

**TOWN OF MARBLEHEAD, MASSACHUSETTS
MARBLEHEAD MUNICIPAL LIGHT DEPARTMENT**

CONTRACT DOCUMENTS
FOR

**FORCE MAIN LAND BRIDGE PROJECT
020824MMLD001**

02/08/2024

Marblehead Municipal Light Department (MMLD)

80 Commercial Street

Marblehead, MA 01945

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Town of Marblehead

INVITATION FOR BIDS

The Marblehead Municipal Light Department, (“MMLD”), the Awarding Authority, invites sealed bids from **General Contractors** for the **Force Main Land Bridge Project** in Marblehead, Massachusetts, in accordance with the documents prepared by Bayside Engineering dated February 7th. Copies of the Invitation for Bids may be obtained at <https://www.marblehead.org/procurement-department/pages/bids> on or after February 8, 2024. Bids are subject to M.G.L. c. 30, § 39M & to minimum wage rates required by M.G.L. c.149 §§26 to 27H inclusive. Bids will be received until **February 28, 2024, at 10:00 AM** and publicly opened at the date and time. Any bids received after such time will not be accepted unless this date and time has been changed by addendum. General bids shall be accompanied by a bid deposit that is not less than five (5%) of the greatest possible bid amount (considering all alternates) and made payable to the **Marblehead Municipal Light Department** in the form of a certified check, a bid bond, cash, or a treasurer's or cashier's check. An optional **Pre-Bid Conference** and site visit will be held on **February 14, at 10 am** at the **Marblehead Municipal Light Department, 80 Commercial Street, Marblehead, MA.** All bids for this project are subject to applicable public bidding laws of Massachusetts. 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. The contract will be awarded to the responsive bidder deemed by the awarding authority to be the lowest responsible and eligible bidder. The bidder agrees that its bid shall be good and may not be withdrawn for a period of 30 days, Saturdays, Sundays, and legal holidays excluded, after the opening of the bids. MMLD 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 MMLD.

Marblehead Municipal Light Department
Joseph Kowalik
General Manager

SECTION 00 21 13

INSTRUCTIONS TO BIDDERS

1. Receipt and Opening of Bids

Marblehead Municipal Light Department, Marblehead, Massachusetts, herein called the Owner or Awarding Authority, acting by and through its Electric Light Commission, will receive Bids for the project known as the Force Main Land Bridge Project.

This Project is subject to the public bidding statutes, G.L. c. 30, § 39M. Bids will be received by the Marblehead Municipal Light Department at its Main Office with the address of 80 Commercial Street, Marblehead, Ma 01945, ATTN: General Manager. The envelope must be conspicuously marked as follows: SEALED BID FOR FORCE MAIN LAND BRIDGE PROJECT. If the bid envelope is mailed, it should be enclosed in a second envelope for mailing to avoid inadvertent opening of the bid.

Any bid may be withdrawn prior to the 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 30 days, Saturdays, Sundays, and legal holidays excluded, after the opening of bids.

2. Location and Work to be Done

The location, general characteristics, and principal details of the Work are indicated on plans entitled: Marblehead Municipal Light Department Sewer Force Main Land Bridge Project.

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 or its Architect 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 done for the completion of that item.

Note: The concrete culvert sections indicated in the plans and specifications will be supplied and delivered to the site by another contractor on behalf of MMLD. The construction contract procured under these bid documents is only for the installation of the culvert sections and all related construction work to fully install the land bridge.

3. Preparation of Bid

Each bid must be submitted on the prescribed form. All blank spaces for bid prices must be filled in with both words and figures.

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 and addenda requirements will be rejected prior to checking of bid amounts.

Bids shall be filed as set forth in Section 1, above.

Properly executed bid security shall be included with the bid packages submitted by bidders.

Bid signatures will be checked.

All addenda, if any, will be delivered to the bidder at the address provided by the bidder. Each bidder shall be **solely** responsible to ensure that it has provided a valid mail and email address for such purpose, and before submitting its bid, to confirm with the Awarding Authority that the bidder has received all addenda.

5. Modification

Any bidder may modify its bid by written communication to MMLD at any time prior to the scheduled closing time for receipt of bids. Such written communication must be sealed and delivered in the same manner as the bid.

6. Ability and Experience of Bidder

No award will be made to any bidder who cannot satisfy the Owner that they have 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.

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 itself 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 its obligation to furnish all material and labor necessary to carry out the provisions of this contract. Insofar as possible the Contractor, in carrying out this

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 questions regarding, or interpreting the meaning of the plans, specifications, or other 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 to these bid documents, as described below, is given informally, and shall not be used as the basis of a claim against the Owner.

Every question regarding the Contract Documents or request for interpretation of the Contract Documents should be emailed to William Capone of Bayside Engineering at bcapone@baysideengineering.com (project engineer) with carbon copy sent to the General Manager of the Marblehead Light Department at jkowalik@mhdld.com, and to be given consideration must be received at least seven 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 provided to all potential bidders who have obtained a copy of this IFB from the Town.

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 its delivery of the executed Contract, the Contractor shall furnish a surety bond or bonds as security for the payment of all persons performing labor and materials for fifty (50) percent of the proposed contract price as further specified in Section 00700, 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 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.

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.

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 it 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 it 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 and sub-bid must be accompanied by bid security in the form of a certified check, a bid bond, cash, or a treasurer's or cashier's check, payable to the Owner, in the amount of five (5) percent 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 30 days, Saturdays, Sundays and holidays excluded, 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 either incomplete, conditional, obscure, or not responsive or which contain additions not called for, erasures not properly initialed, alterations, or similar irregularities.

17. Importance of Meeting the Completion Date

The successful general bidder must agree to commence work within ten (10) days of the date of the Notice to Proceed and to fully complete the project (including all punchlist items) no later than April 30, 2024. **Note: The Owner anticipates the delivery of extremely heavy electric power transformer equipment in early May. The land bridge is being constructed solely for the purpose of allowing for safe delivery of that equipment. The only available delivery route for such equipment requires travel over the land bridge to be constructed hereunder. Failure of the Contractor to complete the work specified in these bid documents by the foregoing date will, therefore, result in substantial damages to the Owner under its contract with the electric power transformer manufacturer, including but not limited to costs to store the equipment.**

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 the lump sum or unit prices written in words and figures, the prices written in words will govern.

19. Award of Contract

The Contract will be awarded to "the lowest responsible and eligible bidder". 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, § 39M, and, where applicable, Chapter 149, Sections 44A through 44H, 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 the 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 the bid documents and will be made a part of the Contract Documents.

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, MMLD, and the Town of Marblehead, and their 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. The Town and MMLD shall each be named as additional insured. The Contractor covenants and agrees to hold the Town and MMLD and their 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.

SECTION 00 41 02

BID FORM

Project Title: FORCE MAIN LAND BRIDGE PROJECT
020824MMLD001

Location: Village 13 Substation Site, 25 Maverick St, Marblehead, MA.

To: Marblehead Municipal Light Department

(name of Bidder)

Having carefully examined the Contract Documents prepared by the Engineer, the Contract forms, and the Addenda, and having become thoroughly familiar with the site and conditions under which the work is to be performed, this Bidder proposes to complete the Work of this project in accordance with those Documents and according to the terms of the proffered Agreement for the following price:

_____ Dollars (\$ _____)

The Bidder has received the following Addenda, receipt of which is hereby acknowledged:

By signing this Bid, the undersigned bidder certifies under pain and penalties of perjury that this bid is submitted in good faith and without collusion or fraud with any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

["Contractor"]

[Contact Name for Responsible Person]

[Address of the Contractor]

[Telephone Number]

[email address]

MARBLEHEAD MUNICIPAL LIGHT DEPARTMENT
CONTRACT # __020824MMLD001__

STATE CONTRACT # (if applicable) _____

DATE: _____

This Contract is entered into on, or as of, this date by and between the MARBLEHEAD MUNICIPAL LIGHT DEPARTMENT, Town of Marblehead, 80 Commercial Street, Marblehead, MA 01945 (the "MMLD"), and

1. This is a Contract for the procurement of the following: Installation of land bridge and related work. See Contract Documents.

2. The Contract price to be paid to the Contractor by MMLD is: See Contractor's Bid, incorporated herein by reference.

3. Payment will be made as follows: In accordance with G.L. c.30, § 39G.

3.1 Intentionally omitted.

3.2 Intentionally omitted.

3.3 There shall be no further costs, fees, or reimbursable charges due the Contractor under this Contract unless pursuant to a signed amendment to this Contract.

4. Security:

4.1 In the event the contract price exceeds the sum of \$10,000.00, the Contractor must provide security in the form of a bond or otherwise, conditioned upon the faithful performance of this Contract.

4.2 If this Contract is to be used for either Building Construction subject to MGL c. 149 or Public Works Construction subject to MGL. c. 30, § 39M or MGL. c. 30B, § 5 the following is the minimum required security, subject to MMLD requiring additional security: labor and materials payment bond in an amount equal to 50% of the total Contract price.

5. Definitions:

5.1 Acceptance: All Contracts require proper acceptance of the described goods or services by MMLD. Proper acceptance shall be understood to include inspection of goods and certification of acceptable performance for services by authorized representatives of MMLD to ensure that the goods or services are complete and are as specified in the Contract.

5.2 Contract Documents: All documents relative to the Contract including (where used) Request for Proposals and all attachments thereto, Invitation for Bids, Instructions to Bidders (or similarly titled bid documents), Proposal Form, General Conditions, Supplementary General Conditions, General Specifications, Specifications, Plans, Drawings, all Addenda issued during the bidding period, and Contractor's Bid or Proposal, and all documents included in any project manual issued by or on behalf of MMLD for this Contract. The Contract Documents are complementary, and what is called for by any one document shall be as binding as if called for by all. The purpose of the Contract Documents is to include all labor and materials, equipment, and transportation necessary for the proper performance of the Contract.

5.3 The Contractor: The "other party" to any Contract with MMLD. This term shall (as the sense and particular Contract so require) include Vendor, Contractor, Engineer, or other label used to identify the other party in the particular Contract. Use of the term "Contractor" shall be understood to refer to any other such label used.

5.4 Date of Substantial Performance: The date when the work is sufficiently complete, the services are performed, or the goods delivered, in accordance with Contract Documents, as modified by approved Amendments and Change Orders.

5.5 Goods: Goods, Supplies, Services or Materials.

5.6 Subcontractor: Those having a direct Contract with the Contractor. The term includes one who furnished material worked to a special design according to the Drawings or Specifications of this work but does not include one who merely furnishes material not so worked.

5.7 Work: The services or materials contracted for, or both.

6. Term of Contract and Time for Performance:

This Contract shall be fully performed by the Contractor in accordance with the provisions of the Contract Documents **on or before April 30, 2024**, unless extended, in writing, at the sole discretion of MMLD, and not subject to assent by the Contractor. Time is of the essence for the completion of the Contract.

7. This Section is Intentionally Blank

8. Permits and Approvals:

Permits, Licenses, Approvals and all other legal or administrative prerequisites to its performance of the Contract shall be secured and paid for by the Contractor.

9. Termination and Default:

9.1 Without Cause. MMLD may terminate this Contract on seven (7) calendar days' notice when MMLD's sole discretion it determines it is in the best interests of MMLD to do so, by providing notice to the Contractor, which shall be in writing and shall be deemed delivered

and received when given in person to the Contractor, or when received by fax, express mail, certified mail return receipt requested, regular mail postage prepaid or delivered by any other appropriate method evidencing actual receipt by the Contractor. Upon termination without cause, Contractor will be paid for services rendered to the date of termination.

9.2 For Cause. If the Contractor is determined by MMLD to be in default of any term or condition of this Contract, MMLD may terminate this Contract on seven (7) days' notice by providing notice to the Contractor, which shall be in writing and shall be deemed delivered and received when given in person to the Contractor, or when received by fax, express mail, certified mail return receipt requested, regular mail postage prepaid or delivered by any other appropriate method evidencing actual receipt by the Contractor.

9.3 Default. The following shall constitute events of a default under the Contract:

(1) any material misrepresentation made by the Contractor to MMLD; 2) any failure to perform any of its obligations under this Contract including, but not limited to the following: (i) failure to commence performance of this Contract at the time specified in this Contract due to a reason or circumstance within the Contractor's reasonable control, (ii) failure to perform this Contract with sufficient personnel and equipment or with sufficient material to ensure the completion of this Contract within the specified time due to a reason or circumstance within the Contractor's reasonable control, (iii) failure to perform this Contract in a manner reasonably satisfactory to MMLD, (iv) failure to promptly re-perform within a reasonable time the services that were rejected MMLD as unsatisfactory, or erroneous, (v) discontinuance of the services for reasons not beyond the Contractor's reasonable control, (vi) failure to comply with a material term of this Contract, including, but not limited to, the provision of insurance and non-discrimination, (vii) any other acts specifically and expressly stated in this Contract as constituting a basis for termination of this Contract, and (viii) failure to comply with any and all requirements of state law and/or regulations, and Town of Marblehead bylaw and/or regulations.

10. Suspension or Delay:

MMLD may order the Contractor, in writing, to suspend, delay or interrupt all or any part of the Services without cause for such period of time as MMLD may determine to be appropriate for its convenience. In the event of any such suspension, delay or interruption, the Contractor's time for performance may be equitably adjusted. No adjustment shall be made if the Contractor is or otherwise would have been responsible for the suspension, delay, or interruption of the Services, or if another provision of this Contract is applied to render an equitable adjustment.

11. The Contractor's Breach and MMLD's Remedies:

Failure of the Contractor to comply with any of the terms or conditions of this Contract shall be a material breach of this Contract, and MMLD shall have all the rights and remedies provided in the Contract Documents, the right to cancel, terminate, or suspend the Contract in whole or in part, the right to maintain any and all actions at law or in equity or other proceedings with respect to a breach of this Contract, including "Damages" including but not limited to costs, attorney's fees or other damages resulting from said breach ("Damages") as well as specific performance, and the right to select among the remedies available to it by all of the above.

From any sums due to the Contractor for services, MMLD may keep the whole or any part of the amount for expenses, losses and Damages incurred by MMLD as a consequence of procuring services as a result of any failure, omission, or mistake of the Contractor in providing services as provided in this Contract.

12. Statutory Compliance:

12.1 This Contract will be construed and governed by the provisions of applicable federal, state, and local laws and regulations; and wherever any provision of the Contract or Contract Documents shall conflict with any provision or requirement of federal, state, or local law or regulation, then the provisions of law and regulation shall control. Where applicable to the Contract, the provisions of the General Laws are incorporated by reference into this Contract, including, but not limited to, the following:

General Laws Chapter 30, § 39M, et seq: - Public Works Contracts.

General Laws Chapter 149, § 44A, et seq: Public Buildings Contracts.

12.2 Wherever applicable law mandates the inclusion of any term and provision into a municipal contract, this Section shall be understood to import such term or provision into this Contract. To whatever extent any provision of this Contract shall be inconsistent with any law or regulation limiting the power or liability of cities and towns, such law or regulation shall control.

12.3 The Contractor shall comply with all Federal, State, and local laws, rules, wage regulations, policies, and orders applicable to the Work provided pursuant to this Contract, such provisions being incorporated herein by reference, and shall be responsible for obtaining all necessary licenses, permits, and approvals required for the supply of such Work.

The Contractor hereby agrees to indemnify and hold MMLD and the Town of Marblehead harmless for and against any and all fines, penalties or monetary liabilities incurred by MMLD and the Town as a result of the failure of the Contractor to comply with the previous sentence. If any discrepancy or inconsistency is discovered in the Drawings, Specifications or Contract for this work in violation of any such law, bylaw, regulation, order, or decree, it shall forthwith report the same in writing to MMLD. The Contractor hereby agrees to, at all times, itself observe and comply with all such existing and future laws, by-laws, regulations, orders, and decrees; and hereby agrees to protect and indemnify MMLD and the Town, and their duly appointed agents against any claim or liability arising from or based on any violation whether by him or its agents, employees, or subcontractors of any such law, bylaw, regulation, or decree.

13. Conflict of Interest:

Both MMLD and the Contractor acknowledge the provisions of the State Conflict of Interest Law (General Laws Chapter 268A), and this Contract expressly prohibits any activity which shall constitute a violation of that law. The Contractor shall be deemed to have investigated the application of M.G.L. c. 268A to the performance of this Contract; and by executing the Contract Documents the Contractor certifies to MMLD that neither the Contractor nor its agents, employees, or subcontractors are thereby in violation of General Laws Chapter 268A.

14. Certification of Tax Compliance

By executing this Contract, the Contractor hereby certifies, pursuant to General Laws Chapter 62C, Section 49A, that it has complied with all laws of the Commonwealth of Massachusetts relating to taxes, reporting of employees and contractors, and withholding and remitting child support.

15. Non-Discrimination/Affirmative Action

The Contractor shall carry out the obligations of this Contract in compliance with all requirements imposed by or pursuant to federal, State and local ordinances, statutes, rules and regulations and policies prohibiting discrimination in employment, including but not limited to, Title VII of the Civil Rights Act of 1964; the Age Discrimination in Employment Act of 1967; Section 504 of the Rehabilitation Act of 1973 and Mass. G. L. c. 151B, and any other executive orders, rules, regulations, requirements and policies relating thereto enacted by the Commonwealth of Massachusetts and the Town of Marblehead as they may be amended from time to time. Contractor shall not discriminate against any qualified employee or applicant for employment because of race, color, national origin, ancestry, age, sex, religion, physical or mental handicap or sexual orientation.

15.1 As used in this section “affirmative action” means positive steps to ensure all qualified persons equal employment opportunity without regard to race, color, religion, sex, or national origin at all stages of the employment process: recruitment, selection, placement, promotion, training, layoff, and termination. It may include, but is not limited to, the following:

- (a) Inclusion in all solicitation and advertisements for employees of a statement that the Contractor is an “Equal Opportunity Employer”.
- (b) Placement of solicitations and advertisements for employees in media that reaches minority groups.
- (c) Notification in writing of all recruitment sources that the Contractor solicits the referral of applicants without regard to race, color, religion, sex, or national origin.
- (d) Direct solicitation of the support of responsible and appropriate community, state, and federal agencies to assist recruitment efforts.
- (e) Participation in, or establishment of, apprenticeship or training programs where outside programs are inadequate or unavailable to minority groups.
- (f) Modification of collective bargaining agreements to eliminate restrictive barriers established by dual lines of seniority, dual rates of pay or dual lines of promotion or progression which are based on race, color, religion, sex, or national origin; and
- (g) Review selection, placement, promotion, training, layoff and termination procedures and requirements to ensure that they do not intentionally or unintentionally discriminate against qualified persons because of race, color, religion, sex, or national origin.

15.2 The Contractor, if applicable, shall include in all compliance and progress reports submitted to MMLD a report which shall include: (a) A certificate stating that he or she is currently in compliance with the provisions of G.L. c. 152B and setting forth the Affirmative Action he or she is currently undertaking and will undertake during the contract period to provide equal employment opportunity for all qualified persons without regard to race, color, religion, sex or national origin; and (b) A statement in writing supporting information signed by an authorized officer or agent on behalf of any labor union or other agency which refers workers

or provides or supervises apprenticeship or other training programs which the Contractor deals, to the effect that the union or other agency's practices and policies do not discriminate on the basis of race, color, religion, sex or national origin; provided, in the event that the union or other agency shall refuse to execute such a statement, the Contractor need only so certify in writing.

15.3 A copy of any such report as described above, shall be filed in the office of the Marblehead Town Clerk and shall upon said filing become a public record.

15.4 The Contractor will take Affirmative Action to ensure that employees are solicited and employed, and that employees are treated during employment, without regard to race, color, religion, sex, or national origin.

15.5 The Contractor will in all solicitation or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

15.6 In determining whether steps taken by the Contractor constitute Affirmative Action, MMLD shall take into account the relevant characteristics of the Contractor including, but not limited to, the number of employees and the location of the principal and branch offices.

16. Assignment:

The Contractor shall not assign, sublet, or otherwise transfer this Contract, in whole or in part, without the prior written consent of MMLD, and shall not assign any of the moneys payable under this Contract, except by and with the written consent of MMLD.

17. Condition of Enforceability of Contract Against MMLD:

This Contract is only binding upon, and enforceable against, MMLD if the Contract is signed by the MMLD General Manager.

18. Corporate Contractor:

If the Contractor is a corporation, it shall endorse upon this Contract (or attach hereto) its Clerk's Certificate certifying the corporate capacity and authority of the party signing this Contract for the corporation. Such certificate shall be accompanied by a letter or other instrument stating that such authority continues in full force and effect as of the date the Contract is executed by the Contractor. This Contract shall not be enforceable against MMLD unless and until the Contractor complies with this section.

The Contractor, if a foreign corporation, shall file with the Commissioner of Corporations a Power of Attorney and duly authenticated copies of its Charter or Certificate of Incorporation; and said Contractor shall comply with all the laws of the Commonwealth of Massachusetts.

19. Contractor's Personnel:

The Contractor shall utilize only its employees and shall not utilize any third-party contractors without prior written approval of MMLD.

20. Liability of Public Officials:

To the full extent permitted by law, no official, employee, agent, or representative of the Town of Marblehead or MMLD shall be individually or personally liable on any obligation of the Town or MMLD under this Contract.

21. Indemnification: In addition to the other remedies set forth in the Contract Documents:

The Contractor hereby agrees to indemnify, defend and save harmless MMLD and the Town of Marblehead, their officers, agents and employees, from and against any and all damages, liabilities, actions, suits, proceedings, claims, demands, losses, costs, expenses, recoveries and judgments of every nature and description (including attorneys' fees) that may arise in whole or in part out of or in connection with the work being performed or to be performed, or out of any act or omission by the Contractor, its employees, agents, subcontractors, material men, and anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by any party indemnified hereunder. The Contractor hereby agrees to reimburse the Town of Marblehead and MMLD for damage to its property caused by the Contractor, its employees, agents, subcontractors or material men, and anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, including damages caused by his, it's or their use of faulty, defective, or unsuitable material or equipment, unless the damage is caused by MMLD or the Town's gross negligence or willful misconduct.

21.1 The Contractor hereby agrees to indemnify and hold harmless MMLD and the Town of Marblehead, including the agents, employees and representatives of either, from and against all claims, damages, losses and expenses, including attorney's fees, arising out of or resulting from the performance of the work, provided that any such claim, damage, loss or expense (a) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including the loss of use resulting therefrom and (b) is caused in whole or in part by any negligent act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder.

21.2 The Contractor shall be responsible for all damage or injury to property of any character during the prosecution of the work resulting from any act, omission, neglect, or misconduct in the manner or method of executing the work or due to the non-execution of the work or at any time due to defective work or materials.

In any and all claims against the town or any of their agents or employees by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this paragraph shall not be limited in anyway by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under workmen's Compensation Acts, disability benefit acts or other employee benefit acts.

The Contractor hereby assumes the entire responsibility and liability for any and all injury to or death of any or all persons, including the Contractor's employees, and for any and all

damage to property caused by, resulting from or arising in whole or in part out of any act, omission, or neglect on the part of the Contractor or of any Subcontractor or of anyone directly or indirectly employed by any of them, or of anyone for whose acts any of them may be liable in connection with operations under the Contract.

The foregoing provisions shall not be deemed to be released, waived, limit or modified in any respect by reason of any surety or insurance provided by the Contractor under the Contract.

22. Insurance

22.1 Workers Compensation Insurance:

The Contractor shall provide by insurance for the payment of compensation and the furnishing of other benefits under Chapter 152 of the General Laws of Massachusetts (The Worker's Compensation Act) to all employees of the Contractor who are subject to the provisions of Chapter 152 of the General Laws of Massachusetts.

Failure to provide and continue in force such insurance during the period of this Contract shall be a material breach of this Contract, shall operate as an immediate termination thereof, and Contractor hereby agrees to indemnify the Town of Marblehead and MMLD for all losses, claims, and actions resulting from the failure to provide the insurance required by this Article.

The Contractor shall furnish to MMLD a certificate evidencing such insurance prior to the execution of this Contract before the same shall be binding on the parties thereto, except if specifically waived by the Town.

22.2 Professional Liability Insurance

Liability of \$1 million per claim and \$3 million aggregate.

Failure to provide and continue in force such insurance during the period of this Contract shall be a material breach of this Contract, shall operate as an immediate termination thereof, and Contractor hereby agrees to indemnify MMLD and the Town of Marblehead for all losses, claims, and actions resulting from the failure to provide the insurance required by this Article.

22.3 Other Insurance Requirements

Comprehensive commercial general liability insurance with limits of at least \$1 Million per occurrence and \$3 Million annual aggregate for property damage and \$1 Million per person and \$3 Million per occurrence for bodily injury, which shall include the Town of Marblehead and MMLD as additional insureds, and which shall cover bodily injury, sickness or disease, or death of any person including employees and those persons other than the Contractor's employees, and claims insured by usual personal liability coverage, death, or property damage

arising out of the Work including injury or destruction of tangible property, including loss of use resulting therefrom.

Motor vehicle insurance for any motor vehicles used in performing the Work, with limits of at least \$500,000 per person, and \$1 Million per accident.

The intent of the Specifications regarding insurance is to specify minimum coverage and minimum limits of liability acceptable under the Contract. However, it shall be the Contractor's responsibility to purchase and maintain insurance of such character and in such amounts as will adequately protect it and the Town from and against all claims, damages, losses, and expenses resulting from exposure to any casualty liability in the performance of the work, including and not limited to Professional liability insurance where applicable.

All policies shall identify MMLD and the Town as an additional insured (except Workers' Compensation and Professional Liability). The Contractor shall notify MMLD immediately upon the cancellation or amendment to any policy. Renewal Certificates shall be filed with the Town at least ten (10) days prior to the expiration of the required policies. Certificates evidencing all such coverage shall be provided to the Town upon the execution of this Contract, and upon the renewal of any such coverage. Each such certificate shall specifically refer to this Contract and shall state that such insurance is as required by this Contract. Failure to provide the notices required in this Section or to continue in force such insurance shall be a material breach of this Contract and shall be grounds for immediate termination. Said insurance shall include: Workers Compensation/Employers' Liability Insurance, Business Automobile Liability Insurance, and Commercial General Liability Insurance (CGL). The CGL policy shall include coverage for liability arising from premises, operations, independent Contractors, personal injury, contractual liability. All Certificates of Insurance shall be on the "MIIA" or "ACORD" Certificate of Insurance form, shall contain true transcripts from the policies, authenticated by the proper officer of the Insurer, evidencing in particular those insured, the extent of coverage, the location and operations to which the insurance applies, the expiration date and the above-mentioned notice clauses. All insurance shall be written on an occurrence basis. Coverage shall be maintained without interruption from date of the Contract until date of final payment and termination of any coverage required to be maintained after payment.

