

COMMONWEALTH OF MASSACHUSETTS



CONTRACT DOCUMENTS AND SPECIAL PROVISIONS

PROPOSAL NO.	612080-130935
P.V. =	\$1,080,000.00
PLANS	YES

FOR

**Federal Aid Project No. TAP-SRS2(003)X
Rebecca M. Johnson Elementary School Improvements (SRTS)**

in the City of

SPRINGFIELD

In accordance with the STANDARD SPECIFICATIONS
for HIGHWAYS and BRIDGES dated 2025

This Proposal to be opened and read:

TUESDAY, JULY 29, 2025 at 2:00 P.M.

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DOCUMENT 00010

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*** END OF DOCUMENT ***

DOCUMENT 00104

**NOTICE TO CONTRACTORS**

Electronic proposals for the following project will be received through the internet using www.bidx.com until the date and time stated below and will be posted on www.bidx.com forthwith after the bid submission deadline. No paper copies of bids will be accepted. All Bidders must have a valid vendor code issued by MassDOT in order to bid on projects. Bidders need to apply for a Digital ID at least 14 days prior to a scheduled bid opening date with www.bidx.com.

TUESDAY, JULY 29, 2025 at 2:00 P.M. ****SPRINGFIELD****Federal Aid Project No. TAP-SRS2(003)X****Rebecca M. Johnson Elementary School Improvements (SRTS)******Date Subject to Change****PROJECT VALUE = \$1,080,000.00**

Bidders must be pre-qualified by the Department in the HIGHWAY - CONSTRUCTION or HIGHWAY - SIDEWALK AND CURBING category to bid on the above project. An award will not be made to a Contractor who is not pre-qualified by the Department prior to the opening of Proposals.

All prospective Bidders who intend to bid on this project must obtain "Request Proposal Form (R109)". The blank "Request Proposal Form (R109)" can be obtained at: <https://www.mass.gov/prequalification-of-horizontal-construction-firms>.

All prospective Bidders must complete and e-mail an electronic copy of "Request Proposal Form (R109)" to the MassDOT Director of Prequalification for approval: prequal.r109@dot.state.ma.us.

Proposal documents for official bidders are posted on www.bidx.com. Other interested parties may receive informational Contract Documents containing the Plans and Special Provisions, free of charge.

Bids will be considered, and the contract awarded in accordance with statutes governing such contracts in accordance with Massachusetts General Laws Chapter 30 § 39M.

The Project Bids File Attachments folder for proposals at www.bidx.com shall be used for submitting at the time of bid required information such as the Bid Bond required document, and other documents that may be requested in the proposal.

NOTICE TO CONTRACTORS (Continued)

All parties who wish to have access to information plans and specification must send a "Request for Informational Documents" to MassDOTBidDocuments@dot.state.ma.us.

A Proposal Guaranty in the amount of 5% of the value of the bid is required.

This project is subject to the schedule of prevailing wage rates as determined by the Commissioner of the Massachusetts Department of Labor and Workforce Development, and the Division of Occupational Safety, and the United States Department of Labor.

The Massachusetts Department of Transportation, in accordance with Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby affirmatively ensures that for any contract entered into pursuant to this advertisement, all bidders, including disadvantaged business enterprises, will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin in consideration for an Award.

This Proposal contains the "STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)". The goals and timetables applicable to this proposal for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all work, are contained in Appendices A and B-80 of the above specifications.

The Contractor (hereinafter includes consultants) will comply with the Acts and Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration (FHWA), as they may be amended from time to time, which are herein incorporated by reference and made a part of this Contract as contained in Appendices C and D of the above specifications.

NOTICE TO CONTRACTORS (Continued)**PRICE ADJUSTMENTS**

This Contract contains price adjustments for hot mix asphalt and Portland cement mixtures, diesel fuel, and gasoline. For reference the base prices are as follows: liquid asphalt \$635.00 per ton, Portland cement \$425.53 per ton, diesel fuel \$2.569 per gallon, and gasoline \$2.450 per gallon, and Steel Base Price Index 340.6. MassDOT posts the **Price Adjustments** on their Highway Division's website at

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

This Contract contains Price Adjustments for steel. See Document 00813 - PRICE ADJUSTMENT FOR STRUCTURAL STEEL AND REINFORCING STEEL for their application and base prices.

MassDOT projects are subject to the rules and regulations of the Architectural Access Board (521 CMR 1.00 et seq.)

Prospective bidders and interested parties can access this information and more via the internet at WWW.COMMBUYS.COM.

BY: Monica G. Tibbits-Nutt, Secretary and CEO, MassDOT
Jonathan L. Gulliver, Administrator, MassDOT Highway Division
SATURDAY, JUNE 28, 2025

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DOCUMENT 00210

REQUIREMENTS OF MASSACHUSETTS GENERAL LAWS
CHAPTER 30, SECTION 39R;
CHAPTER 30, SECTION 39O

July 1, 1981, updated October 2016

M.G.L. c. 30, § 39R. Award of Contracts; Accounting Statements; Annual Financial Statements; Definitions.

(a) The words defined herein shall have the meaning stated below whenever they appear in this section:

- (1) "Contractor" means any person, corporation, partnership, joint venture, sole proprietorship, or other entity awarded a contract pursuant to sections thirty-eight A1/2 to thirty-eight O, inclusive, of chapter seven and any contract awarded or executed pursuant to section eleven C of chapter twenty-five A, section thirty-nine M of chapter thirty, or sections forty-four A to forty-four H, inclusive, of chapter one hundred and forty-nine, which is for an amount or estimated amount greater than one hundred thousand dollars.
- (2) "Contract" means any contract awarded or executed pursuant to sections thirty-eight A1/2 to thirty-eight O, inclusive, of chapter seven and any contract awarded or executed pursuant to section eleven C of chapter twenty-five A, section thirty-nine M of chapter thirty, or sections forty-four A through forty-four H, inclusive, of chapter one hundred and forty-nine, which is for amount or estimated amount greater than one hundred thousand dollars.
- (3) "Records" means books of original entry, accounts, checks, bank statements and all other banking documents, correspondence, memoranda, invoices, computer printouts, tapes, discs, papers and other documents or transcribed information of any type, whether expressed in ordinary or machine language.
- (4) "Independent Certified Public Accountant" means a person duly registered in good standing and entitled to practice as a certified public accountant under the laws of the place of his residence or principal office and who is in fact independent. In determining whether an accountant is independent with respect to a particular person, appropriate consideration should be given to all relationships between the accountant and that person or any affiliate thereof. Determination of an accountant's independence shall not be confined to the relationships existing in connection with the filing of reports with the awarding authority.
- (5) "Audit", when used in regard to financial statements, means an examination of records by an independent certified public accountant in accordance with generally accepted accounting principles and auditing standards for the purpose of expressing a certified opinion thereon, or, in the alternative, a qualified opinion or a declination to express an opinion for stated reasons.
- (6) "Accountant's Report", when used in regard to financial statements, means a document in which an independent certified public accountant indicates the scope of the audit which he has made and sets forth his opinion regarding the financial statements taken as a whole with a listing of noted exceptions and qualifications, or an assertion to the effect that an overall opinion cannot be expressed. When an overall opinion cannot be expressed the reason therefor shall be stated. An accountant's report shall include as a part thereof a signed statement by the responsible corporate officer attesting that management has fully disclosed all material facts to the independent certified public accountant, and that the audited financial statement is a true and complete statement of the financial condition of the contractor.
- (7) "Management", when used herein, means the chief executive officers, partners, principals or other person or persons primarily responsible for the financial and operational policies and practices of the contractor.
- (8) Accounting terms, unless otherwise defined herein, shall have a meaning in accordance with generally accepted accounting principles and auditing standards.

(b) Subsection (a)(2) hereof notwithstanding, every agreement or contract awarded or executed pursuant to sections thirty-eight A 1/2 to thirty-eight O, inclusive, of chapter seven, or eleven C of chapter twenty-five A, and pursuant to section thirty-nine M of chapter thirty or to section forty-four A through H, inclusive, of chapter one hundred and forty-nine, shall provide that:

- (1) The contractor shall make, and keep for at least six years after final payment, books, records, and accounts which in reasonable detail accurately and fairly reflect the transactions and dispositions of the contractor, and
- (2) Until the expiration of six years after final payment, the office of inspector general, and the commissioner of capital asset management and maintenance shall have the right to examine any books, documents, papers or records of the contractor or of his subcontractors that directly pertain to, and involve transactions relating to, the contractor or his subcontractors, and
- (3) If the agreement is a contract as defined herein, the contractor shall describe any change in the method of maintaining records or recording transactions which materially affect any statements filed with the awarding authority, including in his description the date of the change and reasons therefor, and shall accompany said description with a letter from the contractor's independent certified public accountant approving or otherwise commenting on the changes, and
- (4) If the agreement is a contract as defined herein, the contractor has filed a statement of management on internal accounting controls as set forth in paragraph (c) below prior to the execution of the contract, and
- (5) If the agreement is a contract as defined herein, the contractor has filed prior to the execution of the contracts and will continue to file annually, an audited financial statement for the most recent completed fiscal year as set forth in paragraph (d) below.

(c) Every contractor awarded a contract shall file with the awarding authority a statement of management as to whether the system of internal accounting controls of the contractor and its subsidiaries reasonably assures that:

- (1) transactions are executed in accordance with management's general and specific authorization;
- (2) transactions are recorded as necessary
 - i. to permit preparation of financial statements in conformity with generally accepted accounting principles, and
 - ii. to maintain accountability for assets;
- (3) access to assets is permitted only in accordance with management's general or specific authorization; and
- (4) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action was taken with respect to any difference.

Every contractor awarded a contract shall also file with the awarding authority a statement prepared and signed by an independent certified public accountant, stating that he has examined the statement of management on internal accounting controls, and expressing an opinion as to:

- (1) whether the representations of management in response to this paragraph and paragraph (b) above are consistent with the result of management's evaluation of the system of internal accounting controls; and
- (2) whether such representations of management are, in addition, reasonable with respect to transactions and assets in amounts which would be material when measured in relation to the applicant's financial statements.

- (d) Every contractor awarded a contract by the commonwealth or by any political subdivision thereof shall annually file with the commissioner of capital asset management and maintenance during the term of the contract a financial statement prepared by an independent certified public accountant on the basis of an audit by such accountant. The final statement filed shall include the date of final payment. All statements shall be accompanied by an accountant's report. Such statements shall be made available to the awarding authority upon request.
- (e) The office of inspector general, the commissioner of capital asset management and maintenance and any other awarding authority shall enforce the provisions of this section. The commissioner of capital asset management and maintenance may after providing an opportunity for the inspector general and other interested parties to comment, promulgate pursuant to the provisions of chapter thirty A such rules, regulations and guidelines as are necessary to effectuate the purposes of this section. Such rules, regulations and guidelines may be applicable to all awarding authorities. A contractor's failure to satisfy any of the requirements of this section may be grounds for debarment pursuant to section forty-four C of chapter one hundred and forty-nine.
- (f) Records and statements required to be made, kept or filed under the provisions of this section shall not be public records as defined in section seven of chapter four and shall not be open to public inspection; provided, however, that such records and statements shall be made available pursuant to the provisions of clause (2) of paragraph (b).

M.G.L. c. 30, § 390: Suspension, Delay, or Interruption or Failure to Act by Awarding Authority; Adjustment in Contract Price; Submission of Claims.

Section 39O. Every contract subject to the provisions of section thirty-nine M of this chapter or subject to section forty-four A of chapter one hundred forty-nine shall contain the following provisions (a) and (b) in their entirety and, in the event a suspension, delay, interruption or failure to act of the awarding authority increases the cost of performance to any subcontractor, that subcontractor shall have the same rights against the general contractor for payment for an increase in the cost of his performance as provisions (a) and (b) give the general contractor against the awarding authority, but nothing in provisions (a) and (b) shall in any way change, modify or alter any other rights which the general contractor or the subcontractor may have against each other.

- (a) The awarding authority may order the general contractor in writing to suspend, delay, or interrupt all or any part of the work for such period of time as it may determine to be appropriate for the convenience of the awarding authority; provided however, that if there is a suspension, delay or interruption for fifteen days or more or due to a failure of the awarding authority to act within the time specified in this contract, the awarding authority shall make an adjustment in the contract price for any increase in the cost of performance of this contract but shall not include any profit to the general contractor on such increase; and provided further, that the awarding authority shall not make any adjustment in the contract price under this provision for any suspension, delay, interruption or failure to act to the extent that such is due to any cause for which this contract provides for an equitable adjustment of the contract price under any other contract provisions.
- (b) The general contractor must submit the amount of a claim under provision (a) to the awarding authority in writing as soon as practicable after the end of the suspension, delay, interruption or failure to act and, in any event, not later than the date of final payment under this contract and, except for costs due to a suspension order, the awarding authority shall not approve any costs in the claim incurred more than twenty days before the general contractor notified the awarding authority in writing of the act or failure to act involved in the claim.

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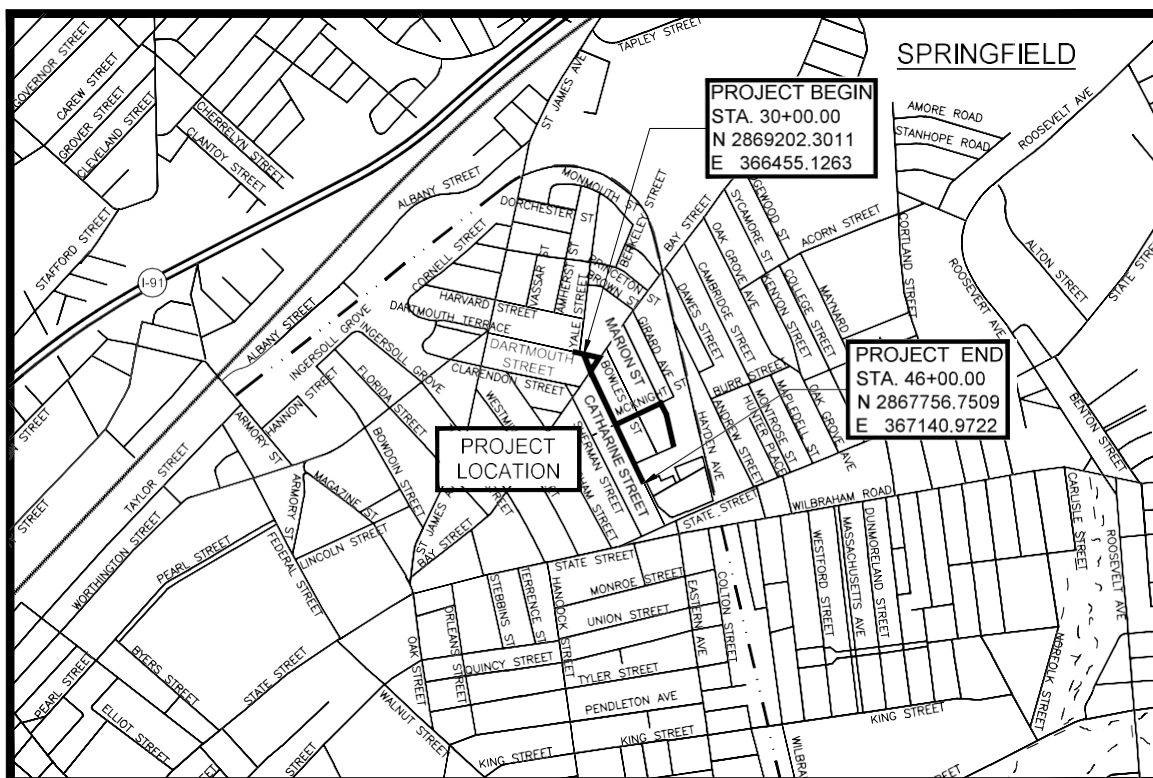
DOCUMENT 00331

LOCUS MAP

SPRINGFIELD

Federal Aid Project No. TAP-SRS2(003)X

Rebecca M. Johnson Elementary School Improvements (SRTS)



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Final Report ☐Interim Report ☐**CONTRACTOR PROJECT EVALUATION FORM***For instructions on using this form, see Engineering Directive E-10-002, Dated 4/20/2010*

Date: _____

City/Town: _____

Contractor: _____

Project: _____

Address: _____

F.A. No. _____

Contract Number: _____

Bid Price: _____

Notice to Proceed: _____

Funds: State: _____ Fed Aid: _____

Current Contract Completion Date: _____

Date Work Started: _____

Date Work Completed*: _____

Contractor's Superintendent: _____

Division: (indicates class of work) Highway: _____ Bridge: _____ Maintenance: _____

*If work was NOT completed within specified time (including extensions) give reasons on following page.

	Excellent 10	Very Good 9	Average 8	7	Fair 6	5	Poor 4	% Rating
1. Workmanship								x 2=
2. Safety								x 2=
3. Schedule								x 1.5=
4. Home Office Support								x 1=
5. Subcontractors Performance								x 1=
6. Field Supervision/ Superintendent								x 1=
7. Contract Compliance								x 0.5=
8. Equipment								x 0.5=
9. Payment of Accounts								x 0.5=
(use back for additional comments)								
							Overall Rating:	

*(Give explanation of items 1 through 9 on the following page in numerical order if overall rating is below 80%. Use additional sheets if necessary.)*_____
District Construction Engineer's Signature/Date_____
Resident Engineer's Signature/Date_____
Contractor's Signature Acknowledging Report/DateContractor Requests Meeting with the District: No ☐Yes ☐

Date Meeting Held: _____

Contractor's Comments/Meeting Notes (extra sheets may be added to this form and noted here if needed): __________



DOCUMENT 00440

Final Report ☐Interim Report ☐**SUBCONTRACTOR PROJECT EVALUATION FORM***For instructions on using this form, see Engineering Directive E-10-002, Dated 4/20/2010*

Date: _____

City/Town: _____

Subcontractor: _____

Project: _____

Address: _____

F.A. No.: _____

Contract Number: _____

Prime Contractor _____

Current Contract Completion Date: _____

Date Work Started: _____

Date Work Completed*: _____

Subcontractor's Superintendent: _____

Type of Work Performed by Subcontractor: _____

*If work was NOT completed within specified time (including extensions) give reasons on following page.

	Excellent 10	Very Good 9	Average 8	7	Fair 6	5	Poor 4	% Rating
1. Workmanship								x 2=
2. Safety								x 2=
3. Schedule								x 1.5=
4. Home Office Support								x 1.5=
5. Field Supervision/ Superintendent								x 1=
6. Contract Compliance								x 1=
7. Equipment								x 0.5=
8. Payment of Accounts								x 0.5=
(use back for additional comments)							Overall Rating:	

(Give explanation of items 1 through 8 on the following page in numerical order if overall rating is below 80%. Use additional sheets if necessary.)

District Construction Engineer's Signature/Date _____

Resident Engineer's Signature/Date _____

Contractor Signature Acknowledging Report/Date _____

Subcontractor Signature Acknowledging Report/Date _____

Subcontractor Requests Meeting with the District: No ☐ Yes ☐ Date Meeting Held: _____

Subcontractor's Comments / Meeting Notes (extra sheets may be added to this form and noted here if needed): _____

Contractor's Comments: _____

DOCUMENT 00710
GENERAL CONTRACT PROVISIONS
Revised: 04-16-25

NOTICE OF AVAILABILITY

The STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES dated 2025, the SUPPLEMENTAL SPECIFICATIONS, the 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS; the 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING and the CONSTRUCTION STANDARD DETAILS are available online at <https://www.mass.gov/massdot-highway-division-manuals-and-publications>

SPECIAL PROVISIONS FOR RIGHT-TO-KNOW ACT REQUIREMENTS

The Contractor's attention is directed to Massachusetts General Laws, Chapter 111F, commonly known as the Right-To-Know Act, and to the regulations promulgated pursuant thereto. Among the provisions of the Right-To-Know Act is a requirement that employers make available to employees Materials Safety Data Sheets (MSDS) for any substance on the Massachusetts Substance List (MSL) to which employees are, have been, or may be exposed.

To ensure prompt compliance with these regulations and legislation, the Contractor shall:

1. Deliver to the Department, prior to the start of any work under this contract, copies of MSDS for all MSL substances to be used, stored, processed or manufactured at the worksite by the Contractor.
2. Train employees of the Department, who may be exposed to MSL substances as a result of the Contractor's work under this contract, with regard to those specific substances in accordance with requirements of the Right-To-Know Act.
3. Observe all safety precautions recommended on the MSDS for any MSL substance to be used, stored, processed, or manufactured at the worksite by the Contractor.
4. Inform the Department in writing regarding specific protective equipment recommended in the MSDS for MSL substances to which employees of the Department may be exposed as a result of the Contractor's work under this contract.

The Department shall not be liable for any delay or suspension of work caused by the refusal of its employees to perform any work due to the Contractor's failure to comply with the Right-To-Know Act. The Contractor agrees to hold the Department or the Commissioner of the Department harmless and fully indemnified for any and all claims, demands, fines, actions, complaints, and causes of action resulting from or arising out of the Contractor's failure to comply with the requirements of the Right-To-Know Act.

ALTERNATIVE DISPUTE RESOLUTION

Forum, Choice of Law and Mediations:

Any actions arising out of a contract shall be governed by the laws of Massachusetts and shall be brought and maintained in a State or federal court in Massachusetts which shall have exclusive jurisdiction thereof. MassDOT and the Contractor may both agree to mediation of any claim and will share the costs of such mediation pro rata based on the number of parties involved.

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SUPPLEMENTAL SPECIFICATIONS

MARCH 31, 2025

The 2025 *Standard Specifications for Highways and Bridges* are amended by the following modifications, additions and deletions. These Supplemental Specifications prevail over those published in the Standard Specifications.

The Specifications Committee has issued these Supplemental Specifications for inclusion into each proposal until such time as they are updated or incorporated into the next Standard Specifications.

Contractors are cautioned that these Supplemental Specifications are dated and will change as they are updated.

DIVISION I

GENERAL REQUIREMENTS AND COVENANTS

SECTION 2.00: PROPOSAL REQUIREMENTS AND CONDITIONS

Subsection 2.09: Rejection of Proposals

Replace bullet (i) in the third paragraph with the following:

- (i.) award of the contract would result in the Bidder exceeding the Aggregate Bonding Capacity or the Single Bonding Capacity established by its Surety Company, or the Bidder's Proposal exceeds its Single Contract Limit, or the Bidder was not prequalified in the specified class of work on or before the time of bid opening; or

SECTION 7.00: LEGAL RELATIONS AND RESPONSIBILITY TO PPUBLIC

Subsection 7.05: Insurance Requirements

Change the title of paragraph A to Workers' Compensation Insurance

Subsection 7.22: Labor, Lodging, Board, Maximum Hours of Employment, Weekly Payment, Keeping of Payroll Records.

