



TOWN OF MATTAPOISETT, MASSACHUSETTS

CONTRACT DOCUMENTS
FOR

WATER STREET CULVERT REPLACEMENT

March 4, 2026

Town of Mattapoissett
16 Main Street
Mattapoissett, MA 02739

Prepared by:
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SECTION 00020

INVITATION TO BID

Sealed bids for furnishing the following item will be received at the Town of Mattapoissett Town Hall, 16 Main Street, Mattapoissett, MA 02739 until the time specified below. Immediately following the closure of bids, the bids will be publicly opened and read at the Town of Mattapoissett Town Hall.

ITEM

BID DUE DATE/TIME

**Bid: “Water Street Culvert Replacement
Town of Mattapoissett, Massachusetts”**

Thursday, March 26, 2026 at 2:00 P.M.

The work under this Contract consists of the replacement of the existing culvert for an unnamed stream under Water Street out to Mattapoissett Harbor, including a precast concrete box culvert, precast approach slabs, installation of guardrail, full depth pavement construction, pavement transitions, spreading loam borrow and seed, pavement markings, temporary traffic control (detour), control of water, replacement of a portion of the water and sewer pipes, and other street improvements. The project limits extend approximately 40 feet both east and west of the existing culvert.

All Bidders shall carefully note the following conditions:

1. The Town of Mattapoissett experiences a significant influx of summer residents and tourists. Given the location of the project adjacent to the town beach, all construction will be suspended from the week prior to Memorial Day to the week after Labor Day. Work will be allowed during the following periods:

Construction Season 1	September 14, 2026 – May 21, 2027
Construction Season 2	September 13, 2027 – March 31, 2028

2. The Contractor is required to move all materials and equipment out of the area while work is suspended. The Contract provides for two (2) separate mobilizations of materials and equipment. Item 748., Mobilization, shall be paid for Construction Season 1. If the work is not completed by May 21, 2027, Item 748.1, Re-Mobilization, shall be paid for the remobilization of materials and equipment for Construction Season 2. No further payments shall be made if construction extends into a third season.
3. Funding for the project is subject to Town Meeting approval, tentatively scheduled for May 11, 2026. In addition, the Town cannot enter into a contract prior to the start of the next fiscal year, which begins July 1, 2026. **The bidder agrees that its bid shall be good and may not be withdrawn for a period of 120 days after the opening of the bids.** The Town reserves the right to cancel the bid at any time.
4. **All bidders must be prequalified by the Massachusetts Department of Transportation – Highway Division (MassDOT) in the category of Bridge - Culverts in order to submit bids for the work.** Bids from individuals or firms that are not eligible to bid as determined by MassDOT will not be accepted.

5. Bidders shall demonstrate that they have experience in working on projects of a similar or greater size and type to the proposed project. **All bidders will be required to provide examples with references of a minimum of three (3) successfully completed projects of a similar size and scope within the past five (5) years. The projects shall have been constructed in the Commonwealth of Massachusetts and may be either culverts or bridges with a minimum span of six (6) feet.** The Owner's decision or judgment on these matters will be final, conclusive, and binding.

Each Bidder must possess a copy of the latest "Massachusetts Department of Transportation Standard Specifications for Highways and Bridges" to properly interpret the Contract Documents, prepare and submit bids, and understand contractual obligations.

An electronic copy of the bid documents, specifications and bid forms may be requested from Greenman-Pedersen, Inc by e-mail at rsheappard@gpinet.com.

Bids will be due at the Office of the Select Board at the Mattapoisett Town Hall on the day and time specified above and will be publicly opened and read at the Town Hall immediately following. Bids received after such time will not be accepted. Sealed envelopes containing bids must be clearly marked in accordance with the Bidding and Contract Requirements.

Each Bid must be accompanied by a bid security consisting of a BID BOND or CERTIFIED CHECK issued by a responsible bank or trust company in the amount of 5% of the bid price.

A performance bond in an amount equal to 100 percent of the total amount of the contract price with a surety company qualified to do business in the Commonwealth of Massachusetts will be required for the faithful performance of the contract as well as a labor and materials bond in an amount equal to 100 percent of the total contract price.

All bids for this project are subject to applicable public bidding laws of Massachusetts, including G.L. c.30, § 39M, as amended. Attention is directed to the minimum wage rates to be paid as determined by the Commissioner of Labor and Workforce Development and the weekly payroll record submittal requirements under the provisions of Massachusetts General Laws, Chapter 149, Section 26 through 27D inclusive.

Selection of the contractor will be based upon bidder qualifications, including evidence of past performance in similar projects, and bid price. The contract will be awarded to the bidder deemed by the awarding authority to be the lowest responsible and eligible bidder.

The Town reserves the right to waive any informalities, to accept or reject, in whole or in part any or all bids, or take whatever other action may be deemed to be in the best interest of the Town.

The Town of Mattapoisett
By Its Select Board

END OF SECTION 00020

SECTION 00100

INSTRUCTIONS TO BIDDERS

1. Receipt and Opening of Bids

The Town of Mattapoisett, Massachusetts, herein called the Owner, acting by and through its Select Board, will receive sealed Bids for the project known as “**Water Street Culvert Replacement Project**”.

General bids shall be addressed to the Town of Mattapoisett Office of the Select Board, 16 Main Street, Mattapoisett, MA 02739 and endorsed “**Bid for Water Street Culvert Replacement Project**”. Bids will be received at the Office of the Select Board at the time and date specified in Section 00020, at which time and place said bids will be publicly opened and read aloud. Electronic submissions of bids will not be accepted.

Any bid may be withdrawn prior to the above scheduled time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified will not be considered. The bidder agrees that its bid shall be good and may not be withdrawn for a period of 120 days after the opening of bids, as specified in Section 00200.

2. Location and Work to be Done

The work under this Contract consists of the replacement of the existing culvert for an unnamed stream under Water Street out to Mattapoisett Harbor, including a precast concrete box culvert, cast-in-place concrete approach slabs, removal and reconstruction of cemented stone masonry retaining walls, installation of guardrails, full depth pavement construction, pavement transitions, spreading loam borrow and seed, pavement markings, temporary traffic control (detour), control of water, replacement of a portion of the water main, replacement of a portion of the sewer line, installation and reconnection of stormwater drainage structures, and other street improvements. The project limits extend approximately 40 feet both east and west of the existing culvert.

The location, general characteristics, and principal details of the Work are indicated on plans entitled: “**Water Street Culvert Replacement, Town of Mattapoisett**” prepared by Greenman-Pedersen, Inc. and provided as Attachment E.

The bidder shall take special note of the descriptions provided for individual items in the Bid Tabulation Sheet, as well as the information provided in the Special Provisions.

All work under this contract shall be done in conformance with the latest editions of the following: the Massachusetts Department of Transportation’s (MassDOT) *Standard Specifications for Highways and Bridges*, the *Construction Standard Details*, the *Traffic Management Plans and Detail Drawings*, the *Standard Drawings for Signs and Supports*, the *Standard Drawings for Traffic Signals and Highway Lighting* and the *Overhead Signal Structure and Foundation Standard Drawings*; also the Federal Highway Administration’s latest edition of the *Manual on Uniform Traffic Control Devices (MUTCD)* with Massachusetts Amendments; AmericanHort’s latest edition of *The American Standard for Nursery Stock*; and the Plans and these Contract Documents.

Additional drawings showing details in accordance with which the Work is to be done may be furnished by addendum from time to time during the bidding period by the Owner and/or its Consultant and shall then become a part of the Contract Documents.

The Contractor shall furnish all labor, services, materials, equipment, plant, machinery, apparatus, appliances, tools, supplies, and all other things necessary to do all work required for the completion of each item of the Work and as herein specified.

The Work to be done and paid for under any item shall not be limited to the exact extent mentioned or described but shall include all incidental work necessary or customarily performed for the completion of that item.

3. Preparation of Bid

Each bid must be submitted on the prescribed Form of General Bid, Section 00300, in its entirety. All blank spaces for bid prices must filled in, in ink or typewritten, in both words and figures. Each bid must fully and completely provide all other information required in Section 00300 (pages 00300-1 through 00300-11, inclusive), including years in business; names and addresses of all principals; work and bank references; certification as to compliance with stipulated state and federal laws and regulations; and Certificate of Vote.

Only Section 00300, complete, is required to be submitted with the Bid, as well as the Bid Security. Additional references may also be submitted in the bid package.

Each bid must be submitted in a sealed envelope bearing on the outside the name of the bidder, his address, and endorsed with the name of the project as specified in Receipt and Opening of Bids, above. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed as specified in Receipt and Opening of Bids, above.

4. Bid Opening Procedure

The following list of requirements shall apply to each filed bid. Bids not meeting all the requirements for timeliness and security will be rejected. Bids not meeting signature requirements may be rejected unless there is other evidence that it is an authorized bid, such as a bidder's signature on other documents submitted with the bid; this will meet the signature requirement. Bids that do not acknowledge addendum may be accepted provided that the addendum does not affect the bidder's price or scope of work; otherwise the bid will be rejected.

Bids shall be filed at the place and before the time specified in Receipt and Opening of Bids, above. Properly executed bid security shall be placed in the same sealed envelope with the bid. A separate envelope containing the bid security is not necessary.

Bid signatures will be checked.

All addenda will be sent either by certified mail, with return receipt requested, or e-mail to all prospective bidders. All bidders shall include with their bids the written acknowledgment form provided in Section 00300, FORM OF GENERAL BID.

The bid quantities are not guaranteed and their primary purpose is for the determination of the low bidder.

Each bid shall be individually checked and read aloud for Bid Security, Form of General Bid, etc. prior to the bidder's Bid Price being announced. Please note that only Pages 00300-1 through 00300-11, inclusive, are required to be submitted along with the bid security.

The total dollar amount of each bid will be read, and the three apparent lowest bids will be selected for further consideration. These three (3) apparent low bids will be read aloud for the benefit of the other bidders and the bid opening procedure will be closed. All those present at the bid opening may examine all bids after the bid opening and after confirmation by the town as to the accuracy of all bids.

After the bids are opened, and the three (3) apparent low bidders announced, all of the bids will be checked for mathematical errors. A tabulation of all bids, including any corrections with notations, will be produced and sent to all firms that requested the bid documents. The Bid Tabulation is generally available within 24 hours. The town will also post all submitted bids on its website at the first available opportunity.

5. Modification

Any bidder may modify his bid by written communication at any time prior to the scheduled closing time for receipt of bids.

The communication shall not reveal the bid price but shall provide the addition or subtraction or other modification so that the final prices or terms will not be known by the Owner until the sealed bid is opened.

6. Ability and Experience of Bidder

No award will be made to any bidder who cannot satisfy the Owner that he has sufficient ability and experience in this class of work and sufficient capital and plant to enable him to prosecute and complete the work successfully within the time named. The Owner's decision or judgment on these matters will be final, conclusive, and binding.

Bidders shall demonstrate that they have experience in working on projects of a similar or greater size, type and complexity to the proposed project. **All bidders will be required to provide examples with references of a minimum of three (3) successfully completed projects of a similar size, type, complexity and scope within the past five (5) years. The projects shall have been constructed in the Commonwealth of Massachusetts and may be either bridge culverts or bridges with a minimum span of six (6) feet.** The Owner's decision or judgment on these matters will be final, conclusive, and binding.

The Owner may make such investigations as it deems necessary, and the bidder shall furnish to the Owner, under oath if so required, all such information and data for this purpose as the Owner may request.

7. Conditions of Work

Each bidder must familiarize himself fully with the conditions relating to the construction of the project and the employment of labor thereon. Failure to do so will not relieve a successful bidder of his obligation to furnish all material and labor necessary to carry out the provisions of his contract. Insofar as possible the Contractor, in carrying out his work, must employ such methods

or means as will not cause any interruption of or interference with the work of any other Contractor.

8. Addenda and Interpretations

No interpretation of the meaning of the plans, specifications or other pre-bid documents will be made to any bidder orally. All information given to bidders other than by means of the plans, specifications, or by addenda, as described below, is given informally and shall not be used as the basis of a claim against the Owner.

Every request for such interpretation shall be in writing addressed to Robert Sheppard, P.E., Greenman-Pedersen, Inc., 181 Ballardvale Street, Suite 202, Wilmington, Massachusetts 01887 and may be e-mailed to rsheppard@gpinet.com. To be given consideration, requests must be received at least five (5) days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, when issued, will be sent by email or by certified mail with return receipt requested to all prospective bidders (at the respective address furnished by them for such purposes). Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the Contract Documents.

9. Security for Faithful Performance

Simultaneously with his delivery of the executed Contract, the Contractor shall furnish a surety bond or bonds as security for faithful performance of this contract and for the payment of all persons performing labor and materials under this contract as specified in Section 00700, GENERAL CONDITIONS and Section 00800, SUPPLEMENTARY GENERAL CONDITIONS included herein. The surety on such bond or bonds shall be a surety company qualified to do business under the laws of the Commonwealth of Massachusetts and satisfactory to the Owner. The bonds shall remain in force for one year after final acceptance of the work by the Owner, unless the Owner, in writing, releases the Contractor from the obligation sooner.

10. Power of Attorney

Attorneys-in-fact who sign Contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

11. Laws and Regulations

The bidder's attention is directed to the fact that all applicable State laws, municipal ordinances or bylaws, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the Contract the same as though written out in full. Attention is directed to Section 00850 and to other applicable sections of the Contract Documents.

12. Liquidated Damages for Failure to Enter into Contract

The successful bidder, upon his failure or refusal to execute and deliver the Contract and bonds required within 10 days after presentation thereof by the Owner, shall forfeit to the Owner, as liquidated damages for such failure or refusal, the security deposited with his/her bid, but the

amount forfeited shall not exceed the difference between his/her bid price and the bid price of the next lowest responsible and eligible bidder. In case of death, disability, bona fide clerical or mechanical error of a substantial nature, or other similar unforeseen circumstances affecting the bidder, his/her bid deposit will be returned.

13. Obligation of Bidder

At the time of the opening of bids, each bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the Contract Documents (including all addenda). The failure or omission of any bidder to examine any form, instrument, or document shall in no way relieve any bidder from any obligation in respect of his bid.

14. Information Not Guaranteed

All information given in the Contract Documents relating to subsurface and other conditions, natural phenomena, existing pipes, and other structures is from the best sources at present available to the Owner. All such information is furnished only for the information and convenience of bidders and is not guaranteed.

It is agreed and understood that the Owner does not warrant or guarantee that the subsurface or other conditions, natural phenomena, existing pipes, or other structures encountered during construction will be the same as those indicated in the Contract Documents.

If is further agreed and understood that no bidder or Contractor shall use or be entitled to use any of the information made available to him or obtained in any examination made by him in any manner as a basis of or ground for any claim or demand against the Owner or the Architect/Engineer, arising from or by reason of any variance which may exist between the information made available and the actual subsurface or other structures actually encountered during the construction work, except as may otherwise be expressly provided for in the Contract Documents.

15. Bid Security

Each bid must be accompanied by bid security in the form of a certified check, a bid bond, or a treasurer's or cashier's check, payable to the Owner, in the amount of five percent (5%) of the value of the bid. Such security of general bidders will be returned to all except the three lowest responsible and eligible bidders within five days, Saturdays, Sundays, and legal holidays excluded, after the opening of bids, and the remaining securities will be returned promptly after the Owner and the accepted bidder have executed the Contract, or if no notice of intent to award has been presented to the selected contractor within 120 days after the date of the opening of bids, upon demand of the bidder at any time thereafter.

16. Right to Reject Bid

The Owner reserves the right to waive any informalities in bids and to reject any and all bids, should the Owner deem it to be in the public interest to do so.

The Owner may also reject bids which in its sole judgment are incomplete, conditional, obscure or not responsive or which contain additions not called for, erasures not properly initialed, alterations, or similar irregularities.

The bidder shall note that his bid shall be based on the work as described in the contract documents and shall not assume that value engineering and/or alternative materials will be allowed during construction.

17. Time for Completion

The successful general bidder must commence work within ten (10) days of the date of receipt of the Owner's Notice to Proceed and to complete the project work within the time limit stated in Section 00300, FORM OF GENERAL BID.

18. Comparison of Bids

Bids will be compared on the basis of prices set forth in the bid forms. In the event that there is a discrepancy between a Unit Price and the Total Price for an item, the Unit Price shall control.

Bidders shall provide Unit Prices for each item of work that reasonably approximate the estimated cost to perform said work. Unit prices provided by the Bidder shall not be adjusted during the life of the Contract regardless of the final quantity of each item unless changes in the work are ordered by the Owner pursuant to the General Conditions. The provisions of M.G.L. Chapter 30, Section 39N shall still apply.

All bids shall be based on the quantities set forth in the Invitation for Bid. These quantities shall be used as a basis for comparison of the bids. The quantities are based on estimates of the work to be performed during the term of this Contract. However, the Town does not expressly or by implication agree or warrant that the actual amount of work will correspond with such estimates and the Town reserves the right to increase or decrease the amount of any class or portion of the work as determined by funding authorization, without change of price per unit, which unit prices shall be used for increases and decreases (credits) for adjustments in the quantity of work required.

19. Award of Contract

The Contract will be awarded to "the lowest responsible and eligible bidder" pursuant to General Laws Chapter 30, Section 39M as amended. Such a bidder shall possess the skill, ability and integrity necessary for the faithful performance of the work, shall be able to furnish labor that can work in harmony with all other elements of labor employed, or to be employed, in the work, and shall otherwise comply with all applicable provisions of law. Contract award shall be subject to availability of an appropriation for funding.

20. Statutes Regulating Competitive Bidding

Any bid which does not comply with the provisions of Massachusetts General Laws Chapter 30 Section 39M, as amended, need not be accepted and the Owner may reject every such bid.

21. Wage Rates

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.

State schedules of Prevailing Wage Rates are included in Attachment A. The Bidder shall note that the project is a multi-year contract. The unit prices shall reflect prevailing wages over the entire length of the contract. The Contract completion date is December 31, 2027.

22. Contractor Records

The Contractor shall comply with the provisions of Massachusetts General Laws, Chapter 30, Section 39R concerning Contractor records.

23. Insurance

The Contractor shall carry and continuously maintain until completion of the Contract, insurance as specified in the General Conditions and in such form as shall protect him performing work covered by this Contract, and the Town of Mattapoisett and its employees, agents and officials, from all claims an liability for damages for bodily injury, including accidental death, and for property damage, which may arise from operations under this Contract. Greenman-Pedersen, Inc., and Field Engineering Co., Inc. shall be named as additionally insured. The Contractor covenants and agrees to hold the Town and its employees, agents and officials harmless from loss or damage due to claims for bodily injury or death and/or property damage arising from, or in connection with, operations under this Contract.

24. Project Manager

In addition to a project Architect/Engineer, the Owner may utilize the services of a project manager, whose duties shall be as set forth in the Agreement for Project Manager Services.

25. Price Adjustments for Specific Materials

In accordance with the requirements of Chapter 30, Section 38A of the General Laws of Massachusetts, Municipal Contracts for bid under Chapter 30 Section 39M shall include a price adjustment clause for liquid asphalt cement, diesel fuel and gasoline, Portland Cement Concrete, and Structural and Reinforcing Steel within the limits specified in Section 01000, Division 1. Baseline prices shall be those in effect as of the date of the bid opening.

END OF SECTION 00100

SECTION 00300

FORM OF GENERAL BID

Bid of _____ (hereinafter called "Bidder")*

- a corporation, organized and existing under the laws of the state of _____
- a partnership
- a joint venture
- an individual doing business as _____

To the Town of Mattapoisett, Massachusetts (hereinafter called "Owner").

A) The undersigned Bidder, in compliance with your invitation for bids for the project known as **“Water Street Culvert Replacement Project, Mattapoisett, Massachusetts”**, having examined the plans and specifications and related documents and the site of the proposed work, and being familiar with all of the conditions surrounding the construction of the proposed project including the availability of materials and labor, hereby proposes to furnish all labor, materials, and supplies, and to construct the project in accordance with the contract documents and the plans and specifications within the time set forth below, and at the prices stated below. These prices are to cover all expenses incurred in performing the work required under the contract documents, of which this bid is a part.

The Bidder hereby agrees to commence work on or before the date to be specified in written "Notice to Proceed" of the Owner, but no sooner than July 17, 2026. Furthermore, the Bidder agrees that substantial completion of the project shall be achieved by December 31, 2027 and final completion of the project for acceptance by the Town shall be achieved no later than March 1, 2028.

The Bidder further agrees to pay as liquidated damages the sum of Five Hundred Dollars (\$500.00) for each consecutive calendar day thereafter that the work is not complete for acceptance by the Town as provided in Section 00700 GENERAL CONDITIONS.

B) Bidder acknowledges receipt of and this bid includes the following addenda:

No. _____ Dated: _____

No. _____ Dated: _____

No. _____ Dated: _____

*Specify corporation, partnership or individual as applicable.

BID TABULATION SHEET

Instructions:

- (1) Insert Unit Price (numeric amount in dollars and cents) under "Unit Price" for each Item.
- (2) Multiply the Estimated Quantity by the Unit Price and insert the product for "Total Price" for each Item.
- (3) Add all products in the Total Price Column and insert the sum for the Total Base Bid Price for Bid Comparison in numeric value and words.
- (4) In the event of a discrepancy between the Unit Price and the Total Price for each item, the Unit Price shall control. In the event of a discrepancy of the Total Bid Price in numbers and words, the numbers shall control.

An unbalanced or unreasonable lump sum or unit price submitted herein may be grounds for rejection of the bid.

BASE BID

Item	Item Description	Quantity	Unit	(1) Unit Price	(2) Total Value
103	TREE REMOVED - DIAMETER UNDER 24 INCHES	1	EA	\$	\$
120	EARTH EXCAVATION	20	CY	\$	\$
140	BRIDGE EXCAVATION	370	CY	\$	\$
142	CLASS B TRENCH EXCAVATION (Contingency)	10	CY	\$	\$
144	CLASS B ROCK EXCAVATION	290	CY	\$	\$
146	DRAINAGE STRUCTURE REMOVED	3	EA	\$	\$
151	GRAVEL BORROW	15	CY	\$	\$
151.2	GRAVEL BORROW FOR BACKFILLING STRUCTURES AND PIPES	175	CY	\$	\$
156	CRUSHED STONE	20	TON	\$	\$
156.1	CRUSHED STONE FOR BRIDGE FOUNDATIONS	130	TON	\$	\$
156.5	CRUSHED STONE FOR FILTER BLANKET	10	CY	\$	\$
170	FINE GRADING AND COMPACTING - SUBGRADE AREA	200	SY	\$	\$
201	CATCH BASIN	3	EA	\$	\$
202	MANHOLE	3	EA	\$	\$

Item	Item Description	Quantity	Unit	(1) Unit Price	(2) Total Value
210	SANITARY SEWER MANHOLE	2	EA	\$	\$
220.7	SANITARY STRUCTURE ADJUSTED	1	EA	\$	\$
222.3	FRAME AND GRATE (OR COVER) MUNICIPAL STANDARD	6	EA	\$	\$
223.1	FRAME AND GRATE (OR COVER) REMOVED AND STACKED	6	EA	\$	\$
225.52	TRAP AND HOOD MUNICIPAL STANDARD	3	EA	\$	\$
238.161	16 INCH CERAMIC EPOXY LINE DUCTILE IRON SEWER PIPE	20	FT	\$	\$
241.12	12 INCH REINFORCED CONCRETE PIPE CLASS III	30	FT	\$	\$
241.18	18 INCH REINFORCED CONCRETE PIPE CLASS III	25	FT	\$	\$
241.24	24 INCH REINFORCED CONCRETE PIPE CLASS III	48	FT	\$	\$
258	STONE FOR PIPE ENDS	20	SY	\$	\$
303.1	10 INCH DUCTILE IRON WATER PIPE (MECHANICAL JOINT)	25	FT	\$	\$
350.1	10 INCH GATE AND GATE BOX	2	EA	\$	\$
358	GATE BOX ADJUSTED	2	EA	\$	\$
402	DENSE GRADED CRUSHED STONE FOR SUB-BASE	3	CY	\$	\$
440	CALCIUM CHLORIDE FOR ROADWAY DUST CONTROL	300	LB	\$	\$

Item	Item Description	Quantity	Unit	(1) Unit Price	(2) Total Value
443	WATER FOR ROADWAY DUST CONTROL	1	MGL	\$	\$
460	HOT MIX ASPHALT	105	TON	\$	\$
506	GRANITE CURB TYPE VB - STRAIGHT	85	FT	\$	\$
506.01	GRANITE CURB WITH CEMENT CONCRETE BACKING	10	FT	\$	\$
509	GRANITE TRANSITION CURB - STRAIGHT	15	FT	\$	\$
514	GRANITE CURB INLET - STRAIGHT	2	EA	\$	\$
619.5	TUBULAR STEEL BACKED TIMBER BRIDGE RAIL WITH METAL HANDRAIL	50	FT	\$	\$
657	TEMPORARY FENCE	60	FT	\$	\$
645.048	48 INCH CHAIN LINK FENCE (PIPE TOP RAIL) (LINE POST OPTION)	40	FT	\$	\$
652.048	48 INCH CHAIN LINK FENCE END POST	1	EA	\$	\$
697.1	SILT SACK	3	EA	\$	\$
698.3	GEOTEXTILE FABRIC FOR SEPARATION	20	SY	\$	\$
698.4	GEOTEXTILE FABRIC FOR PERMANENT EROSION CONTROL	340	SY	\$	\$
748	MOBILIZATION	1	LS	\$	\$
748.1	REMOBILIZATION	1	EA	\$	\$

Item	Item Description	Quantity	Unit	(1) Unit Price	(2) Total Value
751	LOAM FOR ROADSIDES	5	CY	\$	\$
765	SEEDING	165	SY	\$	\$
767.121	SEDIMENT CONTROL BARRIER	480	FT	\$	\$
853.2	TEMPORARY BARRIER (TL-2)	50	FT	\$	\$
899	POLICE DETAIL	35,000	\$	\$	\$
983.35	STREAMBED MATERIAL REMOVED AND RELAID	10	CY	\$	\$
983.36	BEACH MATERIAL REMOVED AND RELAID	20	CY	\$	\$
986.21	MODIFIED ROCKFILL WITH GRAVEL PACKED VOIDS	5	CY	\$	\$
991.3	CONTROL OF WATER - CULVERT NO. M-XX-XXX(AAA)	1	LS	\$	\$
995.011	CULVERT STRUCTURE - CULVERT NO. M-XX-XXX(AAA)	1	LS	\$	\$
TOTAL BID FOR COMPARISON (3)				\$	

TOTAL BID PRICE FOR COMPARISON (In words)

The above unit prices shall include all labor, materials, bailing, shoring, removal, overhead, profit, insurance, etc., to cover the finished work.

The Bidder understands that all bids for this project are subject to the applicable bidding laws of the Commonwealth of Massachusetts, including General Laws Chapter 30, Section 39M, as amended.

The Bidder understands that the Owner reserves the right to reject any or all bids and to waive any informalities in the bidding.

The Bidder agrees that this bid shall be good and may not be withdrawn for a period of 60 days after the opening of bids.

Within 10 days of receipt of the written notice of acceptance of this bid, the Bidder will execute the formal Agreement set forth in Section 00500 CONTRACT.

Bid security is attached in the sum of five percent (5%) of the total bid in accordance with the conditions of Section 00100 INSTRUCTIONS TO BIDDERS. The bid security may become the property of the Owner in the event the contract and bond are not executed within the time set forth above.

The selected Contractor shall furnish a performance bond and a payment bond in an amount at least equal to one hundred percent (100%) of the contract price in accordance with Section 00610 PERFORMANCE BOND, Section 00620 PAYMENT BOND, and as stipulated in Section 00700 GENERAL CONDITIONS of the specifications.

The undersigned offers the following information as evidence of his qualifications to perform the work as bid upon according to all the requirements of the plans and specifications.

1. Have been in business under present name for ____ years.
2. The names and addresses of all persons interested in the bid (if made by a partnership or corporation) as principals, are as follows:

(attach supplementary list if necessary)

3. The bidder is requested to state below what work of a similar character to that included in the proposed contract he has done, and give references that will enable the Owner to judge his experience, skill and business standing (add supplementary page if necessary).

Project Name: _____

Completion Date: _____

Contract Amount: _____

Design Engineer: _____

Reference Name: _____

Reference Relationship to Project: _____

Telephone Number: _____

Project Name: _____

Completion Date: _____

Contract Amount: _____

Design Engineer: _____

Reference Name: _____

Reference Relationship to Project: _____

Telephone Number: _____

Project Name: _____

Completion Date: _____

Contract Amount: _____

Design Engineer: _____

Reference Name: _____

Reference Relationship to Project: _____

Telephone Number: _____

Project Name: _____

Completion Date: _____

Contract Amount: _____

Design Engineer: _____

Reference Name: _____

Reference Relationship to Project: _____

Telephone Number: _____

Project Name: _____

Completion Date: _____

Contract Amount: _____

Design Engineer: _____

Reference Name: _____

Reference Relationship to Project: _____

Telephone Number: _____

Project Name: _____

Completion Date: _____

Contract Amount: _____

Design Engineer: _____

Reference Name: _____

Reference Relationship to Project: _____

Telephone Number: _____

Project Name: _____

Completion Date: _____

Contract Amount: _____

Design Engineer: _____

Reference Name: _____

Reference Relationship to Project: _____

Telephone Number: _____

Bank Reference

Name of Reference: _____

Name of Bank: _____

Address: _____

Telephone Number: _____

Pursuant to M.G.L. CH. 62C, Sec. 49A, I certify hereby in writing, under penalties of perjury, that the within named Bidder/Contractor has complied with all laws of the Commonwealth of Massachusetts relating to taxes, reporting of employees and contractors, and withholding and remitting of child support.

The undersigned Bidder hereby certifies under penalties of perjury, as follows: (1) that he/she 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.

The undersigned certifies under penalties of perjury that this bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this paragraph the word "person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity.

The undersigned certifies under penalty of perjury that the below named contractor is not presently debarred from doing public construction work in the commonwealth under the provisions of section twenty-nine F of chapter twenty-nine, or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation promulgated thereunder.

The undersigned bidder hereby certifies, under pains and penalties of perjury, that the foregoing bid is based upon the payment to laborers to be employed on the project of wages in an amount no less than the applicable prevailing wage rates established for the project by the Massachusetts Department of Labor and Workforce Development. The undersigned bidder agrees to indemnify the awarding authority for, from and against any loss, expense, damages, actions or claims, including any expense incurred in connection with any delay or stoppage of the project work arising out of or as a result of (1) the failure of the said bid to be based upon the payment of the said applicable prevailing wage rates or (2) the failure of the bidder, if selected as the contractor, to pay laborers employed on the project the said applicable prevailing wage rates.

Respectfully submitted:

Date: _____

By: _____
(Signature)

(Type Name of Bidder)

(Title)

(Business Address)

(City and State)

(Telephone Number)

CERTIFICATE OF VOTE
(to be filed if Contractor is a Corporation)

I, _____, hereby certify that I am the duly qualified
(Secretary of the Corporation)

and acting Secretary of _____ and I further certify that a meeting of the
(Name of Corporation)

Directors of said Company, duly called and held on _____, at which
(Date of Meeting)

all Directors were present and voting, the following vote was unanimously passed:

VOTED: To authorize and empower

Anyone acting singly, to execute Forms of General Bid, Contracts or Bonds on behalf of the Corporation.

I further certify that the above vote is still in effect and has not been changed or modified in any respect.

By: _____
(Secretary of Corporation)

A True Copy:

Attest: _____
(Notary Public)

My Commission Expires: _____
(Date)

SECTION 00500

AGREEMENT

THIS AGREEMENT, made this ___ day of _____, 2026, by and between the party of the first part, the Town of Mattapoisett, hereinafter called "OWNER," acting herein through its Board of Selectmen, and the party of the second part, _____ doing business as *(an individual) (a partnership) (a joint venture) (a corporation) located in the *(City) (Town) of _____, County of _____, and State of _____, hereinafter called "CONTRACTOR."

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by the OWNER, the CONTRACTOR hereby agrees with the OWNER to commence and complete the project described as follows: **"Water Street Culvert Replacement Project, Mattapoisett, Massachusetts"**, hereinafter called the Project, for the sum of _____ Dollars (\$ _____) and all extra work in connection therewith, under the terms as stated in the Bid Documents dated March 4, 2026, including all addenda; and at its own proper cost and expense to furnish all the materials, supplies, machinery equipment, tools, superintendence, labor, insurance, and other accessories and services necessary to complete the said project in accordance with the conditions and prices stated in Section 00300 FORM OF GENERAL BID, attached hereto.

The CONTRACTOR hereby agrees to commence work under this Contract on or before a date to be specified in written "Notice to Proceed" of the OWNER.

The CONTRACTOR further agrees that substantial completion of the project shall be achieved by December 31, 2027 and final completion of the project for acceptance by the Town shall be achieved no later than March 31, 2028.

The CONTRACTOR further agrees to pay as liquidated damages the sum of \$500.00 for each consecutive calendar day thereafter as provided in the Liquidated Damages Paragraph of Article 8 of Section 00700 GENERAL CONDITIONS.

The OWNER's right to assess liquidated damages shall not preclude the OWNER from the exercise of any other rights to recover damages on account of the CONTRACTOR's failure to achieve substantial or final completion within the time required.

The CONTRACTOR agrees not to discriminate against or exclude any person from participation herein on grounds of race, religion, color, sex, age or national origin; and that it shall take affirmative actions to ensure that applicants are employed, and that employees are treated during their employment, without regard to race, religion, color, sex, age, handicapped status, or national origin.

The CONTRACTOR agrees not to participate in or cooperate with an international boycott, as defined in Section 999 (b)(3) and (4) of the Internal Revenue Code of 1986, as amended, or engage in conduct declared to be unlawful by Section 2 of Chapter 151E of the Massachusetts General Laws.

The OWNER agrees to pay the CONTRACTOR in current funds for the performance of the contract, subject to additions and deductions, as provided in Section 00700 GENERAL CONDITIONS, and to make payments on account thereof as provided in the Estimates and Payments Paragraph of Article 9 of Section 00700 GENERAL CONDITIONS.

IN WITNESS WHEREOF, the parties to these presents have executed this contract in two (2) counterparts, each of which shall be deemed an original, in the year and day first above mentioned.

AGREED:

TOWN OF MATTAPOISETT, MASSACHUSETTS

(Owner)

By _____

CONTRACTOR: _____

By _____

_____ *(Printed Name)*

_____ *(Title)*

_____ *(Street Address, City and State)*

Approved as to Form:

By _____
(Owner's Counsel)

In accordance with M.G.L. C.44, Section 31C, this is to certify that an appropriation in the amount of this contract is available therefor and that the _____ has been authorized to execute the contract and approve all requisitions and change orders.

By _____
(Owner's Accountant)

(Name)

CERTIFICATE OF VOTE
(to be filed if Contractor is a Corporation)

I, _____, hereby certify that I am the duly qualified and acting
(Secretary of the Corporation)

Secretary of _____ and I further certify that a meeting of the Directors of said
(Name of Corporation)

Company, duly called and held on _____, at which all Directors were present
(Date of Meeting)

and voting, the following vote was unanimously passed:

VOTED: To authorize and empower

Anyone acting singly, to execute Forms of General Bid, Contracts or Bonds on behalf of the Corporation.

I further certify that the above vote is still in effect and has not been changed or modified in any respect.

By: _____
(Secretary of Corporation)

A True Copy:

Attest: _____
(Notary Public)

My Commission Expires: _____
(Date)

SECTION 00610

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 Town of Mattapoisett, 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 _____, 2026 (the "Construction Contract"), for the construction described as follows:

"Water Street Culvert Replacement Project, Mattapoisett, Massachusetts"

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.

IN WITNESS WHEREOF, this instrument is executed in ____ () counterparts, each one of which shall be deemed an original, this the _____ day of _____, 2026.

ATTEST:

(Principal Secretary)

By _____

(Address-Zip Code)

Principal

Witness as to Principal

(SEAL)

(Address-Zip Code)

ATTEST:

Witness as to Surety

By _____

(Address-Zip Code)

Surety

(Attorney-in-Fact)

Witness as to Surety

(SEAL)

(Address-Zip Code)

NOTE: Date of Bond must not be prior to date of Contract. If Contractor is a Partnership, all partners should execute Bond.

SECTION 00620

PAYMENT 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 Town of Mattapoissett, 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 _____, 2026, for the construction described as follows:

"Water Street Culvert Replacement Project, Mattapoissett, Massachusetts"

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, subcontractors, and corporations furnishing materials for or performing labor in the prosecution of the work provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such work, and all insurance premiums on said work, and for all labor, performed in such work whether by subcontractor or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the 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 this contract or to the work or to the specifications.

PROVIDED, FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in ____ () counterparts, each one of which shall be deemed an original, this the _____ day of _____, 2026.

ATTEST:

_____ *Surety*

_____ By _____
(Attorney-in-Fact)

_____ *(Address-Zip Code)*

_____ (SEAL)
Witness as to Surety

_____ *(Address-Zip Code)*

NOTE: Date of Bond must not be prior to date of Contract. If Contractor is a Partnership, all partners should execute Bond.

SECTION 00700

GENERAL CONDITIONS

ARTICLE 1 – GENERAL PROVISIONS

ARTICLE 2 - OWNER

ARTICLE 3 - CONTRACTOR

ARTICLE 4 - SUBCONTRACTORS

ARTICLE 5 – CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

ARTICLE 6 – CHANGES IN THE WORK / CLAIMS FOR ADDITIONAL COSTS

ARTICLE 7 - TIME

ARTICLE 8 – PAYMENTS AND COMPLETION

ARTICLE 9 – PROTECTION OF PERSONS AND PROPERTY

ARTICLE 10 – INSURANCE AND BONDS

ARTICLE 11 – UNCOVERING AND CORRECTION OF WORK

ARTICLE 12 – MISCELLANEOUS PROVISIONS

ARTICLE 13 – TERMINATION OR SUSPENSION OF THE CONTRACT

ARTICLE 1 - GENERAL PROVISIONS

§ 1.1 DEFINITIONS

§ 1.1.1 THE CONTRACT DOCUMENTS

The Contract Documents consist of the Owner-Contractor Agreement, the Conditions of the Contract (General, Supplemental and other Conditions), the Drawings, the Specifications, all Addenda issued prior to and all Modifications issued after execution of the Contract, and all applicable laws, ordinances and regulations. A Modification is (1) a written amendment to the contract signed by both parties, (2) a Change Order, (3) a written interpretation issued by the Owner or (4) a written order for a minor change in the Work issued pursuant to Paragraph 7.4. The Contract Documents include Bidding Documents such as the Advertisement or Invitation to Bid, the Instructions to Bidders, sample forms, the Contractor's Bid or portions of Addenda relating to any of these, or any other documents, specifically enumerated in the Owner-Contractor Agreement.

In the event of a conflict among the Contract Documents, they shall be construed according to the following priorities:

- 1) Modifications.
- 2) Owner/Contractor Agreement (in the following order):
 - a) Addenda including bid questions and responses
 - b) Permits
 - c) Special Provisions (§ 01000)
 - d) Plans
 - e) Supplemental General Conditions
 - f) General Conditions
- 3) MassDOT Specifications (in the following order):
 - a) Interim Supplemental Specifications
 - b) Supplemental Specifications
 - c) Standard Specifications
- 4) Referenced materials and supplementary documents

§ 1.1.2 THE CONTRACT

The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. The Contract may be amended or modified only by a Modification. All Work mentioned or indicated in the Contract Documents shall be performed by the Contractor as part of this Contract unless it is specifically indicated in the Contract Documents that such Work is to be done by others. Notwithstanding Section 1.1.1, should the Drawings or the Specifications disagree in themselves or with each other, the Contractor shall provide the better quality or greater quantity of Work unless otherwise directed by written amendment to the Contract.

§ 1.1.3 THE WORK

The Work comprises the completed construction required by the Contract Documents and includes all labor necessary to produce such construction, and all materials and equipment incorporated or to be incorporated in such construction.

§ 1.1.4 THE PROJECT

The project is the total construction of which the Work performed under the Contract Documents may be the whole or a part.

§ 1.1.5 OR EQUAL

The use of the words "Or Equal" following the name of any manufacturer, vendor or proprietary product shall be understood to mean that articles or materials may be substituted which, in the opinion of the Owner, are equal in quality, durability, appearance, strength, design and performance to the articles or materials named or described and will perform adequately in providing a first-class facility.

When submitting shop drawing information on articles or materials which are being proposed as substitutes for specified items, the Contractor shall clearly identify them as such. If the articles or materials are accepted as equal to those on which dimensions on the drawings are based, any dimensional variance from those shown and/or specified shall be shown on the shop drawings prepared by the Contractor, illustrating the manner in which conformity to dimensions and design is to be obtained. All such drawings shall be subject to the approval of the Owner and the installation of the article shall not proceed without first obtaining said approval.

§ 1.2 EXECUTION, CORRELATION AND INTENT

§ 1.2.1 The Contract Documents shall be signed in not less than duplicate by the Owner and Contractor.

§ 1.2.2 By executing the Contract, the Contractor represents that he has visited the site, familiarized himself with the local conditions under which the Work is to be performed, and correlated his observations with the requirements of the Contract Documents.

§ 1.2.3 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work. The Contract Documents are complementary, and what is required by any one shall be as binding as if required by all. Work not covered in the Contract Documents will not be required unless it is consistent therewith and is reasonably inferable therefrom as being necessary to produce the intended results. Words and abbreviations which have well-known technical or trade meanings are used in the Contract Documents in accordance with such recognized meanings.

§ 1.2.4 The organization of the Specifications into divisions, sections and articles, and the arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

§ 1.2.5 Unless otherwise stated in the Contract Documents, words which have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

§ 1.2.6 All indications or notations which apply to one of a number of similar situations, materials or processes shall be deemed to apply to all such situations, materials or processes wherever they appear in the Work, except where a contrary result is clearly indicated by the Contract Documents.

§ 1.2.7 Where codes, standards, requirements and publications of public and private bodies are referred to in the Specifications, references shall be understood to be to the latest revision prior to the date of receiving bids, except where otherwise indicated.

§ 1.2.8 Where no explicit quality or standards for materials or workmanship are established for Work, such Work is to be of good quality for the intended use and consistent with the quality of the surrounding Work and of the construction of the Project generally.

§ 1.2.9 All manufactured articles, materials, and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned in accordance with the manufacturer's written or printed directions and instructions unless otherwise indicated in the Contract Documents.

§ 1.2.10 Test boring or soil test information included with the Contract Documents or otherwise made available to the Contractor was obtained by the Owner for use by the Architect/Engineers in the design of the Project or Work. The Owner does not hold out such information to the Contractor as a completely accurate indication of subsurface conditions, and no claim for extra cost or extension of time resulting from a reliance by the Contractor on such information shall be allowed except as provided by Chapter 30, Section 39N of the General Laws of the Commonwealth of Massachusetts.

§ 1.2.11 Where the Work is to fit with existing conditions or work to be performed by others, the Contractor shall fully and completely join the Work with such conditions or work, unless otherwise specified.

§ 1.3 OWNERSHIP AND USE OF DOCUMENTS

§ 1.3.1 All Drawings, Specifications and copies thereof furnished by the Owner are and shall remain the Owner's property. They are to be used only with respect to this Project and are not to be used on any other project without the prior written consent of the Owner. With the exception of one contract set for each party to the Contract, such documents are to be returned or suitably accounted for to the Owner at the completion of the Work. Submission or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of any reserved rights.

ARTICLE 2 - OWNER

§ 2.1 DEFINITION

§ 2.1.1 The Owner is the person or entity identified as such in the Owner-Contractor Agreement and is referred to throughout the Contract Documents as if singular in number. The term Owner means the Owner or, as applicable, the Owner's authorized representative ("Architect/Engineer"), which for this Project shall be **Greenman-Pedersen, Inc.** The Owner may also retain a separate Project Manager, who shall work with the Architect/Engineer in the administration of the Contract. The form of agreement between the Owner and the Architect/Engineer and/or the Project Manager shall be made available to the Contractor upon request.

§ 2.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER

§ 2.2.1 The Owner shall, at the written request of the Contractor, prior to commencement of the Work and thereafter, furnish to the Contractor reasonable evidence that financial arrangements have been made to fulfill the Owner's obligations under the Contract.

§ 2.2.2 The Owner shall furnish available surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. Except as otherwise stated in the Contract Documents, the Contractor shall be entitled to reasonably rely on the accuracy of information furnished by the Owner except to the extent that the Contractor's review thereof reveals, or in the exercise

of reasonable diligence should have revealed, any inaccuracy or incompleteness therein. The Contractor shall exercise proper precautions relating to the safe performance of the Work.

§ 2.2.3 Information or services required of the Owner by the Contract Documents shall be furnished by the Owner with reasonable promptness.

§ 2.2.4 Unless otherwise provided in the Contract Documents, the Contractor will be furnished, free of charge, three (3) copies of Drawings and Project Manuals as are reasonably necessary for execution of the Work, all additional copies will be furnished upon request at the cost of reproduction.

§ 2.3 OWNER'S RIGHT TO ACCESS THE WORK

§ 2.3.1 The Owner, Architect/Engineer and Project Manager shall at all times have access to the Work, wherever it is in preparation and progress. The Contractor shall provide facilities for such access so the Owner, Architect/Engineer and Project Manager may perform its functions under the Contract Documents.

§ 2.4 OWNER'S RIGHT TO REJECT THE WORK

§ 2.4.1 The Owner, unilaterally or upon the recommendation of the Architect Engineer and Project Manager, will have the authority to reject Work which does not conform to the Contract Documents. Whenever, in its opinion, it is necessary or advisable for the implementation of the intent of the Contract Documents, the Owner shall have the authority to require special inspection or testing of the Work in accordance with Section 12.5.2, whether or not such Work be then fabricated, installed or completed. Any such rejection of work shall not relieve the Contractor of the responsibility for maintaining protection of the Work and the Owner's property.

§ 2.5 OWNER'S RIGHT TO STOP THE WORK

§ 2.5.1 If the Contractor fails to correct Work which is not in accordance with the requirements of the Contract Documents as required by Section 11.2 or persistently fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity. The Contractor shall resume the Work after such stoppage promptly upon written notice to do so from the Owner.

§ 2.6 OWNER'S RIGHT TO CARRY OUT THE WORK

§ 2.6.1 If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a seven-day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such deficiencies. In such case an appropriate Change Order shall be issued deducting from payments then or thereafter due the Contractor the reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the Architect/Engineer's additional services made necessary by such default, neglect or failure. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner.

ARTICLE 3 - CONTRACTOR

§ 3.1 GENERAL

§ 3.1.1 The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Contractor" means the Contractor or the Contractor's authorized representative.

§ 3.1.2 The Contractor shall perform the Work in accordance with the Contract Documents.

§ 3.1.3 The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Owner in the administration of the Contract, or by tests, inspections or approvals required or performed by persons other than the Contractor.

§ 3.2 REVIEW OF CONTRACT DOCUMENTS BY CONTRACTOR

§ 3.2.1 The Contractor shall carefully study and compare the Contract Documents and shall at once report to the Owner any error, inconsistency or omission he may discover. If the Contractor performs any construction activity it knows or reasonably should know involves a recognized error, inconsistency or omission in the Contract Documents without such notice to the Owner, the Contractor shall assume appropriate responsibility for such performance and shall bear an appropriate amount of the attributable costs for such correction.

§ 3.2.2 Any claim by the Contractor or Subcontractors that, in submitting their respective bids, they did not include all items as shown in the Contract Documents, will be given no consideration for an adjustment of any kind. If any item is specified in a Section which would not normally furnish this item it shall be the responsibility of the Contractor to coordinate the situation with the Subcontractor, and if the item under consideration is not to be provided by the Subcontractor it shall be the responsibility of the Contractor to provide the work in question, without any additional cost to the Owner.

§ 3.3 SUPERVISION AND CONSTRUCTION PROCEDURES

§ 3.3.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention which shall not be less than such state of skill and attention generally rendered by the contracting profession for projects similar to the Project in scope, difficulty and location. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, the Contractor shall evaluate the jobsite safety thereof and, except as stated below, shall be fully and solely responsible for the jobsite safety of such means, methods, techniques, sequences or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely written notice to the Owner and Architect/Engineer and shall not proceed with that portion of the Work without further written instructions from the Architect/Engineer.

§ 3.3.2 The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for or on behalf of the Contractor or any of its Subcontractors this obligation shall also extend to the presence on the Site of suppliers of materials or equipment, their employees, contractors, and agents engaged in the Work.

§ 3.3.3 The Contractor shall not be relieved from his obligations to perform the Work in accordance with the Contract Documents either by the activities or duties of the Owner in its administration of the Contract, or by inspection, tests or approvals required or performed under Section 12.5 by persons other than the Contractor.

§ 3.3.4 The Contractor shall retain a registered professional engineer or registered land surveyor, acceptable to the Architect/Engineer, to establish the exterior lines and required elevations for all buildings and structures to be erected, and to establish lines and grades for associated roads, utilities and grading. The engineer or surveyor shall certify the actual location of constructed elements of the Work.

§ 3.4 LABOR AND MATERIALS

§ 3.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

§ 3.4.2 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Contract. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them.

§ 3.5 WARRANTY

§ 3.5.1 The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects not inherent in the quality required or permitted, and that the Work will conform to the requirements of the Contract Documents and, promptly after written notification of non-conformance, shall be repaired or replaced by the Contractor with Work conforming to such requirements. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. If required by the Owner, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

§ 3.5.2 The Contractor shall be responsible for determining that all materials furnished for the Work meet all requirements of the Contract Documents. The Owner may require the Contractor to produce reasonable evidence that a material meets such requirements, such as certified reports of past tests by qualified testing laboratories, reports of studies by qualified experts, or other evidence which, in the opinion of the Owner, would lead to a reasonable certainty that any material used, or proposed to be used, in the Work meets the requirements of the Contract Documents. All such data shall be furnished at the Contractor's expense.

§ 3.5.3 If the Contractor proposes to use a material which, while suitable for the intended use, deviates in any way from the detailed requirements of the Contract Documents, the Contractor shall inform the Owner in writing of the nature of such deviations at the time the material is submitted for approval.

§ 3.5.4 In informing the Owner of deviations or substitutions, the Contractor shall provide, upon request, evidence leading to a reasonable certainty that the proposed substitution or deviation will provide a quality of result at least equal to that otherwise attainable. If, in the opinion of the Owner, the evidence presented by the Contractor does not provide a sufficient basis for such reasonable certainty, the Owner may reject such substitution or deviation without further investigation.

§ 3.5.5 Any additional cost, or any loss or damage arising from the substitution of any material or any method for those originally specified shall be borne by the Contractor, notwithstanding approval or acceptance of such substitution by the Owner, unless such substitution was made at the written request or direction of the Owner.

§ 3.5.6 The warranty provided in this Section 3.5 shall be in addition to and not in limitation of any other warranty required by the Contract Documents or otherwise prescribed by law.

§ 3.5.7 The Contractor shall procure and deliver to the Owner, no later than the date claimed by the Contractor as the date of Substantial Completion, all special warranties required by the Contract Documents. Delivery by the Contractor shall constitute the Contractor's guarantee to the Owner that the warranty will be performed in accordance with its terms and conditions.

§ 3.5.8 The Contractor shall guarantee all Work for a period of one year after Date of Substantial Completion, or by the terms of any special guarantee required by the Contract Documents. The Contractor shall, upon written notice from the Owner, promptly correct defective Work or Work not in accordance with the Contract Documents.

§ 3.6 TAXES

§ 3.6.1 The Contractor shall pay applicable sales, consumer, use and similar taxes for the Work provided by the Contractor which are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect. The project is exempt from the Massachusetts Sales Tax to the extent permitted by G.L. c.64H, §6(f). The exemption number can be obtained from the Owner upon request by the successful bidder.

§ 3.7 PERMITS, FEES AND NOTICES

§ 3.7.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for all permits and fees, licenses and inspections necessary for proper execution and completion of the Work which are customarily secured after execution of the Contract and which are legally required when bids are received, or negotiations concluded.

§ 3.7.2 The Contractor shall comply with and give notices required by laws, ordinances, rules, regulations and lawful orders of public authorities applicable to performance of the Work.

§ 3.7.3 If the Contractor observes that portions of the Contract Documents are at variance therewith, the Contractor shall promptly notify the Owner in writing, and necessary changes shall be accomplished by appropriate Modification.

§ 3.7.4 If the Contractor performs Work it knows or should know to be contrary to laws, statutes, ordinances, building codes, and rules and regulations without such notice to the Architect/Engineer and Owner, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.

§ 4.3 SUPERINTENDENT

§ 4.3.1 The Contractor shall employ a competent full-time superintendent and necessary assistants who shall be in attendance at the Project site at all times during the progress of the Work. The superintendent shall represent the Contractor and all communications given to the superintendent shall be as binding as if given to the Contractor. Important communications shall be confirmed in writing. Other communications shall be confirmed on written request in each case. The Contractor shall remove the superintendent if requested to do so by the Owner and shall replace him with a competent person acceptable to the Owner.

§ 3.8.2 The Contractor shall coordinate and supervise the Work performed by Subcontractors to the end that the Work is carried out without conflict between trades and so that no trade, at any time, causes delay to the general progress of the Work. The Contractor and all Subcontractors shall at all times afford each trade, any separate contractor, or the Owner, every reasonable opportunity for the installation of Work and the storage of materials.

§ 3.8.3 The Contractor shall arrange for and attend job meetings with the Owner and such other persons as the Owner may from time to time wish to have present. The Contractor shall be represented by a principal, project manager, general superintendent or other authorized main office representative, as well as by the Contractor's own superintendent. An authorized representative of any Subcontractor or Sub-subcontractor shall attend such meetings if the representative's presence is requested by the Architect/Engineer. Such representatives shall be empowered to make binding commitments on all matters to be discussed at such meetings, including costs, payments, change orders, time schedules and manpower. Any notices required under the Contract may be served on such representatives.

§ 3.9 CONTRACTOR'S CONSTRUCTION SCHEDULES

§ 3.9.1 The Contractor, within ten (10) calendar days after being awarded the Contract, shall prepare and submit for the Owner's information and approval a Contractor's construction schedule for the Work. The schedule shall not exceed time limits current under the Contract Documents, shall be revised, subject to the Owner's approval, at appropriate intervals as required by the conditions of the Work and Project, shall be related to the entire Project to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work. The construction schedule shall be in such form and contain such information as the Owner requires. The construction schedule shall be resource loaded for the Contractor and all subcontractors, with each resource identified by name, description, unit of measure, and calendar assignment. For each class of work included in the Contractor's schedule of values, the construction schedule shall show the percentage of completion to be obtained and the total dollar value of the work to be completed as of the first of each month until Substantial Completion. All calculations shall be on the basis of work in place, but not including the value of materials delivered but not in place.

§ 3.10 DOCUMENTS AND SAMPLES AT THE SITE

§ 3.10.1 The Contractor shall maintain at the site for the Owner one record copy of the Drawings, Specifications, Addenda, Change Orders and other Modifications, in good order and marked currently to record field changes and selections made during construction, and one record copy of approved Shop Drawings, Product Data, Samples and similar required submittals. These shall be available to the Architect/Engineer and shall be delivered to the Architect/Engineer for submittal to the Owner upon completion of the Work.

§ 3.11 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

§ 3.11.1 Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

§ 3.11.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

§ 3.11.3 Samples are physical examples which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

§ 3.11.4 The Contractor shall review for compliance with the Contract Documents, approve and submit to the Architect/Engineer Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of separate contractors.

§ 3.11.5 By approving and submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents. By approving and submitting Shop Drawings, Product Data, Samples, and similar submittals the Contractor thereby represents that the Contractor has determined and verified all dimensions, quantities, field dimensions, relations to existing work, coordination with work to be installed later, coordination with information on previously accepted Shop Drawings, Product Data, Samples, or similar submittals and verification of compliance with all the requirements of the Contract Documents. The accuracy of all such information is the responsibility of the Contractor.

§ 3.11.6 The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the Owner's approval of Shop Drawings, Product Data, Samples or similar submittals unless the Contractor has specifically informed the Owner in writing of such deviation at the time of submittal and (1) the Owner has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples or similar submittals by the Owner's approval thereof.