The Contractor shall obtain and maintain during the term of this Contract the insurance coverage in companies licensed to do business in the Commonwealth of Massachusetts and acceptable to the Town.

23. Documents, Materials, Etc.

Any materials, reports, information, data, etc. given to or prepared or assembled by the Contractor under this Contract are to be kept confidential and shall not be made available to any individual or organization by the Contractor (except agents, servants, or employees of the Contractor) without the prior written approval of MMLD, except as otherwise required by law. The Contractor shall comply with the provisions Chapter 66A of the General Laws of Massachusetts as it relates to public documents, and all other state and federal laws and regulations relating to confidentiality, security, privacy, and use of confidential data.

Any materials produced in whole or in part under this Contract shall not be subject to copyright, except by MMLD, in the United States or any other country. MMLD and

the Town shall have unrestricted authority to, without payment of any royalty, commission, or additional fee of any type or nature, publicly disclose, reproduce, distribute, and otherwise use, and authorize others to use, in whole or in part, any reports, data or other materials prepared under this Contract.

All data, reports, programs, software, equipment, furnishings, and any other documentation or product paid for by MMLD shall vest in MMLD at the termination of this Contract. The Contractor shall at all times, during or after termination of this Contract, obtain the prior written approval of MMLD before making any statement bearing on the work performed or data collected under this Contract to the press or issuing any material for publication through any medium.

24. No Employment

The Contractor acknowledges and agrees that it is acting as an independent Contractor for all services rendered pursuant to this Contract, and neither the Contractor, nor its employees, agents, servants nor any person for whose conduct the Contractor is responsible shall be considered an employee or agent of MMLD or the Town of Marblehead for any purpose and shall not file any claim or bring any action for any worker's compensation unemployment benefits and compensation for which they may otherwise be eligible as an MMLD or Town employee as a result of work performed pursuant to the terms of this Contract.

25. Audit, Inspection and Recordkeeping

At any time during normal business hours, and as often as MMLD may deem it reasonably necessary, there shall be available in the office of the Contractor for the purpose of audit, examination, and/or to make excerpts or transcript all records, contracts, invoices, materials, payrolls, records of personnel, conditions of employment and other data relating to all matters covered by this Contract.

26. Payment

MMLD agrees to make all reasonable efforts to pay to the Contractor the sum set forth in the Contractor's bid or proposal within thirty (30) days of receipt of a proper invoice detailing the work completed and acceptance from MMLD of the work completed.

27. Waiver and Amendment

Amendments, or waivers of any additional term, condition, covenant, duty, or obligation contained in this Contract may be made only by written amendment executed by all signatories to the original Contract, prior to the effective date of the amendment.

To the extent allowed by law, any conditions, duties, and obligations contained in this Contract may be waived only by written agreement by both parties.

Forbearance or indulgence in any form or manner by a party shall not be construed as a waiver, nor in any manner limit the legal or equitable remedies available to that

party. No waiver by either party of any default or breach shall constitute a waiver of any subsequent default or breach of a similar or different matter.

28. Severability

If any term or condition of this Contract or any application thereof shall to any extent be held invalid, illegal, or unenforceable by a court of competent jurisdiction, the validity, legality, and enforceability of the remaining terms and conditions of this Contract shall not be deemed affected thereby unless one or both parties would be substantially or materially prejudiced.

29. Forum and Choice of Law

This Contract and any performance herein shall be governed by and be construed in accordance with the laws of the Commonwealth of Massachusetts. Any and all proceedings or actions relating to subject matter herein shall be brought and maintained in the courts of the Commonwealth of Massachusetts or the federal district court sitting in the Commonwealth of Massachusetts, which shall have exclusive jurisdiction thereof. This paragraph shall not be construed to limit any other legal rights of the parties.

30. Notices

Any notice permitted or required under the provisions of this Contract to be given or served by either of the parties hereto upon the other party hereto shall be in writing and signed in the name or on the behalf of the party giving or serving the same. Notice shall be deemed to have been received at the time of actual service or three (3) business days after the date of a certified or registered mailing properly addressed. Notice to the Contractor shall be deemed sufficient if sent to the mail or email address set forth on page 1 or furnished from time to time in writing hereafter.

31. Binding on Successors:

This Contract is binding upon the parties hereto, their successors, assigns and legal representatives (and where not corporate, the heirs and estate of the Contractor). Neither the Town nor the Contractor shall assign or transfer any interest in the Contract without the written consent of the other.

32. Entire Agreement:

This Contract, including all documents incorporated herein by reference, constitutes the entire integrated agreement between the parties with respect to the matters described. This Contract supersedes all prior agreements, negotiations, and representations, either written or oral, and it shall not be modified or amended except by a written document executed by the parties hereto.

[THE REMAINDER OF THIS PAGE HAS BEEN LEFT BLANK]

IN WITNESS WHEREOF the parties have hereto and to two other identical instruments set forth their hands and executed this as an instrument under seal this the day and year first above written.

Marblehead Municipal Light Department: The Contractor by:

Signature Date

Joseph Kowalik, General Manager

Signature Date

Print Name & Title

EXAMPLE CLERK'S CERTIFICATE

Action of Shareholders
Written Consent

(Date)

The undersigned, being the Shareholders of _____, a Massachusetts Corporation (the "Corporation") entitled to vote on the action, hereby consent to the adoption of the following votes:

VOTED: That the [President and/or the Vice President or named individual], each of them acting singly is, authorized to execute any and all Contract Documents and to enter into and negotiate the terms of all contracts and to accomplish same and to execute any and all documents, instruments, and agreements in order to effectuate the transaction and that said transaction shall be valid, binding, effective, and legally enforceable.

VOTED: That the officers are, and each of them acting singly is, authorized, from time to time, in the name and on behalf of the Corporation to take or cause to be taken all such action(s) as s/he or they, as the case may be, deem necessary, appropriate or advisable to effect the foregoing votes, as may be shown by the officer or officers execution or performance which shall be conclusive evidence that the same is authorized by the directors of this Corporation.

VOTED: That the officers are, and each of them acting singly is, authorized, from time to time, in the name and on behalf of this Corporation, under its corporate seal, if desired, attested by an appropriate officer, if desired, to execute, make oath to, acknowledge, deliver and file any and all of the agreements, instruments, certificates and documents referred to or related to the foregoing votes.

VOTED: That the officers are, and each of them acting singly is, authorized, from time to time and on behalf of this Corporation, under its corporate seal, if desired, to execute, acknowledge and deliver any and all agreements, instruments, certificates and documents referred to or related to the foregoing votes, with such changes as the officer or officers so acting may deem necessary or desirable, and the signature of such officer or officers to be conclusive evidence that the same is authorized by the directors of this Corporation.

Clerk of Corporation Certificate

I, _____ the Clerk of the foregoing corporation, do hereby certify that the above vote was taken at a duly called meeting of the shareholders of the Corporation on _____, 20__.

Clerk of Corporation

SEAL

CONTRACT CHECKLIST
FOR TOWN'S INTERNAL USE ONLY. DO NOT ATTACH TO EXECUTED
CONTRACTS

Initials

Certification of Signatures _____
For Corporation: need President's signature or
Clerk's Certificate dated no more than 2 years ago
With Corporate Seal affixed (see above form)
For LLC: need Manager signature or signed vote
of the LLC

Certificate of Non-collusion _____

Insurance Certificate _____
(showing Town as additional insured)
Matches amount of insurance required under contract

Certificate of Good Faith _____

Certificate of Tax Compliance _____

Signed by Contractor _____
Matches certification by Corp officer of authority.

Certificate of Good Standing for Corporation or Certificate
of Legal Existence for LLC both from the Secretary of State _____

Contract Reviewed by: _____
Signature

Name, Title _____

FOR TOWN'S INTERNAL USE ONLY. DO NOT ATTACH TO EXECUTED
CONTRACTS

SUPPLEMENT “C”

[] CONSTRUCTION

SUPPLEMENT “C” - Applicable to Contracts for the construction of:

(1) Public Buildings and Public Works

(Governed by the provisions of General Laws Chapter 30B).

(2) Public Buildings

(Governed by the provisions of General Laws Chapter 149, § 44A, et seq.); and

(3) Public Works

(governed by the provisions of General Laws Chapter 30, §39M, et seq)

1. This form supplements the Town of Marblehead (“Town”) “Contract and General Conditions” and applies only to contracts for the construction, reconstruction, alteration, remodeling or repair of public works or public buildings in Marblehead.

2. Wherever the law requires one contracting with a city or town to be bonded, such obligation shall be understood to be a term and condition of this Contract. The Contractor agrees to secure such bonds (where required) in the form required by the Town and provide an original thereof to the Town prior to the commencement of performance.

3. Equality:

3.1. In the case of a closed Specification written for a specific item or items to be furnished under the Base Bid, such specifications shall, as applicable, be in compliance with the Massachusetts General Laws, Chapter 30, Section 39M and Chapter 149, Sec. 44A et seq.

3.2. Where the name of an item, material or manufacturer is mentioned in the Specifications or on the Drawings, except as above noted, the intent is to establish a standard and in no way should be construed to exclude any item or manufacturer not mentioned by name, but whose product meets the Specifications as to design, utility, and quality. Final decision shall rest solely with the Town’s Project Representative (herein after “Project Representative”) as to its acceptability.

4. Change Orders:

4.1. Change orders must receive the approval of the MMLD General Manager and must be supported by the project engineers and architects, if any.

4.2. Change orders to contracts governed by General Laws Chapter 30B may not increase the quantity of goods or services provided by more than twenty-five (25%) per cent, in compliance with Sec. 13 of Chapter 30B.

5. The Contractor will carry out the obligations of this contract in full compliance with all of the requirements imposed by or pursuant to General Laws Chapter 151, Sec. 1, et seq. (Minimum Wage Law) and any executive orders, rules, regulations, and requirements of the Commonwealth of Massachusetts as they may from time to time be amended. The Contractor will at all times comply with the wage rates as determined by the Commissioner of the Department of Labor and Industries, under the provisions of General Laws Chapter 149, Sections 26 and 27D (Prevailing Wage), as shall be in force and as amended.

6. The Contractor shall continuously maintain adequate protection of all work from damage and shall protect the property of the Town, MMLD, and others, including adjacent property, from injury or loss arising in connection with the Contract. The Contractor shall make good any such damage, injury, or loss, except as may be directly due to errors in the Contract Documents or caused by agents or employees of the Town or MMLD, or due to causes beyond the Contractor's control and not the Contractor's fault or negligence.

7. The Contractor shall take all necessary precautions for the safety of employees on the work, and shall comply with all applicable provisions of Federal, State, and local laws and codes to prevent accidents or injury to persons on, about or adjacent to the premises where the work is being performed. The Contractor will erect and properly maintain at all times, as required by the conditions and progress of the work, all necessary safeguards for the protection of workers and the public, shall post danger signs warning against the hazards created by such features of construction such as pits, protruding nails, hosts, well holes, elevator hatchways, scaffolding, window openings, stairways and falling materials; and shall designate a responsible member of its organization on the work, whose duty shall be the prevention of accidents.

8. The Town and MMLD shall at all times have access to the work wherever it is in preparation or progress and the Contractor shall provide suitable accommodations for such access.

9. The Contractor shall appoint a competent superintendent and foreman and any necessary assistants, all of whom shall be satisfactory to MMLD. If MMLD in its sole discretion determines that the construction superintendent, foreman, or assistants are unacceptable, then upon seven days' notice from MMLD, the Contractor shall replace such person or persons with people acceptable to MMLD.

10. The Contractor shall give efficient supervision to the work, using its best skill and attention. The Contractor shall carefully study and compare the drawings, specifications and other instructions and shall at once report to MMLD any error, inconsistency or omission which shall be discovered. Included in this responsibility shall be supervision of all work performed by subcontractors on the work.

11. Notwithstanding any other provision of this Contract to the contrary, if the Contractor neglects to prosecute the work properly, or fails to perform the contract or any of its provisions, MMLD may, upon three days' written notice, make good on such deficiencies and may deduct the cost thereof from the payment then or thereafter due the Contractor, without prejudice to any other remedy it may have

12. Inspection by the MMLD's Project Representative

12.1. MMLD shall have the right to designate a Project Representative who may make periodic visits to the site to familiarize MMLD and the Town generally with the progress and quality of the work, and to determine in general if the work is proceeding in accordance with the Contract Documents. The Project Representative will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the work and will not be responsible for the Contractor's failure to carry out the construction work in accordance with the Contract Documents. During such visits and on the basis of these observations while at the site, the Project Representative will keep MMLD and the Town informed on the progress of the work, will endeavor to guard MMLD and the Town against defects and deficiencies in the work of contractors, and may condemn structural work as failing to conform to the Contract Documents. The Project Representative shall have authority to act on behalf of MMLD only to the extent expressly delegated by MMLD, which shall be shown to the Contractor, and shall have authority to stop the work whenever such stoppage may reasonably be necessary to insure the proper execution of the Contract.

12.2. In connection with the work, the Project Representative shall not be responsible for construction methods, means, techniques, sequences, or procedures employed by the Contractor or the Contractor's safety programs, requirements, regulations, or precautions.

13. Decisions of the Project Representative

13.1. The Project Representative shall, within a reasonable time, make decisions on all claims of MMLD or the Contractor and on all other matters relating to the execution and progress of the structural work or the interpretation of the Contract Documents.

13.2. The Project Representative's decision, in matters relating to the project, shall be final, if within the terms of the Contract Documents.

13.3. If, however, the Project Representative fails to render a decision within ten days after the parties have presented their evidence, either party may then avail itself of the remedies provided in this Contract or available to it by law. If the Project Representative renders a decision after such remedies have commenced, such decision may be entered as evidence but shall not disturb or interrupt such proceedings except where such decision is acceptable to the parties concerned.

14.1 Use of Premises by the Contractor:

14.1. The Contractor shall confine its apparatus, the storage of materials and the operations of its workmen to limits indicated by law, by-laws, permits or directions of MMLD and shall not unreasonably encumber the premises with its materials.

14.2. The Contractor shall not load or permit any part of the structure to be loaded with a weight that will endanger its safety.

15. Maintenance of Premises:

The Contractor shall at all times keep the premises free from accumulation of waste materials or rubbish caused by its employees or work, and at the completion of the work it shall remove all its rubbish from and about the work site and all its tools, scaffolding and surplus

materials and shall leave its work “broom-clean”, or its equivalent, unless more exactly specified. In case of dispute, MMLD may remove the rubbish and charge the cost to the several contractors, as MMLD shall determine to be just.

16. Right to Terminate

16.1 In addition to any other remedies herein provided and notwithstanding any other provisions hereof to the contrary, if the Contractor should (1) be adjudged a bankrupt, (2) make a general assignment for the benefit of creditors, (3) have a receiver appointed on account of its insolvency, (4) persistently or repeatedly refuse or fail to supply enough personnel and resources to perform the contract, (5) fail to make prompt payment to subcontractors or to providers of materials or labor, (6) persistently disregard laws and regulations or lawful directives of MMLD or the Town, or (7) be guilty of a substantial violation of any provision of the Contract, then MMLD may, without prejudice to any other right or remedy and after giving the Contractor (or any surety) seven (7) days’ written notice, terminate the contract and the employment of the Contractor and take possession of the premises and of all materials, tools and appliances thereon and finish the work by whatever method it deems appropriate.

16.2 In such cases, the Contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid amount owed to the Contractor for work already completed shall exceed the expense of finishing the work, including compensation for additional architectural, managerial, legal, and administrative services, such excess shall be paid to the Contractor. If such expenses shall exceed such unpaid balances, the Contractor shall pay the difference to MMLD.

16.3 The Contractor shall not be relieved of liability to, or duty to indemnify, the Town or MMLD by virtue of any termination of this Contract, and any claim for damages against the Contractor relating to the Contractor’s performance under this contract shall survive any termination hereunder.

Notwithstanding any other provision of this Contract, MMLD reserves the right at any time in its absolute discretion to suspend or terminate this Contract in whole or in part for its convenience upon seven (7) days’ written notice to the Contractor. MMLD shall incur no liability by reason of such termination except for the obligation to pay compensation for all work performed by the Contractor and accepted by MMLD to the termination date.

17. Progress Payments:

17.1. The Contractor shall, before the first application for payment, submit to MMLD schedule of values of the various parts of the work, including quantities aggregating the total sum of the Contract, divided so as to facilitate payments to Subcontractors, made out in such form as MMLD and the Contractor may agree upon, and, if required, supported by such evidence as to its correctness. This schedule, when approved by MMLD, shall be used as a basis for payment, unless it is found to be in error. If applying for payments, the Contractor shall submit a statement based upon this schedule.

17.2. The Contractor shall submit to MMLD an itemized Application for Payment, supported to the extent required by MMLD and the Town by invoices or other vouchers, showing payments for materials and labor, payments to Subcontractors and such other evidence of the Contractor's right to payment.

17.3 Subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

.1 Take that portion of the Contract Sum properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the Contract Sum allocated to that portion of the Work in the schedule of values, less retainage of five percent (5%). Pending final determination of cost to the Owner of changes in the Work, amounts not in dispute shall be included.

.2 Add that portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing), less retainage of 5 percent (5%).

.3 Subtract the aggregate of previous payments made by MMLD; and

.4 Subtract amounts, if any, for which MMLD has withheld or nullified a Certificate for Payment as provided in Section 18, below.

18. Withholding of Payments

18.1. MMLD may withhold or, on account of subsequently discovered evidence, nullify the whole or part of any payment to such extent as may be necessary in its reasonable opinion to protect the MMLD and the Town of Marblehead from loss on account of:

18.1.1. Defective work not remedied.

18.1.2. Claims filed or reasonable evidence indicating probable filing of claims.

18.1.3. Failure of the Contractor to make payments properly to Subcontractors or for material or labor.

18.1.4. A reasonable doubt that the Contract can be completed for the balance then unpaid.

18.1.5. Damage to another contractor.

18.1.6. Delays resulting in liquidated damages.

18.2. Withholding of payments shall be in strict compliance with statutory requirements.

19. Claims by Contractor and Liability of MMLD

19.1 All claims by the Contractor against MMLD shall, unless otherwise provided by law, be initiated by a written claim submitted to MMLD no later than seven (7) calendar days after the event or the first appearance of the circumstances causing the claim. The claim shall set forth in detail all known facts and circumstances supporting the claim. The Contractor shall continue its performance under this contract regardless of the submission or existence of any claims.

19.2 The limit of liability of MMLD and the Town under this Contract is limited to the compensation provided herein for work actually performed and shall in no event include liability for delays or for incidental, special or consequential damages or lost profits or for damages or loss from causes beyond MMLD's or the Town's reasonable control.

20. Damages for Delay:

The Contractor shall have no claims for any damages, costs, or expenses of any kind or nature, for any suspension, delay, interruption, frustration, obstruction, hindrance, interference, compression or acceleration of the work on the part of MMLD, the Town of Marblehead, architect, engineer, or any of their consultants in performing or furnishing any work, or resulting from problems or deficiencies with materials, information, or documentation and/or decisions in connection with the execution of the work. Except as otherwise provided by applicable law, the Contractor's sole remedy for such delay shall be for a claim for an extension of time to the time for contract performance.

21. Liquidated Damages:

Because both parties recognize (1) that the time for completion of this Contract is of the essence, (2) that MMLD will suffer loss if the work is not completed within the contract time specified, plus any extension thereof allowed in accordance with the provisions of this contract, and (3) the delays, expense and difficulties involved in a legal proceeding to determine the actual loss suffered by MMLD if the work is not completed in time, it is agreed that the Contractor will pay the Town as liquidated damages representing an estimate of delay damages to which the Contractor agrees by entering into this Contract, not as a penalty, the sum of One Thousand Dollars (\$1,000) per day for each calendar day of delay beginning on Monday, May 13, 2024, until the work is completed, whether the work is completed by the Contractor or some other person. MMLD's right to impose liquidated damages shall in no way prohibit or restrict MMLD's right to bring a legal action for damages in lieu of or in addition to its option to impose liquidated damages. MMLD may deduct any liquidated damages from money due the Contractor, and if such payment is insufficient to cover the liquidated damages, then the Contractor shall pay the amount due.

22. The Contractors' Mutual Responsibility:

Should the Contractor cause damage to any separate subcontractor on the work, the Contractor agrees, upon due notice, to settle with such contractor by agreement, or by recourse to remedies provided by law or by the provisions of the contract. If such separate contractor sues MMLD or the Town on account of any damage alleged to have been sustained, MMLD or the Town shall notify the Contractor, who shall defend such proceedings at MMLD's expense and, if any judgment against MMLD or the Town arises therefrom, the Contractor shall

pay or satisfy it and pay all costs incurred by MMLD or the Town including attorney's fees and related costs of litigation.

23. Separate Contracts:

23.1. MMLD reserves the right to let other Contracts in connection with this work under similar General Conditions. The Contractor shall afford other contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work and shall properly connect and coordinate its work with theirs.

23.2. If any part of the Contractor's work depends, for proper execution or results, upon the work of any other contractor, the Contractor shall inspect and promptly report to MMLD any defects in such work that render it unsuitable for such proper execution and results. Failure of the Contractor to so inspect and report shall constitute an acceptance of the other contractor's work as fit and proper for the reception of its work except as to defects which may develop in the other contractor's work after the execution of its work.

23.3. To ensure the proper execution of its subsequent work, the Contractor shall measure work already in place and shall at once report to MMLD any discrepancy between the executed work and the Drawings.

24. Subcontracts:

24.1. All Subcontracts shall be awarded in conformity with the requirements of the General Laws, Commonwealth of Massachusetts, Chapter 149, Sections 44A to 44L, inclusive.

24.2. The Contractor agrees that it is as fully responsible to MMLD and the Town for the acts and omissions of its Subcontractors and of persons either directly or indirectly employed by them, as it is for the acts and omissions of persons directly employed by it.

24.3. Nothing contained in the Contract Documents shall create any contractual relationship between any Subcontractor and MMLD or the Town.

25. Contractor-Subcontractor Relations:

The Contractor agrees to bind every Subcontractor and every Subcontractor agrees to be bound by the terms of the Agreement, the General Conditions of the Contract, the Supplementary General Conditions, the Drawings and Specifications, as far as applicable to its work, including the provisions of the General Laws, Commonwealth of Massachusetts, Chapter 149, Section 44A, et seq.

26. The Contractor's Insurance:

Notwithstanding any other provisions of this Contract to the Contrary and in addition to any requirements set forth in the Contract, the Contractor shall provide and maintain the following insurance:

26.1. The Contractor shall purchase and maintain 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, whether such operations be by itself or by any Subcontractor or by anyone directly or indirectly employed by any of them or by anyone for whose acts any of them may be liable.

26.2 Liability Insurance Requirements

In addition to the liability insurance requirements set forth in the Contract, the liability insurance shall include all major divisions and shall be on a comprehensive general basis including Premises and Operations, Owners and Contractor's Protective, Products and Completed Operations, and Owned, Non-owned and Hired Motor Vehicles. All such insurance shall be written for not less than any limits of liability required by law, unless otherwise provided in the Contract Documents. The Contractor's insurance shall include:

Excess Liability	(Umbrella)	\$3,000,000
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Excess Liability (Umbrella) Insurance (Subcontractors) \$1,000,000 or 1.5 times the value of the subcontract, whichever is higher.

26.3. The above insurance policies shall also be subject to the following requirements:

25.3.1. Insurance coverage for the Contractor's Comprehensive General Liability, as hereinafter specified under Paragraph entitled "Protective Liability Insurance" shall be written by one and the same insurance company to avoid the expense of duplicate and/or overlapping coverage and to facilitate and expedite the settlement of claims.

25.3.2 All premium costs shall be included in the Contractor's bid.

27. Protective Liability Insurance:

27.1. The Contractor shall purchase and maintain such insurance as described in the preceding paragraph as will protect MMLD and the Town from claims which may arise from operations under the Contract, including operations performed for the named insureds by independent contractors and general inspection thereof by the named insureds.

27.2. The Contractor shall also purchase and maintain such insurance as will protect MMLD and the Town against Automobile Non-Ownership Liability in connection with the Contractor's operations under the Contract, whether such operations be by itself or by any Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable.

27.3. The limits of liability for coverage required under the Contract shall be as specified within the Contract Documents.

The Town and MMLD shall be named as an additional insured on the above referenced liability Policies, and the Contractor's insurance shall be the primary coverage. The cost of such

insurance, including required endorsements and amendments, shall be the sole responsibility of the Contractor.

28. Liens:

Neither the Final Payment nor any part of the retained percentage shall become due until the Contractor, if required, shall deliver to MMLD a complete release of all liens arising out of the Contract, or receipts in full in lieu thereof and, if required in either case, an affidavit that as far as it has knowledge or information, the releases and receipts include all the labor and material for which a lien could be filed. The Contractor shall comply with all statutory provisions of the General Laws of the Commonwealth of Massachusetts with regard to liens, Chapter 254 and 149 as amended (as a minimum requirement).

29. Guarantees:

29.1 The Contractor guarantees and warrants to MMLD that all labor furnished under this Contract will be competent to perform the tasks undertaken, that the product of such labor will yield only first-class results, that materials and equipment furnished will be of good quality, new, and of recent manufacture unless otherwise permitted by this Contract, and that the Work will be of good quality, free from faults and defects and in strict conformance with this Contract. All Work not conforming to these requirements may be considered defective.

29.2. If at any time any part of the work constructed under the terms of this contract shall in the opinion of MMLD require repairing due to defective work or materials furnished by the Contractor, MMLD may notify the Contractor in writing to make the required repairs. If the Contractor shall neglect to start such repairs within ten days of the date of giving it notice thereof and to complete the same to the satisfaction of MMLD with reasonable dispatch, then MMLD may employ other persons to make such repairs. MMLD shall charge the expense thereof to the Contractor and may use any moneys still retained to pay for the same, and if such sum is insufficient, the Contractor shall be obligated to pay the balance thereof.