In the second paragraph replace the word "workman" to "worker" and the word "workmen" to "workers".

Replace the third paragraph with the following:

Attention of Bidders is called to MGL Chapter 149, Section 148 requiring the weekly payment of employee wages.

SECTION 9.00: MEASUREMENT AND PAYMENT

Subsection 9.03: Payment for Extra Work

Replace paragraph B, first paragraph, numbers (2) and (3) with the following.

- (2) Plus 13 percent of direct labor, for the estimated costs of Federal Insurance Contribution Act (FICA) including Medicare; Federal Unemployment Tax Act (FUTA); State Unemployment Tax Act (SUTA), which includes Unemployment Insurance, the Workforce Training Fund Program, Employer Medical Assistance Contribution, and COVID-19 Recovery Assessment; Earned Sick Time (EST) Law (940 CMR 33.00); and Paid Family and Medical Leave (PFML) Act (458 CMR 2.00);

or, as an alternative to the above 13 percent, the Contractor may elect to use actual rates for FICA, FUTA, SUTA, EST and PFML provided the actual rates are supported with verifiable documentation and shall be subject to review by MassDOT Audit Operations.

- (3) Plus the estimated cost of Workers' Compensation and Liability Insurance, Health, Welfare and Pension benefits, and such additional fringe benefits which the Contractor is required to pay as a result of Union Labor Agreements and/or is required by authorized governmental agencies;

In paragraph B., second paragraph, number (3), replace the word "Workmen's" with "Workers".

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DOCUMENT 00719

(Revised September 14, 2023 – for all Federally Aided Projects)

**SPECIAL PROVISIONS FOR PARTICIPATION BY
DISADVANTAGED BUSINESS ENTERPRISES**
(IMPLEMENTING TITLE 49 OF THE CODE OF FEDERAL REGULATIONS, PART 26)

Section:

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POLICY

The Massachusetts Department of Transportation (MassDOT) receives Federal financial assistance from the Federal Highway Administration (FHWA), United States Department of Transportation (U.S. DOT), and as a condition of receiving this assistance, has signed an assurance that it will comply with 49 CFR Part 26 (Participation By Disadvantaged Business Enterprises In Department Of Transportation Financial Assistance Programs). The U.S. DOT Disadvantaged Business Enterprise Program is authorized by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (“SAFETEA-LU”), as amended, at Title 23, United States Code, § 1101.

Accordingly, MassDOT has established a Disadvantaged Business Enterprise (DBE) Program in accordance with 49 CFR Part 26. It is the policy of MassDOT to ensure that DBEs have an equal opportunity to receive and participate in U.S. DOT assisted Contracts, without regard to race, color, national origin, or sex. To this end, MassDOT shall not directly, or through contractual or other arrangements, use criteria or methods of administration that have the effect of defeating or substantially impairing accomplishment of the program objectives stated below:

- ◆ To ensure nondiscrimination in the award and administration of U.S. DOT assisted Contracts;
- ◆ To create a level playing field on which DBEs can compete fairly for U.S. DOT assisted Contracts;
- ◆ To ensure that the DBE Program is narrowly tailored in accordance with applicable law;
- ◆ To ensure that only firms that fully meet 49 CFR Part 26 eligibility standards are permitted to participate as DBEs;
- ◆ To help remove barriers to the participation of DBEs in U.S. DOT assisted Contracts; and
- ◆ To assist the development of firms that can compete successfully in the market place outside the DBE Program.

The Director of Civil Rights of MassDOT has been designated as the DBE Liaison Officer. The DBE Liaison Officer is responsible for implementing all aspects of the DBE Program. Other MassDOT employees are responsible for assisting the Office of Civil Rights in carrying out this obligation. Implementation of the DBE Program is accorded the same priority as compliance with all other legal obligations incurred by MassDOT in its financial assistance agreements with each operating administration of the U.S. DOT. Information on the Federal requirements and MassDOT’s policies and information can be found at:

<i>Type of Info</i>	<i>Website</i>	<i>Description</i>
MassDOT Highway Division Policies and Info	https://www.mass.gov/disadvantaged-business-enterprise-goals-2019-2022	MassDOT– Highway Div’n Page
For copies of the Code of Federal Regulations	http://www.gpo.gov/fdsys/browse/collectionCfr.action?collectionCode=CFR	FDsys – US Gov’t Printing Office
For information about the U.S.DOT DBE Program	https://www.transportation.gov/civil-rights/disadvantaged-business-enterprise	U.S. DOT/ FHWA page

1. DEFINITIONS

As used in these provisions, the terms set out below are defined as follows:

“Broker”, for purposes of these provisions, shall mean a DBE Entity that has entered into a legally binding relationship to provide goods or services delivered or performed by a third party. A broker may be a DBE Entity that arranges or expedites transactions but performs no work or installation services.

“Contractor”, “General” or “Prime” Contractor, “Bidder,” and “DB Entity” shall mean a person, firm, or other entity that has contracted directly with MassDOT to provide contracted work or services.

“Contract” shall mean the Contract for work between the Contractor and MassDOT.

“DBB” or “Design-Bid-Build” shall mean the traditional design, bid and project delivery method consisting of separate contracts between awarding authority and a designer resulting in a fully designed project; and a separate bidding process and Contract with a construction Contractor or Bidder.

“DB” or “Design-Build” shall mean an accelerated design, bid and project delivery method consisting of a single contract between the awarding authority and a DB Entity, consisting of design and construction companies that will bring a project to full design and construction.

“Disadvantaged Business Enterprise” or “DBE” shall mean a for-profit, small business concern:

- (a) that is at least fifty-one (51%) percent owned by one or more individuals who are both socially and economically disadvantaged, or, in the case of any corporation, in which at least fifty-one (51%) percent of the stock is owned by one or more such individuals; and
- (b) where the management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.

“FHWA” shall mean the Federal Highway Administration,” an agency within U.S. DOT that supports State and local governments in the design, and maintenance of the Nation’s highway system (Federal Aid Highway Program).

“Good faith efforts” shall mean efforts to achieve a DBE participation goal or other requirement of these Special Provisions that, by their scope, intensity, and appropriateness to the objective, can reasonably be expected to fulfill the program requirement. Such efforts must be deemed acceptable by MassDOT.

“Joint Venture” shall mean an association of a DBE firm and one or more other firms to carry out a single, for-profit business enterprise, for which the parties combine their property, capital, efforts, skills and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the Contract and whose share in the capital contribution, control, management, risks, and profits of the joint venture are commensurate with its ownership interest.

“Approved Joint Venture” shall mean a joint venture, as defined above, which has been approved by MassDOT’s Prequalification Office and Office of Civil Rights for DBE participation on a particular Contract.

"Manufacturer" shall mean a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles or equipment required under the contract and of the general character described by the specifications.

"Regular Dealer" shall mean a DBE firm that owns, operates, or maintains a store, warehouse, or other establishment in which materials, supplies, articles or equipment of the general character described by the specifications and required under the Contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.

- (a) To be a regular dealer, the firm must be an established, regular business that engages, as its principal business, and under its own name, in the purchase and sale of the products in question.
- (b) A person may be a regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business as provided above if the person both owns and operates distribution equipment for the products. Any supplementing of regular dealers' own distribution equipment shall be by long term lease agreement and not on an ad hoc or contract by contract basis.
- (c) Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions are not regular dealers within the meaning of this definition.

"Responsive" and "Responsible" refers to the bidder's submittal meeting all of the requirements of the advertised request for proposal. The term responsible refers to the ability of the Contractor to perform the work. This ability can be determined prior to bid invitations.

"Small Business or Small Business Concern" shall mean a small business concern or company as defined in Section 3 of the Small Business Act and SBA regulations implementing it (13 CFR Part 121); and is a business that does not exceed the cap on annual average gross receipts established by the U.S. Secretary of Transportation pursuant to 49 CFR Part 26.65; see also 49 CFR Part 26.39.

"SDO" shall mean the Massachusetts Supplier Diversity Office, formerly known as the State Office of Minority and Women Business Assistance (SOMWBA). In 2010, SOMWBA was abolished and the SDO was established. See St. 2010, c. 56. The SDO has assumed all the functions of SOWMBA. SDO is an agency within the Commonwealth of Massachusetts Executive office of Administration and Finance (ANF) Operational Services Division (OSD). The SDO mandate is to help promote the development of business enterprises and non-profit organizations owned and operated by minorities and women.

"Socially and economically disadvantaged individuals" shall mean individuals who are citizens of the United States (or lawfully admitted permanent residents) and who are:

- (a) Individuals found by SDO to be socially and economically disadvantaged individuals on a case by case basis.
- (b) Individuals in the following groups, members of which are rebuttably presumed to be socially and economically disadvantaged:

- (1) "Black Americans" which includes persons having origin in any of the Black racial groups of Africa; (2) "Hispanic Americans" which include persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race; (3) "Native Americans" which include persons who are American Indians, Eskimos, Aleuts, or Native Hawaiians; (4) "Asian Pacific Americans" which includes persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands (Republic of Palau), the Commonwealth of the Northern Marianas Islands, Macao, Fiji, Tonga, Kiribati, Tuvalu, Nauru, Federated States of Micronesia, or Hong Kong; (5) "Subcontinent Asian Americans" which includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka; (6) Women; or (7) Any additional groups whose members are designated as socially and economically disadvantaged by the Small Business Administration (SBA), at such time as the SBA designation becomes effective.

Other terms and definitions applicable to the U.S. DOT DBE Program may be found at 49 CFR Part 26 and related appendices and guidance pages.

2. DBE PARTICIPATION

a. Goal

On this Contract, MassDOT has established the following goal(s) for participation by firms owned and controlled by socially and economically disadvantaged persons. At least half of the goal must be met in the form of DBE Subcontractor construction activity as opposed to material supplies or other services. The applicable goal remains in effect throughout the life of the contract regardless of whether pre-identified DBE Subcontractors remain on the Project or under Contract.

☒ Design-Bid-Build Projects: DBE Participation Goal 14 %
(One half of this goal shall be met in the form of Subcontractor construction activity)

☐ Design-Build Projects: DBE Design Participation Goal ____% and DBE Construction Participation Goal ____%
(One half of the Construction Goal shall be met in the form of Subcontractor construction activity)

b. Bidders List

Pursuant to the provisions of 49 CFR Part 26.11(c), Recipients such as MassDOT, must collect from all Bidders who seek work on Federally assisted Contracts the firm full company name(s), addresses and telephone numbers of all firms that have submitted bids or quotes to the Bidders in connection with this Project. All bidders should refer to the Special Provision Document "A00801" of the Project proposal for this requirement.

In addition, MassDOT must provide to U.S. DOT, information concerning contractors firm status as a DBE or non-DBE, the age of the firm, and the annual gross receipts of the firm within a series of brackets (e.g., less than \$500,000; \$500,000–\$1 million; \$1–2 million; \$2–5 million, etc.). The status, firm age, and annual gross receipt information will be sought by MassDOT regularly prior to setting its DBE participation goal for submission to U.S. DOT. MassDOT will survey each individual firm for this information directly.

Failure to comply with a written request for this information within fifteen (15) business days may result in the suspension of bidding privileges or other such sanctions, as provided for in Section 9 of this provision, until the information is received.

3. CONTRACTOR ASSURANCES

No Contractor or any Subcontractor shall discriminate on the basis of race color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in all respects and as applicable prior to, or subsequent to, award of U.S. DOT assisted Contracts. The Contractor agrees to affirmatively seek out and consider DBE firms as Contractors, Subcontractors, and/or suppliers of materials and services for this Contract. No Contract will be approved until MassDOT has reviewed Bidders'/Contractors' affirmative actions concerning DBEs. Failure to carry out these requirements is a material breach of this Contract which may result in the termination of the Contract or such other remedy as MassDOT or FHWA deem appropriate.

4. REQUIRED SUBCONTRACT PROVISIONS

The Prime Contractor shall include the provisions of Section 3 above in every subcontract, making those provisions binding on each Subcontractor; in addition, the Prime Contractor shall include a copy of this Special Provision, in its entirety, in every subcontract with a DBE firm which is, or may be, submitted for credit toward the Contract participation goal.

5. ELIGIBILITY OF DBES

Only firms that have been certified by SDO and confirmed by MassDOT as eligible in accordance with 49 CFR Part 26 to participate as DBEs on federally aided MassDOT Contracts may be used on this Contract for credit toward the DBE participation goal.

a. Massachusetts DBE Directory

MassDOT makes available to all bidders the most current Massachusetts Disadvantaged Business Enterprise Directory. This directory is made available for Contractors' convenience and is informational only. The Directory lists those firms that have been certified as eligible in accordance with the criteria of 49 CFR Part 26 to participate as DBEs on federally aided MassDOT contracts. The Directory also lists the kinds of work each firm is certified to perform but does not constitute an endorsement of the quality of performance of any business and does not represent MassDOT Subcontractor approval.

Contractors are encouraged to make use of the DBE Directory maintained by SDO on the Internet. This listing is updated daily and may be accessed at the SDO's website at:

<https://www.diversitycertification.mass.gov/BusinessDirectory/BusinessDirectorySearch.aspx>

b. DBE Certification

A firm must apply to SDO, currently acting as certification agent for MassDOT, for DBE certification to participate on federally aided MassDOT Contracts. A DBE application may be made in conjunction with a firm's application to SDO for certification to participate in state-funded minority and women business enterprise programs or may be for DBE certification only. An applicant for DBE certification must identify the area(s) of work it seeks to perform on U.S. DOT funded projects.

c. Joint Venture Approval

To obtain recognition as an approved DBE Joint Venture, the parties to the joint venture must provide to MassDOT's Office of Civil Rights and Prequalification Office, at least fourteen (14) business days before the bid opening date, an Affidavit of DBE/Non-DBE Joint Venture in the form attached hereto, and including, but not limited to the following:

1. a copy of the Joint Venture Agreement;
2. a description of the distinct, clearly defined portion of the contract work that the DBE will perform with its own forces; and,
3. all such additional information as may be requested by MassDOT for the purpose of determining whether the joint venture is eligible.

6. COUNTING DBE PARTICIPATION TOWARDS DBE PARTICIPATION GOALS

In order for DBE participation to count toward the Contract participation goal, the DBE(s) must have served a commercially useful function in the performance of the Contract and must have been paid in full for acceptable performance.

a. Commercially Useful Function

- (1) In general, a DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. With respect to materials and supplies used on the Contract, the DBE must be responsible for negotiating price, determining quality and quantity, ordering the material, installing (where applicable) and paying for the material itself.
- (2) To determine whether a DBE is performing a commercially useful function, MassDOT will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the Contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and other relevant factors.
- (3) A DBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation. In determining whether a DBE is such an extra participant, MassDOT will examine similar transactions, particularly those in which DBEs do not participate.

b. Counting Participation Toward The Contract Participation Goal

DBE participation which serves a commercially useful function shall be counted toward the DBE participation goal in accordance with the Provisions of 49 CFR Part 26.55(a) to (h), as follows:

- (1) When a DBE participates in a construction Contract, MassDOT will count the value of the work performed by the DBE's own forces. MassDOT will count the cost of supplies and materials obtained by the DBE for the work of its contract, including supplies purchased or equipment leased by the DBE. Supplies, labor, or equipment the DBE Subcontractor uses, purchases, or leases from the Prime Contractor or any affiliate of the Prime Contractor will not be counted.

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- (2) MassDOT will count the entire amount of fees or commissions charged by a DBE firm for providing bona fide services, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a U.S. DOT assisted Contract, toward DBE participation goals, provided it is determined that the fee is reasonable and not excessive as compared with fees customarily allowed for similar services.
 - (3) When a DBE performs as a participant in a joint venture, MassDOT will count toward DBE participation goals a portion of the total dollar value of the contract that is equal to the distinct, clearly defined portion of the work of the Contract that the DBE performs with its own forces.
 - (4) MassDOT will use the following factors in determining whether a DBE trucking company is performing a commercially useful function:
 - (i) the DBE must be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract; there cannot be a contrived arrangement for the purpose of meeting DBE participation goals.
 - (ii) the DBE must itself own and operate at least one fully licensed, insured, and operational truck used on the Contract.
 - (iii) the Contractor will receive DBE credit for the total value of the transportation services the DBE provides on the Contract using trucks owned, insured, and operated by the DBE itself and using drivers the DBE employs alone.
 - (iv) the DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The Contractor who has a contract with a DBE who leases trucks from another DBE will receive credit for the total value of the transportation services of the lease.
 - (v) the DBE may also lease trucks from a non-DBE firm, including an owner-operator. The Contractor who has a Contract with a DBE who leases trucks from a non-DBE is entitled to credit for the total value of the transportation services provided by non-DBE lessees not to exceed the value of transportation services provided by DBE-owned trucks on the Contract. Additional participation by non-DBE lessees receives credit only for the fee or commission it receives as a result of the lease arrangement, fee or commission it receives as a result of the lease arrangement. The DBE does not receive credit for the total value of the transportation services provided by the lessee, since these services are not provided by a DBE.
 - (vi) the lease must indicate that the DBE has exclusive use of, and control over, the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display the name and identification number of the DBE.
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- (5) MassDOT will count the Prime Contractor's expenditures with DBEs for materials or supplies toward DBE participation goals as follows:
- (i) if the materials or supplies are obtained from a DBE manufacturer, as defined in Section 1 above, MassDOT will count one hundred (100%) percent of the cost of the materials or supplies toward DBE participation goals, provided the DBE meets the other requirements of the regulations.
 - (ii) if the materials or supplies are purchased from a DBE regular dealer, as defined in Section 1 above, MassDOT will count sixty (60%) percent of the cost of the materials or supplies toward the Contract participation goal, provided the DBE meets the other requirements of the regulations.
 - (iii) for materials or supplies purchased from a DBE which is neither a manufacturer nor a regular dealer, MassDOT will count the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site toward the Contract participation goal, provided that MassDOT determines the fees to be reasonable and not excessive as compared with fees customarily allowed for similar services; the cost of the materials and supplies themselves will not be counted; and provided the DBE meets the other requirements of the regulations.

c. Joint Check Policy

MassDOT recognizes that the use of joint checks may be a business practice required by material suppliers and vendors in the construction industry. A joint check is a two-party check issued by a/the Prime Contractor to a DBE third party such as a regular dealer of material or supplies. The Prime Contractor issues the check as payor to the DBE and the third party jointly as payees to guarantee payment to the third party for materials or supplies obtained or to be used by the DBE. FHWA has established criteria to ensure that DBEs are in fact performing a commercially useful function ("CUF") while using a joint check arrangement. Contractors and DBEs must meet and conform to these conditions and criteria governing the use of joint checks.

In the event that a Contractor or DBE Subcontractor desires to use a joint check, MassDOT will require prior notice and will closely monitor the arrangement for compliance with FHWA regulations and guidance. MassDOT may allow a joint check arrangement and give credit to a Contractor for use of the DBE where one or more of the following conditions exist:

- The use of a joint check is in fact required by this type of vendor or supplier as a standard industry practice that applies to all Contractors (DBEs and non-DBEs); or is required by a specific vendor or supplier;
- Payment for supplies or materials would be delayed for an unreasonably extended period without the joint check arrangement;
- The DBE (or any of its Subcontractors) has a pattern or history of not paying a vendor or supplier within a reasonable time or has not established enough of a credit history with the supplier or vendor; and/or
- The presence of severe adverse economic conditions, where credit resources may be limited and such practices may be necessary or required to effect timely payments.

Other factors MassDOT may consider:

- Whether there is a requirement by the Prime Contractor that a DBE should use a specific vendor or supplier to meet their Subcontractor specifications;
- Whether there is a requirement that a DBE use the Prime Contractor's negotiated price;
- The independence of the DBE;
- Whether approval has been sought prior to use of a joint check arrangement; and
- Whether any approved joint check arrangement has exceeded a reasonable period of use;
- The operation of the joint check arrangement; and
- Whether the DBE has made an effort to establish alternate arrangements for following periods (i.e., the DBE must show it can, or has, or why it has not, established or increased a credit line with the vendor or supplier).

Even with the use of a Joint Check, both the Contractor and DBE remain responsible for compliance with all other elements under 49 CFR § 26.55 (c) (1), and must still be able to prove that a commercially useful function is being performed for the Contractor.

d. Joint Check Procedure(s)

- The DBE advises its General or Prime Contractor that it will have to use a Joint Check and provide proof of such requirement.
- The General or the Prime Contractor submits a request for approval to MassDOT, using MassDOT's approved Joint Check Request form (Document B00855) and by notification on the DBE Letter of Intent (Document B00854), and any other relevant documents. Requests that are not initiated during the bid process should be made in writing and comply with the procedure.
- The MassDOT Office of Civil Rights will review the request and render a decision as part of the approval process for DBE Schedules and Letters of Intent.
- Review and Approval will be project specific and relevant documents will be made part of the project Contract file.
- Payments should be made in the name of both the DBE and vendor or supplier. Payments should be issued and signed by the Contractor as only the guarantor for prompt payment of purchases to the vendor or supplier. The payment to the vendor or supplier should be handled by the DBE (i.e. if possible, funds or the joint check should be processed by the DBE and sent by the DBE to the vendor or supplier).
- MassDOT may request copies of cancelled checks (front and back) and transmittal information to verify any payments made to the DBE and vendor or supplier.
- MassDOT may request other information and documents, and may ask questions of the Contractor, Subcontractor and vendor or supplier prior to, during, and after the project performance to ascertain whether the Subcontractor is performing a commercially useful function and all parties are complying with DBE Program policies and procedures as part of the Subcontractor approval process.

7. AWARD DOCUMENTATION AND PROCEDURES

- a. The two lowest bidders/the two bidders with the lowest price per quality score point, shall submit, by the close of business on the third (3rd) business day after the bid opening, a completed Schedule of Participation by DBEs (Document B00853) which shall list:
- (1) The full company name, address and telephone number of each DBE with whom the bidder intends to make a commitment.
 - (2) The contract item(s), by number(s) and quantity(ies), if applicable, or specific description of other business activity to be performed by each DBE as set forth in the Letters of Intent. The Bidder shall list only firms which have the capacity to perform, manage and supervise the work proposed in accordance with the requirements of 49 CFR Part 26 and Section **6.b** of these Special Provisions.
 - (3) The total dollar amount to be paid to each DBE. (Bidders are cautioned that at least one half of the participation goal must be met with construction activity work.)
 - (4) The total dollar amount to be paid to each DBE that is eligible for credit toward the DBE participation goal under the counting rules set out in Section **6.b**.
 - (5) The total creditable DBE participation as a percentage of the total bid price.
- b. All firms listed on the Schedule must be currently certified.
- c. The two lowest bidders/the two bidders with the lowest price per quality score point, shall each submit, with their Schedules of Participation, fully completed, signed Letters of Intent (Document B00854) from each of the DBEs listed on the Schedule. The Letters of Intent shall be in the form attached and shall identify specifically the contract activity the DBE proposes to perform, expressed as contract item number, if applicable, description of the activity, NAICS code, quantity, unit price and total price. In the event of discrepancy between the Schedule and the Letter of Intent, the Letter of Intent shall govern.
- d. Evidence of good faith efforts will be evaluated by MassDOT in the selection of the lowest responsible bidder.