§ 3.12 USE OF SITE

§ 3.12.1 The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

§ 3.13 CUTTING AND PATCHING

§ 3.13.1 The Contractor shall be responsible for cutting, fitting or patching required to complete the Work or to make its parts fit together properly.

§ 3.13.2 The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner or separate contractors by cutting, patching or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter such construction by the Owner or a separate contractor except with written consent of the Owner and of such separate contractor; such consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold from the Owner or a separate contractor the Contractor's consent to cutting or otherwise altering the Work.

§ 3.14 CLEANING UP

§ 3.14.1 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove from and about the Project waste materials, rubbish, the Contractor's tools, construction equipment, machinery and surplus materials.

§ 3.14.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and the cost thereof shall be charged to the Contractor.

§ 3.15 ACCESS TO WORK

§ 3.15.1 The Contractor shall at all times provide the Owner access to the Work in preparation and progress wherever located.

§ 3.16 ROYALTIES, PATENTS AND COPYRIGHTS

§ 3.16.1 The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner harmless from loss on account thereof, but shall not be responsible for such defense or loss when a particular design, process or product of a particular manufacturer or manufacturers is required by the Contract Documents or where the copyright violations are contained in Drawings, Specifications or other documents prepared by the Owner. However, if the Contractor has reason to believe that the required design, process or product is an infringement of a copyright or a patent, the Contractor shall be responsible for such loss unless such information is promptly furnished to the Owner.

§ 3.17 INDEMNIFICATION

§ 3.17.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner and agents and employees from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work by the Contractor or Subcontractor(s). Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Section 3.17.

§ 3.17.2 In claims against any person or entity indemnified under this Section 3.17 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under Section 3.17.1 shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts.

ARTICLE 4 – SUBCONTRACTORS**§ 4.1 DEFINITIONS**

§ 4.1.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include a separate contractor or subcontractors of a separate contractor.

§ 4.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

§ 4.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS

§ 4.2.1 Unless otherwise stated in the Contract Documents or the bidding requirements, the Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner the names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each principal portion of the Work. The Architect/Engineer will promptly reply to the Contractor in writing stating whether or not the Owner or the Architect/Engineer, after due investigation, has reasonable objection to any such proposed person or entity.

§ 4.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner has made reasonable and legally permissible and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

§ 4.2.3 If the Owner has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner has no reasonable objection

§ 4.2.4 The Contractor shall not change a Subcontractor, person or entity previously selected if the Owner makes reasonable objection to such substitute.

§ 4.3 SUBCONTRACTUAL RELATIONS

§ 4.3.1 By appropriate agreement, written where legally required for validity, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work, which the Contractor, by these Documents, assumes toward the Owner and Architect/Engineer. Each subcontract agreement shall preserve and protect the rights of the Owner and Architect/Engineer under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement which may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

ARTICLE 5 – CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

§ 5.1 OWNER'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD SEPARATE CONTRACTS

§ 5.1.1 The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and to award separate contracts in connection with other portions of the Project or other construction or operations on the site under Conditions of the Contract identical or substantially similar to these.

§ 5.1.2 When separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.

§ 5.1.3 The Owner shall provide for coordination of the activities of the Owner's own forces and of each separate contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with other separate contractors and the Owner in reviewing their construction schedules when directed to do so. The Contractor shall make any revisions to the construction schedule deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the Contractor, separate contractors and the Owner until subsequently revised.

§ 5.2 MUTUAL RESPONSIBILITY

§ 5.2.1 The Contractor shall afford the Owner and separate contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.

§ 5.2.2 If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a separate contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly report to the Architect/Engineer apparent discrepancies or defects in such other construction that would render it unsuitable for such proper execution and results. Failure of the Contractor so to report shall constitute an acknowledgment that the Owner's or separate contractor's completed or partially completed construction is fit and proper to receive the Contractor's Work, except as to defects not then reasonably discoverable.

§ 5.2.3 The Owner shall be reimbursed by the Contractor for costs incurred by the Owner which are payable to a separate contractor because of delays, improperly timed activities or defective construction of the Contractor.

§ 5.2.4 The Contractor shall promptly remedy damage wrongfully caused by the Contractor to completed or partially completed construction or to property of the Owner or separate contractors as provided in Section 9.2.5.

ARTICLE 6 – CHANGES IN THE WORK / CLAIMS FOR ADDITIONAL COSTS**§ 6.1 CHANGE ORDER**

§ 6.1.1 A Change Order is a written order to the Contractor signed by the Owner, issued after execution of the Contract, authorizing a change in the Work or an adjustment in the Contract Sum or the Contract Time. The Contract Sum and the Contract Time may be changed only by Change Order.

§ 6.1.2 The Owner, without invalidating the Contract, may order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Sum and the Contract Time being adjusted accordingly. All such changes in the Work shall be authorized by Change Order, and shall be performed under the applicable conditions of the Contract Documents and applicable General Laws.

§ 6.1.3 Upon request of the Owner or the Architect/Engineer, the Contractor shall without cost to the Owner submit to the Architect/Engineer, in such form as the Architect/Engineer may require, an accurate written estimate of the cost of any proposed extra Work or change. The estimate shall indicate the quantity and unit cost of each item of materials, and the number of hours of work and hourly rate for each class of labor, as well as the description and amounts of all other costs chargeable under the terms of this Article. Unit labor costs for the installation of each item of materials shall be shown if required by the Architect/Engineer. The Contractor shall promptly revise and resubmit each estimate if the Architect/Engineer determines that it is not in compliance with the requirements of this Article, or that it contains errors of fact or mathematical errors. If required by the Architect/Engineer, in order to establish the exact cost of new Work added or of previously required Work omitted, the Contractor shall obtain and furnish to the Architect/Engineer bona fide proposals from recognized suppliers for furnishing any material included in such Work. Such estimates shall be furnished promptly so as to occasion no delay in the Work and shall be furnished at the Contractor's expense. The Contractor shall state in the estimate any extension of time required for the completion of the Work if the change or extra work is ordered.

§ 6.1.4 The cost or credit to the Owner resulting from a change in the Work shall be determined in one or more of the following ways:

1. by mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
2. by unit prices stated in the Contract Documents or subsequently agreed upon;
3. by cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
4. by the method provided in Section 6.1.5.

§ 6.1.5 If none of the methods set forth in Section 6.1.5.1, 6.1.5.2 or 6.1.5.3 is agreed upon, the Contractor, provided he receives a written order signed by the Owner, shall promptly proceed with the Work involved. The cost of such Work shall then be determined by the Owner on the basis of the reasonable expenditures and savings of those performing the Work attributable to the change, including, in the case of an increase in the Contract Sum, a reasonable allowance for overhead and profit. In such case, and also under Section 6.1.5.2 and 6.1.5.3 above, the Contractor shall keep and present an itemized accounting together with appropriate supporting data for inclusion in a Change Order. Unless otherwise provided in the Contract Documents, cost shall be limited to the following: actual cost of materials, including sales tax and cost of delivery; labor, including social security, old age and unemployment insurance, and fringe benefits required by agreement or custom; workers' or workmen's compensation insurance; bond premiums, and rental value of equipment and machinery. Pending final determination of cost to the Owner, payments on account shall be made on the Owner's Certificate for Payment. The amount of credit to be allowed by the Contractor to the Owner for any deletion or change which results in a net decrease in the Contract Sum will be the amount of the actual net cost. When both additions and credits covering related Work or substitutions are involved in any one change, the allowance for overhead and profit shall be figured on the basis of the net increase, if any, with respect to that change.

§ 6.1.6 Unit prices shall be as stated in the Bid Form and the Contract shall include all costs of the Contractor to the Owner as listed in Section 6.1.5. No additional charges shall be allowed for these items under any circumstances.

§ 6.2 CONCEALED CONDITIONS

§ 6.2.1 Should concealed conditions encountered in the performance of the Work below the surface of the ground or should concealed or unknown conditions in an existing structure be at variance with the conditions indicated by the Contract Documents, or should unknown physical conditions below the surface of the ground or should concealed or unknown conditions in an existing structure of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract, be encountered, the Contract Sum shall be equitably adjusted by Change Order upon claim by either party made within twenty days after the first observance of the conditions.

§ 6.3 MINOR CHANGES IN THE WORK

§ 6.3.1 The Owner will have authority to order minor changes in the Work not involving an adjustment in the Contract Sum or an extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes shall be affected by written order, and shall be binding on the Owner and the Contractor. The Contractor shall carry out such written orders promptly, regardless of whether it objects to an absence of adjustment in the Contract Time or Contract Sum.

§ 6.4 CLAIMS FOR INCREASE IN CONTRACT TIME OR CONTRACT SUM

§ 6.4.1 Definition. The word "Claim" shall mean a written demand by the Contractor for an increase in the Contract Time or the Contract Sum. The Contractor is responsible for substantiating its Claims. The word "Claim" shall not include claims by the Owner. The Owner may withhold from the Contractor the value of any claims against the Contractor in accordance with Massachusetts General Laws, including, but not limited to, Sections 39G and 39K of Chapter 30.

§ 6.4.2 Time Limits on Claims. Contractor must initiate Claims within fourteen (14) calendar days after occurrence of the event giving rise to such Claim by written notice to the Architect/Engineer and the Owner. Such written notice must (1) be signed by the Contractor; (2) conspicuously identify on its face that the notice serves as a notice of claim; (3) explain in sufficient detail the basis of the Claim; (4) identify the date of the event giving rise to such Claim; and (5) state the exact dollar amount of the increase in the Contract Sum being requested, if any, and the number of days extension to the Contract Time sought, if any. This notice shall be given by the Contractor before proceeding to execute the Work, except in an emergency endangering life or property. No such claim shall be valid unless so made.

§ 6.4.3 If the Contractor claims that additional cost is involved because of, but not limited to, (1) any written interpretation by the Owner, (2) any order by the Owner to stop the Work where the Contractor was not at fault, (3) any written order for a minor change in the Work issued or (4) failure of payment by the Owner, the Contractor shall make such claim as provided in this Section 6.4.

ARTICLE 7 – TIME**§ 7.1 DEFINITIONS**

§ 7.1.1 Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

§ 7.1.2 The date of commencement of the Work is the date established in a notice to proceed. If there is no notice to proceed, it shall be the date of the Owner-Contractor Agreement or such other date as may be established therein.

§ 7.1.3 The Date of Substantial Completion of the Work or designated portion thereof is the Date certified by the Owner when construction is substantially complete, in accordance with the Contract Documents, other than only customary punch list items, the lack of or completion of which will not interfere with the Owner's use, so the Owner can lawfully occupy and utilize the Work or designated portion thereof for the use for which it is intended. The Date of Final Completion of the Work is the date on which the Owner issues its final Certificate for Payment in accordance with Section 8.9 hereof.

§ 7.1.4 The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

§ 7.2 PROGRESS AND COMPLETION

§ 7.2.1 All time limits stated in the Contract Documents are of the essence of the Contract.

§ 7.2.2 The Contractor shall begin the Work on the date of commencement as defined in Section 7.1.2. He shall carry the Work forward expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time, and Final Completion thereafter in accordance with the provisions of the Contract Documents. If the Contractor fails to keep pace with the construction schedule prepared pursuant to Section 3.9, as measured by the certificates for payment issued by the Architect/Engineer, the

Owner may require the Contractor, at the Contractor's sole cost, to accelerate the progress of the work by adding personnel or increasing the hours of work or by other means acceptable to the Owner.

§ 7.3 DELAYS AND EXTENSIONS OF TIME

§ 7.3.1 If the Contractor claims that he is delayed at any time in the progress of the Work by any act or neglect of the Owner or by any employee of the Owner, or by any separate contractor employed by the Owner, or by changes ordered in the Work, or by labor disputes, fire, unavoidable casualties, or any causes beyond the Contractor's or its Subcontractor's control, or by delay authorized by the Owner, then, provided such delay in no way results from the act or neglect of the Contractor or any of its Subcontractors, the Contract Time may be extended by Change Order for such reasonable time as the Owner may determine.

§ 7.3.2 Any claim for extension of time shall be made in writing to the Owner within the time set forth in Section 6.4.2; otherwise it shall be waived. In the case of a continuing delay only one claim is necessary. The Contractor shall provide an estimate of the probable effect of such delay on the progress of the Work.

§ 7.3.3 If no agreement is made stating the dates upon which interpretations of the Contract Documents by the Architect/Engineer shall be furnished, then no claim for delay shall be allowed on account of failure to furnish such interpretation until fifteen days after written request is made for them, and not then unless such claim is reasonable.

§ 7.3.4 The Contractor hereby agrees that the Contractor shall have no claim for damages of any kind against the Owner on account of any delay in the commencement or performance of the Work and/or any hindrance, delay or suspension of any portion of the Work, whether such delay is caused by the Owner, or otherwise, except as and to the extent expressly provided under M.G.L. c.30, §39O in the case of written orders by the Owner. The Contractor acknowledges that the Contractor's sole remedy for any such delay and/or suspension will be an extension of time as provided in this Article.

§ 7.4 LIQUIDATED DAMAGES

§ 7.4.1 It is expressly understood and agreed, by and between the Contractor and Owner, that the time for the completion of the Work described herein is a reasonable time for the completion of same, taking into consideration the average climatic range and usual industrial and/or residential conditions prevailing in this locality. If the said Contractor shall neglect, fail or refuse to substantially complete the Work within the times herein specified, or any proper extension thereof granted by the Owner, then the Contractor does hereby agree, as a part consideration for the awarding of this Contract, to pay to the Owner the amount specified in the Agreement not as a penalty but as liquidated damages for such breach of contract, for each and every calendar day that the Contractor shall be in default after the time stipulated for completing the Work. The said amount is fixed and agreed upon by and between the Contractor and the Owner because of the impracticability of fixing and ascertaining the actual damages the Owner would in such event sustain, and said amount is agreed to be the amount of damages which the Owner would sustain and said amount shall be deducted by the Owner from periodic payments.

ARTICLE 8 – PAYMENTS AND COMPLETION

§ 8.1 CONTRACT SUM

§ 8.1.1 The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

§ 8.2 SCHEDULE OF VALUES

§ 8.2.1 Before the first Application for Payment, the Contractor shall submit to the Architect/Engineer a schedule of values allocated to various portions of the Work, prepared in such form and supported by such data to substantiate its accuracy as the Architect/Engineer may require. This schedule, unless objected to by the Architect/Engineer, in which case it shall be revised until acceptable to the Architect/Engineer shall be used as a basis for reviewing the Contractor's Applications for Payment.

§ 8.3 APPLICATIONS FOR PAYMENT

§ 8.3.1 The Contractor shall submit to the Owner an itemized Application for Payment supported by such data substantiating the Contractor's right to payment as provided elsewhere in the Contract Documents for the period ending the last day of each month within the Contract period. The Application shall contain a separate line item or section for each subtrade category and a listing of the amount paid to each subcontractor as of the date of the Application

§ 8.3.2 Such applications may not include requests for payment for portions of the Work for which the Contractor does not intend to pay to a Subcontractor or material supplier, unless such Work has been performed by others whom the Contractor intends to pay.

§ 8.3.3 Unless otherwise provided in the Contract Documents, payments may be made on account of materials or equipment not incorporated in the Work but delivered and suitably stored at the site and, if approved in advance by the Owner, payments may similarly be made for materials or equipment suitably stored at some other location agreed upon in writing. Payments for materials or equipment stored on or off the site shall be conditioned upon submission by the Contractor of bills of sale or such other procedures satisfactory to the Owner to establish the Owner's title to such materials or equipment or otherwise protect the Owner's interest, including applicable insurance and transportation to the site for those materials and equipment stored off the site. The Contractor shall assume responsibility to protect all such materials from loss or damage at no cost to the Owner, until they are finally incorporated into the Work, whether or not they have been paid for by the Owner.

§ 8.3.4 The Contractor warrants that title to all Work, materials and equipment covered by an Application for Payment will pass to the Owner either by incorporation in the construction or upon the receipt of payment by the Contractor, whichever occurs first, free and clear of all liens, claims, security interests or encumbrances, hereinafter referred to in this Article 9 as "liens"; and that no Work, materials or equipment covered by an Application for Payment will have been acquired by the Contractor, or by any other person performing Work at the site or furnishing materials and equipment for the Project, subject to an agreement under which an interest therein or an encumbrance thereon is retained by the seller or otherwise imposed by the Contractor or such other person.

§ 8.4 CERTIFICATES FOR PAYMENT

§ 8.4.1 The Architect/Engineer will, within ten days after receipt of the Contractor's properly completed and supported Application for Payment, either issue to the Owner a Certificate for Payment, with a copy to the Contractor, for such amount as the Architect/Engineer determines is properly due, or notify the Contractor and Owner in writing of the Architect/Engineer's reasons for withholding certification in whole or in part as provided in Section 8.5.1.

§ 8.4.2 The issuance of a Certificate for Payment by the Architect/Engineer shall not be deemed to represent that he has made exhaustive or continuous on-site inspections to check the quality or quantity of the Work or that he has reviewed the construction means, methods, techniques, sequences or procedures, or that he has made any examination to ascertain how or for what purpose the Contractor has used the moneys previously paid on account of the Contract Sum.

§ 8.5 DECISIONS TO WITHHOLD CERTIFICATION

§ 8.5.1 The Owner shall withhold its Payment in whole or in part, to the extent necessary reasonably to protect itself. If the Owner is unable to make payment in the amount of the Application, he will notify the Contractor as provided in Section 8.4.1. If the Contractor and the Owner cannot agree on a revised amount, the Owner will issue a Certificate for Payment for the amount for which it determines is properly due. The Owner may also decline to make payment and the Architect/Engineer because of subsequently discovered evidence or subsequent observations, may nullify the whole or any part of any Certificate for Payment previously issued, to such extent as may be necessary in its opinion to the Owner from loss because of:

- .1 defective work not remedied,
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims,
- .3 failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment,
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum,
- .5 damage to the Owner or another Contractor,
- .6 reasonable evidence that the Work will not be completed within the Contract Time, or
- .7 material failure to carry out the Work in accordance with the Contract Documents.

§ 8.5.2 When the above grounds in Section 8.5.1 are removed, payment shall be made for amounts withheld because of them.

§ 8.6 PROGRESS PAYMENTS

§ 8.6.1 After the Architect/Engineer has issued a Certificate for Payment, the Owner shall make payment in the manner and within the time provided in General Laws Chapter 30, Section 39, and the Contract Documents. The Owner reserves the right to a 5% general retainage from each progress payment, which retainage shall be released to the Contractor upon substantial completion, less amounts properly allocated to punch list work and potential claims of the Owner.

§ 8.6.2 The Contractor shall promptly pay each Subcontractor, upon receipt of payment from the Owner, out of the amount paid to the Contractor on account of such Subcontractor's portion of the Work, the amount to which said Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of such Subcontractor's portion of the Work.

§ 8.6.3 The Owner shall not have any obligation to pay or to see to the payment of any moneys to any Subcontractor except as may otherwise be required by law.

§ 8.6.4 No Certificate for a progress payment, nor any progress payment, nor any partial or entire use or occupancy of the Project by the Owner, shall constitute an acceptance of any Work not in accordance with the Contract Documents.

§ 8.6.5 Notwithstanding the provisions of Section 8.6 all progress payments shall be made in accordance with Chapter 30, Sections 39F, 39G and 39K (as appropriate) of the General Laws of the Commonwealth of Massachusetts, as amended.

§ 8.7 SUBSTANTIAL COMPLETION

§ 8.7.1 When the Contractor considers that the Work, or a designated portion thereof which is acceptable to the Owner, is substantially complete as defined in Section 7.1.3, the Contractor shall prepare for submission to the Owner a list of items to be completed or corrected. The failure to include any items on

such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. When the Owner on the basis of an inspection determines that the Work or designated portion thereof is substantially complete, he will then prepare a Certificate of Substantial Completion which shall establish the Date of Substantial Completion, shall state the responsibilities of the Owner and the Contractor for security, maintenance, heat, utilities, damage to the Work, and insurance, and shall fix the time within which the Contractor shall complete the items listed therein. Warranties required by the Contract Documents shall commence on the Date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion. The Certificate of Substantial Completion shall be submitted to the Owner and the Contractor for their written acceptance of the responsibility assigned to them in such Certificate.

§ 8.7.2 Upon Substantial Completion of the Work or designated portion thereof and upon application by the Contractor and Certification by the Architect/Engineer, the Owner shall make payment, reflecting adjustment in retainage, if any, for such Work or portion thereof as provided in the Contract Documents.

§ 8.7.3 The Contractor shall complete and correct any incomplete or defective work within forty-five (45) calendar days from the date of Substantial Completion or, if earlier, the date established herein for final completion of the project work, unless the Contractor is granted, in the form of a change order, a time extension by the Owner.

§ 8.8 PARTIAL OCCUPANCY OR USE

§ 8.8.1 The Contractor agrees to the use and occupancy of the Project or any portion thereof before Substantial Completion of the Work. The Owner will cooperate with the Contractor with respect to the completion of the Work by taking such reasonable steps as may be possible to avoid interference with the Contractor's Work provided that they do not interfere with the proper functioning of the facility. The Contractor shall not be responsible for wear and tear or damage resulting solely from temporary occupancy. Use and occupancy of any part of the Work prior to Substantial Completion shall not relieve the Contractor from maintaining the required payment and performance bonds and insurance required by this Contract.

§ 8.9 FINAL COMPLETION AND FINAL PAYMENT

§ 8.9.1 Upon receipt of written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect/Engineer will make such inspection and, when it finds the Work acceptable under the Contract Documents and the Contract fully performed, it will issue a final Certificate for Payment stating that to the best of its knowledge, information and belief, and on the basis of its observations and inspections, the Work has been completed in accordance with the terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor, and noted in said final Certificate, is due and payable.

§ 8.9.2 Neither the final payment nor the remaining retained percentage shall become due until the Contractor submits to the Owner (1) an affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or his property might in any way be responsible, have been fully paid or otherwise satisfied, (2) consent of surety, if any, to final payment and (3), if required by the Owner, other data establishing payment or satisfaction of all such obligations, receipts, releases and waivers of liens arising out of the Contract, to the extent and in such form as may be designated by the Owner. If any Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify him against any such lien. If any such lien remains unsatisfied after all payments are made, the Contractor shall refund to the Owner all moneys that the latter may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.

§ 8.9.3 Acceptance of final payment by the Contractor, a Subcontractor or material supplier shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

§ 8.9.4 Notwithstanding anything in the Contract Documents to the contrary, final payment shall be made in accordance with the requirements of G.L.c.30, §39K (building projects) or §39G (public works projects), as amended.

ARTICLE 9 – PROTECTION OF PERSONS AND PROPERTY

§ 9.1 SAFETY PRECAUTIONS AND PROGRAMS

§ 9.1.1 The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Contract, including but not limited to precautions and programs as may be required by executive orders of the Governor of the Commonwealth of Massachusetts.

§ 9.2 SAFETY OF PERSONS AND PROPERTY

§ 9.2.1 The Contractor shall take all reasonable precautions for safety of, and shall provide all reasonable protection to prevent damage, injury or loss to:

1. all employees on the Work and other persons who may be affected thereby;
2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody or control of the Contractor or the Contractor's Subcontractors or Sub-subcontractors; and
3. other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

§ 9.2.2 The Contractor shall give all notices and comply with all applicable laws, ordinances, rules, regulations and lawful orders of public authorities bearing on safety of persons or property or their protection from damage, injury or loss, including but not limited to executive orders of the Governor of the Commonwealth of Massachusetts.

§ 9.2.3 The Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent sites and utilities.

§ 9.2.4 When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.

§ 9.2.5 The Contractor shall promptly remedy all damage or loss to any property referred to in Sections 9.2.1.2 and 9.2.1.3 caused in whole or in part by the Contractor, any Subcontractor, any Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable and for which the Contractor is responsible under Sections 9.2.1.2 and 9.2.1.3., except damage or loss solely attributable to the acts or omissions of the Owner, the Engineer or anyone directly or indirectly employed by the Owner or Engineer, or by anyone for whose acts the Owner or Engineer may be liable, and not attributable to the acts or omissions of the Owner, the Engineer or anyone

directly or indirectly employed by them, or by anyone for whose acts it may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to his obligation under Section 3.13.2

§ 9.2.6 The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner and Architect/Engineer.

§ 9.2.7 The Contractor shall not load or permit any part of the construction or site to be loaded so as to endanger its safety.

§ 9.2.8 The Contractor shall at all times protect excavations, trenches, buildings and materials from rain water, groundwater, backup or leakage of sewers, drains and other piping, and from water of any other origin and shall remove promptly any accumulation of water. The Contractor shall provide and operate all pumps, piping and other equipment necessary to this end.

§ 9.2.9 The Contractor shall remove snow and ice which might result in damage or delay.

§ 9.2.10 During the progress of the Work and at all times prior to the date of Substantial Completion or occupancy of the Work by the Owner, whichever is earlier, the Contractor shall provide temporary heat, ventilation, and enclosure, adequate to permit the Work to proceed in a timely fashion, and to prevent damage to completed Work or Work in progress, or to materials stored on the premises.

§ 9.3 HAZARDOUS MATERIALS

§ 9.3.1 If the Contractor encounters or recognizes on the site any material known or reasonably believed to be hazardous, including but not limited to asbestos or polychlorinated biphenyl (PCB), the Contractor shall immediately stop Work in the area affected and report the condition to the Owner and Architect/Engineer in writing. The Contractor and the Owner shall cooperate in implementing measures to remove or contain said material and the Contractor shall comply with all directions of the Architect/Engineer in the implementation of such removal or containment.

§ 9.4 EMERGENCIES

§ 9.4.1 In any imminent or existing emergency affecting the safety of persons or property at the project site, the Contractor shall act, at his discretion, to prevent threatened damage, injury or loss. Any additional compensation or extension of time claimed by the Contractor on account of emergency work shall be subject to the provisions in Article 7. Actions required of the Contractor by applicable laws, ordinances, rules, regulations and lawful orders of public authorities bearing on the safety of persons or property or their protection from damage, injury or loss shall not be deemed an unforeseen emergency under this section.

ARTICLE 10 – INSURANCE AND BONDS

§ 10.1 CONTRACTOR'S LIABILITY INSURANCE

§ 10.1.1 The Contractor shall purchase and maintain in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located such insurance as will protect the Contractor from claims set forth below which may arise out of or result from the Contractor's operations under the Contract and for which the Contractor may be legally liable, whether such operations be by the Contractor or by a Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

1. claims under workers' compensation, disability benefit and other similar employee benefit acts which are applicable to the Work to be performed;
2. claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor's employees;
3. claims for damages because of bodily injury, sickness or disease, or death of any person other than the Contractor's employees;
4. claims for damages insured by usual personal injury liability coverage;
5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom;
6. claims for damages because of bodily injury, death of a person or property damage arising out of ownership, maintenance or use of a motor vehicle; and,
7. claims for bodily injury or property damage arising out of completed operations.

§ 10.1.2 The insurance required by Section 10.1.1 shall include all major divisions of coverage and shall be on a comprehensive general basis including Premises and Operations (including X-C-U), Owner's and Contractor's Protective, Products and Completed Operations, and Owned, Non-owned, and Hired Motor Vehicles. Such insurance shall be written for not less than any limits of liability required by law or those set forth in the Contract Documents, whichever is greater.

All insurance shall be written on an occurrence basis, unless the Owner approves in writing coverage on a claims-made basis. Coverages, whether written on an occurrence or claims-made basis, shall be maintained without interruption from date of commencement of the Work until date of final payment and termination of any coverage required to be maintained after final payment. The Owner shall be added as an Additional Insured on all policies.

Coverage for such liability insurance shall be provided by a company or companies reasonably acceptable to the Owner and authorized to do business in Massachusetts. Contractor shall furnish to Owner written confirmation as to the insurance carrier's most current financial ratings when it submits certificates of insurance.

§ 10.1.3 Certificates of insurance acceptable to the Owner shall be filed with the Owner prior to commencement of the Work. These certificates and the insurance policies required by this Section 10.1 shall contain a provision that coverages afforded under the policies will not be canceled or allowed to expire until at least 30 days' prior written notice has been given to the Owner. If any of the foregoing insurance coverages are required to remain in force after final payment and are reasonably available, an additional certificate evidencing continuation of such coverage shall be submitted with the final Application for Payment as required by Section 8.9.2. Information concerning reduction of coverage on account of revised limits or claims paid under the General Aggregate, or both, shall be furnished by the Contractor with reasonable promptness in accordance with the Contractor's information and belief. These certificates shall set forth evidence of all coverage required by Section 10.1.1 and 10.1.2. The Contractor shall furnish to the Owner copies of any endorsements that are subsequently issued amending limits of coverage.

§ 10.2 OWNER'S LIABILITY INSURANCE

§ 10.2.1 The Contractor shall procure and pay for an Owner's policy of Owner's protective liability insurance insuring the Owner and its officers, employees and agents against claims which may arise from operations under the Contract or relating thereto.

§ 10.3 PROPERTY INSURANCE

§ 10.3.1 The Contractor shall purchase and maintain property insurance upon the entire Work at the site to the full insurable value thereof. Coverage for such liability insurance shall be provided by a company or companies reasonably acceptable to the Owner and which have, and shall maintain throughout the pendency of this contract, a minimum financial rating of not less than A+ according to A.M. Best or AAA according to Moody's. Contractor shall furnish to Owner written confirmation as to the insurance carrier's most current financial ratings when it submits the Certificate of Insurance. Such insurance shall include the interests of the Owner, the Contractor, Subcontractors and Sub-subcontractors in the work and shall insure against the perils of fire and extended coverage and shall include "all risks" insurance for physical loss or damage including without duplication, theft, vandalism and malicious mischief. This insurance shall also cover portions of the Work stored off the site or in transit. If this insurance is written with stipulated amounts deductible, the Owner shall not be responsible for any difference between the payments made by the insurance carrier and the claim. The policy shall contain a provision that coverage afforded under policies will not be canceled or allowed to expire until at least 30 days' written notice has been given to the Owner. The Owner shall be named insured within the policy.

§ 10.3.2 The Contractor shall pay Subcontractors their just shares of insurance proceeds received by the Contractor, and by appropriate agreements, written where legally required for validity, shall require Subcontractors to make payments to their Sub-subcontractors in similar manner.

§ 10.3.3 The Owner shall have the power to adjust and settle with its insurers any loss for which it has obtained insurance.

§ 10.3.4 Upon the occurrence of an insured loss, the Owner and the Contractor shall cooperate with each other and with each other's insurer in the submission of claims and related information and the distribution of any insurance proceeds. If after such a loss no other special agreement is made, replacement of damaged work shall be covered by an appropriate change order.

§ 10.4 MINIMUM AMOUNT OF INSURANCE

§ 10.4.1 In no case shall the limits of liability for the insurance required by this section be less than specified in the Supplemental General Conditions.

§ 10.5 PERFORMANCE BOND AND PAYMENT BOND

§ 10.5.1 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 not less than one hundred percent (100%) of the Contract price as security for the payment of all persons performing labor on the project 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, and in a form acceptable to the Owner, and shall remain in effect through the one-year warranty period.

§ 11.5.2 Upon completion of the work to the satisfaction of the Owner, the Contractor shall provide a Maintenance Bond or Warranty Bond in an amount to be established by the Owner, but not less than twenty-five percent (25%) of the Contract Price. The Maintenance Bond or Warranty Bond shall be provided prior to release of the Performance Bond and/or final payment to the Contractor. The Maintenance Bond or Warranty Bond shall remain in effect through the one-year warranty period.

ARTICLE 11 – UNCOVERING AND CORRECTION OF WORK**§ 11.1 UNCOVERING OF WORK**

§ 11.1.1 If any portion of the work should be covered contrary to the request of the Owner or to requirements specifically expressed in the Contract Documents, it must, if required in writing by the Owner, be uncovered for his observation and shall be replaced at the Contractor's expense.

§ 11.1.2 If any other portion of the Work has been covered which the Owner has not specifically requested to observe prior to being covered, the Owner may request to see such Work and it shall be uncovered by the Contractor. If such Work be found in accordance with the Contract Documents, the cost of uncovering and replacement shall, by appropriate Change Order, be charged to the Owner. If such Work be found not in accordance with the Contract Documents, the Contractor shall pay such costs unless it be found that this condition was caused by the Owner or a separate contractor as provided in Article 6, in which event the Owner shall be responsible for the payment of such costs. The Contractor shall bear the cost of any loss, or damages to the owner resulting from such failure or defect.

§ 11.2 CORRECTION OF WORK

§ 11.2.1 The Contractor shall promptly correct all Work rejected by the Owner as defective or as failing to conform to the Contract Documents whether observed before or after Substantial Completion and whether or not fabricated, installed or completed. The Contractor shall bear all costs of correcting such rejected Work, including compensation for the Owner's additional services made necessary thereby.

§ 11.2.2 The Contractor shall provide a document to the Owner certifying that if within one year after the Date of Substantial Completion of the Work or designated portion thereof or within one year after acceptance by the Owner of designated equipment or within such longer period of time as may be prescribed by law or by the terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be defective or requiring excessive service or maintenance or not in accordance with the Contract Documents, the Contractor shall correct it within seven (7) days after receipt of a written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such approval, which written acceptance shall specifically refer to such defect. This obligation shall survive termination of the Contract. The Owner shall give such notice reasonably promptly after discovery of the condition. The provisions of this paragraph are in addition to, and not in limitation of, the Owner's other rights and remedies hereunder and in law and equity.

§ 11.2.3 The Contractor shall remove from the site all portions of the Work which are defective or non-conforming and which have not been corrected under Sections 3.5.1, 11.2.1 and 11.2.2, unless removal is waived by the Owner in writing.

§ 11.2.4 If the Contractor fails to correct defective or nonconforming Work as provided in Sections 3.5.1, 11.2.1 and 11.2.2 the Owner may correct it in accordance with Section 2.6.

§ 11.2.5 If the Contractor does not proceed with the correction of defective or non-conforming Work within a reasonable time fixed by written notice from the Owner, the Owner may remove it and may store the materials or equipment at the expense of the Contractor. If the Contractor does not pay the cost of such removal and storage within ten days thereafter, the Owner may upon ten additional days' written notice sell such Work at auction or at private sale and shall account for the net proceeds thereof, after deducting all the costs that should have been borne by the Contractor, including compensation for the Owner's additional services made necessary thereby. If such proceeds of sale do not cover all costs which the Contractor should have borne, the difference shall be charged to the Contractor and an appropriate

Change Order shall be issued. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

§ 11.2.6 The Contractor shall bear the cost of making good all work of the Owner or separate contractors destroyed or damaged by such correction or removal.

§ 11.2.7 Nothing contained in this Section 11.2 shall be construed to establish a period of limitation with respect to any other obligation which the Contractor might have under the Contract Documents, including Section 3.5 hereof. The establishment of the time period of one year after the Date of Substantial Completion or such longer period of time as may be prescribed by law or by the terms of any warranty required by the Contract Documents relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which his obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to his obligation other than specifically to correct the Work.

§ 11.3 ACCEPTANCE OF NONCONFORMING WORK

§ 11.3.1 If the Owner prefers to accept defective or nonconforming Work, he may do so instead of requiring its removal and correction, in which case a Change Order will be issued to reflect a reduction in the Contract Sum where appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

ARTICLE 12 – MISCELLANEOUS PROVISIONS

§ 12.1 GOVERNING LAW

§ 12.1.1 The Contract shall be governed by the law of the Commonwealth of Massachusetts. All applicable provisions of Federal, state, or local laws, by-laws, rules, or regulations are incorporated into the Contract as if fully set forth herein. Any litigation shall be instituted solely in a Massachusetts state court sitting in the Massachusetts county in which Owner is located.

§ 12.2 SUCCESSORS AND ASSIGNS

§ 12.2.1 The Owner and the Contractor each bind himself, his partners, successors, assigns and legal representatives to the other party hereto and to the partners, successors, assigns and legal representatives of such other party in respect to all covenants, agreements and obligations contained in the Contract Documents. The Contractor shall not assign the Contract or sublet it as a whole without the written consent of the Owner, nor shall the Contractor assign any moneys due or to become due to him hereunder, without the previous written consent of the Owner.

§ 12.3 WRITTEN NOTICE

§ 12.3.1 Written notice shall be deemed to have been duly served if delivered in person to the individual or a member of the firm or entity or to an officer of the corporation for which it was intended, or if delivered at or sent by registered or certified mail to the last business address known to the party giving notice.

§ 12.4 RIGHTS AND REMEDIES

§ 12.4.1 Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights and remedies otherwise imposed or available by law.

§ 12.4.2 No action or failure to act by the Owner or Architect/Engineer shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed in writing.

§ 12.5 TESTS AND INSPECTIONS

§ 12.5.1 If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any portion of the Work to be inspected, tested or approved, the Contractor shall give the Owner timely notice of its readiness so the Owner may observe such inspection, testing or approval. The Contractor shall bear all costs of such inspections, tests or approvals conducted by public authorities which are normal and customary for the type of work required by the Contract. Unless otherwise provided, the Owner shall bear all costs of other inspections, tests or approvals. All testing methods, organizations, and personnel shall be approved by the Owner before the start of testing Work, without regard to what party will ultimately pay for such Work.

§ 12.5.2 If the Owner determines that any Work requires special inspection, testing, or approval which Section 12.5.1 does not include, it will instruct the Contractor to order such special inspection, testing or approval, and the Contractor shall give notice as provided in Section 12.5.1. If such special inspection or testing reveals a failure of the Work to comply with the requirements of the Contract Documents, the Contractor shall bear all costs thereof, including compensation for the Owner's additional services made necessary by such failure; otherwise the Owner shall bear such costs, and an appropriate Change Order shall be issued.

§ 12.5.3 Required certificates of inspection, testing or approval shall be secured by the Contractor and promptly delivered by him to the Owner.

§ 12.5.4 The Contractor shall obtain and deliver promptly to the Architect/Engineer any occupancy permit and any certificates of final inspection of any part of the Contractor's work and operating permits for any mechanical apparatus, such as elevators, escalators, boilers, air compressors, etc., which may be required by law to permit full use and occupancy of the premises by the Owner. Receipt of such permits or certificates by the Architect/Engineer shall be a condition precedent to Substantial Completion of the Work.

§ 12.5.5 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

§ 12.6 LIMITATION OF LIABILITY

§ 12.6.1 The Owner shall be liable, if ever, only to the extent of its interest in the Project; and no officer, director, partner, agent or employee of the Owner shall ever be personally or individually liable with respect to this Contract or the Work. Each Subcontract shall include the foregoing limitation, which shall be effective if the Owner ever succeeds to the Contractor's rights and obligations under a Subcontract.

§ 12.7 DEFENSE OF SUITS

§ 12.7.1 The Contractor shall be responsible for, and shall defend and pay all costs, attorneys' fees and liabilities, both direct and indirect, as a result of litigation arising out of this Contract.

§ 12.7.2 Neither final acceptance nor occupation of the premises by the Owner shall relieve the Contractor of responsibility for all claims for labor, materials, and equipment arising out of this Contract.

§ 12.7.3 The Contractor shall indemnify and hold harmless the Owner and the Architect/Engineer and their agents and employees from and against all claims, damages, losses, and expenses including attorneys' fees arising out of or resulting from the performance of the work.

ARTICLE 13 – TERMINATION OR SUSPENSION OF THE CONTRACT

§ 13.1 TERMINATION BY THE CONTRACTOR

§ 13.1.1 The Contractor may terminate the Contract if, through no act or fault of the Contractor or a Subcontractor, Sub-subcontractor or their agents or employees or any other persons or entities performing portions of the Work under direct or indirect contract with the Contractor, the Work is stopped for a period of 30 consecutive days because the Architect/Engineer has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Section 8.4.1, or because the Owner has not made payment on a Certificate for Payment properly issued within the time stated in the Contract Documents, subject to Owner's right to withhold the fair value of its claims against Contractor.

§ 13.1.2 If the above reason exists, the Contractor may, upon thirty (30) additional days written notice to the Owner and Architect/Engineer, terminate the Contract and recover from the Owner payment for the Work executed and for all materials or equipment not incorporated in the Work, but delivered and suitably stored at the site, unless the Owner and/or Architect/Engineer have cured the reason for termination within such 30-day period. The payment for materials or equipment stored at the site shall be conditioned upon submission by the Contractor of bills of sale or such other evidence as is satisfactory to the Owner to establish the Owner's title to such material or equipment or otherwise protect the Owner's interest.

§ 13.2 TERMINATION BY THE OWNER FOR CAUSE

§ 13.2.1 The Owner may without prejudice to any other right or remedy deem this Contract terminated for cause if any of the following defaults shall occur and not be cured within ten (10) days after the giving of notice thereof by the Owner to the Contractor and any surety that has given bonds in connection with this Contract:

1. The Contractor has filed a petition, or a petition has been filed against the Contractor with its consent, under any federal or state law concerning bankruptcy, reorganization, insolvency or relief from creditors, or if such a petition is filed against the Contractor without its consent and is not dismissed within sixty (60) days; or if the Contractor is generally not paying its debts as they become due; or if the Contractor becomes insolvent; or if the Contractor consents to the appointment of a receiver, trustee, liquidator, custodian or the like of the Contractor or of all or any substantial portion of its assets and such appointment or possession is not terminated within sixty (60) days; or if the Contractor makes an assignment for the benefit of creditors;
2. The Contractor refuses or fails, except in cases for which extension of time is provided under this Contract's express terms, to supply enough properly skilled workers or proper materials to perform its obligations under this Contract, or the Architect/Engineer has determined that the rate of progress required for the timely completion of the Work is not being met;
3. The Contractor fails to make prompt payment to Subcontractors or for materials, equipment, or labor;
4. All or a part of the Work has been abandoned;
5. The Contractor has sublet or assigned all or any portion of the Work, the Contract, or claims thereunder, without the prior written consent of the Owner, except as expressly permitted in this Contract;
6. The Contractor has failed to comply with any applicable Laws, regulations or government orders;

7. The Contractor fails to maintain, or provide to the Owner evidence of the insurance or bonds required by this Contract, or
8. The Contractor has failed to prosecute the Work or any portion thereof to the standards required under this Contract or has otherwise breached any material provision of this Contract.

§ 13.2.2 The Owner shall give the Contractor and any surety notice of such termination for cause, but the giving of notice of such termination shall not be a condition precedent or subsequent to the termination's effectiveness. In the event of such termination, and without limiting any other available remedies, the Owner may, at its option:

1. hold the Contractor and its sureties liable in damages for a breach of Contract;
2. notify the Contractor to discontinue all work, or any part thereof, and the Contractor shall discontinue all work, or any part thereof, as the Owner may designate;
3. complete the Work, or any part thereof, and charge the expense of completing the Work or part thereof, to the Contractor;
4. require the surety or sureties to complete the Work and perform all of the Contractor's obligations under this Contract.

§ 13.2.3 If the Owner elects to complete all or any portion of the Work as specified in Section 13.2.2.3 above, it may take possession of all materials, equipment, tools, machinery, implements at or near the Site owned by the Contractor and finish the Work at the Contractor's expense by whatever means the Owner may deem expedient; and the Contractor shall cooperate at its expense in the orderly transfer of the same to a new contractor or to the Owner as directed by the Owner. In such case the Owner shall not make any further payments to the Contractor until the Work is completely finished. The Owner shall not be liable for any depreciation, loss or damage to said materials, machinery, implements or tools during said use and the Contractor shall be solely responsible for their removal from the site of the Work after the Owner has no further use for them. Unless so removed within fifteen days after notice to the Contractor to do so, they may be sold at public auction, and the proceeds credited to the Contractor's account; or they may, at the option of the Owner, be stored at the Contractor's expense subject to a lien for the storage charges.

§ 13.2.4 Damages and expenses incurred under Section 13.2.2 above shall include, but not be limited to, costs for the design or extra engineering services and Project Manager services required, in the opinion of the Owner, to successfully inspect and administer the construction contract through final completion of the Work

§ 13.2.5 Expenses charged under Section 13.2.2 above may be deducted and paid by the Owner out of any moneys then due or to become due the Contractor under this Contract.

§ 13.2.6 All sums, damages, and expenses incurred by the Owner to complete the Work shall be charged to the Contractor. In case the damages and expenses charged are less than the sum that would have been payable under this Contract if the same had been completed by the Contractor, the Contractor shall be entitled to receive the difference. In case such expenses shall exceed the said sum, the Contractor shall pay the amount of the excess to the Owner.

§ 13.3 TERMINATION BY THE OWNER FOR CONVENIENCE

§ 13.3.1 The Owner may terminate this Contract for convenience even though the Contractor is not in default by giving notice to the Contractor specifying in said notice the date of termination.

§ 13.3.2 In the event that the Contract is terminated pursuant to Section 13.3.1, the Contractor shall be reimbursed in accordance with the Contract Documents for all Work performed up to the termination date, and for all materials or equipment not incorporated in the Work, but delivered and suitably stored at

the site. Payment for materials or equipment stored at the site shall be conditioned upon submission by the Contractor of bills of sale or such other evidence as is satisfactory to the Owner to establish the Owner's title to such material or equipment or otherwise protect the Owner's interest. The payment provided in this section shall be considered to fully compensate the Contractor for all claims and expenses and those of any consultants, Subcontractors, and suppliers, directly or indirectly attributable to the termination, including any claims for lost profits.

§ 13.3.2 Upon termination of this Contract for convenience as provided in Section 13.3.1 of this Article, the Contractor shall: (1) stop the Work; (2) stop placing orders and Subcontracts in connection with this Contract; (3) cancel all existing orders and Subcontracts; (4) surrender the site to the Owner in a safe condition; (5) transfer to the Owner all materials, supplies, work in process, appliances, facilities, equipment and machinery of this Contract, and all plans, Drawings, specifications and other information and documents used in connection with this Contract.

SECTION 00800

SUPPLEMENTAL GENERAL CONDITIONS

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The following provisions modify, change, delete from or add to Section 00700 GENERAL CONDITIONS. Where any Subsection of the General Conditions is modified or any Article Paragraph, Subparagraph or Clause thereof is modified or deleted by these Supplemental General Conditions, the unaltered provisions of that Article, Paragraph, Subparagraph or Clause shall remain in effect.

§ SC 8.10 PREVAILING WAGE AND OSHA COMPLIANCE

§ 8.10.1 In accordance with General Laws Chapter 149, Section 26 through 27D, the Contractor is obligated to comply with the prevailing wage rates established by the Commissioner of the Department of Labor and Workforce Development for mechanics, apprentices, chauffeurs, teamsters and laborers employed on the Project. The schedule of applicable prevailing wage rates for the Project, together with a Certificate of Compliance therewith, are set forth in Attachment A herein.

§ 8.10.2 Certified payrolls shall be provided to the Owner on a weekly basis. No interim or final payment shall be made until the Owner is in receipt of all certified payrolls up to the date of the interim or final payment application. This requirement also applies to all subcontractors retained by the Contractor that are required to pay prevailing wage rates.

§ 8.10.3 Certified payrolls shall be on the form provided through the Department of Labor and Workforce Development. No other format shall be accepted. The form may be downloaded here:

<https://www.mass.gov/doc/weekly-certified-payroll-report/download>. Each certified payroll shall be accompanied by a completed Weekly Statement of Compliance Form: <https://www.mass.gov/doc/weekly-statement-of-compliance/download>.

§ 8.10.4 All covered employees who are entitled to receive the prevailing wage while on the worksite, as well as any other employee of an entity that is required to pay the prevailing wage at the worksite, must have completed the OSHA 10 training. Contractors must provide documentation of the OSHA 10 training on the CPR for each employee the first time the individual is listed on a weekly payroll record. All covered employees must carry documentation of OSHA 10 training on their person when they are on the worksite or be able to immediately direct a representative of the AGO to the documentation. No interim or final payment shall be made until the Owner is in receipt of a copy of the OSHA 10 training certificates of all employees listed on the weekly payroll record(s). This requirement also applies to all subcontractors retained by the Contractor that are required to pay prevailing wage rates.

§ SC 10.4 MINIMUM AMOUNT OF INSURANCE

§ 10.4.1 In no case shall the limits of liability be less than the following:

1. Contractor's Liability Insurance
 - a. Workers' Compensation:
 1. State: Statutory
 2. Employer Liability:
 - \$ 100,000.00 Bodily Injury by Accident
 - \$ 500,000.00 Bodily Injury by Disease - policy limit
 - \$ 100,000.00 Bodily Injury by Disease - each
 - \$ 2,000,000 Umbrella Liability - all limits

-
- b. Comprehensive General Liability (including Premises-Operations; Independent Contractor's Protective; Products and Completed Operations; Broad Form Property Damage):
1. Bodily Injury:
\$1,000,000 Each Occurrence
\$3,000,000 Aggregate
 2. Products and Completed Operations
\$1,000,000 Each Occurrence (bodily injury and property damage)
\$3,000,000 Aggregate
 3. Property Damage Liability (including coverage for XCU hazards).
\$1,000,000 Each Occurrence
\$3,000,000 Aggregate
 4. Products and Completed Operations insurance shall be maintained for a minimum period of 2 years after final payment and Contractor shall continue to provide evidence of such coverage to Owner on an annual basis during the aforementioned.
 5. Contractual Liability (Hold Harmless Coverage):
\$ _____ Bodily Injury Each Occurrence
\$ _____ Property Damage Each Occurrence
\$ _____ Property Damage Aggregate
(See above liability limits)
 6. Personal Injury, with Employment Exclusion deleted:
\$ _____ All Limits
- c. Comprehensive Automobile Liability (owned, non-owned, hired):
1. Bodily Injury
\$1,000,000 Each Person
\$1,000,000 Each Accident
 2. Property Damage
\$1,000,000 Each Accident
- d. Property Insurance / Builders Risk: the full Contact sum
- e. Umbrella Liability Coverage
\$2,000,000 All Limits

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 General Conditions.

Section 01000

**SPECIAL PROVISIONS TO THE
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION'S
STANDARD AND SUPPLEMENTAL SPECIFICATIONS**

DIVISION I

1. Definitions Used in These Special Provisions

The "Municipality", the "Owner" and the "Town" shall mean the Town of Mattapoissett, the municipality in which the Contract work is to be performed.

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

The "Contractor" shall mean the person or entity identified as such in the Owner-Contractor Agreement.

"Engineer" shall mean the authorized representative of the Town of Mattapoissett, if so designated, otherwise the term shall mean the Town of Mattapoissett. The Town retains the authority to perform all functions designated hereinafter to the Engineer, regardless of an authorized representative.

2. Schedule of Operations (Supplementing Section 8.02 of the Standard Specifications)

A Pre-Construction Conference will be held at a time and place to be set following award of the Contract. At that time, the Contractor will be required to submit a plan showing his schedule of operations. Present at this meeting will be representatives of the municipality, including the Conservation Commission/Agent, and public safety officials. The purpose of the meeting will be to enable the various agencies to offer suggestions to the Contractor concerning his proposed schedule in order that full cooperation may be reached between the Contractor and the various agencies.

3. Work Schedule

Work on this Project is restricted to a normal eight (8) hour day, five (5) day week, with the prime Contractor and all subcontractors working on the same shift. The work hours may be modified by the municipality upon request of the Contractor.

No work shall be done on this contract on Saturdays, Sundays or Holidays without 48 hours notification to and permission from the municipality.

The Town of Mattapoissett experiences a significant influx of summer residents and tourists. Given the location of the project adjacent to the town beach, all construction will be suspended from the week prior to Memorial Day to the week after Labor Day. Work will be allowed during the following periods:

Construction Season 1	September 14, 2026 – May 21, 2027
Construction Season 2	September 13, 2027 – March 31, 2028

4. Guarantee After Final Acceptance (Supplementing Section 5.11 of the Standard Specifications)

The Contractor shall, at his own expense, replace any work performed under this Contract found to be defective in workmanship, material, or manner of functioning within twelve (12) months from date of final acceptance of all the installations under this Contract.

5. Permits (Supplementing Subsection 7.03 of the Standard Specifications)

The Contractor shall be responsible for obtaining the Street Opening Permit from the municipality. The Contractor shall be responsible for obtaining and coordinating all other necessary permits. Any and all fees associated with these permits shall be considered incidental to the Contract.

The Contractor shall note that the Scope of Work may be adjusted because of these permits and approvals, and that all work shall be performed in accordance with these permits and approvals. See attachments for additional information.

6. Cooperation by Contractor (Supplementing Subsection 5.05 of the Standard Specifications)

Agents of various public service, municipal and state agencies may be entering on the work site to remove existing facilities, to construct or place new facilities or to make alterations to existing facilities. The Contractor shall perform the work in cooperation with the various agencies in a manner which causes the least interference with the operations of the aforementioned agencies and shall have no claim for delay which may be due, or result, from said work of these agents.

The Contractor shall cooperate with the various utility companies, public agencies and the municipality, and provide access through the site if required for their work or to observe work in connection with this project that affects their respective properties, but all official orders and directives to the Contractor will be issued by the municipality.

7. Adjacent Contracts (Supplementing Subsection 5.06 of the Standard Specifications)

Concurrent work may be in progress in the project area by the municipality, utility companies, another contractor hired by the municipality, or other contractors hired by private parties. The Contractor is required to coordinate his activities with these parties.

The Contractor is required to coordinate work with the local utilities to adjust, rebuild, reset and or relocate all private utilities required by the Scope of Work. Relocation and/or resetting of all private utilities to new grades made necessary by the construction of this project will be accomplished by the respective utility companies.

No additional payment will be allowed for any disruption of work schedule caused by or required to coordinate work in this contract with work to be performed by others, as described above, or which may be encountered during the prosecution of the work.

8. Construction Staking (Supplementing Subsection 5.07 of the Standard Specifications)

Replace "Department" with "Contractor" in the first sentence of Subsection 5.07. Prior to construction, the Contractor will establish baseline control from the information given by the Engineer on the Plans and from record survey available from the Engineer and the municipality. The Contractor shall perform all survey required for the work, said work shall be considered incidental to the Contract.

9. Massachusetts Department of Environmental Protection File Number Sign (Supplementing Subsection 7.01 of the Standard Specifications)

This project is subject to Massachusetts General Laws, Chapter 131, Section 40 as amended. A portion of the proposed work will be within jurisdiction areas covered by the Wetlands Protection Act. However, no temporary or permanent wetland impacts are anticipated. Signs shall be in accordance with the latest MassDOT Construction Standards. All costs for the manufacture, erection, maintenance, moving, and removal of the signs shall be incidental to the Contract.

For this project, the Massachusetts Department of Environmental Protection File No. is 44-1590. All General and Special Conditions contained in the Order of Conditions attached hereto shall be adhered to.

The Contractor is advised that no additional compensation will be allowed for the following, if required: the hiring and paying for services of a Professional Biologist, Botanist, Wetland Scientist, Engineer, Landscape Architect, etc.; wetland flagging; wetland replication monitoring reports, etc.

If field conditions and/or Contractor-proposed erection, demolition, storage, or other procedures not originally allowed by existing environmental permits require work to occur in or otherwise impact water or wetland resource areas, the Contractor is advised that no associated work can occur until all required environmental permits have been either amended or obtained allowing such work. The Contractor must notify the Engineer and/or the Owner in writing at least 20 days prior to desired commencement of the proposed activity. All environmental submittals, including any contact with Local, State, or Federal environmental agencies, must be coordinated with the Engineer and/or the Owner. The Contractor is expected to fully cooperate with requests for information and provide same in a timely manner. The Contractor is further advised that the municipality will not entertain a delay claim due to the time required to modify or obtain the environmental permits.

10. Environmental Protection

The Contractor shall operate only in those areas shown on the Contract Documents and shall provide protective measures called for in various Contract Items or at the direction of the Owner. All protective measures shall be maintained by the Contractor until removal is approved by the Owner or at the end of the Project.

The Contractor shall maintain all construction and storage areas free of debris and trash.

The Contractor shall be responsible for restoration of disturbed areas as provided for in the various items. Any damage to areas not approved by the Owner shall be restored at the Contractor's expense. Should the Contractor fail to make the necessary repairs, the Owner may make such repairs and charge them against the Contractor.

The driveway to 37-39 Water Street is a peastone driveway with metal edging. The Contractor shall be responsible for restoring the driveway to its original condition upon completion of the work on the north side of Water Street. No additional compensation shall be made for the restoration of the driveway, but all costs associated with the work shall be included under the various items.