29.3. All guarantees and warranties required in the various Sections of the Specifications which originate with a Subcontractor or Manufacturer must be delivered to MMLD before final payment to the Contractor may be made for the amount of that subtrade or for the phase of work to which the guarantee or warranty relates. The failure to deliver a required guarantee or warranty shall be held to constitute a failure of the Subcontractor to fully complete his work in accordance with the Contract Documents. The Contractor's obligation to correct work is in addition to, and not in substitution of, such guarantees or warranties as may be required in the various Sections of the Specifications.

PAYMENT BOND

THE CONDITION OF THIS OBLIGATION is such that Whereas, the Principal entered into a certain contract with the Owner, dated the _____ day of _____, 20____, for the construction described as follows:

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 _____, 20_____.

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.



MAURA HEALEY
Governor

KIM DRISCOLL
Lt. Governor

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

Prevailing Wage Rates

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

LAUREN JONES
Secretary

MICHAEL FLANAGAN
Director

Awarding Authority: Marblehead Municipal Light Department
Contract Number: 020824 MMLD 001 **City/Town:** MARBLEHEAD
Description of Work: INSTALL PRECAST BRIDGE OVER SEWER FORCE MAIN
Job Location: 25 Maverick Street, Marblehead Ma

Information about Prevailing Wage Schedules for Awarding Authorities and Contractors

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

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
Construction						
(2 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	01/01/2024	\$38.95	\$15.07	\$18.67	\$0.00	\$72.69
	06/01/2024	\$39.95	\$15.07	\$18.67	\$0.00	\$73.69
	12/01/2024	\$39.95	\$15.07	\$20.17	\$0.00	\$75.19
	01/01/2025	\$39.95	\$15.57	\$20.17	\$0.00	\$75.69
	06/01/2025	\$40.95	\$15.57	\$20.17	\$0.00	\$76.69
	12/01/2025	\$40.95	\$15.57	\$21.78	\$0.00	\$78.30
	01/01/2026	\$40.95	\$16.17	\$21.78	\$0.00	\$78.90
	06/01/2026	\$41.95	\$16.17	\$21.78	\$0.00	\$79.90
	12/01/2026	\$41.95	\$16.17	\$23.52	\$0.00	\$81.64
	01/01/2027	\$41.95	\$16.77	\$23.52	\$0.00	\$82.24
(3 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	01/01/2024	\$39.02	\$15.07	\$18.67	\$0.00	\$72.76
	06/01/2024	\$40.02	\$15.07	\$18.67	\$0.00	\$73.76
	12/01/2024	\$40.02	\$15.07	\$20.17	\$0.00	\$75.26
	01/01/2025	\$40.02	\$15.57	\$20.17	\$0.00	\$75.76
	06/01/2025	\$41.02	\$15.57	\$20.17	\$0.00	\$76.76
	12/01/2025	\$41.02	\$15.57	\$21.78	\$0.00	\$78.37
	01/01/2026	\$41.02	\$16.17	\$21.78	\$0.00	\$78.97
	06/01/2026	\$42.02	\$16.17	\$21.78	\$0.00	\$79.97
	12/01/2026	\$42.02	\$16.17	\$23.52	\$0.00	\$81.71
	01/01/2027	\$42.02	\$16.77	\$23.52	\$0.00	\$82.31
(4 & 5 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	01/01/2024	\$39.14	\$15.07	\$18.67	\$0.00	\$72.88
	06/01/2024	\$40.14	\$15.07	\$18.67	\$0.00	\$73.88
	12/01/2024	\$40.14	\$15.07	\$20.17	\$0.00	\$75.38
	01/01/2025	\$40.14	\$15.57	\$20.17	\$0.00	\$75.88
	06/01/2025	\$41.14	\$15.57	\$20.17	\$0.00	\$76.88
	12/01/2025	\$41.14	\$15.57	\$21.78	\$0.00	\$78.49
	01/01/2026	\$41.14	\$16.17	\$21.78	\$0.00	\$79.09
	06/01/2026	\$42.14	\$16.17	\$21.78	\$0.00	\$80.09
	12/01/2026	\$42.14	\$16.17	\$23.52	\$0.00	\$81.83
	01/01/2027	\$42.14	\$16.77	\$23.52	\$0.00	\$82.43
ADS/SUBMERSIBLE PILOT <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2020	\$103.05	\$9.40	\$23.12	\$0.00	\$135.57
For apprentice rates see "Apprentice- PILE DRIVER"						
AIR TRACK OPERATOR <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.61	\$9.65	\$17.14	\$0.00	\$65.40
For apprentice rates see "Apprentice- LABORER"						
AIR TRACK OPERATOR (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	12/01/2023	\$38.61	\$9.65	\$17.14	\$0.00	\$65.40
	06/01/2024	\$39.94	\$9.65	\$17.14	\$0.00	\$66.73
	12/01/2024	\$41.27	\$9.65	\$17.14	\$0.00	\$68.06
	06/01/2025	\$42.66	\$9.65	\$17.14	\$0.00	\$69.45
	12/01/2025	\$44.04	\$9.65	\$17.14	\$0.00	\$70.83
	06/01/2026	\$45.48	\$9.65	\$17.14	\$0.00	\$72.27
	12/01/2026	\$46.92	\$9.65	\$17.14	\$0.00	\$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						

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

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - BOILERMAKER - Local 29

Effective Date - 01/01/2024

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

Notes:

Apprentice to Journeyworker Ratio:1:4

BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING)	02/01/2024	\$62.40	\$11.49	\$23.59	\$0.00	\$97.48
BRICKLAYERS LOCAL 3 (LYNN)	08/01/2024	\$64.50	\$11.49	\$23.59	\$0.00	\$99.58
	02/01/2025	\$65.80	\$11.49	\$23.59	\$0.00	\$100.88
	08/01/2025	\$67.95	\$11.49	\$23.59	\$0.00	\$103.03
	02/01/2026	\$69.30	\$11.49	\$23.59	\$0.00	\$104.38
	08/01/2026	\$71.50	\$11.49	\$23.59	\$0.00	\$106.58
	02/01/2027	\$72.90	\$11.49	\$23.59	\$0.00	\$107.98

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

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

Effective Date - 02/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$31.20	\$11.49	\$23.59	\$0.00	\$66.28
2	60	\$37.44	\$11.49	\$23.59	\$0.00	\$72.52
3	70	\$43.68	\$11.49	\$23.59	\$0.00	\$78.76
4	80	\$49.92	\$11.49	\$23.59	\$0.00	\$85.00
5	90	\$56.16	\$11.49	\$23.59	\$0.00	\$91.24

Effective Date - 08/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$32.25	\$11.49	\$23.59	\$0.00	\$67.33
2	60	\$38.70	\$11.49	\$23.59	\$0.00	\$73.78
3	70	\$45.15	\$11.49	\$23.59	\$0.00	\$80.23
4	80	\$51.60	\$11.49	\$23.59	\$0.00	\$86.68
5	90	\$58.05	\$11.49	\$23.59	\$0.00	\$93.13

Notes:

Apprentice to Journeyworker Ratio:1:5

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

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

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

For apprentice rates see "Apprentice- LABORER"

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

For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
CAISSON & UNDERPINNING TOP MAN <i>LABORERS - FOUNDATION AND MARINE</i>	12/01/2023	\$44.33	\$9.65	\$18.22	\$0.00	\$72.20
	06/01/2024	\$45.81	\$9.65	\$18.22	\$0.00	\$73.68
	12/01/2024	\$47.28	\$9.65	\$18.22	\$0.00	\$75.15
	06/01/2025	\$48.78	\$9.65	\$18.22	\$0.00	\$76.65
	12/01/2025	\$50.28	\$9.65	\$18.22	\$0.00	\$78.15
	06/01/2026	\$51.83	\$9.65	\$18.22	\$0.00	\$79.70
	12/01/2026	\$53.33	\$9.65	\$18.22	\$0.00	\$81.20
For apprentice rates see "Apprentice- LABORER"						
CARBIDE CORE DRILL OPERATOR <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
For apprentice rates see "Apprentice- LABORER"						
CARPENTER <i>CARPENTERS -ZONE 2 (Eastern Massachusetts)</i>	03/01/2023	\$45.12	\$9.33	\$19.97	\$0.00	\$74.42

Apprentice - CARPENTER - Zone 2 Eastern MA

Effective Date - 03/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.56	\$9.33	\$1.73	\$0.00	\$33.62
2	60	\$27.07	\$9.33	\$1.73	\$0.00	\$38.13
3	70	\$31.58	\$9.33	\$14.78	\$0.00	\$55.69
4	75	\$33.84	\$9.33	\$14.78	\$0.00	\$57.95
5	80	\$36.10	\$9.33	\$16.51	\$0.00	\$61.94
6	80	\$36.10	\$9.33	\$16.51	\$0.00	\$61.94
7	90	\$40.61	\$9.33	\$18.24	\$0.00	\$68.18
8	90	\$40.61	\$9.33	\$18.24	\$0.00	\$68.18

Notes:

% Indentured After 10/1/17; 45/45/55/55/70/70/80/80
Step 1&2 \$30.71/ 3&4 \$36.93/ 5&6 \$56.82/ 7&8 \$63.06

Apprentice to Journeyworker Ratio:1:5

CARPENTER WOOD FRAME <i>CARPENTERS-ZONE 3 (Wood Frame)</i>	04/01/2023	\$24.16	\$7.21	\$4.80	\$0.00	\$36.17
All Aspects of New Wood Frame Work						

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - CARPENTER (Wood Frame) - Zone 3

Effective Date - 04/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$14.50	\$7.21	\$0.00	\$0.00	\$21.71
2	60	\$14.50	\$7.21	\$0.00	\$0.00	\$21.71
3	65	\$15.70	\$7.21	\$0.00	\$0.00	\$22.91
4	70	\$16.91	\$7.21	\$0.00	\$0.00	\$24.12
5	75	\$18.12	\$7.21	\$3.80	\$0.00	\$29.13
6	80	\$19.33	\$7.21	\$3.80	\$0.00	\$30.34
7	85	\$20.54	\$7.21	\$3.80	\$0.00	\$31.55
8	90	\$21.74	\$7.21	\$3.80	\$0.00	\$32.75

Notes:
 % Indentured After 10/1/17; 45/45/55/55/70/70/80/80
 Step 1&2 \$17.86/ 3&4 \$20.22/ 5&6 \$27.57/ 7&8 \$29.94

Apprentice to Journeyworker Ratio:1:5

CEMENT MASONRY/PLASTERING BRICKLAYERS LOCAL 3 (LYNN)	01/01/2024	\$49.33	\$13.00	\$23.57	\$1.30	\$87.20
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Apprentice - CEMENT MASONRY/PLASTERING - Eastern Mass (Lynn)

Effective Date - 01/01/2024

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

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

Apprentice to Journeyworker Ratio:1:3

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

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

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
COMPRESSOR OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$35.62	\$15.00	\$16.40	\$0.00	\$67.02
	06/01/2024	\$36.47	\$15.00	\$16.40	\$0.00	\$67.87
	12/01/2024	\$37.42	\$15.00	\$16.40	\$0.00	\$68.82
	06/01/2025	\$38.27	\$15.00	\$16.40	\$0.00	\$69.67
	12/01/2025	\$39.22	\$15.00	\$16.40	\$0.00	\$70.62
	06/01/2026	\$40.08	\$15.00	\$16.40	\$0.00	\$71.48
	12/01/2026	\$41.03	\$15.00	\$16.40	\$0.00	\$72.43
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						

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

Apprentice - PAINTER Local 35 - BRIDGES/TANKS

Effective Date - 01/01/2024		Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
Step	percent					
1	50	\$28.03	\$9.95	\$0.00	\$0.00	\$37.98
2	55	\$30.83	\$9.95	\$6.66	\$0.00	\$47.44
3	60	\$33.64	\$9.95	\$7.26	\$0.00	\$50.85
4	65	\$36.44	\$9.95	\$7.87	\$0.00	\$54.26
5	70	\$39.24	\$9.95	\$20.32	\$0.00	\$69.51
6	75	\$42.05	\$9.95	\$20.93	\$0.00	\$72.93
7	80	\$44.85	\$9.95	\$21.53	\$0.00	\$76.33
8	90	\$50.45	\$9.95	\$22.74	\$0.00	\$83.14

Effective Date - 07/01/2024		Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
Step	percent					
1	50	\$28.63	\$9.95	\$0.00	\$0.00	\$38.58
2	55	\$31.49	\$9.95	\$6.66	\$0.00	\$48.10
3	60	\$34.36	\$9.95	\$7.26	\$0.00	\$51.57
4	65	\$37.22	\$9.95	\$7.87	\$0.00	\$55.04
5	70	\$40.08	\$9.95	\$20.32	\$0.00	\$70.35
6	75	\$42.95	\$9.95	\$20.93	\$0.00	\$73.83
7	80	\$45.81	\$9.95	\$21.53	\$0.00	\$77.29
8	90	\$51.53	\$9.95	\$22.74	\$0.00	\$84.22

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

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

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

DEMO: BURNERS <i>LABORERS - ZONE 2</i>	12/01/2023	\$45.23	\$9.65	\$18.07	\$0.00	\$72.95
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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER"						
DEMO: CONCRETE CUTTER/SAWYER <i>LABORERS - ZONE 2</i>	12/01/2023	\$45.48	\$9.65	\$18.07	\$0.00	\$73.20
For apprentice rates see "Apprentice- LABORER"						
DEMO: JACKHAMMER OPERATOR <i>LABORERS - ZONE 2</i>	12/01/2023	\$45.23	\$9.65	\$18.07	\$0.00	\$72.95
For apprentice rates see "Apprentice- LABORER"						
DEMO: WRECKING LABORER <i>LABORERS - ZONE 2</i>	12/01/2023	\$44.48	\$9.65	\$18.07	\$0.00	\$72.20
For apprentice rates see "Apprentice- LABORER"						
DIRECTIONAL DRILL MACHINE OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$54.43	\$15.00	\$16.40	\$0.00	\$85.83
	06/01/2024	\$55.71	\$15.00	\$16.40	\$0.00	\$87.11
	12/01/2024	\$57.15	\$15.00	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.43	\$15.00	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.87	\$15.00	\$16.40	\$0.00	\$91.27
	06/01/2026	\$61.15	\$15.00	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.59	\$15.00	\$16.40	\$0.00	\$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
DIVER <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2020	\$68.70	\$9.40	\$23.12	\$0.00	\$101.22
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER TENDER <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2020	\$49.07	\$9.40	\$23.12	\$0.00	\$81.59
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER TENDER (EFFLUENT) <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2020	\$73.60	\$9.40	\$23.12	\$0.00	\$106.12
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER/SLURRY (EFFLUENT) <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2020	\$103.05	\$9.40	\$23.12	\$0.00	\$135.57
For apprentice rates see "Apprentice- PILE DRIVER"						
DRAWBRIDGE OPERATOR (Construction) <i>DRAWBRIDGE - SEIU LOCAL 888</i>	07/01/2020	\$26.77	\$6.67	\$3.93	\$0.16	\$37.53
ELECTRICIAN <i>ELECTRICIANS LOCAL 103</i>	09/01/2023	\$61.39	\$13.00	\$21.69	\$0.00	\$96.08
	03/01/2024	\$61.86	\$13.00	\$22.21	\$0.00	\$97.07
	09/01/2024	\$63.78	\$13.00	\$22.26	\$0.00	\$99.04
	03/01/2025	\$64.98	\$13.00	\$22.30	\$0.00	\$100.28
	09/01/2025	\$66.89	\$13.00	\$22.36	\$0.00	\$102.25
	03/01/2026	\$68.09	\$13.00	\$22.39	\$0.00	\$103.48
	09/01/2026	\$70.00	\$13.00	\$22.45	\$0.00	\$105.45
	03/01/2027	\$71.19	\$13.00	\$22.49	\$0.00	\$106.68
	09/01/2027	\$73.11	\$13.00	\$22.54	\$0.00	\$108.65
	03/01/2028	\$74.31	\$13.00	\$22.58	\$0.00	\$109.89

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - ELECTRICIAN - Local 103

Effective Date - 09/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$24.56	\$13.00	\$0.74	\$0.00	\$38.30
2	40	\$24.56	\$13.00	\$0.74	\$0.00	\$38.30
3	45	\$27.63	\$13.00	\$16.16	\$0.00	\$56.79
4	45	\$27.63	\$13.00	\$16.16	\$0.00	\$56.79
5	50	\$30.70	\$13.00	\$16.66	\$0.00	\$60.36
6	55	\$33.76	\$13.00	\$17.16	\$0.00	\$63.92
7	60	\$36.83	\$13.00	\$17.67	\$0.00	\$67.50
8	65	\$39.90	\$13.00	\$18.17	\$0.00	\$71.07
9	70	\$42.97	\$13.00	\$18.67	\$0.00	\$74.64
10	75	\$46.04	\$13.00	\$19.18	\$0.00	\$78.22

Effective Date - 03/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$24.74	\$13.00	\$0.74	\$0.00	\$38.48
2	40	\$24.74	\$13.00	\$0.74	\$0.00	\$38.48
3	45	\$27.84	\$13.00	\$16.67	\$0.00	\$57.51
4	45	\$27.84	\$13.00	\$16.67	\$0.00	\$57.51
5	50	\$30.93	\$13.00	\$17.17	\$0.00	\$61.10
6	55	\$34.02	\$13.00	\$17.67	\$0.00	\$64.69
7	60	\$37.12	\$13.00	\$18.17	\$0.00	\$68.29
8	65	\$40.21	\$13.00	\$18.68	\$0.00	\$71.89
9	70	\$43.30	\$13.00	\$19.18	\$0.00	\$75.48
10	75	\$46.40	\$13.00	\$19.69	\$0.00	\$79.09

Notes :
 App Prior 1/1/03; 30/35/40/45/50/55/65/70/75/80

Apprentice to Journeyworker Ratio:2:3***

ELEVATOR CONSTRUCTOR	01/01/2022	\$65.62	\$16.03	\$20.21	\$0.00	\$101.86
ELEVATOR CONSTRUCTORS LOCAL 4						

Apprentice - ELEVATOR CONSTRUCTOR - Local 4

Effective Date - 01/01/2022

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$32.81	\$16.03	\$0.00	\$0.00	\$48.84
2	55	\$36.09	\$16.03	\$20.21	\$0.00	\$72.33
3	65	\$42.65	\$16.03	\$20.21	\$0.00	\$78.89
4	70	\$45.93	\$16.03	\$20.21	\$0.00	\$82.17
5	80	\$52.50	\$16.03	\$20.21	\$0.00	\$88.74

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

Apprentice to Journeyworker Ratio:1:1

ELEVATOR CONSTRUCTOR HELPER <i>ELEVATOR CONSTRUCTORS LOCAL 4</i>	01/01/2022	\$45.93	\$16.03	\$20.21	\$0.00	\$82.17
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For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"

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

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

FIELD ENG.INST.PERSON-BLDG,SITE,HVY/HWY <i>OPERATING ENGINEERS LOCAL 4</i>	11/01/2023	\$50.30	\$14.50	\$16.15	\$0.00	\$80.95
	05/01/2024	\$51.54	\$14.50	\$16.15	\$0.00	\$82.19
	11/01/2024	\$52.83	\$14.50	\$16.15	\$0.00	\$83.48
	05/01/2025	\$54.27	\$14.50	\$16.15	\$0.00	\$84.92
	11/01/2025	\$55.56	\$14.50	\$16.15	\$0.00	\$86.21
	05/01/2026	\$57.00	\$14.50	\$16.15	\$0.00	\$87.65
	11/01/2026	\$58.29	\$14.50	\$16.15	\$0.00	\$88.94
	05/01/2027	\$59.72	\$14.50	\$16.15	\$0.00	\$90.37

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

FIELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY <i>OPERATING ENGINEERS LOCAL 4</i>	11/01/2023	\$51.87	\$14.50	\$16.15	\$0.00	\$82.52
	05/01/2024	\$53.12	\$14.50	\$16.15	\$0.00	\$83.77
	11/01/2024	\$54.42	\$14.50	\$16.15	\$0.00	\$85.07
	05/01/2025	\$55.87	\$14.50	\$16.15	\$0.00	\$86.52
	11/01/2025	\$57.17	\$14.50	\$16.15	\$0.00	\$87.82
	05/01/2026	\$58.62	\$14.50	\$16.15	\$0.00	\$89.27
	11/01/2026	\$59.92	\$14.50	\$16.15	\$0.00	\$90.57
	05/01/2027	\$61.37	\$14.50	\$16.15	\$0.00	\$92.02

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
FIELD ENG.ROD PERSON-BLDG,SITE,HVY/HWY <i>OPERATING ENGINEERS LOCAL 4</i>	11/01/2023	\$24.93	\$14.50	\$16.15	\$0.00	\$55.58
	05/01/2024	\$25.66	\$14.50	\$16.15	\$0.00	\$56.31
	11/01/2024	\$26.42	\$14.50	\$16.15	\$0.00	\$57.07
	05/01/2025	\$27.27	\$14.50	\$16.15	\$0.00	\$57.92
	11/01/2025	\$28.03	\$14.50	\$16.15	\$0.00	\$58.68
	05/01/2026	\$28.88	\$14.50	\$16.15	\$0.00	\$59.53
	11/01/2026	\$29.64	\$14.50	\$16.15	\$0.00	\$60.29
	05/01/2027	\$30.49	\$14.50	\$16.15	\$0.00	\$61.14
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FIRE ALARM INSTALLER <i>ELECTRICIANS LOCAL 103</i>	09/01/2023	\$61.39	\$13.00	\$21.69	\$0.00	\$96.08
	03/01/2024	\$61.86	\$13.00	\$22.21	\$0.00	\$97.07
	09/01/2024	\$63.78	\$13.00	\$22.26	\$0.00	\$99.04
	03/01/2025	\$64.98	\$13.00	\$22.30	\$0.00	\$100.28
	09/01/2025	\$66.89	\$13.00	\$22.36	\$0.00	\$102.25
	03/01/2026	\$68.09	\$13.00	\$22.39	\$0.00	\$103.48
	09/01/2026	\$70.00	\$13.00	\$22.45	\$0.00	\$105.45
	03/01/2027	\$71.19	\$13.00	\$22.49	\$0.00	\$106.68
	09/01/2027	\$73.11	\$13.00	\$22.54	\$0.00	\$108.65
	03/01/2028	\$74.31	\$13.00	\$22.58	\$0.00	\$109.89
For apprentice rates see "Apprentice- ELECTRICIAN"						
FIRE ALARM REPAIR / MAINTENANCE <i>LOCAL 103</i> / COMMISSIONING <i>ELECTRICIANS</i>	09/01/2023	\$49.11	\$13.00	\$19.68	\$0.00	\$81.79
	03/01/2024	\$49.49	\$13.00	\$20.19	\$0.00	\$82.68
	09/01/2024	\$51.02	\$13.00	\$20.24	\$0.00	\$84.26
	03/01/2025	\$51.98	\$13.00	\$20.27	\$0.00	\$85.25
	09/01/2025	\$53.51	\$13.00	\$20.32	\$0.00	\$86.83
	03/01/2026	\$54.47	\$13.00	\$20.34	\$0.00	\$87.81
	09/01/2026	\$56.00	\$13.00	\$20.39	\$0.00	\$89.39
	03/01/2027	\$56.95	\$13.00	\$20.42	\$0.00	\$90.37
	09/01/2027	\$58.49	\$13.00	\$20.46	\$0.00	\$91.95
	03/01/2028	\$59.45	\$13.00	\$20.49	\$0.00	\$92.94
For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"						
FIREMAN (ASST. ENGINEER) <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$44.47	\$15.00	\$16.40	\$0.00	\$75.87
	06/01/2024	\$45.53	\$15.00	\$16.40	\$0.00	\$76.93
	12/01/2024	\$46.71	\$15.00	\$16.40	\$0.00	\$78.11
	06/01/2025	\$47.77	\$15.00	\$16.40	\$0.00	\$79.17
	12/01/2025	\$48.94	\$15.00	\$16.40	\$0.00	\$80.34
	06/01/2026	\$50.00	\$15.00	\$16.40	\$0.00	\$81.40
	12/01/2026	\$51.18	\$15.00	\$16.40	\$0.00	\$82.58
	For apprentice rates see "Apprentice- OPERATING ENGINEERS"					
FLAGGER & SIGNALER (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	12/01/2023	\$25.48	\$9.65	\$17.14	\$0.00	\$52.27
	06/01/2024	\$26.51	\$9.65	\$17.14	\$0.00	\$53.30
	12/01/2024	\$26.51	\$9.65	\$17.14	\$0.00	\$53.30
	06/01/2025	\$27.59	\$9.65	\$17.14	\$0.00	\$54.38
	12/01/2025	\$27.59	\$9.65	\$17.14	\$0.00	\$54.38
	06/01/2026	\$28.71	\$9.65	\$17.14	\$0.00	\$55.50
	12/01/2026	\$28.71	\$9.65	\$17.14	\$0.00	\$55.50
	For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"					

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
FLOORCOVERER	09/01/2023	\$53.48	\$8.83	\$20.27	\$0.00	\$82.58
<i>FLOORCOVERERS LOCAL 2168 ZONE I</i>	03/01/2024	\$54.73	\$8.83	\$20.27	\$0.00	\$83.83
	09/01/2024	\$56.23	\$8.83	\$20.27	\$0.00	\$85.33
	03/01/2025	\$57.73	\$8.83	\$20.27	\$0.00	\$86.83
	09/01/2025	\$59.23	\$8.83	\$20.27	\$0.00	\$88.33
	03/01/2026	\$60.73	\$8.83	\$20.27	\$0.00	\$89.83
	09/01/2026	\$62.23	\$8.83	\$20.27	\$0.00	\$91.33
	03/01/2027	\$63.73	\$8.83	\$20.27	\$0.00	\$92.83

Apprentice - FLOORCOVERER - Local 2168 Zone I

Effective Date - 09/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$26.74	\$8.83	\$1.76	\$0.00	\$37.33
2	55	\$29.41	\$8.83	\$1.76	\$0.00	\$40.00
3	60	\$32.09	\$8.83	\$3.52	\$0.00	\$44.44
4	65	\$34.76	\$8.83	\$3.52	\$0.00	\$47.11
5	70	\$37.44	\$8.83	\$16.75	\$0.00	\$63.02
6	75	\$40.11	\$8.83	\$16.75	\$0.00	\$65.69
7	80	\$42.78	\$8.83	\$18.51	\$0.00	\$70.12
8	85	\$45.46	\$8.83	\$18.51	\$0.00	\$72.80