All information requested by MassDOT for the purpose of evaluating the Contractor's efforts to achieve the participation goal must be provided within three (3) calendar days and must be accurate and complete in every detail. The apparent low bidder's attainment of the DBE participation goal or a satisfactory demonstration of good faith efforts is a prerequisite for award of the Contract.

- e. Failure to meet, or to demonstrate good faith efforts to meet, the requirements of these Special Provisions shall render a bid non-responsive. Therefore, in order to be eligible for award, the bidder (1) must list all DBE's it plans to employ on the Schedule of Participation; and provide the required Letters of Intent for, DBE participation which meets or exceeds the Contract goal in accordance with the terms of these Special Provisions or (2) must demonstrate, to the satisfaction of MassDOT, that good faith efforts were made to achieve the participation goal. MassDOT will adhere to the guidance provided in Appendix A to 49 CFR Part 26 on the determination of a Contractor's good faith efforts to meet the DBE participation goal(s) set forth in Section 2 herein.

- f. If MassDOT finds that the percentage of DBE participation submitted by the bidder on its Schedule does not meet the Contract participation goal, or that Schedule and Letters of Intent were not timely filed, and that the bidder has not demonstrated good faith efforts to comply with these requirements, it shall propose that the bidder be declared ineligible for award. In that case, the bidder may request administrative reconsideration. Such requests must be sent in writing within three (3) calendar days of receiving notice of proposed ineligibility to: The Office of the General Counsel, Massachusetts Department of Transportation, 10 Park Plaza, Boston, MA, 02116.
- g. If, after administrative reconsideration, MassDOT finds that the bidder has not shown that sufficient good faith efforts were made to comply with the requirements of these Special Provisions, it shall reject the bidder's proposal and may retain the proposal guaranty.
- h. Actions which constitute evidence of good faith efforts to meet a DBE participation goal include, but are not limited to, the following examples, which are set forth in 49 CFR Part 26, Appendix A:
- (1) Soliciting through all reasonable and available means (e.g., attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the Contract. The bidder must solicit this interest within sufficient time to allow the DBEs to respond to the solicitation. The bidder must determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.
 - (2) Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE participation goal will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the Prime Contractor might otherwise prefer to perform these work items with its own forces.
 - (3) Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
 - (4) Negotiating in good faith with interested DBEs. It is the bidder's responsibility to make a portion of the work available to DBE Subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE Subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone number of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBEs to perform the work.

A bidder using good business judgment would consider a number of factors in negotiating with Subcontractors, including DBE Subcontractors, and would take a firm's price and capabilities as well as Contract participation goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a bidder's failure to meet the Contract DBE participation goal, as long as such costs are reasonable. Also, the ability or desire of a Prime Contractor to perform the work of a Contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Prime Contractors are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.

- (5) Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. Contractors should be careful of adding additional requirements of performance that would in effect limit participation by DBEs or any small business. The Contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. nonunion employee status) are not legitimate causes for the rejection or non-solicitation of bids in the Contractor's efforts to meet the Contract participation goal.
- (6) Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or contractor.
- (7) Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case by case basis to provide assistance in the recruitment and placement of DBEs.

8. COMPLIANCE

- a. All activity performed by a DBE for credit toward the Contract participation goal must be performed, managed and supervised by the DBE in accordance with all commercially useful function requirements of 49 CFR Part 26. The Prime Contractor shall not enter into, or condone, any other arrangement.
- b. The Prime Contractor shall not perform with its own organization, or assign to any other business, an activity designated for the DBE(s) named on the Schedule(s) submitted by the Prime Contractor under Section 7 or under paragraph 8.f of this section, without the approval of MassDOT in accordance with the requirements of paragraphs 8.f and 8.j of this section.
- c. MassDOT may suspend payment for any activity that was not performed by the DBE to whom the activity was committed on the approved Schedule of Participation, or that was not performed in accordance with the requirements of Section 6.
- d. MassDOT retains the right to approve or disapprove of any or all Subcontractors. Requests by the Prime Contractor for approval of participation by a DBE Subcontractor for credit toward the Contract participation goal must include, in addition to any other requirements for Subcontractor approval, the following:
 - (1) A copy of the proposed subcontract. The subcontract must be for at least the dollar amount, and for the work described, in the Bidder's Schedule of Participation.
 - (2) A resume stating the qualifications and experience of the DBE Superintendent and/or foreperson who will supervise the on-site work. A new resume will be required for any change in supervisory personnel during the progress of the work.
 - (3) A Schedule of Operations indicating when the DBE is expected to perform the work.
 - (4) A list of (1) equipment owned by the DBE to be used on the Project, and (2) equipment to be leased by the DBE for use on the Project.

- (5) A list of: (1) all projects (public and private) which the DBE is currently performing; (2) all projects (public and private) to which the DBE is committed; and (3) all projects (public and private) to which the DBE intends to make a commitment. For each Contract, list the contracting organization, the name and telephone number of a contact person for the contracting organization, the dollar value of the work, a description of the work, and the DBE's work schedule for each project.
- e. If, pursuant to the Subcontractor approval process, MassDOT finds that a DBE Subcontractor does not have sufficient experience or resources to perform, manage and supervise work of the kind proposed in accordance with the requirements of 49 CFR Part 26, approval of the DBE Subcontractor may be denied. In the event of such denial, the Prime Contractor shall proceed in accordance with the requirements paragraphs **8.f** and **8.j** of this section.
- f. If, for reasons beyond its control, the Prime Contractor cannot comply with its DBE participation commitment in accordance with the Schedule of Participation submitted under Section 7, the Prime Contractor shall submit to MassDOT the reasons for its inability to comply with its obligations and shall submit, and request approval for, a revised Schedule of Participation. If approved by MassDOT, the revised Schedule shall govern the Prime Contractor's performance in meeting its obligations under these Special Provisions.
- g. A Prime Contractor's compliance with the participation goal in Section 2 shall be determined by reference to the established percentage of the total contract price, provided, however, that no decrease in the dollar amount of a bidder's commitment to any DBE shall be allowed without the approval of MassDOT.
- h. If the contract amount is increased, the Prime Contractor may be required to submit a revised Schedule of Participation in accordance with paragraphs **8.f** and **8.j** of this section.
- i. In the event of the decertification of a DBE scheduled to participate on the Contract for credit toward the participation goal, but not under subcontract, the Contractor shall proceed in accordance with paragraphs **8.f** and **8.j** of this section.
- j. The Prime Contractor shall notify MassDOT immediately of any facts that come to its attention indicating that it may or will be unable to comply with any aspect of its DBE obligation under this Contract.
- k. Any notice required by these Special Provisions shall be given in writing to: (1) the Resident Engineer; (2) the District designated Compliance Officer; and (3) the DBE Liaison Officer, MassDOT Office of Civil Rights, 10 Park Plaza, – 3rd Floor - West, Boston, MA, 02116 and cc'd to the Deputy Chief of External Programs.
- l. The Prime Contractor and its Subcontractors shall comply with MassDOT's Electronic Reporting System Requirements (MassDOT Document 00821) and submit all information required by MassDOT related to the DBE Special Provisions through the Equitable Business Opportunity Solution ("EBO"). MassDOT reserves the right to request reports in the format it deems necessary anytime during the performance of the Contract.
- m. Termination of DBE by Prime Contractor
- (1) A Prime Contractor shall not terminate a DBE Subcontractor or an approved substitute DBE firm without the prior written consent of MassDOT. This includes, but is not limited to, instances in which a Prime Contractor seeks to perform work originally designated for a DBE Subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm.

- (2) MassDOT may provide such written consent only if MassDOT agrees, for reasons stated in its concurrence document, that the Prime Contractor has good cause to terminate the DBE firm.
- (3) For purposes of this paragraph, good cause includes the following circumstances:
 - (i) The DBE Subcontractor fails or refuses to execute a written contract;
 - (ii) The DBE Subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Good cause, however, does not exist if the failure or refusal of the DBE Subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the Prime Contractor;
 - (iii) The DBE Subcontractor fails or refuses to meet the Prime Contractor's reasonable, nondiscriminatory bond requirements.
 - (iv) The DBE Subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;
 - (v) The DBE Subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1,200 or applicable State law;
 - (vi) (vii) MassDOT has determined that the listed DBE Subcontractor is not a responsible contractor;
 - (vii) The listed DBE Subcontractor voluntarily withdraws from the Project and provides written notice of its withdrawal;
 - (viii) The listed DBE is ineligible to receive DBE credit for the type of work required;
 - (ix) A DBE owner dies or becomes disabled with the result that the listed DBE Contractor is unable to complete its work on the Contract;
 - (x) Other documented good cause that MassDOT determines compels the termination of the DBE Subcontractor. Good cause, however, does not exist if the Prime Contractor seeks to terminate a DBE it relied upon to obtain the Contract so that the Prime Contractor can self-perform the DBE work or substitute another DBE or non-DBE Contractor after Contract Award.
- (4) Before transmitting to MassDOT a request to terminate and/or substitute a DBE Subcontractor, the Prime Contractor must give notice in writing to the DBE Subcontractor, with a copy to MassDOT, of its intent to request to terminate and/or substitute, and the reason for the request.
- (5) The Prime Contractor must give the DBE five (5) business days to respond to the Prime Contractor's notice. The DBE must advise MassDOT and the Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why MassDOT should not approve the Prime Contractor's action. If required in a particular case as a matter of public necessity (e.g., safety), MassDOT may provide a response period shorter than five (5) business days.
- (6) In addition to post-award terminations, the provisions of this section apply to pre-award deletions of or substitutions for DBE firms.

n. Prompt Payment.

Contractors are required to promptly pay Subcontractors under this Prime Contract within ten (10) business days from the receipt of each payment the Prime Contractor receives from MassDOT. Failure to comply with this requirement may result in the withholding of payment to the Prime Contractor until such time as all payments due under this provision have been received by the Subcontractor(s) and/or referral to the Prequalification Committee for action which may affect the Contractor's prequalification status.

9. SANCTIONS

If the Prime Contractor does not comply with the terms of these Special Provisions and cannot demonstrate to the satisfaction of MassDOT that good faith efforts were made to achieve such compliance, MassDOT may, in addition to any other remedy provided for in the Contract, and notwithstanding any other provision in the Contract:

- a.** Retain, in connection with final acceptance and final payment processing, an amount determined by multiplying the total contract amount by the percentage in Section 2, less the amount paid to approved DBE(s) for work performed under the Contract in accordance with the provisions of Section 8.
- b.** Suspend, terminate or cancel this Contract, in whole or in part, and call upon the Prime Contractor's surety to perform all terms and conditions in the Contract.
- c.** In accordance with 720 CMR 5.05(1)(f), modify or revoke the Prime Contractor's Prequalification status or recommend that the Prime Contractor not receive award of a pending Contract. The Prime Contractor may appeal the determination of the Prequalification Committee in accordance with the provisions of 720 CMR 5.06.
- d.** Initiate debarment proceedings pursuant to M.G.L. c. 29 §29F and, as applicable, 2 CFR Parts 180, 215 and 1,200.
- e.** Refer the matter to the Massachusetts Attorney General for review and prosecution, if appropriate, of any false claim or pursuant to M.G.L. c. 12, §§ 5A to 5O (the Massachusetts False Claim Act).
- f.** Refer the matter to the U.S. DOT's Office of the Inspector General or other agencies for prosecution under Title 18, U.S.C. § 1001, 49 CFR Parts 29 and 31, and other applicable laws and regulations.

10. FURTHER INFORMATION; ENFORCEMENT, COOPERATION AND CONFIDENTIALITY.

- a.** Any proposed DBE, bidder, or Contractor shall provide such information as is necessary in the judgment of MassDOT to ascertain its compliance with the terms of this Special Provision. Further, pursuant to 49 CFR, Part 26.107:

- (1) If you are a firm that does not meet the eligibility criteria of 49 CFR, Parts 26.61 to 26.73 (“subpart D”), that attempts to participate in a DOT- assisted program as a DBE on the basis of false, fraudulent, or deceitful statements or representations or under circumstances indicating a serious lack of business integrity or honesty, MassDOT or FHWA may initiate suspension or debarment proceedings against you under 49 CFR Part 29.
 - (2) If you are a firm that, in order to meet DBE Contract participation goals or other DBE Program requirements, uses or attempts to use, on the basis of false, fraudulent or deceitful statements or representations or under circumstances indicating a serious lack of business integrity or honesty, another firm that does not meet the eligibility criteria of subpart D, FHWA may initiate suspension or debarment proceedings against you under 49 CFR Part 29.
 - (3) In a suspension or debarment proceeding brought either under subparagraph a.(1) or b.(2) of this section, the concerned operating administration may consider the fact that a purported DBE has been certified by a recipient. Such certification does not preclude FHWA from determining that the purported DBE, or another firm that has used or attempted to use it to meet DBE participation goals, should be suspended or debarred.
 - (4) FHWA may take enforcement action under 49 CFR Part 31, Program Fraud and Civil Remedies, against any participant in the DBE Program whose conduct is subject to such action under 49 CFR Part 31.
 - (5) FHWA may refer to the Department of Justice, for prosecution under 18 U.S.C. 1001 or other applicable provisions of law, any person who makes a false or fraudulent statement in connection with participation of a DBE in any DOT-assisted program or otherwise violates applicable Federal statutes.
- b. Pursuant to 49 CFR Part 26.109, the rules governing information, confidentiality, cooperation, and intimidation or retaliation are as follows:
 - (1) Availability of records.
 - (i) In responding to requests for information concerning any aspect of the DBE Program, FHWA complies with provisions of the Federal Freedom of Information and Privacy Acts (5 U.S.C. 552 and 552a). FHWA may make available to the public any information concerning the DBE Program release of which is not prohibited by Federal law.
 - (ii) MassDOT shall safeguard from disclosure to unauthorized persons information that may reasonably be considered as confidential business information, consistent with Federal and Massachusetts General Law (M.G.L. c. 66, § 10, M.G.L. c. 4, §7 (26), 950 CMR 32.00).
 - (2) Confidentiality of information on complainants. Notwithstanding the provisions of subparagraph b.(1) of this section, the identity of complainants shall be kept confidential, at their election. If such confidentiality will hinder the investigation, proceeding or hearing, or result in a denial of appropriate administrative due process to other parties, the complainant must be advised for the purpose of waiving the privilege. Complainants are advised that, in some circumstances, failure to waive the privilege may result in the closure of the investigation or dismissal of the proceeding or hearing.

- (3) Cooperation. All participants in FHWA's DBE Program (including, but not limited to, recipients, DBE firms and applicants for DBE certification, complainants and appellants, and Contractors using DBE firms to meet Contract participation goals) are required to cooperate fully and promptly with U.S. DOT and recipient compliance reviews, certification reviews, investigations, and other requests for information. Failure to do so shall be a ground for appropriate action against the party involved (e.g., with respect to recipients, a finding of noncompliance; with respect to DBE firms, denial of certification or removal of eligibility and/or suspension and debarment; with respect to a complainant or appellant, dismissal of the complaint or appeal; with respect to a Contractor which uses DBE firms to meet participation goals, findings of non-responsibility for future Contracts and/or suspension and debarment).
- (4) Intimidation and retaliation. No recipient, Contractor, or any other participant in the program, may intimidate, threaten, coerce, or discriminate against any individual or firm for the purpose of interfering with any right or privilege secured by this part or because the individual or firm has made a complaint, testified, assisted, or participated in any manner in an investigation, proceeding, or hearing under this part. If any recipient or contractor violates this prohibition, that entity is in noncompliance with this 49 CFR Part 26.

11. LIST OF ADDITIONAL DOCUMENTS.

- a. The following documents shall be completed and signed by the bidder and designated DBEs in accordance with Section 7 - Award Documentation and Procedures. These documents must be returned by the bidder to MassDOT's Bid Document Distribution Center:
- ☐ Schedule of DBE Participation (Document B00853)
 - ☐ Letter of Intent (Document B00854)
 - ☐ DBE Joint Check Arrangement Approval Form (Document B00855), if Contractor and DBE plan, or if DBE is required to use a Joint Check
- b. The following document shall be signed and returned by Contractor and Subcontractors/DBEs to the MassDOT District Office overseeing the Project, as applicable:
- ☐ Contractor/Subcontractor Certification Form (Document No. 00859) (a checklist of other documents to be included with every subcontract (DBEs and non-DBEs alike)).
- c. The following document shall be provided to MassDOT's Office of Civil Rights and Prequalification Office at least fourteen (14) business days before the bid opening date, if applicable:
- ☐ Affidavit of DBE/Non-DBE Joint Venture (Document B00856)
- d. The following document shall be provided to MassDOT's District Office of Civil Rights within 30 calendar days after the work of the DBE is completed, or no later than 30 calendar days after the work of the DBE is on a completed and processed CQE. This document shall be completed and submitted by the Prime Contractor:
- ☐ Certificate of Completion by a Minority/Women or Disadvantaged Business Enterprise (M/W/DBE) (Form No. CSD-100)

**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
- II. Nondiscrimination
- III. Non-segregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work

performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide

sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants /

Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:

The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurances Required:

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act ([29 CFR part 3](#))), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act ([40 U.S.C. 3141\(2\)\(B\)](#)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in [29 CFR part 1](#), a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

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

(ii) The classification is used in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division

under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

d. *Fringe benefits not expressed as an hourly rate.* Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph

2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901](#)–3907.

3. Records and certified payrolls (29 CFR 5.5)

a. Basic record requirements (1) Length of record retention. All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) Information required. Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) Additional records relating to fringe benefits. Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(4) Additional records relating to apprenticeship. Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. Certified payroll requirements (1) Frequency and method of submission. The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting

agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) Information required. The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <https://www.dol.gov/sites/dolgov/files/WHDL/legacy/files/wh347.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) Statement of Compliance. Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in [29 CFR part 3](#); and

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

(4) Use of Optional Form WH-347. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature.* The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification.* The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under [18 U.S.C. 1001](#) and [31 U.S.C. 3729](#).

(7) *Length of certified payroll retention.* The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents.* The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers.* The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements.* If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under [29 CFR part 6](#) any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures.* Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address

of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity (29 CFR 5.5)

a. *Apprentices* (1) *Rate of pay.* Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits.* Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio.* The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates.* Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity.* The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and [29 CFR part 30](#).

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

6. Subcontracts. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, [18 U.S.C. 1001](#).

11. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#); or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#).

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or

mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

* \$31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901](#)–3907.

4. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the

event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

- a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;
- b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;
- c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or
- d. Informing any other person about their rights under CWHSSA or this part.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
 (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and

health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;.

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

3. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

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

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or

cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

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

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B)**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

DOCUMENT 00811

SPECIAL PROVISIONS
MONTHLY PRICE ADJUSTMENT FOR HOT MIX ASPHALT (HMA) MIXTURES
Revised: 02/03/2023

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

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

Base Price

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

Period Price

The Period Price is the price of liquid asphalt for each monthly period as determined by the Department using the average selling price per standard ton of PG64-28 paving grade (primary binder classification) asphalt, FOB manufacturer's terminal, as listed under the "East Coast Market - New England, Boston, Massachusetts area" section of the Poten & Partners, Inc. "Asphalt Weekly Monitor". This average selling price is listed in the issue having a publication date of the second Friday of the month and will be posted as the Period Price for that month. The Department will post this Period Price on its website at <https://www.mass.gov/service-details/massdot-current-contract-price-adjustments> following its receipt of the relevant issue of the "Asphalt Weekly Monitor". Poten and Partners has granted the Department the right to publish this specific asphalt price information sourced from the Asphalt Weekly Monitor.

Price Adjustment Determination, Calculation and Payment

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

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

The Price Adjustment applies only to the actual virgin liquid asphalt content in the mixture placed on the job in accordance with the approved Job Mix Formula.

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

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

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

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DOCUMENT 00812

SPECIAL PROVISIONS
MONTHLY PRICE ADJUSTMENT FOR DIESEL FUEL AND GASOLINE –
ENGLISH UNITS
Revised: 02/01/2021

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

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

The Base Price of Diesel Fuel and Gasoline will be the price as indicated in the Department's web site <https://www.mass.gov/service-details/massdot-current-contract-price-adjustments> for the month in which the contract was bid, which includes State Tax.

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

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

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

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

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

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

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DOCUMENT 00813

SPECIAL PROVISIONS

PRICE ADJUSTMENTS FOR STRUCTURAL STEEL AND REINFORCING STEEL

June 18, 2025

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

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

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

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

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

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

Base Prices and Period Prices are defined as follows:

Base Prices of unfabricated structural steel and unfabricated reinforcing steel on a project are fixed prices determined by the Department and found in the table below. While it is the intention of the Department to make this table comprehensive, some of a project’s unfabricated structural steel and/or unfabricated reinforcing steel may be inadvertently omitted. Should this occur, the Contractor shall bring the omission to the Department’s attention so that a contract alteration may be processed that adds the missing steel to the table and its price adjustments to the Contract.

The Base Price Date is the month and year of the most recent finalized period price index at the time that MassDOT opened bids for the project. The Base Price Index for this contract is the Steel PPI listed in the Notice to Contractors.

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

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

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

Period Prices are determined as follows:

Period Price = Base Price X Index Factor

Index Factor = Period Price Index / Base Price Index

Example of a Period Price Calculation:

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

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

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

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

Period Price = Base Price X Index Factor = $\$0.82/\text{Pound} \times 0.950 = \$0.78/\text{Pound}$

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

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

* To access the PPI website and obtain a Base Price Index or a Period Price Index, go to

<http://data.bls.gov/cgi-bin/srgate>

End of example.

The Contractor will be paid for unfabricated structural steel and unfabricated reinforcing steel under the respective contract pay items for all components constructed of either structural steel or reinforced Portland cement concrete under their respective Contract Pay Items.