Daily maintenance and fueling of equipment shall be conducted away from all wetland areas. The Contractor shall have sufficient materials on hand to control and clean up any spillage. In the event of an accidental spillage within any wetland area, the Contractor shall take immediate action to

prevent contamination of wetland areas and shall cease operations and notify the Engineer and the Owner. The cost of clean-up of any contamination shall be the responsibility of the Contractor.

Maintenance and repair other than daily requirement shall be done off-site at the Contractor's own facility or service yard.

From time to time the site may be visited or inspected by Local, State or Federal agencies responsible for protection of the environment. The Contractor shall cooperate with the representatives and shall not hinder or impede their work.

All protective measures shall be paid for in the costs of the various items.

The Contractor shall provide for removal of dirt spilled from his trucks on existing pavement over which it is hauled or otherwise deposited whenever in the judgment of the Engineer and/or the Owner the accumulation is sufficient to cause the formation of mud or dust or interfere with drainage.

Dust Control: Provide positive methods and apply dust control materials to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into the atmosphere.

The Contractor shall provide sanitary facilities for the use of workers at the site and shall ensure that they are maintained in a clean condition. The contents shall be removed and disposed of in a satisfactory manner as the occasion requires. The sanitary conveniences shall be the obligation and responsibility of the Contractor.

The Contractor shall ensure that no invasive plant species, as defined and listed as Invasive, Likely Invasive, or Potentially Invasive, by the Massachusetts Invasive Plant Advisory Group <http://www.massnrc.org/MIPAG>, are introduced or spread around the site by construction activities including but not limited to: improperly cleaned construction equipment and importation of infected materials such as borrow, compost, nursery stock, seed, or hay bales. Corrective measures, if necessary, shall be made by the Contractor as directed by the Engineer and/or the Owner.

The Contractor shall be solely responsible for all costs associated with ensuring that invasive species are not introduced or spread around the site by construction activities and for all corrective measures required for as long as necessary to eliminate the introduced invasive plant species and prevent re-establishment of same.

11. Erosion and Sediment Control

Sediment and erosion control best management practices (BMPs) shall be installed prior to beginning any construction activities and shall remain in place throughout construction and until all disturbed areas are re-vegetated. Additional BMPs shall be installed wherever directed. The Engineer has the authority to limit the surface areas of erodible earth material exposed by excavation, borrow and fill, or any such operations. Such measures will involve the construction of staked straw bales, a settling basin/tank, silt fences, turbidity curtains, or other control devices or methods as necessary to control erosion and sedimentation.

The erosion and sediment control features installed by the Contractor shall be satisfactorily maintained by the Contractor until acceptance of the project. In the event of conflict between these

specifications and laws, rules, or regulations of local agencies, the more restrictive requirements shall apply.

If temporary erosion and sediment control measures are required due to the Contractor's negligence or carelessness, the control measures shall be performed by the Contractor at his own expense. Construction of temporary erosion and sediment control measures, which are not attributed to the Contractor's negligence, carelessness, or failure to install permanent controls, will be performed as shown on the Plans and/or as ordered by the Engineer.

Repeated failures by the Contractor to control erosion, pollution, and/or siltation, shall be cause for the Owner to employ outside assistance or to use his own forces to provide the necessary corrective measures. The cost of such assistance plus project engineering costs will be charged to the Contractor and appropriate deductions made from the Contractor's monthly progress estimate.

Payment for temporary soil erosion and control work will be included under Item 767.121 in the Contract.

12. Oil and Hazardous Material Spills Prevention

Measures must be taken by the Contractor to prevent spills and leaks of oils or other hazardous materials to the environment. Such measures include but are not limited to:

- (1) Proper maintenance of construction equipment.
- (2) Design fuel and hazardous material handling areas so as to prevent releases to the environment (include containment structures if needed).
- (3) Instruct personnel in proper waste handling procedures and strictly prohibit disposal into drains, waterways or receptacles designed for non-hazardous waste only (e.g. trash dumpsters).

The Department of Environmental Protection (DEP) regulations 310 CMR 30.00 and 40.00 address proper management procedures for oil and hazardous waste. Releases or threats of releases of oil or hazardous materials must be reported to the DEP if the amounts equal or exceed reportable quantities. Reportable quantities are listed by DEP in 310 CMR 40.900. Notification to DEP must be made as soon as possible but not more than two hours after obtaining knowledge of a release or threat of release.

13. Public Safety and Convenience (Supplementing Subsection 7.09 of the Standard Specifications)

Safety controls for construction operations shall be done in accordance with the relevant provisions of Section 850 of the Standard Specifications, the Manual on Uniform Traffic Control Devices, the Temporary Traffic Control Plans and the following:

The Contractor shall provide necessary access for fire apparatus and other emergency vehicles through the work zone to all abutting properties at all times. Unless otherwise approved by the municipality, one lane shall be open to provide access to abutting properties at all times during the execution of the work. The Contractor shall at all times provide access to public and private lots and alleys in the work area or arrange 24 hours in advance for disruption in access.

Before the start of work, the Contractor shall post all locations in compliance with the Manual of Uniform Traffic Control Devices (MUTCD) and the Temporary Traffic Control Plans in the Contract documents.

The Contractor shall familiarize himself with the provisions of the Manual of Uniform Traffic Control Devices Part VI Construction and Maintenance. During construction, the Contractor shall provide traffic warning devices that conform to the MUTCD in order to properly protect traffic and pedestrians from the Work. The Contractor shall be responsible for providing, positioning, repositioning, maintaining and removing signs through the course of the project as deemed necessary by the municipality or the Engineer.

When it is deemed necessary by the Chief of Police that detail Police Officers are needed, they will be provided by the Contractor. The municipality shall reimburse the Contractor without mark-up for the cost of the Police Detail upon presentation of the cancelled check. It is the Contractor's responsibility to cancel a Police Detail at a minimum of four hours in advance of the start of the shift if conditions so warrant. The Contractor shall not be reimbursed for Police Details if the Contractor fails to show for the job or if the Contractor fails to cancel the detail with adequate advance notice.

This provision of Police Details shall not relieve the Contractor of the responsibility of providing proper traffic control devices when operating adjacent to the roadway while it is open to the public. Any costs associated with these devices are the responsibility of the Contractor and shall be accounted for in the unit costs unless otherwise provided for.

The Contractor shall provide sufficient fencing, barricades and signage and otherwise provide for security around all excavations and stockpiles. Cost for these items shall be included in the unit costs for the items of work.

The above provisions represent minimal requirements for maintenance of traffic and safety and may be modified at the discretion of the Engineer and/or the Owner.

If, at any time, in the judgment of the Engineer, the Work is not properly made safe in regard to public travel, persons on or about the Work, or public or private property, the Engineer shall have the right to order such safeguards to be erected and such precautions to be taken as deemed advisable, and the Contractor shall comply promptly with such orders. If, under such circumstances, the Contractor does not or cannot immediately put the work and the safeguard into proper and approved condition or if the Contractor or his representative is not upon the site so that he can be notified immediately of the insufficiency of safety precautions, the Owner may put the work into such condition that it shall be, in his opinion, in all respects safe. The Contractor shall pay all costs and expenses incurred by the Owner in so doing. Such action of the Owner or his failure to take such action, shall in no way relieve or diminish the responsibility of the Contractor for any and all costs, expenses, losses, liability, claims, suits, proceedings, judgments, awards, or damages resulting from by reason of, or in connection with the failure to take precautions or the insufficiency of the safety precautions taken by him or by the Owner acting under authority of this section.

Any automotive equipment, not protected by traffic cones or plastic drums, that is working on a public way under this project shall have one amber flashing warning light mounted on the cab roof or on the highest practical point of the machinery visible to both oncoming and overtaking vehicles, at least 32 candlepower and 50 - 60 flashes per minute. This light shall be in operation while the equipment is working or traveling in the work area at a speed of less than 25 mph, and a slow moving vehicle emblem shall also be displayed.

Construction equipment shall not be parked within any traveled way unless said equipment is adequately lighted and protected by safety devices and vehicular traffic is appropriately detoured. Appropriate MUTCD requirements shall apply.

Positioning, adjusting and re-positioning of all devices such as traffic cones, high level warning devices, etc., not otherwise classified and paid for under other items in this Contract, is considered incidental and no separate payment will be made.

14. Protection of Utilities and Property (Supplementing Subsection 7.13 of the Standard Specifications)

Written notice shall be given by the Contractor to all public service corporations or municipal and State officials owning or having charge of publicly or privately owned utilities of his intention to commence operations affecting such utilities at least one week in advance of the commencement of such operations. The Contractor shall, at the same time, file a copy of such notice with the Owner and the Engineer. It is the Contractor's responsibility to provide adequate notice to all public and private utilities that may be affected by the construction of the project.

The following are the names of owners of the principal utilities affected as well as other major contacts, but completeness of this list is not guaranteed:

Electric

Eversource Electric "B"

50 Duchaine Blvd.

New Bedford, MA 01745

Contact: Ned Sadowski

Email: ned.sadowski@eversource.com

Gas

Eversource Gas

157 Cordaville Road, 3113

Southborough, MA 01772

contact: Jeffrey Evans-Mongeon

(508) 305-6970

Email: Jeffrey.Evans-Mongeon@eversource.com

Telephone

Verizon

385 Myles Standish Boulevard

Taunton, MA 02780

Contact: Karen Mealey

(774) 409-3160

Email: karen.m.mealey@verizon.com

Water

Mattapoissett Water & Sewer Dept.

P.O. Box 474, 19 County Road

Mattapoissett, MA 02739

Contact: Henri Renault, Superintendent

(508) 758-4161

Email: hrenauld@mattapoissett.net

Sewer

Mattapoissett Water & Sewer Dept.

P.O. Box 474, 19 County Road

Mattapoissett, MA 02739

Contact: Henri Renault, Superintendent

(508) 758-4161

Email: hrenauld@mattapoissett.net

Cable

Comcast Cable Corporation

P.O. Box 6505, 5 Omni Way

Chelmsford, MA 01824

Contact: Wendy Brown

(978) 848-5163

Email: Wendy_Brown@comcast.com

Eversource Fiber

247 Station Drive, Mail Stop: SUM SE 320

Westwood, MA 02090

Contact: Bechir Khoury

(781) 441-3864

Email: bechir.khoury@eversource.com

DPWMattapoisett Highway Department

5 Mendell Road
Mattapoisett, MA 02379
Contact: Garrett M. Bauer, Highway
Surveyor
(508) 758-4181
Email: highway@mattapoisett.net

Mattapoisett Police Department

64 County Road
Mattapoisett, MA 02739
Contact: Jason A King, Police Chief
(508) 758-4141
Email: jaking@mattapoisettpolice.com

OtherOpen Cape

PO Box 1148
Barnstable, MA 02630-2148
Contact: Gary Farrenkopf
Email: info@opencape.org

Mattapoisett Fire Department

62 County Road
Mattapoisett, MA 02739
Contact: Andrew Murray, Fire Chief
(508) 758-4150

Verizon Wireless Small Cell

20 Alexander Drive
Wallingford, CT 06492
Contact: Elizabeth Glidden
Email: elizabeth.glidden@vzw.com

Engineer

Greenman-Pedersen, Inc.
181 Ballardvale Street, Suite 202
Wilmington, MA 01887
Contact: Rob Sheppard, P.E.
(978) 570-2992
Email: rsheppard@gpinet.com

The Contractor's attention is directed to the necessity of making his own investigation in order to ensure that no damage to existing structures, drainage lines, etc., will occur. Whatever measures are necessary to protect these lines during work shall be included in the Contract unit price for the items involved.

The locations of existing underground utilities are shown in an approximate way only and have not been independently verified by the owners or representatives. The Contractor shall notify Massachusetts DIG SAFE and procure a Dig Safe Number for each location prior to disturbing existing ground in any way. The Dig Safe Call Center telephone number is 1-888-344-7233.

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, vaults or other structures, trees, shrubs, grass and landscaping shall, at his 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 his own expense, of any damage to such structures caused its acts or neglect and shall leave them in the same condition as they existed prior to commencement of the work.

In case of damage to utilities, the Contractor shall promptly notify the utility owner and shall, if requested by the Owner, furnish labor and equipment to work temporarily under the utility 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 municipality or by the utility owner that suffers the loss. The cost of such repairs shall be borne by the Contractor, without compensation therefor.

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 Engineer will, as soon thereafter as reasonable, cause the position of the utilities to be changed or take such other actions deemed suitable and proper.

If live service connections are to be interrupted by excavations of any kind, the Contractor shall not break the service until new services are provided and inspected by the utility owner.

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

Utility structures not correctly adjusted to proper grade prior to paving or buried during construction shall be uncovered, repaired if necessary and reset to grade at Contractor's expense.

15. Prosecution of Work (Supplementing Subsection 8.03 of the Standard Specifications)

Before starting any work under this Contract, the Contractor shall prepare and submit to the Engineer for approval, a plan (based on the Contract Temporary Traffic Control 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 the proposed traffic conditions during each phase of operations 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.

When in the opinion of the Engineer, construction operations constitute a hazard to the safety of the travelling public in the area, the Contractor may be required to restrict or suspend operations and remove equipment from the roadway. The Contractor may also be required to suspend operations during certain hours and to remove the Contractor's equipment from the roadway.

Areas outside the limits of proposed work disturbed by the Contractor's operations shall be restored by the Contractor to their original condition at the Contractor's expense.

16. Disposal of Surplus Materials

All existing and other materials not required or needed for use on the project, and not required to be removed and stacked, shall become the property of the Contractor and shall be removed from the

site during the construction period on a daily basis and disposed of legally (see also the Special Conditions to the Order of Conditions). 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.

17. Material Removed and Stacked

All materials owned by the municipality and noted on the Contract documents to be removed and stacked shall be carefully removed, transported and stacked (on boards) at the discretion of the Owner to the Town of Mattapoissett DPW (Highway Department) yard at 5 Mendell Road during normal business hours.

The Contractor shall be held responsible for any damage to the materials to be stacked before final removal. The Contractor's responsibility shall cease upon final acceptance of the work or 60 days from the time a certified notice (with a copy sent to the Engineer) is sent to the Owner of the material advising him that it is available for removal.

If the Engineer or the municipality determines that any part of the stacked material is unsuitable for reuse, said materials shall become the property of the Contractor, and the Contractor shall dispose of them away from the site. No separate payment will be made for disposal, but all costs in connection therewith shall be included in the prices bid for various Contract items.

18. Concrete Washout and Refueling

Washouts of the concrete truck chutes or small tools shall be permitted in a designated area on the Construction Plans. Prior to use of the designated area, a washout procedure shall be submitted to the Town of Mattapoissett Conservation Commission outlining all work is conducted in accordance with the US Environmental Protection Agency's Stormwater Best Management Practices for Concrete Washout:

(https://www.epa.gov/sites/default/files/2015-11/documents/concretewashout_0.pdf).

Washout area materials include the use of a washout filter and a washout pit installed with appropriate erosion and sedimentation controls. The washout pit shall consist of a vinyl washout container, filter bag, and haybales and compost filter tubes / straw wattles to expand the protected area. This material must be immediately removed from the site once dry.

All other required washouts and all refueling activities shall take place in areas noted in the Special Conditions of the Order of Conditions issued for this project.

No separate payment will be made for the above work, but all costs in connection therewith shall be included in the prices bid for various Contract items.

19. Drainage

It shall be the Contractor's responsibility to maintain drainage in the project areas to provide continual drainage of the travel ways and construction area and in conformance with permits and approvals in the area under construction prior to the time the final system is put into use.

20. Property Bounds

The Contractor shall exercise due care when working around all property bounds which are to remain. This shall include, but not necessarily be limited to, concrete and granite bounds, iron rods, rebars, stakes, pipes, nails, or any other property or layout markers whether existing or proposed under this project. Should any damage to a property marker result from the actions of the Contractor, the marker shall be replaced, realigned, and/or reset to its intended position and certified as to the correct location by a Massachusetts registered professional land surveyor as directed by the Engineer. No further compensation will be due to the contractor for the materials and labor required to re-establish the property marker as described above.

21. Concrete Foundations

Concrete foundations of items to be removed, if not interfering with the proposed construction, may be abandoned in place with approval of the Engineer. Foundations left in place under roadway surface shall be removed to a depth of 3 feet below finished grade; all other foundations left in place shall be removed to a depth of 12 inches below the finished grade. The top 12 inches shall be restored to match the existing grade with materials similar in kind to the abutting materials.

22. Temporary Access to Area Residents

The work is in a mixed-use section of the municipality and access to all properties must be maintained at all times. The Contractor shall provide safe and ready means of ingress and egress to all abutting properties in the project area, both day and night, for the duration of the project.

23. Open Excavations

All open excavations shall be adequately safeguarded by providing temporary barricades, caution signs, lights and other means to prevent accidents to persons, and damage to property. The length of open trench will be controlled by the particular surrounding conditions but shall always be confined to the limits prescribed by the municipality. If the excavation becomes a hazard, or if it excessively restricts traffic at any point, special construction procedures shall be taken, such as limiting the length of open trench or requiring that the trench shall not remain open overnight.

24. Sheeting and Bracing

The Contractor shall furnish, place and remove all sheeting and bracing required to support the sides of the trenches or other excavations for this project.

The Contractor shall be solely responsible for the safety of the workers and the adjacent facilities from danger of caving and sliding and all work to be done shall be in strict accordance with the Department of Labor, Occupational Safety and Health Administration regulations and suggested practices for construction excavation and/or other applicable codes and regulations.

Special precautions shall be taken to guard against any damage to or settlement of pavements, buildings, walls, pipes, ducts, or other structures and facilities that are adjacent to the work.

The cost of providing and removing sheeting, shoring and bracing shall be included in the cost of various items of work under this contract and no additional compensation will be allowed therefore.

25. Work During Inclement Weather

No work shall be done under this Contract except by permission of the Engineer when the weather is unfit for good and careful work to be performed. Should the severity of the weather continue, the Contractor, upon the direction of the municipality, shall suspend all work until instructed to resume operations by the municipality. Time shall be extended to cover the duration of the order. Work damaged during periods of suspension due to inclement weather shall be repaired and/or replaced by the Contractor. No earth fill or embankment shall be placed upon frozen material. If there is a delay in the Work due to the weather conditions, the necessary precautions must be taken to bond new work to old.

26. Sweeping of Streets

All work areas shall be kept clean by the Contractor. The Contractor shall provide weekly sweeping of streets and gutters within the Limits of Work, subject to approval of the Engineer. The Contractor shall also be responsible for sweeping and cleaning of surfaces beyond the limits of the project to clean up material caused by spillage or vehicular tracking during the various phases of the work. Sweeping of streets shall be included in the various items and no additional compensation will be allowed therefore.

27. Shop Drawings Submittals

The Contractor shall, within 10 days after receipt of Notice to Proceed, submit to the Engineer for approval a submittals schedule for all materials and equipment required for this Project. Submittals schedule shall indicate required dates for submitting shop drawings, samples, and product data for materials in order to meet project schedule.

The approval of Shop Drawings shall be general and shall not relieve the Contractor of his responsibility for adherence to the contract or for any error in the drawing.

The Contractor shall not receive payment for, nor will he be allowed to install any item or materials, which require shop drawing approval unless and until he has received shop drawing approval for that item from the Design Engineer with an approval stamp placed thereon.

Within 15 days after receipt of an approved shop drawing for any item, the Contractor shall provide the municipality with written proof that he has ordered such approved materials required on the subject contract and a written confirmation of such order and delivery schedule from the manufacturer of the item. This delivery schedule shall be appropriate for timely completion of this project.

28. Public Water Supply

The Contractor shall note that a source of municipal water may not be present in the area. If necessary, the Contractor may be required to transport water for construction of the project to the job site. Water required for construction of the project will be considered to be incidental to the various items of work.

29. Personal Protective Safety Equipment for Contractor Personnel

The Contractor is responsible to ensure that all personnel, including all subcontractors, working on the project are issued and are wearing all necessary personal protective safety equipment while working

within the project limits. This equipment shall include, as a minimum, a hardhat and a safety vest, regardless of the type of work being performed. Other safety equipment shall be added as required to perform the work in which they are engaged and in accordance with all local, state and federal requirements in effect. Safety equipment shall be provided at no additional cost to the municipality.

30. Precautions Under Electric Lines

The Contractor's attention is directed to the AASHTO Guide on Occupational Safety on Highway Construction Projects, Subpart N, 1926.550, relating to construction equipment clearances at overhead electric lines, which states in part "...the minimum clearance between the lines and any part of the crane or load must be at least ten feet from lines rated 50 KV or below, and greater distances for higher voltage...".

For the protection of personnel and equipment, the Contractor shall be aware of this regulation especially during paving operations using large semi-trailer vehicles.

31. Preservation of Roadside Growth (Subsection 8.08 of the Standard Specifications shall be amended as follows)

The Contractor shall take all necessary care when excavating or working in the vicinity of existing trees so that the root systems, trunks, and branches are not damaged. All precautions shall be taken to ensure that heavy equipment does not damage any roots, including those that lie below the limits of excavation.

Do not store equipment or stockpile materials within drip line of trees or in areas enclosed by tree protection fencing.

Avoid any direct soil contamination in root zone area by petroleum, petroleum products or solvents, salts or any other pollutant during construction.

All cutting or trimming of trees to be preserved shall be executed by a Massachusetts Certified Arborist. The Contractor shall provide the Engineer with a copy of the certification prior to any work on trees.

Trees that, in the judgment of the Engineer, have been irreparably damaged by the Contractor shall be replaced in kind and in size, or with a quantity of 2-inch caliper replacement trees (the quantity of which shall be determined by the Engineer) such that the cumulative caliper of the replacement trees will be up to the equivalent of diameter of the lost tree at breast height.

The cost for the removal of destroyed tree(s), including roots and stump, as well as the cost of replacement trees, shall be paid for by the Contractor.

32. Sawcuts

Sawcuts shall be made in new and/or existing pavement in areas of excavation, pavement transition limits, curb installation, driveway and full depth pavement construction limits, and as directed by the Engineer. **Payment for all sawcutting required for this project shall be included in the unit price under the applicable items.**

33. Restoration of Site

All areas disturbed during construction, and for which items are not otherwise called out for on the plans or these Special Provisions, shall be restored to their original conditions. All labor, equipment, and material required for surface restoration work including loam, seed, and any other material necessary to restore disturbed surfaces to a condition equal to or greater than that which existed prior to construction shall be considered incidental to this item. This surface restoration work shall be completed in all areas disturbed by the contractor during construction, not only in areas disturbed by erosion control measures, if installed.

34. Monthly Price Adjustment for Hot Mix Asphalt

This provision applies to all projects using greater than 100 tons of hot mix asphalt (HMA) mixtures containing liquid asphalt cement.

Price Adjustments will be based on the variance in price, for the liquid asphalt component only, from the Base Price to 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 is a fixed price determined by MassDOT at the time of bid opening using the same method as for the determination of the Period Price detailed below.

Period Price

The Period Price of liquid asphalt for each monthly period shall be as determined by MassDOT 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. MassDOT will post this Period Price on its website within two (2) business days following their receipt of the relevant issue of the "Asphalt Weekly Monitor". Poten and Partners has granted MassDOT the right to publish this specific asphalt price information sourced from the Asphalt Weekly Monitor.

Price Adjustment Determination, Calculation and Payment

The Contract Price of the hot mix asphalt mixture will be paid under the respective item in the Contract. Price adjustments, 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 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.

The Price Adjustment will be a separate payment item. It will be determined by the following:

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

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.

No Price Adjustment will be allowed beyond the Completion Date of this Contract, unless there is an extension of the contract time approved by the municipality.

35. Monthly Price Adjustment For Diesel Fuel and Gasoline

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 Owner, 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 MassDOT's web site (www.massdot.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 affected 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., 140., 142., 144., 151., 151.2 and 156. (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

36. Monthly Price Adjustment For Portland Cement Concrete Mixture

This provision applies to all projects using greater than 100 Cubic Yards of Portland cement concrete containing Portland cement. 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 MassDOT using the same method as for the determination of the Period Price (see below).

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 MassDOT 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 an extension of the contract time approved by the municipality.

37. Monthly Price Adjustment For Structural Steel and Reinforcing Steel

This provision applies to projects containing a price adjustment for structural steel and reinforcing steel. It applies to all structural steel and reinforcing steel, as defined below, on the project. Compliance with this provision is mandatory, i.e., there are no "opt-in" or "opt-out" clauses. Price adjustments will be handled as described below and shall only apply to unfabricated reinforcing steel bars and unfabricated structural steel material, consisting of rolled shapes, plate steel, sheet piling, pipe piles, steel castings and steel forgings.

Price adjustments will be variances between Base Prices and Period Prices. Base Prices and Period Prices are defined below.

Price adjustments will only be made if the variances between Base Prices and Period Prices are 5% or more. A variance can result in the Period Price being either higher or lower than the Base Price. Once the 5% threshold has been achieved, the adjustment will apply to the full variance between the Base Price and the Period Price.

Price adjustments will be calculated by multiplying the number of pounds of unfabricated structural steel material or unfabricated reinforcing steel bars on a project by the index factor calculated as shown below under Example of a Period Price Calculation.

Price adjustments will *not* include guardrail panels or the costs of shop drawing preparation, handling, fabrication, coatings, transportation, storage, installation, profit, overhead, fuel costs, fuel surcharges, or other such charges not related to the cost of the unfabricated structural steel and unfabricated reinforcing steel.

The weight of steel subject to a price adjustment shall not exceed the final shipping weight of the fabricated part by more than 10%.

Base Prices and Period Prices are defined as follows:

Base Prices of unfabricated structural steel and unfabricated reinforcing steel on a project are fixed prices determined by MassDOT and found in the table below.

The Base Price Date is the month and year in which the Owner opened bids for the project. This date is used to select the Base Price Index.

Period Prices of unfabricated structural steel and unfabricated reinforcing steel on a project are variable prices that have been calculated using the Period Price Date and an index of steel prices to adjust the Base Price.

The Period Price Date is the date the steel was delivered to the fabricator as evidenced by an official bill of lading submitted to the Owner containing a description of the shipped materials, weights of the shipped materials and the date of shipment. This date is used to select the Period Price Index.

The index used for the calculation of Period Prices is the U.S. Department of Labor Bureau of Labor Statistics (BLS) Producer Price Index (PPI) Series ID WPU101702 (Not Seasonally Adjusted, Group: Metals and Metal Products, Item: Semi-finished Steel Mill Products.) As this index is subject to revision for a period of up to four (4) months after its original publication, no price adjustments will be made until the index for the period is finalized, i.e., the index is no longer suffixed with a "(P)".

Period Prices are determined as follows:

Period Price = Base Price X Index Factor

Index Factor = Period Price Index / Base Price Index

Example of a Period Price Calculation:

Calculate the Period Price for December 2009 using a Base Price from March 2009 of \$0.82/Pound for 1,000 Pounds of ASTM A709 (AASHTO M270) Grade A36 Structural Steel Plate.

The Period Price Date is December 2009. From the PPI website*, the Period Price Index = 218.0.

The Base Price Date is March 2009. From the PPI website*, the Base Price Index = 229.4.

Index Factor = Period Price Index / Base Price Index = 218.0 / 229.4 = 0.950

Period Price = Base Price X Index Factor = \$0.82/Pound X 0.950 = \$0.78/Pound

Since $\$0.82 - \$0.78 = \$0.04$ is less than 5% of \$0.82, no price adjustment is required.

If the \$0.04 difference shown above was greater than 5% of the Base Price, then the price adjustment would be 1,000 Pounds X \$0.04/Pound = \$40.00. Since the Period Price of \$0.78/Pound is less than the Base Price of \$0.82/Pound, indicating a drop in the price of steel between the bid and the delivery of material, a credit of \$40.00 would be owed to the Owner. When the Period Price is higher than the Base Price, the price adjustment is owed to the Contractor.

To access the PPI website and obtain a Base Price Index or a Period Price Index, go to <http://data.bls.gov/cgi-bin/srgate>

End Division I

DIVISION II

ITEM 120.

EARTH EXCAVATION

CUBIC YARD

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

The work includes the excavation and disposal of asphalt pavement, landscaping and grass areas, and plantings as necessary. The work shall also include the removal of brush, bushes, shrubs and trees and stumps up to 9" in diameter in areas outside clearing and grubbing limits necessary for the work to be performed under this contract. The work also includes the removal of free-standing rocks or boulders found at the edge of the road, typically used for landscaping purposes which are not labeled to be removed and reset or stacked.

The work also includes the removal and disposal of the existing chain link fence and posts, complete.

The work shall also include the removal and disposal of all other items noted as removed and disposed that are not specifically paid for under other items.

The work shall also include the removal and disposal of existing materials shown on the drawings to be removed and stacked but which in the judgment of the Engineer and/or the Owner, as appropriate, are unsuitable for reuse, and for which disposal is not paid for under other items.

Edges of excavations made in existing pavements shall be squared by saw cutting with power-driven tools to provide a neat, clean edge for joining new pavement as shown on the Plans. Ragged, uneven edges will not be accepted. Pavement areas which have been broken or undermined shall be edged neatly with minimum disturbance to the remaining pavement.

Where new driveways abut existing pavements to remain, existing pavement shall be saw cut. Care shall be exercised not to damage trees outside the limits of the project.

METHOD OF MEASUREMENT

Earth Excavation will be measured for payment by the per Cubic Yard.

BASIS OF PAYMENT

Earth Excavation will be paid for at the Contract unit price per Cubic Yard, which price shall be full compensation for the removal, transporting and disposal of materials as described above.

ITEM 140.**BRIDGE EXCAVATION****CUBIC YARD**

The work to be performed under this Item shall conform to Section 140 – Excavation for Structures of the latest MassDOT Standard Specifications for Highways and Bridges and to the following:

DESCRIPTION

Bridge Excavation shall be limited to excavation of material required for the placement of the proposed culvert sections and culvert outlet (including cut-off walls), approach slabs, concrete footings, cemented stone masonry walls, and drainage vault.

Additional material removed for sloped excavation needed shall be considered incidental to this Item and the contractor's bid price shall include full compensation for all excavation required for the installation of the culvert, retaining walls, and drainage vault outlet. No quantity adjustment will be considered for excavation outside of the pay limits as defined above.

Based on the soil descriptions of the boring logs, some of the existing on-site granular soils may meet the requirements of Ordinary Borrow. The suitability for reuse shall be confirmed by testing samples during construction to evaluate if the soil in question meets MassDOT standards for Ordinary Borrow.

See Special Provision Item 144. - Class B Rock Excavation for direction to remove the existing culvert and as a contingency Item for rocks encountered during bridge excavation work.

See Special Provision Item 690. – Stone Masonry Wall Removed and Rebuilt in Cement Mortar for the partial removal of the upstream channel wall and the partial removal of the downstream beach retaining wall.

See Special Provision Item 983.35 - Streambed Material Removed and Relaid, where the top 12” of existing channel material removed within the limits of the proposed upstream regrading is intended to be excavated, stored on site, and used to regrade the upstream channel. This Item shall include any additional excavation required within the limits shown on the plans.

See Special Provision Item 983.36 - Beach Material Removed and Relaid, where all beach material at the proposed outlet retaining wall shall be carefully removed, stored, and relaid in-kind.

METHOD OF MEASUREMENT

Bridge Excavation will be measured in the unit of Cubic Yard for materials removed to install and construct all proposed structures listed within the description of this Item and the contract plans. Compensation is limited to a vertical plane offset of 12 inches beyond the limits of all proposed structures listed within the description of this Item and the contract plans.

BASIS OF PAYMENT

This Item will be paid for at the Contract unit price, which price shall include full compensation for all labor, tools, equipment, materials, and incidental expenses necessary to complete this work.

ITEM 144.**CLASS B ROCK EXCAVATION****CUBIC YARD**

The work to be performed under this Item shall conform to Section 140 - Excavation for Structures, of the MassDOT Standard Specifications for Highways and Bridges and the following:

DESCRIPTION

Work under this item shall include excavated rocks encountered within the areas that require Item 140. - Bridge Excavation and Item 983.35 – Streambed Material Removed and Relaid.

Work under this Item shall include the demolition and removal of the existing stone masonry culvert. Pay limit for rock excavation of the existing stone masonry culvert will be limited to the proposed culvert geometry.

Except as specified, all material and debris shall become the property of the Contractor, and shall be recycled, reused, or disposed of in accordance with all applicable local, state, and federal requirements.

METHOD OF MEASUREMENT

Class B Rock Excavation will be measured for payment by the Cubic Yard for material removed. Pay limit for qualifying rock excavation for the removal of the stone masonry culvert will be restricted to the limits of the existing stone masonry culvert. Class B Rock Excavation shall include all rock encountered under the work of Item 140. – Bridge Excavation.

BASIS OF PAYMENT

Class B Rock Excavation will be paid for at the Contract unit price, which price shall include full compensation for all labor, tools, equipment, materials and incidental expenses necessary to complete the work.

ITEM 156.5**CRUSHED STONE FOR FILTER BLANKET****CUBIC YARD**

The work under this Item shall conform to the relevant provisions of Sections 150 – Embankment and Section 983 – Retement of the Standard Specifications and the following:

DESCRIPTION

The work shall include placing crushed stone for the filter blanket located underneath the proposed scour protection apron as shown on the Plans. This material is used as a bedding/foundation element for Item 258. - Stone for Pipe Ends.

The crushed stone shall conform to Section M2.01.1 – Crushed Stone for Drainage Foundation of the Standard Specifications. The required geotextile fabric for separation is to be paid for under Item 698.4 - Geotextile Fabric for Permanent Erosion Control.

The crushed stone shall be placed in conformance with the Standard Specifications.

This crushed stone shall not be used for any other location unless otherwise directed by the Engineer or called out directly on the plans.

ITEM 156.5 (Continued)

METHOD OF MEASUREMENT

Crushed Stone for Filter Blanket will be measured for payment per Cubic Yard, complete in place.

BASIS OF PAYMENT

Crushed Stone for Filter Blanket will be paid for at the Contract Unit Price per Cubic yard, which price shall include the costs of all labor, tools, materials and equipment required to complete the work.

ITEM 201.

CATCH BASIN

EACH

ITEM 202.

MANHOLE

EACH

The work under these items shall conform to the relevant provisions of Subsection 201 of the Standard Specifications and the following:

All castings located within the pavement area shall not be set to finished grade until after the binder course has been placed.

All catch basins and manholes shall be placed on a bedding of 6 inches crushed stone, as determined by the Engineer to remove unsuitable material and provide a stable structure foundation in accordance with Subsection 150.68.

Where required, cone sections of manholes and catch basins shall be replaced by flat top sections or eccentric sections at no additional cost.

All frames shall be set in a concrete collar conforming to Construction Standard Detail 223.0.1 prior to placement of top course. All frames shall be set on a minimum of two courses of mortared brick as specified in the Standard Specifications. Cost of such work shall be included in the cost of the structure or item of which it forms a part.

All proposed catch basins shall be constructed with a minimum 4-foot-deep sump. An oil-water-debris separator shall be provided over the outlet pipe on all basins.

The cost to provide and install the catch basin and manhole shall include the entire structure, regardless of depth.

METHOD OF MEASUREMENT

Catch Basin and Manhole 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. No separate payment will be made for excavation regardless of depth, but all costs in connection therewith shall be included in the Contract unit price bid.

ITEMS 201. and 202. (Continued)**BASIS OF PAYMENT**

Catch Basin and Manhole will be paid for as specified for similar items under Paragraph 230.81. No separate payment will be made for excavation and excavation support, backfill, surface restoration and installation of concrete collars, but all costs in connection therewith shall be included in the Contract unit price bid.

No separate payment will be made for sawcutting pavement, but all costs in connection therewith shall be included in the Contract unit price bid.

Over excavation to remove unsuitable subgrade material and provide a stable foundation, as determined by the Engineer, will be paid for under Item 142. Class B Trench Excavation.

Crushed stone bedding material, as required by the Engineer to provide a stable foundation, will be paid for under Item 156. Crushed Stone.

ITEM 210.**SANITARY SEWER MANHOLE****EACH**

The work under these items shall conform to the relevant provisions of Subsection 201 of the Standard Specifications and the following:

General

The Contractor shall furnish all labor, materials, equipment and incidentals necessary to provide all manholes and precast structures specified and otherwise required to complete the Work.

Structures shall conform in shape, size, dimensions, material, and other respects to the details shown or as ordered by the Engineer.

Inverts shall conform accurately to the size and elevation of the adjoining pipes. Side inverts shall be curved and main inverts, where direction changes, shall be laid out in smooth curves of the longest possible radius which is tangent to the centerline of adjoining pipelines.

Reference Standard

1. ASTM C 32, sewer and Manhole Brick (made from Clay or Shale).
2. ASTM A48, Gray Iron Castings.
3. ASTM C 139, Concrete Masonry Units for Construction of Catch basins and Manholes.
4. ASTM C 140, Sampling and Testing Concrete Masonry Units.
5. ASTM C 207, Hydrated Lime for Masonry Purposes.
6. ASTM C478, Precast Reinforced Concrete Manhole Sections.
7. ASTM C 923, Resilient Connectors Between Reinforced Concrete Manhole.

Submittals

- A. Shop Drawings: submittals or approval Shop Drawings of design and construction details of all precast concrete structures, manhole frames and covers, and pipe connections. Computations signed and sealed by a Massachusetts licensed Professional Engineer to verify structural adequacy of manholes and reactions to uplift, shall be submitted for review with Shop Drawings. Shop Drawings shall indicate all dimensions, openings, jointing, inserts, reinforcing bars, means of handling and all necessary details.

ITEM 210. (Continued)

- B. The precasting company must be a MassDOT approved precasting company and be listed on the Qualified Construction Materials List (QCML).

MATERIALS**Precast Concrete Manholes**

- A. Precast manholes shall conform to the details shown. Manhole bases may be precast unless cast-in-place is required by the Drawings. Concrete top slabs shall not be less than 8-inches thick.
- B. Precast components shall consist of reinforced concrete pipe sections especially designed for manhole construction. They shall be manufactured in accordance with ASTM C478, latest revision, except as modified herein, and shall conform to the manhole details shown on the plans.
- C. Precast, reinforced concrete manhole bases, riser sections, cone sections, flat slabs and other components shall be manufactured by wet cast methods only using satisfactory forms to provide smooth surfaces free from excessive honeycombing or other imperfections.
- D. The joints shall be tongue and groove type employing butyl sealing material. The circumferential and longitudinal steel reinforcement shall be continuous and extend into the bell and spigot ends of the joint without breaking the continuity of the steel.
- E. All precast manhole components shall be of approved design and of sufficient strength to withstand the loads imposed upon them. They shall be designed for a minimum earth cover loading of 140 pounds per cubic foot, an H-20 wheel loading, and a suitable allowance for impact. Manhole bases shall have reinforcing steel in their walls in accordance with ASTM C478.
- F. Lifting holes if used in manhole components shall be tapered, and no more than two (2) shall be cast in each section. Tapered, solid rubber plugs shall be furnished to seal the lifting holes. The lifting holes shall be constructed to be sealed by plugs driven from the outside face of the section and the remaining void filled with cement mortar outside only.
- G. The point of intersection (P.I.) of the sewer pipe centerlines shall be marked with a 3/8-inch diameter stainless steel pin firmly enclosed in the floor of each manhole base and protruding approximately 1-inch above the finished floor of the base.
- H. The barrel of the manhole shall be constructed of various lengths of riser pipe manufactured in increments of one foot to provide the correct height with the fewest joints. Openings in the barrel of the manholes for sewers or drop connections will not be permitted closer than one foot from the nearest joint. Special manhole base or riser sections shall be furnished as necessary to meet this requirement.
- I. A precast or cast-in-place slab or precast eccentric cone, as shown or approved, shall be provided at the top of the manhole barrel to receive the cast iron frame and cover.
- J. Manhole sections shall contain manhole steps, 12 inches on centers, accurately positioned and embedded in the concrete.

ITEM 210. (Continued)

- K. Stubs for connecting sewer pipe to manhole bases shall be as shown on the plans. A watertight joint shall be provided in the manhole wall by the manufacturer, and shall be a lock-joint gasket.

Precast Structures

- A. Precast concrete structures shall be installed, as shown.
- B. Precast, reinforced concrete bases, riser sections, flat slabs and other components of precast structures shall be manufactured by wet cast methods only using satisfactory forms to provide smooth surfaces free from excessive honeycombing or other imperfections.
- C. The joints between the components shall have continuous shear keys with hydrophilic waterstop and shall be watertight.
- D. Precast structures shall conform to the details shown. Bases may be precast unless cast-in-place is required by the Drawings. Bases shall have two cages of reinforcing steel in their walls, each of the area equal to that required in the riser sections.
- E. Wall thicknesses shall be five (5) inches, minimum. Thickness of base shall be six (6) inches minimum.
- F. Design Criteria:
Soil Pressure (psf) = 90H, where H is the height of soil above in feet.
Unit weight of soil = 140 pcf.
Live Load = H-20 Truck loading or 300 psf, whichever critical.
Allowable soil bearing pressure = 4000 psf.
- G. Base slab shall be designed for uplift.
- H. Structures shall be installed to the grades shown.

Manhole Steps

Manhole steps shall be copolymer polypropylene plastic with continuous, 1/2-inch diameter steel reinforcing rod.

Brick

Brick used shall conform to MassDOT specification M4.05.0.

Mortar

Cement mortar used shall conform to MassDOT specification M4.02.15.

Coating

- A. The exterior of all manholes and precast structures shall be coated with a minimum of two coats of bitumastic sealant. Total Dry film thickness per coat shall be 8 to 10 mils.
- B. The interior of all manholes and precast structures shall be fully coated with a 1/8-inch-thick coating of coal tar epoxy.

ITEM 210. (Continued)**CONSTRUCTION METHODS**Precast Manholes and Structures

- A. All precast structures shall be set on a 12-inch crushed stone foundation where foundation is undisturbed earth, and 6 inches where foundation is rock. The base shall be set at the proper grade and carefully leveled and aligned. A concrete base or leveling course under precast structures shall be poured where, if in the opinion of the Engineer, foundation conditions at a specific location are such that a concrete base is required and the Engineer so orders. Where specifically ordered, such concrete, in the amount ordered, will be included for payment as additional concrete.
- B. The precast manhole components shall be assembled truly plumb. The base of the bell or groove end at joints between components shall be buttered with 1:2 cement mortar to provide a uniform bearing between components. All joints shall be sealed with cement mortar inside and out and troweled smooth to the contour of the wall surface. Raised or rough joint finishes will not be accepted.
- C. All lifting holes shall be sealed tight with a tapered solid rubber plug driven into the hole and the remaining void filled with cement mortar outside only.

Brick Inverts

Brick Invert Work shall conform to the following:

- Remove debris from bottom of manhole before invert is constructed.
- Moisten bricks. Prevent over-soaking to avoid improper adhesion.
- Lay each brick as a header in a full bed and joint of mortar without requiring subsequent grouting, flushing or filling, and thoroughly bond.
- Provide brick inverts conforming to size of adjoining pipes. Side inverts shall be curved. Main inverts shall be laid out in smooth curves of longest possible radius where direction changes, which is tangent to centerlines of adjoining pipe.

Brick Stacks

- A. Manholes shall have a brick masonry stack a minimum of 2 courses of brick but not over 12-inches in height constructed on the top slab or cone section on which the manhole frame and cover shall be placed. The height of the stack shall be such as is necessary to bring the manhole frame to the proper grade and elevation.
- B. Bricks shall be thoroughly wet when laid and each brick shall be laid in mortar so as to form full bed, end, and side joints in one operation. Joints shall not be wider than 3/8-inch except when bricks are laid radially, in which case the narrowest part of the joint shall not exceed 1/4-inch. The bricks shall be laid in a workmanlike manner, true to line, and all joints shall be carefully struck and pointed. Brickwork shall be kept moist for a period of five (5) days after completion and suitable precautions shall be taken to prevent freezing during cold weather. The entire stack shall be cement plastered. Final plastering of the inside of the brick stack shall be done after all final grading and paving is complete and the frame and cover will not be disturbed by additional construction work.

Frames, Covers and Steps

- A. Frames shall be cast into top slab of precast structure or firmly set and bonded to the masonry at the proper grade to conform with the finished surface of the street or ground surface as shown on Contract Drawings.

ITEM 210. (Continued)

- B. Steps shall be uniformly spaced at 12 inches on center and shall project evenly as shown on the plans. For precast manholes, tapered holes shall be cast in the manhole walls using special, tapered plugs supplied by the manufacturer of the steps. The steps shall be installed in accordance with the Manufacturer's instructions.

Grading

- A. As shown on the plans or as directed, certain manholes are to extend above existing ground level. Fill shall be placed around these manholes to the level of the rim of the cast iron manhole frame, and the surface evenly graded on a 1:5 slope to the surrounding ground as shown unless directed otherwise.
- B. All other manholes in unpaved areas shall be built to an elevation higher than the original ground, as directed, and the ground surface shall be graded to drain away from the manhole rim.
- C. Manholes in paved areas shall be constructed to meet the final surface grade. Manholes shall not project above finished roadway pavements to prevent damage from snowplows.

Height of Manholes and Structures

The Contractor shall be solely responsible for the proper height of all manholes and structures necessary to reach the final grade at all locations. The Contractor is cautioned that the Engineer's review of shop drawings for manhole components will be general in nature and that the Contractor shall provide bricks to adjust any manhole height to meet field conditions for final grading.

Leakage Tests

All manholes and structures shall be hydraulically tested for leakage, and any leakage found shall be repaired in a satisfactory manner and the manhole retested. Leakage test shall consist of plugging all influent or effluent piping, then filling the manhole with water to the top of concrete of the cone or flat top section. After water level has stabilized, the structure shall be refilled to the top and left standing within the manhole for twenty-four (24) hours. Cover top of manhole to prevent loss of water through evaporation. The water loss shall not exceed 0.75 gallons/vertical foot within a twenty-four (24) hour period.

METHOD OF MEASUREMENT

Sanitary sewer manhole will be measured for payment per each, regardless of depth, complete in place.

BASIS OF PAYMENT

Sanitary sewer manhole will be paid for at the respective Contract unit prices per each, which price shall include all labor, materials, equipment and incidental costs required to complete the work. No separate payment will be made for excavation, including excavation for crushed stone installation, backfill, cutting existing pipe, watertight grout, resilient connectors, testing and any bypass operations needed for testing and steps, but all costs in connection therewith shall be included in the contract unit price bid.

Crushed stone bedding shall be paid for separately under Crushed Stone, Item 156.

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

Work under this Item shall be in accordance with the relevant provisions of Subsection 220 of the Standard Specifications and the following:

DESCRIPTION

Municipal frame and grates (or covers) shall be constructed to conform to the Town of Mattapoisett Highway Department requirements. Manhole frames and covers shall be EJ Model No. 0MA211000038, EJ Model No. 0MA211000040, and EJ Model No. 0MA211000041 (as applicable per utility), or approved equal. Catch basin frames shall be EJ Model No. 0MA554000005 OR 0MA55400006, or approved equal. Catch basin grates shall be EJ Model No. 0MA552000075, or approved equal.

Casting frames shall be set in a full mortar bed with a minimum of 2 courses of brick, a minimum of 4 inches in height. All castings shall be set in a full concrete collar, conforming to Construction Standard Detail 223.0.1.

METHOD OF MEASUREMENT

Frame and Grate (or Cover) Municipal Standard will be measured for payment by the each, complete in place.

BASIS OF PAYMENT

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, equipment and incidental costs required to complete the work.

ITEM 225.52 **TRAP AND HOOD MUNICIPAL STANDARD** **EACH**

All proposed catch basins shall be provided with a hood to minimize the entry of oil, gasoline, and debris into drainage pipes. Acceptable hoods are the Eliminator by Ground Water Rescue, Inc., "Snout" by Best Management Practices, Inc., or approved equal.

METHOD OF MEASUREMENT

Trap and Hood Municipal Standard will be measured for payment by the each, complete in place.

BASIS OF PAYMENT

Trap and Hood Municipal Standard 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 238.161**16 INCH CERAMIC EPOXY LINE DUCTILE IRON
SEWER PIPE****FOOT**

The work under these items shall conform to the relevant provisions of Subsection 230 of the Standard Specifications and the following:

This item shall be used to construct the proposed sewer system from the upstream proposed manhole, extending through the doghouse box culvert section to the downstream proposed manhole.

Submittals

The Contractor shall provide a certificate to the Engineer furnished by the pipe manufacturer that all pipe delivered to the project complies in all respects with the applicable standard specifications listed herein. Certification of piping materials shall be provided to and approved by the Engineer prior to shipment of piping to the job site.

For all pipe submit a schedule complete with manufacturer's brochure/parts list, manufacturer specifications and thickness class/rating of materials.

MATERIALS**Ductile Iron (DI) Pipe**

Ductile Iron (DI), pipe shall meet the requirements of ANSI A21.50-76 (AWWA C-150-76) and ANSI A21.51-86 (AWWA C-151-86) or latest revision. All ductile iron piping shall be Class 52 ANSI thickness rating. Buried ductile iron piping shall utilize push-on pipeline joints and mechanical joints at all fittings. All pipe joints shall meet or exceed the requirements of ANSI A21.11 (AWWA C-111). All pipe shall have asphaltic outside coating in accordance with AWWA C-151 and C-110.

All ductile iron sewer pipe shall have an interior ceramic novalac epoxy coating such as Indurons' Protecto 401, Tnemec Perma-Shield H2S or Permite Corp. Permax CTF. Ductile iron piping and coating shall be installed and cured as specified by the manufacturer. Application shall be done in a controlled environment and not in the field.

All ductile Iron (DI) pipe and joints shall have a minimum pressure rating of 350 psi working water pressure and 450 psi surge pressure.

Restrained joint hardware shall be used for all ductile iron pipe, whether in gravity or pressure applications. Restrained joint ductile iron pipe shall be installed with locking type gaskets to provide a restrained joint. The locking gaskets shall be rated for 250 psi operating pressure and allow for a 3-degree joint deflection. The locking gaskets shall be suitable for pipe.

Mechanical Joint Fittings

Fittings used for all DI piping systems of 3-inch diameter or larger shall be ductile iron construction meeting the requirements of ANSI A21.10 (AWWA C-110) or compact type fittings meeting the requirements of AWWA C-153. Buried fittings shall employ mechanical joints throughout. All fittings and wall sleeves shall be double cement mortar lined with bituminous coat inside and out, in accordance with ANSI A21.4 (AWWA C-104). Fittings shall be at least Class 53 ANSI thickness rating. Mechanical joints shall be rated for 350 psi working water pressure.

Install retainer glands for all mechanical joint fittings and valves. Retainer glands shall be Meg-A-Lug Series 1100 as manufactured by EBAA Iron, Inc. or approved equal.

ITEM 238.161 (Continued)Warning Tape

Underground tape shall be 3-inch wide silver metal detectable tape which permanently identifies the underground sewer and services. The tape shall meet APWA requirements and use brown colored stripes with black print indicating "CAUTION BURIED SEWER BELOW".

Poly Wrap

All ductile iron pipe and fitting (including carrier pipe in casing bore) shall be continuously wrapped/encased with 8 mil polyethylene. Joints shall overlap 24 inches and be taped with commercial grade duct tape.

CONSTRUCTION

All pipe shall be laid in close conformity to line and grade and shall have a full, firm and even bearing at each joint and along the entire length of pipe. Pipe laying shall begin at the downstream end and progress upstream, unless waived by the Engineer. For sanitary sewers the bell end shall be downstream with the spigot end upstream.

Handling and Assembly of Pipe: All pipe shall be handled and assembled in accordance with the manufacturer's instructions and AWWA Standards. Great care shall be used in unloading pipe from the trucks. No pipe shall be allowed to be dropped from the trucks or to be slid out and one end allowed to drop. Pipe shall be rolled off on skids and let down slowly and carefully. Care shall be taken to prevent pipe from being knocked against each other.

Special care shall be exercised in placing and compacting material immediately adjacent to pipes in order to avoid damage to the pipe and to prevent pipe misalignment.

Movement of construction equipment, vehicles and loads over and adjacent to any pipe shall be done at the Contractor's risk.

Testing:

The Contractor shall perform leakage and pressure tests of the force mains using clean water prior to actual operation. The engineer will be given 24 hours' notice prior to testing. There shall be both a pressure test and leakage testing of the force mains.

Pressure Test

After the pipe has been installed all pressure pipe shall be tested to a specified pressure in excess of the specified working pressure of the pipe. All pressure pipe shall be tested according to Section 4 of AWWA Specification C600. All newly laid pressure pipe shall be subjected to a hydrostatic pressure of at least 1.5 times or 25 psi greater than the working pressure at the point of testing, whichever pressure is greater.

Test pressure restrictions shall:

- Not be less than 1.25 x the working pressure at the highest point along the test section.
- Not exceed pipe or thrust restraint design pressure.
- Be of at least 2-hr. duration.
- Not vary by more than + 5 psi.

ITEM 238.161 (Continued)**Pressurization:**

Each section of pipe shall be filled with water slowly and the specified test pressure, based on the elevation of the lowest point of the line or section under test and corrected to the elevation of the test gauge, shall be applied by means of a pump connected to the pipe in a manner satisfactory to the Engineer.

Air Removal:

Before applying the specified test pressure, air shall be expelled completely from the pipe, valves, and hydrants. If permanent air vents are not located at all high points, the Contractor shall install corporation cocks at such points so that the air can be expelled as the line is filled with water. After all the air has been expelled, the corporation cocks shall be closed and the test pressure applied. At the conclusion of the pressure test, the corporation cocks shall be removed and plugged, or left in place at the discretion of the Engineer.

Examination:

All exposed pipe, fittings, valves, hydrants, and joints shall be examined carefully during the test. Any damage or defective pipe, fittings, valves, or hydrants that are discovered following the pressure test shall be repaired or replaced with sound material and the test shall be repeated until it is satisfactory to the Engineer.

Leakage Test:

A leakage test shall be conducted concurrently with the pressure test.

Leakage Defined:

Leakage shall be defined as the quantity of water that must be supplied into the newly laid pipe, or any valved section thereof, to maintain pressure within 5 psi of the specified test pressure after the air in the pipeline has been expelled and the pipe has been filled with water.

Allowable leakage: No pipe installation will be accepted if the leakage is greater than that determined by the following formula:

Maximum allowable leakage = 10 Gal./inch/diameter/mile/24 hrs.

Acceptance of Installation: Acceptance shall be determined on the basis of allowable leakage. If any test of pipe laid discloses leakage greater than that specified above the Contractor shall, at their own expense, locate and repair the defective material until leakage is within the specified allowance. Retesting at the Contractor's expense shall be performed until test results meet specified values.

The Contractor shall provide suitable braced bulkheads, plugs and other accessories required to accommodate pipe testing functions.

Concrete Encasement

Where the pipe crosses a water line and within 10 feet of the waterline, the pipe shall be encased in concrete for a distance of 6 inches above, below and on each side of the pipe. Concrete encasement within the precast culvert section shall be as shown on the plans.

Concrete encasement shall conform to Subsection 901 following M4.06.5 – Lightweight Concrete and shall be incidental to this item. Backfilling over concrete encasement shall not be completed until concrete has cured for at least 24 hours.

ITEM 238.161 (Continued)**Concrete Thrust Blocks**

All bends, and fittings on force mains shall be blocked to the wall of the trench with 3000 psi, 1.5 Inch, 470 Cement Concrete as shown on the plans. Backfilling over concrete thrust blocks shall not be completed until concrete has cured for at least 24 hours.

Temporary Plugs

Prior to leaving the job site each day after completion of pipe laying work, the Contractor shall furnish and install a temporary plug in the exposed end of the pipe to prevent any dirt or debris from entering the pipe.

METHOD OF MEASUREMENT

16 inch ceramic epoxy line ductile iron sewer pipe will be measured for payment by the foot installed, complete in place.

BASIS OF PAYMENT

16 inch ceramic epoxy line ductile iron sewer pipe will be paid for at the respective Contract unit price per foot, which price shall include all labor, materials, equipment and incidental costs required to complete the work. No separate payment will be made for excavation regardless of depth, connections to bridge support, required adjustments, backfill, bends and fitting, couplings to connect to existing sewers, restraint glands, field lock gaskets, polywrap and thrust blocks, but all costs in connection therewith shall be included in the Contract unit price bid.