Effective Date - 03/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$27.37	\$8.83	\$1.76	\$0.00	\$37.96
2	55	\$30.10	\$8.83	\$1.76	\$0.00	\$40.69
3	60	\$32.84	\$8.83	\$3.52	\$0.00	\$45.19
4	65	\$35.57	\$8.83	\$3.52	\$0.00	\$47.92
5	70	\$38.31	\$8.83	\$16.75	\$0.00	\$63.89
6	75	\$41.05	\$8.83	\$16.75	\$0.00	\$66.63
7	80	\$43.78	\$8.83	\$18.51	\$0.00	\$71.12
8	85	\$46.52	\$8.83	\$18.51	\$0.00	\$73.86

Notes: Steps are 750 hrs.
 % After 10/1/17; 45/45/55/55/70/70/80/80 (1500hr Steps)
 Step 1&2 \$34.65/ 3&4 \$41.76/ 5&6 \$63.02/ 7&8 \$70.12

Apprentice to Journeyworker Ratio:1:1

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

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
GENERATOR/LIGHTING PLANT/HEATERS <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$35.62	\$15.00	\$16.40	\$0.00	\$67.02
	06/01/2024	\$36.47	\$15.00	\$16.40	\$0.00	\$67.87
	12/01/2024	\$37.42	\$15.00	\$16.40	\$0.00	\$68.82
	06/01/2025	\$38.27	\$15.00	\$16.40	\$0.00	\$69.67
	12/01/2025	\$39.22	\$15.00	\$16.40	\$0.00	\$70.62
	06/01/2026	\$40.08	\$15.00	\$16.40	\$0.00	\$71.48
	12/01/2026	\$41.03	\$15.00	\$16.40	\$0.00	\$72.43
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						

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

Apprentice - GLAZIER - Local 35 Zone 2

Effective Date - 01/01/2024

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

Effective Date - 07/01/2024

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

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

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

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - OPERATING ENGINEERS - Local 4

Effective Date - 12/01/2023

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

Effective Date - 06/01/2024

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

Notes:

Apprentice to Journeyworker Ratio:1:6

HVAC (DUCTWORK)	02/01/2024	\$57.86	\$14.43	\$27.07	\$2.93	\$102.29
SHEETMETAL WORKERS LOCAL 17 - A	08/01/2024	\$59.61	\$14.43	\$27.07	\$2.93	\$104.04
	02/01/2025	\$61.36	\$14.43	\$27.07	\$2.93	\$105.79
	08/01/2025	\$63.21	\$14.43	\$27.07	\$2.93	\$107.64
	02/01/2026	\$65.16	\$14.43	\$27.07	\$2.93	\$109.59

For apprentice rates see "Apprentice- SHEET METAL WORKER"

HVAC (ELECTRICAL CONTROLS)	09/01/2023	\$61.39	\$13.00	\$21.69	\$0.00	\$96.08
ELECTRICIANS LOCAL 103	03/01/2024	\$61.86	\$13.00	\$22.21	\$0.00	\$97.07
	09/01/2024	\$63.78	\$13.00	\$22.26	\$0.00	\$99.04
	03/01/2025	\$64.98	\$13.00	\$22.30	\$0.00	\$100.28
	09/01/2025	\$66.89	\$13.00	\$22.36	\$0.00	\$102.25
	03/01/2026	\$68.09	\$13.00	\$22.39	\$0.00	\$103.48
	09/01/2026	\$70.00	\$13.00	\$22.45	\$0.00	\$105.45
	03/01/2027	\$71.19	\$13.00	\$22.49	\$0.00	\$106.68
	09/01/2027	\$73.11	\$13.00	\$22.54	\$0.00	\$108.65
	03/01/2028	\$74.31	\$13.00	\$22.58	\$0.00	\$109.89

For apprentice rates see "Apprentice- ELECTRICIAN"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
HVAC (TESTING AND BALANCING - AIR) <i>SHEETMETAL WORKERS LOCAL 17 - A</i>	02/01/2024	\$57.86	\$14.43	\$27.07	\$2.93	\$102.29
	08/01/2024	\$59.61	\$14.43	\$27.07	\$2.93	\$104.04
	02/01/2025	\$61.36	\$14.43	\$27.07	\$2.93	\$105.79
	08/01/2025	\$63.21	\$14.43	\$27.07	\$2.93	\$107.64
	02/01/2026	\$65.16	\$14.43	\$27.07	\$2.93	\$109.59
For apprentice rates see "Apprentice- SHEET METAL WORKER"						
HVAC (TESTING AND BALANCING -WATER) <i>PIPEFITTERS LOCAL 537 (Local 138)</i>	09/01/2023	\$63.48	\$12.70	\$21.50	\$0.00	\$97.68
	03/01/2024	\$65.28	\$12.70	\$21.50	\$0.00	\$99.48
	09/01/2024	\$67.08	\$12.70	\$21.50	\$0.00	\$101.28
	03/01/2025	\$68.88	\$12.70	\$21.50	\$0.00	\$103.08
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HVAC MECHANIC <i>PIPEFITTERS LOCAL 537 (Local 138)</i>	09/01/2023	\$63.48	\$12.70	\$21.50	\$0.00	\$97.68
	03/01/2024	\$65.28	\$12.70	\$21.50	\$0.00	\$99.48
	09/01/2024	\$67.08	\$12.70	\$21.50	\$0.00	\$101.28
	03/01/2025	\$68.88	\$12.70	\$21.50	\$0.00	\$103.08
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HYDRAULIC DRILLS <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.61	\$9.65	\$17.14	\$0.00	\$65.40
For apprentice rates see "Apprentice- LABORER"						
HYDRAULIC DRILLS (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	12/01/2023	\$38.61	\$9.65	\$17.14	\$0.00	\$65.40
	06/01/2024	\$39.94	\$9.65	\$17.14	\$0.00	\$66.73
	12/01/2024	\$41.27	\$9.65	\$17.14	\$0.00	\$68.06
	06/01/2025	\$42.66	\$9.65	\$17.14	\$0.00	\$69.45
	12/01/2025	\$44.04	\$9.65	\$17.14	\$0.00	\$70.83
	06/01/2026	\$45.48	\$9.65	\$17.14	\$0.00	\$72.27
12/01/2026	\$46.92	\$9.65	\$17.14	\$0.00	\$73.71	
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
INSULATOR (PIPES & TANKS) <i>HEAT & FROST INSULATORS LOCAL 6 (BOSTON)</i>	09/01/2023	\$53.50	\$14.75	\$19.61	\$0.00	\$87.86
	09/01/2024	\$56.92	\$14.75	\$19.61	\$0.00	\$91.28
	09/01/2025	\$60.34	\$14.75	\$19.61	\$0.00	\$94.70
	09/01/2026	\$63.76	\$14.75	\$19.61	\$0.00	\$98.12

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

Effective Date - 09/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$26.75	\$14.75	\$14.32	\$0.00	\$55.82
2	60	\$32.10	\$14.75	\$15.37	\$0.00	\$62.22
3	70	\$37.45	\$14.75	\$16.43	\$0.00	\$68.63
4	80	\$42.80	\$14.75	\$17.49	\$0.00	\$75.04

Effective Date - 09/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$28.46	\$14.75	\$14.32	\$0.00	\$57.53
2	60	\$34.15	\$14.75	\$15.37	\$0.00	\$64.27
3	70	\$39.84	\$14.75	\$16.43	\$0.00	\$71.02
4	80	\$45.54	\$14.75	\$17.49	\$0.00	\$77.78

Notes:

Steps are 1 year

Apprentice to Journeyworker Ratio:1:4

IRONWORKER/WELDER	03/16/2023	\$52.72	\$8.35	\$26.70	\$0.00	\$87.77
IRONWORKERS LOCAL 7 (BOSTON AREA)	03/16/2024	\$53.97	\$8.35	\$26.70	\$0.00	\$89.02

Apprentice - IRONWORKER - Local 7 Boston

Effective Date - 03/16/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$31.63	\$8.35	\$26.70	\$0.00	\$66.68
2	70	\$36.90	\$8.35	\$26.70	\$0.00	\$71.95
3	75	\$39.54	\$8.35	\$26.70	\$0.00	\$74.59
4	80	\$42.18	\$8.35	\$26.70	\$0.00	\$77.23
5	85	\$44.81	\$8.35	\$26.70	\$0.00	\$79.86
6	90	\$47.45	\$8.35	\$26.70	\$0.00	\$82.50

Effective Date - 03/16/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$32.38	\$8.35	\$26.70	\$0.00	\$67.43
2	70	\$37.78	\$8.35	\$26.70	\$0.00	\$72.83
3	75	\$40.48	\$8.35	\$26.70	\$0.00	\$75.53
4	80	\$43.18	\$8.35	\$26.70	\$0.00	\$78.23
5	85	\$45.87	\$8.35	\$26.70	\$0.00	\$80.92
6	90	\$48.57	\$8.35	\$26.70	\$0.00	\$83.62

Notes:

Apprentice to Journeyworker Ratio:1:4

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
JACKHAMMER & PAVING BREAKER OPERATOR <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
For apprentice rates see "Apprentice- LABORER"						
LABORER <i>LABORERS - ZONE 2</i>	12/01/2023	\$37.86	\$9.65	\$17.14	\$0.00	\$64.65

Apprentice - LABORER - Zone 2
Effective Date - 12/01/2023

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

Notes:

Apprentice to Journeyworker Ratio:1:5

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

Apprentice - LABORER (Heavy & Highway) - Zone 2
Effective Date - 12/01/2023

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

Effective Date - 06/01/2024

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

Notes:

Apprentice to Journeyworker Ratio:1:5

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
LABORER: CARPENTER TENDER <i>LABORERS - ZONE 2</i>	12/01/2023	\$37.86	\$9.65	\$17.14	\$0.00	\$64.65
For apprentice rates see "Apprentice- LABORER"						
LABORER: CEMENT FINISHER TENDER <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.36	\$9.40	\$16.89	\$0.00	\$64.65
For apprentice rates see "Apprentice- LABORER"						
LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER <i>LABORERS - ZONE 2</i>	12/01/2023	\$37.95	\$9.65	\$17.20	\$0.00	\$64.80
For apprentice rates see "Apprentice- LABORER"						
LABORER: MASON TENDER <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
For apprentice rates see "Apprentice- LABORER"						
LABORER: MASON TENDER (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
	06/01/2024	\$39.44	\$9.65	\$17.14	\$0.00	\$66.23
	12/01/2024	\$40.77	\$9.65	\$17.14	\$0.00	\$67.56
	06/01/2025	\$42.16	\$9.65	\$17.14	\$0.00	\$68.95
	12/01/2025	\$43.54	\$9.65	\$17.14	\$0.00	\$70.33
	06/01/2026	\$44.98	\$9.65	\$17.14	\$0.00	\$71.77
	12/01/2026	\$46.42	\$9.65	\$17.14	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
LABORER: MULTI-TRADE TENDER <i>LABORERS - ZONE 2</i>	12/01/2023	\$37.86	\$9.65	\$17.14	\$0.00	\$64.65
For apprentice rates see "Apprentice- LABORER"						
LABORER: TREE REMOVER <i>LABORERS - ZONE 2</i>	12/01/2023	\$37.86	\$9.65	\$17.14	\$0.00	\$64.65
This classification applies to the removal of standing trees, and the trimming and removal of branches and limbs when related to public works construction or site clearance incidental to construction . For apprentice rates see "Apprentice- LABORER"						
LASER BEAM OPERATOR <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
For apprentice rates see "Apprentice- LABORER"						
LASER BEAM OPERATOR (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
	06/01/2024	\$39.44	\$9.65	\$17.14	\$0.00	\$66.23
	12/01/2024	\$40.77	\$9.65	\$17.14	\$0.00	\$67.56
	06/01/2025	\$42.16	\$9.65	\$17.14	\$0.00	\$68.95
	12/01/2025	\$43.54	\$9.65	\$17.14	\$0.00	\$70.33
	06/01/2026	\$44.98	\$9.65	\$17.14	\$0.00	\$71.77
	12/01/2026	\$46.42	\$9.65	\$17.14	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
MARBLE & TILE FINISHERS <i>BRICKLAYERS LOCAL 3 - MARBLE & TILE</i>	02/01/2024	\$47.89	\$11.49	\$21.37	\$0.00	\$80.75
	08/01/2024	\$49.57	\$11.49	\$21.37	\$0.00	\$82.43
	02/01/2025	\$50.61	\$11.49	\$21.37	\$0.00	\$83.47
	08/01/2025	\$52.33	\$11.49	\$21.37	\$0.00	\$85.19
	02/01/2026	\$53.41	\$11.49	\$21.37	\$0.00	\$86.27
	08/01/2026	\$55.17	\$11.49	\$21.37	\$0.00	\$88.03
	02/01/2027	\$56.29	\$11.49	\$21.37	\$0.00	\$89.15

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

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

Effective Date - 02/01/2024

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

Effective Date - 08/01/2024

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

Notes:

Apprentice to Journeyworker Ratio:1:3

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

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

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

Effective Date - 02/01/2024

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

Effective Date - 08/01/2024

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

Notes:

Apprentice to Journeyworker Ratio:1:5

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

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

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

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

MILLWRIGHT (Zone 1) <i>MILLWRIGHTS LOCAL 1121 - Zone 1</i>	01/02/2023	\$47.27	\$8.58	\$21.57	\$0.00	\$77.42
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Apprentice - MILLWRIGHT - Local 1121 Zone 1

Effective Date - 01/02/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$26.00	\$8.58	\$5.72	\$0.00	\$40.30
2	65	\$30.73	\$8.58	\$17.93	\$0.00	\$57.24
3	75	\$35.45	\$8.58	\$18.98	\$0.00	\$63.01
4	85	\$40.18	\$8.58	\$20.01	\$0.00	\$68.77

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

Apprentice to Journeyworker Ratio:1:4

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

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

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

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

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

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

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

PAINTER (BRIDGES/TANKS) PAINTERS LOCAL 35 - ZONE 2	01/01/2024	\$56.06	\$9.95	\$23.95	\$0.00	\$89.96
	07/01/2024	\$57.26	\$9.95	\$23.95	\$0.00	\$91.16
	01/01/2025	\$58.46	\$9.95	\$23.95	\$0.00	\$92.36

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PAINTER Local 35 - BRIDGES/TANKS

Effective Date - 01/01/2024

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

Effective Date - 07/01/2024

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

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

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

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

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

Effective Date - 01/01/2024

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

Effective Date - 07/01/2024

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

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

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

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

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

Effective Date - 01/01/2024

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

Effective Date - 07/01/2024

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

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

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

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PAINTER - Local 35 Zone 2 - BRUSH NEW

Effective Date - 01/01/2024

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

Effective Date - 07/01/2024

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

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

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

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PAINTER Local 35 Zone 2 - BRUSH REPAINT

Effective Date - 01/01/2024

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

Effective Date - 07/01/2024

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

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

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

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

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

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
PIER AND DOCK CONSTRUCTOR (UNDERPINNING AND DECK) <i>PILE DRIVER LOCAL 56 (ZONE 1)</i> For apprentice rates see "Apprentice- PILE DRIVER"	08/01/2020	\$49.07	\$9.40	\$23.12	\$0.00	\$81.59
PILE DRIVER <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2020	\$49.07	\$9.40	\$23.12	\$0.00	\$81.59

Apprentice - PILE DRIVER - Local 56 Zone 1

Effective Date - 08/01/2020

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.54	\$9.40	\$23.12	\$0.00	\$57.06
2	60	\$29.44	\$9.40	\$23.12	\$0.00	\$61.96
3	70	\$34.35	\$9.40	\$23.12	\$0.00	\$66.87
4	75	\$36.80	\$9.40	\$23.12	\$0.00	\$69.32
5	80	\$39.26	\$9.40	\$23.12	\$0.00	\$71.78
6	80	\$39.26	\$9.40	\$23.12	\$0.00	\$71.78
7	90	\$44.16	\$9.40	\$23.12	\$0.00	\$76.68
8	90	\$44.16	\$9.40	\$23.12	\$0.00	\$76.68

Notes:
 % Indentured After 10/1/17; 45/45/55/55/70/70/80/80
 Step 1&2 \$34.01/ 3&4 \$41.46/ 5&6 \$62.80/ 7&8 \$69.25

Apprentice to Journeyworker Ratio:1:5

PIPEFITTER & STEAMFITTER <i>PIPEFITTERS LOCAL 537 (Local 138)</i>	09/01/2023	\$63.48	\$12.70	\$21.50	\$0.00	\$97.68
	03/01/2024	\$65.28	\$12.70	\$21.50	\$0.00	\$99.48
	09/01/2024	\$67.08	\$12.70	\$21.50	\$0.00	\$101.28
	03/01/2025	\$68.88	\$12.70	\$21.50	\$0.00	\$103.08

Apprentice - PIPEFITTER Local 537 (Local 138)

Effective Date - 09/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$25.39	\$12.70	\$9.05	\$0.00	\$47.14
2	45	\$28.57	\$12.70	\$21.50	\$0.00	\$62.77
3	60	\$38.09	\$12.70	\$21.50	\$0.00	\$72.29
4	70	\$44.44	\$12.70	\$21.50	\$0.00	\$78.64
5	80	\$50.78	\$12.70	\$21.50	\$0.00	\$84.98

Effective Date - 03/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$26.11	\$12.70	\$9.05	\$0.00	\$47.86
2	45	\$29.38	\$12.70	\$21.50	\$0.00	\$63.58
3	60	\$39.17	\$12.70	\$21.50	\$0.00	\$73.37
4	70	\$45.70	\$12.70	\$21.50	\$0.00	\$79.90
5	80	\$52.22	\$12.70	\$21.50	\$0.00	\$86.42

Notes:
 ** 1:3; 3:15; 1:10 thereafter / Steps are 1 yr.
 Refrig/AC Mechanic **1:1;1:2;2:4;3:6;4:8;5:10;6:12;7:14;8:17;9:20;10:23(Max)

Apprentice to Journeyworker Ratio:**

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

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

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

PLUMBER PLUMBERS & GASFITTERS LOCAL 12 (Local 138)	09/03/2023	\$66.44	\$14.07	\$18.86	\$0.00	\$99.37
	03/03/2024	\$68.24	\$14.07	\$18.86	\$0.00	\$101.17
	09/01/2024	\$70.04	\$14.07	\$18.86	\$0.00	\$102.97
	03/02/2025	\$71.34	\$14.32	\$19.11	\$0.00	\$104.77

Apprentice - PLUMBER/GASFITTER - Local 12 (Local 138)

Effective Date - 09/03/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$23.25	\$14.07	\$6.80	\$0.00	\$44.12
2	40	\$26.58	\$14.07	\$7.72	\$0.00	\$48.37
3	55	\$36.54	\$14.07	\$10.51	\$0.00	\$61.12
4	65	\$43.19	\$14.07	\$12.36	\$0.00	\$69.62
5	75	\$49.83	\$14.07	\$14.22	\$0.00	\$78.12

Effective Date - 03/03/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$23.88	\$14.07	\$6.80	\$0.00	\$44.75
2	40	\$27.30	\$14.07	\$7.72	\$0.00	\$49.09
3	55	\$37.53	\$14.07	\$10.51	\$0.00	\$62.11
4	65	\$44.36	\$14.07	\$12.36	\$0.00	\$70.79
5	75	\$51.18	\$14.07	\$14.22	\$0.00	\$79.47

Notes: ** 1:2; 2:6; 3:10; 4:14; 5:19/Steps are 1 yr
 Steps are 1 yr
 Step 4 with lic\$69.00, Step5 with lic\$76.87

Apprentice to Journeyworker Ratio:**

PNEUMATIC CONTROLS (TEMP.)	09/01/2023	\$63.48	\$12.70	\$21.50	\$0.00	\$97.68
PIPEFITTERS LOCAL 537 (Local 138)	03/01/2024	\$65.28	\$12.70	\$21.50	\$0.00	\$99.48
	09/01/2024	\$67.08	\$12.70	\$21.50	\$0.00	\$101.28
	03/01/2025	\$68.88	\$12.70	\$21.50	\$0.00	\$103.08

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

PNEUMATIC DRILL/TOOL OPERATOR	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
LABORERS - ZONE 2						

For apprentice rates see "Apprentice- LABORER"

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

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

POWDERMAN & BLASTER	12/01/2023	\$38.86	\$9.65	\$17.14	\$0.00	\$65.65
LABORERS - ZONE 2						

For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
POWDERMAN & BLASTER (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	12/01/2023	\$39.36	\$9.40	\$16.89	\$0.00	\$65.65
	06/01/2024	\$40.69	\$9.40	\$16.89	\$0.00	\$66.98
	12/01/2024	\$42.02	\$9.40	\$16.89	\$0.00	\$68.31
	06/01/2025	\$43.41	\$9.40	\$16.89	\$0.00	\$69.70
	12/01/2025	\$44.79	\$9.40	\$16.89	\$0.00	\$71.08
	06/01/2026	\$46.23	\$9.40	\$16.89	\$0.00	\$72.52
	12/01/2026	\$47.67	\$9.40	\$16.89	\$0.00	\$73.96
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)						
POWER SHOVEL/DERRICK/TRENCHING MACHINE <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$55.03	\$15.00	\$16.40	\$0.00	\$86.43
	06/01/2024	\$56.33	\$15.00	\$16.40	\$0.00	\$87.73
	12/01/2024	\$57.78	\$15.00	\$16.40	\$0.00	\$89.18
	06/01/2025	\$59.08	\$15.00	\$16.40	\$0.00	\$90.48
	12/01/2025	\$60.53	\$15.00	\$16.40	\$0.00	\$91.93
	06/01/2026	\$61.83	\$15.00	\$16.40	\$0.00	\$93.23
	12/01/2026	\$63.28	\$15.00	\$16.40	\$0.00	\$94.68
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (CONCRETE) <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$54.43	\$15.00	\$16.40	\$0.00	\$85.83
	06/01/2024	\$55.71	\$15.00	\$16.40	\$0.00	\$87.11
	12/01/2024	\$57.15	\$15.00	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.43	\$15.00	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.87	\$15.00	\$16.40	\$0.00	\$91.27
	06/01/2026	\$61.15	\$15.00	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.59	\$15.00	\$16.40	\$0.00	\$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (DEWATERING, OTHER) <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$35.62	\$15.00	\$16.40	\$0.00	\$67.02
	06/01/2024	\$36.47	\$15.00	\$16.40	\$0.00	\$67.87
	12/01/2024	\$37.42	\$15.00	\$16.40	\$0.00	\$68.82
	06/01/2025	\$38.27	\$15.00	\$16.40	\$0.00	\$69.67
	12/01/2025	\$39.22	\$15.00	\$16.40	\$0.00	\$70.62
	06/01/2026	\$40.08	\$15.00	\$16.40	\$0.00	\$71.48
	12/01/2026	\$41.03	\$15.00	\$16.40	\$0.00	\$72.43
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
READY-MIX CONCRETE DRIVER <i>TEAMSTERS 42 - J.G. MacLeallan (Wakefield)</i>	05/01/2023	\$29.25	\$12.00	\$7.00	\$0.00	\$48.25
	05/01/2024	\$29.50	\$12.00	\$7.00	\$0.00	\$48.50
	05/01/2025	\$30.00	\$12.00	\$7.00	\$0.00	\$49.00
	05/01/2026	\$30.50	\$12.00	\$7.00	\$0.00	\$49.50
RECLAIMERS <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$54.43	\$15.00	\$16.40	\$0.00	\$85.83
	06/01/2024	\$55.71	\$15.00	\$16.40	\$0.00	\$87.11
	12/01/2024	\$57.15	\$15.00	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.43	\$15.00	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.87	\$15.00	\$16.40	\$0.00	\$91.27
	06/01/2026	\$61.15	\$15.00	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.59	\$15.00	\$16.40	\$0.00	\$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
RIDE-ON MOTORIZED BUGGY OPERATOR <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
For apprentice rates see "Apprentice- LABORER"						

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

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

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

Apprentice - ROOFER - Local 33

Effective Date - 02/01/2024

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

Effective Date - 08/01/2024

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

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

Apprentice to Journeyworker Ratio:**

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

For apprentice rates see "Apprentice- ROOFER"

SHEETMETAL WORKER <i>SHEETMETAL WORKERS LOCAL 17 - A</i>	02/01/2024	\$57.86	\$14.43	\$27.07	\$2.93	\$102.29
	08/01/2024	\$59.61	\$14.43	\$27.07	\$2.93	\$104.04
	02/01/2025	\$61.36	\$14.43	\$27.07	\$2.93	\$105.79
	08/01/2025	\$63.21	\$14.43	\$27.07	\$2.93	\$107.64
	02/01/2026	\$65.16	\$14.43	\$27.07	\$2.93	\$109.59

Apprentice - SHEET METAL WORKER - Local 17-A

Effective Date - 02/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	42	\$24.30	\$14.43	\$6.13	\$0.00	\$44.86
2	42	\$24.30	\$14.43	\$6.13	\$0.00	\$44.86
3	47	\$27.19	\$14.43	\$12.11	\$1.61	\$55.34
4	47	\$27.19	\$14.43	\$12.11	\$1.61	\$55.34
5	52	\$30.09	\$14.43	\$13.09	\$1.73	\$59.34
6	52	\$30.09	\$14.43	\$13.34	\$1.73	\$59.59
7	60	\$34.72	\$14.43	\$14.75	\$1.92	\$65.82
8	65	\$37.61	\$14.43	\$15.73	\$2.03	\$69.80
9	75	\$43.40	\$14.43	\$17.69	\$2.27	\$77.79
10	85	\$49.18	\$14.43	\$19.15	\$2.48	\$85.24

Effective Date - 08/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	42	\$25.04	\$14.43	\$6.13	\$0.00	\$45.60
2	42	\$25.04	\$14.43	\$6.13	\$0.00	\$45.60
3	47	\$28.02	\$14.43	\$12.11	\$1.64	\$56.20
4	47	\$28.02	\$14.43	\$12.11	\$1.64	\$56.20
5	52	\$31.00	\$14.43	\$13.09	\$1.76	\$60.28
6	52	\$31.00	\$14.43	\$13.34	\$1.76	\$60.53
7	60	\$35.77	\$14.43	\$14.75	\$1.95	\$66.90
8	65	\$38.75	\$14.43	\$15.73	\$2.07	\$70.98
9	75	\$44.71	\$14.43	\$17.69	\$2.30	\$79.13
10	85	\$50.67	\$14.43	\$19.15	\$2.53	\$86.78

Notes:
Steps are 6 mos.