Price adjustments, as herein provided for, will be paid separately as follows:

Structural Steel

Pay Item Number 999.449 for positive (+) pay adjustments (payments to the Contractor)

Pay Item Number 999.457 for negative (-) pay adjustments (credits to MassDOT Highway Division)

Reinforcing Steel

Pay Item Number 999.466 for positive (+) pay adjustments (payments to the Contractor)

Pay Item Number 999.467 for negative (-) pay adjustments (credits to MassDOT Highway Division)

No price adjustment will be made for price changes after the Contract Completion Date, unless the MassDOT Highway Division has approved an extension of Contract Time for the Contract.

TABLE

Steel Type		Price per Pound
1	ASTM A615/A615M Grade 60 (AASHTO M31 Grade 60 or 420) Reinforcing Steel	\$0.52
2	ASTM A27 (AASHTO M103) Steel Castings, H-Pile Points & Pipe Pile Shoes (See Note below.)	\$0.73
3	ASTM A668 / A668M (AASHTO M102) Steel Forgings	\$0.73
4	ASTM A108 (AASHTO M169) Steel Forgings for Shear Studs	\$0.75
5	ASTM A709/A709M Grade 36 / AASHTO M270M/M270 Grade 36 or 250 Structural Steel Plate	\$0.79
6	ASTM A709/A709M Grade 36 / AASHTO M270M/M270 Grade 36 or 250 Structural Steel Shapes	\$0.74
7	ASTM A709/A709M Grade 50 / AASHTO M270M/M270 Grade 50 or 345 Structural Steel Plate	\$0.79
8	ASTM A709/A709M Grade 50 / AASHTO M270M/M270 Grade 50 or 345 Structural Steel Shapes	\$0.74
9	ASTM A709/A709M Grade 50WT / AASHTO M270M/M270 Grade 50WT or 345WT Structural Steel Plate	\$0.82
10	ASTM A709/A709M Grade 50WT / AASHTO M270M/M270 Grade 50WT or 345WT Structural Steel Shapes	\$0.75
11	ASTM A709/A709M Grade 50W / AASHTO M270M/M270 Grade 50W 345W Structural Steel Plate	\$0.82
12	ASTM A709/A709M Grade 50W / AASHTO M270M/M270 Grade 50W or 345W Structural Steel Shapes	\$0.75
13	ASTM A709/A709M Grade HPS 50W / AASHTO M270M/M270 Grade HPS 50W or 345W Structural Steel Plate	\$0.86
14	ASTM A709/A709M Grade HPS 70W / AASHTO M270M/M270 Grade HPS 70W or 485W Structural Steel Plate	\$0.92
15	ASTM A514/A514M-05 Grade HPS 100W / AASHTO M270M/M270 Grade HPS 100W or 690W Structural Steel Plate	\$1.41
16	ASTM A992/A992M Grade 50S / AASHTO M270M/M270 Grade 50S or 345S Structural Steel Plate	\$0.82
17	ASTM A992/A992M Grade 50S / AASHTO M270M/M270 Grade 50S or 345S Structural Steel Shapes	\$0.75
18	ASTM A276 Type 316 Stainless Steel	\$4.24
19	ASTM A240 Type 316 Stainless Steel	\$4.24
20	ASTM A148 Grade 80/50 Steel Castings (See Note below.)	\$1.46
21	ASTM A53 Grade B Structural Steel Pipe	\$0.92
22	ASTM A500 Grades A, B, 36 & 50 Structural Steel Pipe	\$0.92
23	ASTM A252, Grades 240 (36 KSI) & 414 (60 KSI) Pipe Pile	\$0.73
24	ASTM 252, Grade 2 Permanent Steel Casing	\$0.73
25	ASTM A36 (AASHTO M183) for H-piles, steel supports and sign supports	\$0.77
26	ASTM A328 / A328M, Grade 50 (AASHTO M202) Steel Sheetpiling	\$1.39
27	ASTM A572 / A572M, Grade 50 Sheetpiling	\$1.39
28	ASTM A36/36M, Grade 50	\$0.79
29	ASTM A570, Grade 50	\$0.77
30	ASTM A572 (AASHTO M223), Grade 50 H-Piles	\$0.79
31	ASTM A1085 Grade A (50 KSI) Steel Hollow Structural Sections (HSS), heat-treated per ASTM A1085 Supplement S1	\$0.92
32	AREA 140 LB Rail and Track Accessories	\$0.48

NOTE: Steel Castings are generally used only on moveable bridges. Cast iron frames, grates and pipe are not "steel" castings and will not be considered for price adjustments.

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DOCUMENT 00814

SPECIAL PROVISIONS
PRICE ADJUSTMENT FOR PORTLAND CEMENT CONCRETE MIXES

January 12, 2009

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

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

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

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

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

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

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

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

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

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DOCUMENT 00820

**THE COMMONWEALTH OF MASSACHUSETTS
SUPPLEMENTAL EQUAL EMPLOYMENT OPPORTUNITY,
NON-DISCRIMINATION AND AFFIRMATIVE ACTION PROGRAM**

I. Definitions

For purposes of this contract,

"Minority" means a person who meets one or more of the following definitions:

- (a) American Indian or Native American means: all persons having origins in any of the original peoples of North America and who are recognized as an Indian by a tribe or tribal organization.
- (b) Asian means: All persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian sub-continent, or the Pacific Islands, including, but Not limited to China, Japan, Korea, Samoa, India, and the Philippine Islands.
- (c) Black means: All persons having origins in any of the Black racial groups of Africa, including, but not limited to, African-Americans, and all persons having origins in any of the original peoples of the Cape Verdean Islands.
- (d) Eskimo or Aleut means: All persons having origins in any of the peoples of Northern Canada, Greenland, Alaska, and Eastern Siberia.
- (e) Hispanic means: All persons having their origins in any of the Spanish-speaking peoples of Mexico, Puerto Rico, Cuba, Central or South America, or the Caribbean Islands.

"State construction contract" means a contract for the construction, reconstruction, installation, demolition, maintenance or repair of a building or capital facility, or a contract for the construction, reconstruction, alteration, remodeling or repair of a public work undertaken by a department, agency, board, or commission of the commonwealth.

"State assisted construction contract" means a contract for the construction, reconstruction, installation, demolition, maintenance or repair of a building or capital facility undertaken by a political subdivision of the commonwealth, or two or more political subdivisions thereof, an authority, or other instrumentality and whose costs of the contract are paid for, reimbursed, grant funded, or otherwise supported, in whole or in part, by the commonwealth.

II. Equal Opportunity, Non-Discrimination and Affirmative Action

During the performance of this Contract, the Contractor and all subcontractors (hereinafter collectively referred to as "the Contractor") for a state construction contract or a state assisted construction contract, for him/herself, his/her assignees and successors in interest, agree to comply with all applicable equal employment opportunity, non-discrimination and affirmative action requirements, including but not limited to the following:

In connection with the performance of work under this contract, the Contractor shall not discriminate against any employee or applicant for employment because of race, color, religious creed, national origin, sex, sexual orientation, genetic information, military service, age, ancestry or disability, shall not discriminate in the selection or retention of subcontractors, and shall not discriminate in the procurement of materials and rentals of equipment.

The aforesaid provision shall include, but not be limited to, the following: employment upgrading, demotion, or transfer; recruitment advertising, layoff or termination; rates of pay or other forms of compensation; conditions or privileges of employment; and selection for apprenticeship or on-the-job training opportunity. The Contractor shall comply with the provisions of chapter 151B of the Massachusetts General Laws, as amended, and all other applicable anti-discrimination and equal opportunity laws, all of which are herein incorporated by reference and made a part of this Contract.

The Contractor shall post hereafter in conspicuous places, available for employees and applicants for employment, notices to be provided by the Massachusetts Commission Against Discrimination setting forth the provisions of the Fair Employment Practices Law of the Commonwealth (Massachusetts General Laws Chapter 151 B).

In connection with the performance of work under this contract, the Contractor shall undertake, in good faith, affirmative action measures to eliminate any discriminatory barriers in the terms and conditions of employment on the grounds of race, color, religious creed, national origin, sex, sexual orientation, genetic information, military service, age, ancestry or disability. Such affirmative action measures shall entail positive and aggressive measures to ensure nondiscrimination and to promote equal opportunity in the areas of hiring, upgrading, demotion or transfer, recruitment, layoff or termination, rate of compensation, apprenticeship and on-the-job training programs. A list of positive and aggressive measures shall include, but not be limited to, advertising employment opportunities in minority and other community news media; notifying minority, women and other community-based organizations of employment opportunities; validating all job specifications, selection requirements, and tests; maintaining a file of names and addresses of each worker referred to the Contractor and what action was taken concerning such worker; and notifying the administering agency in writing when a union with whom the Contractor has a collective bargaining agreement has failed to refer a minority or woman worker. These and other affirmative action measures shall include all actions required to guarantee equal employment opportunity for all persons, regardless of race, color, religious creed, national origin, sex, sexual orientation, genetic information, military service, age, ancestry or disability. One purpose of this provision is to ensure to the fullest extent possible an adequate supply of skilled tradesmen for this and future Commonwealth public construction projects.

III. Minority and Women Workforce Participation

Pursuant to his/her obligations under the preceding section, the Contractor shall strive to achieve on this project the labor participation goals contained herein. Said participation goals shall apply in each job category on this project including but not limited to bricklayers, carpenters, cement masons, electricians, ironworkers, operating engineers and those classes of work enumerated in Section 44F of Chapter 149 of the Massachusetts General Laws. The participation goals for this project shall be 15.3% for minorities and 6.9% for women. The participation goals, as set forth herein, shall not be construed as quotas or set-asides; rather, such participation goals will be used to measure the progress of the Commonwealth's equal opportunity, non-discrimination and affirmative action program. Additionally, the participation goals contained herein should not be seen or treated as a floor or as a ceiling for the employment of particular individuals or group of individuals.

IV. Liaison Committee

At the discretion of the agency that administers the contract for the construction project there may be established for the life of the contract a body to be known as the Liaison Committee. The Liaison Committee shall be composed of one representative each from the agency or agencies administering the contract for the construction project, hereinafter called the administering agency, a representative from the Office of Affirmative action, and such other representatives as may be designated by the administering agency. The Contractor (or his/her agent, if any, designated by him/her as the on-site equal employment opportunity officer) shall recognize the Liaison Committee as an affirmative action body, and shall establish a continuing working relationship with the Liaison Committee, consulting with the Liaison Committee on all matters related to minority recruitment, referral, employment and training.

V. Reports and Records

The Contractor shall prepare projected workforce tables on a quarterly basis when required by the administering agency. These shall be broken down into projections, by week, of workers required in each trade. Copies shall be furnished one week in advance of the commencement of the period covered, and also, when updated, to the administering agency and the Liaison Committee when required.

The Contractor shall prepare weekly reports in a form approved by the administering agency, unless information required is required to be reported electronically by the administering agency, the number of hours worked in each trade by each employee, identified as woman, minority, or non-minority. Copies of these shall be provided at the end of each such week to the administering agency and the Liaison Committee.

Records of employment referral orders, prepared by the Contractor, shall be made available to the administering agency on request.

The Contractor will provide all information and reports required by the administering agency on instructions issued by the administering agency and will permit access to its facilities and any books, records, accounts and other sources of information which may be determined by the administering agency to effect the employment of personnel. This provision shall apply only to information pertinent to the Commonwealth's supplementary non-discrimination, equal opportunity and access and opportunity contract requirements. Where information required is in the exclusive possession of another who fails or refuses to furnish this information, the Contractor shall so certify to the administering agency and shall set forth what efforts he has made to obtain the information.

VI. Access to Work Site

A designee of the administering agency and a designee of the Liaison Committee shall each have a right to access the work site.

VII. Solicitations for Subcontracts, and for the Procurement of Materials and Equipment

In all solicitations either by competitive bidding or negotiation made by the Contractor either for work to be performed under a subcontract or for the procurement of materials or equipment, each potential subcontractor or supplier shall be notified in writing by the Contractor of the Contractor's obligations under this contract relative to non-discrimination and equal opportunity.

VIII. Sanctions

Whenever the administering agency believes the General or Prime Contractor or any subcontractor may not be operating in compliance with the provisions of the Fair Employment Practices Law of the Commonwealth (Massachusetts General Laws Chapter 151B), the administering agency may refer the matter to the Massachusetts Commission Against Discrimination ("Commission") for investigation.

Following the referral of a matter by the administering agency to the Massachusetts Commission Against Discrimination, and while the matter is pending before the MCAD, the administering agency may withhold payments from contractors and subcontractors when it has documentation that the contractor or subcontractor has violated the Fair Employment Practices Law with respect to its activities on the Project, or if the administering agency determines that the contractor has materially failed to comply with its obligations and the requirements of this Section. The amount withheld shall not exceed a withhold of payment to the General or Prime Contractor of 1/100 or 1% of the contract award price or \$5,000, whichever sum is greater, or, if a subcontractor is in non-compliance, a withhold by the administering agency from the General Contractor, to be assessed by the General Contractor as a charge against the subcontractor, of 1/100 or 1% of the subcontractor price, or \$1,000 whichever sum is greater, for each violation of the applicable law or contract requirements. The total withheld from anyone General or Prime Contractor or subcontractor on a Project shall not exceed \$20,000 overall. No withhold of payments or investigation by the Commission or its agent shall be initiated without the administering agency providing prior notice to the Contractor.

If, after investigation, the Massachusetts Commission Against Discrimination finds that a General or Prime Contractor or subcontractor, in commission of a state construction contract or state-assisted construction contract, violated the provisions of the Fair Employment Practices Law, the administering agency may convert the amount withheld as set forth above into a permanent sanction, as a permanent deduct from payments to the General or Prime Contractor or subcontractor, which sanction will be in addition to any such sanctions, fines or penalties imposed by the Massachusetts Commission Against Discrimination.

No sanction enumerated under this Section shall be imposed by the administering agency except after notice to the General or Prime Contractor or subcontractor and an adjudicatory proceeding, as that term is used, under Massachusetts General Laws Chapter 30A, has been conducted.

IX. Severability

The provisions of this section are severable, and if any of these provisions shall be held unconstitutional by any court of competent jurisdiction, the decision of such court shall not affect or impair any of the remaining provisions.

X. Contractor's Certification

After award and prior to the execution of any contract for a state construction contract or a state assisted construction contract, the Prime or General Contractor shall certify that it will comply with all provisions of this Document 00820 Supplemental Equal Employment Opportunity, Non-Discrimination and Affirmative Action Program, by executing Document 00859 Contractor/Subcontractor Certification Form.

XI. Subcontractor Requirements

Prior to the award of any subcontract for a state construction contract or a state assisted construction contract, the Prime or General Contractor shall provide all prospective subcontractors with a complete copy of this Document 00820 entitled "Supplemental Equal Employment Opportunity, Non-Discrimination and Affirmative Action Program" and will incorporate the provisions of this Document 00820 into any and all contracts or work orders for all subcontractors providing work on the Project. In order to ensure that the said subcontractor's certification becomes a part of all subcontracts under the prime contract, the Prime or General Contractor shall certify in writing to the administering agency that it has complied with the requirements as set forth in the preceeding paragraph by executing Document 00859 Contractor/Subcontractor Certification Form.

Rev'd 03/07/14

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DOCUMENT 00821

**ELECTRONIC REPORTING REQUIREMENTS
CIVIL RIGHTS PROGRAMS AND CERTIFIED PAYROLL**

Implemented on March 2, 2009

Revised June 04, 2019

The Massachusetts Department Of Transportation (MassDOT) has replaced the CHAMP reporting system with Equitable Business Opportunity Solution (EBO), a new web-based civil rights reporting software system. This system is capable of handling both civil rights reporting requirements and certified payrolls. The program's functions include the administration of Equal Employment Opportunity (EEO) requirements, On-The-Job Training requirements (OJT), Disadvantage Business Enterprise (DBE) and/or Minority / Women's Business Enterprise (M/WBE) subcontracting requirements, and the electronic collection of certified payrolls associated with MassDOT projects. In addition, this system is used to generate various data required as part of the American Recovery and Reinvestment Act (ARRA). Contractors are responsible for all coordination with all sub-contractors to ensure timely and accurate electronic submission of all required data.

Contractor and Sub-Contractor EBO User Certification

All contractors and sub-contractors must use the EBO software system. The software vendor, Internet Government Solutions (IGS), has developed an online EBO Training Module that is available to contractors and sub-contractors. This module is a self-tutorial which allows all users in the company to access the training, complete the tutorial, and become certified as EBO users for a one time fee of \$75.00. This is the only cost to contractors and sub-contractors associated with the EBO software system. The online EBO Training Module can be accessed at www.ebotraining.com. Click the "Register My Company" button on the login page to begin your training registration. Questions regarding EBO online training should be directed to Gerry Anguilano, IGS at (440) 238-1684.

MassDOT will track contractors and sub-contractors who have successfully completed the on-line training module. All persons performing civil rights program and/or certified payroll functions should be EBO certified.

Vetting of Firms and Designated Firm Individuals

Contractors must authorize a Primary Log-In ID Holder who has completed EBO on-line training to have access to the EBO system by completing and submitting the "Request For EBO System Log-In/Password Form" located on the MassDOT website at: <https://www.mass.gov/how-to/how-to-get-an-ebo-login>. Contractors must also agree to comply with the EBO system user agreement located on the MassDOT website.

All subcontracts entered into on a project must include language that identifies the submission and training requirements that the sub-contractor must perform. Sub-contractors will be approved by the respective District Office of MassDOT through the existing approval process. When new sub-contractors, who have not previously worked for MassDOT, are initially selected by a general contractor, the new sub-contractor must be approved by the District before taking the EBO on-line training module.

Interim Reporting Requirements

Until MassDOT is satisfied that the EBO system is fully operational and functioning as designed, contractors and sub-contractors will be required to submit certified payrolls manually. There will be a transition period where dual reporting, through manual and electronic submission, will be required. MassDOT, however, will notify contractors and sub-contractors when they may cease manual submission of certified payrolls.

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DOCUMENT 00859

CONTRACTOR/SUBCONTRACTOR CERTIFICATION FORM ‡*The contractor shall submit this completed document 00859 to MassDOT for each subcontract.*_____
(Contractor) Date: __________
(Subcontractor) ☐ District Approved SubcontractorContract No: 130935 Project No. 612080 Federal Aid No.: TAP-SRS2(003)XLocation: SPRINGFIELDProject Description: Rebecca M. Johnson Elementary School Improvements (SRTS)

PART 1 CONTRACTOR CERTIFICATION: I hereby certify, as an authorized official of this company, that to the best of my knowledge, information and belief, the company is in compliance with all applicable federal and state laws, rules, and regulations governing fair labor and employment practices, that the company will not discriminate in their employment practices, that the company will make good faith efforts to comply with the minority employee and women employee workforce participation ratio goals and specific affirmative action steps contained in Contract Document 00820 The Commonwealth of Massachusetts Supplemental Equal Employment Opportunity, Non-Discrimination and Affirmative Action Program, and that the company will comply with the special provisions and documentation indicated below (as checked).

I further hereby certify, as an authorized official of this company, that the special provisions and documentation indicated below (as checked) have been or are included in, and made part of, the Subcontractor Agreement entered into with the firm named above.

☐ **This is not a Federally-aided construction project****Document #**

- ☐ 00718 –Participation By Minority Or Women's Business Enterprises and SDVOBE†
- ☐ 00761 –Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion
- ☐ 00820 – MA Supplemental Equal Employment Opportunity, Non-Discrimination, and Affirmative Action Program
- ☐ 00821 – Electronic Reporting Requirements, Civil Rights Programs, and Certified Payroll
- ☐ 00859 – Contractor/Subcontractor Certification Form (this document)
- ☐ 00860 – MA Employment Laws
- ☐ 00861 – Applicable State Wage Rates in the Contract Proposal**
- ☐ B00842 – MA Schedule of Participation By Minority or Women Business Enterprises (M/WBEs)†
- ☐ B00843 – MA Letter of Intent – M/WBEs†
 - ** Does not apply to Material Suppliers, unless performing work on-site
 - † Applies only if Subcontractor is a M/WBE; only include these forms for the particular M/WBE Entity
- ☐ B00844 - Schedule of Participation By SDVOBE
- ☐ B00845 - Letter of Intent – SDVOBE
- ☐ B00846 – M/WBE or SDVOBE Joint Check Arrangement Approval Form
- ☐ B00847 – Joint Venture Affidavit

☐ **This is a Federally-aided construction project (Federal Aid Number is present)****Document #**

- ☐ 00719 – Special Provisions for Participation by Disadvantaged Business Enterprises†
- ☐ 00760 - Form FHWA 1273 - Required Contract Provisions for Federal-Aid Construction Contracts
- ☐ 00820 – MA Supplemental Equal Employment Opportunity, Non-Discrimination and Affirmative Action Program
- ☐ 00821 – Electronic Reporting Requirements, Civil Rights Programs and Certified Payroll
- ☐ 00859 – Contractor/Subcontractor Certification Form (this document)
- ☐ 00860 – MA Employment Laws
- ☐ 00870 – Standard Federal Equal Employment Opportunity Construction Contract Specifications Executive Order 11246, (41 CFR Parts 60-4.2 and 60-4.3 (Solicitations and Equal Opportunity Clauses))*
- ☐ 00875 – Federal Trainee Special Provisions

- ☐ B00853 – Schedule of Participation by Disadvantaged Business Enterprise†
☐ B00854 – Letter of Intent – DBEs†
☐ B00855 – DBE Joint Check Arrangement Approval Form
☐ B00856 – Joint Venture Affidavit
☐ 00861/00880 - Applicable state and federal wage rates from Contract Proposal**

*Applicable only to Contracts or Subcontracts in excess of \$10,000

**Does not apply to Material Suppliers, unless performing work on-site

† Applies only if Subcontractor is a DBE; only include these forms for the particular DBE Entity

Signed this _____ Day of _____, 20____ Under The Pains And Penalties Of Perjury.