Concrete for use as encasement within the culvert shall be incidental under this Item.

<u>ITEM 303.10</u>	<u>10 INCH DUCTILE IRON WATER PIPE (MECHANICAL JOINT)</u>	<u>FOOT</u>
<u>ITEM 350.1</u>	<u>10 INCH GATE AND GATE BOX</u>	<u>EACH</u>

DESCRIPTION

This item consists of furnishing and installing 10-inch ductile iron pipe, fittings, thrust blocks, bends, couplings and joint restraints in accordance with the current Town of Mattapoissett - Water Department Standards.

MATERIALS1. **DUCTILE IRON PIPE**

- A. Pipe shall be Class 52, mechanical joint ductile iron pipe, meeting the requirements of ANSI/AWWA C151/A21.51 and C150/A21.50 or latest revision. Pipe shall be manufactured by U.S. Pipe, Griffin Pipe Products, or approved equal. All pipe shall be accompanied by the manufacturer's Certificate of Compliance.
- B. Pipe interior shall be double cement lined, with an asphaltic seal coat meeting the requirements of ANSI/AWWA C104/A21.4-95 or latest revision.
- C. Pipe exterior shall be coated with an approved asphaltic coating, approximately 1-mil in thickness.

ITEMS 303.10 and 350.1 (Continued)

D. Rubber gasketed joint shall meet the requirements of ANSI/AWWA C111/A21.11-95 or latest revisions.

E. Concrete for thrust blocks shall be 3000 psi – ¾”.

2. DUCTILE IRON FITTINGS

A. Fittings shall meet or exceed the requirements of ANSI/AWWA C153/A21.53-94 or latest revision.

B. Mechanical joints shall meet or exceed the requirements of ANSI/AWWA C111/A21.11-95 or latest revision.

C. Coatings to be the same as specified for pipe.

D. All fittings shall be accompanied by the manufacturer’s Certificate of Compliance.

3. SPECIAL FITTINGS

A. Hydrant valve anchoring tees shall be mechanical joint, each having bell and plain end. The gate valve will be secured directly to the tee by using the standard mechanical joint gasket and standard bolts.

B. Plugs shall be ductile iron with mechanical joint and retainer feature.

C. Restrained joints shall be used at all pipe joints, fittings, valves, etc., where indicated on the plans, and shall be Series 1100 Megalug® Mechanical Joint Restraint by EBAA Iron, Inc. or equivalent acceptable to the Engineer.

4. SAND EMBEDMENT MATERIAL

A. All sand borrow for pipe embedment shall conform to M1.04.0 Type B of the latest MassDOT Standard Specifications for Highways and Bridges.

CONSTRUCTION REQUIREMENTS**1. GENERAL**

A. Care shall be taken in loading, transporting and unloading to prevent damage to the pipe, coatings or lining.

B. Protect pipe and fittings during handling against shocks and free fall. Pipe shall not be dropped.

C. Handling and laying of pipe shall be in accordance with the manufacturer’s instruction.

ITEMS 303.10 and 350.1 (Continued)

- D. All pipe shall be examined before laying and no piece shall be installed which is found to be defective.
- E. Extraneous materials shall be removed from the interior of the pipe and fittings.
- F. If any defective pipe is detected after it has been laid, it shall be removed and replaced with a sound pipe in a satisfactory manner by the Contractor, at his/her own expense.

2. DUCTILE IRON PIPE

- A. Lay ductile iron pipe in accordance with ANSI/AWWA C600 -93 with a bury depth of 5 feet.
- B. Pipe cutting shall be done by machine, leaving a smooth cut at right angles to the axis of the pipe and the cement lining shall be undamaged.
- C. The cut end of a pipe which is being made up into a push-on-joint shall have its cut and beveled to prevent damage to the gasket during assembly of the joint.
- D. The Contractor shall have on hand at the start of the job, one 1/16 bend and one 1/8 bend for 8 and 12-inch pipe. These shall be used as job conditions require.
- E. All bends, tees, caps, plugs and hydrants shall be provided with reaction or thrust blocking in addition to Megalug restraint glands.
- F. Install retainer glands in accordance with the manufacturer's recommended installation instructions.
- G. When pipe laying is not in progress, including lunchtime, the open end of the pipe(s) shall be closed by a suitable pipe cap or plug to prevent the entry of stones, dirt or ground water to the line.
- H. Thrust blocks shall be constructed at all tees, plugs, bends, and other locations as indicated on the plans or as directed by the Engineer. The blocks shall be placed against undisturbed ground so that pipe joints will be accessible for any possible repairs.

3. CONNECTIONS AT EXISTING WATER MAINS

- A. The exact location of the existing water mains shall be determined by test pit excavations as directed by the Engineer.
- B. Once uncovered, the Contractor shall prepare the pipe for the proposed connection. Care shall be taken in alignment of the new piping and fittings, to keep deflection within the manufacturer's allowable tolerances.

4. PUSH-ON JOINTS

- A. Push-on joint shall be made in accordance with the manufacturer's instructions. Pipe shall be laid with bell ends looking ahead.

ITEMS 303.10 and 350.1 (Continued)

- B. Thoroughly clean groove and bell socket of pipe and fitting, along with plain end of mating pipe.
- C. Apply lubricant to plain end of pipe and gasket, provided by pipe manufacturer's recommendation. Insert gasket in the groove of the bell end.
- D. Push beveled plain end of pipe into bell, keeping pipe straight during installation and making deflection after insertion to complete.
- E. After joining a pipe, a metal feeler should be used to make certain the rubber gasket is located correctly.

5. **MECHANICAL JOINTS**

- A. Clean pipe end and socket, and apply a soapy water solution or lubricant as provided by pipe manufacturer.
- B. Place gland on plain end with lip extension toward plain end, followed by gasket with narrow side toward plain end.
- C. Insert pipe into socket and press gasket firmly and evenly into gasket recess.
- D. Push gland toward socket and center, installing bolts and nuts hand tight.
- E. Good alignment shall be preserved in laying. The deflection at joints shall not exceed that recommended by the manufacturer.
- F. Tighten bolts in alternating sequence utilizing a torque wrench, maintaining the same distance between the gland and face of flange during the process.
- G. Bolts shall be tightened to the specified torque.

FLUSHING, HYDROSTATIC TESTING AND DISINFECTING WATER MAIN1. **DESCRIPTION**

The work shall consist of flushing, hydrostatic testing, disinfecting and dechlorinating all new water pipe in accordance with the current Town of Mattapoisett Water Department Standards including all corporations, tubing, air relief fittings, and incidentals tools and materials necessary to complete the testing.

2. **MATERIALS**A. **FLUSHING**

- 1. All new pipeline(s), and existing pipeline(s) that have been drained and cut-into for making new connections, shall be thoroughly flushed prior to pressure and/or leakage testing and final disinfection.

ITEMS 303.10 and 350.1 (Continued)

2. Flushing shall be accomplished through partial opening and closing of valves, hydrants, and blow offs under expected line pressure as necessary to obtain the required scouring velocity. Flow velocities shall not be less than 2.5 feet per second in each pipeline section that is being flushed.
3. The size and number of hydrant outlets or pipeline taps to provide the required flow (at 40 psi residual pressure) is as follows. Minimum required flow and opening(s) diameter to flush pipeline segments based on 40 psi residual pressure in the pipeline.

Pipe Dia. (in.)	Flow to Produce 2.5 fps In pipe (GPM)	Min. Size Tap on Pipe (inches)	Outlet Openings	
			Number	Size (in)
4	100	15/16	1	2-1/2
6	220	1-3/8	1	2-1/2
8	390	1-7/8	1	2-1/2

4. If less than a 40 psi residual pressure is available in the pipeline, with the size tap shown above, then a larger number of taps or hydrant outlets will be required.
5. The length of time for flushing, at or above the minimum allowable velocity shall be computed to allow a minimum of 3 times the total volume of water stored in the pipeline segment being flushed to waste.

3. HYDROSTATIC TESTING

- A. All new pipeline(s) shall be subjected to a hydrostatic pressure of at least 1.5 times the working pressure that will exist at the point of testing, or 150 psi, whichever is greater. Test pressures shall meet the following requirements.
 1. Be of at least 2.5 hour duration.
 2. Be not less than 1.25 times the expected system working pressure at the highest point along the test section.
 3. Not vary by more than plus or minus 5 psi for the duration of the test.
- B. Air Removal. Following flushing, and before applying the specified test pressure, air shall be completely expelled from the pipeline segment being tested. After all air has been expelled, the air blow-offs shall be closed, and the test pressure applied.

ITEMS 303.10 and 350.1 (Continued)

- C. Pressure Test. Hydrostatic testing shall be in compliance with ANSI/AWWA C600-93 or latest revisions. Each valved section of pipeline shall be slowly raised to the specified test pressure for two (2) separate periods. The first period shall be for 15 minutes, after which the pressure in the test section shall be allowed to drop slowly back to system pressure.
- D. The pressure shall then be slowly raised again to the specified test pressure and maintained for 2.5 hours. The test pressure shall be based on the elevation of the lowest point of the pipeline in the test section and shall be corrected to the elevation of the test gauge. The test pressure shall be applied by means of a pump connected to the pipeline, in a manner satisfactory to Engineer, and which will prevent any backflow into the existing water system.
- E. Examination. Any exposed pipe, fittings, valves, hydrants and joints shall be carefully examined during the test. Any damaged or defective pipe, fittings, hydrants, or valves discovered following, or as a result of the pressure test shall be repaired or replaced with sound material. If faulty materials are removed and replaced, the pressure testing procedure shall be repeated until satisfactory to Engineer.
- F. The Contractor shall provide the Engineer with a written report on the pressure test to include the date, time, location, stations, quantity of water supplied, during test, size of pipe etc.
- G. Notification: The Engineer shall be notified, in writing, at least 48 hours prior to the hydrostatic testing of the pipe line.

CONSTRUCTION REQUIREMENTS1. **LEAKAGE TESTING**

- A. Each section of the pipe line shall be slowly filled with water, with the specified test pressure, measured at the point of the lowest elevation, applied by means of a pump connection to the pipe in a manner satisfactory to the Engineer. The pump, pipe connection, gauges and all other necessary apparatus shall be furnished by the company selected by the Contractor.
- B. During the filling of the pipe and before applying the specified test pressure, all air shall be expelled from the pipe line. At all points of high elevation, the Contractor shall install corporation cocks so that air can be expelled as the pipe is filled with water. After all air has been expelled, the corporation cocks shall be closed at the test pressure applied. At the conclusion of the pressure test, the corporation cocks shall be removed and plugged or left in place at the discretion of the Owner.
- C. Leakage Test: Leakage shall be defined as the quantity of water that must be supplied into the pipe to maintain pressure within 5 psi of the specified test pressure after the air has been expelled and the pipe filled with water. Leakage shall not be measured by a drop in pressure in a test section over a period of time.
- D. No pipe installations shall be accepted if the leakage is greater than that determined by the following formula:

ITEMS 303.10 and 350.1 (Continued)

$$L = (S \times D \times P^{0.5})/133,200$$

where: L = allowable leakage, in gallons per hour
 S = the length of the pipe tested, in feet
 D = the nominal diameter of the pipe, in inches
 P = the average test pressure during the test in psi

- E. Should any test of the section of pipe line disclose leakage greater than permitted, the Contractor shall at his own expense locate and repair the defects until the repeated pressure test yields a leakage value within the allowable limit.

2. DISINFECTION

- A. The pipe lines shall be disinfected in strict accordance with ANSI/AWWA C651-92 and by application of chlorine either as calcium hypochlorite or liquid sodium hypochlorite in an amount to produce a solution of 50 p.p.m., for a contact period of 24 hours, and afterward, dechlorinated and flushed until the chlorine residual is reduced to less than 1.5 p.p.m.
- B. Chlorine dosage shall be applied by pumping into the line to be treated, a sufficient amount of chlorine solution, which when mixed with water in the pipe line, will meet the required concentration. The mixture shall be pumped through the section being treated and shall be discharged and monitored at a point farthest from the point of introduction of the chlorine. When the solution reaches 50 p.p.m., the pump and discharge valve shall be closed and the liquid left in the section being chlorinated for 24 hours.
- C. The chlorine solution used for disinfecting the new water line shall be discharged from the water main and into a holding tank, where the solution may be neutralized and disposed of properly.
- D. If a hydrant connection is not available to be used for discharging the chlorine solution from the new line, a temporary blow-off connection shall be installed for that purpose. Upon completion of the disinfection process, the blow-off connection shall be removed.
- E. The Contractor or the company selected by the Contractor shall furnish all materials and equipment for the sterilization of the mains. The Water Division will furnish necessary assistance in flushing and the operation of the gate valves.
- F. Sampling and chlorination taps shall be a corporation cock installed in the main with a copper tube and curb stop assembly. No hose or fire hydrant shall be used in the chlorination or collection of samples. Sampling and chlorination points must be reviewed and approved by the Engineer prior to disinfection.
- G. At least one sample shall be collected for each 1,200 linear feet of water main and from each dead end. After chlorination and flushing, all new water mains must be tested for the presence of total coliform bacteria and background bacteria.
- H. Any segment of new water main shall be considered unsuitable for service if a coliform bacteria count or a background bacteria count is obtained from that sample.

ITEMS 303.10 and 350.1 (Continued)

- I. Any segment of new water main considered unsuitable because of a coliform bacteria count must be re-disinfected and retested. Any segment of new water main considered unsuitable because of a background bacteria count must either be reflashed or re-disinfected, at the discretion of the Engineer, and retested.
- J. Notification: The Engineer shall be notified, in writing, at least 48 hours prior to the collection of bacterial samples. The Water Department will collect and analyze all bacteriological samples.
- K. Approved Companies for water main pressure testing, disinfection and sampling must be used for all testing. The Contractor can obtain a list of approved testing companies from the Town of Mattapoisett Water Department.

METHOD OF MEASUREMENT

Item 303.10 10-Inch Ductile Iron Water Pipe (Mechanical Joint) shall be measured in place on a linear foot basis installed, complete and in place. Measurement for length will be along the horizontal centerline of the pipe, with no deductions for gate valves or standard fittings. The water main shall be measured to the nearest 0.5 of a foot.

Item 350.1 10-Inch Gate and Gate Box shall be measured in place per each, complete and in place.

BASIS OF PAYMENT

Item 303.10 10-Inch Ductile Iron Water Pipe (Mechanical Joint) shall be paid for on a linear foot basis installed, complete and in place. Measurement for length will be along the horizontal centerline of the pipe, with no deductions for gate valves or standard fittings. The water main shall be measured to the nearest 0.5 of a foot.

Payment for furnishing and installing ductile iron pipe and fittings of the class and size specified shall be full compensation for excavation, dewatering, cutting of pipes, furnishing sand borrow pipe bedding, laying and jointing the pipe, thrust blocks, bends, megalugs, and similar materials; also, backfilling, compaction; supporting of existing drainage or utility lines in the trench; relocating and/or renewing, in part or whole, water, sewer and/or other service pipes where they interfere with the grade of the new water mains; connecting new pipes to existing pipes; furnishing and installing any sleeves or flexible couplings necessary to connect the new pipes to the existing pipes; and for all other pipeline work and appurtenances, except for which a definite payment item is included in the Bid Form.

This price shall also be full compensation for furnishing all labor, materials, equipment required to flush, test, and disinfect water mains as installed and all other work incidental thereto.

Item 350.1 10-Inch Gate and Gate Box shall be paid for per each, complete and in place. Payment shall be full compensation for excavation, dewatering, cutting of pipes, furnishing sand borrow pipe bedding, thrust blocks, megalugs, and similar materials; also, backfilling, compaction; and for all work required to complete the installation.

ITEM 460.**HOT MIX ASPHALT****TON**

The work under this item shall conform to the relevant provisions of Section 460, Hot Mix Asphalt Pavement for Local Streets, of the Standard Specifications and the following:

This item shall be used for all work that requires hot mix asphalt, including permanent paving of the surface and intermediate courses, temporary and permanent pavement patches (if required), and hot mix asphalt driveways as may be required.

The pavement mix shall be provided from a MassDOT qualified Hot Mix Asphalt Production Facility as provided in <https://www.mass.gov/info-details/hot-mix-asphalt-production-facility-m3120>. The Contractor shall provide a minimum of 48 hours notice to the Engineer and provide the name and location of the HMA Production Facility prior to placement.

If required, in areas of a permanent pavement patch, the area shall be sawcut and excavated to a depth of six-and-a-half inches (6.5") below the surface elevation after milling (or existing pavement surface if milling is not required). Pavement shall be placed to the depths noted on the plans.

Temporary pavement patches, if required, shall be paved to a depth of three inches (3").

All pavement surfaces shall be swept clean, free of dust, fines and slurry immediately prior to the application of the tack coat.

Asphalt Emulsion for Tack Coat, meeting the requirements of Subsection 460.30 of the Standard Specifications, shall be applied immediately prior to placing the pavement. The emulsion application rate shall equal 0.07 gallons per square yard.

Where new pavement meets existing asphalt pavement, the vertical joint face shall be thoroughly coated with a hot applied pavement joint adhesive meeting the requirements of Subsection 460.30 of the Standard Specifications. All longitudinal joints between adjacent pulls of hot mix asphalt shall also be treated with a hot applied pavement joint adhesive meeting the requirements of Subsection 460.30.

During paving operations, the Contractor shall retain the services of a qualified testing laboratory to perform nuclear density testing of the compacted surface. The pavement density shall meet the minimum requirements provided in Section 460.

METHOD OF MEASUREMENT

Item 460 Hot Mix Asphalt will be measured for payment in accordance with Subsection 460.90 of the Standard Specifications.

BASIS OF PAYMENT

Item 460 Hot Mix Asphalt will be paid for in accordance with Subsection 460.91 of the Standard Specifications.

Asphalt emulsion for tack coat and HMA joint sealant, milling of the pavement transitions, sweeping of the existing or milled surface prior to paving, excavation in areas of permanent pavement patching, and density testing of the compacted surface, shall all be incidental to Item 460.

Milling required for the pavement transitions shall be considered incidental to Item 460.

ITEM 506.01 **GRANITE CURB WITH CEMENT CONCRETE BACKING** **FOOT**

Work under this item shall conform to the relevant provisions of Section 506 of the Standard Specifications and the following:

Proposed Granite Curb with Cement Concrete Backing shall be installed as shown on the plans over the limits of the proposed culvert.

METHOD OF MEASUREMENT

Granite Curb with Cement Concrete Backing will be measured for payment per linear foot, complete in place.

BASIS OF PAYMENT

Granite Curb with Cement Concrete Backing will be paid for at the Contract unit price per linear foot, which price shall include all labor, materials, equipment and incidental costs required to complete the work. Concrete placed for backing of the curb shall be incidental to this item.

ITEM 657 **TEMPORARY FENCE** **FOOT**

Work under this item shall conform to the relevant provisions of Section 644 of the MassDOT Standard Specifications for Highways and Bridges and the following:

This Item shall consist of furnishing and installing the temporary fence and all gates as required and/or directed, and the removal and resetting of the temporary fence during construction of the project. Work under this item shall also include foundations, movable foundations, supports, and gates.

MATERIALS

Temporary fence shall be polyethylene fencing or chain link fence (new or used). Fence shall be a minimum of 6 feet high and supported by steel posts spaced at a maximum of 8 feet on center or by other means acceptable to the Engineer. Temporary fence and posts shall be subject to the Engineer's approval.

CONSTRUCTION

Where required, posts shall be firmly affixed to the top of the temporary precast concrete barriers. Contractor shall submit attachment detail to the Engineer for approval. Posts not attached to barriers need not be set in concrete bases but may be set in sockets backfilled with earth and solidly tamped at the time of installation.

All posts including end, corner and intermediate brace posts and all gates and gate posts (including those necessary to gain access to the bridge construction site) shall be included in the linear foot cost. Materials 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. Posts shall be set plumb and all fencing neatly aligned. The Contractor shall be responsible and cognizant that it remains secure and the area is sealed off at all times to the general public. All such maintenance shall be considered incidental to the item. It may be necessary to move sections of the temporary fence at times during construction.

ITEM 657. (Continued)

In the course of the construction of the project, it will be necessary for the Contractor to remove, relocate and reset the temporary construction fence to locations designated by the Engineer so as to coordinate the different construction activities. Care must be used in removing and relocating the temporary fence and its appurtenances to retain it in its original condition. If the temporary fence is removed and relocated, and is found defective for any reason, it shall be replaced, restored or repaired with like materials at the Contractor's expense.

After use, the fence shall become the property of the Contractor and shall be removed from the site. Removal of the fence shall not occur until the construction work is complete with the exception of paving operations. Fence fabric shall be placed on the top of the post away from the work area. A top tension wire, rather than the pipe top rail, shall be used. The top edge of the fabric shall be finished with a "knuckled" selvage.

METHOD OF MEASUREMENT

Temporary fence will be measured for payment by the foot, complete in place.

BASIS OF PAYMENT

Temporary fence 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. No separate payment will be made for gates, end, corner and intermediate posts and foundations, and removal and resetting of same, but all costs in connection therewith shall be included in the Contract unit price bid.

ITEM 697.1**SILT SACK****EACH**

Work under this item shall conform to the relevant provisions of Sections 227 and 670 of the Standard Specifications and the following:

The work under this item includes the furnishing, installation, maintenance, and removal of a reusable fabric sack to be installed in drainage structures for the protection of wetlands and other resource areas and the prevention of silt and sediment from the construction site from entering the storm water collection system. Devices shall be ACF Environmental (800)-448-3636; Reed & Graham, Inc. Geosynthetics (888)-381-0800; The BMP Store (800)-644-9223; or approved equal.

CONSTRUCTION METHODS

Silt sacks shall be installed in existing and proposed catch basins and drop inlets within the project limits and as required by the Resident Engineer.

The silt sack shall be as manufactured to fit the opening of the drainage structure under regular flow conditions and shall be mounted under the grate. The insert shall be secured from the surface such that the grate can be removed without the insert discharging into the structure. The filter material shall be installed and maintained in accordance with the manufacturer's written literature and as directed by the Engineer.

Silt sacks shall remain in place until the placement of the pavement overlay or top course and the graded areas have become permanently stabilized by vegetative growth. All materials used for the filter fabric will become the property of the Contractor and shall be removed from the site.

ITEM 697.1 (Continued)

The Contractor shall inspect the condition of silt sacks after each rainstorm and during major rain events. Silt sacks shall be cleaned periodically to remove and dispose of accumulated debris as required. Silt sacks, which become damaged during construction operations, shall be repaired, or replaced immediately at no additional cost to the Town.

When emptying the silt sack, the contractor shall take all due care to prevent sediment from entering the structure. Any silt or other debris found in the drainage system at the end of construction shall be removed at the Contractors expense. The silt and sediment from the silt sack shall be legally disposed of offsite. Under no condition shall silt and sediment from the insert be deposited on site and used in construction.

All curb openings shall be blocked to prevent stormwater from bypassing the device.

All debris accumulated in silt sacks shall be handled and disposed of as specified in Section 227 of the Standard Specifications.

METHOD OF MEASUREMENT

Silt sacks will be measured for payment by the each, complete in place.

BASIS OF PAYMENT

Silt sacks 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. No separate payment will be made for removal and disposal of the sediment from the insert, but all costs in connection therewith shall be included in the Contract unit price bid.

ITEM 698.3**GEOTEXTILE FABRIC FOR SEPARATION****SQUARE YARD**

Work under these items shall consist of furnishing and installing geotextile fabric below the scour protection as shown on the Plans or as required by the Engineer.

MATERIALS

The geotextile fabric for separation shall conform to Department Material Specification M9.50.0 Class I non-woven, shall be in accordance with AASHTO M 288 and shall be on the MassDOT Qualified Construction Materials List.

CONSTRUCTION

For seams that are sewn in the field, the Contractor shall provide at least a six-foot length of sample sewn seam for the approval of the Engineer before the geotextile fabric is installed. The seams sewn for sampling shall be sewn using the same type of 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 for both directions shall be provided. The seam assembly description shall be submitted by the Contractor along with the seam samples. This description shall include the seam type, stitch type, sewing thread, and stitch density. If the Contractor elects to sew seams instead of overlap, colored thread must be used.

ITEM 698.3 (Continued)

Geotextile shall be placed in intimate contact with soils without wrinkles or folds and 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 or tear it.

Adjacent geotextile sheets shall be joined by either sewing or overlapping. At roll ends, overlapped seams shall overlap a minimum of 12 inches, except when placed under water, where they shall overlap a minimum of 3 feet. Adjacent rolls shall overlap a minimum of 12 inches.

Care shall be taken during installation to prevent damage to the geotextile as a result of the installation process. Should the geotextile be damaged, a geotextile patch shall be placed over the damaged area extending a minimum of 3 feet beyond the limits of the damage.

The Crushed Stone placement shall begin at the toe of slope and proceed up the slope. Placement shall take place so as to avoid stretching and subsequent tearing of the geotextile. Crushed Stone shall not be dropped from a height exceeding 3 feet.

Field monitoring shall be performed to verify that the Crushed Stone placement does not damage the geotextile. Any geotextile damaged during backfill placement shall be replaced as required by the Engineer, at the Contractor's expense.

The Contractor shall take care not to allow more than two weeks of atmospheric exposure to the elements and direct sunlight. Fabric rolls shall not be dropped more than two feet.

METHOD OF MEASUREMENT

Geotextile fabric for separation will be measured for payment by the square yard, complete in place. No additional payment will be made for material overlapping and fold-overs.

BASIS OF PAYMENT

Geotextile fabric for separation will be paid for at the Contract unit price per square yard, which price shall include all labor, materials, equipment and incidental costs required to complete the work. Overlaps and fold-overs are considered incidental.

ITEM 698.4**GEOTEXTILE FABRIC FOR PERMANENT
EROSION CONTROL****FOOT**

The work under this Item shall consist of furnishing and installing geotextile fabric between Item 156.1 – Crushed Stone for Bridge Foundations, 156.5 – Crushed Stone for Filter Blanket, and the soil below and to the sides as shown on the Plans or as required by the Engineer.

MATERIALS

The geotextile fabric for permanent erosion control shall conform to Department Material Specification M9.50.0 Class I non-woven, shall be in accordance with AASHTO M 288 and shall be on the MassDOT Qualified Construction Materials List.

ITEM 698.4 (Continued)**CONSTRUCTION**

Atmospheric exposure of the geotextile fabric to the elements following laydown shall be a maximum of 14 days. Additionally, the Contractor shall take care not to allow more than two weeks of exposure to the elements or direct sunlight. Fabric rolls shall not be dropped more than two feet.

For seams that are sewn in the field, the Contractor shall provide at least a six-foot length of sample sewn seam for the approval of the Engineer before the geotextile fabric is installed. The seams sewn for sampling shall be sewn using the same type of 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 for both directions shall be provided. The seam assembly description shall be submitted by the Contractor along with the seam samples. This description shall include the seam type, stitch type, sewing thread, and stitch density. If the Contractor elects to sew seams instead of overlapping, colored thread must be used.

Geotextile shall be placed in intimate contact with soils without wrinkles or folds and 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 or tear it.

Adjacent geotextile sheets shall be joined by either sewing or overlapping. At roll ends, overlapped seams shall overlap a minimum of 12 inches, except when placed under water, where they shall overlap a minimum of 3 feet. Adjacent rolls shall overlap a minimum of 12 inches.

Care shall be taken during installation to prevent damage to the geotextile as a result of the installation process. Should the geotextile be damaged, a geotextile patch shall be placed over the damaged area extending a minimum of 3 feet beyond the limits of the damage.

Any modified rock fill placement shall begin at the fold of the geotextile fabric of any slope and proceed up the slope to avoid unfolding the fabric. Placement shall take place so as to avoid stretching and subsequent tearing of the geotextile. Stones shall not be dropped from a height exceeding 3 feet.

Field monitoring shall be performed to verify that stone placement does not damage the geotextile. Any geotextile damaged during backfill placement shall be replaced as required by the Engineer, at the Contractor's expense.

METHOD OF MEASUREMENT

Geotextile fabric for permanent erosion control will be measured for payment by the square yard, complete in place. No additional payment will be made for material overlapping and fold-overs.

BASIS OF PAYMENT

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 and incidental costs required to complete the work. Overlaps and fold-overs are considered incidental to the unit price and shall not be measured separately for cost.

ITEM 748.
ITEM 748.1**MOBILIZATION**
REMOBILIZATION**LUMP SUM**
LUMP SUM

The work under this item shall conform to the relevant provisions of Subsection 748. of the Standard Specifications and the following:

The Town of Mattapoisett experiences a significant influx of summer residents and tourists. Given the location of the project adjacent to the town beach, all construction will be suspended from the week prior to Memorial Day to the week after Labor Day. Work will be allowed during the following periods:

Construction Season 1	September 14, 2026 – May 21, 2027
Construction Season 2	September 13, 2027 – May 19, 2028

The Contractor is required to move all materials and equipment out of the area while work is suspended. Should the work be substantially completed by the end of Construction Season 1, as determined by the Engineer, Item 748.1 shall not be applicable, and no payment shall be made for this item.

BASIS OF PAYMENT

Item 748., Mobilization, will be made on a Lump Sum Basis for Construction Season 1. Item 748.1, Remobilization, will be made on a Lump Sum Basis for Construction Season 2, if construction extends beyond Construction Season 1. The unit price for Items 748. and 748.1 shall each not exceed 3% of the Contract Bid Total, exclusive of these items and Police Details. Failure to observe this requirement may result in rejection of the bid in accordance with Subsection 2.04: Preparation of Proposals.

Payment for Items 748.and 748.1 shall be made on the following schedule:

The first payment of one-third (1/3) of the Lump Sum Price shall be made with the first pay requisition of Construction Season 1 (or Construction Season 2).

The second payment of one-third (1/3) of the Lump Sum Price shall be made with the second pay requisition of Construction Season 1 (or Construction Season 2).

The third payment of one-third (1/3) of the Lump Sum Price shall be made with the third pay requisition of Construction Season 1 (or Construction Season 2).

Should the project be substantially complete prior to the third pay requisition of either Construction Season 1 or Construction Season 2, then the remainder of the Lump Sum Price shall be made.

ITEM 767.121**SEDIMENT CONTROL BARRIER****FOOT**

The work under this item shall conform to the relevant provisions of Subsections 670, 751 and 767 of the Standard Specifications and 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.

ITEM 767.121 (Continued)

Twelve-inch diameter (after installation) compost filter tubes with biodegradable natural fabric (i.e., cotton, jute, burlap) are intended to be the primary sedimentation control barrier. Photo-biodegradable fabric shall not be used.

For small areas of disturbance with minimal slope and slope length, the Engineer may approve the following sediment control methods:

- 9-inch compost filter tubes
- Straw bales which shall be trenched

No straw wattles may be used. Additional compost filter tubes (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.

When required by permits, additional sediment barrier shall be stored on-site for emergency use and replacement for the duration of the contract.

Where shown on the plans or when required by permits, sedimentation fence shall be used in addition to compost filter tubes and straw bales and shall be compensated under that item.

Sediment control barriers shall be installed in the approximate location as shown on the plans and as required so that no excavated or disturbed soil can enter mitigation areas or adjacent wetlands or waterways. If necessary to accommodate field conditions and to maximize effectiveness, barrier locations may be shifted with approval from the Engineer. Barriers shall be in place prior to excavation work. No work shall take place outside the barriers.

MATERIALS AND CONSTRUCTION

Prior to initial placement of barriers, the Contractor and the Engineer shall review locations specified on the plans and adjust placement to ensure that the placement will provide maximum effectiveness.

Barriers shall be staked, trenched, and/or wedged as specified herein and according to the Manufacturer's instructions. Barriers 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 peat, 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 made of 100% biodegradable materials (i.e., cotton, hemp or jute) and shall have a knitted mesh with openings that allow for sufficient water flow and effective sediment capture.

Tubes shall be tamped, but not trenched, to ensure good contact with soil. When reinforcement is necessary, tubes shall be stacked as shown on the detail plans.

ITEM 767.121 (Continued)**Straw Bales**

Straw bales shall be used if shown on the plans or when specified by Orders of Condition or other permit requirements.

Bales should be placed in a single row, lengthwise on the contour, with ends of adjacent bales tightly abutting one another. All bales should be either wire-bound or string-tied. Straw bales should be installed so that bindings are oriented around the sides (rather than along the tops and bottoms) of the bales in order to prevent deterioration of the bindings.

The barrier should be entrenched and backfilled. A trench should be excavated the width of a bale and the length of the proposed barrier to a minimum depth of 4 inches. The trench must be deep enough to remove all grass and other material which might allow underflow. After the bales are staked and chinked (filled by wedging), the excavated soil should be backfilled against the barrier. Backfill soil should conform to the ground level on the downhill side and should be built up to 4 inches against the uphill side of the barrier.

Each bale should be securely anchored by at least 2 stakes or re-bars driven through the bale. The first stake in each bale should be driven toward the previously laid bale to force the bales together. Stakes or re-bars should be driven deep enough into the ground to securely anchor the bales. For safety reasons, stakes should not extend above the bales but should be driven in flush with the top of the bale.

The gaps between the bales should be chinked (filled by wedging) with straw to prevent water from escaping between the bales. Loose straw scattered over the area immediately uphill from a straw bale barrier tends to increase barrier efficiency. Wedging must be done carefully in order not to separate the bales.

When used in a swale, the barrier should be extended to such a length that the bottoms of the end bales are higher in elevation than the top of the lowest middle bale to assure that sediment-laden runoff will flow either through or over the barrier but not around it.

Sedimentation Fence

Materials and Installation shall be per Section 670.40 and 670.60 of the Standard Specifications and the following:

Sedimentation fence shall only be used if shown on the plans or when specified by Orders of Condition or other permit requirements.

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 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.

ITEM 767.121 (Continued)**MAINTENANCE**

Maintenance of the sediment control barrier shall be per Section 670.60 of the Standard Specifications or per the Stormwater Pollution Prevention Plan (SWPPP), whichever is more restrictive.

The contractor shall inspect the sediment barrier in accordance with relevant permits. At a minimum, barriers shall be inspected at least once every 7 calendar days and after a rain event resulting in 0.25 inches or more of rainfall. Contractor shall be responsible for ensuring that an effective barrier is in place and working effectively for all phases of the Contract.

Barriers that decompose 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 (despite fabric decay) and continues to provide effective water and sediment control, barrier does not necessarily require replacement.

DISMANTLING & REMOVING

Barriers shall be dismantled and/or removed, as required, when construction work is complete and upslope areas have been permanently stabilized and after receiving permission to do so from the Engineer.

Regardless of site context, nonbiodegradable material and components of the sediment barriers, including photo-biodegradable fabric, plastic netting, nylon twine, and sedimentation fence, shall be removed and disposed off-site by the Contractor.

For naturalized areas, biodegradable, natural fabric and material may be left in place to decompose on-site. In urban, residential, or other locations where aesthetics is a concern, the following shall apply:

- Compost filter tube fabric shall be cut and removed, and compost shall be raked to blend evenly (as would be done with a soil amendment or mulch). No 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 seeding or existing grasses (i.e., lawn or native grass mix).
- Sedimentation fence, stakes, and other debris shall be removed and disposed off-site. Site shall be restored to a neat and clean condition.

METHOD OF MEASUREMENT

Item 767.121 will be measured at the contract unit price per foot of sediment control barrier installed. Additional barrier, such as double or triple stacking of compost filter tubes, will be measured per foot of tube installed.

BASIS OF PAYMENT

Item 767.121 will be 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.

ITEM 767.121 (Continued)

Additional barrier, such as double or triple stacking of compost filter tubes, will 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 directed by the Engineer at the Contractor's expense.

ITEM 983.35**STREAMBED MATERIAL REMOVED
AND RELAID****CUBIC YARD**

Work under this Item shall conform to the relevant provisions of Section 983 Revetment, of the MassDOT Standard Specifications for Highways and Bridges and the following:

Work shall consist of removing the top 12" of existing stream bed material removed within the limits of the proposed upstream channel re-grading. This material shall be temporarily stored on-site and relaid as shown on the Contract drawings or as directed by the Engineer. Any additional excavation required within the stone walls of the upstream channel shall be included under this Item.

The purpose of this Item is to provide for the removal, storage and installation of natural streambed for aquatic organisms and to enhance the unnamed stream upstream of the culvert.

MATERIAL

If insufficient streambed material is found, the contractor has the option to supplement with the following material:

The streambed material shall be native cobbles and boulders similar in shape and size of streambed stone adjacent to the work area. Partially angular rock is preferred over round and shall be able to lock together to prevent movement during high flows. Crushed Stone will not be accepted for any of the components. Any stone excavated from the existing streambed can be stockpiled and reused for streambed restoration, provided the excavated stone is characteristic of the existing stream material upstream and downstream of the work area, or meets the above criteria. The elevations and conditions of the existing streambed shall be maintained to the maximum extent practicable. Any supplemental material must be approved by the Town of Mattapoisett and/or the Engineer.

CONSTRUCTION

Existing streambed material that is excavated under this Item shall be stockpiled on-site during construction activities and shall be protected to prevent the material from blending with other soils on the work site.

The location of placement for material under this Item shall follow the direction of the Plans or as directed by the Engineer. No separate payment shall be made for removal beyond limits specified.

Material not required for re-use shall be removed from the site and disposed of legally with no additional compensation.

ITEM 983.35 (Continued)**METHOD OF MEASUREMENT**

Streambed Material Removed and Relaid will be measured for payment per Cubic Yard of streambed material complete in place.

BASIS OF PAYMENT

The work to be done under this Item shall be paid for the Contract unit price, which price shall include full compensation for all labor, tools, equipment, materials and incidental expenses necessary to excavate, stockpile and relay streambed material to the lines and grades shown on the Contract plans or as directed by the Engineer.

ITEM 983.36**BEACH MATERIAL REMOVED
AND RELAID****CUBIC YARD**

Work under this Item shall conform to the relevant provisions of Section 983 Revetment, of the MassDOT Standard Specifications for Highways and Bridges and the following:

Work shall consist of removing the beach sand and stones within the limits of the proposed riprap apron. The beach sand and stones shall be temporarily stored on-site and relaid as shown on the Contract drawings or as directed by the Engineer.

Prior to this work, the Contractor shall note the location of the existing beach stones at the outlet. Beach stones shall be safely stored on-site for reuse and shall be reinstalled to their original location after the proposed apron is constructed.

The purpose of this Item is to provide for the removal, storage and installation of beach material at the culvert outlet to restore the town beach to its original aesthetic condition and provide for the aquatic organisms.

MATERIAL

All materials to be used shall be originally obtained from its excavated location for re-use. If insufficient material is found, the contractor has the option to supplement with a material similar in shape and size to the existing material. Any supplemental material must be approved by the Town of Mattapoisett and/or the Engineer and shall be considered incidental to this Item.

CONSTRUCTION

Existing beach material that is excavated under this Item shall be stockpiled on-site during construction activities and shall be protected to prevent the material from blending with other soil on the work site.

The location of placement for material under this Item shall follow the direction of the Plans or as directed by the Engineer. No separate payment shall be made for removal beyond limits of the proposed apron specified in the plans.

Material not required for re-use shall be first approved by the Town of Mattapoisett before removal from the site and disposed of legally with no additional compensation. The Town may direct the Contractor to deposit all or a portion of the beach material within the Town of Mattapoisett with no additional compensation.

ITEM 983.36 (Continued)**METHOD OF MEASUREMENT**

Beach Material Removed and Relaid will be measured for payment per Cubic Yard of streambed material complete in place.

BASIS OF PAYMENT

The work to be done under this Item shall be paid for at the Contract unit price, which price shall include full compensation for all labor, tools, equipment, materials and incidental expenses necessary to excavate, stockpile and relay beach material to the lines and grades shown on the Contract plans or as directed by the Engineer.

ITEM 986.21**MODIFIED ROCKFILL WITH
GRAVEL PACKED VOIDS****CUBIC YARD**

The work to be performed under this Item shall be in conformance with section 983 Revetment, of the MassDOT Standard Specifications for Highways and Bridges and consists of furnishing and installing modified rockfill to the limits shown on the Contract Drawings or as directed by the Engineer. The modified rockfill shall meet the M2.02.4 material specification.

After the modified rockfill has been placed, gravel will be used to pack any voids that are present. The modified rockfill and gravel will provide a level area for the placement of the natural stream bed materials.

The gravel for voids shall conform to the gradation requirements of Gravel Borrow Type B (M1.03.0, Type b). All gravel used to pack voids is considered incidental to this Item.

METHOD OF MEASUREMENT

Modified Rockfill with Gravel Packed Voids will be measured for payment in place by the Cubic Yard conforming to the length, width and depth required by the Contract drawings.

BASIS OF PAYMENT

The work to be done under this Item shall be paid for at the Contract unit price, which price shall include full compensation for all labor, tools, equipment, materials and other incidental expenses necessary to complete the work.

ITEM 991.3**CONTROL OF WATER –
CULVERT NO. M-XX-XXX (AAA)****LUMP SUM**

The work under this Item shall conform to the relevant provisions of Subsection 140.60 of the MassDOT Standard Specifications for Highways and Bridges, the Contract Drawings, and the following:

This Item covers both upstream inlet water control and downstream outlet water control at the town beach.

ITEM 991.3 (Continued)

The work shall consist of installing and maintaining a temporary water control system in the areas of the culvert installation, cut-off wall installation, drainage vault installation, town beach retaining wall construction, and upstream channel re-grading and wall construction as specified herein and shown on the Contract drawings. The Contractor shall furnish all labor, materials and equipment required for completing the work. Furthermore, the operations of Control of Water neither shall cause the accumulation of siltation nor any adverse effect to the water or the environment.

Work under this Item shall include all materials, equipment and labor needed to construct and install temporary control of water systems. The temporary control of water systems includes water flow diversion and sedimentation and erosion control. The temporary control of water systems shall be non-permanent which does not harm the ecology of the river, land under water, and surrounding land, and shall be comprised of a bypass pipe, sand bag cofferdams, steel sheeting or other approved impervious curtains, and dewatering to facilitate construction activities. Operations of Control of Water shall not adversely affect the quality of the required construction.

Work under this Item also includes pumping operations, installation of bypass piping, installation of earth berms, sandbags, filter fabrics, weirs, stone, and all other means to collect, settle, and discharge water back into the Unnamed Stream during construction.

As part of the work under this Item, it is the responsibility of the Contractor to determine the need and extent of dewatering required.

SUBMITTALS

Prior to the commencement of any work at the site, the Contractor shall submit to the Engineer and the Mattapoisett Conservation Commission for review and approval, a detailed plan for water control, including the construction of the water control system, and a culvert and retaining wall work sequence plan with a timetable and details specific to each of the phases of construction. The submittals shall include working drawings and calculations detailing the methods and materials proposed to account for all anticipated loads and construction conditions necessary to permit the work while maintaining a safe work area and protecting property from damage.

Work under this item shall not commence with the approval of the Mattapoisett Conservation Commission and the Engineer, including all dewatering plans.

The Water Control Plan shall include a Sedimentation and Erosion Control Plan and a Water Flow Diversion and Containment Plan. The plans shall be adequate in detail to define specifics regarding materials, sizes, connections and incidental items associated with the work. The furnishing of such plans shall not serve to relieve the Contractor's responsibility for the safety of the work or his responsibility for the successful completion of the project. The proposed plans submitted shall be designed and stamped by a Professional Engineer registered in the Commonwealth of Massachusetts. The Contractor's attention is directed to the Order of Conditions included herein, for additional information on submittal requirements.

The Contractor shall make their own evaluation of existing conditions and water flow, the effects of his proposed temporary works and construction methods and shall provide in his design for all loads and construction conditions necessary to permit construction of the specified structures while maintaining public safety and protecting completed work and all third party property from damage due to his operations.

ITEM 991.3 (Continued)

The Contractor shall also provide a description and details of the intended methods to prevent debris, including airborne particles, from entering the town beach or Unnamed Stream during the entire project duration.

Sedimentation and Erosion Control Plan

The Contractor shall submit to the Engineer, plans and details of the intended sedimentation treatment basin system that will be used along with dewatering techniques, and its location at the bridge site. All discharge resulting from dewatering activities shall be directed to temporary sedimentation treatment basins at locations approved by the Engineer. At no time shall said discharge be directly released into the stream or ocean. The proposed plan shall include methods and equipment necessary to discharge water from the sedimentation treatment basins. Sedimentation treatment basins shall be sized appropriately to adequately dewater from the proposed work zone while allowing sufficient time for sediments to settle out of the water, and with a depth such that a minimum of 18 inches of freeboard is maintained throughout its use.

Water Flow Diversion and Containment Plan

The Contractor shall submit plans and details along with a complete description showing the proposed system for control of water and dewatering plan to the Engineer for his approval prior to the start of the work. The proposed plan shall include methods and equipment necessary to perform the work and shall include water discharge methods and equipment to bring water from the work zone to sedimentation treatment basin.

CONSTRUCTION METHODS

The work to be done under this heading shall include placing and removing sand bag cofferdams with or without impervious curtains, or an equivalent cofferdam unit, at locations shown on the Contract Drawings. This work shall also include dewatering within the cofferdams, if needed to conduct the work. The dewatering discharge shall be directed to a temporary sedimentation treatment basin. The bags shall not decay nor rip or tear during installation, its service life within the waterway, or during the cofferdam removal process. The Contractor shall not disturb the stream bed prior to placing the cofferdams in order to avoid migration of silts and sands further downstream. The Contractor is responsible for researching the seasonal flow characteristics of Unnamed Stream and ocean tide levels to determine appropriate cofferdam details.

Measures to control the discharge of sediment or pollutants into the water resource areas shall include, but not be limited to the following:

1. Site construction areas outside the buffer zones and on relatively flat ground.
2. Schedule the work within the resource areas to avoid periods of anticipated high water (i.e. spring floods) and inclement weather.
3. Management of construction operations involving hazardous materials, such as refueling and maintenance of equipment within the resource areas.
4. Installation and continuous maintenance of water control measures throughout the project.

ITEM 991.3 (Continued)

5. Treatment of all discharge resulting from dewatering activities through a sedimentation/detention basin to control turbidity. At no time shall the discharge from dewatering activities be directly released into a resource area.

The locations of any sandbag dams and sedimentation/retention basins will be determined by the Contractor based on the selected methods of construction. Placement of the basins shall be in an upland area that is within the existing right of way. Refer to Plans for anticipated location of needed water control.

All dewatering and related water control work shall be conducted in such a manner as to prevent siltation or contamination of the waterway. At a minimum, the settling basin shall be constructed of an earthen berm lined with geotextile fabric and surrounded by staked hay bales. The basin shall meet or exceed the following criteria:

1. The size and location of the basin shall be determined based on the size of the Contractor's pump and the anticipated flows for the river and the need to perform demolition and construction.
2. The outlet/weir of the dewatering basin shall not cause erosion of the surrounding area. An approved method of controlling erosion, such as an erosion control blanket, stone, etc., shall be used at the outlet of the basin.
3. The Contractor shall not allow any sediment within the settling basin to accumulate to a depth of greater than 12 inches at any point in the basin, nor shall the water level be allowed to rise to a height of more than 24 inches.
4. The sedimentation treatment basin shall be designed with a minimum of 18 inches of freeboard, which must be maintained at all times.
5. The Contractor shall inspect the settling basin(s) at least twice daily when in operation.
6. Damages shall be repaired immediately.
7. The settling basin outlet shall be cleaned daily.
8. The sediments within the settling basin shall be disposed of as approved by the Engineer.

Upon completion of water control, the materials and equipment used to maintain the cofferdam(s) and sedimentation treatment basin(s) shall become the property of the Contractor and shall be removed by the Contractor from the site. The area affected shall be restored to its natural condition in a manner subject to the Engineer's approval.

BASIS OF PAYMENT

Control of Water – Culvert No. M-XX-XXX will be paid for at the Contract lump sum price, which shall include, but not be limited to, the design of the water control systems, as well as all equipment, materials and labor needed for the installation, maintenance, removal, disposal of the materials used for water control, and disposal of any siltation materials caused by the pumping operation. All costs required for permits, transport, special handling, inspection, testing, etc., shall be included in the Contract bid price, which shall also include all labor, materials, equipment, tools, and incidental costs required to complete the work.

ITEM 995.011**CULVERT STRUCTURE,
CULVERT NO. M-XX-XXX (AAA)****LUMP SUM**

The work under this Item shall conform to the relevant provisions of Section 995 – Bridge Structure of the Standard and Supplemental Specifications and these Special Provisions. This Item includes all material and labor necessary to complete the work in accordance with the schedule of Items included herein under Basis for Partial Payments and all other Items that are part of the work for which payment is not provided for elsewhere.

Work under this Item shall include all materials, equipment and labor needed to construct the following:

- Reinforcing Steel - Epoxy Coated
- Precast Concrete Box Culvert
- Precast Cut-off Walls
- Precast Drainage Vault & Outlet
- Precast Outlet Retaining Wall Footings for Stone Masonry Walls
- Cast-In-Place Inlet Retaining Wall Footings for Stone Masonry Walls
- Cast-In-Place Approach Slabs
- Cast-In-Place Concrete Headwalls
- Stone Masonry in Cement Mortar (Stone Veneer for Inlet Concrete Headwall)
- Drainage Vault Grate – Coated Steel
- Damp-proofing
- Membrane Waterproofing
- Any incidentals required to complete the work.

The work does not include any items listed separately in the proposal. Payment for materials shown on the Contract Drawings as being part of this culvert structure or which may be incidental to its construction and are not specifically included for payment under another Item shall be considered incidental to the work performed under this Item and shall be included in the unit price of the component of which they are a part.

Work under this Item shall conform to the specific requirements stipulated below for the component parts of this Item. For those component parts where no specific requirement is stipulated, the Standard Specifications shall apply except for payment.

All costs associated with the sheet membrane waterproofing shall be incidental to the lump sum Item.

The following Special Provisions shall apply to items included under Item 995.011:

STEEL REINFORCEMENT FOR STRUCTURES – EPOXY COATED

Steel reinforcement for structures and steel reinforcement for structures – epoxy coated shall conform to the applicable provisions of Section 901 – Cement Concrete and Subsections M8.01.0 – Reinforcing Steel and M8.01.7 – Epoxy Coated Reinforcing Bars of the Standard Specifications and the following:

ITEM 995.011 (Continued)

Mechanical splices, if used, shall be compatible with epoxy coated rebar. Mechanical splices shall be as listed on the MassDOT qualified products list and shall develop 125% of the yield strength of the connected bars. Splices shall not have rebar stops. Mechanical splices and reinforcing supports shall be considered as included in the price per pound of Steel Reinforcement for Structures - Epoxy Coated, as stated by the Contractor and approved by the Engineer in the "Basis for Partial Payments".

MATERIALS

Reinforcing bars shall be deformed bars rolled from new billet steel conforming to the requirements of ASTM A615 grade 60 and shall be epoxy coated, unless otherwise noted on the Contract Drawings. Epoxy coated reinforcing bars shall conform to AASHTO-M284.

SUBMITTALS

Details of splices, including manufacturer, sequence of installation and all relevant technical data shall be submitted to the Engineer for approval prior to installation.

5000 PSI, 3/4 IN., 685 HP CEMENT CONCRETE**General**

The work under this heading shall conform to the relevant provisions of Sections 901 – Cement Concrete and the Materials Section M4 of the Standard Specifications and the following:

Work under this Item shall include all materials, equipment and labor needed to construct the following:

- Removable Approach Slab Panels
 - Approach slabs are proposed to be installed within the roadway sections of the culvert due to the depth of fill over the culvert being less than 18-inches. The approach slab shall be removable with lift hooks cast into each panel. With the box culvert to be contractor designed, if the culvert designer provides calculations showing the box culvert final design does not require an approach slab, then the contractor may disregard the contract documents direction to install an approach slab, but only through approval of the Engineer of Record.
- Headwalls with Stone Veneer
- Upstream Retaining Wall Cap & Footings

The work does not include any items listed separately in the proposal. Joint fillers, joint sealers, and construction joints shall be considered as incidental to the work involved in the furnishing and placing of concrete.

CONSTRUCTION METHODS

Strict placing, vibrating, and form stripping practices shall be followed to achieve quality concrete. Voids and forming accessory holes shall be patched as necessary to match the surrounding texture and color to produce a uniform appearance. Precast footings are anticipated at the outlet with the limited construction schedule and tidal conditions at the beach. The contractor may request to cast the retaining wall footings in lieu of precast if the contractor submits a construction procedure outlining their proposed approach.

ITEM 995.011 (Continued)**SUBMITTALS**

Submittals shall conform to the Standard Specifications for Section 901 – Cement Concrete as well as the following:

Details of required approach slab connections, shop drawings, manufacturer documentation, installation procedure, and all relevant technical data shall be submitted to the Engineer for approval prior to installation of the approach slab. Design computations and shop drawings shall be prepared and stamped by a Professional Engineer licensed to practice in the Commonwealth of Massachusetts.

STONE MASONRY WALL REMOVED AND REBUILT IN CEMENT MORTAR

The work under this heading shall conform to the relevant provisions of Subsection 685 – Stone Masonry Wall and 690 – Walls Removed and Rebuilt of the latest MassDOT Standard Specifications for Highway and Bridges and the following:

Description

The work shall include partial removal of the adjacent upstream stone channel walls and the partial removal of the town beach retaining wall to the limits shown on the Plans or as directed by the Engineer for the installation of stone masonry walls within the limits shown on the Plans or as directed by the Engineer.

The Contractor's operations shall not result in any damage to adjacent structures or foundations. Any damage to adjacent structures that are to remain that are damaged as a result of the Contractor's operations, shall be repaired by the Contractor to the satisfaction of the Engineer and at no additional expense.

After the proposed culvert, outlet, and drainage vault have been installed, the contractor shall place the footings within the locations shown on the plans. The stockpiled stones shall then be used to rebuild the retaining walls in cement mortar up to the fascia of the culvert/drainage outlet as shown on the Plans.

Materials

The stone shall consist of those removed from the present walls and their foundations, as well as any stones removed under Item 144. - Class B Rock Excavation, provided the stones match the size, color, and type of the rocks from the removed walls. Removed stones shall be broken as little as possible and shall be carefully stockpiled separately so as not to mix with other excavated stones or materials on site.

If insufficient material is found, the contractor has the option to supplement with new stones as necessary to provide rebuilt walls of uniform appearance and cross-sectional dimensions throughout their length. Additional material is considered incidental to this Item and shall be approved by the Town of Mattapoisett and/or the Engineer before use. The Contractor shall notify the Engineer within 14 days of their use.

Inlet walls: The face of the new wall shall not extend further than the inside face of the culvert at the inlet and shall align/meet with the face of the retained wall section.

ITEM 995.011 (Continued)

Outlet walls: Stones used for the rebuilt section of the town beach retaining wall shall be placed in a pattern to establish a seamless connection and have the same aesthetic appearance as the unremoved section of the town beach retaining wall.

STONE MASONRY IN CEMENT MORTAR

The work under this heading shall conform to the relevant provisions of Subsection 685 – Stone Masonry Wall of the latest MassDOT Standard Specifications for Highway and Bridges and the following:

Description

The work under this heading shall include all materials, equipment and labor needed to construct a stone veneer on the cast-in-place headwall at the culvert inlet.

Materials

Stone used to create the stone veneer shall conform to the materials section under the Stone Masonry Wall Rebuilt in Mortar heading

DRAINAGE VAULT GRATE – COATED STEEL

The work under this heading shall conform to the applicable provisions of Section 960 – Structural Steel and Miscellaneous Metal Products of the Standard Specifications and the following:

Description

The work under this heading shall include all materials, equipment and labor needed to install a drainage vault grate at the culvert outlet that will not impede stormwater drainage. The work also includes all needed mechanical design details, flow capacity, and engineering calculations from a MassDOT Approved Fabricator. The precast culvert fabricator shall supply the connections needed for attaching the steel grate to the precast concrete culvert outlet. The drainage vault grate shall be installed to prevent unauthorized human access into the drainage structure from the beach and shall include a locking mechanism approved by the Town of Mattapoisett.

Materials

The powder coated marine grade grate and connections shall be comprised of SAE 316 Stainless Steel or an equivalent corrosion resistance material approved by the Town of Mattapoisett and/or Engineer. The painted metal color shall be Federal Standard Color FS 17038 (03120F) Black.