Apprentice to Journeyworker Ratio:1:4

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

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
SPECIALIZED EARTH MOVING EQUIP > 35 TONS <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	01/01/2024	\$39.53	\$15.07	\$18.67	\$0.00	\$73.27
	06/01/2024	\$40.53	\$15.07	\$18.67	\$0.00	\$74.27
	12/01/2024	\$40.53	\$15.07	\$20.17	\$0.00	\$75.77
	01/01/2025	\$40.53	\$15.57	\$20.17	\$0.00	\$76.27
	06/01/2025	\$41.53	\$15.57	\$20.17	\$0.00	\$77.27
	12/01/2025	\$41.53	\$15.57	\$21.78	\$0.00	\$78.88
	01/01/2026	\$41.53	\$16.17	\$21.78	\$0.00	\$79.48
	06/01/2026	\$42.53	\$16.17	\$21.78	\$0.00	\$80.48
	12/01/2026	\$42.53	\$16.17	\$23.52	\$0.00	\$82.22
	01/01/2027	\$42.53	\$16.77	\$23.52	\$0.00	\$82.82
SPRINKLER FITTER <i>SPRINKLER FITTERS LOCAL 550 - (Section B) Zone 2</i>	10/01/2023	\$61.16	\$10.90	\$23.20	\$0.00	\$95.26
	03/01/2024	\$62.78	\$10.90	\$23.20	\$0.00	\$96.88
	10/01/2024	\$64.40	\$10.90	\$23.20	\$0.00	\$98.50
	03/01/2025	\$66.02	\$10.90	\$23.20	\$0.00	\$100.12

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - SPRINKLER FITTER - Local 550 (Section B) Zone 2

Effective Date - 10/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$21.41	\$10.90	\$12.80	\$0.00	\$45.11
2	40	\$24.46	\$10.90	\$13.60	\$0.00	\$48.96
3	45	\$27.52	\$10.90	\$14.40	\$0.00	\$52.82
4	50	\$30.58	\$10.90	\$15.20	\$0.00	\$56.68
5	55	\$33.64	\$10.90	\$16.00	\$0.00	\$60.54
6	60	\$36.70	\$10.90	\$16.80	\$0.00	\$64.40
7	65	\$39.75	\$10.90	\$17.60	\$0.00	\$68.25
8	70	\$42.81	\$10.90	\$18.40	\$0.00	\$72.11
9	75	\$45.87	\$10.90	\$19.20	\$0.00	\$75.97
10	80	\$48.93	\$10.90	\$20.00	\$0.00	\$79.83

Effective Date - 03/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$21.97	\$10.90	\$12.80	\$0.00	\$45.67
2	40	\$25.11	\$10.90	\$13.60	\$0.00	\$49.61
3	45	\$28.25	\$10.90	\$14.40	\$0.00	\$53.55
4	50	\$31.39	\$10.90	\$15.20	\$0.00	\$57.49
5	55	\$34.53	\$10.90	\$16.00	\$0.00	\$61.43
6	60	\$37.67	\$10.90	\$16.80	\$0.00	\$65.37
7	65	\$40.81	\$10.90	\$17.60	\$0.00	\$69.31
8	70	\$43.95	\$10.90	\$18.40	\$0.00	\$73.25
9	75	\$47.09	\$10.90	\$19.20	\$0.00	\$77.19
10	80	\$50.22	\$10.90	\$20.00	\$0.00	\$81.12

Notes: Apprentice entered prior 9/30/10:
40/45/50/55/60/65/70/75/80/85
Steps are 850 hours

Apprentice to Journeyworker Ratio:1:3

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

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TAMPERS, SELF-PROPELLED OR TRACTOR DRAWN <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$54.43	\$15.00	\$16.40	\$0.00	\$85.83
	06/01/2024	\$55.71	\$15.00	\$16.40	\$0.00	\$87.11
	12/01/2024	\$57.15	\$15.00	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.43	\$15.00	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.87	\$15.00	\$16.40	\$0.00	\$91.27
	06/01/2026	\$61.15	\$15.00	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.59	\$15.00	\$16.40	\$0.00	\$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
TELECOMMUNICATION TECHNICIAN <i>ELECTRICIANS LOCAL 103</i>	09/01/2023	\$49.11	\$13.00	\$19.68	\$0.00	\$81.79
	03/01/2024	\$49.49	\$13.00	\$20.19	\$0.00	\$82.68
	09/01/2024	\$51.02	\$13.00	\$20.24	\$0.00	\$84.26
	03/01/2025	\$51.98	\$13.00	\$20.27	\$0.00	\$85.25
	09/01/2025	\$53.51	\$13.00	\$20.32	\$0.00	\$86.83
	03/01/2026	\$54.47	\$13.00	\$20.34	\$0.00	\$87.81
	09/01/2026	\$56.00	\$13.00	\$20.39	\$0.00	\$89.39
	03/01/2027	\$56.95	\$13.00	\$20.42	\$0.00	\$90.37
	09/01/2027	\$58.49	\$13.00	\$20.46	\$0.00	\$91.95
	03/01/2028	\$59.45	\$13.00	\$20.49	\$0.00	\$92.94

Apprentice - TELECOMMUNICATION TECHNICIAN - Local 103

Effective Date - 09/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	45	\$22.10	\$13.00	\$0.66	\$0.00	\$35.76
2	45	\$22.10	\$13.00	\$0.66	\$0.00	\$35.76
3	50	\$24.56	\$13.00	\$15.66	\$0.00	\$53.22
4	50	\$24.56	\$13.00	\$15.66	\$0.00	\$53.22
5	55	\$27.01	\$13.00	\$16.06	\$0.00	\$56.07
6	60	\$29.47	\$13.00	\$16.46	\$0.00	\$58.93
7	65	\$31.92	\$13.00	\$16.87	\$0.00	\$61.79
8	70	\$34.38	\$13.00	\$17.27	\$0.00	\$64.65
9	75	\$36.83	\$13.00	\$17.67	\$0.00	\$67.50
10	80	\$39.29	\$13.00	\$18.07	\$0.00	\$70.36

Effective Date - 03/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	45	\$22.27	\$13.00	\$0.67	\$0.00	\$35.94
2	45	\$22.27	\$13.00	\$0.67	\$0.00	\$35.94
3	50	\$24.75	\$13.00	\$16.16	\$0.00	\$53.91
4	50	\$24.75	\$13.00	\$16.16	\$0.00	\$53.91
5	55	\$27.22	\$13.00	\$16.57	\$0.00	\$56.79
6	60	\$29.69	\$13.00	\$16.97	\$0.00	\$59.66
7	65	\$32.17	\$13.00	\$17.38	\$0.00	\$62.55
8	70	\$34.64	\$13.00	\$17.78	\$0.00	\$65.42
9	75	\$37.12	\$13.00	\$18.18	\$0.00	\$68.30
10	80	\$39.59	\$13.00	\$18.58	\$0.00	\$71.17

Notes:

Apprentice to Journeyworker Ratio:1:1

TERRAZZO FINISHERS	02/01/2024	\$61.34	\$11.49	\$23.59	\$0.00	\$96.42
BRICKLAYERS LOCAL 3 - MARBLE & TILE	08/01/2024	\$63.44	\$11.49	\$23.59	\$0.00	\$98.52
	02/01/2025	\$64.74	\$11.49	\$23.59	\$0.00	\$99.82
	08/01/2025	\$66.89	\$11.49	\$23.59	\$0.00	\$101.97
	02/01/2026	\$68.24	\$11.49	\$23.59	\$0.00	\$103.32
	08/01/2026	\$70.44	\$11.49	\$23.59	\$0.00	\$105.52
	02/01/2027	\$71.84	\$11.49	\$23.59	\$0.00	\$106.92

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - TERRAZZO FINISHER - Local 3 Marble & Tile

Effective Date - 02/01/2024

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

Effective Date - 08/01/2024

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

Notes:

Apprentice to Journeyworker Ratio:1:3

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

For apprentice rates see "Apprentice- LABORER"

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

For apprentice rates see "Apprentice- LABORER"

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

For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TRACTORS/PORTABLE STEAM GENERATORS <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$54.43	\$15.00	\$16.40	\$0.00	\$85.83
	06/01/2024	\$55.71	\$15.00	\$16.40	\$0.00	\$87.11
	12/01/2024	\$57.15	\$15.00	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.43	\$15.00	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.87	\$15.00	\$16.40	\$0.00	\$91.27
	06/01/2026	\$61.15	\$15.00	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.59	\$15.00	\$16.40	\$0.00	\$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
TRAILERS FOR EARTH MOVING EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	01/01/2024	\$39.82	\$15.07	\$18.67	\$0.00	\$73.56
	06/01/2024	\$40.82	\$15.07	\$18.67	\$0.00	\$74.56
	12/01/2024	\$40.82	\$15.07	\$20.17	\$0.00	\$76.06
	01/01/2025	\$40.82	\$15.57	\$20.17	\$0.00	\$76.56
	06/01/2025	\$41.82	\$15.57	\$20.17	\$0.00	\$77.56
	12/01/2025	\$41.82	\$15.57	\$21.78	\$0.00	\$79.17
	01/01/2026	\$41.82	\$16.17	\$21.78	\$0.00	\$79.77
	06/01/2026	\$42.82	\$16.17	\$21.78	\$0.00	\$80.77
	12/01/2026	\$42.82	\$16.17	\$23.52	\$0.00	\$82.51
	01/01/2027	\$42.82	\$16.77	\$23.52	\$0.00	\$83.11
TUNNEL WORK - COMPRESSED AIR <i>LABORERS (COMPRESSED AIR)</i>	12/01/2023	\$56.56	\$9.65	\$18.67	\$0.00	\$84.88
	06/01/2024	\$58.04	\$9.65	\$18.67	\$0.00	\$86.36
	12/01/2024	\$59.51	\$9.65	\$18.67	\$0.00	\$87.83
	06/01/2025	\$61.01	\$9.65	\$18.67	\$0.00	\$89.33
	12/01/2025	\$62.51	\$9.65	\$18.67	\$0.00	\$90.83
	06/01/2026	\$64.06	\$9.65	\$18.67	\$0.00	\$92.38
	12/01/2026	\$65.56	\$9.65	\$18.67	\$0.00	\$93.88
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE) <i>LABORERS (COMPRESSED AIR)</i>	12/01/2023	\$58.56	\$9.65	\$18.67	\$0.00	\$86.88
	06/01/2024	\$60.04	\$9.65	\$18.67	\$0.00	\$88.36
	12/01/2024	\$61.51	\$9.65	\$18.67	\$0.00	\$89.83
	06/01/2025	\$63.01	\$9.65	\$18.67	\$0.00	\$91.33
	12/01/2025	\$64.51	\$9.65	\$18.67	\$0.00	\$92.83
	06/01/2026	\$66.06	\$9.65	\$18.67	\$0.00	\$94.38
	12/01/2026	\$67.56	\$9.65	\$18.67	\$0.00	\$95.88
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - FREE AIR <i>LABORERS (FREE AIR TUNNEL)</i>	12/01/2023	\$48.63	\$9.65	\$18.67	\$0.00	\$76.95
	06/01/2024	\$50.11	\$9.65	\$18.67	\$0.00	\$78.43
	12/01/2024	\$51.58	\$9.65	\$18.67	\$0.00	\$79.90
	06/01/2025	\$53.08	\$9.65	\$18.67	\$0.00	\$81.40
	12/01/2025	\$54.58	\$9.65	\$18.67	\$0.00	\$82.90
	06/01/2026	\$56.13	\$9.65	\$18.67	\$0.00	\$84.45
	12/01/2026	\$57.63	\$9.65	\$18.67	\$0.00	\$85.95
For apprentice rates see "Apprentice- LABORER"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TUNNEL WORK - FREE AIR (HAZ. WASTE) <i>LABORERS (FREE AIR TUNNEL)</i>	12/01/2023	\$50.63	\$9.65	\$18.67	\$0.00	\$78.95
	06/01/2024	\$52.11	\$9.65	\$18.67	\$0.00	\$80.43
	12/01/2024	\$53.58	\$9.65	\$18.67	\$0.00	\$81.90
	06/01/2025	\$55.08	\$9.65	\$18.67	\$0.00	\$83.40
	12/01/2025	\$56.58	\$9.65	\$18.67	\$0.00	\$84.90
	06/01/2026	\$58.13	\$9.65	\$18.67	\$0.00	\$86.45
	12/01/2026	\$59.63	\$9.65	\$18.67	\$0.00	\$87.95
For apprentice rates see "Apprentice- LABORER"						
VAC-HAUL <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	01/01/2024	\$39.24	\$15.07	\$18.67	\$0.00	\$72.98
	06/01/2024	\$40.24	\$15.07	\$18.67	\$0.00	\$73.98
	12/01/2024	\$40.24	\$15.07	\$20.17	\$0.00	\$75.48
	01/01/2025	\$40.24	\$15.57	\$20.17	\$0.00	\$75.98
	06/01/2025	\$41.24	\$15.57	\$20.17	\$0.00	\$76.98
	12/01/2025	\$41.24	\$15.57	\$21.78	\$0.00	\$78.59
	01/01/2026	\$41.24	\$16.17	\$21.78	\$0.00	\$79.19
	06/01/2026	\$42.24	\$16.17	\$21.78	\$0.00	\$80.19
	12/01/2026	\$42.24	\$16.17	\$23.52	\$0.00	\$81.93
	01/01/2027	\$42.24	\$16.77	\$23.52	\$0.00	\$82.53
WAGON DRILL OPERATOR <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
For apprentice rates see "Apprentice- LABORER"						
WAGON DRILL OPERATOR (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
	06/01/2024	\$39.44	\$9.65	\$17.14	\$0.00	\$66.23
	12/01/2024	\$40.77	\$9.65	\$17.14	\$0.00	\$67.56
	06/01/2025	\$42.16	\$9.65	\$17.14	\$0.00	\$68.95
	12/01/2025	\$43.54	\$9.65	\$17.14	\$0.00	\$70.33
	06/01/2026	\$44.98	\$9.65	\$17.14	\$0.00	\$71.77
	12/01/2026	\$46.42	\$9.65	\$17.14	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
WASTE WATER PUMP OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2023	\$55.03	\$15.00	\$16.40	\$0.00	\$86.43
	06/01/2024	\$56.33	\$15.00	\$16.40	\$0.00	\$87.73
	12/01/2024	\$57.78	\$15.00	\$16.40	\$0.00	\$89.18
	06/01/2025	\$59.08	\$15.00	\$16.40	\$0.00	\$90.48
	12/01/2025	\$60.53	\$15.00	\$16.40	\$0.00	\$91.93
	06/01/2026	\$61.83	\$15.00	\$16.40	\$0.00	\$93.23
	12/01/2026	\$63.28	\$15.00	\$16.40	\$0.00	\$94.68
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
WATER METER INSTALLER <i>PLUMBERS & GASFITTERS LOCAL 12 (Local 138)</i>	09/03/2023	\$66.94	\$14.07	\$18.36	\$0.00	\$99.37
	03/03/2024	\$68.74	\$14.07	\$18.36	\$0.00	\$101.17
	09/01/2024	\$70.54	\$14.07	\$18.36	\$0.00	\$102.97
	03/02/2025	\$71.34	\$14.32	\$18.61	\$0.00	\$104.27
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GASFITTER"						

Additional Apprentices Information:

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

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

All steps are six months (1000 hours.)

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

** Multiple ratios are listed in the comment field.

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

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

SECTION 01 10 00

SUMMARY OF THE WORK

PART 1 - GENERAL

1.01 GENERAL PROVISIONS

- A. Attention is directed to the Drawings and General and Supplementary Conditions of the Contract and all other Division 1 Specifications which are hereby made a part of this section.

1.02 PROJECT IDENTIFICATION

- A. General: The Project name is “Force Main Land Bridge Project” as shown on the Contract Documents. Drawings and Specifications which are dated February 7, 2024.

The project site is located at:

Marblehead Village 13 Substation
25 Maverick Street
Marblehead, MA 01945

- B. Contract Documents: Contract documents indicate the work of the Contract and related requirements and conditions that have an impact on the project. Related requirements and conditions that are indicated on the Contract Documents include, but are not necessarily limited to the following:

1. Existing site conditions and restrictions on use of the site.
2. Requirements for partial Owner occupancy during Contract Work.

- C. Summary by Reference: Work of the Contract can be summarized by references to the Contract, General Conditions, Supplementary Conditions, Specification Sections, Drawings, addenda and modifications to the contract documents issued subsequent to the initial printing of this project manual and including but not necessarily limited to printed material referenced by any of these documents.

- D. Precast concrete sections shall be fabricated and delivered to the project site by another contractor no later than **April 22, 2024** to meet the final completion date for the project of **April 30, 2024**. The Marblehead Municipal Light Department (MMLD) has electric generating equipment scheduled for delivery and installation at the project site by another contractor by the date aforesaid. Failure of the Contractor to complete the work under these bid documents by the foregoing date will result in substantial damages to the Owner under its other contract with such other contractor.

- E. **Precast concrete sections shall be procured by the MMLD under a separate contract** and shall be at the project site prior to the installation work.

1.03 WORK UNDER THIS CONTRACT

- A. The work to be done under this contract consists of executing and completing all work required for the fabrication and installation of a precast culvert structure, site work, and all other related work as indicated below:
1. General Information:
 - a. This document describes the work for the construction of one precast concrete culvert structure and associated work, site work and all other related work as indicated. The project shall be designed and constructed so as to meet all requirements of the Ninth Edition of the Massachusetts State Building Code and the 2015 International Building (2015 IBC), in addition to all other applicable codes and regulations as indicated in the contract documents. The project site includes all structures as shown on the drawings.
 - B. The work will include all operations necessary to deliver the structures in a fully installed an operable condition, including all utility and site work (except that to be performed by the Town of Marblehead) and obtaining all necessary licenses, permits, and certificates.
 - C. Work will include all site work and installation of a precast concrete “bridge” for the protection of the existing 24” sewer force main including all work as described in these drawings and specifications. A portion of the work shall be self-performed by the City of Marblehead as indicated in Section 1.04 below. The Contractor will provide a schedule for completion of the project to the Owner within a predetermined construction period.
 - D. Provide all other related work that is necessary to complete the work indicated. Such related shall include, but is not limited to: the need for utility termination and relocation, temporary drainage, protection of adjacent structures, and all other work necessary to complete the work indicated.
 - E. The Massachusetts Standard Labor Wage rates as outlined and included in the Division 0 Documents, will be used in the construction of this project.
 - F. Reference To Drawings: The work to be done under this Contract is shown on the following drawings:

Title Sheet and Index

Site/Civil

- C1 Proposed Site Plan Land Bridge
- C2 Proposed Grading Plan

Structural

- S1 Section and Details
- S2 Profiles and Details
- S3 Precast Piece Details

S4 Precast Construction Layout

1.04 OWNER SELF-PERFORMED WORK

- A. A portion of the work shall be self-performed by the Town of Marblehead as indicated below:
1. Temporary removal and replacement of fence and fence posts to facilitate delivery of electrical components upon completion of the precast culvert structure.
 2. Relocation moving of any items which are within the limits of the new work as indicated on the plans.
 3. Procurement and delivery to the work site of precast concrete pieces for land bridge structure.

1.05 REFERENCE TO SPECIFICATIONS:

The work to be done under this Contract is shown in the following Construction Specifications:

DIVISION 1- GENERAL REQUIREMENTS

Section 01 10 00	Summary of the Work
Section 01 10 60	Regulatory Requirements
Section 01 31 00	Project Coordination
Section 01 33 00	Submittal Requirements
Section 01 40 00	Quality Requirements
Section 01 43 25	Structural Tests and Special Inspections
Section 01 77 00	Contract Closeout

DIVISION 2 – EXISTING CONDITIONS

NOT USED

DIVISION 3 - CONCRETE

Section 03 45 00	Precast Concrete
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DIVISION 31 - EARTHWORK

Section 31 23 00	Earthwork
Section 31 25 00	Erosion and Sedimentation Control
Section 31 25 10	Compost Filter Tube

OWNER OCCUPANCY

- A. Beneficial Use and Occupancy: The Owner may require partial occupancy to the site during the entire construction period.
 - 1. Maintain access to vehicle access corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from the Owner and authorities having jurisdiction.

1.06 COORDINATION

- A. The General Contractor shall be responsible for the proper fitting of all the work and for the coordination of the operations of all trades, subcontractors or material and men engaged upon the work. The General Contractor shall do, or cause his agents to do, all cutting, fitting, adjusting, and repair necessary in order to make the several parts of the work come together properly.
 - 1. Examine Contract Documents in advance of start of construction and identify in writing questions, irregularities, or interference to the Engineer in writing. Failure to identify and address such issues in advance becomes the sole responsibility of the Contractor. A conflict that would cause the reduction of the normal ceiling height of any occupied space is considered to be an interference.
- B. The work sequence shall follow planning and schedule established by the Contractor as approved by the Owner and Engineer. The work upon the site of the project shall commence promptly and be executed with full simultaneous progress. Work operations requiring the interruption of utilities, service, and access shall be scheduled so as to involve minimum disruption and inconvenience and to be expedited so as to insure minimum duration of any periods of disruption or inconvenience.
- C. The Contractor shall review the tolerances established in the specifications for each type of work and as established by trade organizations. The Contractor shall coordinate the various trades and resolve any conflicts that may exist between trade tolerances without additional cost to the Owner. The Contractor shall provide any chipping, leveling, shoring, or surveys to ensure that the various materials align as detailed by the Engineer.

1.07 TIME OF COMPLETION

- A. The Contractor shall commence work immediately for required submittals and other requirements upon receipt of the executed contract and shall complete **all** work specified to the complete satisfaction of the Owner by **April 30, 2024**.

1.08 OWNER RESPONSIBILITIES

- A. The Owner shall provide access to all work areas as allowed for in approved schedule. The Contractor shall notify the Owner prior to working nights, weekend, or holiday hours.
- B. The Owner shall have personnel on call to provide the Contractor with assistance on building-related matters.

1.10 QUALITY ASSURANCE

- A. **Requirements of Regulatory Agencies:** The construction requirements of federal, state, municipal, or other political subdivision specifications exceeding the requirements of the codes, standards and approving bodies referenced herein shall be met and complied with. Comply with requirements of the National Fire Protection Association (NFPA) and Marblehead Fire Department as directly appropriate to work and workmanship of this Contract.
- B. **Worker's Qualifications:** In acceptance or rejection of complete work, no allowance will be made for lack of skill on the part of the Contractor's forces performing such work. All Contractor personnel shall be accredited to conduct response actions in accordance with requirements of the Contract.
- C. **Certificates and Permits:** Upon completion of work, and prior to final payment, furnish formal certification of final inspections to the Engineer from authorities having jurisdiction and secure required permits, if any, from same. Additionally, prepare detailed diagrams and drawings which may be required by those authorities having jurisdiction.
- D. **Source Quality Control:** Products used throughout these specifications and as indicated on the Drawings are those companies having established reputations in the manufacture of the particular materials, equipment, or apparatus specified. Such products may be of their own make, or products of others for which they assume full responsibility when used in said outfits (which are not manufactured completely by them), and with replacement parts available. Owner shall have final approval of all products used in this contract.
- E. **Job Conditions:**
 - 1. Contractor shall be required to provide all utilities and services needed to perform the work.
 - 2. Provide products of new and recent manufacture.
 - 3. For each category of materials and equipment (Products), use material equipment of the same manufacturer and type.

1.11 EXAMINATION OF SITE AND DOCUMENTS, PRE-CONSTRUCTION CONFERENCE

- A. A pre-bid conference will be held at 80 Commercial Street, Marblehead, on the date and at the time indicated in the Invitation to Bid. The pre-bid conference may include a site visit, based on the interest of bidders in attendance.
- B. The bidders are expected to examine and to be thoroughly familiar with all contract documents and with the conditions under which the work is to be carried out. The Owner will not be

responsible for errors, omissions, and/or charges for extra work arising from the General Contractors or Subcontractors failure to familiarize themselves with the Contract Documents, that he is familiar with the conditions and requirements of both where they require, in any part of the work a given result to be produced, that the contract documents are adequate and he will produce the required results.

- C. Contact: Joseph Kowalik – General Manager
Marblehead Municipal Light Dept.
80 Commercial Street
Marblehead, MA 01945
Tel.: 781-631-0240
Email: jkowalik@mhdld.com
- Bill Capone – Design Engineer
Bayside Engineering
600 Unicorn Park Drive
Woburn, MA 01801
Tel. 781-932-3201
Email: bcapone@baysideengineering.com

1.12 CONTRACTOR QUALIFICATION

- A. The Contractor shall certify in writing that he has successfully performed on at least three (3) construction projects of equivalent size and complexity.

1.13 SUPERVISION OF WORK

- A. The Contractor shall be held directly responsible for the correct installation of all work performed under this Contract. The Contractor must make a good repair, without expense to the Owner, of any part of the new work, or existing work to remain, which may become inoperative on account of leaving the work unprotected or unsupervised during construction of the system or which may break or give out in any manner by reason of poor workmanship, defective materials or any lack of space to allow for expansion and contraction of the work during the Contractor's warranty period, from the date of final acceptance of the work by the Owner.

1.14 FIELD MEASUREMENTS

- A. Although care has been taken to ensure their accuracy, the dimensions shown for existing items and structures are not guaranteed. It is the responsibility of the Contractor to verify these dimensions in the field before fabricating any construction component. No claims for extra payment due to incorrect dimensions will be considered by the Owner.

1.15 WORK SEQUENCE

- A. The Contractor shall commence work and shall maintain a sufficient work force at all times to ensure satisfactory completion within allotted construction time period and following the approved schedule.