 (Print Name and Title)

 (Authorized Signature)

PART 2

PART 2. SUBCONTRACTOR CERTIFICATION: I hereby certify, as an authorized official of this company, that the required documents in Part 1 above were physically incorporated in our Agreement/Subcontract with the Contractor and give assurance that this company will fully comply or make every good faith effort to comply with the same. I further certify that:

1. This company recognizes that if this is a Federal-Aid Project, then this Contract is covered by the equal employment opportunity laws administered and enforced by the United States Department of Labor ("USDOL"), Office of Federal Contract Compliance Programs ("OFCCP"). By signing below, we acknowledge that this company has certain reporting obligations to the OFCCP, as specified by 41 CFR Part 60-4.2.
2. This company further acknowledges that any contractor with fifty (50) or more employees on a Federal-aid Contract with a value of fifty-thousand (\$50,000) dollars or more must annually file an EEO-1 Report (SF 100) to the EEOC, Joint Reporting Committee, on or before September 30th, each year, as specified by 41 CFR Part 60-1.7a.
3. For more information regarding the federal reporting requirements, please contact the USDOL, OFCCP Regional Office, at 1-646-264-3170 or EEO-1, Joint Reporting Committee at 1-866-286-6440. You may also find guidance at: <http://www.dol.gov/ofccp/TAguides/consttag.pdf> or <http://www.wdol.gov/dba.aspx#0>.
4. This company ☐ has, ☐ has not, participated in a previous contract or subcontract subject to the Equal Opportunity clauses set forth in 41 CFR Part 60-4 and Executive Order 11246, and where required, has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs or the EEO Commission all reports due under the applicable filing requirements.
5. This company is in full compliance with applicable Federal and Commonwealth of Massachusetts laws, rules, and regulations and is not currently debarred or disqualified from bidding on or participating in construction contracts in any jurisdiction of the United States. See : <https://www.mass.gov/service-details/contractors-and-vendors-suspended-or-debarred-by-massdot>
6. This company is properly registered and in good standing with the Office of the Secretary of the Commonwealth.

Signed this _____ Day of _____, 20____, Under The Pains And Penalties Of Perjury.

Firm: _____

Address: _____

 (Print Name and Title)

Telephone Number: _____

Federal I.D. Number: _____

 (Authorized Signature)

Estimated Start Date: _____

Estimated Completion Date: _____

Estimated Dollar Amount: _____

 (Date)

DOCUMENT 00860

COMMONWEALTH OF MASSACHUSETTS PUBLIC EMPLOYMENT LAWS

Revised February 20, 2019

The Contractor's attention is directed to Massachusetts General Laws, Chapter 149, Sections 26 through 27H, and 150A. This contract is considered to fall within the ambit of that law, which provides that in general, the Prevailing Rate or Total Rate must be paid to employees working on projects funded by the Commonwealth of Massachusetts or any political subdivision including Massachusetts Department of Transportation (MassDOT).

A Federal Aid project is also subject to the Federal Minimum Wage Rate law for construction. When comparing a state minimum wage rate, monitored by the Massachusetts Attorney General, versus federal minimum wage rate, monitored by the U.S. Department of Labor Wage and Hour Division, for a particular job classification the higher wage is at all times to be paid to the affected employee.

Every contractor or subcontractor engaged in this contract to which sections twenty-seven and twenty-seven A apply will keep a true and accurate record of all mechanics and apprentices, teamsters, chauffeurs and laborers employed thereon, showing the name, address and occupational classification of each such employee on this contract, and the hours worked by, and the wages paid to, each such employee, and shall furnish to the MassDOT's Resident Engineer, on a weekly basis, a copy of said record, in a form approved by MassDOT and in accordance with M.G.L. c. 149, § 27B, signed by the employer or his/her authorized agent under the penalties of perjury.

Each such contractor or subcontractor shall preserve its payroll records for a period of three years from the date of completion of the contract.

The Prevailing Wage Rate generally includes the following:

Minimum Hourly Wage + Employer Contributions to Benefit Plans = Prevailing Wage Rate or Total Rate

Any employer who does not make contributions to Benefit Plans must pay the total Prevailing Wage Rate directly to the employee.

Any deduction from the Prevailing Wage Rate or Total Rate for contributions to benefit plans can only be for a Health & Welfare, Pension, or Supplementary Unemployment plan meeting the requirements of the Employee Retirement Income Security Act (ERISA) of 1974. The maximum allowable deduction for these benefits from the prevailing wage rate cannot be greater than the amount allowed by Executive Office of Labor (EOL) for the specified benefits. Any additional expense of providing benefits to the employees is to be borne by the employer and cannot be deducted from the Minimum Hourly Wage. If the employer's benefit expense is less than that so provided by EOL the difference will be paid directly to the employee. The rate established must be paid to all employees who perform work on the project.

When an employer makes deductions from the Minimum Hourly Wage for an employee's contribution to social security, state taxes, federal taxes, and/or other contribution programs, allowed by law, the employer shall furnish each employee a suitable pay slip, check stub or envelope notifying the employee of the amount of the deductions.

No contractor or subcontractor contracting for any part of the contract week shall require or permit any laborer or mechanic to be employed on such work in excess of forty hours in any workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times his basic rate of pay for all hours worked in excess of forty hours in such workweek, whichever is the greater number of overtime hours.

Apprentice Rates are permitted only when there is an Apprentice Agreement registered with the Massachusetts Division of Apprentice Training in accordance with M.G.L. c. 23, § 11E-11L.

The Prevailing Wage Rates issued for each project shall be the rates paid for the entire project. The Prevailing Wage Rates must be posted on the job site at all times and be visible from a public way.

In addition, each such contractor and subcontractor shall furnish to the MassDOT's Resident Engineer, within fifteen days after completion of its portion of the work, a statement, executed by the contractor or subcontractor or by any authorized officer or employee of the contractor or subcontractor who supervises the payment of wages, in the following form:

STATEMENT OF COMPLIANCE

Date: _____

I, _____ do hereby state:
(Name of signatory party) (Title)

That I pay or supervise the payment of the persons employed by:

(Contractor or Subcontractor)

on the _____
(MassDOT Project Location and Contract Number)

and that all mechanics and apprentices, teamsters, chauffeurs and laborers employed on said project have been paid in accordance with wages determined under the provisions of sections twenty-six and twenty-seven of chapter one hundred and forty-nine of the General Laws.

Signature _____

Title _____

The above-mentioned copies of payroll records and statements of compliance shall be available for inspection by any interested party filing a written request to the MassDOT's Resident Engineer for such inspection and copying.

Massachusetts General Laws c. 149, §27, requires annual updates to prevailing wage schedules for all public construction contracts lasting longer than one year. MassDOT will request the required updates and furnish them to the Contractor. The Contractor is required to pay no less than the wage rates indicated on the annual updated wage schedules.

MassDOT will request the updates no later than two week before the anniversary of the Notice to Proceed date of the contract to allow for adequate processing by the Department of Labor Standards (DLS). The effective date for the new rates will be the anniversary date of the contract (i.e. the notice to proceed date), regardless of the date of issuance on the schedule from DLS.

All bidders are cautioned that the aforementioned laws require that employers pay to covered employees no less than the applicable minimum wages. In addition, the same laws require that the applicable prevailing wages become incorporated as part of this contract. The prevailing minimum wage law establishes serious civil and criminal penalties for violations, including imprisonment and exclusion from future public contracts. Bidders are cautioned to carefully read the relevant sections of the Massachusetts General Laws.

*** END OF DOCUMENT ***

DOCUMENT 00861

STATE PREVAILING WAGE RATES

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**THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT
DEPARTMENT OF LABOR STANDARDS
Prevailing Wage Rates**

MAURA HEALY
Governor

KIM DRISCOLL
Lt. Governor

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

LAUREN JONES
Secretary
MICHAEL FLANAGAN
Director

Awarding Authority: MassDOT Highway **City/Town:** SPRINGFIELD
Contract Number: 130935
Description of Work: SPRINGFIELD - Federal Aid Project No. TAP-SRS2(003)X Rebecca M. Johnson Elementary School Improvements (SRTS)
Job Location: Along Catharine Street

Information about Prevailing Wage Schedules for Awarding Authorities and Contractors

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

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
(2 AXLE) DRIVER - EQUIPMENT	6/1/2025	\$40.95	\$15.57	\$20.17	\$0.00	\$0.00	\$76.69
TEAMSTERS JOINT COUNCIL NO. 10	12/1/2025	\$40.95	\$15.57	\$21.78	\$0.00	\$0.00	\$78.30
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	1/1/2026	\$40.95	\$16.17	\$21.78	\$0.00	\$0.00	\$78.90
	6/1/2026	\$41.95	\$16.17	\$21.78	\$0.00	\$0.00	\$79.90
	12/1/2026	\$41.95	\$16.17	\$23.52	\$0.00	\$0.00	\$81.64
	1/1/2027	\$41.95	\$16.77	\$23.52	\$0.00	\$0.00	\$82.24
(3 AXLE) DRIVER - EQUIPMENT	6/1/2025	\$41.02	\$15.57	\$20.17	\$0.00	\$0.00	\$76.76
TEAMSTERS JOINT COUNCIL NO. 10	12/1/2025	\$41.02	\$15.57	\$21.78	\$0.00	\$0.00	\$78.37
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	1/1/2026	\$41.02	\$16.17	\$21.78	\$0.00	\$0.00	\$78.97
	6/1/2026	\$42.02	\$16.17	\$21.78	\$0.00	\$0.00	\$79.97
	12/1/2026	\$42.02	\$16.17	\$23.52	\$0.00	\$0.00	\$81.71
	1/1/2027	\$42.02	\$16.77	\$23.52	\$0.00	\$0.00	\$82.31
(4 & 5 AXLE) DRIVER - EQUIPMENT	6/1/2025	\$41.14	\$15.57	\$20.17	\$0.00	\$0.00	\$76.88
TEAMSTERS JOINT COUNCIL NO. 10	12/1/2025	\$41.14	\$15.57	\$21.78	\$0.00	\$0.00	\$78.49
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	1/1/2026	\$41.14	\$16.17	\$21.78	\$0.00	\$0.00	\$79.09
	6/1/2026	\$42.14	\$16.17	\$21.78	\$0.00	\$0.00	\$80.09
	12/1/2026	\$42.14	\$16.17	\$23.52	\$0.00	\$0.00	\$81.83
	1/1/2027	\$42.14	\$16.77	\$23.52	\$0.00	\$0.00	\$82.43
ADS/SUBMERSIBLE PILOT	8/1/2024	\$117.16	\$10.08	\$11.62	\$12.67	\$0.00	\$151.53
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 3)							
For apprentice rates see "Apprentice- PILE DRIVER"							
AIR TRACK OPERATOR	6/2/2025	\$37.00	\$9.90	\$9.25	\$8.32	\$0.00	\$64.47
LABORERS	12/1/2025	\$38.25	\$9.90	\$9.25	\$8.32	\$0.00	\$65.72
LABORERS - ZONE 3 (BUILDING & SITE)	6/1/2026	\$39.55	\$9.90	\$9.25	\$8.32	\$0.00	\$67.02
	12/7/2026	\$40.85	\$9.90	\$9.25	\$8.32	\$0.00	\$68.32
	6/7/2027	\$42.25	\$9.90	\$9.25	\$8.32	\$0.00	\$69.72
	12/6/2027	\$43.65	\$9.90	\$9.25	\$8.32	\$0.00	\$71.12
	6/5/2028	\$45.15	\$9.90	\$9.25	\$8.32	\$0.00	\$72.62
	12/4/2028	\$46.65	\$9.90	\$9.25	\$8.32	\$0.00	\$74.12
For apprentice rates see "Apprentice- LABORER"							
AIR TRACK OPERATOR (HEAVY & HIGHWAY)	6/1/2025	\$37.00	\$9.90	\$9.25	\$6.31	\$0.00	\$62.46
LABORERS	12/1/2025	\$38.24	\$9.90	\$9.25	\$6.31	\$0.00	\$63.70
LABORERS - ZONE 3 (HEAVY & HIGHWAY)	6/1/2026	\$39.54	\$9.90	\$9.25	\$6.31	\$0.00	\$65.00
	12/1/2026	\$40.83	\$9.90	\$9.25	\$6.31	\$0.00	\$66.29
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
ASBESTOS WORKER (PIPES & TANKS)	6/1/2025	\$39.42	\$14.50	\$4.30	\$6.25	\$0.00	\$64.47
HEAT & FROST INSULATORS LOCAL 6	12/1/2025	\$40.32	\$14.50	\$4.30	\$6.25	\$0.00	\$65.37
HEAT & FROST INSULATORS LOCAL 6 (SPRINGFIELD)							
ASPHALT RAKER	6/2/2025	\$36.50	\$9.90	\$9.25	\$8.32	\$0.00	\$63.97
LABORERS	12/1/2025	\$37.75	\$9.90	\$9.25	\$8.32	\$0.00	\$65.22
LABORERS - ZONE 3 (BUILDING & SITE)	6/1/2026	\$39.05	\$9.90	\$9.25	\$8.32	\$0.00	\$66.52
	12/7/2026	\$40.35	\$9.90	\$9.25	\$8.32	\$0.00	\$67.82

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	6/7/2027	\$41.75	\$9.90	\$9.25	\$8.32	\$0.00	\$69.22
	12/6/2027	\$43.15	\$9.90	\$9.25	\$8.32	\$0.00	\$70.62
	6/5/2028	\$44.65	\$9.90	\$9.25	\$8.32	\$0.00	\$72.12
	12/4/2028	\$46.15	\$9.90	\$9.25	\$8.32	\$0.00	\$73.62
For apprentice rates see "Apprentice- LABORER"							
ASPHALT RAKER (HEAVY & HIGHWAY)	6/1/2025	\$36.50	\$9.90	\$9.25	\$6.31	\$0.00	\$61.96
LABORERS	12/1/2025	\$37.74	\$9.90	\$9.25	\$6.31	\$0.00	\$63.20
LABORERS - ZONE 3 (HEAVY & HIGHWAY)	6/1/2026	\$39.04	\$9.90	\$9.25	\$6.31	\$0.00	\$64.50
	12/1/2026	\$40.33	\$9.90	\$9.25	\$6.31	\$0.00	\$65.79
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
AUTOMATIC GRADER-EXCAVATOR (RECLAIMER)	12/1/2023	\$39.56	\$13.78	\$12.15	\$3.00	\$0.00	\$68.49
OPERATING ENGINEERS LOCAL 98							
OPERATING ENGINEERS LOCAL 98							
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
BACKHOE/FRONT-END LOADER OPERATOR	12/1/2023	\$39.56	\$13.78	\$12.15	\$3.00	\$0.00	\$68.49
OPERATING ENGINEERS LOCAL 98							
OPERATING ENGINEERS LOCAL 98							
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
BARCO-TYPE JUMPING TAMPER	6/2/2025	\$36.50	\$9.90	\$9.25	\$8.32	\$0.00	\$63.97
LABORERS	12/1/2025	\$37.75	\$9.90	\$9.25	\$8.32	\$0.00	\$65.22
LABORERS - ZONE 3 (BUILDING & SITE)	6/1/2026	\$39.05	\$9.90	\$9.25	\$8.32	\$0.00	\$66.52
	12/7/2026	\$40.35	\$9.90	\$9.25	\$8.32	\$0.00	\$67.82
	6/7/2027	\$41.75	\$9.90	\$9.25	\$8.32	\$0.00	\$69.22
	12/6/2027	\$43.15	\$9.90	\$9.25	\$8.32	\$0.00	\$70.62
	6/5/2028	\$44.65	\$9.90	\$9.25	\$8.32	\$0.00	\$72.12
	12/4/2028	\$46.15	\$9.90	\$9.25	\$8.32	\$0.00	\$73.62
For apprentice rates see "Apprentice- LABORER"							
BATCH/CEMENT PLANT - ON SITE	12/1/2023	\$39.03	\$13.78	\$12.15	\$3.00	\$0.00	\$67.96
OPERATING ENGINEERS LOCAL 98							
OPERATING ENGINEERS LOCAL 98							
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
BLOCK PAVER, RAMMER / CURB SETTER	6/2/2025	\$37.00	\$9.90	\$9.25	\$8.32	\$0.00	\$64.47
LABORERS	12/1/2025	\$38.25	\$9.90	\$9.25	\$8.32	\$0.00	\$65.72
LABORERS - ZONE 3 (BUILDING & SITE)	6/1/2026	\$39.55	\$9.90	\$9.25	\$8.32	\$0.00	\$67.02
	12/7/2026	\$40.85	\$9.90	\$9.25	\$8.32	\$0.00	\$68.32
	6/7/2027	\$42.25	\$9.90	\$9.25	\$8.32	\$0.00	\$69.72
	12/6/2027	\$43.65	\$9.90	\$9.25	\$8.32	\$0.00	\$71.12
	6/5/2028	\$45.15	\$9.90	\$9.25	\$8.32	\$0.00	\$72.62
	12/4/2028	\$46.65	\$9.90	\$9.25	\$8.32	\$0.00	\$74.12
For apprentice rates see "Apprentice- LABORER"							
BLOCK PAVER, RAMMER / CURB SETTER (HEAVY & HIGHWAY)	6/1/2025	\$37.00	\$9.90	\$9.25	\$6.31	\$0.00	\$62.46
LABORERS	12/1/2025	\$38.24	\$9.90	\$9.25	\$6.31	\$0.00	\$63.70
LABORERS - ZONE 3 (HEAVY & HIGHWAY)	6/1/2026	\$39.54	\$9.90	\$9.25	\$6.31	\$0.00	\$65.00
	12/1/2026	\$40.83	\$9.90	\$9.25	\$6.31	\$0.00	\$66.29
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
BOILER MAKER	1/1/2024	\$48.12	\$7.07	\$14.60	\$6.00	\$0.00	\$75.79
BOILERMAKERS LOCAL 29							
BOILERMAKERS LOCAL 29							

Apprentice: BOILER MAKER**Effective Date: 1/1/2024**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	65.00	\$31.28	\$7.07	\$9.32	\$3.90	\$0.00	\$51.57
2	65.00	\$31.28	\$7.07	\$9.32	\$3.90	\$0.00	\$51.57
3	70.00	\$33.68	\$7.07	\$10.03	\$4.20	\$0.00	\$54.98
4	75.00	\$36.09	\$7.07	\$10.74	\$4.50	\$0.00	\$58.40
5	80.00	\$38.50	\$7.07	\$11.45	\$4.80	\$0.00	\$61.82
6	85.00	\$40.90	\$7.07	\$12.18	\$5.10	\$0.00	\$65.25
7	90.00	\$43.31	\$7.07	\$12.88	\$5.40	\$0.00	\$68.66
8	95.00	\$45.71	\$7.07	\$13.62	\$5.70	\$0.00	\$72.10

BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING)	2/1/2025	\$54.21	\$11.49	\$15.57	\$5.89	\$0.00	\$87.16
BRICKLAYERS LOCAL 3	8/1/2025	\$56.36	\$11.49	\$15.57	\$5.89	\$0.00	\$89.31
BRICKLAYERS LOCAL 3 (SPRINGFIELD/PITTSFIELD)	2/1/2026	\$57.71	\$11.49	\$15.57	\$5.89	\$0.00	\$90.66
	8/1/2026	\$59.91	\$11.49	\$15.57	\$5.89	\$0.00	\$92.86
	2/1/2027	\$61.31	\$11.49	\$15.57	\$5.89	\$0.00	\$94.26

Apprentice: BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING)**Effective Date: 2/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$27.11	\$11.49	\$15.57	\$5.89	\$0.00	\$60.06
2	60.00	\$32.53	\$11.49	\$15.57	\$5.89	\$0.00	\$65.48
3	70.00	\$37.95	\$11.49	\$15.57	\$5.89	\$0.00	\$70.90
4	80.00	\$43.37	\$11.49	\$15.57	\$5.89	\$0.00	\$76.32
5	90.00	\$48.79	\$11.49	\$15.57	\$5.89	\$0.00	\$81.74

Apprentice: BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING)**Effective Date: 8/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$28.18	\$11.49	\$15.57	\$5.89	\$0.00	\$61.13
2	60.00	\$33.82	\$11.49	\$15.57	\$5.89	\$0.00	\$66.77
3	70.00	\$39.45	\$11.49	\$15.57	\$5.89	\$0.00	\$72.40
4	80.00	\$45.09	\$11.49	\$15.57	\$5.89	\$0.00	\$78.04
5	90.00	\$50.72	\$11.49	\$15.57	\$5.89	\$0.00	\$83.67

BULLDOZER/POWER SHOVEL/TREE SHREDDER /CLAM SHELL	12/1/2023	\$39.56	\$13.78	\$12.15	\$3.00	\$0.00	\$68.49
OPERATING ENGINEERS LOCAL 98							
OPERATING ENGINEERS LOCAL 98							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
CAISSON & UNDERPINNING BOTTOM MAN	6/1/2025	\$48.85	\$9.90	\$9.25	\$9.80	\$0.00	\$77.80
LABORERS	12/1/2025	\$50.35	\$9.90	\$9.25	\$9.80	\$0.00	\$79.30
LABORERS - FOUNDATION AND MARINE	6/1/2026	\$51.90	\$9.90	\$9.25	\$9.80	\$0.00	\$80.85
	12/1/2026	\$53.40	\$9.90	\$9.25	\$9.80	\$0.00	\$82.35
For apprentice rates see "Apprentice- LABORER"							
CAISSON & UNDERPINNING LABORER	6/1/2025	\$47.70	\$9.90	\$9.25	\$9.80	\$0.00	\$76.65
LABORERS	12/1/2025	\$49.20	\$9.90	\$9.25	\$9.80	\$0.00	\$78.15
LABORERS - FOUNDATION AND MARINE	6/1/2026	\$50.75	\$9.90	\$9.25	\$9.80	\$0.00	\$79.70
	12/1/2026	\$52.25	\$9.90	\$9.25	\$9.80	\$0.00	\$81.20
For apprentice rates see "Apprentice- LABORER"							
CAISSON & UNDERPINNING TOP MAN	6/1/2025	\$48.03	\$9.90	\$9.25	\$9.80	\$0.00	\$76.98
LABORERS	12/1/2025	\$49.53	\$9.90	\$9.25	\$9.80	\$0.00	\$78.48
LABORERS - FOUNDATION AND MARINE	6/1/2026	\$51.08	\$9.90	\$9.25	\$9.80	\$0.00	\$80.03
	12/1/2026	\$52.58	\$9.90	\$9.25	\$9.80	\$0.00	\$81.53
For apprentice rates see "Apprentice- LABORER"							
CARBIDE CORE DRILL OPERATOR	6/2/2025	\$36.50	\$9.90	\$9.25	\$8.32	\$0.00	\$63.97
LABORERS	12/1/2025	\$37.75	\$9.90	\$9.25	\$8.32	\$0.00	\$65.22
LABORERS - ZONE 3 (BUILDING & SITE)	6/1/2026	\$39.05	\$9.90	\$9.25	\$8.32	\$0.00	\$66.52
	12/7/2026	\$40.35	\$9.90	\$9.25	\$8.32	\$0.00	\$67.82
	6/7/2027	\$41.75	\$9.90	\$9.25	\$8.32	\$0.00	\$69.22
	12/6/2027	\$43.15	\$9.90	\$9.25	\$8.32	\$0.00	\$70.62
	6/5/2028	\$44.65	\$9.90	\$9.25	\$8.32	\$0.00	\$72.12
	12/4/2028	\$46.15	\$9.90	\$9.25	\$8.32	\$0.00	\$73.62
For apprentice rates see "Apprentice- LABORER"							
CARPENTER	3/1/2025	\$43.26	\$7.91	\$11.25	\$6.90	\$0.00	\$69.32
CARPENTERS	9/1/2025	\$44.21	\$7.91	\$11.25	\$6.90	\$0.00	\$70.27
CARPENTERS LOCAL 336 - HAMPDEN HAMPSHIRE	3/1/2026	\$45.11	\$7.91	\$11.25	\$6.90	\$0.00	\$71.17
FRANKLIN	9/1/2026	\$46.06	\$7.91	\$11.25	\$6.90	\$0.00	\$72.12
	3/1/2027	\$46.96	\$7.91	\$11.25	\$6.90	\$0.00	\$73.02