Submittals

Details of required connections, coating information, shop drawings, manufacturer documentation, installation procedure, and all relevant technical data shall be submitted to the Engineer for approval prior to installation.

ITEM 995.011 (Continued)

PRECAST CONCRETE BOX CULVERT UNITS
PRECAST CONCRETE CUT-OFF WALL UNITS
PRECAST APPROACH SLAB UNITS
PRECAST CONCRETE DRAINAGE VAULT UNIT
PRECAST RETAINING WALL FOOTING UNITS

General

The work under this Heading consists of designing, fabricating, transporting and installing a precast concrete box culvert, cut-off walls, drainage vault & outlet, retaining wall footings, and appurtenances and includes all necessary labor, materials, and equipment to complete the work as shown on the Plans. The precast units shall meet the requirements of Section M4: Cement, Concrete, and Related Materials.

In addition, the precast units shall conform to the dimensions (span and rise) and geometry shown on the Contract Drawings. The lengths of individual precast segments shown on the drawings are for conceptual purposes only. Contractor may modify the lengths as required, provided a minimum length of 5'-0" is provided for all segments. Headwall, cut-off wall reinforcement and/or mechanical splicers shall be cast into the exterior sections as shown on the Contract plans.

Precast Concrete Box Culvert Outlet

Precast concrete shop drawings shall include details for the drainage vault gate connections to the culvert, impressions for hinges, and location of locking mechanism.

Drainage Vault

The Drainage Vault may require a recessed bottom to install all culvert & outlet connections. The finished elevation inside the vault shall be the same as the outlet. Lightweight concrete fill shall be permitted if the fabricator cannot cast a higher bottom slab. The material and compensation for the lightweight concrete shall be incidental under this Item.

If the Drainage Vault fabricator can detail a higher bottom slab, then the contractor may disregard the direction within the contract plans to install lightweight concrete inside the drainage vault to a smooth finish, but only through the submittal process under the precast structure section of this Special Provision.

All work shall conform to the MassDOT Standard Specifications and the requirements of the current AASHTO LRFD Bridge Construction Specifications, supplemented by the current relevant provisions of the latest edition of PCI MNL-116 (The Manual for Quality Control for Plants and Production of Precast and Prestressed Concrete Products), except as noted herein. The contract documents shall take precedence over the AASHTO LRFD Bridge Construction Specifications and PCI MNL-116. M4.02.14 of the MassDOT Standard Specifications is superseded in its entirety by the requirements specified below.

ITEM 995.011 (Continued)**MATERIALS****A. Materials.**

Materials shall conform to M4.09.1 and the following:

Non-Shrink Grout Products	M4.04.5
Controlled Low-Strength Material – Structural Non-Excavatable	M4.08.0
Welded Steel Wire Fabric	M8.01.2
Mechanical Reinforcing Bar Splicer	M8.01.9
Lifting Devices	PCI MNL-116
Corrugated Metal Pipe	AASHTO M 36
Hydraulic Cement	M4.01.1
Mortar for Filling Keyways	M4.04.0
Slag	AASHTO M 302
Lightweight Concrete	M4.06.5

1. Vertical Adjustment Assembly.

Vertical Adjustment Assembly details and material requirements shall be as shown on the plans. Alternate devices may be used provided that they are adjustable and can support the anticipated loads. The design of the leveling devices, with necessary calculations, shall be submitted to the Engineer of Record for approval.

2. Threaded Inserts.

Threaded inserts are permissible to facilitate forming the keyway pours. Threaded inserts shall be hot dip galvanized or made of stainless steel. The number of threaded inserts shall be minimized, and the inserts shall not come in contact with the reinforcing steel.

3. Corrugated Metal Pipe.

Corrugated Metal Pipe to be used for forming voids as specified on the plans shall be fabricated from steel and shall have a protective metallic coating of zinc (galvanizing).

CONSTRUCTION METHODS – PLANT FABRICATION**A. Box Culverts, Three-Sided Frames and Arches.**

The Contractor shall submit design computations for the box culvert, rigid frame or arch bridge elements to the Engineer for review and approval. The computations shall be prepared in accordance with the latest AASHTO LRFD Bridge Design Specifications, the MassDOT Bridge Manual (Hundredth Anniversary Edition), and the Plans using English units and HL-93 live loading. The design computations shall consider all Strength, Extreme Event and Service Limit States as are appropriate for each stage of fabrication, shipment, construction, and for the final in-service condition. Design computations and shop drawings shall be prepared and stamped by a Professional Engineer licensed to practice in the Commonwealth of Massachusetts. The shop drawings shall be prepared and submitted in accordance with M4.09.2B.

The box dimensions provided on the plans are shown to establish the size of the proposed opening. The width and thickness of each frame unit may vary depending upon the manufacturer's specifications provided that the opening size is maintained. The Contractor shall be responsible for modifying the dimensions of the frame elements to compensate for elastic shortening, shrinkage, grade corrections, and other phenomena that make in-process fabricating dimensions different from those shown on the drawings. Approval of the shop drawings shall not relieve the Contractor from responsibility for the correctness of the dimensions shown.

ITEM 995.011 (Continued)**Joints.**

The precast reinforced concrete three-sided frame shall be produced with grout-filled keyways per the details on the plans, the manufacturer's recommendations, and as approved by the Engineer. The ends shall be manufactured such that when the sections are laid together they will make a continuous line of frames with a smooth interior surface free of appreciable irregularities, and in compliance with the permissible variations.

4. Marking.

The following information shall be clearly marked on the interior of each frame by indentation, waterproof paint, or other approved means:

- Frame span and rise
- Date of manufacture and lot number
- Name and trademark of the manufacturer

Pre-Production Meeting.

The Contractor shall notify the Engineer to determine if a pre-production meeting will be required to review the specification, shop drawings, curing plan, schedule, and discuss any specific requirements. The meeting shall be held prior to scheduling an Inspector (refer to M4.09.4 *Department Acceptance*), and at least seven (7) days prior to the scheduled casting of any Precast Concrete Elements or control section. The Contractor shall schedule the meeting, which shall include representatives of the Fabricator and Town of Mattapoissett.

Reinforcement.

The reinforcing bars shall be installed in accordance with Subsection 901.35, including tolerances for cover and horizontal spacing of bars. Components of mechanical reinforcing bar splicers shall be set with the tolerances shown on the plans. The reinforcing bars and mechanical reinforcing bar splicers shall be assembled into a rigid cage that will maintain its shape in the form and which will not allow individual reinforcing bars to move during the placement of concrete. This cage shall be secured in the form so that the clearances to all faces of the concrete, as shown on the plans, shall be maintained.

Where reinforcing bars are to protrude from one Precast Concrete Element in order to mate with reinforcing bar splicers in a second precast concrete element, the fabricator shall set the reinforcing bars and the reinforcing bar splicers with a template in order to ensure proper fit up within the tolerances specified on the plans.

Tolerances.

Fabrication shall comply with tolerances specified on the plans. Tolerances for steel reinforcement placement shall be in accordance with Subsection 901.35. In the absence of specifications on the plans, tolerances shall comply with the latest version of the PCI MNL 135, Precast Tolerance Manual.

Forms.

Concrete shall be cast in rigidly constructed forms, which will maintain the Precast Concrete Elements within specified tolerances to the shapes, lines and dimensions shown on the approved fabrication drawings. Forms shall be constructed from flat, smooth, non-absorbent material and shall be sufficiently tight to prevent the leakage of the plastic concrete. When wood forms are used, all faces in contact with the concrete shall be laminated or coated with a non-absorbent material. All worn or damaged forms, which cause irregularities on the concrete surface or damage to the concrete during form removal, shall be repaired or replaced before being reused. If threaded inserts are cast into the elements for support of formwork, the inserts shall be recessed a minimum of 1 inch and shall be plugged after use with a grout of the same color as that of the precast cement concrete.

ITEM 995.011 (Continued)**CONSTRUCTION METHODS – FIELD CONSTRUCTION****A. General.**

All of the Contractor's field personnel involved in the erection and assembly of the Precast Concrete Elements shall have knowledge of and follow the approved Erection Procedure and Quality Control Plan for Precast Concrete Element Assembly.

Prior to installation, the following documentation shall be reviewed and confirmed by the Engineer or designee:

- (a) QC Compressive Strength Test Report Forms attaining Design Strength, $f'c$ for the Precast Concrete Element's representative subplot.
- (b) Certificate of Compliance generated by the Fabricator as described under the Fabricator Quality Control section.
- (c) QC Inspection Reports signed by the Quality Control Manager.

Field construction staff shall verify that the Engineer has accepted all Precast Concrete Elements prior to installation.

Erection Procedure and Quality Control Plan for Precast Concrete Element Assembly.

Prior to the erection, the Contractor shall submit an Erection Procedure and a Quality Control Plan for Precast Concrete Element Assembly for approval by the Engineer. This submittal shall include computations and drawings for the transport, hoisting, erection and handling of the Precast Concrete Elements. The Erection Procedure and Quality Control Plan for Precast Concrete Element Assembly shall be prepared and stamped by a Professional Engineer registered in the Commonwealth of Massachusetts with working knowledge of the Contractor's equipment, approved shop drawings, and materials to build the culvert. The Erection Procedure and Quality Control Plan for Precast Concrete Element Assembly shall, at a minimum, include the following:

Erection Procedure

The Erection Procedure shall be prepared to conform to the requirements of 960.61, Design, Fabrication and Erection and the applicable sections in Chapter 8 of the PCI Design Handbook (eighth edition) for handling, erection, and bracing requirements. At a minimum, the Erection Procedure shall provide:

- (a) Minimum concrete compressive strength for handling the Precast Concrete Elements.
- (b) Concrete stresses during handling, transport, and erection.
- (c) Crane capacities, pick radii, sling geometry, and lifting hardware.
- (d) Verification that the equipment can handle all pick loads and weights with the required factor of safety.
- (e) Evaluation of construction sequence and evaluation of any geometric conflicts in the lifting of the Precast Concrete Elements and setting them as shown on the plans.
- (f) Design of crane supports including verification of subgrade for support.
- (g) Location and design of all temporary bracing that will be required during erection.

Non-shrink grout and concrete materials, approved by the Engineer, shall be placed as shown on the plans. Fill joints, keyways, and voids, in strict accordance with the specifications and manufacturer's recommendations and instructions.

ITEM 995.011 (Continued)

For footings, approach slabs and highway guardrail transitions, once these Precast Concrete Elements have been set to the correct horizontal and vertical alignment, the void between them and the supporting soil shall be filled with Controlled Low-Strength Material – Structural Non-Excavatable to the limits as shown on the plans. Add additional grout ports in the footings to facilitate the bedding process if required.

Except in approach slabs, joints shall be filled flush to the top with non-shrink grout, and any vertical misalignment between adjacent elements shall be feathered out on a slope of 1 to 12.

Curing of grout or concrete shall be performed in strict accordance with the specifications and manufacturer's recommendations. Filling shall not be completed in cold weather when either the ambient temperature or the precast member's temperature is below the manufacturer's recommendation. No localized heating of either the precast members or of the air surrounding the element will be permitted in an attempt to reach application temperatures.

If the joints or voids are not filled within five days after the Precast Elements are erected, the Contractor shall cover and protect the openings from weather and debris until they are filled.

5. Quality Control Plan for Precast Concrete Element Assembly

The Quality Control Plan for Precast Concrete Element Assembly is a document prepared and submitted by the Contractor prior to the start of work which requires the Contractor to identify and detail the sequence of construction in accordance with the project schedule and which clearly identifies all stages of field construction. The assembly procedures for the Precast Concrete Elements shall be submitted in PDF format on 24"x36" sheets. This document will be treated as a Construction Procedure and will be reviewed by both the Designer and the District Construction Office. The approval of this document will serve as a guideline for setting interim concrete and grout strengths and curing procedures to allow construction to proceed without waiting for the final in-service strengths to be achieved.

The following list details the minimum criteria that should be included in the Quality Control Plan for Precast Concrete Element Assembly:

- (a) A detailed schedule showing the sequence of operations that the Contractor will follow. The schedule shall include a timeline for installation of all major elements of the culvert accounting for the installation of temporary works and cure times of grouts or closure pour concrete and other selected materials.
- (b) Calculations that support the schedule outlined above should be included verifying that the selected materials have adequate interim strength to proceed from one step to another. Final material strengths are not normally required until the culvert is opened to vehicular traffic. The minimum factor of safety of two (2) will be required for the interim strength of grouts and closure pour concrete before construction is allowed to proceed to subsequent steps. The factor of safety is applied to the service loads that are supported by the elements and materials during various stages of construction. For example, if the Contractor calculates that the grout between the precast pier cap and pier wall requires a strength of 100 psi to support the dead load of the beams in the next step, a cylinder break of 200 psi will be required prior to allowing the pier cap to be loaded with the beams. The required strength of materials for subsequent construction stages shall also be calculated and the material strength verified.
- (c) The Contractor is responsible for determining the center of gravity for all elements. Special care shall be used for unusual elements that are not symmetric. These elements may require special lifting hardware to allow for installation in a plumb or flat position.

ITEM 995.011 (Continued)

- (d) Plan of the work area, depicting items such as temporary earth support, utilities within the immediate vicinity of the work, drainage structures, etc. The Contractor shall coordinate the various subcontractors that will need to occupy the same area and shall ensure that there are no conflicts. For example, if the Contractor is having different Subcontractors prepare and submit plans for temporary earth support and demolition, and the earth support is required to be installed prior to the demolition, it shall be the Contractor's responsibility to ensure that the Quality Control Plan for Precast Concrete Element Assembly submission allows both operations to be performed without field modification.
- (e) Details of all equipment that shall be employed for the construction of the culvert.
- (f) Methods of providing temporary support of the elements. Include methods of adjusting and securing the element after placement.
- (g) Vertical Adjustment Assemblies to be used as a means of setting precast concrete footings to the correct elevations.
- (h) Procedures for controlling the overall horizontal dimensions and the vertical elevations as each precast concrete element is erected by using the tolerance limits of the joints as detailed on the plans.
- (i) Methods for curing grout.
- (j) Proposed methods for installing non-shrink grout and the sequence and equipment for the grouting operation.
- (k) Methods for sealing the keyways in preparation for filling with non-shrink grout, including the use of backer rods. The Contractor shall not assume that the backer rods will restrain the pressure from the grout in vertical grout joints. Provide additional forming to retain the backer rod.

Survey and Layout.

Working points, working lines, and benchmark elevations shall be established prior to placement of all elements. The Contractor is responsible for field survey as necessary to complete the work. The Town of Mattapoisett and Engineer reserves the right to perform additional independent survey. If discrepancies are found, the Contractor may be required to verify previous survey data.

Preparation of Closure Pours and Grouted Keyways.

Immediately prior to erecting the Precast Concrete Elements, the closure pours and grouted keyways shall be cleaned at the job site of all dust, dirt, carbonation, laitance, and other potentially detrimental materials which may interfere with the bonding of the closure pour concrete or grout and precast concrete using a high-pressure water blast. Any exposed reinforcing steel in the precast concrete shall be protected from damage during the cleaning of the keyways. Damaged epoxy coating of steel reinforcement shall be repaired, and the reinforcing steel shall be cleaned as directed by the Engineer. The surfaces of the closure pours and grouted keyways shall be wetted so that the surfaces shall have a Saturated Surface Dry (SSD) condition for at least 24 hours prior to the placement of the closure pour concrete.

ITEM 995.011 (Continued)**Erection.**

The elements shall be placed in the sequence and according to the methods outlined in the Erection Procedure and Quality Control Plan for Precast Concrete Element Assembly. As the erection proceeds, the Contractor shall constantly monitor the assembly to ensure that the precast concrete element is within proper horizontal and vertical location and tolerances prior to releasing it from the crane and setting the next unit. The Contractor may use shims to maintain proper setting tolerances.

The concrete elements shall be lifted only by the lifting devices, and the utmost care shall be taken to prevent distortion of the elements during handling, transportation or storage.

This approval will be contingent on the Contractor demonstrating by calculations, prepared by a Professional Engineer registered in Massachusetts, that the elements will not be damaged by the non-vertical lifting force and by documentation that the capacity of the lifting devices is adequate for the non-vertical lifting force.

After all Precast Concrete Elements have been placed, the actual overall dimensions of the structure both horizontal and vertical, as laid out shall not deviate from the nominal dimensions shown on the plans beyond a tolerance of +0 inches and -1 inches. Once the layout of Precast Concrete Elements has been accepted by the Engineer, the Contractor shall cut all lifting devices off below the surfaces of the elements.

Box Culverts, Three-Sided Frames and Arches.

Backfilling operations shall not begin until the following checks have been made:

1. The frame to footing key joints are grouted as shown on the plans;
2. The joints between exterior frame culvert elements and wingwall stems are complete as shown on the plans;
3. All joint seals are properly placed.

Backfill shall be paid for under separate items. The backfilling procedures shall be in accordance with Sections 120, 150, and 170 of the Standard Specifications and Supplemental Specifications modified as follows:

- (a) Fill shall be placed and compacted in layers not exceeding one foot in depth;
- (b) Dumping of fill shall not be allowed any nearer to the structure than 3.25 feet from a vertical plane extending from the back of the footing;
- (c) Backfill shall be placed as symmetrically as possible around the structure with differential depths of backfill on each side of the structure not exceeding 1.5 feet with respect to each other;
- (d) Compaction shall be achieved using hand compaction equipment for all fill within one foot of the structure;
- (e) The bare structure shall not be crossed by any equipment heavier than that specified by the frame manufacturer. All damage resulting from equipment damage shall be rectified to the satisfaction of the Engineer at no cost to the Department;
- (f) Construction equipment will not be permitted atop an uncompleted structure;
- (g) Construction equipment whose weight exceeds the design capacity shall not be permitted atop the completed structure under any circumstances;

ITEM 995.011 (Continued)

(h) The use of vibratory rollers for compaction purposes will not be permitted.

A representative of the manufacturer shall be on site at the commencement of the installation, at no cost to the Department, to assist the Contractor. The representative shall offer advisory assistance only and shall not supplant the Contractor's representative, or the Engineer.

Filling of Blockouts for Lifting Devices and Threaded inserts.

If the blockouts in the Precast Concrete Elements where the lifting devices were located will be exposed and visible after assembly is complete, the Contractor shall fill these blockouts with Mortar (M4.04.5).

After the formwork has been removed, all threaded inserts that have been cast into the precast concrete for support of the formwork shall be filled with a grout of the same color as that of the precast concrete.

SCHEDULE OF BASIS FOR PARTIAL PAYMENT

Prior to the execution of the Contract by the Owner, the Contractor shall submit on the following form a schedule of unit prices for the major component Sub-Items that make up Item 995.011 as well as their total culvert structure Lump Sum cost for Culvert Structure, Culvert No. M-XX-XXX (AAA).

The culvert structure Lump Sum breakdown quantities provided in the proposal form are estimated and not guaranteed. The total of all partial payments to the Contractor shall equal the Lump Sum contract price regardless of the accuracy of the quantities furnished by the Engineer of the individual bridge components. The cost of labor and materials for any Item not listed but required to complete the work shall be considered incidental to Item 995.011 and no further compensation will be allowed.

The schedule on the proposal form applies only to Culvert Structure No. M-XX-XXX (AAA). Payment for similar materials and construction at locations other than at this culvert structure shall not be included under this Item. Sub-Item numbering is presented for information only in coordination with MassDOT Standard Nomenclature.

ITEM 995.011 (Continued)**CULVERT STRUCTURE, CULVERT NO. M-XX-XXX (AAA)**

Sub-Item	Component	Quantity	Unit	Unit Price	Total
685.	STONE MASONRY WALL IN CEMENT MORTAR	75	CY		
685.3	STONE MASONRY IN CEMENT MORTAR	8	FT		
904.3	5000 PSI, ¾ INCH, 685 HP CEMENT CONCRETE	15	CY		
904.301	PRECAST CUT-OFF WALL UNITS	2	EA		
904.302	PRECAST RETAINING WALL FOOTING UNITS	2	EA		
910.1	STEEL REINFORCEMENT FOR STRUCTURES – EPOXY COATED	500	LB		
916.	PRECAST CONCRETE BOX CULVERT UNITS	25	EA		
916.2	PRECAST CONCRETE DRAINAGE VAULT UNITS	1	EA		
960.101	DRAINAGE VAULT GRATE – COATED STEEL	1	EA		
965.	MEMBRANE WATERPROOFING FOR BRIDGE DECKS	630	SF		
970.	DAMP-PROOFING	3,250	SF		

Total Cost of Item 995.011 = \$

END SPECIAL PROVISIONS

ATTACHMENTS FOLLOW

ATTACHMENT A
PREVAILING WAGE RATES



**THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT
DEPARTMENT OF LABOR STANDARDS
Prevailing Wage Rates**

MAURA HEALEY
Governor

KIM DRISCOLL
Lt. Governor

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: Mattapoisett **City/Town:** MATTAPOISETT

Contract Number:

Description of Work: Replacement of an existing culvert carrying Water Street at the Mattapoisett Town Beach (30 Water Street) and drains through the existing wharf retaining wall in the town of Mattapoisett.

Job Location: 30 Water Street

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 updated wage schedule must be provided to all contractors, including general and sub-contractors, working on the construction project.
- This annual update requirement is generally not applicable to 27F “rental of equipment” contracts. For such contracts, the prevailing wage rates issued by DLS shall remain in effect for the duration of the contract term. However, if the prevailing wage rate sheet issued does not contain wage rates for each year covered by the contract term, the Awarding Authority must request updated rate sheets from DLS and provide them to the contractor to ensure the correct rates are being paid throughout the duration of the contract. Additionally, if an Awarding Authority exercises an option to renew or extend the contract term, they must request updated rate sheets from DLS and provide them to the contractor.
- 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.

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
(2 AXLE) DRIVER - EQUIPMENT	1/1/2026	\$40.95	\$16.17	\$21.78	\$0.00	\$0.00	\$78.90
TEAMSTERS JOINT COUNCIL NO. 10	6/1/2026	\$41.95	\$16.17	\$21.78	\$0.00	\$0.00	\$79.90
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/1/2026	\$41.95	\$16.17	\$23.52	\$0.00	\$0.00	\$81.64
	1/1/2027	\$41.95	\$16.77	\$23.52	\$0.00	\$0.00	\$82.24
(3 AXLE) DRIVER - EQUIPMENT	1/1/2026	\$41.02	\$16.17	\$21.78	\$0.00	\$0.00	\$78.97
TEAMSTERS JOINT COUNCIL NO. 10	6/1/2026	\$42.02	\$16.17	\$21.78	\$0.00	\$0.00	\$79.97
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/1/2026	\$42.02	\$16.17	\$23.52	\$0.00	\$0.00	\$81.71
	1/1/2027	\$42.02	\$16.77	\$23.52	\$0.00	\$0.00	\$82.31
(4 & 5 AXLE) DRIVER - EQUIPMENT	1/1/2026	\$41.14	\$16.17	\$21.78	\$0.00	\$0.00	\$79.09
TEAMSTERS JOINT COUNCIL NO. 10	6/1/2026	\$42.14	\$16.17	\$21.78	\$0.00	\$0.00	\$80.09
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/1/2026	\$42.14	\$16.17	\$23.52	\$0.00	\$0.00	\$81.83
	1/1/2027	\$42.14	\$16.77	\$23.52	\$0.00	\$0.00	\$82.43
ADS/SUBMERSIBLE PILOT	8/1/2024	\$117.16	\$10.08	\$11.62	\$12.67	\$0.00	\$151.53
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 2)							
For apprentice rates see "Apprentice- PILE DRIVER"							
AIR TRACK OPERATOR	12/1/2025	\$41.22	\$10.65	\$9.75	\$9.11	\$0.00	\$70.73
LABORERS	6/1/2026	\$42.66	\$10.65	\$9.75	\$9.11	\$0.00	\$72.17
LABORERS - ZONE 2	12/1/2026	\$44.10	\$10.65	\$9.75	\$9.11	\$0.00	\$73.61
	6/1/2027	\$45.55	\$10.65	\$9.75	\$9.11	\$0.00	\$75.06
	12/1/2027	\$47.00	\$10.65	\$9.75	\$9.11	\$0.00	\$76.51
	6/1/2028	\$48.50	\$10.65	\$9.75	\$9.11	\$0.00	\$78.01
	12/1/2028	\$50.00	\$10.65	\$9.75	\$9.11	\$0.00	\$79.51
For apprentice rates see "Apprentice- LABORER"							
AIR TRACK OPERATOR (HEAVY & HIGHWAY)	12/1/2025	\$41.22	\$10.65	\$9.75	\$9.21	\$0.00	\$70.83
LABORERS	6/1/2026	\$42.66	\$10.65	\$9.75	\$9.21	\$0.00	\$72.27
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$44.10	\$10.65	\$9.75	\$9.21	\$0.00	\$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
ASBESTOS WORKER (PIPES & TANKS)	12/1/2025	\$44.80	\$14.50	\$4.30	\$6.75	\$0.00	\$70.35
HEAT & FROST INSULATORS LOCAL 6							
HEAT & FROST INSULATORS LOCAL 6 (SOUTHERN MASS)							
ASPHALT RAKER	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.05	\$10.65	\$9.75	\$9.11	\$0.00	\$74.56
	12/1/2027	\$46.50	\$10.65	\$9.75	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.00	\$10.65	\$9.75	\$9.11	\$0.00	\$77.51
	12/1/2028	\$49.50	\$10.65	\$9.75	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
ASPHALT RAKER (HEAVY & HIGHWAY)	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.21	\$0.00	\$70.33
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.21	\$0.00	\$71.77
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.21	\$0.00	\$73.21

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE	12/1/2025	\$59.28	\$16.05	\$13.25	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.58	\$16.05	\$13.25	\$3.25	\$0.00	\$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$62.03	\$16.05	\$13.25	\$3.25	\$0.00	\$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
BACKHOE/FRONT-END LOADER	12/1/2025	\$59.28	\$16.05	\$13.25	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.58	\$16.05	\$13.25	\$3.25	\$0.00	\$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$62.03	\$16.05	\$13.25	\$3.25	\$0.00	\$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
BARCO-TYPE JUMPING TAMPER	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.05	\$10.65	\$9.75	\$9.11	\$0.00	\$74.56
	12/1/2027	\$46.50	\$10.65	\$9.75	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.00	\$10.65	\$9.75	\$9.11	\$0.00	\$77.51
	12/1/2028	\$49.50	\$10.65	\$9.75	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
BLOCK PAVER, RAMMER / CURB SETTER	12/1/2025	\$41.22	\$10.65	\$9.75	\$9.11	\$0.00	\$70.73
LABORERS	6/1/2026	\$42.66	\$10.65	\$9.75	\$9.11	\$0.00	\$72.17
LABORERS - ZONE 2	12/1/2026	\$44.10	\$10.65	\$9.75	\$9.11	\$0.00	\$73.61
	6/1/2027	\$45.55	\$10.65	\$9.75	\$9.11	\$0.00	\$75.06
	12/1/2027	\$47.00	\$10.65	\$9.75	\$9.11	\$0.00	\$76.51
	6/1/2028	\$48.50	\$10.65	\$9.75	\$9.11	\$0.00	\$78.01
	12/1/2028	\$50.00	\$10.65	\$9.75	\$9.11	\$0.00	\$79.51
For apprentice rates see "Apprentice- LABORER"							
BLOCK PAVER, RAMMER / CURB SETTER (HEAVY & HIGHWAY)	12/1/2025	\$41.22	\$10.65	\$9.75	\$9.21	\$0.00	\$70.83
LABORERS	6/1/2026	\$42.66	\$10.65	\$9.75	\$9.21	\$0.00	\$72.27
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$44.10	\$10.65	\$9.75	\$9.21	\$0.00	\$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
BOILER MAKER	1/1/2024	\$48.12	\$7.07	\$14.60	\$6.00	\$0.00	\$75.79
BOILERMAKERS LOCAL 29							
BOILERMAKERS LOCAL 29							

Apprentice: BOILER MAKER							
Effective Date: 1/1/2024							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	65.00	\$31.28	\$7.07	\$9.32	\$3.90	\$0.00	\$51.57
2	65.00	\$31.28	\$7.07	\$9.32	\$3.90	\$0.00	\$51.57
3	70.00	\$33.68	\$7.07	\$10.03	\$4.20	\$0.00	\$54.98
4	75.00	\$36.09	\$7.07	\$10.74	\$4.50	\$0.00	\$58.40
5	80.00	\$38.50	\$7.07	\$11.45	\$4.80	\$0.00	\$61.82
6	85.00	\$40.90	\$7.07	\$12.18	\$5.10	\$0.00	\$65.25

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: BOILER MAKER							
Effective Date: 1/1/2024							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
7	90.00	\$43.31	\$7.07	\$12.88	\$5.40	\$0.00	\$68.66
8	95.00	\$45.71	\$7.07	\$13.62	\$5.70	\$0.00	\$72.10

Apprentice to Journeyworker Ratio: 1:4

BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING)	2/1/2026	\$67.95	\$12.84	\$15.57	\$8.02	\$0.00	\$104.38
BRICKLAYERS LOCAL 3	8/1/2026	\$70.15	\$12.84	\$15.57	\$8.02	\$0.00	\$106.58
BRICKLAYERS LOCAL 3 (NEW BEDFORD)	2/1/2027	\$71.55	\$12.84	\$15.57	\$8.02	\$0.00	\$107.98

Apprentice: BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING)							
Effective Date: 2/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$33.98	\$12.84	\$15.57	\$8.02	\$0.00	\$70.41
2	60.00	\$40.77	\$12.84	\$15.57	\$8.02	\$0.00	\$77.20
3	70.00	\$47.57	\$12.84	\$15.57	\$8.02	\$0.00	\$84.00
4	80.00	\$54.36	\$12.84	\$15.57	\$8.02	\$0.00	\$90.79
5	90.00	\$61.16	\$12.84	\$15.57	\$8.02	\$0.00	\$97.59

Apprentice: BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING)							
Effective Date: 8/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$35.08	\$12.84	\$15.57	\$8.02	\$0.00	\$71.51
2	60.00	\$42.09	\$12.84	\$15.57	\$8.02	\$0.00	\$78.52
3	70.00	\$49.11	\$12.84	\$15.57	\$8.02	\$0.00	\$85.54
4	80.00	\$56.12	\$12.84	\$15.57	\$8.02	\$0.00	\$92.55
5	90.00	\$63.14	\$12.84	\$15.57	\$8.02	\$0.00	\$99.57

Apprentice to Journeyworker Ratio: 1:5

BULLDOZER/GRADER/SCRAPER OPERATING ENGINEERS LOCAL 4	12/1/2025	\$58.62	\$16.05	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.90	\$16.05	\$13.25	\$3.25	\$0.00	\$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$61.34	\$16.05	\$13.25	\$3.25	\$0.00	\$93.89

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

CAISSON & UNDERPINNING BOTTOM MAN LABORERS	12/1/2025	\$49.10	\$10.65	\$9.75	\$9.80	\$0.00	\$79.30
LABORERS - FOUNDATION AND MARINE	6/1/2026	\$50.65	\$10.65	\$9.75	\$9.80	\$0.00	\$80.85
LABORERS	12/1/2026	\$52.15	\$10.65	\$9.75	\$9.80	\$0.00	\$82.35

For apprentice rates see "Apprentice- LABORER"

CAISSON & UNDERPINNING LABORER LABORERS	12/1/2025	\$47.95	\$10.65	\$9.75	\$9.80	\$0.00	\$78.15
LABORERS	6/1/2026	\$49.50	\$10.65	\$9.75	\$9.80	\$0.00	\$79.70

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS - FOUNDATION AND MARINE	12/1/2026	\$51.00	\$10.65	\$9.75	\$9.80	\$0.00	\$81.20
For apprentice rates see "Apprentice- LABORER"							

CAISSON & UNDERPINNING TOP MAN LABORERS	12/1/2025	\$48.28	\$10.65	\$9.75	\$9.80	\$0.00	\$78.48
LABORERS - FOUNDATION AND MARINE	6/1/2026	\$49.83	\$10.65	\$9.75	\$9.80	\$0.00	\$80.03
	12/1/2026	\$51.33	\$10.65	\$9.75	\$9.80	\$0.00	\$81.53
For apprentice rates see "Apprentice- LABORER"							

CARBIDE CORE DRILL OPERATOR LABORERS	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.11	\$0.00	\$70.23
LABORERS - ZONE 2	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.11	\$0.00	\$71.67
	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.05	\$10.65	\$9.75	\$9.11	\$0.00	\$74.56
	12/1/2027	\$46.50	\$10.65	\$9.75	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.00	\$10.65	\$9.75	\$9.11	\$0.00	\$77.51
	12/1/2028	\$49.50	\$10.65	\$9.75	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							

CARPENTER	9/1/2025	\$50.10	\$10.58	\$11.47	\$8.50	\$0.00	\$80.65
CARPENTERS	3/1/2026	\$51.35	\$10.58	\$11.47	\$8.50	\$0.00	\$81.90
CARPENTERS -ZONE 2 (Eastern Massachusetts)	9/1/2026	\$52.60	\$10.58	\$11.47	\$8.50	\$0.00	\$83.15
	3/1/2027	\$53.85	\$10.58	\$11.47	\$8.50	\$0.00	\$84.40

Apprentice: CARPENTER							
Effective Date: 9/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$22.55	\$10.58	\$0.00	\$1.73	\$0.00	\$34.86
2	45.00	\$22.55	\$10.58	\$0.00	\$1.73	\$0.00	\$34.86
3	55.00	\$27.56	\$10.58	\$0.00	\$3.40	\$0.00	\$41.54
4	55.00	\$27.56	\$10.58	\$0.00	\$3.40	\$0.00	\$41.54
5	70.00	\$35.07	\$10.58	\$11.41	\$5.10	\$0.00	\$62.16
6	70.00	\$35.07	\$10.58	\$11.41	\$5.10	\$0.00	\$62.16
7	80.00	\$40.08	\$10.58	\$11.44	\$6.80	\$0.00	\$68.90
8	80.00	\$40.08	\$10.58	\$11.44	\$6.80	\$0.00	\$68.90

Apprentice: CARPENTER							
Effective Date: 3/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$23.11	\$10.58	\$0.00	\$1.73	\$0.00	\$35.42
2	45.00	\$23.11	\$10.58	\$0.00	\$1.73	\$0.00	\$35.42
3	55.00	\$28.24	\$10.58	\$0.00	\$3.40	\$0.00	\$42.22
4	55.00	\$28.24	\$10.58	\$0.00	\$3.40	\$0.00	\$42.22
5	70.00	\$35.95	\$10.58	\$11.41	\$5.10	\$0.00	\$63.04
6	70.00	\$35.95	\$10.58	\$11.41	\$5.10	\$0.00	\$63.04
7	80.00	\$41.08	\$10.58	\$11.44	\$6.80	\$0.00	\$69.90
8	80.00	\$41.08	\$10.58	\$11.44	\$6.80	\$0.00	\$69.90

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice to Journeyworker Ratio: 1:5							
CARPENTER WOOD FRAME	10/1/2025	\$27.75	\$7.02	\$3.80	\$1.00	\$0.00	\$39.57
CARPENTERS	10/1/2026	\$28.85	\$7.02	\$3.80	\$1.00	\$0.00	\$40.67
CARPENTERS-ZONE 3 (Wood Frame)							
All Aspects of New Wood Frame Work							

Apprentice: CARPENTER WOOD FRAME							
Effective Date: 10/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$16.65	\$7.02	\$0.00	\$0.00	\$0.00	\$23.67
2	60.00	\$16.65	\$7.02	\$0.00	\$0.00	\$0.00	\$23.67
3	65.00	\$18.04	\$7.02	\$0.00	\$1.00	\$0.00	\$26.06
4	70.00	\$19.43	\$7.02	\$0.00	\$1.00	\$0.00	\$27.45
5	75.00	\$20.81	\$7.02	\$3.80	\$1.00	\$0.00	\$32.63
6	80.00	\$22.20	\$7.02	\$3.80	\$1.00	\$0.00	\$34.02
7	85.00	\$23.59	\$7.02	\$3.80	\$1.00	\$0.00	\$35.41
8	90.00	\$24.98	\$7.02	\$3.80	\$1.00	\$0.00	\$36.80

Apprentice: CARPENTER WOOD FRAME							
Effective Date: 10/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$17.31	\$7.02	\$0.00	\$0.00	\$0.00	\$24.33
2	60.00	\$17.31	\$7.02	\$0.00	\$0.00	\$0.00	\$24.33
3	65.00	\$18.75	\$7.02	\$0.00	\$1.00	\$0.00	\$26.77
4	70.00	\$20.20	\$7.02	\$0.00	\$1.00	\$0.00	\$28.22
5	75.00	\$21.64	\$7.02	\$3.80	\$1.00	\$0.00	\$33.46
6	80.00	\$23.08	\$7.02	\$3.80	\$1.00	\$0.00	\$34.90
7	85.00	\$24.52	\$7.02	\$3.80	\$1.00	\$0.00	\$36.34
8	90.00	\$25.97	\$7.02	\$3.80	\$1.00	\$0.00	\$37.79

Apprentice to Journeyworker Ratio: 1:5

CEMENT MASONRY/PLASTERING	1/1/2026	\$53.24	\$13.35	\$16.43	\$7.78	\$1.80	\$92.60
PLASTERERS AND CEMENT MASONS LOCAL 534	7/1/2026	\$54.49	\$13.35	\$16.43	\$7.78	\$1.80	\$93.85
Plasterers and Cement Masons - Zone 1	1/1/2027	\$55.94	\$13.35	\$16.43	\$7.78	\$1.80	\$95.30
	7/1/2027	\$57.29	\$13.35	\$16.43	\$7.78	\$1.80	\$96.65
	1/1/2028	\$58.64	\$13.35	\$16.43	\$7.78	\$1.80	\$98.00

Apprentice: CEMENT MASONRY/PLASTERING							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$26.62	\$13.35	\$16.43	\$0.00	\$0.00	\$56.40
2	60.00	\$31.94	\$13.35	\$16.43	\$7.78	\$1.80	\$71.30

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: CEMENT MASONRY/PLASTERING							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
3	65.00	\$34.61	\$13.35	\$16.43	\$7.78	\$1.80	\$73.97
4	70.00	\$37.27	\$13.35	\$16.43	\$7.78	\$1.80	\$76.63
5	75.00	\$39.93	\$13.35	\$16.43	\$7.78	\$1.80	\$79.29
6	80.00	\$42.59	\$13.35	\$16.43	\$7.78	\$1.80	\$81.95
7	90.00	\$47.92	\$13.35	\$16.43	\$0.00	\$0.00	\$77.70
Apprentice: CEMENT MASONRY/PLASTERING							
Effective Date: 7/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$27.25	\$13.35	\$16.43	\$0.00	\$0.00	\$57.03
2	60.00	\$32.69	\$13.35	\$16.43	\$7.78	\$1.80	\$72.05
3	65.00	\$35.42	\$13.35	\$16.43	\$7.78	\$1.80	\$74.78
4	70.00	\$38.14	\$13.35	\$16.43	\$7.78	\$1.80	\$77.50
5	75.00	\$40.87	\$13.35	\$16.43	\$7.78	\$1.80	\$80.23
6	80.00	\$43.59	\$13.35	\$16.43	\$7.78	\$1.80	\$82.95
7	90.00	\$49.04	\$13.35	\$0.00	\$7.78	\$0.00	\$70.17
Apprentice to Journeyworker Ratio: 1:5							
CHAIN SAW OPERATOR	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.05	\$10.65	\$9.75	\$9.11	\$0.00	\$74.56
	12/1/2027	\$46.50	\$10.65	\$9.75	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.00	\$10.65	\$9.75	\$9.11	\$0.00	\$77.51
	12/1/2028	\$49.50	\$10.65	\$9.75	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES	12/1/2025	\$60.48	\$16.05	\$13.25	\$3.25	\$0.00	\$93.03
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$61.81	\$16.05	\$13.25	\$3.25	\$0.00	\$94.36
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$63.29	\$16.05	\$13.25	\$3.25	\$0.00	\$95.84
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
COMPRESSOR OPERATOR	12/1/2025	\$37.97	\$16.05	\$13.25	\$3.25	\$0.00	\$70.52
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$38.83	\$16.05	\$13.25	\$3.25	\$0.00	\$71.38
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$39.78	\$16.05	\$13.25	\$3.25	\$0.00	\$72.33
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
DELEADER (BRIDGE)	1/1/2026	\$59.56	\$10.35	\$12.00	\$12.60	\$0.00	\$94.51
PAINTERS LOCAL 35							
PAINTERS LOCAL 35 - ZONE 2							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: DELEADER (BRIDGE)							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$29.78	\$10.35	\$0.00	\$0.00	\$0.00	\$40.13
2	55.00	\$32.76	\$10.35	\$0.00	\$6.93	\$0.00	\$50.04
3	60.00	\$35.74	\$10.35	\$0.00	\$7.56	\$0.00	\$53.65
4	65.00	\$38.71	\$10.35	\$0.00	\$8.19	\$0.00	\$57.25
5	70.00	\$41.69	\$10.35	\$12.00	\$8.82	\$0.00	\$72.86
6	75.00	\$44.67	\$10.35	\$12.00	\$9.45	\$0.00	\$76.47
7	80.00	\$47.65	\$10.35	\$12.00	\$10.08	\$0.00	\$80.08
8	90.00	\$53.60	\$10.35	\$12.00	\$11.34	\$0.00	\$87.29

Apprentice to Journeyworker Ratio: 1:1

DEMO: ADZEMAN LABORERS	12/1/2025	\$48.00	\$10.65	\$9.75	\$9.65	\$0.00	\$78.05
LABORERS - ZONE 2	6/1/2026	\$49.55	\$10.65	\$9.75	\$9.65	\$0.00	\$79.60
	12/7/2026	\$51.05	\$10.65	\$9.75	\$9.65	\$0.00	\$81.10
	6/7/2027	\$52.65	\$10.65	\$9.75	\$9.65	\$0.00	\$82.70
	12/6/2027	\$54.25	\$10.65	\$9.75	\$9.65	\$0.00	\$84.30
	6/5/2028	\$55.93	\$10.65	\$9.75	\$9.65	\$0.00	\$85.98
	12/4/2028	\$57.60	\$10.65	\$9.75	\$9.65	\$0.00	\$87.65

For apprentice rates see "Apprentice- LABORER"

DEMO: BACKHOE/LOADER/HAMMER OPERATOR LABORERS	12/1/2025	\$49.00	\$10.65	\$9.75	\$9.65	\$0.00	\$79.05
LABORERS - ZONE 2	6/1/2026	\$50.55	\$10.65	\$9.75	\$9.65	\$0.00	\$80.60
	12/7/2026	\$52.05	\$10.65	\$9.75	\$9.65	\$0.00	\$82.10
	6/7/2027	\$53.65	\$10.65	\$9.75	\$9.65	\$0.00	\$83.70
	12/6/2027	\$55.25	\$10.65	\$9.75	\$9.65	\$0.00	\$85.30
	6/5/2028	\$56.93	\$10.65	\$9.75	\$9.65	\$0.00	\$86.98
	12/4/2028	\$58.60	\$10.65	\$9.75	\$9.65	\$0.00	\$88.65

For apprentice rates see "Apprentice- LABORER"

DEMO: BURNERS LABORERS	12/1/2025	\$48.75	\$10.65	\$9.75	\$9.65	\$0.00	\$78.80
LABORERS - ZONE 2	6/1/2026	\$50.30	\$10.65	\$9.75	\$9.65	\$0.00	\$80.35
	12/7/2026	\$51.80	\$10.65	\$9.75	\$9.65	\$0.00	\$81.85
	6/7/2027	\$53.40	\$10.65	\$9.75	\$9.65	\$0.00	\$83.45
	12/6/2027	\$55.00	\$10.65	\$9.75	\$9.65	\$0.00	\$85.05
	6/5/2028	\$56.68	\$10.65	\$9.75	\$9.65	\$0.00	\$86.73
	12/4/2028	\$58.35	\$10.65	\$9.75	\$9.65	\$0.00	\$88.40

For apprentice rates see "Apprentice- LABORER"

DEMO: CONCRETE CUTTER/SAWYER LABORERS	12/1/2025	\$49.00	\$10.65	\$9.75	\$9.65	\$0.00	\$79.05
LABORERS - ZONE 2	6/1/2026	\$50.55	\$10.65	\$9.75	\$9.65	\$0.00	\$80.60
	12/7/2026	\$52.05	\$10.65	\$9.75	\$9.65	\$0.00	\$82.10
	6/7/2027	\$53.65	\$10.65	\$9.75	\$9.65	\$0.00	\$83.70
	12/6/2027	\$55.25	\$10.65	\$9.75	\$9.65	\$0.00	\$85.30
	6/5/2028	\$56.93	\$10.65	\$9.75	\$9.65	\$0.00	\$86.98
	12/4/2028	\$58.60	\$10.65	\$9.75	\$9.65	\$0.00	\$88.65

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER"							
DEMO: JACKHAMMER OPERATOR	12/1/2025	\$48.75	\$10.65	\$9.75	\$9.65	\$0.00	\$78.80
LABORERS	6/1/2026	\$50.30	\$10.65	\$9.75	\$9.65	\$0.00	\$80.35
LABORERS - ZONE 2	12/7/2026	\$51.80	\$10.65	\$9.75	\$9.65	\$0.00	\$81.85
	6/7/2027	\$53.40	\$10.65	\$9.75	\$9.65	\$0.00	\$83.45
	12/6/2027	\$55.00	\$10.65	\$9.75	\$9.65	\$0.00	\$85.05
	6/5/2028	\$56.68	\$10.65	\$9.75	\$9.65	\$0.00	\$86.73
	12/4/2028	\$58.35	\$10.65	\$9.75	\$9.65	\$0.00	\$88.40
For apprentice rates see "Apprentice- LABORER"							
DEMO: WRECKING LABORER	12/1/2025	\$48.00	\$10.65	\$9.75	\$9.65	\$0.00	\$78.05
LABORERS	6/1/2026	\$49.55	\$10.65	\$9.75	\$9.65	\$0.00	\$79.60
LABORERS - ZONE 2	12/7/2026	\$51.05	\$10.65	\$9.75	\$9.65	\$0.00	\$81.10
	6/7/2027	\$52.65	\$10.65	\$9.75	\$9.65	\$0.00	\$82.70
	12/6/2027	\$54.25	\$10.65	\$9.75	\$9.65	\$0.00	\$84.30
	6/5/2028	\$55.93	\$10.65	\$9.75	\$9.65	\$0.00	\$85.98
	12/4/2028	\$57.60	\$10.65	\$9.75	\$9.65	\$0.00	\$87.65
For apprentice rates see "Apprentice- LABORER"							
DIRECTIONAL DRILL MACHINE OPERATOR	12/1/2025	\$58.62	\$16.05	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.90	\$16.05	\$13.25	\$3.25	\$0.00	\$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$61.34	\$16.05	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
DIVER	8/1/2024	\$78.11	\$10.08	\$11.62	\$12.67	\$0.00	\$112.48
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 2)							
as of 8-1-24, Apprentices with diving licenses begin at second year. % of Diver wage 70/80/90 2A \$69.83, 3A \$91.79,4A \$102.14 Total Rate							
DIVER TENDER	8/1/2024	\$51.97	\$10.08	\$11.62	\$12.67	\$0.00	\$86.34
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 2)							
as of 8-1-24, Apprentices with diving licenses begin at second year. % of Piledriver wage 70/80/90 2A \$54.20, 3A \$73.93,4A \$82.05 Total Rate							
DIVER TENDER (EFFLUENT)	8/1/2024	\$83.69	\$10.08	\$11.62	\$12.67	\$0.00	\$118.06
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 2)							
For apprentice rates see "Apprentice- PILE DRIVER"							
DIVER/SLURRY (EFFLUENT)	8/1/2024	\$117.16	\$10.08	\$11.62	\$12.67	\$0.00	\$151.53
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 2)							
For apprentice rates see "Apprentice- PILE DRIVER"							
DRAWBRIDGE OPERATOR (Construction)	7/1/2020	\$26.77	\$6.67	\$3.93	\$0.00	\$0.16	\$37.53
DRAWBRIDGE - SEIU LOCAL 888							
DRAWBRIDGE - SEIU LOCAL 888							
ELECTRICIAN	9/1/2025	\$52.25	\$12.25	\$14.86	\$3.75	\$0.00	\$83.11
ELECTRICIANS LOCAL 223	9/1/2026	\$54.72	\$12.50	\$15.56	\$4.00	\$0.00	\$86.78
ELECTRICIANS LOCAL 223							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: ELEVATOR CONSTRUCTOR							
Effective Date: 1/1/2027							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$40.28	\$0.00	\$0.00	\$0.00	\$0.00	\$40.28
2	55.00	\$44.30	\$16.48	\$11.16	\$11.00	\$0.00	\$82.94
3	65.00	\$52.36	\$16.48	\$11.16	\$11.00	\$0.00	\$91.00
4	70.00	\$56.39	\$16.48	\$11.16	\$11.00	\$0.00	\$95.03
5	80.00	\$64.44	\$16.48	\$11.16	\$11.00	\$0.00	\$103.08
Apprentice to Journeyworker Ratio: 1:1							
ELEVATOR CONSTRUCTOR HELPER	1/1/2026	\$54.08	\$16.38	\$11.06	\$10.07	\$0.00	\$91.59
ELEVATOR CONSTRUCTORS LOCAL 4	1/1/2027	\$56.39	\$16.48	\$11.16	\$11.00	\$0.00	\$95.03
For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"							
FENCE & GUARD RAIL ERECTOR (HEAVY & HIGHWAY)	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.21	\$0.00	\$70.33
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.21	\$0.00	\$71.77
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.21	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
FIELD ENG.INST.PERSON-BLDG,SITE,HVY/HWY	11/1/2025	\$53.56	\$16.05	\$13.25	\$3.25	\$0.00	\$86.11
OPERATING ENGINEERS LOCAL 4	5/1/2026	\$55.00	\$16.05	\$13.25	\$3.25	\$0.00	\$87.55
OPERATING ENGINEERS LOCAL 4	11/1/2026	\$56.29	\$16.05	\$13.25	\$3.25	\$0.00	\$88.84
	5/1/2027	\$57.72	\$16.05	\$13.25	\$3.25	\$0.00	\$90.27
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY	11/1/2025	\$55.17	\$16.05	\$13.25	\$3.25	\$0.00	\$87.72
OPERATING ENGINEERS LOCAL 4	5/1/2026	\$56.62	\$16.05	\$13.25	\$3.25	\$0.00	\$89.17
OPERATING ENGINEERS LOCAL 4	11/1/2026	\$57.92	\$16.05	\$13.25	\$3.25	\$0.00	\$90.47
	5/1/2027	\$59.37	\$16.05	\$13.25	\$3.25	\$0.00	\$91.92
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIELD ENG.ROD PERSON-BLDG,SITE,HVY/HWY	11/1/2025	\$26.03	\$16.05	\$13.25	\$3.25	\$0.00	\$58.58
OPERATING ENGINEERS LOCAL 4	5/1/2026	\$26.88	\$16.05	\$13.25	\$3.25	\$0.00	\$59.43
OPERATING ENGINEERS LOCAL 4	11/1/2026	\$27.64	\$16.05	\$13.25	\$3.25	\$0.00	\$60.19
	5/1/2027	\$28.49	\$16.05	\$13.25	\$3.25	\$0.00	\$61.04
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIRE ALARM INSTALLER	9/1/2025	\$52.25	\$12.25	\$14.86	\$3.75	\$0.00	\$83.11
ELECTRICIANS LOCAL 223	9/1/2026	\$54.72	\$12.50	\$15.56	\$4.00	\$0.00	\$86.78
ELECTRICIANS LOCAL 223							
For apprentice rates see "Apprentice- ELECTRICIAN"							
FIRE ALARM REPAIR / MAINTENANCE / COMMISSIONING	9/1/2025	\$52.25	\$12.25	\$14.86	\$3.75	\$0.00	\$83.11
ELECTRICIANS LOCAL 223	9/1/2026	\$54.72	\$12.50	\$15.56	\$4.00	\$0.00	\$86.78
ELECTRICIANS LOCAL 223							
For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
FIREMAN (ASST. ENGINEER)	12/1/2025	\$47.69	\$16.05	\$13.25	\$3.25	\$0.00	\$80.24
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$48.75	\$16.05	\$13.25	\$3.25	\$0.00	\$81.30
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$49.93	\$16.05	\$13.25	\$3.25	\$0.00	\$82.48

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

FLAGGER & SIGNALER (HEAVY & HIGHWAY)	12/1/2025	\$28.09	\$10.65	\$9.75	\$9.21	\$0.00	\$57.70
LABORERS	6/1/2026	\$29.21	\$10.65	\$9.75	\$9.21	\$0.00	\$58.82
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$29.21	\$10.65	\$9.75	\$9.21	\$0.00	\$58.82

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

FLOORCOVERER	9/1/2025	\$57.74	\$10.33	\$11.47	\$8.80	\$0.00	\$88.34
FLOORCOVERERS LOCAL 2168	3/1/2026	\$59.24	\$10.33	\$11.47	\$8.80	\$0.00	\$89.84
FLOORCOVERERS LOCAL 2168 ZONE I	9/1/2026	\$60.74	\$10.33	\$11.47	\$8.80	\$0.00	\$91.34
	3/1/2027	\$62.24	\$10.33	\$11.47	\$8.80	\$0.00	\$92.84

Apprentice: FLOORCOVERER							
Effective Date: 9/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$25.98	\$10.33	\$0.00	\$1.76	\$0.00	\$38.07
2	45.00	\$25.98	\$10.33	\$0.00	\$1.76	\$0.00	\$38.07
3	55.00	\$31.76	\$10.33	\$0.00	\$3.52	\$0.00	\$45.61
4	55.00	\$31.76	\$10.33	\$0.00	\$3.52	\$0.00	\$45.61
5	70.00	\$40.42	\$10.33	\$11.47	\$5.28	\$0.00	\$67.50
6	70.00	\$40.42	\$10.33	\$11.47	\$5.28	\$0.00	\$67.50
7	80.00	\$46.19	\$10.33	\$11.47	\$7.04	\$0.00	\$75.03
8	80.00	\$46.19	\$10.33	\$11.47	\$7.04	\$0.00	\$75.03

Apprentice: FLOORCOVERER							
Effective Date: 3/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$26.66	\$10.33	\$0.00	\$1.76	\$0.00	\$38.75
2	45.00	\$26.66	\$10.33	\$0.00	\$1.76	\$0.00	\$38.75
3	55.00	\$32.58	\$10.33	\$0.00	\$3.52	\$0.00	\$46.43
4	55.00	\$32.58	\$10.33	\$0.00	\$3.52	\$0.00	\$46.43
5	70.00	\$41.47	\$10.33	\$11.47	\$5.28	\$0.00	\$68.55
6	70.00	\$41.47	\$10.33	\$11.47	\$5.28	\$0.00	\$68.55
7	80.00	\$47.39	\$10.33	\$11.47	\$7.04	\$0.00	\$76.23
8	80.00	\$47.39	\$10.33	\$11.47	\$7.04	\$0.00	\$76.23

Apprentice Notes
Steps are 750 hrs.