1.16 CONTRACTOR USE OF PREMISES

- A. Use of the Site: Limit use of the premises to work in areas indicated on approved schedule. Confine operations to areas within contract limits indicated. Do not disturb portions of the site beyond the areas in which the Work is indicated.
- B. Owner Occupancy: Allow for Owner occupancy and use by the public.
- C. Driveways and Entrances: Keep driveways and entrances serving the Owner clear and available to the Owner, the Owner's employees, and emergency vehicles at all times as indicated in documents. Contractor staging and laydown areas shall be as agreed to with the Owner and the Owner including protections for the public.
- D. Schedule and perform work to afford minimum of interruption to normal and continuous operation of utility systems. The Contractor shall submit to the Owner and Engineer for approval, proposed schedule for performing work; including construction of new utilities, rerouting of existing utilities and final connection of new work to existing work. Schedule shall indicate shutdown time required for each operation.
- E. The Contractor's attention is directed to the necessity of making his own investigation in order to assure that no damage to existing structures, drainage lines, traffic signal conduits, etcetera, will occur.
- F. The Contractor shall notify Massachusetts DIG SAFE and procure a Dig Safe Number for this location prior to disturbing existing ground in any way. The telephone number of the Dig Safe **Call Center is 1-888-344-7233**.
- G. The Contractor will also need to contact the Town of Marblehead Water & Sewer Department at 781-631-0102 for Town-owned water and sewer utilities, and the Marblehead Municipal Light Department for Town-owned electric utilities and National Grid for natural gas utilities.
- H. The Contractor shall notify the Owner in writing 72 hrs in advance of the proposed time for shutting down or interrupting any utilities, services, or facilities that may affect the operation of other buildings, services or facilities of the Owner or of other properties in the area.
- I. Coordinate with Owner and Engineer any work in connection with adjacent driveways, walks, or other facilities that would prevent access thereto or interrupt, restrict, or otherwise infringe upon the Owner's use thereof.
- J. The Contractor shall be aware of the sensitivity of the neighborhood organizations to noise, dust, debris, and site maintenance and take appropriate precautions to avoid conflict.

- K. Damage to existing work, if caused by the Contractor's operations under this Contract, shall be repaired at the Contractor's expense.
- L. Walks, paved or landscaped areas over which temporary driveways cross, laydown areas are constructed, or scaffolding is erected, shall upon completion of the work, be restored to their original condition.
- M. The Contractor can gain access to the premises during the hours specified below. In addition, the Contractor and his personnel will limit themselves only within the working premises during working hours. If work needs to be scheduled during times other than those listed below, Contractor shall inform the Owner one week prior to work.

- 1. Deliveries: 6:30 a.m. to 3:00 p.m.
- 2. General Access: 6:30 a.m. to 3:00 p.m.

N. Confine operations at the site to areas permitted by:

- 1. Laws,
- 2. Ordinances,
- 3. Permits,
- 4. Contract Documents,
- 5. Owner's Regulations.

O. All available existing utilities adjacent to the construction site will be available for use during construction unless indicated otherwise. These utilities would include water, sewer, and electricity. Temporary connections to these utilities, all metering, transformers, removal, usage, and their associated costs will be the responsibility of the Contractor.

1.17 FIELD ENGINEERING

- 1. Provide field engineering services. Establish grades, lines and levels, by use of recognized engineering survey practices.
- 2. Locate and protect any existing utilities on the site which are to remain.

1.18 REFERENCE STANDARDS

- 1. For products specified by association or trade standards, comply with requirements for the standard, except where more rigid requirements are specified or are required by codes.
- 2. Where reference is made in the Contractual Documents to Publications and Standards issued by Associations or Societies, the intent shall be understood to specify the current edition of such Publications or Standards (including tentative revision) in effect on the date of the contract advertisement notwithstanding any reference to a particular date.

1.19 PROJECT MEETINGS

1. Project progress meetings shall be held as scheduled by the Owner's Project Manager and retained for the project.
2. As a prerequisite for monthly payments, ordering schedules, shop drawing schedules, and coordination meeting schedules shall be prepared and maintained by the Contractor and shall be revised and updated on a monthly basis, and a copy shall be submitted to the Project Manager, Owner and Engineer.
3. Scheduling shall be discussed with all concerned parties, and methods shall be presented by the Contractor which shall reflect the completion not being deferred, at no additional cost to the Owner.
4. Minutes of the project progress meetings will be prepared by the Owner's Project Manager and will be distributed in a timely manner to all attendees.

1.20 PERMITS, INSPECTION AND TESTING REQUIRED BY GOVERNING AUTHORITIES

1. If the Contract Documents, laws, ordinances, rules, regulations, or orders of any public authority having any jurisdiction require any portion of the Work to be inspected, tested, or approved, the Contractor shall give the Engineer, and such Authority timely notice of its readiness so that the Engineer may observe such inspecting, testing, or approval.
2. Prior to the start of construction, the Contractor shall complete application to the applicable Building Code enforcement authority for a Building Permit. Such Permit shall be displayed in a conspicuous location at the project site.
3. The Contractor shall apply for the Permit by **March 25, 2024** - assuming receipt of executed contract by **March 15, 2024**. If executed contract is not received by **March 15, 2024**, the Owner may apply for permit on Contractor's behalf with intention of transfer to Contractor upon receipt of executed contract. Contractor must progress work such as to not cause suspension of permit. Any costs resulting from suspension of permit relation to Contractor's actions or inaction to be borne by Contractor, including upgrades mandated by code changes.
4. Provide copies of all permits to the Owner and Engineer

1.21 DEBRIS REMOVAL

1. Debris shall not be permitted to accumulate and the work shall at all times be kept satisfactorily clear on a daily basis to permit access to the site.
2. The Contractor shall removal all non-hazardous debris from the site of the work and shall legally dispose of it at any private or public disposal facility as the contractor may choose. The Contractor shall make all arrangements, obtain all permits and required approvals and bear all costs for such disposal. Garbage to be removed daily.

3. The Contractor shall provide cleaning services for the site grounds. Contractor shall conduct site cleaning of the grounds a minimum of twice per month for the contract duration and shall include but not be limited to removal of litter of whatever nature that accumulates within the limit of work.
4. Snow Removal (if required): Contractor is responsible for all snow removal to accommodate Contractor and Sub-Contractor operations within the limit of work.

1.22 PROTECTION OF PROPERTY AND THE PUBLIC

1. The Contractor shall construct all fences, barricades, and protective facilities required for the protection of the public in accordance with Town and state regulations prior to excavation operations. Furnish and install all signs, light reflectors, and all such protection facilities as may be required.
2. The Contractor shall hold the Owner and the Engineer harmless from all claims arising from the use of public streets, sidewalks, and adjoining premises for construction purposes.
3. Keep all access roads and walks clear of debris, materials, and equipment during demolition operation. Repair streets, drives, curbs, sidewalks, poles, and the like where disturbed by the operation and leave them in good condition after completion of the work as before operation started.
4. Protect everything on the premises from injury by water, frost, wind, fire, accident or other cause, and any interference.
5. Pay fees for police details and fire watches required by local Authorities.

1.23 DAMAGE RESPONSIBILITY

1. The Contractor shall repair, at no cost to the Owner, any damage to building elements, site appurtenances, landscaping, utilities, etc., caused during demolition operation and work of this Contract.

1.24 SAFETY REGULATIONS

1. This project is subject to compliance with Public Law 91-596 "Occupational Safety and Health Act," latest edition (OSHA 29 CFR 1926), with respect to all rules and regulations pertaining to construction, including Volume 36, numbers 75 and 105 of the Federal Register, as amended, and as published by the U.S. Department of Labor.
2. Submit the name of the Contractor's safety officer to the Owner. Submit copies of safety reports to the Owner monthly.
3. All accident reports are to be transmitted to the Owner within 24 hrs of occurrence.

1.25 OSHA SAFETY AND HEALTH COURSE DOCUMENTATION

1. OSHA Safety and Health Course Documentation Records: Chapter 306 of the Massachusetts Acts of 2004 requires that everyone employed at the jobsite must have completed a minimum 10 hr long course in construction safety and health approved by the U.S. Occupational Safety and Health Administration (OSHA) prior to working at the jobsite. Compliance is required of contractors' and subcontractors' on-site employees at all levels, whether stationed in the trailer or working in the field. Unless the Massachusetts Attorney General's office indicates otherwise, this requirement does not apply to home-office employees visiting the site or to suppliers' employees who are making deliveries.
2. Documentation records shall be initially compiled by the Contractor and Subcontractors as part of their certified payrolls, and the Contractor shall create and maintain a copy of the documentation on site at all times. On-site documentation shall be filed in alphabetical order and immediately available to Owner and OSHA inspectors. Fines imposed for noncompliance shall be promptly paid by the Contractor at no additional expense to the Owner. Delays in the progress of the Work caused by such noncompliance will not be acceptable as the basis for an extension of contract time or change order request.

1.26 VISITORS' LOG AND OTHER DATA

- A. The Contractor shall maintain a visitors' log at the workplace and require all persons visiting the site to sign the log. The log should provide space for the following information:
 1. Name
 2. Person or organization represented
 3. Date
 4. Time
5. Purpose of visit
6. Acknowledgement certificate
- B. The Contractor shall maintain a daily job log containing entries describing the progress and location of the work, any special conditions encountered, records of testing, amount of material removed, and other pertinent data.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION 01 10 00

SECTION 01 10 60

REGULATORY REQUIREMENTS

PART 1 – GENERAL

1.01 GENERAL PROVISIONS

- A. Attention is directed to the Drawings and General and Supplementary Conditions of the Contract and all other Division 1 Specifications which are hereby made a part of this section.

1.02 REQUIREMENTS

- A. General Laws
- B. Air Pollution Control
- C. Permits and Licenses
- D. Motor Vehicles
- E. Public Safety and Convenience

1.03 GENERAL LAWS

- A. The Contractor shall keep himself fully informed of all state and national laws and municipal ordinances and regulations in any manner affecting those engaged or employed in the work, or the materials used in the work, or in any way affecting the conduct of the work, and of all orders and decrees of bodies and tribunals having any jurisdiction or authority over the same. If any discrepancy or inconsistency is discovered in the contract for the work in relation to any law, ordinance, regulation, order or decree, the Contractor shall forthwith report the same to the Engineer in writing. He shall at all times observe and comply with and shall cause all his agents and employees to observe and comply with all existing laws, ordinances, regulations, orders and decrees.
- B. It shall be the responsibility of the Contractor to observe and practice to the fullest extent practicable controls, procedures and methods lending themselves to protection of the human and natural environment.
- C. The Contractor shall at all times observe and comply with and shall cause all his agents and employees to observe and comply with all existing laws, ordinances, regulation, orders and decrees especially in their relationship to the protection of the total environment.

1.04 APPLICABLE CODES AND REGULATIONS

- A. All work shall be performed in accordance with all applicable codes including but not limited to:
1. Massachusetts State Building Code, 9th edition.
 2. International Building Code (IBC) 2015 Edition
 3. Commonwealth of Massachusetts Highway Department (MHD - now known as MassDOT Highway Division) Standard Specification for Highways and Bridges and as amended
 4. National Fire Protection Association: NFPA 101 – Life Safety Code
 5. United States Occupational Safety and Health Administration (OSHA)
 6. Massachusetts Architectural Access Board, 521 CMR - MAAB Rules and Regulations, latest edition.
 7. All other applicable codes and regulations as required by law and as stipulated in these contract documents.

1.05 WAGE RATE COMPLIANCE

- A. The Contractor is responsible to ensure that the rate per hour to be paid to workers employed on the work shall not be less than the approved wage rates applicable to this project. A legible copy of the approved rates shall be posted on site and shall be clearly visible for review by all workers.

1.06 AIR POLLUTION CONTROL

- A. The Contractor shall comply with the provisions of Chapter 111, as amended, of the General Laws of the Commonwealth of Massachusetts pertaining to and establishing the Air Pollution Control Districts in the Commonwealth. The burning of trees, brush and other construction debris will not be permitted on the project site. The Contractor shall provide other satisfactory, approved methods of disposal without additional compensation.

1.07 PERMITS AND LICENSES

- A. The Contractor shall procure all required permits and licenses and pay all charges, fees and taxes and give all notices necessary and incidental to the due and lawful prosecution of the work in the Town of Marblehead. Copies of all required permits and licenses shall be filed with the Owner and the Engineer prior to beginning of work.

1.08 MOTOR VEHICLES

- A. No vehicle shall be driven on any way, as defined in Section 1 of Chapter 90 of the General Laws, unless such vehicle is constructed or loaded so as to prevent any of its load from dropping, sifting, leaking or otherwise escaping therefrom, except that sand may be dropped for purposes of securing traction or water or other substances may be sprinkled on such a way in cleaning or maintaining the same (General Laws, Chapter 85, Section 30 as amended).

1.09 PUBLIC SAFETY AND CONVENIENCE

- A. The Contractor shall at all times be responsible for the protection of the work and shall take all precautions for preventing injuries to persons or damage to property on or about the project.
- B. Excavation shall not begin at the site until all materials and equipment required for the work are at the site and available for immediate use. The site shall be protected from public access with the use of temporary construction fencing to be erected and maintained by the Contractor and removed upon completion of the work.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION 01 10 60

SECTION 01 31 00

PROJECT COORDINATION

PART 1 – GENERAL

1.01 GENERAL PROVISIONS

- A. Attention is directed to the Drawings and General and Supplementary Conditions of the Contract and all other Division 1 Specifications which are hereby made a part of this section.

1.02 SUMMARY

During Execution of the work, The Contractor shall:

- A. Description
1. Coordinate scheduling, submittals and work of the various trades and elements of the work to ensure efficient and orderly sequence of installation of construction elements, with provisions for accommodating items to be installed later.
 2. Coordinate with the Marblehead Municipal Light Dept for work to self-performed by the Town of Marblehead.
 3. Coordinate sequence of the work to accommodate continuous occupancy by Owner.
- B. Meetings: In addition to progress meetings, hold coordination meetings and pre-installation conferences with personnel and subcontractors to ensure coordination of the work.
- C. Coordination of Submittals:
1. Schedule and coordinate submittals
 2. Coordinate work of various trades having interdependent responsibilities for installing, connecting to and placing in service such equipment
 3. Coordinate requests for substitution to ensure compatibility of space, of operating elements and effect on work of other trades

1.03 DESCRIPTION OF WORK

- A. Minimum administrative and supervisory requirements necessary for coordination of work on the project include but are not necessarily limited to the following:
 - 1. Surveys and records or reports
 - 2. Limitations for use of site
 - 3. Construction staging
 - 4. Cleaning and protection

1.04 ENGINEERING / LAYOUT OF WORK

- A. The Contractor, at his own expense, shall furnish all engineering services required for establishing grades, lines, levels, dimensions and reference points for all trades; shall be responsible for maintaining benchmarks and other survey marks, and shall replace, as directed, any benchmarks which have been distributed or destroyed.
- B. Drawings shall not be scaled to determine dimensions.
- C. Advise entities performing work of marked lines and levels provided for their use.
- D. The Contractor shall compare all grades, line, levels and dimensions as shown on the Drawings and actual site conditions and shall immediately report to the Engineer and the Owner any inconsistencies and discrepancies for review and clarification prior to preceding with the work. The Contractor will be liable for all costs associated with the removal and replacement of any work done by the Contractor knowing that inconsistencies or discrepancies exist and not reporting such issues to the Engineer.

1.05 LIMITATIONS ON USE OF SITE

- A. General: Limitations on site usage as well as specific requirements that impact site utilization are indicated by other Contract Documents. In addition to these limitations and requirements, administer allocation of available space equitably among entities needing both access and space so as to produce the best overall efficiency in performance of the total work of the project. Schedule deliveries so as to minimize space and time requirements for storage of materials and equipment on site.
- B. Burial of Waste Materials: Do not dispose of organic and hazardous materials on site, either by burial or by burning.

1.06 PROTECTION OF PROPERTY

- A. Existing Surfaces and Facilities

1. Take positive action to protect all existing surfaces and facilities from any damage resulting from construction operations unless modifications to the surface or facilities are required as part of the contract.
2. Protect all paving, landscaping and utility facilities from damage caused by mobile and stationary equipment, including vehicles delivering materials to the site.
3. Protect all finished surfaces through which materials are handled against any possible damage resulting from the conduct of the work by all trades.

B. Utilities

1. Protect and maintain all existing utilities and cause no interruption of service. These utilities include but are not limited to gas, electric, telephone, drainage, sanitary sewer and water.

C. Repair of Damages

1. As soon as possible after discovery of any damage by construction to surfaces of facilities which are to remain in place, repair such damage. All repairs shall result in conditions equal in strength to the previous conditions. All repaired surfaces shall be identical in color and texture to the adjacent existing materials, except where materials cannot be matched, refinish the surrounding area to give a uniform appearance acceptable to the Owner and Engineer.

1.07 FIRE PROTECTION

- A. Take adequate precautions against fire throughout all operations. Flammable material shall be kept at an absolute minimum and shall be properly handled and stored. Except as otherwise provided herein, do not permit fires to be built.
- B. Construction practices, including cutting and welding and protection during construction, shall be in accordance with the published standards of the Factory Mutual Insurance Association, the National Fire Protection Association and the City of Salem Fire Department. Provide approved non-freeze portable fire extinguishers distributed about the project.
- C. Store gasoline and other flammable liquids in Underwriters Laboratories-listed safety containers in conformance to the National Board of Fire Underwriters' recommendations.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

3.01 CLEANING AND PROTECTION

- A. General: During handling and installation of work at the project site, clean and protect work in progress and adjoining work as the basis of continuous maintenance. Apply protective covering on installed work where it is required to ensure freedom from damage or deterioration at time of substantial completion.
- B. Clean and perform maintenance on installed work as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- C. Limiting Exposures of Work: To the extent possible through reasonable control and protection methods, supervise performance of the work in such a manner and by such means as will ensure that none of the work, whether completed or in progress, will be subjected to harmful, dangerous, damaging or otherwise deleterious exposure during the construction period. Such exposure includes, where applicable, but not by way of limitation, the following:
 - 1. Excessive static or dynamic loading
 - 2. Excessive internal or external pressures
 - 3. Thermal shock
 - 4. Excessively high or low humidity
 - 5. Air contamination or pollution
 - 6. Water or ice
 - 7. Solvents or chemicals
 - 8. Light
 - 9. Radiation
 - 10. Puncture
 - 11. Abrasion
 - 12. Heavy traffic
 - 13. Soiling
 - 14. Bacteria
 - 15. Insect infestation
 - 16. Combustion
 - 17. Electrical current
 - 18. High speed operation, improper lubrication, unusual wear or other misuse
 - 19. Incompatible interface
 - 20. Destructive testing
 - 21. Misalignment
 - 22. Excessive weathering
 - 23. Unprotected weathering
 - 24. Improper shipping or handling
 - 25. Theft
 - 26. Vandalism

END OF SECTION 01 31 00

SECTION 01 40 00

QUALITY REQUIREMENTS

PART 1 – GENERAL

1.01 GENERAL PROVISIONS

- A. Attention is directed to the Drawings and General and Supplementary Conditions of the Contract and all other Division 1 Specifications which are hereby made a part of this section.

1.02 REQUIREMENTS INCLUDED

- A. Quality assurance.
- B. Contractor's responsibilities.
- C. Owner's independent agencies.
- D. Duties of the Contractor's testing agencies.
- E. Examination of substrate.

1.03 RELATED SECTIONS

- A. Section 01 31 00 – PROJECT COORDINATION
 - 1. General project management and coordination
- B. Section 01 43 25 – STRUCTURAL TESTS AND INSPECTIONS
 - 1. Testing to be performed by the Owner's Independent Testing Laboratory, exclusive of testing to be performed by the Contractor.

1.04 QUALITY ASSURANCE

- A. Qualifications for Service Agencies: Engage inspection and testing service agencies, including independent testing laboratories, that are prequalified as complying with "Recommended Requirements for Independent Laboratory Qualification" by the American Council of Independent Laboratories and that specialize in the types of inspection and tests to be performed.
- B. Each independent inspection and testing agency engaged on the project shall be authorized by authorities having jurisdiction to operate in the Commonwealth of Massachusetts.

1.05 CONTRACTOR'S RESPONSIBILITIES

- A. The Contractor shall coordinate and schedule inspections, tests and quality control services specified in individual specification sections and required by governing authorities, except where they are specifically indicated to be the work of a Prequalified Trade Contractor – Bid Section or Owner.
 - 1. Contractor shall be responsible for coordinating his work with requirements of Owner's testing agencies and shall provide reasonable services in support of facilitating work of Owner's testing agencies as required.
- B. The Town of Marblehead shall retain and pay for the services of an independent agency to perform the specified inspections, testing and quality control.
 - 1. Section 01 43 25 – STRUCTURAL TESTS AND INSPECTIONS – defines owner testing agency services; however, it is the Contractor's responsibility to provide and pay for its own inspection and testing to ensure his/her quality control.
- C. Retesting: The Contractor is responsible for retesting where results of required inspections, tests or similar services prove unsatisfactory and do not indicate compliance with Contract Documents requirements, regardless of whether the original test or service was the Contractor's responsibility.
- D. Repair and Protection: Upon completion of inspection, testing, sample-taking and similar services performed on the work, repair damaged work and restore substrates and finishes to eliminate deficiencies including deficiencies in the visual quality of exposed finishes. Protect work exposed for quality control service activities and protect repaired work. Repair and protection is the Contractor's responsibility, regardless of the assignment of responsibility for inspection, testing or similar services.
- E. Associated Services: The Contractor shall cooperate with agencies performing required inspections, tests and similar services and provide reasonable auxiliary services as required. Notify the agency sufficiently in advance of operations to permit assignment of personnel. Auxiliary services required include, but are not limited to, the following:
 - 1. Provide access to the work and furnish incidental labor and facilities necessary to facilitate inspections and tests.
 - 2. Take adequate quantities or representative samples of materials that require testing or assist the agency in taking samples.
 - 3. Provide facilities for storage and curing of test samples and delivery of samples to testing laboratories.

4. Provide the agency with a preliminary design mix proposed for use for material mixes that require control by the testing agency.
5. Provide security and protection of samples and test equipment at the project site.

1.06 OWNER'S INDEPENDENT TESTING AGENCIES

- A. The Owner shall provide its own inspections, tests and similar services to be performed by independent testing agencies. Costs for these services are not included in the Contract Sum. Information provided shall be for the sole use of Owner and Engineer shall not relieve the Contractor from any responsibilities under the terms of this Contract.

1.07 DUTIES OF THE CONTRACTOR'S TESTING AGENCIES

- A. The Contractor's independent testing agency engaged to perform inspections, sampling and testing of materials and construction shall cooperate with the Engineer and Owner in performing its duties and shall provide qualified personnel to perform required inspections and tests.
- B. The testing agency shall notify the Engineer and Contractor promptly of irregularities or deficiencies observed in the work during performance of its services.
- C. The testing agency shall not perform any duties of the Contractor.
- D. The contractor is responsible for scheduling times for inspections, tests, taking samples and similar activities.

1.08 SUBMITTALS

- A. General: Refer to Division 1 section on "Submittals" for the general requirements on submittals. Submit a certified written report of each inspection, test or similar service directly to the Engineer, in duplicate. Submit additional copies of each written report directly to the Owner and the local building official when the Owner so directs at no additional cost. Comply with the additional requirements specified in Section 01 43 25 – Structural Tests and Inspections.
 1. Report Data: Written reports of each inspection, test or similar service shall include, but not be limited to, the following:
 - a. Name of testing agency or test laboratory
 - b. Dates and locations of samples and tests or inspections
 - c. Names of individuals making the inspection or test
 - d. Designation of the work and test method
 - e. Complete inspection or test data
 - f. Test results
 - g. Interpretation of test results

- h. Notation of significant ambient conditions at the time of sample-taking and testing
- i. Comments or professional opinion as to whether inspected or tested work complies with requirements of the contract documents
- j. Recommendations on retesting, if applicable

1.09 QUALITY CONTROL, GENERAL

- A. Maintain quality control over suppliers, manufacturers, products, services, site conditions and workmanship to produce work of high quality as specified.
- B. Comply fully with manufacturer's instructions, including each step in sequence.
- C. Comply with specified standards as a minimum quality for the work except when more stringent tolerances, codes or specified requirements indicate higher standards or more precise workmanship.
- D. Perform work by persons qualified to produce workmanship of specified quality.
- E. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortions, or disfigurement. Anchorage devices shall be labeled to allow for visual inspection and verification of type of anchorage device.

1.10 MANUFACTURER'S REPRESENTATIVES

- A. If required; by specific specification sections, manufacturer's representative shall be present at the job site for supervision of work during installation of materials. Such representative shall be present during all aspects of construction to ensure proper installation of all applicable items. Refer to other sections of these specifications for additional requirements.

1.11 EXAMINATION OF SUBSTRATE

- A. Installers of materials, products or equipment shall do the following:
 - 1. Examine base surfaces upon which materials, products or equipment are to be installed.
 - 2. Examine conditions upon which materials, products or equipment are to be installed.
 - 3. Where there is any question as to the dryness of a surface, test with a modern moisture-indicating machine.
 - 4. Notify the Contractor, in writing, with a copy to the Engineer, if conditions are detrimental to proper and timely construction and completion of the work.

- B. Do not proceed with work until unsatisfactory substrate or unacceptable conditions have been corrected. Commencement of installation constitutes acceptance of substrate or base surfaces, and the cost of any corrective work due shall be borne by the installer applying his/her materials, products or equipment thereon.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not used

END OF SECTION 01 40 00

SECTION 01 43 25

STRUCTURAL TESTS AND SPECIAL INSPECTIONS

PART 1 – GENERAL

1.01 RELATED DOCUMENTS

- A. Attention is directed to the Drawings and general provisions of the Contract and all other Division 1 Specifications which are hereby made a part of this section.

1.02 SUMMARY

- A. The Owner shall employ an independent testing agency(s) to perform a program of structural tests and inspections for compliance with Chapter 17 of the 2015 International Building Code. The Structural Engineer of Record (SER) shall prepare a statement of Structural Tests and Inspections, specifying the tests and inspections to be performed throughout the construction of this project. Submission and approval of this statement must be complete prior to beginning construction.

1. The Engineer will organize and direct the test and inspection program. All inspection and test reports shall be submitted to the Contractor, the Owner and the SER. The Contractor shall be responsible for understanding the program of structural tests and inspections and notifying the testing agency and the project manager when work is ready for tests and/or inspections. The Contractor will provide access to the testing agency, the Owner and the SER. Inspections and tests of the structural tests and inspection program will not relieve the Contractor of responsibility for supervision, testing and inspection for quality control of the work.
2. The Owner will provide testing and inspection reports to the local building official when requested by the local building official. Upon completion of the construction, the engineer will make a final report on the satisfactory completion of the program for structural tests and inspection to the building official and to the SER.