Apprentice: CARPENTER							
Effective Date: 3/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$19.47	\$7.91	\$0.00	\$1.40	\$0.00	\$28.78
2	45.00	\$19.47	\$7.91	\$0.00	\$1.40	\$0.00	\$28.78
3	55.00	\$23.79	\$7.91	\$0.00	\$2.76	\$0.00	\$34.46
4	55.00	\$23.79	\$7.91	\$0.00	\$2.76	\$0.00	\$34.46
5	70.00	\$30.28	\$7.91	\$11.25	\$4.14	\$0.00	\$53.58
6	70.00	\$30.28	\$7.91	\$11.25	\$4.14	\$0.00	\$53.58
7	80.00	\$34.61	\$7.91	\$11.25	\$5.52	\$0.00	\$59.29
8	80.00	\$34.61	\$7.91	\$11.25	\$5.52	\$0.00	\$59.29

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: CARPENTER Effective Date: 9/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$19.89	\$7.91	\$0.00	\$1.38	\$0.00	\$29.18
2	45.00	\$19.89	\$7.91	\$0.00	\$1.38	\$0.00	\$29.18
3	55.00	\$24.32	\$7.91	\$0.00	\$2.76	\$0.00	\$34.99
4	55.00	\$24.32	\$7.91	\$0.00	\$2.76	\$0.00	\$34.99
5	70.00	\$30.95	\$7.91	\$11.25	\$4.14	\$0.00	\$54.25
6	70.00	\$30.95	\$7.91	\$11.25	\$4.14	\$0.00	\$54.25
7	80.00	\$35.37	\$7.91	\$11.25	\$5.52	\$0.00	\$60.05
8	80.00	\$35.37	\$7.91	\$11.25	\$5.52	\$0.00	\$60.05
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CARPENTER WOOD FRAME	10/1/2024	\$26.65	\$7.02	\$3.80	\$1.00	\$0.00	\$38.47
CARPENTERS	10/1/2025	\$27.75	\$7.02	\$3.80	\$1.00	\$0.00	\$39.57
CARPENTERS-ZONE 3 (Wood Frame)	10/1/2026	\$28.85	\$7.02	\$3.80	\$1.00	\$0.00	\$40.67
All Aspects of New Wood Frame Work							

Apprentice: CARPENTER WOOD FRAME Effective Date: 10/1/2024							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$15.99	\$7.02	\$0.00	\$0.00	\$0.00	\$23.01
2	60.00	\$15.99	\$7.02	\$0.00	\$0.00	\$0.00	\$23.01
3	65.00	\$17.32	\$7.02	\$0.00	\$1.00	\$0.00	\$25.34
4	70.00	\$18.66	\$7.02	\$0.00	\$1.00	\$0.00	\$26.68
5	75.00	\$19.99	\$7.02	\$3.80	\$1.00	\$0.00	\$31.81
6	80.00	\$21.32	\$7.02	\$3.80	\$1.00	\$0.00	\$33.14
7	85.00	\$22.65	\$7.02	\$3.80	\$1.00	\$0.00	\$34.47
8	90.00	\$23.99	\$7.02	\$3.80	\$1.00	\$0.00	\$35.81

Apprentice: CARPENTER WOOD FRAME Effective Date: 10/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$16.65	\$7.02	\$0.00	\$0.00	\$0.00	\$23.67
2	60.00	\$16.65	\$7.02	\$0.00	\$0.00	\$0.00	\$23.67
3	65.00	\$18.04	\$7.02	\$0.00	\$1.00	\$0.00	\$26.06
4	70.00	\$19.43	\$7.02	\$0.00	\$1.00	\$0.00	\$27.45
5	75.00	\$20.81	\$7.02	\$3.80	\$1.00	\$0.00	\$32.63
6	80.00	\$22.20	\$7.02	\$3.80	\$1.00	\$0.00	\$34.02
7	85.00	\$23.59	\$7.02	\$3.80	\$1.00	\$0.00	\$35.41
8	90.00	\$24.98	\$7.02	\$3.80	\$1.00	\$0.00	\$36.80

CEMENT MASONRY/PLASTERING	7/1/2024	\$44.56	\$13.20	\$16.30	\$2.93	\$1.69	\$78.68
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Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
BRICKLAYERS LOCAL 3							
BRICKLAYERS LOCAL 3 (SPRINGFIELD/PITTSFIELD)							

Apprentice: CEMENT MASONRY/PLASTERING**Effective Date: 7/1/2024**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$22.28	\$13.20	\$16.30	\$0.00	\$0.00	\$51.78
2	60.00	\$26.74	\$13.20	\$16.30	\$2.93	\$1.69	\$60.86
3	65.00	\$28.96	\$13.20	\$16.30	\$2.93	\$1.69	\$63.08
4	70.00	\$31.19	\$13.20	\$16.30	\$2.93	\$1.69	\$65.31
5	75.00	\$33.42	\$13.20	\$16.30	\$2.93	\$1.69	\$67.54
6	80.00	\$35.65	\$13.20	\$16.30	\$2.93	\$1.69	\$69.77
7	90.00	\$40.10	\$13.20	\$16.30	\$2.93	\$1.69	\$74.22

CHAIN SAW OPERATOR	6/2/2025	\$36.50	\$9.90	\$9.25	\$8.32	\$0.00	\$63.97
LABORERS	12/1/2025	\$37.75	\$9.90	\$9.25	\$8.32	\$0.00	\$65.22
LABORERS - ZONE 3 (BUILDING & SITE)	6/1/2026	\$39.05	\$9.90	\$9.25	\$8.32	\$0.00	\$66.52
	12/7/2026	\$40.35	\$9.90	\$9.25	\$8.32	\$0.00	\$67.82
	6/7/2027	\$41.75	\$9.90	\$9.25	\$8.32	\$0.00	\$69.22
	12/6/2027	\$43.15	\$9.90	\$9.25	\$8.32	\$0.00	\$70.62
	6/5/2028	\$44.65	\$9.90	\$9.25	\$8.32	\$0.00	\$72.12
	12/4/2028	\$46.15	\$9.90	\$9.25	\$8.32	\$0.00	\$73.62

For apprentice rates see "Apprentice- LABORER"

COMPRESSOR OPERATOR	12/1/2023	\$39.03	\$13.78	\$12.15	\$3.00	\$0.00	\$67.96
OPERATING ENGINEERS LOCAL 98							
OPERATING ENGINEERS LOCAL 98							

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

CRANE OPERATOR	12/1/2023	\$43.06	\$13.78	\$12.15	\$3.00	\$0.00	\$71.99
OPERATING ENGINEERS LOCAL 98							
OPERATING ENGINEERS LOCAL 98							

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

DELEADER (BRIDGE)	1/1/2025	\$58.46	\$9.95	\$11.85	\$12.10	\$0.00	\$92.36
PAINTERS LOCAL 35							
PAINTERS LOCAL 35 - ZONE 3							

Apprentice: DELEADER (BRIDGE)**Effective Date: 1/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$29.23	\$9.95	\$0.00	\$0.00	\$0.00	\$39.18
2	55.00	\$32.15	\$9.95	\$0.00	\$6.66	\$0.00	\$48.76
3	60.00	\$35.08	\$9.95	\$0.00	\$7.26	\$0.00	\$52.29
4	65.00	\$38.00	\$9.95	\$0.00	\$7.87	\$0.00	\$55.82
5	70.00	\$40.92	\$9.95	\$11.85	\$8.47	\$0.00	\$71.19

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate																																
<div>Apprentice: DELEADER (BRIDGE)</div> <div>Effective Date: 1/1/2025</div> <table><thead><tr><th>Step</th><th>Percent</th><th>Apprentice Base Wage</th><th>Health</th><th>Pension</th><th>Annuity</th><th>Supplemental Unemployment</th><th>Total Rate</th></tr></thead><tbody><tr><td>6</td><td>75.00</td><td>\$43.85</td><td>\$9.95</td><td>\$11.85</td><td>\$9.08</td><td>\$0.00</td><td>\$74.73</td></tr><tr><td>7</td><td>80.00</td><td>\$46.77</td><td>\$9.95</td><td>\$11.85</td><td>\$9.68</td><td>\$0.00</td><td>\$78.25</td></tr><tr><td>8</td><td>90.00</td><td>\$52.61</td><td>\$9.95</td><td>\$11.85</td><td>\$10.89</td><td>\$0.00</td><td>\$85.30</td></tr></tbody></table>								Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate	6	75.00	\$43.85	\$9.95	\$11.85	\$9.08	\$0.00	\$74.73	7	80.00	\$46.77	\$9.95	\$11.85	\$9.68	\$0.00	\$78.25	8	90.00	\$52.61	\$9.95	\$11.85	\$10.89	\$0.00	\$85.30
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate																																
6	75.00	\$43.85	\$9.95	\$11.85	\$9.08	\$0.00	\$74.73																																
7	80.00	\$46.77	\$9.95	\$11.85	\$9.68	\$0.00	\$78.25																																
8	90.00	\$52.61	\$9.95	\$11.85	\$10.89	\$0.00	\$85.30																																
DEMO: ADZEMAN	6/2/2025	\$47.75	\$9.90	\$9.25	\$9.65	\$0.00	\$76.55																																
LABORERS	12/1/2025	\$49.25	\$9.90	\$9.25	\$9.65	\$0.00	\$78.05																																
LABORERS - ZONE 3 (BUILDING & SITE)	6/1/2026	\$50.80	\$9.90	\$9.25	\$9.65	\$0.00	\$79.60																																
	12/7/2026	\$52.30	\$9.90	\$9.25	\$9.65	\$0.00	\$81.10																																
	6/7/2027	\$53.90	\$9.90	\$9.25	\$9.65	\$0.00	\$82.70																																
	12/6/2027	\$55.50	\$9.90	\$9.25	\$9.65	\$0.00	\$84.30																																
	6/5/2028	\$57.18	\$9.90	\$9.25	\$9.65	\$0.00	\$85.98																																
	12/4/2028	\$58.85	\$9.90	\$9.25	\$9.65	\$0.00	\$87.65																																
For apprentice rates see "Apprentice- LABORER"																																							
DEMO: BACKHOE/LOADER/HAMMER OPERATOR	6/2/2025	\$48.75	\$9.90	\$9.25	\$9.65	\$0.00	\$77.55																																
LABORERS	12/1/2025	\$50.25	\$9.90	\$9.25	\$9.65	\$0.00	\$79.05																																
LABORERS - ZONE 3 (BUILDING & SITE)	6/1/2026	\$51.80	\$9.90	\$9.25	\$9.65	\$0.00	\$80.60																																
	12/7/2026	\$53.30	\$9.90	\$9.25	\$9.65	\$0.00	\$82.10																																
	6/7/2027	\$54.90	\$9.90	\$9.25	\$9.65	\$0.00	\$83.70																																
	12/6/2027	\$56.50	\$9.90	\$9.25	\$9.65	\$0.00	\$85.30																																
	6/5/2028	\$58.18	\$9.90	\$9.25	\$9.65	\$0.00	\$86.98																																
	12/4/2028	\$59.85	\$9.90	\$9.25	\$9.65	\$0.00	\$88.65																																
For apprentice rates see "Apprentice- LABORER"																																							
DEMO: BURNERS	6/2/2025	\$49.25	\$9.65	\$9.00	\$9.40	\$0.00	\$77.30																																
LABORERS	12/1/2025	\$50.75	\$9.65	\$9.00	\$9.40	\$0.00	\$78.80																																
LABORERS - ZONE 3 (BUILDING & SITE)	6/1/2026	\$52.30	\$9.65	\$9.00	\$9.40	\$0.00	\$80.35																																
	12/7/2026	\$53.80	\$9.65	\$9.00	\$9.40	\$0.00	\$81.85																																
	6/7/2027	\$55.40	\$9.65	\$9.00	\$9.40	\$0.00	\$83.45																																
	12/6/2027	\$57.00	\$9.65	\$9.00	\$9.40	\$0.00	\$85.05																																
	6/5/2028	\$58.68	\$9.65	\$9.00	\$9.40	\$0.00	\$86.73																																
	12/4/2028	\$60.35	\$9.65	\$9.00	\$9.40	\$0.00	\$88.40																																
For apprentice rates see "Apprentice- LABORER"																																							
DEMO: CONCRETE CUTTER/SAWYER	6/2/2025	\$48.75	\$9.90	\$9.25	\$9.65	\$0.00	\$77.55																																
LABORERS	12/1/2025	\$50.25	\$9.90	\$9.25	\$9.65	\$0.00	\$79.05																																
LABORERS - ZONE 3 (BUILDING & SITE)	6/1/2026	\$51.80	\$9.90	\$9.25	\$9.65	\$0.00	\$80.60																																
	12/7/2026	\$53.30	\$9.90	\$9.25	\$9.65	\$0.00	\$82.10																																
	6/7/2027	\$54.90	\$9.90	\$9.25	\$9.65	\$0.00	\$83.70																																
	12/6/2027	\$56.50	\$9.90	\$9.25	\$9.65	\$0.00	\$85.30																																
	6/5/2028	\$58.18	\$9.90	\$9.25	\$9.65	\$0.00	\$86.98																																
	12/4/2028	\$59.85	\$9.90	\$9.25	\$9.65	\$0.00	\$88.65																																
For apprentice rates see "Apprentice- LABORER"																																							
DEMO: JACKHAMMER OPERATOR	6/2/2025	\$49.25	\$9.65	\$9.00	\$9.40	\$0.00	\$77.30																																

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS	12/1/2025	\$50.75	\$9.65	\$9.00	\$9.40	\$0.00	\$78.80
LABORERS - ZONE 3 (BUILDING & SITE)	6/1/2026	\$52.30	\$9.65	\$9.00	\$9.40	\$0.00	\$80.35
	12/7/2026	\$53.80	\$9.65	\$9.00	\$9.40	\$0.00	\$81.85
	6/7/2027	\$55.40	\$9.65	\$9.00	\$9.40	\$0.00	\$83.45
	12/6/2027	\$57.00	\$9.65	\$9.00	\$9.40	\$0.00	\$85.05
	6/5/2028	\$58.68	\$9.65	\$9.00	\$9.40	\$0.00	\$86.73
	12/4/2028	\$60.35	\$9.65	\$9.00	\$9.40	\$0.00	\$88.40
For apprentice rates see "Apprentice- LABORER"							
DEMO: WRECKING LABORER	6/2/2025	\$47.75	\$9.90	\$9.25	\$9.65	\$0.00	\$76.55
LABORERS	12/1/2025	\$49.25	\$9.90	\$9.25	\$9.65	\$0.00	\$78.05
LABORERS - ZONE 3 (BUILDING & SITE)	6/1/2026	\$50.80	\$9.90	\$9.25	\$9.65	\$0.00	\$79.60
	12/7/2026	\$52.30	\$9.90	\$9.25	\$9.65	\$0.00	\$81.10
	6/7/2027	\$53.90	\$9.90	\$9.25	\$9.65	\$0.00	\$82.70
	12/6/2027	\$55.50	\$9.90	\$9.25	\$9.65	\$0.00	\$84.30
	6/5/2028	\$57.18	\$9.90	\$9.25	\$9.65	\$0.00	\$85.98
	12/4/2028	\$58.85	\$9.90	\$9.25	\$9.65	\$0.00	\$87.65
For apprentice rates see "Apprentice- LABORER"							
DIVER	8/1/2024	\$78.11	\$10.08	\$11.62	\$12.67	\$0.00	\$112.48
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 3)							
as of 8-1-24, Apprentices with diving licenses begin at second year. % of Diver wage 70/80/90 2A \$69.83, 3A \$91.79,4A \$102.14 Total Rate							
DIVER TENDER	8/1/2024	\$49.19	\$10.08	\$11.62	\$12.67	\$0.00	\$83.56
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 3)							
as of 8-1-24, Apprentices with diving licenses begin at second year. % of Piledriver wage 70/80/90 2A \$54.20, 3A \$73.93,4A \$82.05 Total Rate							
DIVER TENDER (EFFLUENT)	8/1/2024	\$83.69	\$10.08	\$11.62	\$12.67	\$0.00	\$118.06
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 3)							
For apprentice rates see "Apprentice- PILE DRIVER"							
DIVER/SLURRY (EFFLUENT)	8/1/2024	\$117.16	\$10.08	\$11.62	\$12.67	\$0.00	\$151.53
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 3)							
For apprentice rates see "Apprentice- PILE DRIVER"							
DRAWBRIDGE OPERATOR (Construction)	7/1/2020	\$26.77	\$6.67	\$3.93	\$0.00	\$0.16	\$37.53
DRAWBRIDGE - SEIU LOCAL 888							
DRAWBRIDGE - SEIU LOCAL 888							
ELECTRICIAN (Including Core Drilling)	12/29/2024	\$51.06	\$13.25	\$8.23	\$6.83	\$0.00	\$79.37
ELECTRICIANS LOCAL 7	6/29/2025	\$52.16	\$13.50	\$8.31	\$6.90	\$0.00	\$80.87
ELECTRICIANS LOCAL 7	12/28/2025	\$53.26	\$13.75	\$8.40	\$6.96	\$0.00	\$82.37
	6/28/2026	\$54.41	\$14.00	\$8.43	\$7.03	\$0.00	\$83.87
	1/3/2027	\$55.56	\$14.25	\$8.47	\$7.09	\$0.00	\$85.37

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: ELECTRICIAN (Including Core Drilling)							
Effective Date: 12/29/2024							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	\$20.42	\$7.35	\$0.61	\$0.00	\$0.00	\$28.38
2	45.00	\$22.98	\$7.35	\$0.69	\$0.00	\$0.00	\$31.02
3	50.00	\$25.53	\$13.25	\$7.47	\$0.00	\$0.00	\$46.25
4	55.00	\$28.08	\$13.25	\$7.54	\$0.00	\$0.00	\$48.87
5	65.00	\$33.19	\$13.25	\$9.74	\$0.00	\$0.00	\$56.18
6	70.00	\$35.74	\$13.25	\$11.19	\$0.00	\$0.00	\$60.18
Apprentice: ELECTRICIAN (Including Core Drilling)							
Effective Date: 6/29/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	\$20.86	\$7.50	\$0.63	\$0.00	\$0.00	\$28.99
2	45.00	\$23.47	\$7.50	\$0.70	\$0.00	\$0.00	\$31.67
3	50.00	\$26.08	\$13.50	\$7.53	\$0.00	\$0.00	\$47.11
4	55.00	\$28.69	\$13.50	\$7.61	\$0.00	\$0.00	\$49.80
5	65.00	\$33.90	\$13.50	\$9.84	\$0.00	\$0.00	\$57.24
6	70.00	\$36.51	\$13.50	\$11.30	\$0.00	\$0.00	\$61.31
ELEVATOR CONSTRUCTOR	1/1/2025	\$62.83	\$16.28	\$10.96	\$10.40	\$0.00	\$100.47
ELEVATOR CONSTRUCTORS LOCAL 41	1/1/2026	\$63.68	\$16.38	\$11.06	\$10.70	\$0.00	\$101.82
ELEVATOR CONSTRUCTORS LOCAL 41	1/1/2027	\$64.53	\$16.48	\$11.16	\$11.00	\$0.00	\$103.17
Apprentice: ELEVATOR CONSTRUCTOR							
Effective Date: 1/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$31.42	\$16.28	\$0.00	\$0.00	\$0.00	\$47.70
2	55.00	\$34.56	\$16.28	\$10.96	\$10.40	\$0.00	\$72.20
3	65.00	\$40.84	\$16.28	\$10.96	\$10.40	\$0.00	\$78.48
4	70.00	\$43.98	\$16.28	\$10.96	\$10.40	\$0.00	\$81.62
5	80.00	\$50.26	\$16.28	\$10.96	\$10.40	\$0.00	\$87.90
Apprentice: ELEVATOR CONSTRUCTOR							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$31.84	\$16.38	\$0.00	\$0.00	\$0.00	\$48.22
2	55.00	\$35.02	\$16.38	\$11.06	\$10.70	\$0.00	\$73.16
3	65.00	\$41.39	\$16.38	\$11.06	\$10.70	\$0.00	\$79.53