Apprentice to Journeyworker Ratio: 1:1

FORK LIFT/CHERRY PICKER	12/1/2025	\$59.28	\$16.05	\$13.25	\$3.25	\$0.00	\$91.83
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Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.58	\$16.05	\$13.25	\$3.25	\$0.00	\$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$62.03	\$16.05	\$13.25	\$3.25	\$0.00	\$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
GENERATOR/LIGHTING PLANT/HEATERS	12/1/2025	\$37.97	\$16.05	\$13.25	\$3.25	\$0.00	\$70.52
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$38.83	\$16.05	\$13.25	\$3.25	\$0.00	\$71.38
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$39.78	\$16.05	\$13.25	\$3.25	\$0.00	\$72.33
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)	6/1/2025	\$43.13	\$10.80	\$8.25	\$5.50	\$0.00	\$67.68
GLAZIERS LOCAL 1333	6/1/2026	\$44.73	\$11.20	\$8.40	\$6.05	\$0.00	\$70.38
GLAZIERS LOCAL 1333	6/1/2027	\$46.73	\$11.60	\$8.55	\$6.60	\$0.00	\$73.48
	6/1/2028	\$48.73	\$12.00	\$8.70	\$7.20	\$0.00	\$76.63

Apprentice: GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)							
Effective Date: 6/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$21.57	\$10.80	\$8.25	\$5.50	\$0.00	\$46.12
2	56.25	\$24.26	\$10.80	\$8.25	\$5.50	\$0.00	\$48.81
3	62.50	\$26.96	\$10.80	\$8.25	\$5.50	\$0.00	\$51.51
4	68.75	\$29.65	\$10.80	\$8.25	\$5.50	\$0.00	\$54.20
5	75.00	\$32.35	\$10.80	\$8.25	\$5.50	\$0.00	\$56.90
6	81.25	\$35.04	\$10.80	\$8.25	\$5.50	\$0.00	\$59.59
7	87.50	\$37.74	\$10.80	\$8.25	\$5.50	\$0.00	\$62.29
8	93.75	\$40.43	\$10.80	\$8.25	\$5.50	\$0.00	\$64.98

Apprentice: GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)							
Effective Date: 6/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$22.37	\$11.20	\$8.40	\$6.05	\$0.00	\$48.02
2	56.25	\$25.16	\$11.20	\$8.40	\$6.05	\$0.00	\$50.81
3	62.50	\$27.96	\$11.20	\$8.40	\$6.05	\$0.00	\$53.61
4	68.75	\$30.75	\$11.20	\$8.40	\$6.05	\$0.00	\$56.40
5	75.00	\$33.55	\$11.20	\$8.40	\$6.05	\$0.00	\$59.20
6	81.25	\$36.34	\$11.20	\$8.40	\$6.05	\$0.00	\$61.99
7	87.50	\$39.14	\$11.20	\$8.40	\$6.05	\$0.00	\$64.79
8	93.75	\$41.93	\$11.20	\$8.40	\$6.05	\$0.00	\$67.58

Apprentice to Journeyworker Ratio: 3:1

HOISTING ENGINEER/CRANES/GRADALLS	12/1/2025	\$59.28	\$16.05	\$13.25	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.58	\$16.05	\$13.25	\$3.25	\$0.00	\$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$62.03	\$16.05	\$13.25	\$3.25	\$0.00	\$94.58

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
PLUMBERS & PIPEFITTERS LOCAL 51							
PLUMBERS & PIPEFITTERS LOCAL 51							
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							

HYDRAULIC DRILLS LABORERS	12/1/2025	\$41.22	\$10.65	\$9.75	\$9.11	\$0.00	\$70.73
LABORERS - ZONE 2	6/1/2026	\$42.66	\$10.65	\$9.75	\$9.11	\$0.00	\$72.17
	12/1/2026	\$44.10	\$10.65	\$9.75	\$9.11	\$0.00	\$73.61
	6/1/2027	\$45.55	\$10.65	\$9.75	\$9.11	\$0.00	\$75.06
	12/1/2027	\$47.00	\$10.65	\$9.75	\$9.11	\$0.00	\$76.51
	6/1/2028	\$48.50	\$10.65	\$9.75	\$9.11	\$0.00	\$78.01
	12/1/2028	\$50.00	\$10.65	\$9.75	\$9.11	\$0.00	\$79.51

For apprentice rates see "Apprentice- LABORER"

HYDRAULIC DRILLS (HEAVY & HIGHWAY) LABORERS	12/1/2025	\$41.22	\$10.65	\$9.75	\$9.21	\$0.00	\$70.83
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$42.66	\$10.65	\$9.75	\$9.21	\$0.00	\$72.27
	12/1/2026	\$44.10	\$10.65	\$9.75	\$9.21	\$0.00	\$73.71

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

INSULATOR (PIPES & TANKS)	9/1/2025	\$54.31	\$14.75	\$9.52	\$10.09	\$0.00	\$88.67
HEAT & FROST INSULATORS LOCAL 6	9/1/2026	\$57.38	\$14.75	\$9.52	\$10.09	\$0.00	\$91.74
HEAT & FROST INSULATORS LOCAL 6 (SOUTHERN MASS)							

Apprentice: INSULATOR (PIPES & TANKS)							
Effective Date: 9/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$27.16	\$14.75	\$9.27	\$5.05	\$0.00	\$56.23
2	60.00	\$32.59	\$14.75	\$9.32	\$6.05	\$0.00	\$62.71
3	70.00	\$38.02	\$14.75	\$9.37	\$7.06	\$0.00	\$69.20
4	80.00	\$43.45	\$14.75	\$9.42	\$8.07	\$0.00	\$75.69

Apprentice: INSULATOR (PIPES & TANKS)							
Effective Date: 9/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$28.69	\$14.75	\$9.27	\$5.05	\$0.00	\$57.76
2	60.00	\$34.43	\$14.75	\$9.32	\$6.05	\$0.00	\$64.55
3	70.00	\$40.17	\$14.75	\$9.37	\$7.06	\$0.00	\$71.35
4	80.00	\$45.90	\$14.75	\$9.42	\$8.07	\$0.00	\$78.14

Apprentice to Journeyworker Ratio: 1:4

IRONWORKER/WELDER	3/16/2021	\$42.46	\$7.70	\$12.10	\$5.00	\$0.00	\$67.26
IRONWORKERS LOCAL 37							
IRONWORKERS LOCAL 37							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: LABORER							
Effective Date: 6/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
4	90.00	\$37.72	\$10.65	\$9.75	\$9.11	\$0.00	\$67.23
Apprentice to Journeyworker Ratio: 1:5							
LABORER (HEAVY & HIGHWAY) LABORERS	12/1/2025	\$40.47	\$10.65	\$9.75	\$9.21	\$0.00	\$70.08
LABORERS	6/1/2026	\$41.91	\$10.65	\$9.75	\$9.21	\$0.00	\$71.52
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$43.35	\$10.65	\$9.75	\$9.21	\$0.00	\$72.96

Apprentice: LABORER (HEAVY & HIGHWAY)							
Effective Date: 12/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$25.03	\$10.15	\$9.50	\$9.21	\$0.00	\$53.89
2	70.00	\$29.20	\$10.15	\$9.50	\$9.21	\$0.00	\$58.06
3	80.00	\$33.38	\$10.15	\$9.50	\$9.21	\$0.00	\$62.24
4	90.00	\$37.55	\$10.15	\$9.50	\$9.21	\$0.00	\$66.41

Apprentice: LABORER (HEAVY & HIGHWAY)							
Effective Date: 6/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$25.15	\$10.65	\$9.75	\$9.21	\$0.00	\$54.76
2	70.00	\$29.34	\$10.65	\$9.75	\$9.21	\$0.00	\$58.95
3	80.00	\$33.53	\$10.65	\$9.75	\$9.21	\$0.00	\$63.14
4	90.00	\$37.72	\$10.65	\$9.75	\$9.10	\$0.00	\$67.22

Apprentice to Journeyworker Ratio: 1:5

LABORER: CARPENTER TENDER LABORERS	12/1/2025	\$40.47	\$10.65	\$9.75	\$9.11	\$0.00	\$69.98
LABORERS	6/1/2026	\$41.91	\$10.65	\$9.75	\$9.11	\$0.00	\$71.42
LABORERS - ZONE 2	12/1/2026	\$43.35	\$10.65	\$9.75	\$9.11	\$0.00	\$72.86
	6/1/2027	\$44.80	\$10.65	\$9.75	\$9.11	\$0.00	\$74.31
	12/1/2027	\$46.25	\$10.65	\$9.75	\$9.11	\$0.00	\$75.76
	6/1/2028	\$47.75	\$10.65	\$9.75	\$9.11	\$0.00	\$77.26
	12/1/2028	\$49.25	\$10.65	\$9.75	\$9.11	\$0.00	\$78.76

For apprentice rates see "Apprentice- LABORER"

LABORER: CEMENT FINISHER TENDER LABORERS	12/1/2025	\$40.47	\$10.65	\$9.75	\$9.11	\$0.00	\$69.98
LABORERS	6/1/2026	\$41.91	\$10.65	\$9.75	\$9.11	\$0.00	\$71.42
LABORERS - ZONE 2	12/1/2026	\$43.35	\$10.65	\$9.75	\$9.11	\$0.00	\$72.86
	6/1/2027	\$44.80	\$10.65	\$9.75	\$9.11	\$0.00	\$74.31
	12/1/2027	\$46.25	\$10.65	\$9.75	\$9.11	\$0.00	\$75.76
	6/1/2028	\$47.75	\$10.65	\$9.75	\$9.11	\$0.00	\$77.26

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	12/1/2028	\$49.25	\$10.65	\$9.75	\$9.11	\$0.00	\$78.76
For apprentice rates see "Apprentice- LABORER"							
LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER LABORERS	12/1/2025	\$40.56	\$10.65	\$9.75	\$9.65	\$0.00	\$70.61
LABORERS - ZONE 2	6/1/2026	\$42.00	\$10.65	\$9.75	\$9.65	\$0.00	\$72.05
	12/7/2026	\$43.44	\$10.65	\$9.75	\$9.65	\$0.00	\$73.49
	6/7/2027	\$44.89	\$10.65	\$9.75	\$9.65	\$0.00	\$74.94
	12/6/2027	\$46.34	\$10.65	\$9.75	\$9.65	\$0.00	\$76.39
	6/5/2028	\$47.84	\$10.65	\$9.75	\$9.65	\$0.00	\$77.89
	12/4/2028	\$49.34	\$10.65	\$9.75	\$9.65	\$0.00	\$79.39
For apprentice rates see "Apprentice- LABORER"							
LABORER: MASON TENDER LABORERS	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.11	\$0.00	\$70.23
LABORERS - ZONE 2	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.11	\$0.00	\$71.67
	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.05	\$10.65	\$9.75	\$9.11	\$0.00	\$74.56
	12/1/2027	\$46.50	\$10.65	\$9.75	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.00	\$10.65	\$9.75	\$9.11	\$0.00	\$77.51
	12/1/2028	\$49.50	\$10.65	\$9.75	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
LABORER: MASON TENDER (HEAVY & HIGHWAY) LABORERS	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.21	\$0.00	\$70.33
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.21	\$0.00	\$71.77
	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.21	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
LABORER: MULTI-TRADE TENDER LABORERS	12/1/2025	\$40.47	\$10.65	\$9.75	\$9.11	\$0.00	\$69.98
LABORERS - ZONE 2	6/1/2026	\$41.91	\$10.65	\$9.75	\$9.11	\$0.00	\$71.42
	12/1/2026	\$43.35	\$10.65	\$9.75	\$9.11	\$0.00	\$72.86
	6/1/2027	\$44.80	\$10.65	\$9.75	\$9.11	\$0.00	\$74.31
	12/1/2027	\$46.25	\$10.65	\$9.75	\$9.11	\$0.00	\$75.76
	6/1/2028	\$47.75	\$10.65	\$9.75	\$9.11	\$0.00	\$77.26
	12/1/2028	\$49.25	\$10.65	\$9.75	\$9.11	\$0.00	\$78.76
For apprentice rates see "Apprentice- LABORER"							
LABORER: TREE REMOVER LABORERS	12/1/2025	\$40.47	\$10.65	\$9.75	\$9.11	\$0.00	\$69.98
LABORERS - ZONE 2	6/1/2026	\$41.91	\$10.65	\$9.75	\$9.11	\$0.00	\$71.42
	12/1/2026	\$43.35	\$10.65	\$9.75	\$9.11	\$0.00	\$72.86
	6/1/2027	\$44.80	\$10.65	\$9.75	\$9.11	\$0.00	\$74.31
	12/1/2027	\$46.25	\$10.65	\$9.75	\$9.11	\$0.00	\$75.76
	6/1/2028	\$47.75	\$10.65	\$9.75	\$9.11	\$0.00	\$77.26
	12/1/2028	\$49.25	\$10.65	\$9.75	\$9.11	\$0.00	\$78.76
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"							
LABORER: LASER BEAM OPERATOR LABORERS	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.11	\$0.00	\$70.23
LABORERS - ZONE 2	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.11	\$0.00	\$71.67
	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.05	\$10.65	\$9.75	\$9.11	\$0.00	\$74.56
	12/1/2027	\$46.50	\$10.65	\$9.75	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.00	\$10.65	\$9.75	\$9.11	\$0.00	\$77.51

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	12/1/2028	\$49.50	\$10.65	\$9.75	\$9.11	\$0.00	\$79.01

For apprentice rates see "Apprentice- LABORER"

LASER BEAM OPERATOR (HEAVY & HIGHWAY) LABORERS	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.21	\$0.00	\$70.33
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.21	\$0.00	\$71.77
	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.21	\$0.00	\$73.21

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

MARBLE & TILE FINISHERS BRICKLAYERS LOCAL 3	2/1/2026	\$52.08	\$12.84	\$15.57	\$5.78	\$0.00	\$86.27
BRICKLAYERS LOCAL 3 - MARBLE & TILE	8/1/2026	\$53.84	\$12.84	\$15.57	\$5.78	\$0.00	\$88.03
	2/1/2027	\$54.96	\$12.84	\$15.57	\$5.78	\$0.00	\$89.15

Apprentice: MARBLE & TILE FINISHERS							
Effective Date: 2/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$26.04	\$12.84	\$15.57	\$5.78	\$0.00	\$60.23
2	60.00	\$31.25	\$12.84	\$15.57	\$5.78	\$0.00	\$65.44
3	70.00	\$36.46	\$12.84	\$15.57	\$5.78	\$0.00	\$70.65
4	80.00	\$41.66	\$12.84	\$15.57	\$5.78	\$0.00	\$75.85
5	90.00	\$46.87	\$12.84	\$15.57	\$5.78	\$0.00	\$81.06

Apprentice: MARBLE & TILE FINISHERS							
Effective Date: 8/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$26.92	\$12.84	\$15.57	\$5.78	\$0.00	\$61.11
2	60.00	\$32.30	\$12.84	\$15.57	\$5.78	\$0.00	\$66.49
3	70.00	\$37.69	\$12.84	\$15.57	\$5.78	\$0.00	\$71.88
4	80.00	\$43.07	\$12.84	\$15.57	\$5.78	\$0.00	\$77.26
5	90.00	\$48.46	\$12.84	\$15.57	\$5.78	\$0.00	\$82.65

Apprentice to Journeyworker Ratio: 1:5

MARBLE MASONS, TILELAYERS & TERRAZZO MECH BRICKLAYERS LOCAL 3	2/1/2026	\$67.97	\$12.84	\$15.57	\$7.99	\$0.00	\$104.37
BRICKLAYERS LOCAL 3 - MARBLE & TILE	8/1/2026	\$70.17	\$12.84	\$15.57	\$7.99	\$0.00	\$106.57
	2/1/2027	\$71.57	\$12.84	\$15.57	\$7.99	\$0.00	\$107.97

Apprentice: MARBLE MASONS, TILELAYERS & TERRAZZO MECH							
Effective Date: 2/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$33.99	\$12.84	\$15.57	\$7.99	\$0.00	\$70.39
2	60.00	\$40.78	\$12.84	\$15.57	\$7.99	\$0.00	\$77.18
3	70.00	\$47.58	\$12.84	\$15.57	\$7.99	\$0.00	\$83.98
4	80.00	\$54.38	\$12.84	\$15.57	\$7.99	\$0.00	\$90.78

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.05	\$10.65	\$9.75	\$9.11	\$0.00	\$74.56
	12/1/2027	\$46.50	\$10.65	\$9.75	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.00	\$10.65	\$9.75	\$9.11	\$0.00	\$77.51
	12/1/2028	\$49.50	\$10.65	\$9.75	\$9.11	\$0.00	\$79.01

For apprentice rates see "Apprentice- LABORER"

OILER (OTHER THAN TRUCK CRANES,GRADALLS)	12/1/2025	\$25.68	\$16.05	\$13.25	\$3.25	\$0.00	\$58.23
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$26.27	\$16.05	\$13.25	\$3.25	\$0.00	\$58.82
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$26.94	\$16.05	\$13.25	\$3.25	\$0.00	\$59.49

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

OILER (TRUCK CRANES, GRADALLS)	12/1/2025	\$31.65	\$16.05	\$13.25	\$3.25	\$0.00	\$64.20
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$32.37	\$16.05	\$13.25	\$3.25	\$0.00	\$64.92
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$33.17	\$16.05	\$13.25	\$3.25	\$0.00	\$65.72

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

OTHER POWER DRIVEN EQUIPMENT - CLASS II	12/1/2025	\$58.62	\$16.05	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.90	\$16.05	\$13.25	\$3.25	\$0.00	\$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$61.34	\$16.05	\$13.25	\$3.25	\$0.00	\$93.89

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

PAINTER (BRIDGES/TANKS)	1/1/2026	\$59.56	\$10.35	\$12.00	\$12.50	\$0.00	\$94.41
PAINTERS LOCAL 35							
PAINTERS LOCAL 35 - ZONE 2							

Apprentice: PAINTER (BRIDGES/TANKS)							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$29.78	\$10.35	\$0.00	\$0.00	\$0.00	\$40.13
2	55.00	\$32.76	\$10.35	\$0.00	\$6.93	\$0.00	\$50.04
3	60.00	\$35.74	\$10.35	\$0.00	\$7.56	\$0.00	\$53.65
4	65.00	\$38.71	\$10.35	\$0.00	\$8.19	\$0.00	\$57.25
5	70.00	\$41.69	\$10.35	\$12.00	\$8.82	\$0.00	\$72.86
6	75.00	\$44.67	\$10.35	\$12.00	\$9.45	\$0.00	\$76.47
7	80.00	\$47.65	\$10.35	\$12.00	\$10.08	\$0.00	\$80.08
8	90.00	\$53.60	\$10.35	\$12.00	\$11.34	\$0.00	\$87.29

Apprentice to Journeyworker Ratio: 1:1

PAINTER (SPRAY OR SANDBLAST, NEW) *	1/1/2026	\$50.46	\$10.35	\$12.00	\$12.60	\$0.00	\$85.41
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used.							
PAINTERS LOCAL 35							
PAINTERS LOCAL 35 - ZONE 2							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: PILE DRIVER							
Effective Date: 8/1/2024							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$23.39	\$10.08	\$0.00	\$2.53	\$0.00	\$36.00
2	55.00	\$28.58	\$10.08	\$0.00	\$5.07	\$0.00	\$43.73
3	70.00	\$36.38	\$10.08	\$11.62	\$7.60	\$0.00	\$65.68
4	80.00	\$41.58	\$10.08	\$11.62	\$10.14	\$0.00	\$73.42
Apprentice to Journeyworker Ratio: 1:5							
PIPELAYER	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.05	\$10.65	\$9.75	\$9.11	\$0.00	\$74.56
	12/1/2027	\$46.50	\$10.65	\$9.75	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.00	\$10.65	\$9.75	\$9.11	\$0.00	\$77.51
	12/1/2028	\$49.50	\$10.65	\$9.75	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
PIPELAYER (HEAVY & HIGHWAY)	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.21	\$0.00	\$70.33
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.21	\$0.00	\$71.77
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.21	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
PLUMBER & PIPEFITTER	8/25/2025	\$55.24	\$10.80	\$16.80	\$4.60	\$0.00	\$87.44
PLUMBERS & PIPEFITTERS LOCAL 51							
PLUMBERS & PIPEFITTERS LOCAL 51							
Apprentice: PLUMBER & PIPEFITTER							
Effective Date: 8/25/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	\$22.10	\$10.15	\$2.50	\$0.00	\$0.00	\$34.75
2	50.00	\$27.62	\$10.15	\$2.50	\$0.00	\$0.00	\$40.27
3	60.00	\$33.14	\$10.15	\$8.40	\$0.50	\$0.00	\$52.19
4	70.00	\$38.67	\$10.15	\$13.44	\$0.80	\$0.00	\$63.06
5	80.00	\$44.19	\$10.15	\$16.80	\$1.00	\$0.00	\$72.14
Apprentice to Journeyworker Ratio: 1:3							
PNEUMATIC CONTROLS (TEMP.)	8/25/2025	\$55.24	\$10.80	\$16.80	\$4.60	\$0.00	\$87.44
PLUMBERS & PIPEFITTERS LOCAL 51							
PLUMBERS & PIPEFITTERS LOCAL 51							
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							
PNEUMATIC DRILL/TOOL OPERATOR	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.11	\$0.00	\$73.11

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	6/1/2027	\$45.05	\$10.65	\$9.75	\$9.11	\$0.00	\$74.56
	12/1/2027	\$46.50	\$10.65	\$9.75	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.00	\$10.65	\$9.75	\$9.11	\$0.00	\$77.51
	12/1/2028	\$49.50	\$10.65	\$9.75	\$9.11	\$0.00	\$79.01

For apprentice rates see "Apprentice- LABORER"

PNEUMATIC DRILL/TOOL OPERATOR (HEAVY & HIGHWAY) LABORERS	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.21	\$0.00	\$70.33
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.21	\$0.00	\$71.77
	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.21	\$0.00	\$73.21

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

POWDERMAN & BLASTER LABORERS	12/1/2025	\$41.47	\$10.65	\$9.75	\$9.11	\$0.00	\$70.98
LABORERS - ZONE 2	6/1/2026	\$42.91	\$10.65	\$9.75	\$9.11	\$0.00	\$72.42
	12/1/2026	\$44.35	\$10.65	\$9.75	\$9.11	\$0.00	\$73.86
	6/1/2027	\$45.80	\$10.65	\$9.75	\$9.11	\$0.00	\$75.31
	12/1/2027	\$47.25	\$10.65	\$9.75	\$9.11	\$0.00	\$76.76
	6/1/2028	\$48.75	\$10.65	\$9.75	\$9.11	\$0.00	\$78.26
	12/1/2028	\$50.25	\$10.65	\$9.75	\$9.11	\$0.00	\$79.76

For apprentice rates see "Apprentice- LABORER"

POWDERMAN & BLASTER (HEAVY & HIGHWAY) LABORERS	12/1/2025	\$41.47	\$10.65	\$9.75	\$9.21	\$0.00	\$71.08
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$42.91	\$10.65	\$9.75	\$9.21	\$0.00	\$72.52
	12/1/2026	\$44.35	\$10.65	\$9.75	\$9.21	\$0.00	\$73.96

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

POWER SHOVEL/DERRICK/TRENCHING MACHINE OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.28	\$16.05	\$13.25	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.58	\$16.05	\$13.25	\$3.25	\$0.00	\$93.13
	12/1/2026	\$62.03	\$16.05	\$13.25	\$3.25	\$0.00	\$94.58

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

PUMP OPERATOR (CONCRETE) OPERATING ENGINEERS LOCAL 4	12/1/2025	\$58.62	\$16.05	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.90	\$16.05	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.34	\$16.05	\$13.25	\$3.25	\$0.00	\$93.89

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

PUMP OPERATOR (DEWATERING, OTHER) OPERATING ENGINEERS LOCAL 4	12/1/2025	\$37.97	\$16.05	\$13.25	\$3.25	\$0.00	\$70.52
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$38.83	\$16.05	\$13.25	\$3.25	\$0.00	\$71.38
	12/1/2026	\$39.78	\$16.05	\$13.25	\$3.25	\$0.00	\$72.33

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

READY-MIX CONCRETE DRIVER TEAMSTERS 653 TEAMSTERS 653 - Southeastern Concrete (Weymouth)	8/1/2023	\$25.00	\$13.91	\$6.90	\$0.00	\$0.00	\$45.81
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RECLAIMERS OPERATING ENGINEERS LOCAL 4	12/1/2025	\$58.62	\$16.05	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.90	\$16.05	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.34	\$16.05	\$13.25	\$3.25	\$0.00	\$93.89

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

RIDE-ON MOTORIZED BUGGY OPERATOR LABORERS	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.11	\$0.00	\$70.23
	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.11	\$0.00	\$71.67

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS - ZONE 2	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.05	\$10.65	\$9.75	\$9.11	\$0.00	\$74.56
	12/1/2027	\$46.50	\$10.65	\$9.75	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.00	\$10.65	\$9.75	\$9.11	\$0.00	\$77.51
	12/1/2028	\$49.50	\$10.65	\$9.75	\$9.11	\$0.00	\$79.01

For apprentice rates see "Apprentice- LABORER"

ROLLER/SPREADER/MULCHING MACHINE	12/1/2025	\$58.62	\$16.05	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.90	\$16.05	\$13.25	\$3.25	\$0.00	\$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$61.34	\$16.05	\$13.25	\$3.25	\$0.00	\$93.89

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

ROOFER (Inc.Roofing Waterproofing &Roofing Damproofg)	2/1/2026	\$53.53	\$14.53	\$12.67	\$9.03	\$0.00	\$89.76
ROOFERS LOCAL 33							
ROOFERS LOCAL 33							

Apprentice: ROOFER (Inc.Roofing Waterproofing &Roofing Damproofg)							
Effective Date: 2/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$26.77	\$14.53	\$6.52	\$9.03	\$0.00	\$56.85
2	60.00	\$32.12	\$14.53	\$12.67	\$9.03	\$0.00	\$68.35
3	65.00	\$34.79	\$14.53	\$12.67	\$9.03	\$0.00	\$71.02
4	75.00	\$40.15	\$14.53	\$12.67	\$9.03	\$0.00	\$76.38
5	85.00	\$45.50	\$14.53	\$12.67	\$9.03	\$0.00	\$81.73

Apprentice Notes
 ** 1:5, 2:6-10, the 1:10; Reroofing: 1:4, then 1:1

Apprentice to Journeyworker Ratio: 1:5

ROOFER SLATE / TILE / PRECAST CONCRETE	2/1/2026	\$53.78	\$14.53	\$12.67	\$9.03	\$0.00	\$90.01
ROOFERS LOCAL 33							
ROOFERS LOCAL 33							

For apprentice rates see "Apprentice- ROOFER"

SHEETMETAL WORKER	10/1/2025	\$44.05	\$14.91	\$13.35	\$6.15	\$2.24	\$80.70
SHEETMETAL WORKERS LOCAL 17	4/1/2026	\$45.55	\$14.91	\$13.35	\$6.15	\$2.24	\$82.20
SHEETMETAL WORKERS LOCAL 17 - B							

Apprentice: SHEETMETAL WORKER							
Effective Date: 10/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	\$17.62	\$14.91	\$4.27	\$0.00	\$1.09	\$37.89
2	45.00	\$19.82	\$14.91	\$4.80	\$0.00	\$1.17	\$40.70
3	50.00	\$22.03	\$14.91	\$12.28	\$0.00	\$1.45	\$50.67
4	55.00	\$24.23	\$14.91	\$12.28	\$0.00	\$1.52	\$52.94
5	60.00	\$26.43	\$14.91	\$12.28	\$3.69	\$1.64	\$58.95

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: TERRAZZO FINISHERS							
Effective Date: 8/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$34.55	\$12.84	\$15.57	\$8.02	\$0.00	\$70.98
2	60.00	\$41.45	\$12.84	\$15.57	\$8.02	\$0.00	\$77.88
3	70.00	\$48.36	\$12.84	\$15.57	\$8.02	\$0.00	\$84.79
4	80.00	\$55.27	\$12.84	\$15.57	\$8.02	\$0.00	\$91.70
5	90.00	\$62.18	\$12.84	\$15.57	\$8.02	\$0.00	\$98.61
Apprentice to Journeyworker Ratio: 1:5							
TEST BORING DRILLER LABORERS	12/1/2025	\$51.95	\$10.65	\$9.75	\$9.80	\$0.00	\$82.15
LABORERS - FOUNDATION AND MARINE	6/1/2026	\$53.50	\$10.65	\$9.75	\$9.80	\$0.00	\$83.70
	12/1/2026	\$55.00	\$10.65	\$9.75	\$9.80	\$0.00	\$85.20
For apprentice rates see "Apprentice- LABORER"							
TEST BORING DRILLER HELPER LABORERS	12/1/2025	\$48.07	\$10.65	\$9.75	\$9.80	\$0.00	\$78.27
LABORERS - FOUNDATION AND MARINE	6/1/2026	\$49.62	\$10.65	\$9.75	\$9.80	\$0.00	\$79.82
	12/1/2026	\$51.12	\$10.65	\$9.75	\$9.80	\$0.00	\$81.32
For apprentice rates see "Apprentice- LABORER"							
TEST BORING LABORER LABORERS	12/1/2025	\$47.95	\$10.65	\$9.75	\$9.80	\$0.00	\$78.15
LABORERS - FOUNDATION AND MARINE	6/1/2026	\$49.50	\$10.65	\$9.75	\$9.80	\$0.00	\$79.70
	12/1/2026	\$51.00	\$10.65	\$9.75	\$9.80	\$0.00	\$81.20
For apprentice rates see "Apprentice- LABORER"							
TRACTORS/PORTABLE STEAM GENERATORS OPERATING ENGINEERS LOCAL 4	12/1/2025	\$58.62	\$16.05	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$59.90	\$16.05	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.34	\$16.05	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
TRAILERS FOR EARTH MOVING EQUIPMENT TEAMSTERS JOINT COUNCIL NO. 10	1/1/2026	\$41.82	\$16.17	\$21.78	\$0.00	\$0.00	\$79.77
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	6/1/2026	\$42.82	\$16.17	\$21.78	\$0.00	\$0.00	\$80.77
	12/1/2026	\$42.82	\$16.17	\$23.52	\$0.00	\$0.00	\$82.51
	1/1/2027	\$42.82	\$16.77	\$23.52	\$0.00	\$0.00	\$83.11
TUNNEL WORK - COMPRESSED AIR LABORERS	12/1/2025	\$60.18	\$10.65	\$9.75	\$10.25	\$0.00	\$90.83
LABORERS (COMPRESSED AIR)	6/1/2026	\$61.73	\$10.65	\$9.75	\$10.25	\$0.00	\$92.38
	12/1/2026	\$63.23	\$10.65	\$9.75	\$10.25	\$0.00	\$93.88
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE) LABORERS	12/1/2025	\$62.18	\$10.65	\$9.75	\$10.25	\$0.00	\$92.83
LABORERS (COMPRESSED AIR)	6/1/2026	\$63.73	\$10.65	\$9.75	\$10.25	\$0.00	\$94.38
	12/1/2026	\$65.23	\$10.65	\$9.75	\$10.25	\$0.00	\$95.88
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - FREE AIR	12/1/2025	\$52.25	\$10.65	\$9.75	\$10.25	\$0.00	\$82.90

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS	6/1/2026	\$53.80	\$10.65	\$9.75	\$10.25	\$0.00	\$84.45
LABORERS (FREE AIR TUNNEL)	12/1/2026	\$55.30	\$10.65	\$9.75	\$10.25	\$0.00	\$85.95
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - FREE AIR (HAZ. WASTE)	12/1/2025	\$54.25	\$10.65	\$9.75	\$10.25	\$0.00	\$84.90
LABORERS	6/1/2026	\$55.80	\$10.65	\$9.75	\$10.25	\$0.00	\$86.45
LABORERS (FREE AIR TUNNEL)	12/1/2026	\$57.30	\$10.65	\$9.75	\$10.25	\$0.00	\$87.95
For apprentice rates see "Apprentice- LABORER"							
VAC-HAUL	1/1/2026	\$41.24	\$16.17	\$21.78	\$0.00	\$0.00	\$79.19
TEAMSTERS JOINT COUNCIL NO. 10	6/1/2026	\$42.24	\$16.17	\$21.78	\$0.00	\$0.00	\$80.19
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/1/2026	\$42.24	\$16.17	\$23.52	\$0.00	\$0.00	\$81.93
	1/1/2027	\$42.24	\$16.77	\$23.52	\$0.00	\$0.00	\$82.53
WAGON DRILL OPERATOR	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.11	\$0.00	\$70.23
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.11	\$0.00	\$71.67
LABORERS - ZONE 2	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.11	\$0.00	\$73.11
	6/1/2027	\$45.05	\$10.65	\$9.75	\$9.11	\$0.00	\$74.56
	12/1/2027	\$46.50	\$10.65	\$9.75	\$9.11	\$0.00	\$76.01
	6/1/2028	\$48.00	\$10.65	\$9.75	\$9.11	\$0.00	\$77.51
	12/1/2028	\$49.50	\$10.65	\$9.75	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
WAGON DRILL OPERATOR (HEAVY & HIGHWAY)	12/1/2025	\$40.72	\$10.65	\$9.75	\$9.21	\$0.00	\$70.33
LABORERS	6/1/2026	\$42.16	\$10.65	\$9.75	\$9.21	\$0.00	\$71.77
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	\$43.60	\$10.65	\$9.75	\$9.21	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
WASTE WATER PUMP OPERATOR	12/1/2025	\$59.28	\$16.05	\$13.25	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.58	\$16.05	\$13.25	\$3.25	\$0.00	\$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	\$62.03	\$16.05	\$13.25	\$3.25	\$0.00	\$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
WATER METER INSTALLER	8/25/2025	\$55.24	\$10.80	\$16.80	\$4.60	\$0.00	\$87.44
PLUMBERS & PIPEFITTERS LOCAL 51							
PLUMBERS & PIPEFITTERS LOCAL 51							
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GASFITTER"							

Additional Apprentice Information

All apprentices must be registered with the Division of Apprenticeship Training(DAS) in accordance with M.G.L.c. 23, §§ 11E-11L. Minimum wage rates for apprentices employed on public works projects are listed above as a percentage of the hourly prevailing wage rate established by the Commissioner under the provisions of M.G.L.c. 149, §§ 26-27D.

Apprentice ratios are established by DAS pursuant to M.G.L.c. 23, §§ 11E-11L. Ratios are expressed as the allowable number of apprentices to journeymen or fraction thereof, unless otherwise specified. The ratios listed herein have been taken from relevant private collective bargaining agreements(CBAs) and are provided for illustrative purposes only. They have not been independently verified as being accurate or continuing to be accurate.

Parties having questions regarding what ratio to use should contact DAS.

ATTACHMENT B
MATTAPOISETT CONSERVATION COMMISSION
ORDER OF CONDITIONS

ORIGINAL



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:
44-1590
MassDEP File #
eDEP Transaction #
MATTAPOISETT
City/Town

A. General Information

Please note:
this form has been modified with added space to accommodate the Registry of Deeds Requirements

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. From: Mattapoissett
Conservation Commission

2. This issuance is for (check one):
a. Order of Conditions b. Amended Order of Conditions

3. To: Applicant:

a. First Name Town of Mattapoissett b. Last Name _____
c. Organization _____
d. Mailing Address 16 Main Street
e. City/Town Mattapoissett f. State MA g. Zip Code 02739

4. Property Owner (if different from applicant):

a. First Name _____ b. Last Name _____
c. Organization _____
d. Mailing Address _____
e. City/Town _____ f. State _____ g. Zip Code _____

5. Project Location:

a. Street Address Water Street Right of Way b. City/Town Mattapoissett
c. Assessors Map/Plat Number 9 d. Parcel/Lot Number 193, 163
Latitude and Longitude, if known: 41d39m30.6936s -70d48m34.1274s
d. Latitude e. Longitude



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A. General Information (cont.)

6. Property recorded at the Registry of Deeds for (attach additional information if more than one parcel):
 Plymouth 107723
 a. County b. Certificate Number (if registered land)
 2939 349
 c. Book d. Page
7. Dates: 10/20/2025 01/12/2026 01/23/2026
 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):
 Water Street Culvert Replacement
 a. Plan Title
 GPI Timothy Letton, P.E.
 b. Prepared By c. Signed and Stamped by
 06/17/2025 varies
 d. Final Revision Date e. Scale
- f. Additional Plan or Document Title 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.



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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 checked="" type="checkbox"/> Bank	58 a. linear feet	58 b. linear feet	44 c. linear feet	44 d. linear feet
5. <input type="checkbox"/> Bordering Vegetated Wetland	_____ a. square feet	_____ b. square feet	_____ c. square feet	_____ d. square feet
6. <input checked="" type="checkbox"/> Land Under Waterbodies and Waterways	196 a. square feet 6.59 e. c/y dredged	196 b. square feet 6.59 f. c/y dredged	169 c. square feet	169 d. square feet
7. <input type="checkbox"/> Bordering Land Subject to Flooding	_____ a. square feet	_____ b. square feet	_____ c. square feet	_____ 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	331 a. total sq. feet 331 c. square feet	331 b. total sq. feet 331 d. square feet	_____ e. square feet	_____ f. square feet
Sq ft within 100 ft	_____ g. square feet	_____ h. square feet	_____ i. square feet	_____ j. square feet
Sq ft between 100-200 ft				



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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	<u> </u> a. square feet	<u> </u> b. square feet		
	<u> </u> c. c/y dredged	<u> </u> d. c/y dredged		
12. <input type="checkbox"/> Barrier Beaches	Indicate size under Coastal Beaches and/or Coastal Dunes below			
13. <input checked="" type="checkbox"/> Coastal Beaches	<u>213</u> a. square feet	<u>213</u> b. square feet	<u>- cu yd</u> c. nourishment	<u>- cu yd</u> d. nourishment
14. <input type="checkbox"/> Coastal Dunes	<u> </u> a. square feet	<u> </u> b. square feet	<u> </u> c. nourishment	<u> </u> d. nourishment
15. <input checked="" type="checkbox"/> Coastal Banks	<u>21</u> a. linear feet	<u>21</u> b. linear feet		
16. <input type="checkbox"/> Rocky Intertidal Shores	<u> </u> a. square feet	<u> </u> b. square feet		
17. <input type="checkbox"/> Salt Marshes	<u> </u> a. square feet	<u> </u> b. square feet	<u> </u> c. square feet	<u> </u> d. square feet
18. <input type="checkbox"/> Land Under Salt Ponds	<u> </u> a. square feet	<u> </u> b. square feet		
	<u> </u> c. c/y dredged	<u> </u> d. c/y dredged		
19. <input type="checkbox"/> Land Containing Shellfish	<u> </u> a. square feet	<u> </u> b. square feet	<u> </u> c. square feet	<u> </u> d. square feet
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			
	<u> </u> a. c/y dredged	<u> </u> b. c/y dredged		
21. <input checked="" type="checkbox"/> Land Subject to Coastal Storm Flowage	<u>11,164</u> a. square feet	<u>11,164</u> b. square feet		
22. <input type="checkbox"/> Riverfront Area	<u> </u> a. total sq. feet	<u> </u> b. total sq. feet		
Sq ft within 100 ft	<u> </u> c. square feet	<u> </u> d. square feet	<u> </u> e. square feet	<u> </u> f. square feet
Sq ft between 100-200 ft	<u> </u> g. square feet	<u> </u> h. square feet	<u> </u> i. square feet	<u> </u> j. square feet



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B. Findings (cont.)

* #23. 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.

23. Restoration/Enhancement *:

a. square feet of BVW	b. square feet of salt marsh

24. Stream Crossing(s):

0	1
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.
 - c. If the work is for a Test Project, this Order of Conditions shall be valid for no more than one year.
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. An Order of Conditions for a Test Project may be extended for one additional year only upon written application by the applicant, subject to the provisions of 310 CMR 10.05(11)(f).
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 1/23/2029 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.



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C. General Conditions Under Massachusetts Wetlands Protection Act

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.
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 44-1590 "
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.



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C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

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.
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.
19. The work associated with this Order (the "Project")
- (1) is subject to the Massachusetts Stormwater Standards
- (2) is NOT 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;



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C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

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.

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 19(f) through 19(k) with respect to that BMP. Any failure of the proposed responsible party to implement the requirements of Conditions 19(f) through 19(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):

-
- 20. For Test Projects subject to 310 CMR 10.05(11), the applicant shall also implement the monitoring plan and the restoration plan submitted with the Notice of Intent. If the conservation commission or Department determines that the Test Project threatens the public health, safety or the environment, the applicant shall implement the removal plan submitted with the Notice of Intent or modify the project as directed by the conservation commission or the Department.



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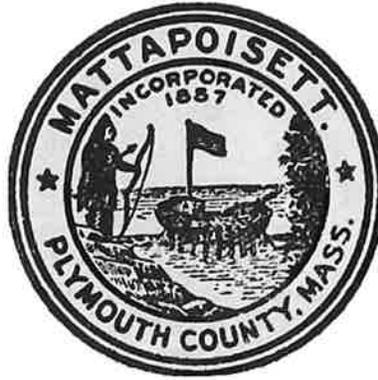
MATTAPOISETT

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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 Mattapoissett 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):

See attached Findings of Fact and Special Conditions (pp. 10a-10f)



Mattapoissett Conservation Commission

Order of Conditions-Special Conditions
Massachusetts Wetlands Protection Act- M.G.L. c.131, §40

<u>Applicant Name:</u>	Town of Mattapoissett
<u>Owner Name:</u>	Same
<u>Project Address:</u>	30 Water Street
<u>Map, Parcel:</u>	Map 9, Parcel 193 &163
<u>DEP File #:</u>	SE44-1590

Findings of Fact

The Town of Mattapoissett (Applicant) submitted a Notice of Intent (NOI) for the above-referenced property (“Property”) via Greenman-Pedersen Inc. (GPI) (Samuel Campbell, representing). The application was received on October 29, 2025. The public hearing was opened on November 24, 2025, and closed on January 12, 2026. Voting Conservation Commission (“Commission”) members included Michael King (Chair) (attended via Zoom), David Nicolosi, David Lawrence, and Ella McIntire. Barry Lima and John Jacobsen were absent. The final vote was to APPROVE WITH SPECIAL CONDITIONS for the proposed project, 4-0. Motion: D. Lawrence. Second: E. McIntire.

Background

The subject Property is located south of Water Street, approximately 100 linear feet east of the intersection of Water Street and North Street. According to the Town of Mattapoissett Vision Government Solutions property card, the lot (“Lot”) is 1.92 acres in size and currently exists as a mixed use, partially developed Lot containing the town beach, cabana, beach cabin, asphalt parking area, Barstow Wharf, and grass areas. Resource areas on and in close proximity to the site include Coastal Dune, Coastal Beach, Inland Bank, 200’ Riverfront Area, Coastal Bank, and Land Under Water Bodies and Waterways. According to the FEMA Flood Map Service Center, the Lot is located within Land Subject to Coastal Storm Flowage Flood Zone VE E1 18, 19 & 21.

Current Proposal

The current proposal includes removing the existing failed stone culvert under Water Street and replacing it with a new 3' x 6' precast box culvert. Additionally, work will include rebuilding the stone masonry walls within 6' of the inlet, capping the headwall with a 6-inch granite cap, and regrading the streambed within 17' of the inlet to a depth of 1'. The new box culvert will extend south from the existing inlet location, connecting to the precast concrete drainage vault which will then convey stormwater runoff and flow from the stream to a discharge point along the Coastal Bank, into the harbor. Approximately 21 linear feet of stone retaining wall will be rebuilt in kind, and a new box culvert will be installed at the outlet. In addition to the new box culvert, new subsurface infrastructure will be installed, including two (2) deep sump catch basins, two (2) drainage manholes, two (2) sanitary sewer manholes connected to ductile iron pipes, and the 10-inch water main and 4-inch gas main will be relocated to accommodate the new culvert. Please see the Notice of Intent Application dated October 2025, by GPI for all project details.

During the several Commission meetings for this application, upstream neighbors, abutters, and Commission members voiced their concerns regarding the potential for this project to exacerbate flooding that already occurs throughout the residential portion of the floodplain adjacent to the perennial stream. Brandon Faneuf (Agent) suggested that the Applicant investigate options for some type of flapper/flood valve at the outlet to control the water entering the culvert from the ocean side. The Commission and their Agent also had concerns regarding where concrete vehicles would be washed down, what the dewatering plan would look like for the stream, and what the operation and maintenance plan for the culvert and associated stormwater structures would look like. Several meetings later, GPI submitted a "Response to Comments" letter dated December 2, 2025, which outlined why the new culvert would be a net improvement over existing conditions, addressed why a tide gate or check valve would not be feasible, and reviewed concrete washout and refueling, inspection & maintenance of the culvert, and the water control/dewatering plan (Please see GPI letter dated 12/1/2025 for details). The Commission was satisfied with the issues addressed in the letter and had no further comments or suggestions.

The proposed project underwent review by Massachusetts Environmental Policy Act (MEPA) in accordance with MEPA regulations (see 301 CMR 11.00) and received a "Certificate of the Secretary of Energy and Environmental Affairs on the Environmental Notification Form", dated December 26, 2025. After review of the ENF, the secretary determined that the project **did not** require an Environmental Impact Report (EIR).

The Lot is partially located within Shellfish Suitability Areas associated with the northern quahog (*Mercenaria mercenaria*) and bay scallop (*Argopecten irradians*), prompting two (2) separate emails from the Massachusetts Division of Marine Fisheries (DMF) for both the ENF and the NOI. For the review of the NOI, Mass DMF recommended that concrete vehicles be prohibited from washing down equipment on site. Otherwise, both emails stated that based on the scope of work proposed, the Division anticipated no adverse impacts to shellfish and had no remaining recommendations or comments for this project.

Wetland Resource Areas

Resource Areas under M.G.L. 131, §40, 310CMR 10.00 present on or in close proximity to site:

- Land Subject to Coastal Storm Flowage (Zone VE E1 18, 19 & 21)
- Inland Bank/ MAHW of River
- Land Under Water Bodies and Waterways
- 200' Riverfront Area
- Coastal Beach w/100' Buffer Zone
- Coastal Bank w/100' Buffer Zone
- Coastal Dune w/100' Buffer Zone

Proposed Impacts

Proposed work will impact Inland Bank associated with the perennial stream (58 linear feet), Land Under Water Bodies and Waterways (196 sf, 6.59 cubic yards), Riverfront Area (331 sf), Coastal Beach (213 sf), Coastal Bank (21 linear feet), and Land Subject to Coastal Storm Flowage (11,164 sf).

Applicable Public Interests

Eight (8) Public Interests under the WPA are applicable for wetlands associated with this project.

- Inland Bank - Public & Private Water Supply, Groundwater Supply, Fisheries, Storm Damage Prevention, Prevention of Pollution, Protection of Wildlife Habitat, and Flood Control.
- Land Under Waterbodies and Waterways - Public & Private Water Supply, Groundwater Supply, Storm Damage Prevention, Flood Control, Prevention of Pollution, and Protection of Fisheries and Wildlife Habitat.
- Riverfront Area - Public & Private Water Supply, Groundwater Supply, Fisheries, Land Containing Shellfish, Storm Damage Prevention, Prevention of Pollution, Protection of Wildlife Habitat, and Flood Control.
- Coastal Beach- Storm Damage Prevention, Flood Control, Protection of Wildlife Habitat.
- Coastal Bank- Storm Damage Prevention, and Flood Control.
- Coastal Dune- Storm Damage Prevention, and Flood Control.

Approval

The plan was approved under the provisions of 310CMR 10.00 in that **no significant adverse impact** to the Resource Areas and Public Interests in M.G.L. c.131, §40, 310CMR 10.00 will occur if:

- a. The site plan is strictly followed;
- b. Any other site-specific special conditions outlined below are strictly adhered to.

It was the decision of the Commission that the location and scale of the proposed project was necessary to fulfill the primary project purpose. As part of the Commission's decision-making process, it took into consideration that:

- The Applicant took adequate measures to avoid and minimize impacts to the greatest extent practicable.

- The project will take place within previously disturbed areas and includes the replacement of an existing failed culvert.
- The Applicant demonstrated that the project, as currently proposed, would be a net improvement over existing conditions, and would not exacerbate any flooding issues upstream.

Plans

- The approved plan of record is entitled “Water Street Culvert Replacement” consisting of twenty-five (25) sheets by GPI, signed and stamped by Timothy Letton, P.E. #53308, and with a final revision date of June 17, 2025.

Special Conditions

General

- 1) These Special Conditions supersede any previous Special Conditions.
- 2) The applicant and the applicant’s agent(s) shall adhere to the following General Conditions of this permit.
- 3) **310 CMR 10.00 allows for a 10-day appeal period, including administrative appeals by the Department of Environmental Protection. Any work completed prior to the elapsing of the appeal period is done at the applicant's own peril.**
- 4) No change in proposed grades are allowed except as denoted on plans.
- 5) In addition to providing the Conservation Commission with a copy of the record final Order of Conditions, **supply the Building Inspector with a copy of the same before starting work** on the project.
- 6) **A pre-construction meeting must take place before groundbreaking, between the general contractor and the Conservation Commission and/or Conservation Agent.**
- 7) **A copy of the Order of Conditions and approved site plans must be present on-site at all times during construction.**
- 8) All persons responsible for conducting the proposed activity must have read and become familiar with the Orders of Conditions for this site.
- 9) All excess materials to be taken off site.
- 10) Dumpsters containing demolished material must be tarped, strapped down, and removed daily from the site.
- 11) No excavation spoils shall be stockpiled on site and must be removed daily.

- 12) All work subject to Building Department and FEMA regulations and restrictions shall be followed, as applicable.
- 13) All construction shall be performed from the upland side of the project site, unless otherwise permitted.

Erosion & Sedimentation Controls

- 14) Prior to commencement of work, erosion control barrier(s) are to be put in place as depicted on plan. This will be maintained throughout work on the project and until ground is stabilized. The commission reserves the right to request additional erosion controls at any time should they deem it necessary.
- 15) The Conservation Commission office is to be contacted when the erosion control barrier has been installed and prior to construction for an inspection. **Construction may not begin until the Commission has inspected the erosion & sedimentation controls.** This may be done during the pre-construction meeting between the contractor and the Conservation Commission and/or Conservation Agent.
- 16) Sedimentation controls shall remain in place until the site is stabilized with loam and seed. Once the site is stable the **applicant shall call the Conservation Commission office for an inspection to remove the erosion controls** prior to requesting a Certificate of Compliance.
- 17) The applicants, owners, successors, or assignees shall be responsible for maintaining and monitoring site activities to prevent erosion, siltation, sedimentation, chemical contamination, or other detrimental impact to any on-site or off-site resource area. It shall be the responsibility of the property owner of record to see that the maintenance conditions are complied with as required by this Order. **This is an in-perpetuity Condition.**
- 18) The existing tree line or erosion controls as depicted on plan shall be considered the limit of work unless otherwise stated.

Inspections by the Commission

- 19) Members, employees, and agents of the Commission shall have the right to enter and inspect the premises to evaluate compliance with the conditions and performance standards stated in this Order, the Massachusetts Wetlands Protection Act, and pertinent Massachusetts regulations (310 CMR 10.00 through 10.6). The Commission may require the submittal of any data deemed necessary by the Commission for that evaluation. The commission must provide adequate notice of inspections and inspections should only be completed during normal business hours.

Hazardous Materials

- 20) Used petroleum products from the maintenance of construction equipment, construction debris, unused paint and paint related products shall be disposed of responsibly off the site. No on-site disposal of these items is allowed.
- 21) Hydraulic fluid must be added to equipment outside of wetlands and buffer Zones. No Containers of fuel, lubricating fluids or hydraulic fluid may be brought into wetlands or buffer zones.

Dewatering & Illicit Discharges

- 22) Any discharge from dewatering activities shall be directed to an on-site area surrounded by staked hay bales. The discharge area shall be sized and located to prevent erosion or transport of sediment to the resource area or adjacent properties. **The dewatering location is to be inspected by the Conservation Agent prior to the start of dewatering.**

Specific to this Application

- 23) The location and type of concrete wash out area is to be determined by the highway department.
- 24) Standard routine inspections and maintenance for the culvert and associated stormwater structures are to be conducted by the town of Mattapoisett.
- 25) The dewatering plan is to be conducted as shown on the approved site plan by GPI. Any changes made by the highway department to the dewatering plan must be brought before the Commission for approval.

Conditions Related to Certificate of Compliance

- 26) The Plan of Record has been prepared and stamped by a registered Professional Engineer. When the project is complete, it is the responsibility of the Applicant/Owner to instruct his Engineer to request a Certificate of Compliance from the Mattapoisett Conservation Commission.
- 27) A professional engineer's letter of veracity stating that the work is in substantial compliance with the approved site plan is to be submitted with the Request for Certificate of Compliance. The Engineer **shall certify in writing that the project has been completed in substantial compliance with this Order of Conditions and shall state any deviations to the plans.** The commission holds the right to request an as-built plan if deemed necessary. If a plan is developed for another department, the commission requests its submittal with the letter of veracity.

- 28) **See Special Condition 17 above.**



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:
 SE44-1590
 MassDEP File #

eDEP Transaction #
Mattapoissett
 City/Town

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.

Please indicate the number of members who will sign this form.

This Order must be signed by a majority of the Conservation Commission.

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.

1/23/20
 1. Date of Issuance
3
 2. Number of Signers

Mattapoissett

Signature [Handwritten Signature]
 Signature Ella McIntire
 Signature [Handwritten Signature]
 Signature _____
 Signature _____
 Signature _____
 Signature _____
 Signature _____

Printed Name David Niadu
 Printed Name Ella McIntire
 Printed Name David Lawrence
 Printed Name _____
 Printed Name _____
 Printed Name _____
 Printed Name _____
 Printed Name _____

by hand delivery on

by certified mail, return receipt requested, on

Date _____

Date 1/23/20



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:
 44-1590
 MassDEP File #

eDEP Transaction #
 MATTAPOISETT
 City/Town

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 for 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.



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:
 44-1590
 MassDEP File #

 eDEP Transaction #
 MATTAPOISETT
 City/Town

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.

Mattapoissett

Conservation Commission

Detach on dotted line, have stamped by the Registry of Deeds and submit to the Conservation Commission.

To:

Mattapoissett

Conservation Commission

Please be advised that the Order of Conditions for the Project at:

30 Water Street

Project Location

44-1590

MassDEP File Number

Has been recorded at the Registry of Deeds of:

Plymouth

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:

01/23/2026

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



**Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands**

DEP File Number:

**Request for Departmental Action Fee
Transmittal Form**

Provided by DEP

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

A. Request Information

1. Location of Project

a. Street Address	b. City/Town, Zip
c. Check number	d. Fee amount

2. Person or party making request (if appropriate, name the citizen group's representative):

Name

Mailing Address

City/Town	State	Zip Code
Phone Number	Fax Number (if applicable)	

3. Applicant (as shown on Determination of Applicability (Form 2), Order of Resource Area Delineation (Form 4B), Order of Conditions (Form 5), Restoration Order of Conditions (Form 5A), or Notice of Non-Significance (Form 6)):

Name

Mailing Address

City/Town	State	Zip Code
Phone Number	Fax Number (if applicable)	

4. DEP File Number:

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



B. Instructions

1. When the Departmental action request is for (check one):

- Superseding Order of Conditions – Fee: \$120.00 (single family house projects) or \$245 (all other projects)
- Superseding Determination of Applicability – Fee: \$120
- Superseding Order of Resource Area Delineation – Fee: \$120



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

DEP File Number:

**Request for Departmental Action Fee
Transmittal Form**

Provided by DEP

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Instructions (cont.)

Send this form and check or money order, payable to the *Commonwealth of Massachusetts*, to:

Department of Environmental Protection
Box 4062
Boston, MA 02211

2. On a separate sheet attached to this form, state clearly and concisely the objections to the Determination or Order which is being appealed. To the extent that the Determination or Order is based on a municipal bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.
3. Send a **copy** of this form and a **copy** of the check or money order with the Request for a Superseding Determination or Order by certified mail or hand delivery to the appropriate DEP Regional Office (see <https://www.mass.gov/service-details/massdep-regional-offices-by-community>).
4. 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.

ATTACHMENT C
CHAPTER 91 LICENSE

The Commonwealth of Massachusetts

No. 12257



Whereas, Town of Mattapoisett

Of -- Mattapoisett --, in the County of Plymouth -- and Commonwealth aforesaid, has applied to the Department of Environmental Protection for a license to -- maintain an existing solid fill wharf, and to construct and maintain a gangway, float, and piles -----

and has submitted plans of the same; and whereas due notice of said application, and of the time and place fixed for a hearing thereon, has been given, as required by law, to the -- Board of Selectmen -- of the -- Town -- of -- Mattapoisett -----.

NOW, said Department, having heard all parties desiring to be heard, and having fully considered said application, hereby, subject to the approval of the Governor, authorizes and licenses the said

-- Town of Mattapoisett --, subject to the provisions of the ninety-first chapter of the General Laws, and of all laws which are or may be in force applicable thereto, to -- maintain an existing solid fill wharf, and to construct and maintain a gangway, float, and piles -----

in and over the waters of -- Mattapoisett Harbor --, at 30 Water Street --, in the Town of -- Mattapoisett -- and in accordance with the locations shown and details indicated on the accompanying DEP License Plan No. 12257, (3 sheets).