1.03 RESPONSIBILITIES

- A. Special Inspector

1. The special inspector shall be a qualified person who shall demonstrate competence to the satisfaction of the building official, for inspection of the particular type of construction operation requiring special inspection.
2. Project Site: Space available for performing construction activities. The extent of project site is shown on drawings.

1.04 INDUSTRY STANDARDS

- A. **Applicability of Standards:** Unless the contract documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copies directly into the contract documents to the extent referenced. Such standards are made a part of the contract documents by reference.
- B. **Publication Dates:** Comply with standards in effect as of date of the contract documents, unless otherwise indicated.
- C. **Copies of Standards:** Each entity engaged in construction on project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the contract documents.
 - 1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.

1.05 ABBREVIATIONS AND ACRONYMS

- A. **Industry Organizations:** Where abbreviations and acronyms are used in specifications or other contract documents, they shall mean the recognized name of the entities indicated in Gale Research's "Encyclopedia of Associations" or in Columbia Books' "National Trade & Professional Associations of the U.S."
- B. **Code Agencies:** Where abbreviations and acronyms are used in specifications or other contract documents, they shall mean the recognized name of current edition of codes in the Commonwealth of Massachusetts.
 - 1. The Statement of Structural Tests and Inspections is submitted as a condition of permit issuance in accordance with the structural tests and inspections requirements of the applicable building code. It includes a Schedule of Structural Tests and Inspections applicable to this project as well as the name of the special inspector who will oversee and administer the program and identify of other agencies intended to be retained for conducting these inspections.
 - 2. Keep records of inspections and see that inspection reports are furnished to the Owner, Structural Engineer of Record, Geotechnical Engineer of Record (if applicable), and the General Contractor.
 - 3. A final report of inspections documenting satisfactory completion of all required structural tests and inspections and correction of any discrepancies noted in the inspections shall be furnished to the building official.

C. TESTING AGENCY(S)

1. The scope of work of the testing agency(s) is defined in the attached “Statement of Structural Tests and Inspections”.
2. The testing agency shall be National Voluntary Accreditation Program (NVLAP) certified, be licensed by the state in which the project is located, and have at least one professional engineer registered by the state in which the project is located on staff. The testing agency and its personnel shall maintain in good standing the certifications, licensing and registrations required by the various agencies noted herein and the state in which the project is located for the duration for the project.
3. The testing agency shall have at their immediate disposal all personnel and sampling, testing, field, and laboratory equipment (maintained in good working order and properly calibrated) necessary to perform the work defined herein.
4. Sampling, testing and inspections for compliance shall be checked against the contract documents (i.e., drawings, project specifications, addenda and referenced standards) and the approved shop drawings. Perform sampling, testing and inspections in coordination with the general contractor and in a timely manner so as to provide the general contractor with sufficient time to repair or replace non-conforming materials or work. Notify the general contractor’s site superintendent immediately when non-conforming materials or work are discovered. Non-conforming materials or work that are not corrected before the inspector leaves the site for the day shall be recorded in the inspection report and issued as required herein.
5. Resample, retest, and reinspect all materials and work found not to conform to the requirements of the contract documents or shop drawings. Testing agency(s) to note in its reports when resampling, retests and re-inspections were performed.
6. The testing agency shall be responsible for sending copies of all sampling, testing and inspection reports, within 48 hours of performance to the owner, special inspector, SER, geotechnical engineer of record (for Earthwork only) and general contractor.

D. GENERAL CONTRACTOR AND SUBCONTRACTORS

1. Cooperate with the testing agency(s), the Owner, building official and SER, and provide safe access to the work area.
2. Provide incidental labor, equipment, materials, and facilities to obtain, handle, store and cure samples at the site or at the source of products to be sampled, tested and inspected.
3. Notify the appropriate testing agency at least 24 hours prior to expected times of operations that require sampling, testing and inspections.

4. Testing, inspection and sampling in the shop or field shall not relieve the general contractor or subcontractors of their responsibilities to furnish materials and workmanship that comply with the requirements of the contract documents and the shop drawings.
5. The contractor is responsible for supervision, testing and inspection as required for quality control of the work.

1.06 CONFLICTING REQUIREMENTS

- A. General: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Engineer for a decision before proceeding.

1.07 STATEMENT OF STRUCTURAL TESTS AND INSPECTIONS

- A. The statement of structural tests and inspections is attached at the end of this section.

PROGRAM OF STRUCTURAL TESTS AND INSPECTIONS

For compliance with Chapter 17 of the 2015 International Building Code (2015 IBC)

Project: Force Main Land Bridge

Location: Village 13 Sub Station
25 Maverick Street, Marblehead, MA

Owner: Marblehead Municipal Light Department (MMLD)
80 Commercial Street
Marblehead, MA 01945

MMLD Contact: Mr. Joe Kowalik
Phone: 1-781-631-0240

Structural Engineer
Of Record (SER): Mr. Bill Capone
Bayside Engineering
600 Unicorn Park Drive
Woburn, MA 01801
Phone: 781-932-3201

The following firms, agencies or individuals (hereinafter referred to collectively as agents) will perform the tests and inspections under the direction of the SER:

Abbreviation	Agent
SI	Special Inspector – William A. Capone, P.E.
TL2	Testing Lab Task #1 – TBD – Verification of Soils

The abbreviations will be used on the attached pages to identify which agent is performing the particular tests or inspections.

The abbreviation will be used on the attached pages to identify which agent is performing the particular tests or inspections.

The following categories of structural tests and inspections, if checked, are included in the program for structural tests and inspections for this project. The specific tests and inspections required for each checked category are listed on the page noted opposite the category.

Category

- | | |
|--|---|
| <input checked="" type="checkbox"/> Verification and inspection of soils | <input checked="" type="checkbox"/> Precast concrete construction |
| <input type="checkbox"/> Pile foundations | <input type="checkbox"/> Steel construction |
| <input type="checkbox"/> Pier foundations | <input type="checkbox"/> Masonry construction |
| <input type="checkbox"/> Cast-in-place concrete construction | <input type="checkbox"/> Wood construction |
| | <input type="checkbox"/> Curtain walls (wall panels) and veneers) |
| | <input type="checkbox"/> Light gage metal framing |
| | <input type="checkbox"/> Special cases |

The following items of construction, if checked, are specified in the contract documents on a performance basis. Their structural design will be reviewed by the SER and their construction is included in the program for tests and inspections:

- | | |
|---|---|
| <input type="checkbox"/> Curtain walls | <input type="checkbox"/> Metal buildings |
| <input type="checkbox"/> Precast concrete components | <input type="checkbox"/> Light gage metal framing |
| <input type="checkbox"/> Post-tensioning steel | <input type="checkbox"/> Metal Roof and Wall Panels |
| <input type="checkbox"/> Structural steel connections | <input type="checkbox"/> _____ |

Verification and Inspection of Soils – Table 1705.6

Item	Agent	Criteria / Scope
1. Verify Materials below shallow foundation are adequate to achieve the design bearing capacity	SI, TL2	1. During fill placement, the inspector shall determine the proper materials and procedures.
2. Verify excavations are extended to proper depth and have reached proper material	SI, TL2	2.
3. Perform classification and testing of compacted fill materials	TL2	3. Verify compacted fill is not less than 95 percent of the maximum dry density at optimum moisture content in accordance with ASTM D 1557 for precast footing base and compacted fill over precast concrete roof structure.
4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill	SI, TL5	4.
5. Prior to placement of compacted fill, observe subgrade and verify site has been prepared properly.	SI, TL2	5.

References

1. ACI 301, Standard Specifications for Structural Concrete.
2. ACI 318, Building Code Requirements for Structural Concrete.
3. ACI 530.1 / ASCE 6 / TMS 602, Specifications for Masonry Structures.
4. AISC 360, Specification for Structural Steel Buildings.
5. ASTM A6, Specifications for General Requirements for Rolled Steel Plates, Shapes, Sheet Piling and Bars for Structural Use.
6. ASTM A568, Specification for Steel Sheet, Carbon and High-Strength, Low-Alloy, Hot-Rolled and Cold Rolled, General Requirements for.
7. ASTM C31, Practice for Making and Curing Concrete Test Specimens in the Field.
8. ASTM C94, Specification for Ready-Mixed Concrete.
9. ASTM C109, Test Method for Compressive Strength of Hydraulic Cement Mortars (using 2 inch or 50mm cub specimens).
10. ASTM C138, Test Method for Unit Weight, Yield and Air Content (Gravimetric) of Concrete.
11. ASTM C143, Test Method for Slump of Hydraulic Cement concrete.
12. ASTM C172, Practice for Sampling Freshly Mixed Concrete.
13. ASTM C173, Test Method for Air Content of Freshly Mixed concrete by the Volumetric Method
14. ASTM C231, Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method
15. ASTM C1064, Test Method for Temperature of Freshly Mixed Portland Cement Concrete
16. AWS D1.1, Structural Welding Code – Steel
17. AWS D1.3, Structural Welding code – Sheet Steel

- 18. RCSC, Specification for Structural Joints using A325 or A490 Bolts
- 19. SDI, Steel Deck Institute Specifications and Commentaries for Composite Steel Floor Deck and Specifications and commentaries for Roof Deck
- 20. SSPC, Steel Structures Painting Council – Steel Structures Painting Manual Volume 2, Systems and Specifications
- 21. CFSD-ASD, Specification for Design of Cold-Formed Steel Structural Members, with 1989 Addendum
- 22. CCFSS, AISI Specification Provisions for Screw Connections

N/A



Registration Seal

Prepared by the Structural Engineer of Record:

Name: William A. Capone, P.E.

Signature: 

Firm: Bayside Engineering

Date: February 7, 2024

SECTION 01 77 00

CONTRACT CLOSEOUT

PART 1 - GENERAL

1.01 GENERAL PROVISIONS

- A. Attention is directed to the Drawings and General and Supplementary Conditions of the Contract and all other Division 1 Specifications which are hereby made a part of this section.

1.02 DESCRIPTION OF REQUIREMENTS

- A. Definitions: Project closeout is the term used to describe certain collective project requirements, indicating completion of the work that is to be fulfilled near the end of the Contract Time in preparation for final acceptance and occupancy of the work by the Owner, as well as final payment to the Contractor and the normal termination of the Contract.
 - 1. Specific requirements for individual units of work are included in the appropriate Specifications Sections.
 - 2. Time of closeout is directly related to “Substantial Completion”; therefore, the time of closeout may be either a single time period for the entire work or a series of time periods for individual elements of the work that have been certified as substantially complete at different dates. This time variation, if any, shall be applicable to the other provisions of this section.

1.03 PREREQUISITES TO SUBSTANTIAL COMPLETION

- A. General: In addition to the requirements in the General Conditions complete the following before requesting the Project Manager and Engineer’s inspection for certification of substantial completion, either for the entire work or for portions of the work. List known exceptions in the request.
 - 1. In the progress payment request that coincides with or is the first request following the date substantial completion is claimed, show either 100% completion for the portion of the work claimed as “substantially complete”, or list incomplete items, the value of incomplete work, and reasons for the work being incomplete.
 - 2. Include support documentation for completion as indicated in these Contract Documents.
 - 3. Submit a statement showing an accounting of changes to the Contract Sum.
 - 4. Advise Owner of pending insurance change-over requirements.
 - 5. Submit specific warranties, workmanship/maintenance bonds, maintenance agreements, final certifications, and similar documents.
 - 6. Obtain and submit releases enabling Owner’s full, unrestricted use of the work and access to services and utilities. Where required, include occupancy permits, operating

certificates, and similar releases. Obtain the required inspections and releases by local building officials.

7. Comply with all requirements indicated for schedules, reports and payments.

B. Inspection Procedures: Upon receipt of Contractor's request for inspection, the Owner will either proceed with inspection or advise Contractor of unfulfilled prerequisites.

1. Following the initial inspection, the Owner will either prepare the certificate of substantial completion, or will advise Contractor of work which must be performed before the certificate will be issued. The Owner will repeat the inspection when requested and when assured that the work had been substantially completed.

2. Results of the completed inspection will form the initial "punchlist" for final acceptance.

1.04 PREREQUISITES TO FINAL ACCEPTANCE

A. General: Complete the following before requesting the Owner's final inspection for certificate of final acceptance, and final payment as required by the General and Supplementary Conditions. List known exceptions, in any, in request.

1. Submit the final payment request with final releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.

2. Submit an updated final statement, accounting for final additional changes to the Contract Sum.

3. Submit a certified copy of the Owner's final punchlist of itemized work to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance and has been endorsed and dated by the Owner.

4. Submit final meter readings for utilities, a measured record of stored fuel, and similar data as of the date of substantial completion, or else when the Owner took possession of and responsibility for corresponding elements of the work.

5. Submit consent of surety.

6. Submit a final liquidated damages settlement statement, if required, acceptable to Owner.

7. Submit evidence of final, continuing coverage complying with insurance requirements.

8. Complete with requirements indicated for schedules, reports and payments.

B. Re-inspection Procedure: The Owner will re-inspect the work upon receipt of the Contractor's notice that the work, including punchlist items resulting from earlier inspections, has been completed, except for those items whose completion has been delayed because of circumstances that are acceptable to the Owner.

1. Upon completion of re-inspection, the Owner will either prepare a certificate of final acceptance, or will advise the Contractor of work that is incomplete or of obligations that have not been fulfilled, but are required for final acceptance.

2. If necessary, the re-inspection procedure will be repeated.

1.05 RECORD DOCUMENT SUBMITTALS

- A. General: Specific requirements for record documents are indicated in the individual sections of the Specifications. Other requirements are indicated in the General Conditions. General submittal requirements are indicated in “submittals” sections.
1. Do not use record documents for construction purposes; protect from deterioration and loss in a secure, fire-resistive location; provide access to record documents for the Engineer’s reference during normal working hours.
- B. Record Drawings: Maintain a record set of blue or black line white prints of contract drawings and shop drawings in a clean, undamaged condition. Mark-up the set of record documents to show the actual installation where the installed work varies substantially from the work as originally shown. Mark whichever drawing is most capable of showing the actual “field” condition fully and accurately; however, where shop drawing are used for mark-up record a cross-reference at the corresponding location on the contract drawings. Give particular attention to concealed work that would be difficult to measure and record at a later date.
1. Mark record sets with red erasable pencil, and, where feasible, use other colors to distinguish between variations in separate categories of work.
 2. Mark-up new information which is known to be important to the Owner, but for some reason was not shown on either contract drawings or shop drawings.
 3. Note related change order number where applicable.
 4. Organize record drawing sheets into manageable sets, bind with durable paper cover sheets, and print suitable titles, dates, and other identification on cover of each set.
 5. Upon completion of the work, submit record drawings to the Engineer for the Owner’s records.
- C. Record Specifications: Maintain one complete copy of the Project Manual including specifications and addenda, and one copy of other written construction documents such as change orders, and similar modifications issued in printed form during construction. Mark these documents to show substantial variations in the actual work performed in comparison with the text of the specifications and modification as issued. Give particular attention to substitutions, selection of options, and similar information on work where it is concealed or cannot otherwise be readily discerned at a later date by direct observation. Note related record drawing information and product data, where applicable.
1. Upon completion of the work, submit record specifications to the Engineer for the Owner’s records.
- D. Record Product Data: Maintain one copy of each product data submittal. Mark these documents to show significant variations in the actual work performed in comparison with the submitted information. Include both variations in the products as delivered to the site, and variations from the manufacturer’s instructions and recommendations for installation. Give particular attention to concealed products and portions of the work which cannot otherwise be readily discerned at a later date by direct observation. Note related change orders and mark-up of record drawings and specifications.
1. Upon completion of mark-up, submit complete set of record product data to the Engineer for the Owner’s records.

- E. Record Sample Submittal: Immediately prior to date or dates of substantial completion, the Contractor will meet at the site with the Owner, the Engineer, and the Owner's personnel, if desired, to determine which, if any, of the submitted samples that have been maintained by the Contractor during progress of the work, are to be transmitted to the Owner for record purposes. Comply with delivery to the Owner's sample storage space.
- F. Miscellaneous Record Submittals: Refer to other sections of these specifications for requirements of miscellaneous recordkeeping and submittals in connection with the actual performance of the work. Immediately prior to the date or dates of substantial completion, complete miscellaneous records and place in good order, properly identified and bound or filed, ready for continued use and reference. Submit to the Owner for the Owner's records.
- G. Operation and Maintenance Manual: Comply with the requirements indicated in Specification Section 01 33 00 Submittal Requirements. Submit to the Owner for the Owner's records.

1.06 GUARANTEES AND WARRANTIES

- A. Submit to the Town of Marblehead and the Engineer all extended guarantees and warranties that have been specified in various, individual Sections of the Specifications. Guarantees shall be assembled by Specification No. and Section in accordance with Specifications Table of Contents.
 - 1. Guarantees and warranties shall be enforceable in the Commonwealth of Massachusetts and subject to interpretation in accordance with the laws of the Commonwealth of Massachusetts.
- B. Unless more-stringent requirements are otherwise specified, guarantee all work against defects of materials, equipment, and workmanship for one year from the Date of Completion or the date of issue of Certificate of Use/Occupancy for the building or portion thereof, whichever occurs first.
- C. If, within any guarantee period, repairs or changes are required in connection with guaranteed work, Contractor shall promptly upon receipt of notice from Owner, and without additional expense to Owner, within ten days:
 - 1. Place in satisfactory condition all guaranteed work and correct all defects.
 - 2. Make good all damage to building, site equipment, or contents thereof, including redecoration that, in the opinion of the Project Manager, results from the use of material, equipment, or workmanship that are inferior, defective, or not in accord with the terms of the Contract.
- D. If Contractor, after such notice, fails to proceed immediately to comply with terms of guarantee, the Owner may correct defects and hold Contractor liable for all expenses incurred.
- E. Promptly after completion of the work, obtain from each subcontractor where a guarantee is required, a warranty addressed to and in favor of the Owner.

- F. Delivery of any warranty required does not relieve the Contractor from any obligation assumed under other provisions of the Contract.
- G. Deliver guarantees and warranties to the Owner before or with the application for Final Payment.
- H. The general warranty set forth in the General Conditions is in addition to, exclusive of, and not in substitution of such guarantees as may be required in the Specifications.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

3.01 FINAL CLEANING

- A. General: Special cleaning requirements for specific units of work are included in the appropriate specification sections. General cleaning during the regular progress of the work is required by the General Conditions and is also included in other Contract Documents.
- B. Cleaning: Provide final cleaning of the work at the time indicated. Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit of work to the condition expected for a normal, commercial building cleaning and maintenance program. Comply with the manufacturer's instructions for operations.
 - 1. Complete the following cleaning operations before requesting the Engineer's inspection for certification of substantial completion.
 - 2. Remove labels which are not required as permanent labels.
 - 3. Clean transparent materials, including mirrors and glass in doors and windows, to a polished condition. Remove putty and other substances which are noticeable as vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials.
 - 4. Clean exposed exterior and interior hard-surface finishes to a dust-free condition, free of dust, stains, films and similar noticeable distracting substances. Restore reflective surfaces to their original reflective condition. Leave concrete floors broom clean.
 - 5. Wipe surfaces of mechanical and electrical equipment clean. Remove excess lubrication and other substances. Clean plumbing fixtures to a sanitary condition. Clean light fixtures and lamps.
 - 6. Clean the project site, including landscape development areas, of rubbish, litter, and foreign substances. Sweep paved areas to a broom-clean condition; remove stains, spills, and other foreign deposits. Rake grounds that are neither paved nor planted to a smooth, even-textured surface.

- C. Pest Control: Engage an experienced exterminator to make a final inspection of the project and to rid project of rodents, insects, and other pests.
- D. Removal of Protection: Except as otherwise indicated or requested by the Engineer, leave in place those temporary protection devices and facilities which were installed during the course of the work.
- E. Compliances: Comply with safety standards and governing regulations for cleaning operations. Do not burn waste material at the site. Do not bury debris or excess material on the Owner's property. Do not discharge volatile or other harmful or dangerous materials into drainage system. Remove waste materials from the site and dispose of in a lawful manner.
- F. Where extra materials of value remaining after completion of associated work have become the Owner's property, dispose of these to the Owner's best advantage as directed.

END OF SECTION 01 77 00

SECTION 03 45 01

PRECAST CONCRETE

PART 1 - GENERAL

1.01 GENERAL PROVISIONS

- A. Attention is directed to the Drawings and General Provisions of the Contract and all other Division 1 Specifications which are hereby made a part of this section.
- B. Refer to other Divisions of these Specifications to determine the type and extent of work therein affecting the work of this trade, whether or not such work is specifically mentioned in this Section.
- C. Precast concrete sections shall be fabricated and delivered to the project site no later than **April 22, 2024** to meet the final completion date for the project of **April 30, 2024**.
- D. The Marblehead Municipal Light Department (MMLD) anticipates the delivery of extremely heavy electric power transformer equipment in early May. The land bridge is being constructed solely for the purpose of allowing for safe delivery of that equipment. The only available delivery route for such equipment requires travel over the land bridge to be constructed hereunder. Failure of the Contractor to complete the work specified in these bid documents by the foregoing date will, therefore, result in substantial damages to the Owner under its contract with the electric power transformer manufacturer, including but not limited to costs to store the equipment.
- E. **Precast concrete sections shall be procured by the MMLD under a separate contract and shall be at the project site prior to the installation work.**
- F. Scope of work includes all labor, material, equipment, and incidental items necessary to install precast concrete sections as indicated on the drawings and the contract documents.

1.02 SUBMITTALS

- A. The precast concrete supplier shall perform calculations for design of reinforcement for all precast sections. All components shall be designed for the proposed dead loads and live load for **HL-93 truck loading**. Calculations shall be performed and stamped by a registered professional engineer licensed in the Commonwealth of Massachusetts and shall be submitted for review and approval prior to fabrication.
- B. Shop drawings for the proposed precast sections shall be submitted and approved prior to fabrications.
- C. Submit product data for stainless steel threaded rods and Schedule 80 PVC pipe.

PART 2- MATERIALS

2.01 PRECAST CONCRETE

- A. Precast Concrete shall have strength of 5,000 PSI minimum at 28 days as determined by standard ASTM testing of cylinders. Cement shall be Portland Cement in accordance with ASTM C150 Type I or II. Cylinders shall be compression tested in accordance with ASTM C31.
- B. Absorption rate shall not exceed 5 percent.
- C. Air entrainment shall be per ASTM C260 with a minimum of 4 percent but not more than 6 percent.
- D. Aggregates shall be quartzite and shall conform to the ASTM C33 with a maximum size of 3/4-inch.
- E. Water shall be clean, potable, free from injurious amounts of oils, alkalis, organic materials and other deleterious substances.
- F. Reinforcing steel shall conform to ASTM A615, Grade 60 (420), with epoxy coating in accordance with ASTM A775.

2.02 HARDWARE

- A. Stainless steel threaded rod for cast-in-place wall sections shall conform to ASTM A276, Type 304 stainless steel and American Iron and Steel Institute Specifications 302/304. Rod diameter shall be 1 inch, length as detailed on the drawings.

PART 3 – EXECUTION

3.01 PRECAST CONCRETE FABRICATION

- A. Casting methods and equipment shall be in accordance with Architectural Precast Association standards. Fabrication is to be done at manufacturer's plant only.
- B. Cast all elements in molds of rigid construction, accurate in detail with precise corners and arises, and so designed as to provide a close control of dimensions and details as indicated on the Drawings.
- B. Handle concrete to prevent segregation of materials. Vibrate concrete either internally or externally, to achieve proper compaction, finish and distribution of concrete.

- C. Take precautions to keep the reinforcing steel in the proper location during placing and consolidation of the concrete. Accurately place and maintain embedded items such as anchor bolts, galvanized steel pipe sleeves, etc. in their proper location during the casting operation.
- D. Ensure that casting and dimensional tolerances are in accordance with Architectural Precast Association standards and with the following:
 - 1. Overall dimension, height and width, plus or minus 1/8 inch.
 - 2. Thickness: Plus or minus 1/8 inch.
- E. Allow concrete to cure in the mold for a minimum of 24 hours before stripping the mold away. Accelerate curing by steam curing provided that the temperature does not exceed 155 degrees F and surfaces of concrete are kept moist. Do not remove elements from the molds until they have reached a compressive strength of 2,000 psi. All precast concrete shall be stored for curing in an enclosed, roofed location with sufficient temperature controlled to ensure ambient temperature never drops below 50 degrees F or rises above 90 degrees F. Under no circumstances shall concrete or concrete forms be subjected to rain, snow or other precipitation, puddling and flooding. After stripping, the precast pieces shall be allowed to sit in the shop undisturbed for seven days to allow the cement to cure enough for movement.

3.02 CONSTRUCTION

- A. All materials shall be delivered, stored, and handled in a manner that they will be fully protected from wetting, staining, shipping, intrusion of foreign matter, and other damage. No material which may cause staining or discoloration shall be used for blocking or packing.
 - 1. All materials showing evidence of irreparable damage will be rejected and shall be promptly removed from the site. All precast concrete pieces that are chipped or otherwise damaged shall be rejected.
 - 2. Thoroughly examine and clean surfaces to receive work of this Section, and notify the Engineer in writing of all conditions which would adversely affect this work. Do not commence work in any area where such notice of adverse conditions has been filed, until corrective work has been completed or waived. Starting of work in any area without issuance of such notice shall constitute acceptance of conditions in the area as being satisfactory to properly receive the work of this Section.
 - 3. For precast roof sections, provide embedded 2" inside diameter Sch. 80 PVC pipe section for connection of the roof sections to the top of the precast concrete side walls.

4. Stainless steel rods shall be cast into the sidewall sections as indicated on the drawings. **Do not field drill precast concrete pieces for stainless steel rods.**
5. Set all precast pieces straight, plumb, and at elevations according to the Drawings. Use acceptable Architectural Precast Association standards for installation of all precast concrete.
6. Do not use pieces with chips, cracks, voids, stains, or other defects which might be visible in the finished work, or which might structurally impair the concrete.
7. Remove and replace precast units which are broken, chipped, stained or otherwise damaged. Where directed, remove and replace units which do not match adjoining work. Provide new matching units, install as specified and point-up joints to eliminate evidence of replacement. Re-point defective and unsatisfactory joints to provide a neat, uniform appearance.