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate																								
<div>Apprentice: ELEVATOR CONSTRUCTOR</div> <div>Effective Date: 1/1/2026</div> <table><thead><tr><th>Step</th><th>Percent</th><th>Apprentice Base Wage</th><th>Health</th><th>Pension</th><th>Annuity</th><th>Supplemental Unemployment</th><th>Total Rate</th></tr></thead><tbody><tr><td>4</td><td>70.00</td><td>\$44.58</td><td>\$16.38</td><td>\$11.06</td><td>\$10.70</td><td>\$0.00</td><td>\$82.72</td></tr><tr><td>5</td><td>80.00</td><td>\$50.94</td><td>\$16.38</td><td>\$11.06</td><td>\$10.70</td><td>\$0.00</td><td>\$89.08</td></tr></tbody></table>								Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate	4	70.00	\$44.58	\$16.38	\$11.06	\$10.70	\$0.00	\$82.72	5	80.00	\$50.94	\$16.38	\$11.06	\$10.70	\$0.00	\$89.08
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate																								
4	70.00	\$44.58	\$16.38	\$11.06	\$10.70	\$0.00	\$82.72																								
5	80.00	\$50.94	\$16.38	\$11.06	\$10.70	\$0.00	\$89.08																								
ELEVATOR CONSTRUCTOR HELPER	1/1/2025	\$43.98	\$16.28	\$10.96	\$10.40	\$0.00	\$81.62																								
ELEVATOR CONSTRUCTORS LOCAL 41	1/1/2026	\$44.58	\$16.38	\$11.06	\$10.70	\$0.00	\$82.72																								
ELEVATOR CONSTRUCTORS LOCAL 41	1/1/2027	\$45.17	\$16.48	\$11.16	\$11.00	\$0.00	\$83.81																								
For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"																															
FENCE & GUARD RAIL ERECTOR (HEAVY & HIGHWAY)	6/1/2025	\$36.50	\$9.90	\$9.25	\$6.31	\$0.00	\$61.96																								
LABORERS	12/1/2025	\$37.74	\$9.90	\$9.25	\$6.31	\$0.00	\$63.20																								
LABORERS - ZONE 3 (HEAVY & HIGHWAY)	6/1/2026	\$39.04	\$9.90	\$9.25	\$6.31	\$0.00	\$64.50																								
	12/1/2026	\$40.33	\$9.90	\$9.25	\$6.31	\$0.00	\$65.79																								
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"																															
FIELD ENG.INST/ROD-BLDG,SITE,HVY/HWY	6/1/1999	\$18.84	\$4.80	\$4.10	\$0.00	\$0.00	\$27.74																								
OPERATING ENGINEERS LOCAL 98																															
OPERATING ENGINEERS LOCAL 98																															
FIELD ENG.PARTY CHIEF:BLDG,SITE,HVY/HWY	6/1/1999	\$21.33	\$4.80	\$4.10	\$0.00	\$0.00	\$30.23																								
OPERATING ENGINEERS LOCAL 98																															
OPERATING ENGINEERS LOCAL 98																															
FIELD ENG.SURVEY CHIEF-BLDG,SITE,HVY/HWY	6/1/1999	\$22.33	\$4.80	\$4.10	\$0.00	\$0.00	\$31.23																								
OPERATING ENGINEERS LOCAL 98																															
OPERATING ENGINEERS LOCAL 98																															
FIRE ALARM INSTALLER	12/29/2024	\$51.06	\$13.25	\$8.23	\$6.83	\$0.00	\$79.37																								
ELECTRICIANS LOCAL 7	6/29/2025	\$52.16	\$13.50	\$8.31	\$6.90	\$0.00	\$80.87																								
ELECTRICIANS LOCAL 7	12/28/2025	\$53.26	\$13.75	\$8.40	\$6.96	\$0.00	\$82.37																								
	6/28/2026	\$54.41	\$14.00	\$8.43	\$7.03	\$0.00	\$83.87																								
	1/3/2027	\$55.56	\$14.25	\$8.47	\$7.09	\$0.00	\$85.37																								
For apprentice rates see "Apprentice- ELECTRICIAN"																															
FIRE ALARM REPAIR / MAINTENANCE	12/29/2024	\$51.06	\$13.25	\$8.23	\$6.83	\$0.00	\$79.37																								
/ COMMISSIONING	6/29/2025	\$52.16	\$13.50	\$8.31	\$6.90	\$0.00	\$80.87																								
ELECTRICIANS LOCAL 7	12/28/2025	\$53.26	\$13.75	\$8.40	\$6.96	\$0.00	\$82.37																								
ELECTRICIANS LOCAL 7	6/28/2026	\$54.41	\$14.00	\$8.43	\$7.03	\$0.00	\$83.87																								
	1/3/2027	\$55.56	\$14.25	\$8.47	\$7.09	\$0.00	\$85.37																								
For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"																															
FIREMAN	12/1/2023	\$39.03	\$13.78	\$12.15	\$3.00	\$0.00	\$67.96																								
OPERATING ENGINEERS LOCAL 98																															
OPERATING ENGINEERS LOCAL 98																															

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: FIREMAN Effective Date: 12/1/2023							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$23.42	\$13.78	\$12.15	\$3.00	\$0.00	\$52.35
2	70.00	\$27.32	\$13.78	\$12.15	\$3.00	\$0.00	\$56.25
3	80.00	\$31.22	\$13.78	\$12.15	\$3.00	\$0.00	\$60.15
4	90.00	\$35.13	\$13.78	\$12.15	\$3.00	\$0.00	\$64.06
FLAGGER & SIGNALER (HEAVY & HIGHWAY)	6/1/2025	\$28.09	\$9.90	\$9.25	\$6.31	\$0.00	\$53.55
LABORERS	12/1/2025	\$28.09	\$9.90	\$9.25	\$6.31	\$0.00	\$53.55
LABORERS - ZONE 3 (HEAVY & HIGHWAY)	6/1/2026	\$29.21	\$9.90	\$9.25	\$6.31	\$0.00	\$54.67
	12/1/2026	\$29.21	\$9.90	\$9.25	\$6.31	\$0.00	\$54.67
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
FLOORCOVERER	3/1/2025	\$43.26	\$7.91	\$11.25	\$6.90	\$0.00	\$69.32
FLOORCOVERERS LOCAL 2168	9/1/2025	\$44.21	\$7.91	\$11.25	\$6.90	\$0.00	\$70.27
FLOORCOVERERS LOCAL 2168 ZONE III	3/1/2026	\$45.11	\$7.91	\$11.25	\$6.90	\$0.00	\$71.17
	9/1/2026	\$46.06	\$7.91	\$11.25	\$6.90	\$0.00	\$72.12
	3/1/2027	\$46.96	\$7.91	\$11.25	\$6.90	\$0.00	\$73.02
Apprentice: FLOORCOVERER Effective Date: 3/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$19.47	\$7.91	\$0.00	\$1.38	\$0.00	\$28.76
2	45.00	\$19.47	\$7.91	\$0.00	\$1.38	\$0.00	\$28.76
3	55.00	\$23.79	\$7.91	\$0.00	\$2.76	\$0.00	\$34.46
4	55.00	\$23.79	\$7.91	\$0.00	\$2.76	\$0.00	\$34.46
5	70.00	\$30.28	\$7.91	\$11.25	\$4.14	\$0.00	\$53.58
6	70.00	\$30.28	\$7.91	\$11.25	\$4.14	\$0.00	\$53.58
7	80.00	\$34.61	\$7.91	\$11.25	\$5.52	\$0.00	\$59.29
8	80.00	\$34.61	\$7.91	\$11.25	\$5.52	\$0.00	\$59.29
Apprentice: FLOORCOVERER Effective Date: 9/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$19.89	\$7.91	\$0.00	\$1.38	\$0.00	\$29.18
2	45.00	\$19.89	\$7.91	\$0.00	\$1.38	\$0.00	\$29.18
3	55.00	\$24.32	\$7.91	\$0.00	\$2.76	\$0.00	\$34.99
4	55.00	\$24.32	\$7.91	\$0.00	\$2.76	\$0.00	\$34.99
5	70.00	\$30.95	\$7.91	\$11.25	\$4.14	\$0.00	\$54.25
6	70.00	\$30.95	\$7.91	\$11.25	\$4.14	\$0.00	\$54.25
7	80.00	\$35.37	\$7.91	\$11.25	\$5.52	\$0.00	\$60.05

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
HVAC (TESTING AND BALANCING - AIR) SHEETMETAL WORKERS LOCAL 63 SHEETMETAL WORKERS LOCAL 63	1/1/2025	\$42.23	\$12.20	\$10.79	\$7.95	\$2.13	\$75.30
For apprentice rates see "Apprentice- SHEET METAL WORKER"							
HVAC (TESTING AND BALANCING -WATER) PLUMBERS & PIPEFITTERS LOCAL 104 PLUMBERS & PIPEFITTERS LOCAL 104	3/17/2024	\$49.21	\$9.55	\$10.10	\$7.00	\$0.00	\$75.86
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							
HVAC MECHANIC PLUMBERS & PIPEFITTERS LOCAL 104 PLUMBERS & PIPEFITTERS LOCAL 104	3/17/2024	\$49.21	\$9.55	\$10.10	\$7.00	\$0.00	\$75.86
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							
HYDRAULIC DRILLS (HEAVY & HIGHWAY) LABORERS	6/1/2025	\$37.00	\$9.90	\$9.25	\$6.31	\$0.00	\$62.46
LABORERS - ZONE 3 (HEAVY & HIGHWAY)	12/1/2025	\$38.24	\$9.90	\$9.25	\$6.31	\$0.00	\$63.70
	6/1/2026	\$39.54	\$9.90	\$9.25	\$6.31	\$0.00	\$65.00
	12/1/2026	\$40.83	\$9.90	\$9.25	\$6.31	\$0.00	\$66.29
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
INSULATOR (PIPES & TANKS) HEAT & FROST INSULATORS LOCAL 6 HEAT & FROST INSULATORS LOCAL 6 (SPRINGFIELD)	9/1/2024	\$45.54	\$14.75	\$9.52	\$10.09	\$0.00	\$79.90
	9/1/2025	\$48.27	\$14.75	\$9.52	\$10.09	\$0.00	\$82.63
	9/1/2026	\$51.01	\$14.75	\$9.52	\$10.09	\$0.00	\$85.37

Apprentice: INSULATOR (PIPES & TANKS)							
Effective Date: 9/1/2024							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$22.77	\$14.75	\$9.27	\$5.05	\$0.00	\$51.84
2	60.00	\$27.32	\$14.75	\$9.32	\$6.05	\$0.00	\$57.44
3	70.00	\$31.88	\$14.75	\$9.37	\$7.06	\$0.00	\$63.06
4	80.00	\$36.43	\$14.75	\$9.42	\$8.07	\$0.00	\$68.67

Apprentice: INSULATOR (PIPES & TANKS)							
Effective Date: 9/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$24.14	\$14.75	\$9.27	\$5.05	\$0.00	\$53.21
2	60.00	\$28.96	\$14.75	\$9.32	\$6.05	\$0.00	\$59.08
3	70.00	\$33.79	\$14.75	\$9.37	\$7.06	\$0.00	\$64.97
4	80.00	\$38.62	\$14.75	\$9.42	\$8.07	\$0.00	\$70.86

IRONWORKER/WELDER IRONWORKERS LOCAL 7 IRONWORKERS LOCAL 7 (SPRINGFIELD AREA)	3/16/2024	\$40.66	\$8.25	\$12.70	\$10.00	\$0.00	\$71.61
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Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: IRONWORKER/WELDER Effective Date: 3/16/2024							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$24.40	\$8.25	\$12.70	\$10.00	\$0.00	\$55.35
2	70.00	\$28.46	\$8.25	\$12.70	\$10.00	\$0.00	\$59.41
3	75.00	\$30.50	\$8.25	\$12.70	\$10.00	\$0.00	\$61.45
4	80.00	\$32.53	\$8.25	\$12.70	\$10.00	\$0.00	\$63.48
5	85.00	\$34.56	\$8.25	\$12.70	\$10.00	\$0.00	\$65.51
6	90.00	\$36.59	\$8.25	\$12.70	\$10.00	\$0.00	\$67.54
JACKHAMMER & PAVING BREAKER OPERATOR	6/2/2025	\$36.50	\$9.90	\$9.25	\$8.32	\$0.00	\$63.97
LABORERS	12/1/2025	\$37.75	\$9.90	\$9.25	\$8.32	\$0.00	\$65.22
LABORERS - ZONE 3 (BUILDING & SITE)	6/1/2026	\$39.05	\$9.90	\$9.25	\$8.32	\$0.00	\$66.52
	12/7/2026	\$40.35	\$9.90	\$9.25	\$8.32	\$0.00	\$67.82
	6/7/2027	\$41.75	\$9.90	\$9.25	\$8.32	\$0.00	\$69.22
	12/6/2027	\$43.15	\$9.90	\$9.25	\$8.32	\$0.00	\$70.62
	6/5/2028	\$44.65	\$9.90	\$9.25	\$8.32	\$0.00	\$72.12
	12/4/2028	\$46.15	\$9.90	\$9.25	\$8.32	\$0.00	\$73.62
For apprentice rates see "Apprentice- LABORER"							
LABORER	6/2/2025	\$36.75	\$9.90	\$9.25	\$8.32	\$0.00	\$64.22
LABORERS	12/1/2025	\$38.00	\$9.90	\$9.25	\$8.32	\$0.00	\$65.47
LABORERS - ZONE 3 (BUILDING & SITE)	6/1/2026	\$39.30	\$9.90	\$9.25	\$8.32	\$0.00	\$66.77
	12/7/2026	\$40.60	\$9.90	\$9.25	\$8.32	\$0.00	\$68.07
	6/7/2027	\$42.00	\$9.90	\$9.25	\$8.32	\$0.00	\$69.47
	12/6/2027	\$43.40	\$9.90	\$9.25	\$8.32	\$0.00	\$70.87
	6/5/2028	\$44.90	\$9.90	\$9.25	\$8.32	\$0.00	\$72.37
	12/4/2028	\$46.40	\$9.90	\$9.25	\$8.32	\$0.00	\$73.87
Apprentice: LABORER Effective Date: 6/2/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$22.05	\$9.90	\$9.25	\$8.32	\$0.00	\$49.52
2	70.00	\$25.73	\$9.90	\$9.25	\$8.32	\$0.00	\$53.20
3	80.00	\$29.40	\$9.90	\$9.25	\$8.32	\$0.00	\$56.87
4	90.00	\$33.08	\$9.90	\$9.25	\$8.32	\$0.00	\$60.55
Apprentice: LABORER Effective Date: 12/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$22.80	\$9.90	\$9.25	\$8.32	\$0.00	\$50.27
2	70.00	\$26.60	\$9.90	\$9.25	\$8.32	\$0.00	\$54.07

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: LABORER Effective Date: 12/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
3	80.00	\$30.40	\$9.90	\$9.25	\$8.32	\$0.00	\$57.87
4	90.00	\$34.20	\$9.90	\$9.25	\$8.32	\$0.00	\$61.67
LABORER (HEAVY & HIGHWAY)	6/1/2025	\$36.25	\$9.90	\$9.25	\$6.31	\$0.00	\$61.71
LABORERS	12/1/2025	\$37.49	\$9.90	\$9.25	\$6.31	\$0.00	\$62.95
LABORERS - ZONE 3 (HEAVY & HIGHWAY)	6/1/2026	\$38.79	\$9.90	\$9.25	\$6.31	\$0.00	\$64.25
	12/1/2026	\$40.08	\$9.90	\$9.25	\$6.31	\$0.00	\$65.54
Apprentice: LABORER (HEAVY & HIGHWAY) Effective Date: 6/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$21.75	\$9.90	\$9.25	\$6.31	\$0.00	\$47.21
2	70.00	\$25.38	\$9.90	\$9.25	\$6.31	\$0.00	\$50.84
3	80.00	\$29.00	\$9.90	\$9.25	\$6.31	\$0.00	\$54.46
4	90.00	\$32.63	\$9.90	\$9.25	\$6.31	\$0.00	\$58.09
Apprentice: LABORER (HEAVY & HIGHWAY) Effective Date: 12/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$22.49	\$9.90	\$9.25	\$6.31	\$0.00	\$47.95
2	70.00	\$26.24	\$9.90	\$9.25	\$6.31	\$0.00	\$51.70
3	80.00	\$29.99	\$9.90	\$9.25	\$6.31	\$0.00	\$55.45
4	90.00	\$33.74	\$9.90	\$9.25	\$6.31	\$0.00	\$59.20
LABORER: CARPENTER TENDER	6/2/2025	\$36.75	\$9.90	\$9.25	\$8.32	\$0.00	\$64.22
LABORERS	12/1/2025	\$38.00	\$9.90	\$9.25	\$8.32	\$0.00	\$65.47
LABORERS - ZONE 3 (BUILDING & SITE)	6/1/2026	\$39.30	\$9.90	\$9.25	\$8.32	\$0.00	\$66.77
	12/7/2026	\$40.60	\$9.90	\$9.25	\$8.32	\$0.00	\$68.07
	6/7/2027	\$42.00	\$9.90	\$9.25	\$8.32	\$0.00	\$69.47
	12/6/2027	\$43.40	\$9.90	\$9.25	\$8.32	\$0.00	\$70.87
	6/5/2028	\$44.90	\$9.90	\$9.25	\$8.32	\$0.00	\$72.37
	12/4/2028	\$46.40	\$9.90	\$9.25	\$8.32	\$0.00	\$73.87
For apprentice rates see "Apprentice- LABORER"							
LABORER: CEMENT FINISHER TENDER	6/2/2025	\$36.25	\$9.90	\$9.25	\$8.32	\$0.00	\$63.72
LABORERS	12/1/2025	\$37.50	\$9.90	\$9.25	\$8.32	\$0.00	\$64.97
LABORERS - ZONE 3 (BUILDING & SITE)	6/1/2026	\$38.80	\$9.90	\$9.25	\$8.32	\$0.00	\$66.27
	12/7/2026	\$40.10	\$9.90	\$9.25	\$8.32	\$0.00	\$67.57
	6/7/2027	\$41.50	\$9.90	\$9.25	\$8.32	\$0.00	\$68.97
	12/6/2027	\$42.90	\$9.90	\$9.25	\$8.32	\$0.00	\$70.37

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	6/5/2028	\$44.40	\$9.90	\$9.25	\$8.32	\$0.00	\$71.87
	12/4/2028	\$45.90	\$9.90	\$9.25	\$8.32	\$0.00	\$73.37
For apprentice rates see "Apprentice- LABORER"							
LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER LABORERS	6/2/2025	\$36.17	\$9.90	\$9.25	\$8.45	\$0.00	\$63.77
LABORERS - ZONE 3 (BUILDING & SITE)	12/1/2025	\$37.42	\$9.90	\$9.25	\$8.45	\$0.00	\$65.02
	6/1/2026	\$38.72	\$9.90	\$9.25	\$8.45	\$0.00	\$66.32
	12/7/2026	\$40.02	\$9.90	\$9.25	\$8.45	\$0.00	\$67.62
	6/7/2027	\$41.42	\$9.90	\$9.25	\$8.45	\$0.00	\$69.02
	12/6/2027	\$42.82	\$9.90	\$9.25	\$8.45	\$0.00	\$70.42
	6/5/2028	\$44.32	\$9.90	\$9.25	\$8.45	\$0.00	\$71.92
	12/4/2028	\$45.82	\$9.90	\$9.25	\$8.45	\$0.00	\$73.42
For apprentice rates see "Apprentice- LABORER"							
LABORER: MASON TENDER LABORERS	6/2/2025	\$39.25	\$9.90	\$9.25	\$8.32	\$0.00	\$66.72
LABORERS - ZONE 3 (BUILDING & SITE)	12/1/2025	\$40.50	\$9.90	\$9.25	\$8.32	\$0.00	\$67.97
	6/1/2026	\$41.80	\$9.90	\$9.25	\$8.32	\$0.00	\$69.27
	12/7/2026	\$43.10	\$9.90	\$9.25	\$8.32	\$0.00	\$70.57
	6/7/2027	\$44.50	\$9.90	\$9.25	\$8.32	\$0.00	\$71.97
	12/6/2027	\$45.90	\$9.90	\$9.25	\$8.32	\$0.00	\$73.37
	6/5/2028	\$47.40	\$9.90	\$9.25	\$8.32	\$0.00	\$74.87
	12/4/2028	\$48.90	\$9.90	\$9.25	\$8.32	\$0.00	\$76.37
For apprentice rates see "Apprentice- LABORER"							
LABORER: MASON TENDER (HEAVY & HIGHWAY) LABORERS	6/1/2025	\$36.50	\$9.90	\$9.25	\$6.31	\$0.00	\$61.96
LABORERS - ZONE 3 (HEAVY & HIGHWAY)	12/1/2025	\$37.74	\$9.90	\$9.25	\$6.31	\$0.00	\$63.20
	6/1/2026	\$39.04	\$9.90	\$9.25	\$6.31	\$0.00	\$64.50
	12/1/2026	\$40.33	\$9.90	\$9.25	\$6.31	\$0.00	\$65.79
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
LABORER: MULTI-TRADE TENDER LABORERS	6/2/2025	\$36.75	\$9.90	\$9.25	\$8.32	\$0.00	\$64.22
LABORERS - ZONE 3 (BUILDING & SITE)	12/1/2025	\$38.00	\$9.90	\$9.25	\$8.32	\$0.00	\$65.47
	6/1/2026	\$39.30	\$9.90	\$9.25	\$8.32	\$0.00	\$66.77
	12/7/2026	\$40.60	\$9.90	\$9.25	\$8.32	\$0.00	\$68.07
	6/7/2027	\$42.00	\$9.90	\$9.25	\$8.32	\$0.00	\$69.47
	12/6/2027	\$43.40	\$9.90	\$9.25	\$8.32	\$0.00	\$70.87
	6/5/2028	\$44.90	\$9.90	\$9.25	\$8.32	\$0.00	\$72.37
	12/4/2028	\$46.40	\$9.90	\$9.25	\$8.32	\$0.00	\$73.87
For apprentice rates see "Apprentice- LABORER"							
LABORER: TREE REMOVER LABORERS	6/2/2025	\$36.75	\$9.90	\$9.25	\$8.32	\$0.00	\$64.22
LABORERS - ZONE 3 (BUILDING & SITE)	12/1/2025	\$38.00	\$9.90	\$9.25	\$8.32	\$0.00	\$65.47
	6/1/2026	\$39.30	\$9.90	\$9.25	\$8.32	\$0.00	\$66.77
	12/7/2026	\$40.60	\$9.90	\$9.25	\$8.32	\$0.00	\$68.07
	6/7/2027	\$42.00	\$9.90	\$9.25	\$8.32	\$0.00	\$69.47
	12/6/2027	\$43.40	\$9.90	\$9.25	\$8.32	\$0.00	\$70.87
	6/5/2028	\$44.90	\$9.90	\$9.25	\$8.32	\$0.00	\$72.37
	12/4/2028	\$46.40	\$9.90	\$9.25	\$8.32	\$0.00	\$73.87

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"

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LASER BEAM OPERATOR	6/2/2025	\$36.50	\$9.90	\$9.25	\$8.32	\$0.00	\$63.97
LABORERS	12/1/2025	\$37.75	\$9.90	\$9.25	\$8.32	\$0.00	\$65.22
LABORERS - ZONE 3 (BUILDING & SITE)	6/1/2026	\$39.05	\$9.90	\$9.25	\$8.32	\$0.00	\$66.52
	12/7/2026	\$40.35	\$9.90	\$9.25	\$8.32	\$0.00	\$67.82
	6/7/2027	\$41.75	\$9.90	\$9.25	\$8.32	\$0.00	\$69.22
	12/6/2027	\$43.15	\$9.90	\$9.25	\$8.32	\$0.00	\$70.62
	6/5/2028	\$44.65	\$9.90	\$9.25	\$8.32	\$0.00	\$72.12
	12/4/2028	\$46.15	\$9.90	\$9.25	\$8.32	\$0.00	\$73.62