The structures hereby authorized shall be limited to the following uses: public access to navigable waters and shoreline stabilization for the protection of existing structures.

The term for this license is unlimited in accordance with 310 CMR 9.15(1)(c).

SPECIAL WATERWAYS LICENSE CONDITIONS

1. In accordance with any license condition, easement, or other public right of lateral passage that exists in the area of the subject property lying between the high and low water marks, the Licensee shall allow the public in the exercise of such rights to pass freely around all structures within such intertidal area. Accordingly, the Licensee shall place and maintain, in good repair, a public access signs on the westerly/easterly sides of the filled wharf, authorized herein, or at each property line, adjacent to the mean high water shoreline. Said signs, provided by the Department, shall be posted immediately upon completion of construction. Nothing in this condition shall be construed as preventing the Licensee from excluding the public from portions of said structure(s) or property not intended for lateral passage.

2. In partial compensation for private use of structures on Commonwealth tidelands, which interferes with the rights of the public to use such lands, the Licensee shall allow the public to pass on foot, for any purpose and from dawn to dusk, within the area of the subject property lying seaward of the high water mark. This condition shall not be construed to prevent the Licensee from taking reasonable measures to discourage unlawful activities by users of the area(s) intended for public passage, including but not limited to trespassing on the adjacent private areas and deposit of refuse of any kind or nature in the water or on the shore.

Further, the exercise by the public of free on-foot passage in accordance with this condition shall be considered a permitted use to which the limited liability provisions of M.G.L. c.21, s.17c apply.

3. Vessels shall be moored such that they do not become grounded at any tide.

4. No dredging (including, but not limited to the effects of prop wash) is permitted herein.

5. The Licensee shall remove seasonal structures; when removed all seasonal structures shall be stored landward of the mean high water shoreline and outside of all wetland resource areas. Said storage shall take place in conformance with any local, state and federal requirements.

6. All work authorized herein shall be completed within five (5) years of the date of license issuance. Said construction period may be extended by the Department for one or more one year periods without public notice, provided that the Applicant submits to the Department, thirty (30) days prior to the expiration of said construction period, a written request to extend the period and provides an adequate justification for said extension.

7. Within sixty (60) days of completion of the licensed project, the Licensee shall request in writing that the Department issue a Certificate of Compliance in accordance with 310 CMR 9.19. The request shall be accompanied by a certification by a registered professional engineer licensed in the Commonwealth that the project was completed in accordance with the License.

Please see page 4 for additional conditions of this license. -----

Duplicate of said plan, number 12257 is on file in the office of said Department, and original of said plan accompanies this License, and is to be referred to as a part hereof.

STANDARD WATERWAYS LICENSE CONDITIONS

1. Acceptance of this Waterways License shall constitute an agreement by the Licensee to conform with all terms and conditions stated herein.
2. This License is granted upon the express condition that any and all other applicable authorizations necessitated due to the provisions hereof shall be secured by the Licensee prior to the commencement of any activity or use authorized pursuant to this License.
3. Any change in use or any substantial structural alteration of any structure or fill authorized herein shall require the issuance by the Department of a new Waterways License in accordance with the provisions and procedures established in Chapter 91 of the Massachusetts General Laws. Any unauthorized substantial change in use or unauthorized substantial structural alteration of any structure or fill authorized herein shall render this Waterways License void.
4. This Waterways License shall be revocable by the Department for noncompliance with the terms and conditions set forth herein. This license may be revoked after the Department has given written notice of the alleged noncompliance to the Licensee and those persons who have filed a written request for such notice with the Department and afforded them a reasonable opportunity to correct said noncompliance. Failure to correct said noncompliance after the issuance of a written notice by the Department shall render this Waterways License void and the Commonwealth may proceed to remove or cause removal of any structure or fill authorized herein at the expense of the Licensee, its successors and assigns as an unauthorized and unlawful structure and/or fill.
5. The structures and/or fill authorized herein shall be maintained in good repair and in accordance with the terms and conditions stated herein and the details indicated on the accompanying license plans.
6. Nothing in this Waterways License shall be construed as authorizing encroachment in, on or over property not owned or controlled by the Licensee, except with the written consent of the owner or owners thereof.
7. This Waterways License is granted subject to all applicable Federal, State, County, and Municipal laws, ordinances and regulations including but not limited to a valid final Order of Conditions issued pursuant to the Wetlands Protection Act, G.L. Chapter 131, s.40.
8. This Waterways License is granted upon the express condition that the use of the structures and/or fill authorized hereby shall be in strict conformance with all applicable requirements and authorizations of the DEP, Division of Water Pollution Control.
9. This License authorizes structure(s) and/or fill on:
 - Private Tidelands. In accordance with the public easement that exists by law on private tidelands, the licensee shall allow the public to use and to pass freely upon the area of the subject property lying between the high and low water marks, for the purposes of fishing, fowling, navigation, and the natural derivatives thereof.
 - Commonwealth Tidelands. The Licensee shall not restrict the public's right to use and to pass freely, for any lawful purpose, upon lands lying seaward of the low water mark. Said lands are held in trust by the Commonwealth for the benefit of the public.
 - a Great Pond of the Commonwealth. The Licensee shall not restrict the public's right to use and to pass freely upon lands lying seaward of the high water mark for any lawful purpose.
 - Navigable River or Stream. The Licensee shall not restrict the public's right to use and to pass freely, for any lawful purpose, in the waterway.
10. No restriction on the exercise of these public rights shall be imposed unless otherwise expressly provided in this license.

Unless otherwise expressly provided by this license, the licensee shall not limit the hours of availability of any areas of the subject property designated for public passage, nor place any gates, fences, or other structures on such areas in a manner that would impede or discourage the free flow of pedestrian movement thereon.

The amount of tidewater displaced by the work hereby authorized has been ascertained by said Department, and compensation thereof has been made by the said -- Town of Mattapoisett -- by paying into the treasury of the Commonwealth -- zero dollars and zero cents (\$0.00) -- for each cubic yard so displaced, being the amount hereby assessed by said Department (0.0 cubic yards = \$0.00).

Nothing in this License shall be so construed as to impair the legal rights of any person.

This License shall be void unless the same and the accompanying plan are recorded within 60 days from the date hereof, in the Plymouth County Registry of Deeds.

IN WITNESS WHEREAS, said Department of Environmental Protection have hereunto set their hands this 21st day of November in the year to thousand eight.

Program Chief *[Signature]*
Commissioner *[Signature]*

Department of
Environmental
Protection

THE COMMONWEALTH OF MASSACHUSETTS

This license is approved in consideration of the payment into the treasury of the Commonwealth by the said ----- Town of Mattapoisett --

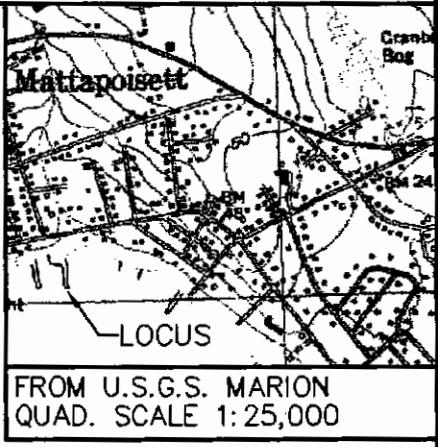
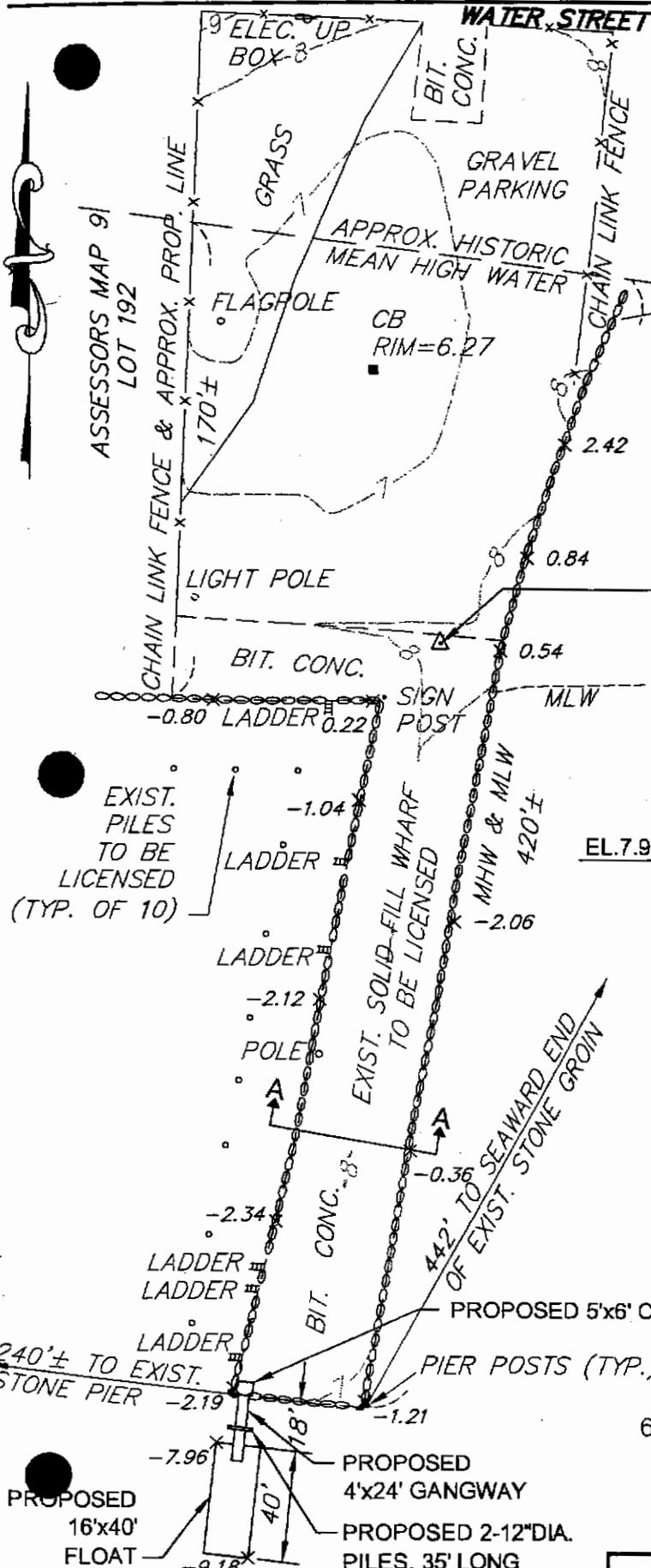
of the further sum of -- zero dollars and zero cents (\$0.00) --

the amount determined by the Governor as a just and equitable charge for rights and privileges hereby granted in the land of the Commonwealth.

BOSTON.

Approved by the Governor.

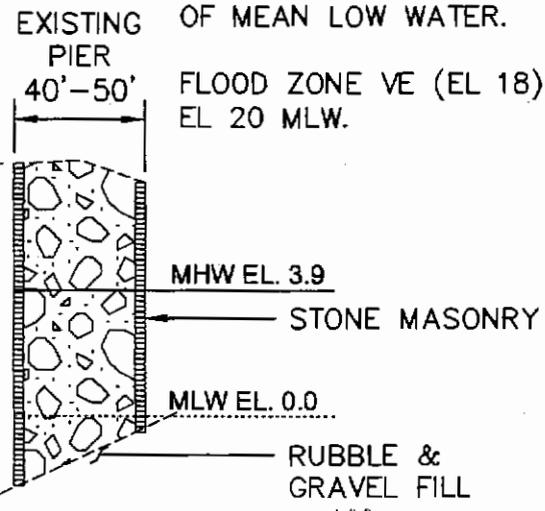
[Signature]
Governor



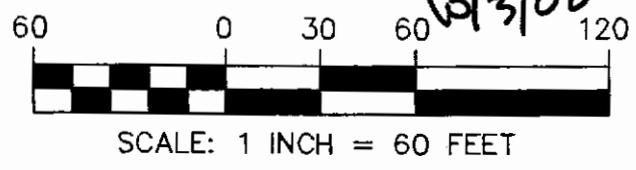
ASSESSORS MAP 9
LOT 193

BM (SET): TOP MAG. NAIL IN PAVEMENT ELEV. = 8.14 MLW

NOTE: ELEVATIONS ARE BASED ON THE PLANE OF MEAN LOW WATER.
FLOOD ZONE VE (EL 18)
EL 20 MLW.



CROSS SECTION A-A
SCALE: 1"=60' HORIZ.
1"=6' VERT.

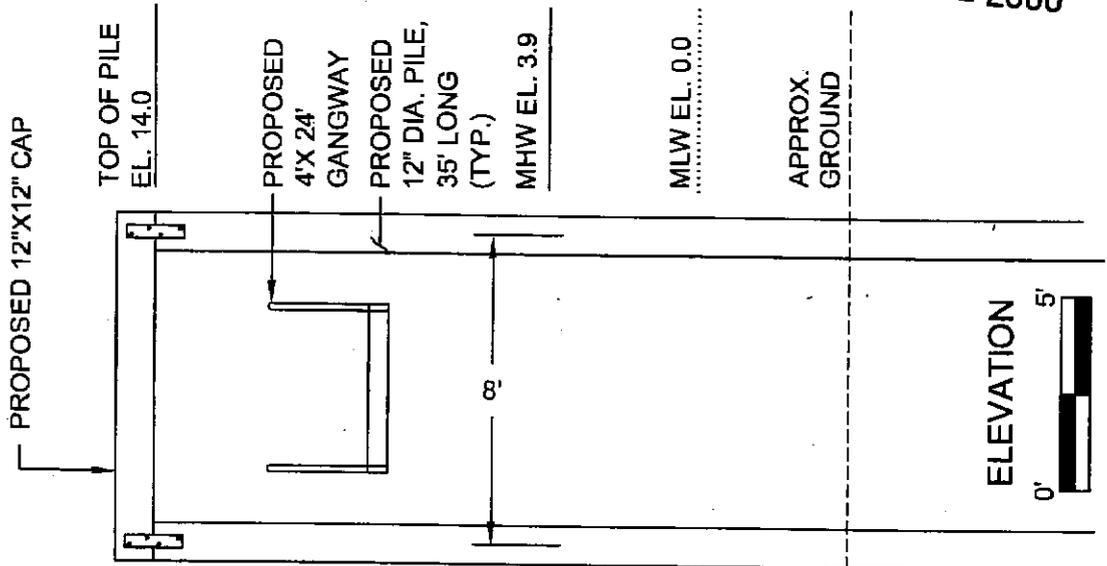


PLAN ACCOMPANYING PETITION OF TOWN OF MATTAPOISETT TO CONSTRUCT & MAINTAIN GANGWAY PILES & FLOAT & MAINTAIN EXISTING SOLID FILL WHARF & PILES AT 30 WATER STREET, MATTAPOISETT HARBOR, MATTAPOISETT MA SHEET 1 OF 3

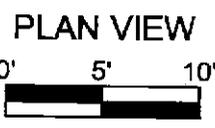
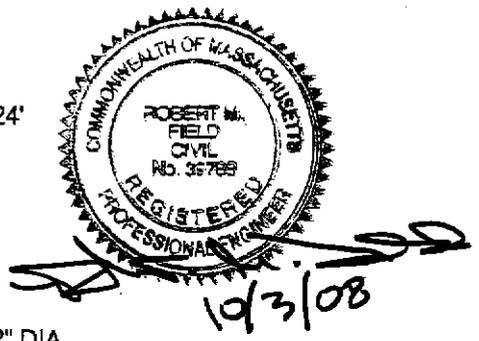
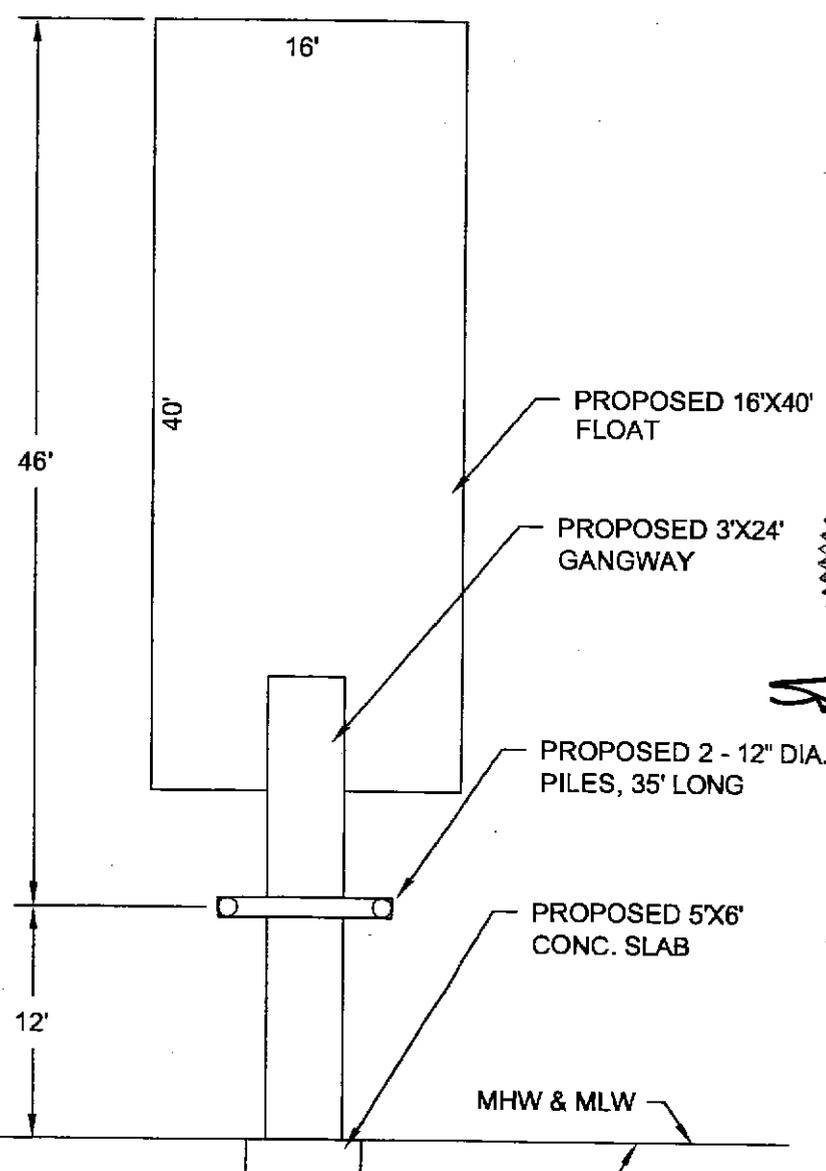
LICENSE PLAN NO. 12257
Approved by Department of Environmental Protection of Massachusetts
NOV 21 2008
Mitch Ziemann

1622-808

LICENSE PLAN NO. 12257
 Approved by Department of Environmental Protection
 Date: NOV 21 2008

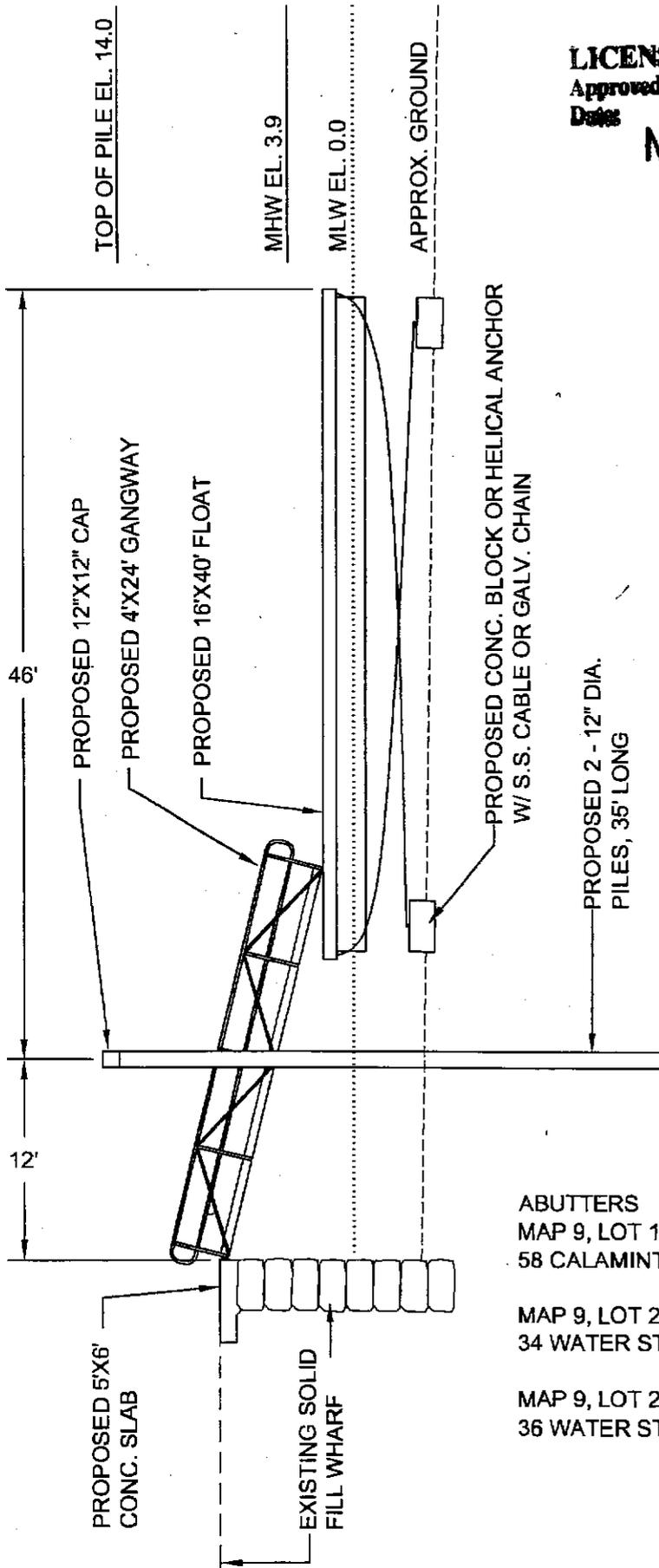


SCALE: 1" = 5'



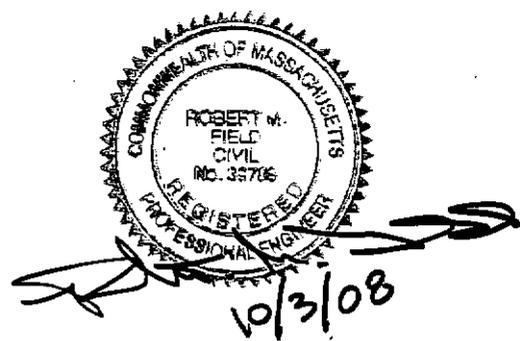
SCALE: 1" = 10'

1208-22-99



LICENSE PLAN NO. **12257**
 Approved by Department of Environmental Protection
 Date: **NOV 21 2008**

CROSS SECTION
 0' 5' 10'
 SCALE: 1" = 10'



ABUTTERS
 MAP 9, LOT 192: PRISCILLA GENEST ET AL
 58 CALAMINT RD, PRINCETON, MA 01541
 MAP 9, LOT 248: ST. PHILIPS EPISC. CHURCH
 34 WATER STREET, MATTAPOISETT, MA 02739
 MAP 9, LOT 250: GEORGE AND KATHLEEN EVANS
 36 WATER STREET, MATTAPOISETT, MA 02739

1008-22-99



Commonwealth of Massachusetts | Executive Office of Energy and Environmental Affairs

Department of Environmental Protection

Southeast Regional Office

Address: 20 Riverside Drive, Lakeville, MA 02347 | **Phone:** 508-946-2700

Maura T. Healey

Governor

Kim Driscoll

Lieutenant Governor

Rebecca Tepper

Secretary

Bonnie Heiple

Commissioner

January 27, 2026

Town of Mattapoisett
c/o Greenman – Pedersen Inc.
Attn: Emma Robert
179 South Street
Boston, MA 02111

RE: Minor Project Modification to DEP License No. 12257
Mattapoisett Harbor, Barstow Wharf, Mattapoisett

Dear Ms. Robert:

The Department has reviewed your request on behalf of the Town of Mattapoisett to modify the referenced Chapter 91 License. The modifications involve repairs to a section of culvert and anti-scour pad on the adjacent beach between MHW and MLW which convey an un-named perennial stream under Barstow Wharf to Buzzards Bay.

The proposed repair work is shown on a plan titled “Plan Accompanying Petition of Town of Mattapoisett to Dredge, Reconstruct, and Maintain Proposed Culvert at Mattapoisett Harbor at 30 Water Street, Mattapoisett, Plymouth County, Massachusetts”, dated January 16, 2026, 13 sheets, prepared by Timothy Letton, Certified MA Professional Engineer No. 53308, provided by Greenman – Pedersen Inc..

The Department has determined that pursuant to 310 CMR 9.22, the activity constitutes a minor project modification, which represents an insignificant deviation from the original specifications of the license, and as such this activity does not require a new or amended license. Please note that other local, state and federal requirements may apply.

If you have any questions pertaining to this matter, please do not hesitate to contact me at (857) 283-5901 or vin.manfredi@mass.gov.

Sincerely,

A handwritten signature in cursive script that reads "Vin Manfredi". The signature is written in black ink and is positioned above a horizontal line.

Vin Manfredi
Waterways Regulation Program

ecc: DEP, Waterways Regulation Program, Boston
Brendan Mullaney, Southeast Region Waterways Section Chief
Mattapoissett Conservation Commission
Maissoun Reda, Wetlands Section Chief, DEP SERO
Garrett Bauer, Town of Mattapoissett Highway Department

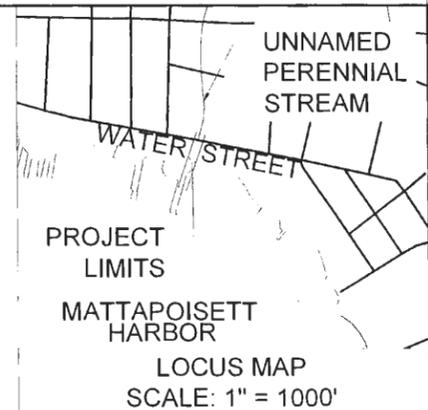
I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.



01.26.2026
DATE

DRAWING INDEX

SHEET	TITLE
1	COVER SHEET
2	LOCUS PLAN
3	EXISTING CONDITIONS PLAN
4	PROPOSED PLAN
5	TRANSVERSE BRIDGE SECTION - 1 (UPSTREAM)
6	TRANSVERSE BRIDGE SECTION - 2
7	TRANSVERSE BRIDGE SECTION - 3
8	TRANSVERSE BRIDGE SECTION - 4 (DOWNSTREAM)
9	TRANSVERSE BRIDGE SECTION - 5 (FULL PROFILE)
10	LONGITUDINAL BRIDGE SECTION - 1 (UPSTREAM)
11	LONGITUDINAL BRIDGE SECTION - 2 (DOWNSTREAM)
12	BRIDGE AND STRUCTURES PLAN
13	DREDGE AND FILL TABLES

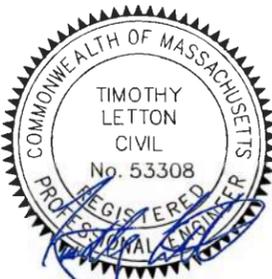


PLAN LEGEND

———	LAYOUT / PROPERTY LINE
———	ORDINARY HIGH WATER (OHW)
———	100-YEAR FLOOD ZONE (VE)
———	MEAN HIGH WATER (MHW)
———	MEAN LOW WATER (MLW)

NOTES

1. VERTICAL DATUM: ELEVATIONS REFER TO NAVD88 DATUM.
2. HORIZONTAL DATUM: PLANS REFER TO NAD83 DATUM.
3. FEMA MAP NUMBER 25023C0566K; EFFECTIVE DATE JULY 6, 2021; FEMA FLOOD INSURANCE STUDY (FIS) NUMBER 25023CV001C; EFFECTIVE DATE NOVEMBER 4, 2016. 100-YR FLOOD ZONE VE; EL. 18.0 UPSTREAM OF CULVERT; EL. 21.0 DOWNSTREAM OF CULVERT.
4. ORDINARY HIGH WATER (OHW) AT EL. 3.3-FEET NAVD88 UPSTREAM OF CULVERT. OHW ELEVATION BASED ON FIELD OBSERVATION OF STAINING ALONG CHANNEL WALLS AND HEADWALL.
5. MEAN HIGH WATER (MHW) AT EL. 1.9-FEET NAVD88 AND MEAN LOW WATER (MLW) AT EL. -2.0-FEET NAVD88 DOWNSTREAM OF CULVERT. MHW AND MLW ELEVATIONS BASED ON NOAA TIDAL DATA AND CONFIRMED THROUGH MEASUREMENT OF OBSERVED HEIGHT OF STAINING AT BARSTOW WHARF.
6. HISTORIC HIGH WATER DATA AVAILABLE VIA DEP GIS MAP LAYERS.
7. LANDOWNER INFORMATION PROVIDED ON SHEET 2 - LOCUS PLAN.
8. NET CHANGE VOL. = 0.00 CY - REFER TO SHEET 13 FOR DREDGE AND FILL TABLES.



01.26.2026

COVER SHEET
SHEET 1 OF 13
JANUARY 16, 2026

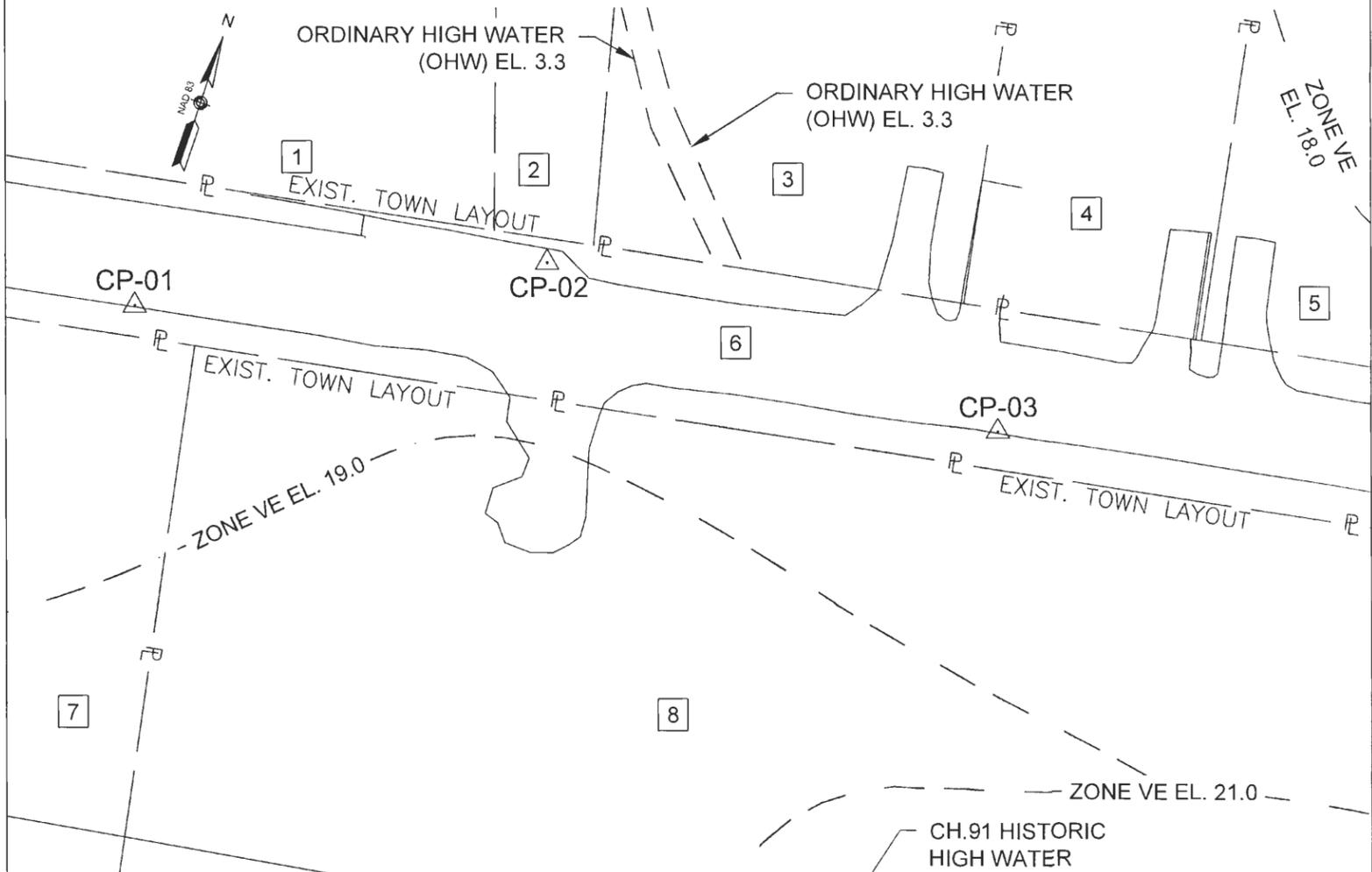
PLAN ACCOMPANYING PETITION OF TOWN OF
MATTAPOISETT TO DREDGE, RECONSTRUCT, AND MAINTAIN
PROPOSED CULVERT AT MATTAPOISETT HARBOR AT 30
WATER STREET, MATTAPOISETT, PLYMOUTH COUNTY,
MASSACHUSETTS

I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

01.26.2026
DATE

PROPERTY OWNERSHIP INFORMATION:

- | | |
|---|---|
| 1 35 WATER STREET, CHARLES MERROW | 5 43 WATER STREET, BARBARA HILLER |
| 2 35 WATER STREET, UTILITY AND VIEW EASEMENT | 6 WATER STREET TOWN LAYOUT RIGHT OF WAY |
| 3 37-39 WATER STREET, SEASPRAY VENTURES LLC | 7 0 WATER STREET, PRISCILLA GENEST |
| 4 41 WATER STREET, NANCY G. & DEBORAH A. KNIGHT | 8 30 WATER STREET, TOWN OF MATTAPOISETT |

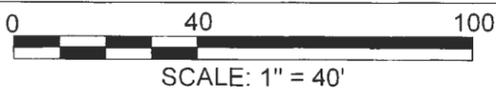


LOCATION REFERENCE POINTS:

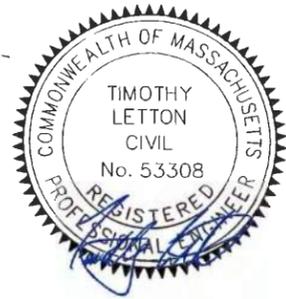
- △ CP-01 N: 2701318.547 E: 844742.587
- △ CP-02 N: 2701360.290 E: 844836.968
- △ CP-03 N: 2701354.781 E: 844956.411

NOTES:

1. LIMITS OF OHW, MHW, AND MLW SHOWN ON PLAN ARE CONSISTENT WITH EXTENTS OF SURVEY AND LIMITS OF PROJECT AREA



LOCUS PLAN
SHEET 2 OF 13
JANUARY 16, 2026



01.26.2026

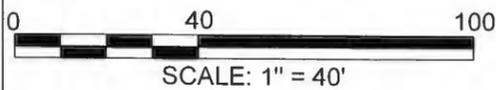
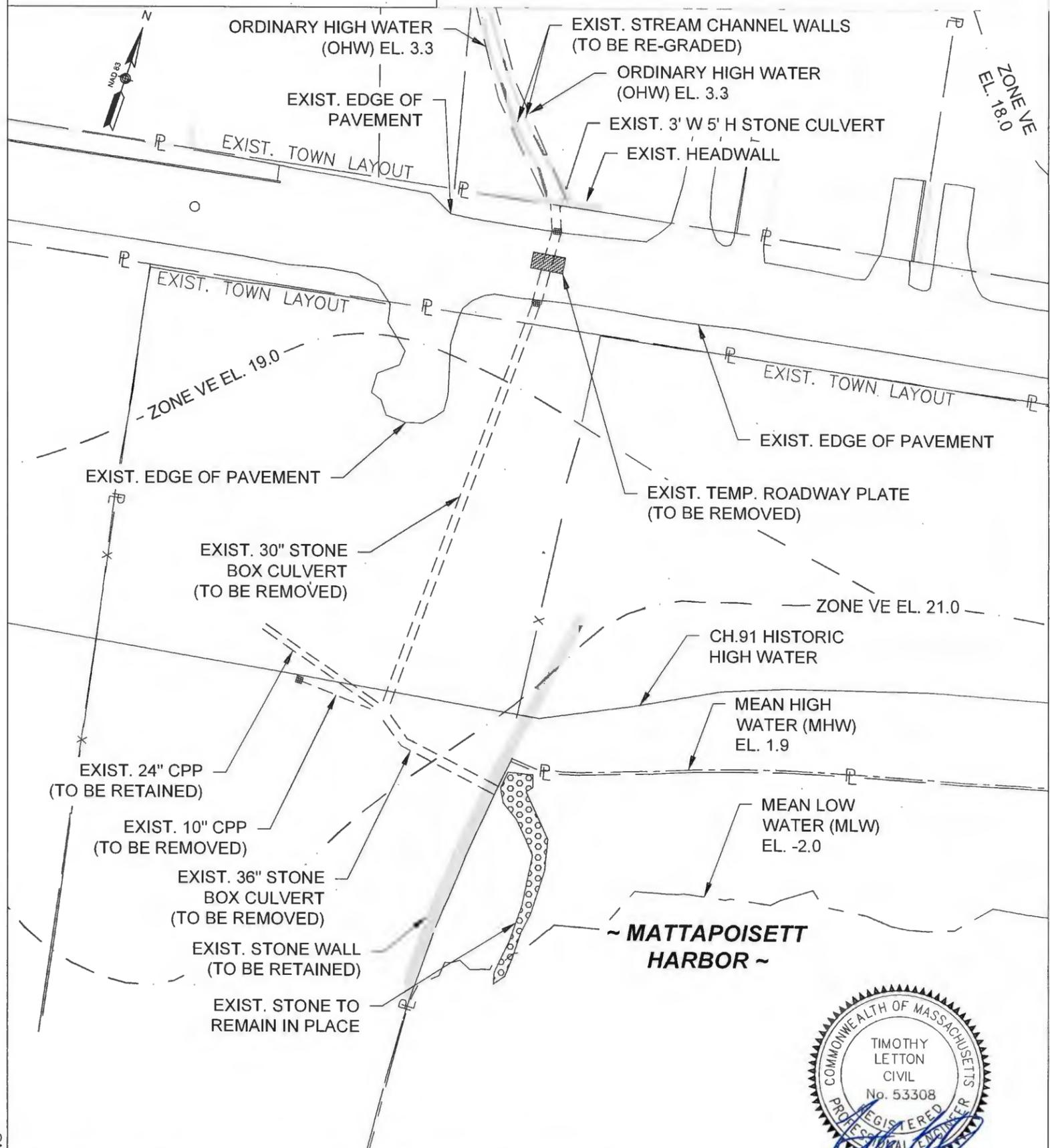
PLAN ACCOMPANYING PETITION OF TOWN OF MATTAPOISETT TO DREDGE, RECONSTRUCT, AND MAINTAIN PROPOSED CULVERT AT MATTAPOISETT HARBOR AT 30 WATER STREET, MATTAPOISETT, PLYMOUTH COUNTY, MASSACHUSETTS

15157.06_CH91_SHEETS_1-4.DWG

I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.



01.26.2026
DATE



EXISTING CONDITIONS PLAN
SHEET 3 OF 13
JANUARY 16, 2026



01.26.2026

PLAN ACCOMPANYING PETITION OF TOWN OF MATTAPOISETT TO DREDGE, RECONSTRUCT, AND MAINTAIN PROPOSED CULVERT AT MATTAPOISETT HARBOR AT 30 WATER STREET, MATTAPOISETT, PLYMOUTH COUNTY, MASSACHUSETTS

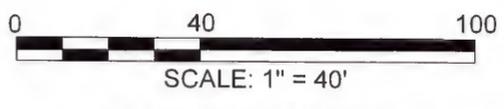
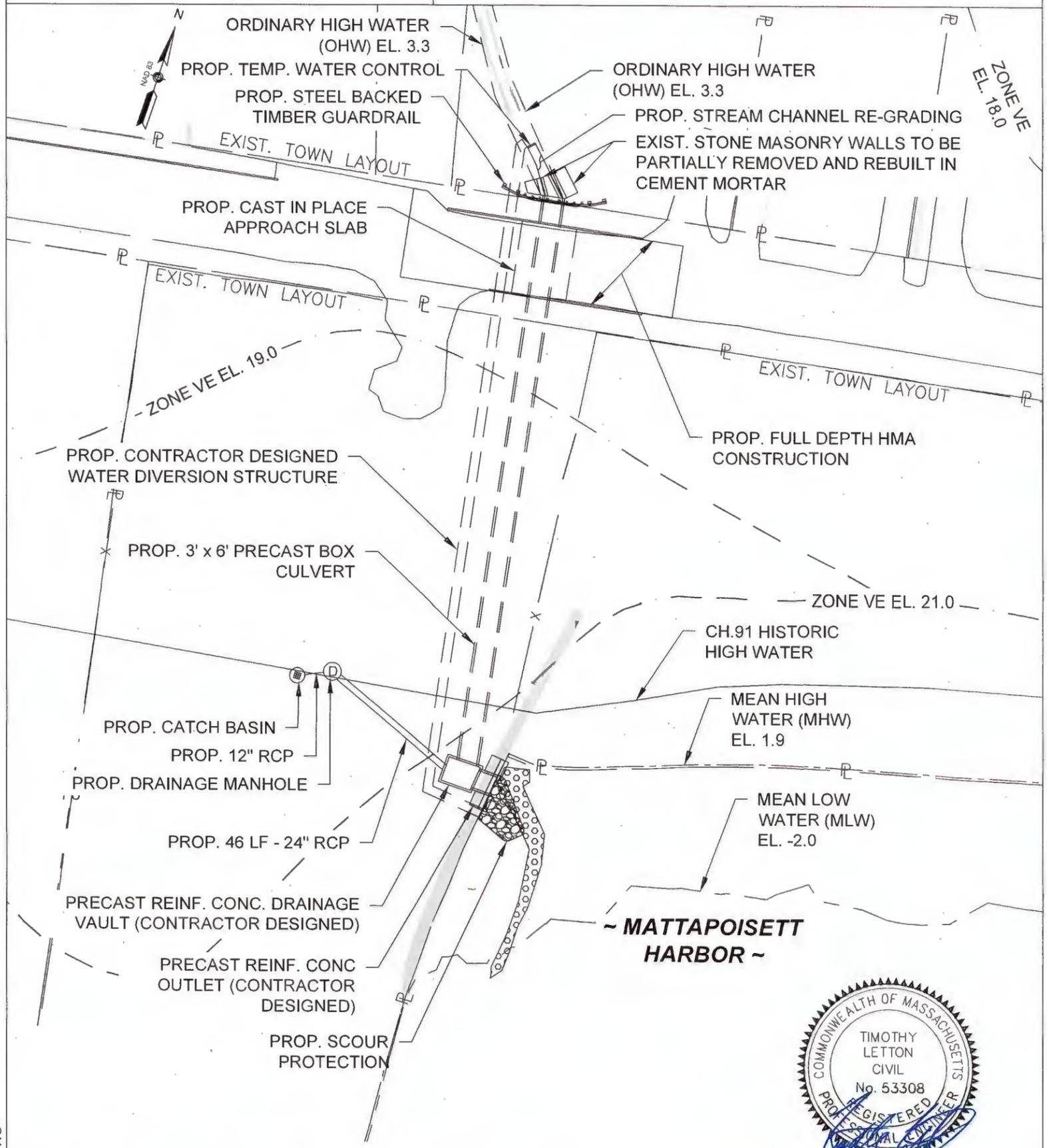
15157.06_CH91_SHEETS_1-4.DWG

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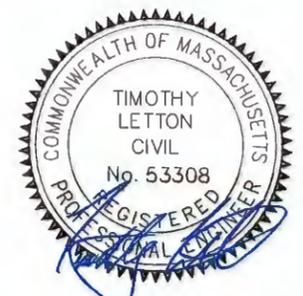
Timothy Letton

01.26.2026

DATE



PROPOSED PLAN
SHEET 4 OF 13
JANUARY 16, 2026



01.26.2026

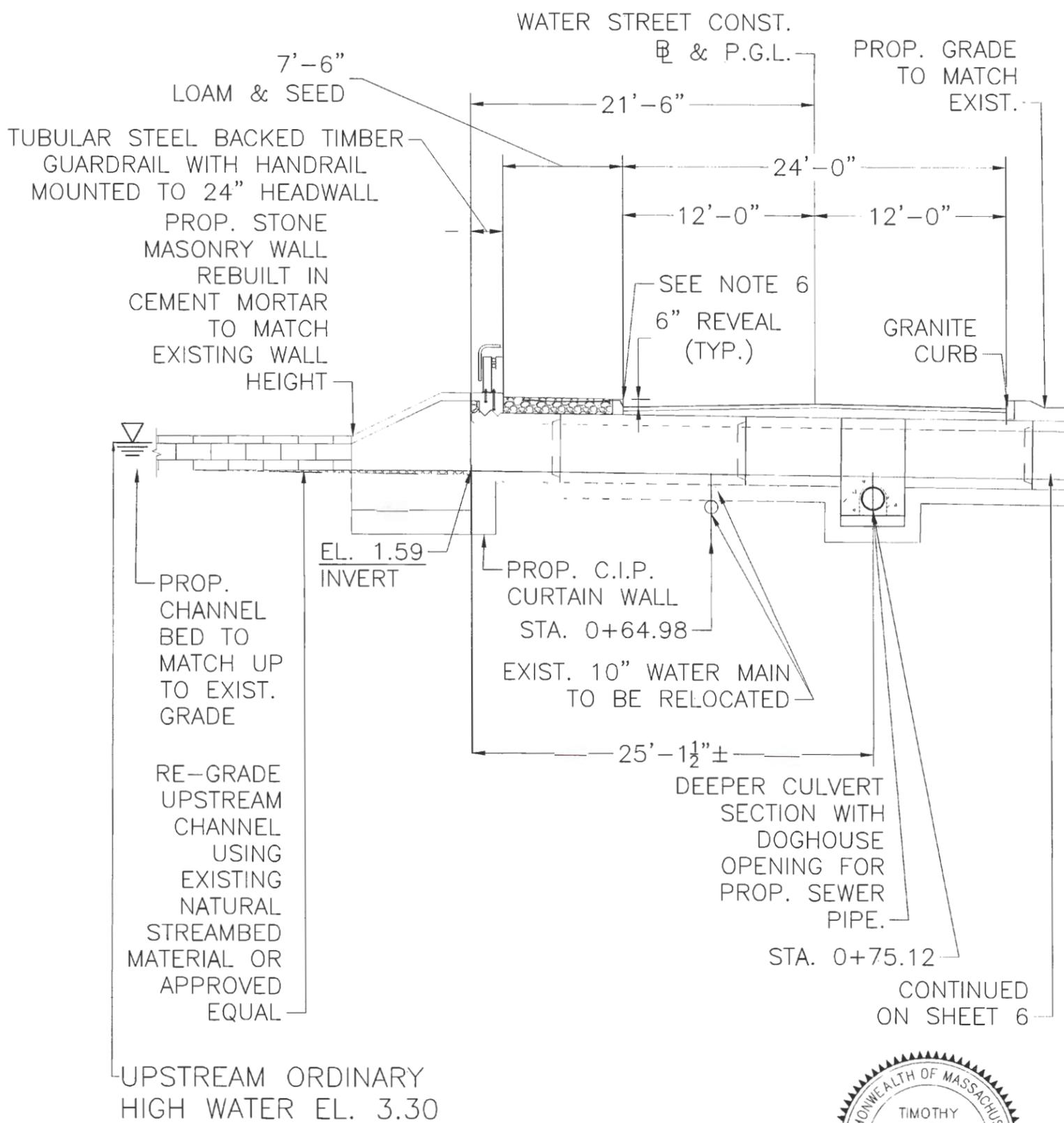
PLAN ACCOMPANYING PETITION OF TOWN OF MATTAPOISETT TO DREDGE, RECONSTRUCT, AND MAINTAIN PROPOSED CULVERT AT MATTAPOISETT HARBOR AT 30 WATER STREET, MATTAPOISETT, PLYMOUTH COUNTY, MASSACHUSETTS

15157.06_CH91_SHEETS_1-4.DWG

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01.26.2026
DATE



CONTINUED ON SHEET 6



TRANSVERSE BRIDGE SECTION - 1 (UPSTREAM)
SHEET 5 OF 13
JANUARY 16, 2026

NOTES:

1. TRANSVERSE SECTION OF STREAM AND CULVERT, VIEW FACING EAST

15157.06_CH91_SHEETS_5-11.DWG

I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

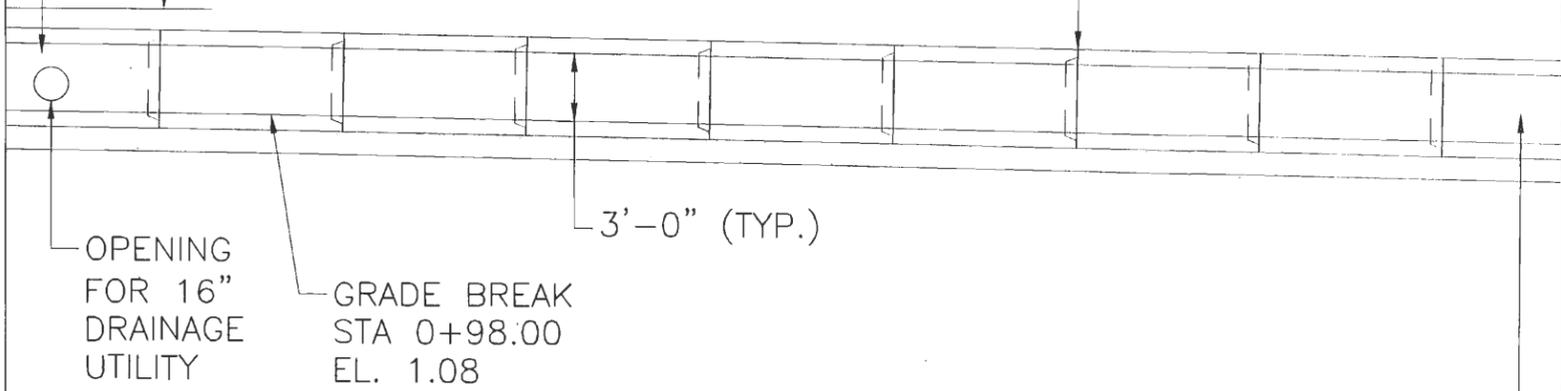


01.26.2026
DATE

CONTINUED ON SHEET 5

CONTRACTOR SHALL REMOVE EXISTING ELEMENTS WITHIN THE PROJECT LIMITS AT THE DIRECTION OF THE TOWN OF MATTAPOISETT AND RESTORE IN-KIND UPON PROJECT COMPLETION.

PROP. CONST. JOINT (TYP.)



OPENING FOR 16" DRAINAGE UTILITY

GRADE BREAK
STA 0+98.00
EL. 1.08

3'-0" (TYP.)

CONTINUED ON SHEET 7



TRANSVERSE BRIDGE SECTION - 2
SHEET 6 OF 13
JANUARY 16, 2026

01.26.2026

NOTES:

1. TRANSVERSE SECTION OF CULVERT, VIEW FACING EAST

15157.06_CH91_SHEETS_5-11.DWG

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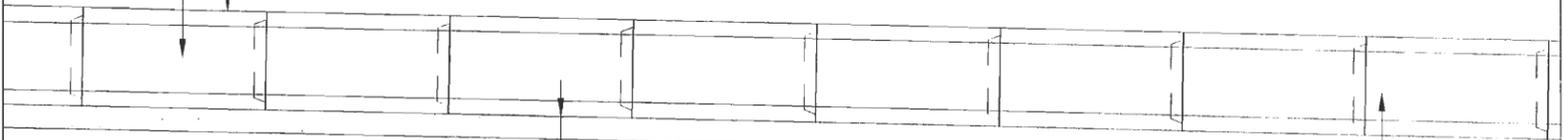


01.26.2026
DATE

CONTINUED ON SHEET 6

PRECAST BOX CULVERT
(CONTRACTOR DESIGNED)

PROP. PARKING LOT GRADE
TO MATCH EXIST.

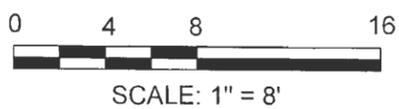


MIN. 12" CRUSHED STONE
FOR BRIDGE FOUNDATIONS
WRAPPED IN GEOTEXTILE
FABRIC UNDER THE CULVERT
& DRAINAGE VAULT

CONTINUED ON SHEET 8.