END OF SECTION 03 45 01

SECTION 31 23 00

EARTHWORK

PART 1 - GENERAL

1.01 GENERAL PROVISIONS

- A. Attention is directed to the Drawings and general provisions of the Contract and all other Division 1 Specifications which are hereby made a part of this section.

1.02 WORK TO BE PERFORMED

- A. The work of this Section consists of furnishing all labor, materials, services and incidentals necessary to complete the work of this section as shown on the Drawings and as specified herein.
1. Excavation including, but not limited to excavation for the new force main concrete land bridge structure.
 2. The work shall include the removal and satisfactory disposal of rubbish, debris and other items not being reused, such as bituminous concrete surfaces, cement concrete blocks, boulders, bricks and other material not considered to be suitable fill material.
 3. Backfill and compaction.
 4. Testing of materials to be used.
 5. Protection of all pavements, vegetation, existing utilities and items that are to remain.
 6. All necessary shoring and bracing to protect all excavations from movement or cave-ins and to maintain safe working conditions.
 7. Dewatering for excavations shall be as indicated under Specification Section 31 23 19 - Dewatering
- B. Notify Massachusetts DIG SAFE (1-800-322-4844) and procure a DIG SAFE number a **minimum of 72 hours** prior to disturbing the ground in any way.

1.03 RELATED WORK SPECIFIED ELSEWHERE

Section 31 23 19 – Dewatering
Section 31 25 00 – Erosion and Sedimentation Control
Section 31 25 10 – Compost Filter Tube

1.04 SAFETY CODES AND STANDARDS

- A. All work shall comply with the rules and regulations of the Massachusetts Division of Occupational Safety and all other local and state agencies having jurisdiction. Nothing contained herein shall be construed as permitting work that is contrary to such rules, regulations and codes.
- B. State Specifications: Massachusetts State Building Code and Massachusetts Department of Transportation Standard Specifications for Highways and Bridges, latest editions.
- C. Perform all excavation work in compliance with applicable requirements of governing authorities having jurisdiction.

1.05 DEFINITIONS

- A. The State Specifications shall mean the Massachusetts State Building Code and Massachusetts Highway Department Standard Specification for Highway and Bridges, latest edition.
- B. Excavation consists of the removal and disposal of materials encountered when establishing required grades below existing grades.
- C. Trenching is defined as removing material in a narrow strip to the elevations required to lay in piping, wiring or other materials to the lines and grades specified or shown on the Contract Drawings.
- D. Backfill consists of placing suitable material over and against footings, foundation walls pipes and wires, roadway embankment and the like and compacting the material to specified density.

1.06 PROTECTION

- A. Protect all known existing utilities against damage. Any damage to such utilities shall be repaired at the Contractor's expense.
- B. Locate existing underground utilities by careful hand excavation.
- C. If any unknown and uncharted utilities are encountered during excavation, promptly notify the Owner's representative on site.
- D. If necessary during the progress of the work to interrupt the natural surface drainage or flow of artificial drains, the and/or Contractor shall provide adequate temporary drainage facilities that will prevent erosion damage or unnecessary delay of the work, and shall restore original drainage or construct proposed drainage structures as soon as the work will permit. The Contractor shall provide and maintain adequate drainage away from any building during construction.
- E. Barricade open excavations and post warning lights for safety of persons. Operate warning

lights during hours from dusk to dawn each day.

- F. Protect structures, utilities, pavements and other facilities immediately adjacent to excavations, from damage caused by settlement, lateral movement, undermining, washout and other hazards.
- G. Take precautions and provide necessary bracing and shoring to guard against movement or settlement of existing improvements or new construction. Contractor is entirely responsible for strength and adequacy of bracing and shoring, and for safety and support of construction from damage or injury caused by the lack thereof or by movement or settlement.

1.07 SPECIAL NOTES

- A. Stockpiling of excavated materials on site will be permitted for topsoil and backfill material which will be reused. Location shall be as directed by the MMLD.
- A. All excess and unused excavated materials must be removed from the site and properly disposed of.

1.08 JOB CONDITIONS

- A. Use of Explosives: Explosives are not permitted on any of the job sites.
- B. The use of pile driving equipment is not allowed on any of the job sites.

PART 2 - PRODUCTS

2.01 BACKFILL MATERIAL

- A. Clean earth, free of perishable materials, containing no more solid than the equivalent of one cubic foot per cubic yard of backfill.
- B. No solid material larger than two inches in its largest dimension allowed.
- C. Backfill is classified as all material made outside building lines, structures, paved areas and behind retaining walls.
- D. Existing excavated materials may be used as backfill and in trenches that do not occur under pavement areas.

2.02 FILL MATERIALS

- A. General: All fill material shall be approved by the Engineer. **Excavated materials from the site may be used if approved.** Imported fill, where required, shall be a non-expansive and predominantly granular soil or soil-rock mixture which is free from organic matter and deleterious substances. Use to bring subgrade to proper elevation under all slabs on grade

within and outside of building and structure perimeters, under all paving and embankments.

B. Structural Fill:

1. Fill for use as compacted fill should consist of inert material, sandy gravel or gravelly sand, free of organic material, loam, trash, snow, ice, frozen soil and other objectionable material conforming to the following gradation requirements:

<u>Sieve Size</u>	<u>Percent Finer by Weight</u>
2"	100
#4	40 - 75
#50	8 - 28
#200	0 - 10

Maximum size of stone in gravel shall be 2 inches largest dimension.

2. Existing fill materials acceptable to the Engineer and not considered to be contaminated may be used as ordinary borrow fill between the side walls of the bridge structure or stockpiled for reuse as granular fill as directed by the Town of Marblehead.
- C. Crushed Stone, if required to create a sump area for dewatering of the excavation, shall be stone or gravel crushings with angular particle size not less than 3/4" nor more than 1-1/2" in diameter, washed and free flowing is acceptable as alternate material. This material must meet ASTM C-33 paragraph 9.1 requirements for quality and soundness.

2.03 ACCESSORIES

- A. Warning Tape: Acid and alkali resistant polyethylene film warning tape manufactured for marking and identifying underground utilities, 6 inches (150 mm) wide and 4 mils (0.1 mm) thick, continuously inscribed with a description of the utility; colored as given in Section 2.02.C.
- B. Detectable Warning Tape: Acid and alkali resistant polyethylene film warning tape manufactured for marking and identifying underground utilities, minimum 6 inches (150 mm) wide and 4 mils (0.1 mm) thick, continuously inscribed with a description of utility, with metallic core encased in a protective jacket for corrosion protection, detectable by metal detector when tape is buried up to 30 inches (750 mm) deep; colored as given in Section 2.02.C.

C. Underground Utility Warning Tape Color Codes:

1. Red: Electric.
2. Yellow: Gas, oil, steam, and dangerous materials.
3. Green: Storm and sanitary sewers and drainage systems, including force mains.
4. Blue: Water.
5. Orange: Communication lines or cables.

PART 3 - EXECUTION

3.01 SITE GRADING

- A. Where Contract Drawings indicate removal of earth to a depth sufficient to provide acceptable base for compacted fill, strip and excavate to elevations indicated.
- B. Grade to levels and dimensions required to the underside of respective finish surfaces, specified base materials, and six inches below finish grade in all areas disturbed by earthwork that are to receive topsoil.
- C. Stockpile excess materials not required or not acceptable for filling from the site as directed by the Town of Marblehead.

3.02 EXCAVATION AND BACKFILL

- A. It is assumed that all excavations to levels and dimensions required by Contract Drawings and Specifications shall be considered as earth excavation.
- B. Excavation and backfilling operations shall be conducted so that no equipment loads are imparted on the existing sewer force main pipe. **Equipment will not be allowed to travel directly over the location of the pipe during excavation and backfilling operations.****
- C. Level off and grade bottoms of excavations to receive concrete (if required) with proper allowance for base materials.
- D. Slope or shore and brace all excavations if required to prevent cave-ins or slides. Remove when no longer required. Take all necessary precautions to prevent damage to life and property.
- E. Keep excavations free of water by pumping or trenching. Conduct water away from excavations and off the site without encroaching on other properties.
- F. Stockpile excess excavated materials as directed by the Town of Marblehead.
- G. Structural backfill shall be impervious mineral soil, free of organic matter, frozen or lump material, roots, debris and rocks over two inches in diameter as specified in Paragraph 2.02.B above.
- H. Select gravel backfill under slabs shall be as specified Paragraph 2.02.B above.

3.03 SOIL COMPACTION

- A. Compaction of gravel base for precast concrete footings shall be done to 95% maximum dry density. Equipment and method used for compaction shall not exceed the threshold vibration

limit of one-inch per second with a limiting value of two-inches per second and a vibration monitoring plan shall be prepared and submitted by the Contractor for approval prior to the work.

- B. Compaction of soil within the limits of the precast walls and in immediate proximity of the sewer force main shall be done with the same provision as Paragraph 3.03.A with the exception that the 95% of maximum density does not need to be met. The Contractor shall submit for approval equipment and methods to be used for compaction within this region.
- C. Compaction of gravel over the precast concrete roof structure shall be done to 95% maximum dry density. Equipment and method used for compaction shall not exceed the threshold vibration limit of one-inch per second with a limiting value of two-inches per second and a vibration monitoring plan shall be prepared and submitted by the Contractor for approval prior to the work.
- D. Make required compaction and density tests.
- E. If required, re-compact fill and re-test at no additional cost to the Owner until compacted fill meets specified requirements. Do not place subsequent layers until required density has been provided on previous layer.
- F. Optimum moisture-density relationship will be determined by testing laboratory in accordance with ASTM D1557 and maximum density determination made by Method D of ASTM D1557.

3.04 RESTORATION OF DISTURBED FINISHED SURFACES

- A. All finished surfaces disturbed during excavation shall be restored to their original conditions.

END OF SECTION 31 23 00

SECTION 31 23 19

DEWATERING

PART 1 - GENERAL

1.01 GENERAL PROVISIONS

- A. Attention is directed to the Drawings, General Conditions of the Contract and all other Division 1 Specifications which are hereby made a part of this section.

1.02 RELATED SECTIONS

- A. The following is a list of Specifications, which may be related to this section:
 - 1. Section 01 50 00 - Temporary Facilities and Controls
 - 2. Section 31 23 00 - Earthwork

1.03 WORK TO BE PERFORMED

The Contractor shall be responsible for the following:

- A. Design, furnish, install, operate, monitor, maintain and remove temporary dewatering and drainage systems as required and lower and control water levels to at least 2 feet below the lowest level of the excavation to permit construction in the dry.
- B. Furnish the services of a licensed professional engineer registered in the Commonwealth of Massachusetts, to prepare dewatering and drainage system designs and submittals.
- C. Furnish, maintain and remove temporary surface water control measures that are adequate to drain and remove surface water entering excavations.
- D. Collect and properly dispose of all dewatering and drainage systems in accordance with State and local requirements and permits.
- E. Protect all adjacent facilities and structures from damage due to dewatering and drainage system equipment and operations.
- F. Remove temporary dewatering and drainage systems when no longer needed. Restore all disturbed areas.

1.04 DESIGN AND PERFORMANCE RESPONSIBILITY

- A. The Contractor shall be solely responsible for the proper design and execution of methods for controlling surface water and groundwater.
- B. The Contractor shall be solely responsible for damage to properties, buildings or structures, sewers and other utility installations, pavements and work that may result from any dewatering or surface water control operations.

- C. Any design review and field monitoring activities by the Owner, State Permitting Agencies or of the Engineer shall not relieve the Contractor of his/her responsibilities for the work.

1.05 DEFINITIONS

- A. Where the phrase "in-the-dry" is used in this Section, it shall be defined as an excavation subgrade where the groundwater level has been lowered to at least 2 feet below the lowest level of the excavation, is stable with no ponded water, mud, or muck and shall be able to support construction equipment without rutting or disturbance and shall be suitable for the placement and compaction of fill material, pipe or concrete foundations.
- B. Any reference to controlling "surface water" or "groundwater" shall include the proposed drainage work.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

3.01 GENERAL

- A. Methods of groundwater control may include but are not limited to perimeter trenches and sump pumping, perimeter groundwater cutoff, well points and combinations thereof.
- B. Control surface water runoff to prevent flow into excavations. Provide temporary measures such as dikes, coffer dams, ditches, pumps, sumps or bypass pipes.
- C. Control surface water and groundwater such that excavation to final grade is made in the dry and bearing soils are maintained undisturbed. Prevent softening, or instability of, or disturbance to, the subgrade due to water seepage. All construction and backfilling shall proceed in the dry and flotation of completed portions of the work shall be prohibited.
- D. The Contractor shall consider the impact of anticipated subsurface soil/water when selecting methods of excavation and temporary dewatering and drainage systems. Where groundwater levels are above the proposed bottoms of excavation, a pumped dewatering system is expected for pre drainage of the soils to at least 2'-0" feet below the lowest level of the excavation until construction has been completed to such an extent that the foundation, structure, pipe, conduit, or fill will not be floated or otherwise damaged. The type of dewatering system, spacing of dewatering units and other details of the work are expected to vary with soil/water conditions at a particular location.

- E. Dewatering and drainage operations shall be conducted in a manner that does not cause loss of ground or disturbance to the soil that supports overlying or adjacent utilities or structures.

3.02 EXCAVATION DEWATERING

- A. Provide and maintain adequate equipment and facilities to remove and dispose of properly all water entering excavations. Excavations shall be kept in-the-dry, so as to maintain an undisturbed sub-grade condition throughout construction below grade, including construction of foundations, pipe installation, and backfill placement.
- B. Excavations for foundations and structures shall be maintained in-the-dry for a minimum of 4 days after concrete placement.
- C. Dewatering and drainage operations shall at all times be conducted in such a manner as to preserve the natural undisturbed bearing capacity of the subgrade at the bottom of the excavation. If the subgrade becomes disturbed for any reason, the unsuitable subgrade material shall be removed and replaced with crushed stone compacted structural fill, or other approved material to restore the bearing capacity of the subgrade to its original undisturbed condition.
- D. Dewatering units used in the work shall be surrounded by suitable filter sand and no fines shall be removed by pumping. Pumping from the dewatering system shall be continuous until pipe or structure is adequately backfilled. Stand-by pumps shall be provided.

3.03 DEWATERING OPERATIONS

- A. All water pumped or drained from the work shall be disposed of in a manner which will not result in undue interference with other work or damage to adjacent properties, pavements and other surfaces, buildings, structures and utilities. Suitable temporary pipes, flumes or channels shall be provided for water that may flow along or across the site of the work.
- B. Dewatering facilities shall be located where they will not interfere with utilities and construction work to be done by others.
- C. Dewatering procedures to be used shall be as described below:
 - 1. Crushed stone shall encapsulate the suction end of the pump to aid in minimizing the amount of silt discharged.
 - 2. For dewatering operations with relatively minor flows, pump discharges shall be directed into straw bale sedimentation traps lined with filter fabric. Water is to be filtered through the straw bales and filter fabric prior to being allowed to seep out into its natural water course.

- D. The Contractor shall be responsible for repair of any damage caused by his dewatering operations. If the damage is caused by the Contractor, repairs shall be at no cost to the Owner.

3.03 DISPOSAL OF DEWATERING

- A. All water discharged from temporary dewatering and drainage systems shall be filtered prior to disposal in accordance with the sedimentation and control requirements as specified herein and as directed. Existing or new sanitary sewer systems shall not be used to dispose of drainage unless the written permission of the utility or Owner is obtained.
- B. The cost of providing and maintaining Dewatering and Runoff Control shall be included in the cost of the various excavation items of work under this Contract and no additional compensation will be allowed therefore.

END OF SECTION 31 23 19

SECTION 31 25 00

EROSION AND SEDIMENTATION CONTROL

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Attention is directed to the Drawings and general provisions of the Contract and all other Division 1 Specifications which are hereby made a part of this section.
- B. This Section specifies furnishing and applying water for dust control and erosion control barriers for the control of erosion and sedimentation on the site and adjacent to the site in areas where clearing, grubbing, and excavation are to be performed.
- C. Dust control operations shall meet the requirements of the Commonwealth of Massachusetts Department of Environmental Protection "310 CMR 7.09: Air Pollution Control Regulations."
- D. Erosion control barrier shall consist of compost filter tubes detailed on the Drawings or as directed by the Engineer and by the Owner.
- E. Related work described elsewhere:
 - 1. Section 31 23 00 – Earthwork
 - 2. Section 31 23 19 – Dewatering
 - 3. Section 31 25 10 – Compost Filter Tubes

1.02 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Compost filter tubes shall meet the criteria as indicated in Specification Section 31 25 10, Subsection 2.01 MATERIALS.

1.03 JOB CONDITIONS

- A. The Contractor shall be responsible for protection of slopes at 2:1 or shallower during the construction period. Where clearing and grubbing and re-grading of such existing slopes is required, provide suitable means for erosion control. Re-grade slopes as necessary.

1.04 QUALITY CONTROL

- A. Erosion control mats shall be installed in accordance with the manufacturer's recommendations. Where manufacturer's recommendations conflict with details shown on the drawings, the more stringent, in the opinion of the Engineer, shall apply.

PART 2 - PRODUCTS

- A. Calcium Chloride shall not be used for dust control at the job site or surrounding areas.
- B. Compost filter tubes shall meet the criteria as indicated in Specification Section 31 25 10, Subsection 2.01 MATERIALS.
- C. Silt fence shall consist of a self-supported or wire supported geotextile silt fence with support posts:
 - 1. Fibers used in the manufacture of geotextiles, and the threads used in joining geotextiles by sewing, shall consist of long chain synthetic polymers composed of at least 85% by weight polyolefins or polyesters.
 - 2. Both the geotextile and threads shall be resistant to chemical attack, mildew, and rot.
 - 3. Geotextiles for silt fences shall conform to the following physical requirements in accordance with the acceptance criteria required by ASTM D4759. Values shown are minimum average roll values. Strength values are in the weaker principal direction.
 - a. Tensile Grab Strength: ASTM D4632; 90 pounds minimum.
 - b. Elongation at 50% Minimum Tensile Strength: ASTM D4632; 50% maximum for self-supported fences.
 - c. Permittivity: ASTM D4491; 0.010 per second minimum.
 - d. Apparent Opening Size (AOS): ASTM D4751; 0.84 millimeters maximum.
 - e. Ultraviolet Degradation: ASTM D4759; at 500 hours exposure, 70% strength retained for all cases.
 - 4. Posts for Silt Fence: Either wood, or synthetic posts may be used. Posts shall have a minimum length of 30" plus burial depth and be of sufficient strength to resist damage during installation and support applied loads.
 - 5. Wire Support: 12-gauge wire supports at 6-inch maximum spacing each way shall be used when geotextile fabric is not strong enough to support applied loads. Provide hog supports.
 - 6. Prefabricated fence systems may be used provided they meet all of the above material requirements.

PART 3 - EXECUTION

3.01 DUST CONTROL

- A. Leave existing pavement and/or ground covering in place until the last possible moment prior to final earth excavation for purposes of dust control.
- B. Water shall be properly applied as required and/or where directed by the Engineer and distributed uniformly at the rate required or ordered. Method and equipment used to distribute the water shall be satisfactory to the Engineer.
- C. The Contractor shall be responsible for keeping dust down at all times, including non-working hours, weekends, and holidays. Sprinkle or treat, with dust suppressors, the soil at the site, and other areas disturbed by construction operations. No dry power brooming is permitted. Instead use vacuuming, wet mopping, wet sweeping, or wet power brooming. Air blowing is permitted only for cleaning nonparticulate debris, such as steel reinforcing bars. No sandblasting is permitted unless dust therefrom is confined. Only wet cutting of concrete blocks, concrete, and asphalt is permitted.
- D. Stop all earthwork when, as determined by the Engineer, dust control procedures have not proved effective in controlling dust. Resumption of work may only begin when site conditions have improved or construction procedures are modified to the satisfaction of the Engineer.

3.02 TEMPORARY EROSION CONTROL

- A. Prior to beginning earth disturbances and construction, install temporary erosion control devices as required. Before cleaning and grubbing, strip forest litter and topsoil from the area(s) to be worked only, and stockpile for future restoration. All stockpiles must be surrounded by silt fencing.
- B. Method of stripping vegetation shall be such as to minimize erosion. Fills shall be placed and compacted in such a manner that soil sliding and erosion is minimized. Grading shall be done in such a manner as not to divert water onto any adjacent property without expressed written permission of the landowner and the local Conservation Commission. If the Installer fails to employ adequate and acceptable erosion control techniques during construction, the Engineer may order a suspension of the work until implementation of satisfactory techniques are agreed upon and demonstrated, and the Installer shall have no claim for damages or time extension resulting from such delays.
- C. Sediment controls shall be in place prior to any concrete or soil disturbing activities including, but not limited to concrete cutting, concrete demolition, earthwork, clearing and grubbing, dewatering and excavation.

- D. Install permanent drainage structures beginning at the downstream end and proceed upstream as soon as possible. Swales and culverts that will be capable of intercepting surface drainage during construction must be provided with adequate sedimentation control.
- E. Construct roads, site improvements, and structures concurrent with the required sedimentation and erosion control devices as per plan.
- F. Erosion control barriers shall be inspected after each significant rainfall and promptly repaired or replaced as necessary.
- G. Accumulated sediment deposits upstream of barriers shall be properly disposed of on a regular basis. All barriers shall be removed and properly disposed of when no longer needed.
- H. Where placement of fill is required for storm water control, fill shall be placed in an unfrozen state upon unfrozen ground.
- I. All disturbed areas shall be loamed, seeded, limed and fertilized. A minimum of 4" of loam shall be installed, unless otherwise indicated on the plans.
- J. All fill shall be free of stumps and large stones.
- K. Any standing bodies of water created during excavation shall be eliminated.
- L. Geotextile fabric shall be installed in all ditches and slopes as required immediately after seeding on slopes greater than 3:1.
- M. Sediment collection sacks shall be installed in all catch basins in paved areas prior to beginning work.
- N. The installer shall maintain erosion and sedimentation controls during construction and until vegetation is fully established.
- O. Temporary ground cover or erosion control shall be established on any undeveloped areas where required per the Planning Board or Conservation Commission.
- P. Disturbed areas showing characteristics or erosion shall be hydroseeded or seeded with grass or small grains including rye, oats or rye grass. Any temporary slopes greater than 3:1 shall be stabilized with the appropriate erosion control.

3.03 MAINTENANCE AND CLEANUP

- A. Maintain the integrity of erosion control barriers as long as they are necessary to contain sediment runoff. Promptly repair or replace ineffective barriers while they are still necessary.

- B. Inspect all barriers immediately after each rainfall and at least daily during prolonged rainfall. Any deficiencies shall be immediately corrected. Make a daily review of the location of barriers in areas where construction activities have changed the natural contour and drainage runoff to ensure that the barriers are properly located for effectiveness. Where deficiencies exist, additional barriers shall be installed as directed by the Engineer.
- C. Sediment deposits shall either be removed when the deposit reaches approximately one-half of the height of the barrier or a second barrier shall be installed as directed by the Engineer. Sediment shall be removed and disposed of periodically from behind the hay bales. In no case shall the accumulated sediment be allowed to rise above the mid height of the bale. All sediment shall be disposed of in an approved manner at the completion of the work.
- D. Erosion control barriers shall remain in place until the Engineer directs that they be removed. Upon removal, remove and dispose of any excess silt accumulations and dress the area to give a pleasing appearance.
- E. Erosion control barriers will remain the property of the Installer, may be re-used at other locations provided the materials meet these specifications requirements, and shall be removed and disposed of at the completion of the Contract unless directed otherwise by the Engineer.

END OF SECTION 31 25 00

SECTION 31 25 10

COMPOST FILTER TUBES

PART 1 - GENERAL

1.01 GENERAL PROVISIONS

- A. Attention is directed to the Drawings and general provisions of the Contract and all other Division 1 Specifications which are hereby made a part of this section.

1.02 WORK TO BE PERFORMED

- A. The purpose of this item is to provide a linear, compost-filled tube for filtering suspended sediments from storm water flow.

PART 2 - PRODUCTS

2.01 MATERIALS

A. CHEMICAL, PHYSICAL AND BIOLOGICAL PARAMETERS

- 1. Compost products specified for use in this application must meet the criteria specified in Table 1. Only compost products that meet all applicable state and federal regulations pertaining to its production and distribution may be used in this application. Approved compost products must meet related state and federal chemical contaminant (e.g., heavy metals, pesticides, etc.) and pathogen limits pertaining to the feedstocks (source materials) in which it is derived.
- 2. Table 1 – Filter Berm and Filter Sock Media Parameters

pH	5.8-8.5
Moisture Content	30%-60%
Particle Size	2" (50 mm) 99% passing 3/8" (10 mm) 30-50% passing
Physical contaminants	<1%

- B. Tubes for compost filters shall be a minimum of 12-inches maximum of 18-inches diameter, and shall be jute mesh or approved biodegradable material. Additional tubes shall be used at the direction of the Engineer.
- C. As shown in the detail, the 1-foot wide by 2-inch deep wedge of compost spread along the top of the filter tube shall be incidental to this item. Stakes for anchors, if required, shall be nominal 2x2 stakes.

PART 3 - EXECUTION

3.01 METHODS

- A. Tubes of compost may be filled on site or shipped. Tubes shall be placed, filled and staked in place as required to ensure stability against water flows. All tubes shall be tamped to ensure good contact with soil.
- B. The Contractor shall ensure that the filter tubes function as intended at all times. Tubes shall be inspected after each rainfall and at least daily during prolonged rainfall. The Contractor shall immediately correct all deficiencies, including, but not limited, to washout, overtopping, clogging due to sediment, and erosion. The Contractor shall review location of tubes in areas where construction activity causes drainage runoff to ensure that the tubes are properly located for effectiveness. Where deficiencies exist, such as overtopping or wash-out, additional staking or compost material shall be installed as directed by the Engineer. The Contractor shall remove sediment deposits as necessary to maintain the filters in working condition.
- C. Filter tube fabric and stakes shall be removed by the Contractor when site conditions are sufficiently stable to prevent surface erosion, and after receiving permission to do so from the Engineer. All tube fabric shall be cut and removed and disposed of off-site by the Contractor. At the direction of the Engineer, the Contractor may rake out and seed compost so that it is no greater than 2- inches in depth on soil substrate.

END OF SECTION 31 25 10



**Land Bridge
Installation
Location**