01.26.2026



TRANSVERSE BRIDGE SECTION - 3
SHEET 7 OF 13
JANUARY 16, 2026

NOTES:

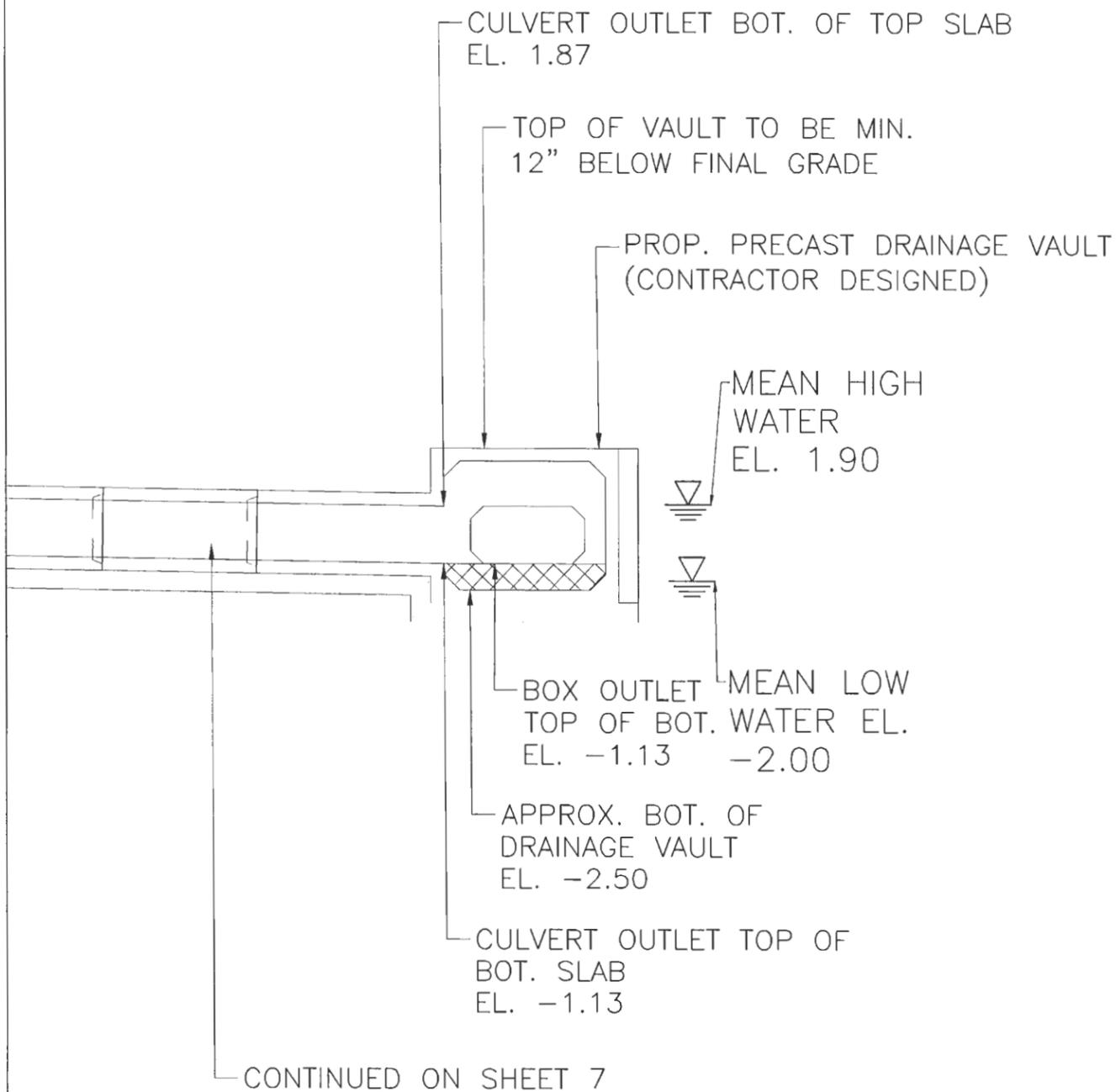
1. TRANSVERSE SECTION OF CULVERT, VIEW FACING EAST

15157.06_CH91_SHEETS_5-11.DWG

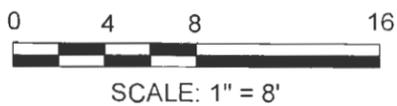
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01.26.2026
DATE



15157.06_CH91_SHEETS_5-11.DWG



TRANSVERSE BRIDGE SECTION - 4 (DOWNSTREAM)
SHEET 8 OF 13
JANUARY 16, 2026



01.26.2026

NOTES:

1. TRANSVERSE SECTION OF CULVERT OUTLET, VIEW FACING EAST
2. REFER TO SHEET 13 FOR DREDGE AND FILL TABLES

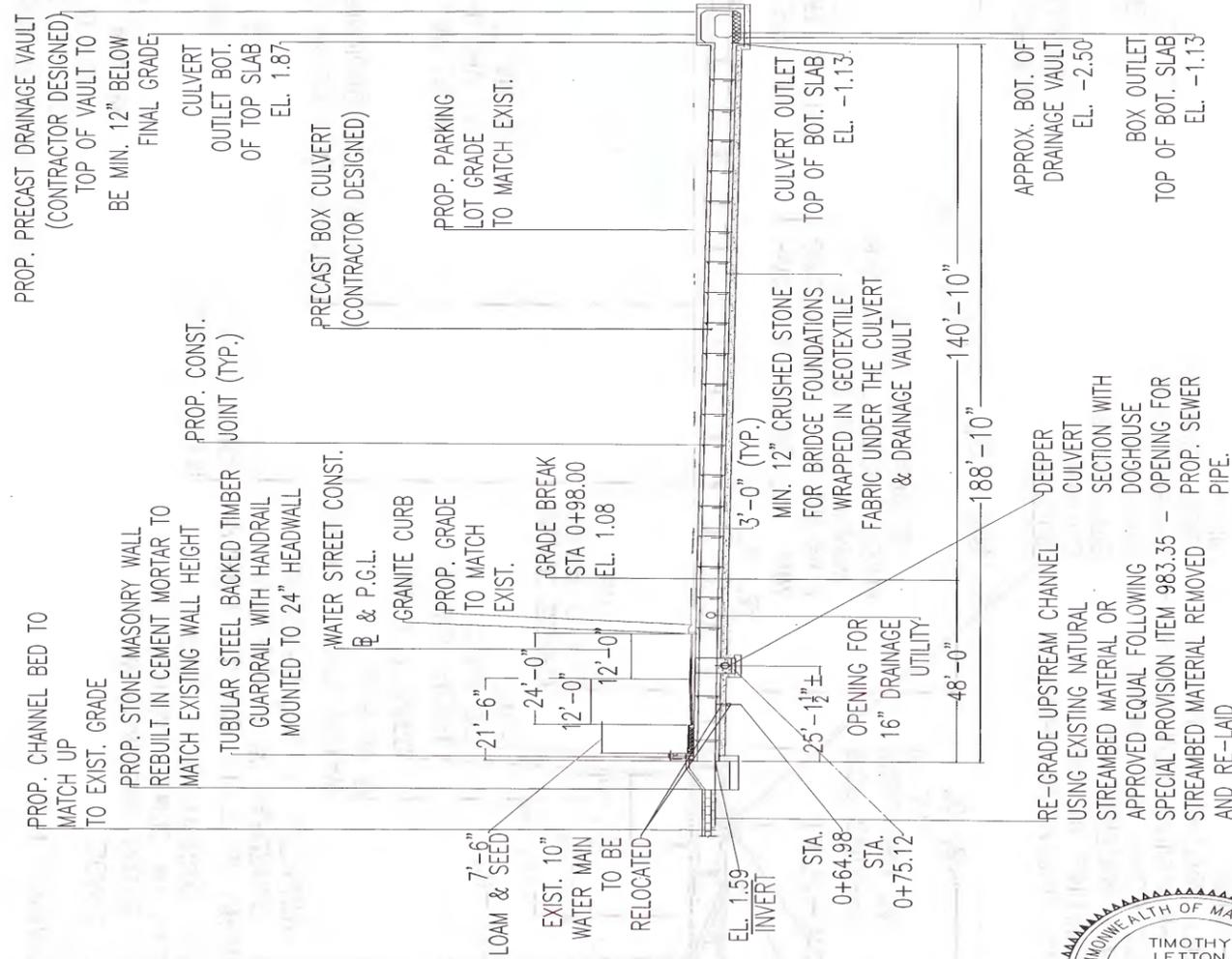
15157.06_CH91_SHEETS_5-11.DWG



TRANSVERSE BRIDGE SECTION - 5 (FULL PROFILE)

SHEET 9 OF 13
JANUARY 16, 2026

- NOTES:**
1. TRANSVERSE SECTION OF CULVERT, VIEW FACING EAST
 2. NET CHANGE VOL. = 0.00 CY - REFER TO SHEET 13 FOR DREDGE AND FILL TABLES



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01.26.2026
DATE

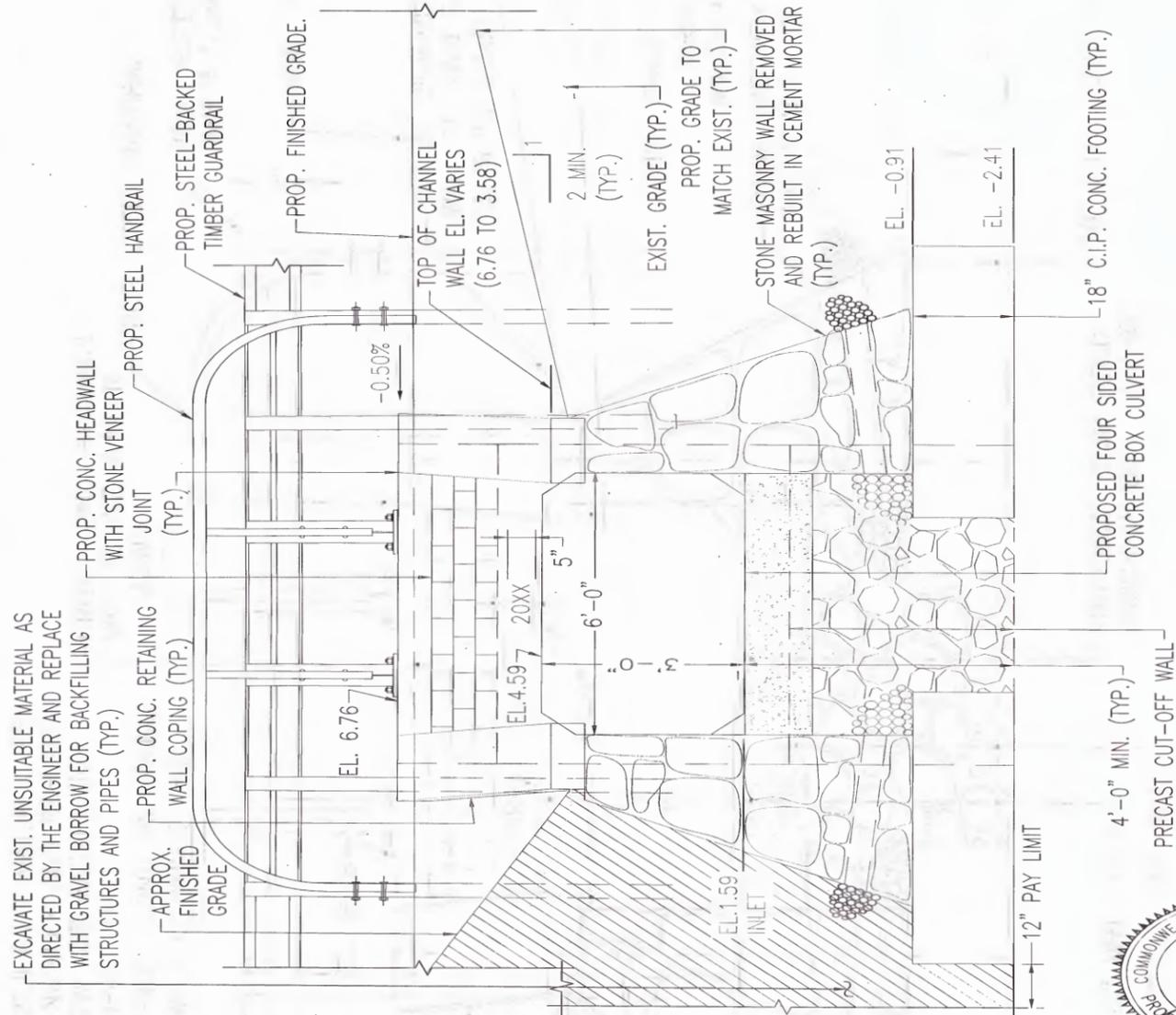


01.26.2026

15157.06_CH91_SHEETS_5-11.DWG



NOTES:
 1. ELEVATION VIEW OF CULVERT AT INLET



LONGITUDINAL BRIDGE SECTION - 1 (UPSTREAM)
 SHEET 10 OF 13
 JANUARY 16, 2026



01.26.2026

I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

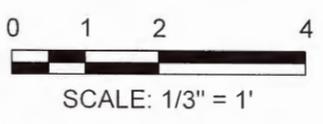
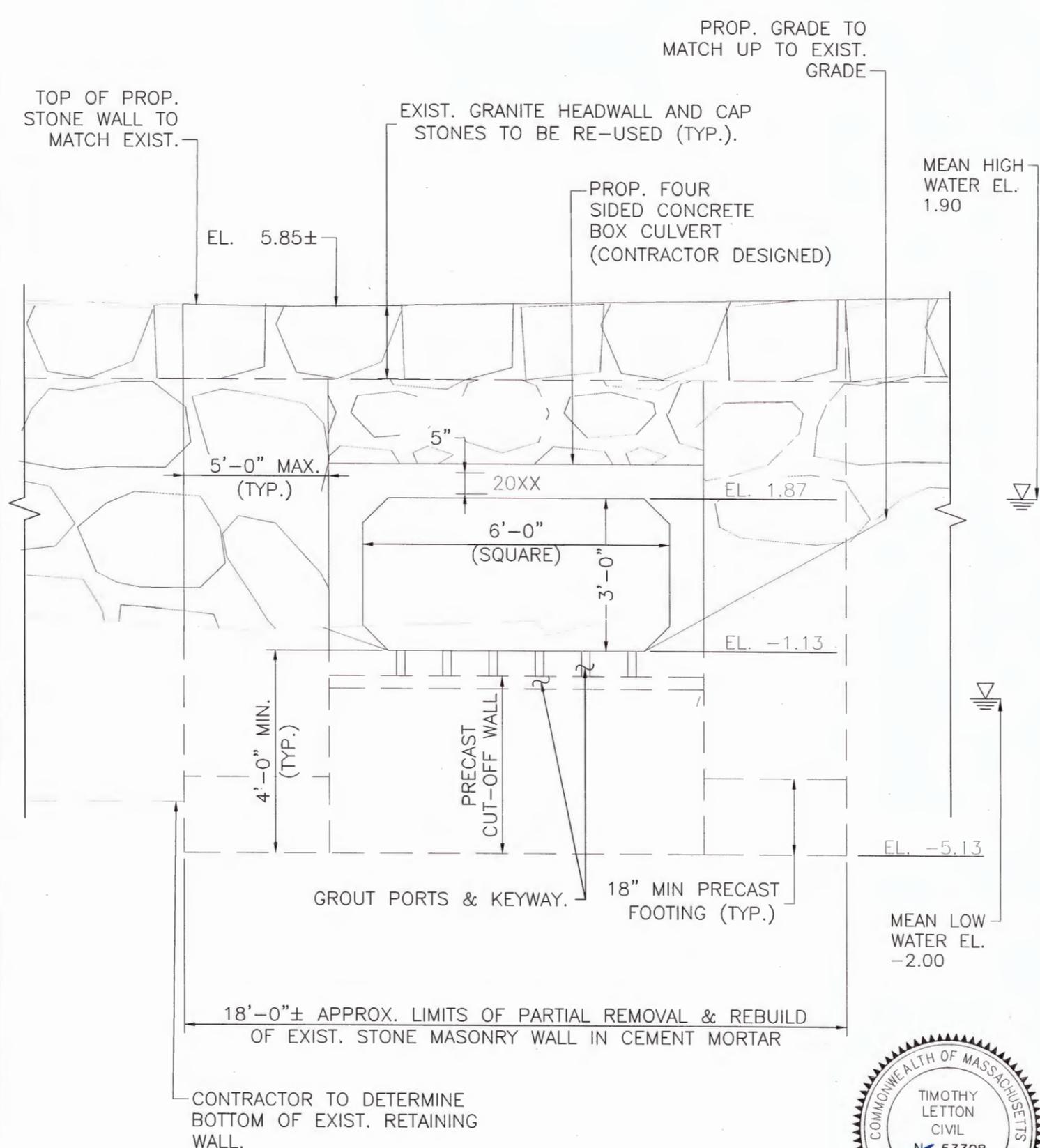
Timothy Letton

01.26.2026
 DATE

I CERTIFY THAT THIS PLAN, AS PREPARED, CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

Timothy Letton

01.26.2026
DATE



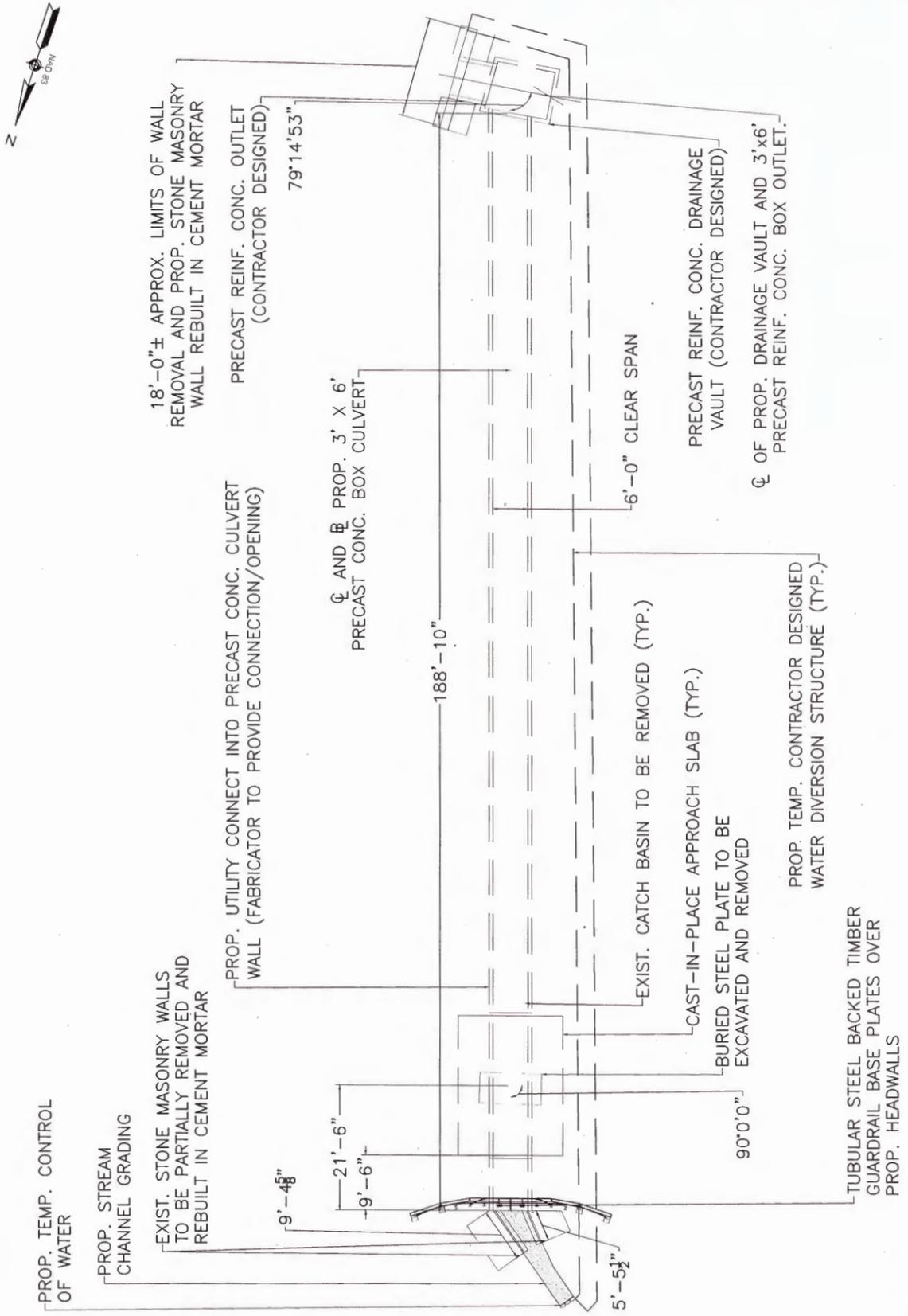
LONGITUDINAL BRIDGE SECTION - 2 (DOWNSTREAM)
SHEET 11 OF 13
JANUARY 16, 2026

01.26.2026

- NOTES:**
1. ELEVATION VIEW OF CULVERT AT OUTLET
 2. REFER TO SHEET 13 FOR DREDGE AND FILL TABLES

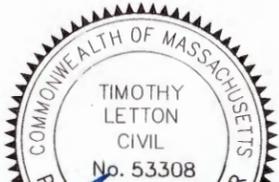
15157.06_CH91_SHEETS_5-11.DWG

.DWG



Timothy Letton

01.26.2026
DATE



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01.26.2026
DATE

DREDGE TOTALS

ELEMENT	MATERIAL	TOTAL PLAN AREA (SF)	AVG. DREDGE DEPTH (FT)	DREDGE VOL. (CF)
BARSTOW WHARF	EXISTING FILL MATERIAL AND DRAINAGE INFRASTRUCTURE	95.03	3.90	370.62
		95.03	3.90	370.62
		2.95	1.90	5.60
		240.00	2.40	583.20
		219.47	3.90	855.96
		206.31	3.90	804.61
SCOUR PROTECTION AT CULVERT OUTLET	EXISTING SAND	177.83	1.00	177.83

TOTAL DREDGE (CF) = 3168.44
TOTAL DREDGE (CY) = 117.35

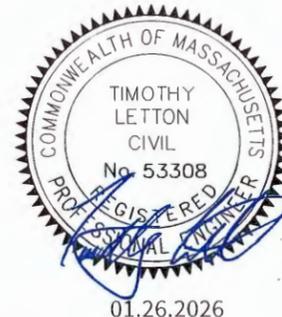
FILL TOTALS

ELEMENT	MATERIAL	TOTAL PLAN AREA (SF)	AVG. FILL DEPTH (FT)	FILL VOL. (CF)
BARSTOW WHARF	CB-105	19.63	3.90	76.57
	DMH-106	19.63	3.90	76.57
	D-31	-	-	5.50
	D-32	-	-	144.51
	BOX CULVERT	142.69	3.90	556.45
	DRAINAGE VAULT	206.31	3.90	804.61
SCOUR PROTECTION AT CULVERT OUTLET	D14 STONE FOR SCOUR PROTECTION AND SAND STOCKPILES FROM EXCAVATION AND PLACED AT EXISTING GRADES PRIOR TO DISTURBANCE	178.00	1.00	178.00

TOTAL FILL (CF) = 1842.03
TOTAL FILL (CY) = 68.22
REMAINING BORROW FILL (CY) = 49.13
TOTAL CUMULATIVE FILL (CY) = 117.35

NOTES:

- BORROW FILL EQUALS 49.13 CY AND REPRESENTS THE REMAINING FILL OF THE PROPOSED CONDITION.
- SUITABLE NATURAL DREDGED MATERIAL AT THE CULVERT OUTLET WILL BE SALVAGED AND STOCKPILED TO BE REPLACED BELOW MHW BOUNDARY OF THE COASTAL BEACH AT THE OUTLET.
- THE PROJECT PROPOSES TO MATCH THE EXISTING GRADES OF BARSTOW WHARF AND TIE INTO THE EXISTING SLOPE AT THE OUTLET. THIS RESULTS IN A NET CHANGE VOL. = 0.0 CY.



DREDGE & FILL TABLES
SHEET 13 OF 13
JANUARY 16, 2026

15157.06_CH91_SHEETS_12-13.DWG



Commonwealth of Massachusetts | Executive Office of Energy and Environmental Affairs

Department of Environmental Protection

Southeast Regional Office

Address: 20 Riverside Drive, Lakeville, MA 02347 | **Phone:** 508-946-2700

Maura T. Healey

Governor

Kim Driscoll

Lieutenant Governor

Rebecca Tepper

Secretary

Bonnie Heiple

Commissioner

January 27, 2026

Town of Mattapoisett
c/o Greenman – Pedersen Inc.
Attn: Emma Robert
179 South Street
Boston, MA 02111

RE: Minor Project Modification to DEP License No. 12257
Mattapoisett Harbor, Barstow Wharf, Mattapoisett

Dear Ms. Robert:

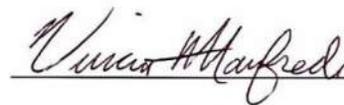
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The proposed repair work is shown on a plan titled “Plan Accompanying Petition of Town of Mattapoisett to Dredge, Reconstruct, and Maintain Proposed Culvert at Mattapoisett Harbor at 30 Water Street, Mattapoisett, Plymouth County, Massachusetts”, dated January 16, 2026, 13 sheets, prepared by Timothy Letton, Certified MA Professional Engineer No. 53308, provided by Greenman – Pedersen Inc..

The Department has determined that pursuant to 310 CMR 9.22, the activity constitutes a minor project modification, which represents an insignificant deviation from the original specifications of the license, and as such this activity does not require a new or amended license. Please note that other local, state and federal requirements may apply.

If you have any questions pertaining to this matter, please do not hesitate to contact me at (857) 283-5901 or vin.manfredi@mass.gov.

Sincerely,

A handwritten signature in cursive script that reads "Vin Manfredi". The signature is written in black ink and is positioned above a horizontal line.

Vin Manfredi
Waterways Regulation Program

ecc: DEP, Waterways Regulation Program, Boston
Brendan Mullaney, Southeast Region Waterways Section Chief
Mattapoissett Conservation Commission
Maissoun Reda, Wetlands Section Chief, DEP SERO
Garrett Bauer, Town of Mattapoissett Highway Department

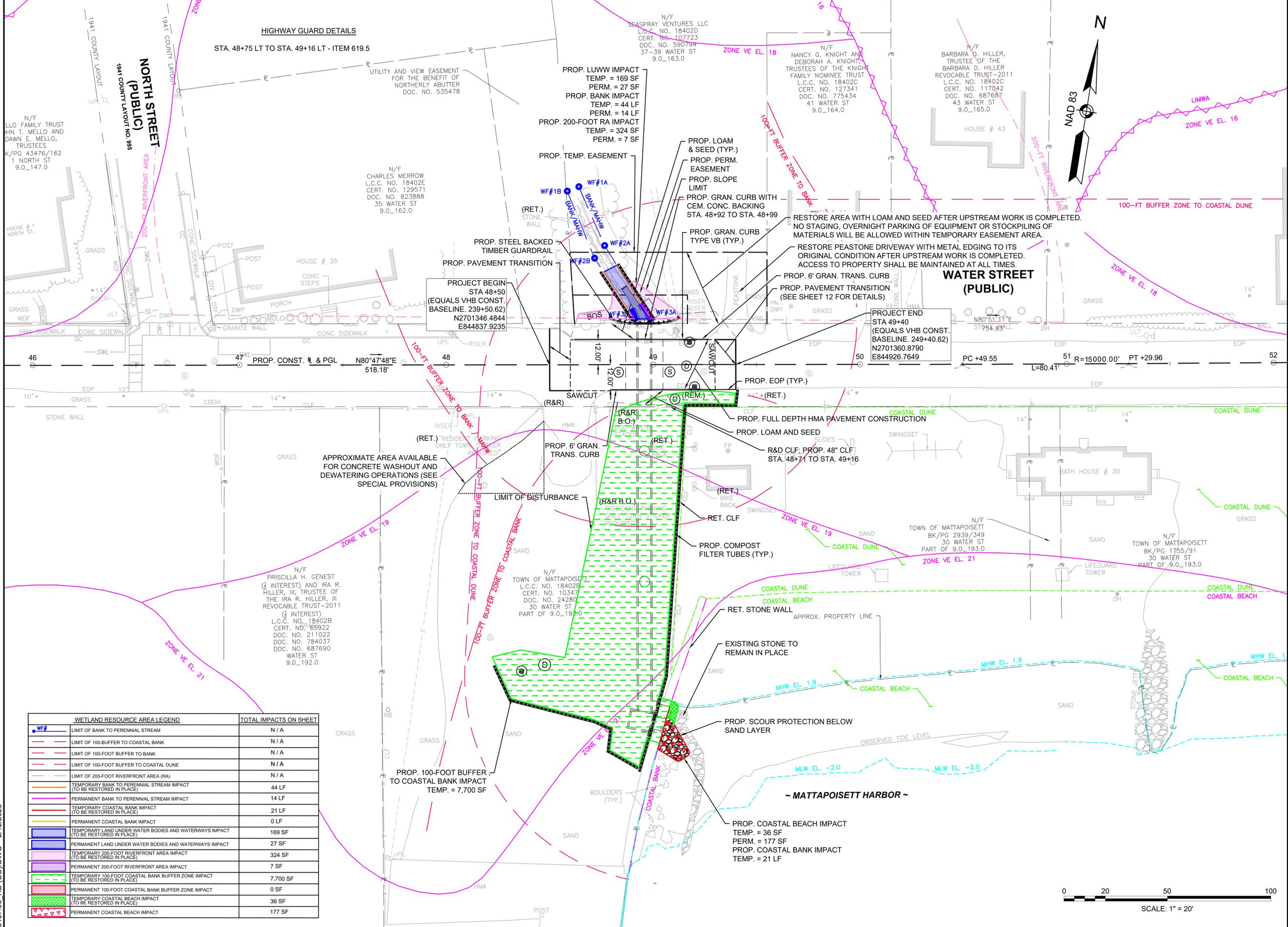
ATTACHMENT D

US ARMY CORPS OF ENGINEERS SELF VERIFICATION FORM NAE

(To Be Issued)

ATTACHMENT E
WATER STREET CULVERT
REPLACEMENT PLANS

**WATER STREET CULVERT
REPLACEMENT
WATER STREET CROSSING OVER
UNNAMED STREAM AT TOWN BEACH
MATTAPOISETT, MASSACHUSETTS**

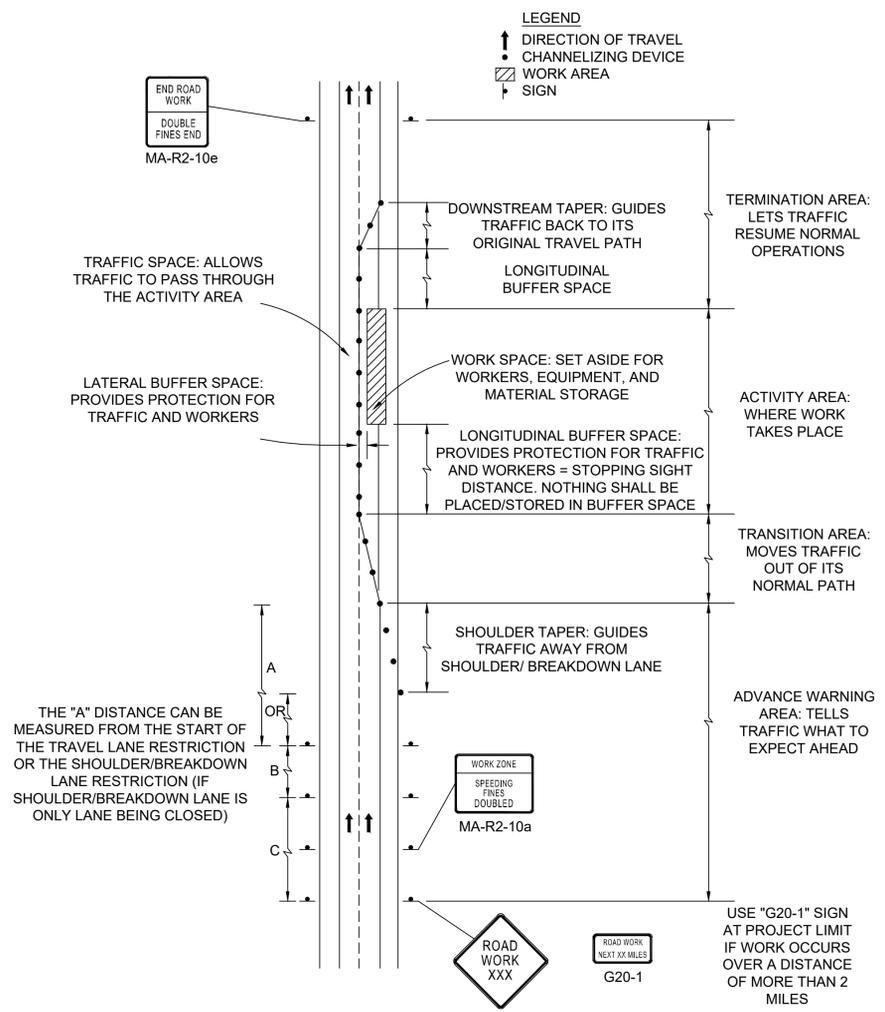


WETLAND RESOURCE AREA LEGEND	TOTAL IMPACTS ON SHEET
WF#	
LIMIT OF BANK TO PERENNIAL STREAM	N/A
LIMIT OF 100-FOOT BUFFER TO COASTAL BANK	N/A
LIMIT OF 100-FOOT BUFFER TO BANK	N/A
LIMIT OF 100-FOOT BUFFER TO COASTAL DUNE	N/A
LIMIT OF 200-FOOT RIVERFRONT AREA (RA)	N/A
TEMPORARY BANK TO PERENNIAL STREAM IMPACT (TO BE RESTORED IN PLACE)	44 LF
PERMANENT BANK TO PERENNIAL STREAM IMPACT	14 LF
TEMPORARY COASTAL BANK IMPACT (TO BE RESTORED IN PLACE)	21 LF
PERMANENT COASTAL BANK IMPACT	0 LF
TEMPORARY LAND UNDER WATER BODIES AND WATERWAYS IMPACT (TO BE RESTORED IN PLACE)	169 SF
PERMANENT LAND UNDER WATER BODIES AND WATERWAYS IMPACT	27 SF
TEMPORARY 200-FOOT RIVERFRONT AREA IMPACT (TO BE RESTORED IN PLACE)	324 SF
PERMANENT 200-FOOT RIVERFRONT AREA IMPACT	7 SF
TEMPORARY 100-FOOT COASTAL BANK BUFFER ZONE IMPACT (TO BE RESTORED IN PLACE)	7,700 SF
PERMANENT 100-FOOT COASTAL BANK BUFFER ZONE IMPACT	0 SF
TEMPORARY COASTAL BEACH IMPACT (TO BE RESTORED IN PLACE)	36 SF
PERMANENT COASTAL BEACH IMPACT	177 SF

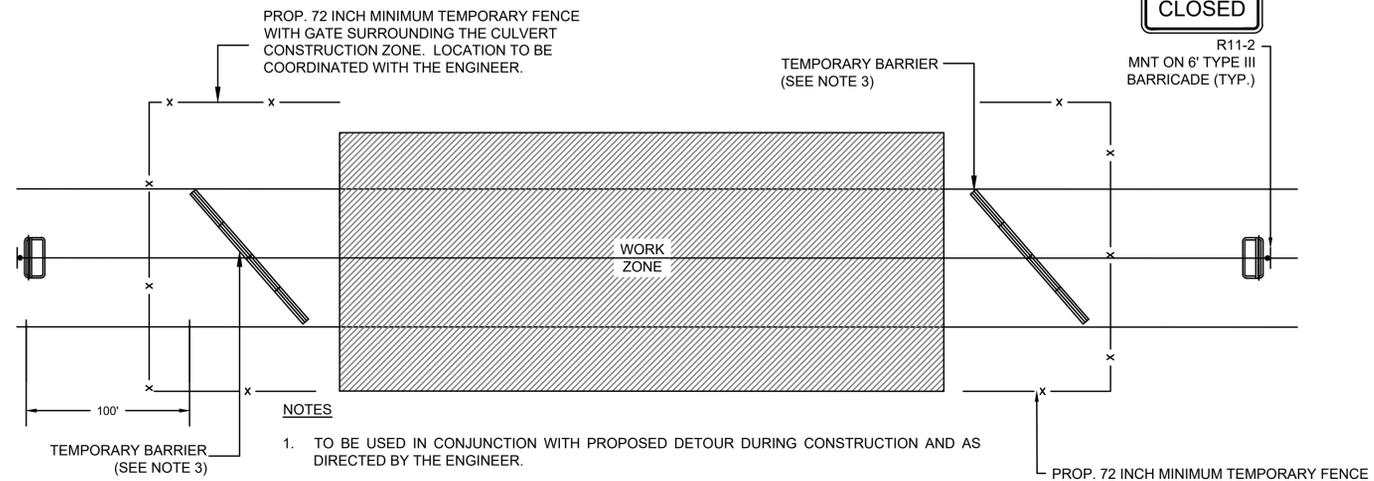
REVISIONS		
NO.	REVISION	DATE

3/4/2026
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15157.06_HD_COI.DWG 2/12/2026



COMPONENT PARTS OF A TEMPORARY TRAFFIC CONTROL (TTC) ZONE
NOT TO SCALE



- NOTES**
1. TO BE USED IN CONJUNCTION WITH PROPOSED DETOUR DURING CONSTRUCTION AND AS DIRECTED BY THE ENGINEER.
 2. CONTRACTOR SHALL REMOVE SEGMENTS OF TEMPORARY CONCRETE BARRIER AS NECESSARY TO GAIN ACCESS TO THE SITE. CONTRACTOR SHALL REPLACE THE BARRIER AT THE END OF EACH WORKING DAY TO SECURE THE SITE. THE COST ASSOCIATED WITH REMOVING AND RESETTING THE TEMPORARY CONCRETE BARRIER SHALL BE CONSIDERED INCIDENTAL TO ITEM 853.2.
 3. PROPOSED TEMPORARY BARRIER SHALL CONFORM TO MASH TEST LEVEL 2
 4. IT IS INTENDED THAT THE DETOUR SHALL BE IN PLACE UNTIL THE PROPOSED CULVERT HAS BEEN INSTALLED AND BACKFILLED AND THE GUARDRAIL HAS BEEN INSTALLED. THE CONTRACTOR SHALL STAGE THE CONSTRUCTION TO MINIMIZE THE TIME THAT THE DETOUR WILL BE IN PLACE.
 5. SHOULD THE ROAD BE REQUIRED TO BE OPENED DUE TO THE SUMMER SHUTDOWN, AND PRIOR TO THE GUARDRAIL IN PLACE, THE CONTRACTOR SHALL PROVIDE TEMPORARY BARRIER ALONG THE NORTH SIDE, INCLUDING TEMPORARY END TREATMENTS, TO THE SATISFACTION OF THE ENGINEER. TEMPORARY BARRIER FOR ROADSIDE PROTECTION SHALL BE INCIDENTAL TO THE CONTRACT.

ROAD CLOSURE DETAIL - DETAIL "A"
NOT TO SCALE

CONSTRUCTION SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)		NUMBER OF SIGNS REQUIRED	COLOR			UNIT AREA IN SQUARE FEET	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING		BACK-GROUND	LEGEND	BORDER		
MA-R2-10a	48"	36"	WORK ZONE SPEEDING FINES DOUBLED	MASSDOT STANDARD		2	FLUORESCENT ORANGE / WHITE	BLACK	BLACK	12.00	24.00
MA-R2-10e	36"	48"	END ROAD WORK DOUBLE FINES END	MASSDOT STANDARD		2	FLUORESCENT ORANGE / WHITE	BLACK	BLACK	12.00	24.00
MA-W20-7b	36"	36"	POLICE OFFICER AHEAD	MASSDOT STANDARD		2	FLUORESCENT ORANGE	BLACK	BLACK	9.00	18.00
W20-1	36"	36"	ROAD WORK AHEAD	↑		5	FLUORESCENT ORANGE	BLACK	BLACK	9.00	45.00
W20-2a	36"	36"	DETOUR AHEAD			4	FLUORESCENT ORANGE	BLACK	BLACK	9.00	36.00
R11-2	48"	30"	ROAD CLOSED	↓		2	WHITE	BLACK	BLACK	10.00	20.00
R11-4	60"	60"	ROAD CLOSED TO THRU TRAFFIC			2	WHITE	BLACK	BLACK	25.00	50.00
M4-8a	24"	18"	END DETOUR			1	FLUORESCENT ORANGE	BLACK	BLACK	3.00	3.00
M4-9R	30"	24"	DETOUR →			7	FLUORESCENT ORANGE	BLACK	BLACK	5.00	35.00
M4-9L	30"	24"	DETOUR ←			6	FLUORESCENT ORANGE	BLACK	BLACK	5.00	30.00

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TEMPORARY TRAFFIC CONTROL PLANS

SCALE: N.T.S.

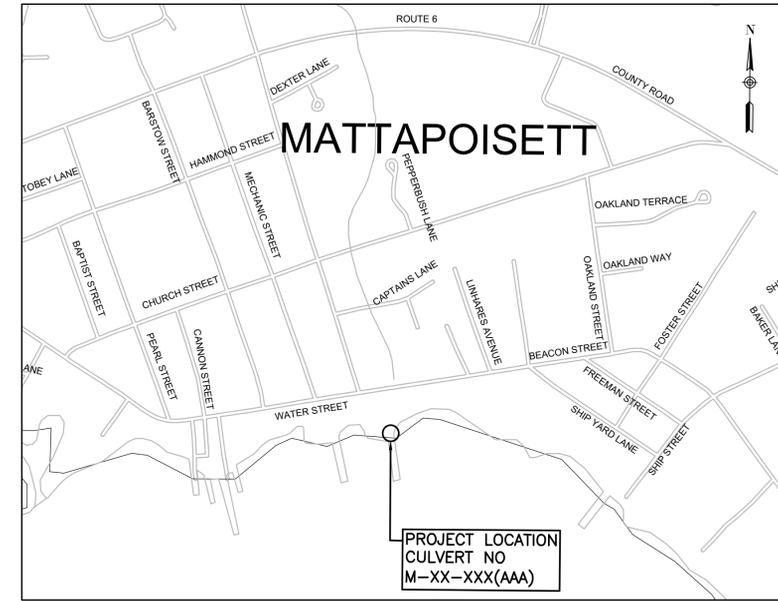
MAX-2015157.09

KEY PLAN NOTES:

1. SEE DRAINAGE & UTILITY PLAN FOR PROPOSED AND EXISTING UTILITY INFORMATION.
2. CONTRACTOR TO COORDINATE THE INSTALLATION OF NEW GAS LINE UNDER PROPOSED CULVERT WITH UTILITY OWNER (EVERSOURCE) AND THE TOWN OF MATTAPOISETT. UPSTATION AND DOWNSTATION GAS CONNECTION SHALL BE MADE AVAILABLE THROUGH THE UTILITY OWNER.
3. CONTRACTOR TO COORDINATE THE INSTALLATION OF PROPOSED WATER MAIN RELOCATION AND INSTALLATION LIMITS WITH THE TOWN OF MATTAPOISETT. FINAL CONDITION SHALL ACCOMMODATE MASSDOT PROJECT #607440 - CORRIDOR IMPROVEMENTS AND RELATED WORK ON MAIN STREET, WATER STREET, BEACON STREET, AND MARION ROAD (TIP 2028).

STA. EQUATION:

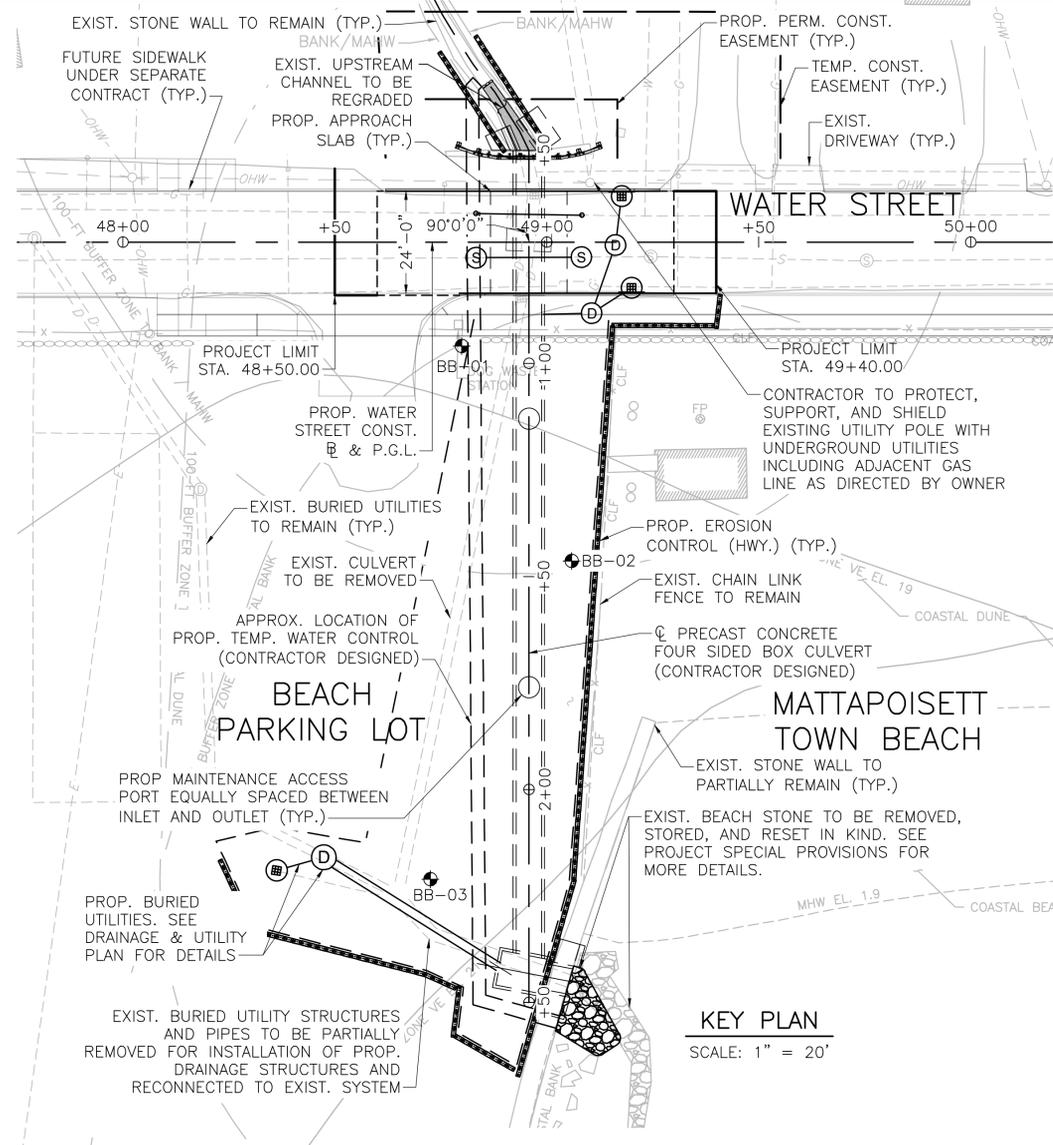
STA. 48+95.77 WATER STREET = STA. 0+71.50 CULVERT CHANNEL



LOCUS
1" = 500'

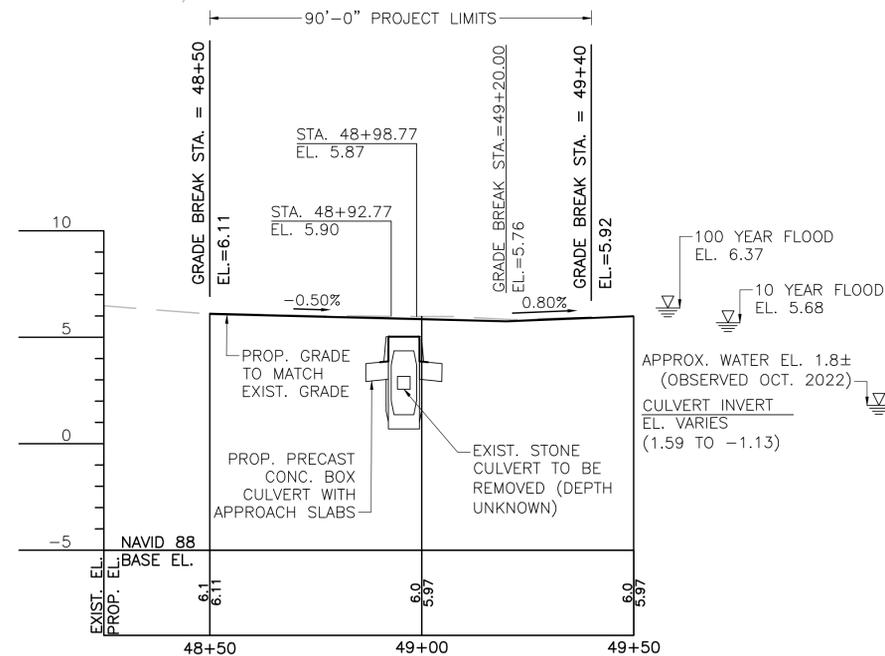
INDEX OF CULVERT SHEETS

14. KEY PLAN, LOCUS MAP, & PROFILES
15. GENERAL NOTES & ESTIMATED QUANTITIES
16. BORING LOGS (1 OF 2)
17. BORING LOGS (2 OF 2)
18. PLAN AND TRANSVERSE SECTION
19. INLET & OUTLET ELEVATIONS
20. CULVERT DETAILS
21. WALL DETAILS & CULVERT SECTIONS
22. BRIDGE RAIL DETAILS 1
23. BRIDGE RAIL DETAILS 2
24. GUARDRAIL DETAILS 1
25. GUARDRAIL DETAILS 2



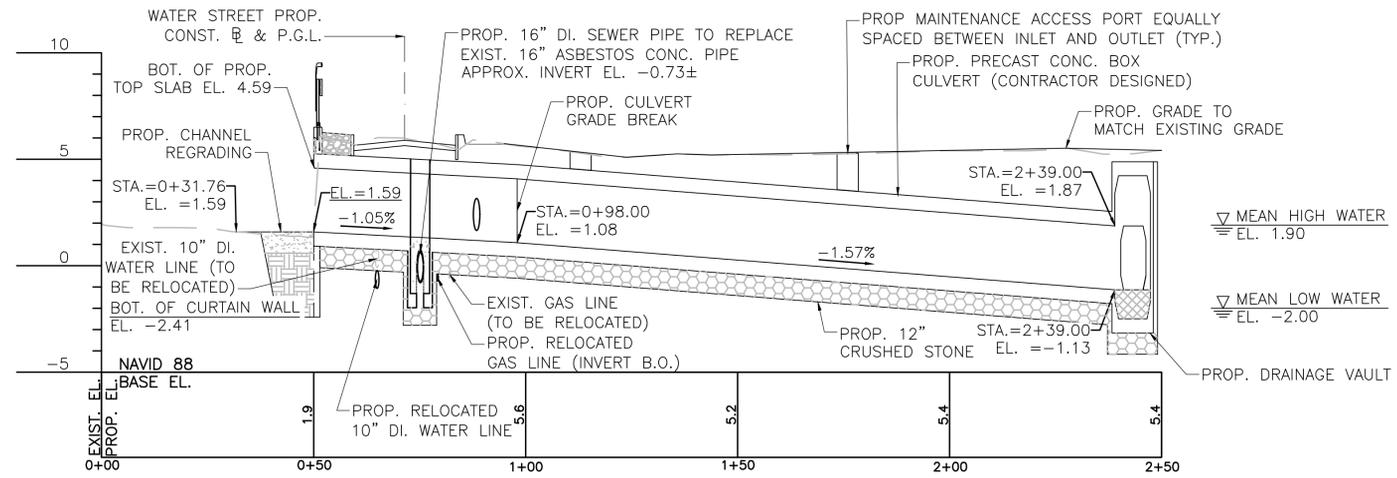
KEY PLAN

SCALE: 1" = 20'



PROFILE - ALONG WATER STREET CONST. & P.G.L.

HORIZ. SCALE: 1" = 20'
VERT. SCALE: 1/4" = 1'-0"



PROFILE - ALONG CULVERT CHANNEL

HORIZ. SCALE: 1" = 20'
VERT. SCALE: 1/4" = 1'-0"

REVISIONS

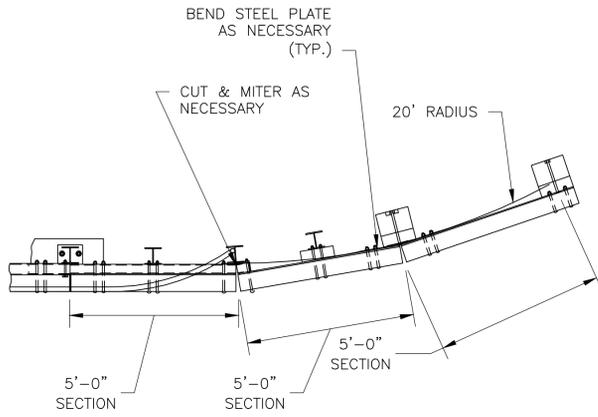
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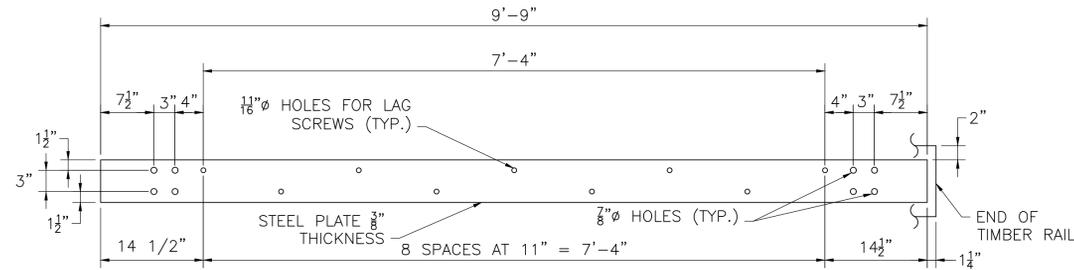
**KEY PLAN,
LOCUS MAP, &
PROFILES**

SCALE: AS NOTED

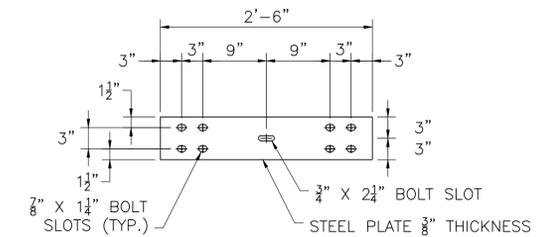
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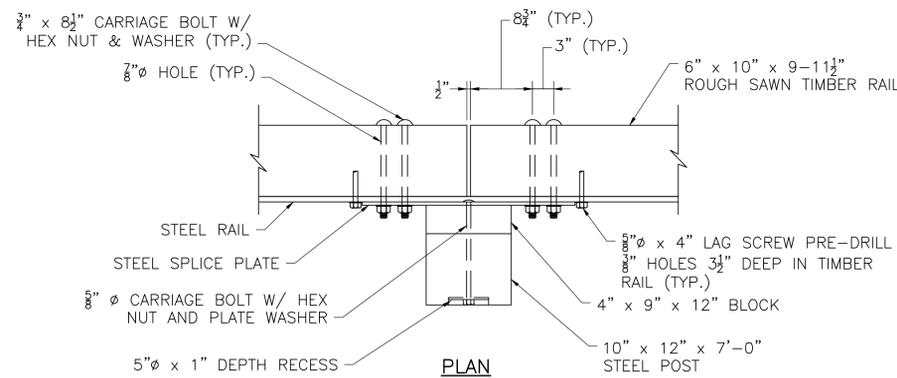
CURVED RAIL



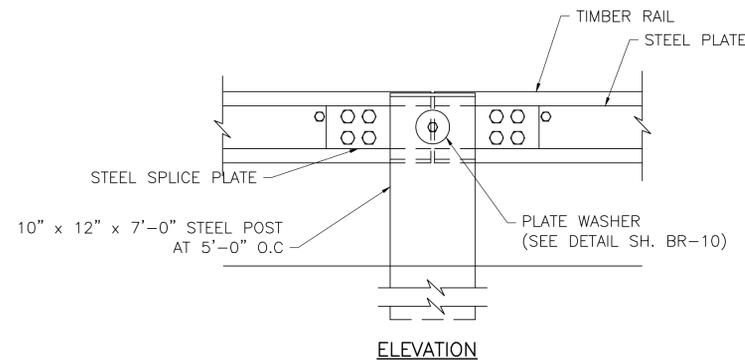
STEEL RAIL



STEEL SPLICE PLATE

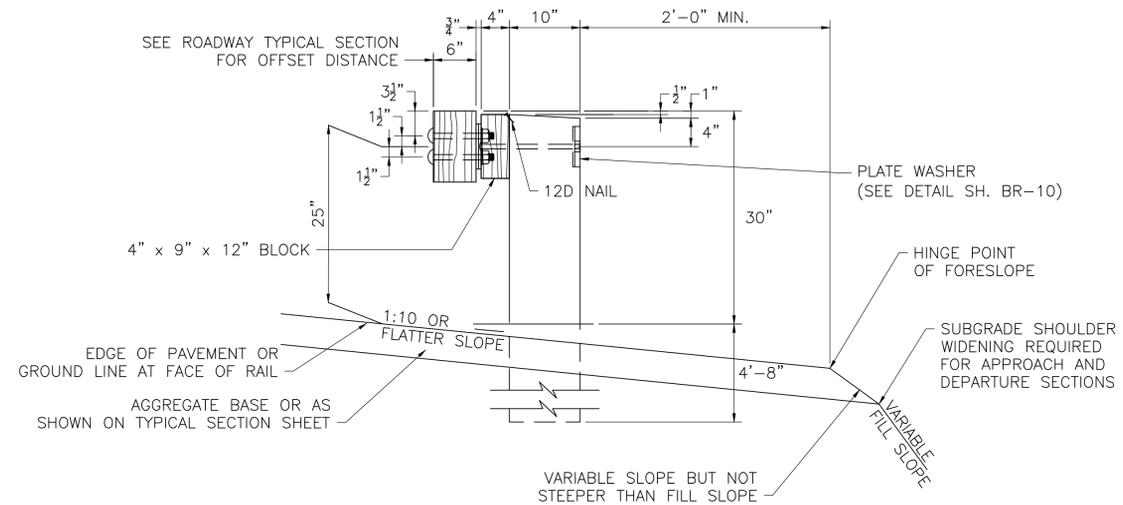


PLAN



ELEVATION

POST CONNECTION



TYPICAL GUARDRAIL CROSS SECTION

STEEL-BACKED TIMBER GUARDRAIL
NOT TO SCALE

GENERAL NOTES:

1. THE STEEL BACKED TIMBER RAILING USED IS CURVED. THE DETAILS ON THIS SHEET ARE PRIMARILY FOR STRAIGHT SECTIONS OF RAIL. HOWEVER, AS SOME OF THE DETAILS ARE NOT DUPLICATED ON THE CURVED SHEET, THIS SHEET IS INCLUDED FOR REFERENCE ONLY.
2. PRE-DRILL 5/8 INCH HOLE IN TIMBER RAIL AND 3/4 INCH HOLES IN THE WOOD SPACER BLOCK FOR THE 5/8 INCH LAG SCREWS.
3. USE AASHTO M270 GRADE 50 FOR ALL STRUCTURAL STEEL AND FASTENER HARDWARE AS SPECIFIED.

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**GUARDRAIL
DETAILS 1**

SCALE: N.T.S.

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