For apprentice rates see "Apprentice- LABORER"

LASER BEAM OPERATOR (HEAVY & HIGHWAY)	6/1/2025	\$36.50	\$9.90	\$9.25	\$6.31	\$0.00	\$61.96
LABORERS	12/1/2025	\$37.74	\$9.90	\$9.25	\$6.31	\$0.00	\$63.20
LABORERS - ZONE 3 (HEAVY & HIGHWAY)	6/1/2026	\$39.04	\$9.90	\$9.25	\$6.31	\$0.00	\$64.50
	12/1/2026	\$40.33	\$9.90	\$9.25	\$6.31	\$0.00	\$65.79

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

MARBLE & TILE FINISHERS	2/1/2025	\$43.84	\$11.49	\$15.10	\$5.68	\$0.00	\$76.11
BRICKLAYERS LOCAL 3	8/1/2025	\$44.75	\$11.49	\$15.10	\$5.68	\$0.00	\$77.02
BRICKLAYERS LOCAL 3 (SPR/PITT) - MARBLE & TILE	2/1/2026	\$45.83	\$11.49	\$15.10	\$5.68	\$0.00	\$78.10
	8/1/2026	\$47.59	\$11.49	\$15.10	\$5.68	\$0.00	\$79.86
	2/1/2027	\$48.71	\$11.49	\$15.10	\$5.68	\$0.00	\$80.98

Apprentice: MARBLE & TILE FINISHERS**Effective Date: 2/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$21.92	\$11.49	\$15.10	\$5.68	\$0.00	\$54.19
2	60.00	\$26.30	\$11.49	\$15.10	\$5.68	\$0.00	\$58.57
3	70.00	\$30.69	\$11.49	\$15.10	\$5.68	\$0.00	\$62.96
4	80.00	\$35.07	\$11.49	\$15.10	\$5.68	\$0.00	\$67.34
5	90.00	\$39.46	\$11.49	\$15.10	\$5.68	\$0.00	\$71.73

Apprentice: MARBLE & TILE FINISHERS**Effective Date: 8/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$22.38	\$11.49	\$15.10	\$5.68	\$0.00	\$54.65
2	60.00	\$26.85	\$11.49	\$15.10	\$5.68	\$0.00	\$59.12
3	70.00	\$31.33	\$11.49	\$15.10	\$5.68	\$0.00	\$63.60
4	80.00	\$35.80	\$11.49	\$15.10	\$5.68	\$0.00	\$68.07
5	90.00	\$40.28	\$11.49	\$15.10	\$5.68	\$0.00	\$72.55

MECH. SWEEPER OPERATOR (ON CONST. SITES)	12/1/2023	\$39.56	\$13.78	\$12.15	\$3.00	\$0.00	\$68.49
OPERATING ENGINEERS LOCAL 98							
OPERATING ENGINEERS LOCAL 98							

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

MECHANIC/WELDER/BOOM TRUCK	12/1/2023	\$39.03	\$13.78	\$12.15	\$3.00	\$0.00	\$67.96
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Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
OPERATING ENGINEERS LOCAL 98							
OPERATING ENGINEERS LOCAL 98							
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							

MILLWRIGHT (Zone 3)	1/6/2025	\$43.48	\$10.08	\$11.47	\$9.75	\$0.00	\$74.78
MILLWRIGHTS LOCAL 1121	1/5/2026	\$45.76	\$10.08	\$11.47	\$9.75	\$0.00	\$77.06
MILLWRIGHTS LOCAL 1121 - Zone 3							

Apprentice: MILLWRIGHT (Zone 3)**Effective Date: 1/6/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	\$23.91	\$10.08	\$0.00	\$5.36	\$0.00	\$39.35
2	65.00	\$28.26	\$10.08	\$0.00	\$6.34	\$0.00	\$44.68
3	75.00	\$32.61	\$10.08	\$11.47	\$7.31	\$0.00	\$61.47
4	85.00	\$36.96	\$10.08	\$11.47	\$8.29	\$0.00	\$66.80

Apprentice: MILLWRIGHT (Zone 3)**Effective Date: 1/5/2026**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	\$25.17	\$10.08	\$0.00	\$5.36	\$0.00	\$40.61
2	65.00	\$29.74	\$10.08	\$0.00	\$6.34	\$0.00	\$46.16
3	75.00	\$34.32	\$10.08	\$11.47	\$7.31	\$0.00	\$63.18
4	85.00	\$38.90	\$10.08	\$11.47	\$8.29	\$0.00	\$68.74

MORTAR MIXER	6/2/2025	\$36.50	\$9.90	\$9.25	\$8.32	\$0.00	\$63.97
LABORERS	12/1/2025	\$37.75	\$9.90	\$9.25	\$8.32	\$0.00	\$65.22
LABORERS - ZONE 3 (BUILDING & SITE)	6/1/2026	\$39.05	\$9.90	\$9.25	\$8.32	\$0.00	\$66.52
	12/7/2026	\$40.35	\$9.90	\$9.25	\$8.32	\$0.00	\$67.82
	6/7/2027	\$41.75	\$9.90	\$9.25	\$8.32	\$0.00	\$69.22
	12/6/2027	\$43.15	\$9.90	\$9.25	\$8.32	\$0.00	\$70.62
	6/5/2028	\$44.65	\$9.90	\$9.25	\$8.32	\$0.00	\$72.12
	12/4/2028	\$46.15	\$9.90	\$9.25	\$8.32	\$0.00	\$73.62

For apprentice rates see "Apprentice- LABORER"

OILER	12/1/2023	\$35.02	\$13.78	\$12.15	\$3.00	\$0.00	\$63.95
OPERATING ENGINEERS LOCAL 98							
OPERATING ENGINEERS LOCAL 98							

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

OTHER POWER DRIVEN EQUIPMENT - CLASS VI	12/1/2023	\$32.74	\$13.78	\$12.15	\$3.00	\$0.00	\$61.67
OPERATING ENGINEERS LOCAL 98							
OPERATING ENGINEERS LOCAL 98							

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

PAINTER (BRIDGES/TANKS)	1/1/2025	\$58.46	\$9.95	\$11.85	\$12.10	\$0.00	\$92.36
PAINTERS LOCAL 35							
PAINTERS LOCAL 35 - ZONE 3							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: PAINTER (BRIDGES/TANKS)							
Effective Date: 1/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$29.23	\$9.95	\$0.00	\$0.00	\$0.00	\$39.18
2	55.00	\$32.15	\$9.95	\$0.00	\$6.66	\$0.00	\$48.76
3	60.00	\$35.08	\$9.95	\$0.00	\$7.26	\$0.00	\$52.29
4	65.00	\$38.00	\$9.95	\$0.00	\$7.87	\$0.00	\$55.82
5	70.00	\$40.92	\$9.95	\$11.85	\$8.47	\$0.00	\$71.19
6	75.00	\$43.85	\$9.95	\$11.85	\$9.08	\$0.00	\$74.73
7	80.00	\$46.77	\$9.95	\$11.85	\$9.68	\$0.00	\$78.25
8	90.00	\$52.61	\$9.95	\$11.85	\$10.89	\$0.00	\$85.30

PAINTER (SPRAY OR SANDBLAST, NEW) * 1/1/2025 \$41.23 \$9.65 \$11.85 \$8.05 \$0.00 \$70.78

* If 30% or more of surfaces to be painted are new construction,
NEW paint rate shall be used.

PAINTERS LOCAL 35

PAINTERS LOCAL 35 - ZONE 3

Apprentice: PAINTER (SPRAY OR SANDBLAST, NEW) *							
Effective Date: 1/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$20.62	\$9.95	\$0.00	\$0.00	\$0.00	\$30.57
2	55.00	\$22.68	\$9.95	\$0.00	\$4.43	\$0.00	\$37.06
3	60.00	\$24.74	\$9.95	\$0.00	\$4.83	\$0.00	\$39.52
4	65.00	\$26.80	\$9.95	\$0.00	\$5.23	\$0.00	\$41.98
5	70.00	\$28.86	\$9.95	\$11.85	\$5.64	\$0.00	\$56.30
6	75.00	\$30.92	\$9.95	\$11.85	\$6.04	\$0.00	\$58.76
7	80.00	\$32.98	\$9.95	\$11.85	\$6.44	\$0.00	\$61.22
8	90.00	\$37.11	\$9.95	\$11.85	\$7.25	\$0.00	\$66.16

PAINTER (SPRAY OR SANDBLAST, REPAINT) 1/1/2025 \$38.55 \$9.95 \$11.85 \$8.05 \$0.00 \$68.40

PAINTERS LOCAL 35

PAINTERS LOCAL 35 - ZONE 3

Apprentice: PAINTER (SPRAY OR SANDBLAST, REPAINT)							
Effective Date: 1/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$19.28	\$9.95	\$0.00	\$0.00	\$0.00	\$29.23
2	55.00	\$21.20	\$9.95	\$0.00	\$4.43	\$0.00	\$35.58
3	60.00	\$23.13	\$9.95	\$0.00	\$4.83	\$0.00	\$37.91
4	65.00	\$25.06	\$9.95	\$0.00	\$5.23	\$0.00	\$40.24
5	70.00	\$26.99	\$9.95	\$11.85	\$5.64	\$0.00	\$54.43
6	75.00	\$28.91	\$9.95	\$11.85	\$6.04	\$0.00	\$56.75

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: PAINTER (SPRAY OR SANDBLAST, REPAINT)							
Effective Date: 1/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
7	80.00	\$30.84	\$9.95	\$11.85	\$6.44	\$0.00	\$59.08
8	90.00	\$34.70	\$9.95	\$11.85	\$7.25	\$0.00	\$63.75

PAINTER / TAPER (BRUSH, NEW) * 1/1/2025 \$39.83 \$9.95 \$11.85 \$8.05 \$0.00 \$69.68

* If 30% or more of surfaces to be painted are new construction,

NEW paint rate shall be used.

PAINTERS LOCAL 35

PAINTERS LOCAL 35 - ZONE 3

Apprentice: PAINTER / TAPER (BRUSH, NEW) *							
Effective Date: 1/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$19.92	\$9.95	\$0.00	\$0.00	\$0.00	\$29.87
2	55.00	\$21.91	\$9.95	\$0.00	\$4.43	\$0.00	\$36.29
3	60.00	\$23.90	\$9.95	\$0.00	\$4.83	\$0.00	\$38.68
4	65.00	\$25.89	\$9.95	\$0.00	\$5.23	\$0.00	\$41.07
5	70.00	\$27.88	\$9.95	\$11.85	\$5.64	\$0.00	\$55.32
6	75.00	\$29.87	\$9.95	\$11.85	\$6.04	\$0.00	\$57.71
7	80.00	\$31.86	\$9.95	\$11.85	\$6.44	\$0.00	\$60.10
8	90.00	\$35.85	\$9.95	\$11.85	\$7.25	\$0.00	\$64.90

PAINTER / TAPER (BRUSH, REPAINT) 1/1/2025 \$37.15 \$9.95 \$11.85 \$8.05 \$0.00 \$67.00

PAINTERS LOCAL 35

PAINTERS LOCAL 35 - ZONE 3

Apprentice: PAINTER / TAPER (BRUSH, REPAINT)							
Effective Date: 1/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$18.58	\$9.95	\$0.00	\$0.00	\$0.00	\$28.53
2	55.00	\$20.43	\$9.95	\$0.00	\$4.43	\$0.00	\$34.81
3	60.00	\$22.29	\$9.95	\$0.00	\$4.83	\$0.00	\$37.07
4	65.00	\$24.15	\$9.95	\$0.00	\$5.23	\$0.00	\$39.33
5	70.00	\$26.01	\$9.95	\$11.85	\$5.64	\$0.00	\$53.45
6	75.00	\$27.86	\$9.95	\$11.85	\$6.04	\$0.00	\$55.70
7	80.00	\$29.72	\$9.95	\$11.85	\$6.44	\$0.00	\$57.96
8	90.00	\$33.44	\$9.95	\$11.85	\$7.25	\$0.00	\$62.49

PAINTER TRAFFIC MARKINGS (HEAVY/HIGHWAY) 6/1/2025 \$36.25 \$9.90 \$9.25 \$6.31 \$0.00 \$61.71

LABORERS

LABORERS 12/1/2025 \$37.49 \$9.90 \$9.25 \$6.31 \$0.00 \$62.95

LABORERS - ZONE 3 (HEAVY & HIGHWAY)

6/1/2026 \$38.79 \$9.90 \$9.25 \$6.31 \$0.00 \$64.25

12/1/2026 \$40.08 \$9.90 \$9.25 \$6.31 \$0.00 \$65.54

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate																																								
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)																																															
PANEL & PICKUP TRUCKS DRIVER	6/1/2025	\$40.78	\$15.57	\$20.17	\$0.00	\$0.00	\$76.52																																								
TEAMSTERS JOINT COUNCIL NO. 10	12/1/2025	\$40.78	\$15.57	\$21.78	\$0.00	\$0.00	\$78.13																																								
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	1/1/2026	\$40.78	\$16.17	\$21.78	\$0.00	\$0.00	\$78.73																																								
	6/1/2026	\$41.78	\$16.17	\$21.78	\$0.00	\$0.00	\$79.73																																								
	12/1/2026	\$41.78	\$16.17	\$23.52	\$0.00	\$0.00	\$81.47																																								
	1/1/2027	\$41.78	\$16.77	\$23.52	\$0.00	\$0.00	\$82.07																																								
PIER AND DOCK CONSTRUCTOR (UNDERPINNING AND DECK)	8/1/2024	\$49.19	\$10.08	\$11.62	\$12.67	\$0.00	\$83.56																																								
PILE DRIVER LOCAL 56																																															
PILE DRIVER LOCAL 56 (ZONE 3)																																															
For apprentice rates see "Apprentice- PILE DRIVER"																																															
PILE DRIVER	8/1/2024	\$49.19	\$10.08	\$11.62	\$12.67	\$0.00	\$83.56																																								
PILE DRIVER LOCAL 56																																															
PILE DRIVER LOCAL 56 (ZONE 3)																																															
Apprentice: PILE DRIVER Effective Date: 8/1/2024 <table> <tr> <th>Step</th><th>Percent</th><th>Apprentice Base Wage</th><th>Health</th><th>Pension</th><th>Annuity</th><th>Supplemental Unemployment</th><th>Total Rate</th></tr> <tr> <td>1</td><td>45.00</td><td>\$22.14</td><td>\$10.08</td><td>\$0.00</td><td>\$2.53</td><td>\$0.00</td><td>\$34.75</td></tr> <tr> <td>2</td><td>55.00</td><td>\$27.05</td><td>\$10.08</td><td>\$0.00</td><td>\$5.07</td><td>\$0.00</td><td>\$42.20</td></tr> <tr> <td>3</td><td>70.00</td><td>\$34.43</td><td>\$10.08</td><td>\$11.62</td><td>\$7.60</td><td>\$0.00</td><td>\$63.73</td></tr> <tr> <td>4</td><td>80.00</td><td>\$39.35</td><td>\$10.08</td><td>\$11.62</td><td>\$10.14</td><td>\$0.00</td><td>\$71.19</td></tr> </table>								Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate	1	45.00	\$22.14	\$10.08	\$0.00	\$2.53	\$0.00	\$34.75	2	55.00	\$27.05	\$10.08	\$0.00	\$5.07	\$0.00	\$42.20	3	70.00	\$34.43	\$10.08	\$11.62	\$7.60	\$0.00	\$63.73	4	80.00	\$39.35	\$10.08	\$11.62	\$10.14	\$0.00	\$71.19
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate																																								
1	45.00	\$22.14	\$10.08	\$0.00	\$2.53	\$0.00	\$34.75																																								
2	55.00	\$27.05	\$10.08	\$0.00	\$5.07	\$0.00	\$42.20																																								
3	70.00	\$34.43	\$10.08	\$11.62	\$7.60	\$0.00	\$63.73																																								
4	80.00	\$39.35	\$10.08	\$11.62	\$10.14	\$0.00	\$71.19																																								
PIPELAYER	6/2/2025	\$36.50	\$9.90	\$9.25	\$8.32	\$0.00	\$63.97																																								
LABORERS	12/1/2025	\$37.75	\$9.90	\$9.25	\$8.32	\$0.00	\$65.22																																								
LABORERS - ZONE 3 (BUILDING & SITE)	6/1/2026	\$39.05	\$9.90	\$9.25	\$8.32	\$0.00	\$66.52																																								
	12/7/2026	\$40.35	\$9.90	\$9.25	\$8.32	\$0.00	\$67.82																																								
	6/7/2027	\$41.75	\$9.90	\$9.25	\$8.32	\$0.00	\$69.22																																								
	12/6/2027	\$43.15	\$9.90	\$9.25	\$8.32	\$0.00	\$70.62																																								
	6/5/2028	\$44.65	\$9.90	\$9.25	\$8.32	\$0.00	\$72.12																																								
	12/4/2028	\$46.15	\$9.90	\$9.25	\$8.32	\$0.00	\$73.62																																								
For apprentice rates see "Apprentice- LABORER"																																															
PIPELAYER (HEAVY & HIGHWAY)	6/1/2025	\$36.50	\$9.90	\$9.25	\$6.31	\$0.00	\$61.96																																								
LABORERS	12/1/2025	\$37.74	\$9.90	\$9.25	\$6.31	\$0.00	\$63.20																																								
LABORERS - ZONE 3 (HEAVY & HIGHWAY)	6/1/2026	\$39.04	\$9.90	\$9.25	\$6.31	\$0.00	\$64.50																																								
	12/1/2026	\$40.33	\$9.90	\$9.25	\$6.31	\$0.00	\$65.79																																								
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)																																															
PLUMBER & PIPEFITTER	3/17/2024	\$49.21	\$9.55	\$10.10	\$7.00	\$0.00	\$75.86																																								
PLUMBERS & PIPEFITTERS LOCAL 104																																															
PLUMBERS & PIPEFITTERS LOCAL 104																																															

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: PLUMBER & PIPEFITTER Effective Date: 3/17/2024							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$22.14	\$9.55	\$10.10	\$0.00	\$0.00	\$41.79
2	50.00	\$24.61	\$9.55	\$10.10	\$0.00	\$0.00	\$44.26
3	55.00	\$27.07	\$9.55	\$10.10	\$0.00	\$0.00	\$46.72
4	60.00	\$29.53	\$9.55	\$10.10	\$0.00	\$0.00	\$49.18
5	65.00	\$31.99	\$9.55	\$10.10	\$0.00	\$0.00	\$51.64
6	70.00	\$34.45	\$9.55	\$10.10	\$0.00	\$0.00	\$54.10
7	75.00	\$36.91	\$9.55	\$10.10	\$0.00	\$0.00	\$56.56
8	80.00	\$39.37	\$9.55	\$10.10	\$0.00	\$0.00	\$59.02
9	80.00	\$39.37	\$9.55	\$10.10	\$7.00	\$0.00	\$66.02
10	80.00	\$39.37	\$9.55	\$10.10	\$7.00	\$0.00	\$66.02
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PNEUMATIC CONTROLS (TEMP.) PLUMBERS & PIPEFITTERS LOCAL 104 PLUMBERS & PIPEFITTERS LOCAL 104	3/17/2024	\$49.21	\$9.55	\$10.10	\$7.00	\$0.00	\$75.86
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							
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PNEUMATIC DRILL/TOOL OPERATOR (HEAVY & HIGHWAY) LABORERS	6/1/2025	\$36.50	\$9.90	\$9.25	\$6.31	\$0.00	\$61.96
LABORERS - ZONE 3 (HEAVY & HIGHWAY)	12/1/2025	\$37.74	\$9.90	\$9.25	\$6.31	\$0.00	\$63.20
	6/1/2026	\$39.04	\$9.90	\$9.25	\$6.31	\$0.00	\$64.50
	12/1/2026	\$40.33	\$9.90	\$9.25	\$6.31	\$0.00	\$65.79
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
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POWDERMAN & BLASTER LABORERS	6/2/2025	\$37.25	\$9.90	\$9.25	\$8.32	\$0.00	\$64.72
LABORERS - ZONE 3 (BUILDING & SITE)	12/1/2025	\$38.50	\$9.90	\$9.25	\$8.32	\$0.00	\$65.97
	6/1/2026	\$39.80	\$9.90	\$9.25	\$8.32	\$0.00	\$67.27
	12/7/2026	\$41.10	\$9.90	\$9.25	\$8.32	\$0.00	\$68.57
	6/7/2027	\$42.50	\$9.90	\$9.25	\$8.32	\$0.00	\$69.97
	12/6/2027	\$43.90	\$9.90	\$9.25	\$8.32	\$0.00	\$71.37
	6/5/2028	\$45.40	\$9.90	\$9.25	\$8.32	\$0.00	\$72.87
	12/4/2028	\$46.90	\$9.90	\$9.25	\$8.32	\$0.00	\$74.37
For apprentice rates see "Apprentice- LABORER"							
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POWDERMAN & BLASTER (HEAVY & HIGHWAY) LABORERS	6/1/2025	\$38.00	\$9.65	\$9.00	\$6.06	\$0.00	\$62.71
LABORERS - ZONE 3 (HEAVY & HIGHWAY)	12/1/2025	\$39.24	\$9.65	\$9.00	\$6.06	\$0.00	\$63.95
	6/1/2026	\$40.54	\$9.65	\$9.00	\$6.06	\$0.00	\$65.25
	12/1/2026	\$41.83	\$9.65	\$9.00	\$6.06	\$0.00	\$66.54
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
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PUMP OPERATOR (CONCRETE) OPERATING ENGINEERS LOCAL 98 OPERATING ENGINEERS LOCAL 98	12/1/2023	\$39.56	\$13.78	\$12.15	\$3.00	\$0.00	\$68.49
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
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PUMP OPERATOR (DEWATERING, OTHER) OPERATING ENGINEERS LOCAL 98	12/1/2023	\$39.03	\$13.78	\$12.15	\$3.00	\$0.00	\$67.96

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
OPERATING ENGINEERS LOCAL 98							
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
READY-MIX CONCRETE DRIVER	5/1/2024	\$26.14	\$11.82	\$7.25	\$0.00	\$0.00	\$45.21
TEAMSTERS 404 - Construction Service (Northampton)							
TEAMSTERS 404 - Construction Service (Northampton)							
RIDE-ON MOTORIZED BUGGY OPERATOR	6/2/2025	\$36.50	\$9.90	\$9.25	\$8.32	\$0.00	\$63.97
LABORERS	12/1/2025	\$37.75	\$9.90	\$9.25	\$8.32	\$0.00	\$65.22
LABORERS - ZONE 3 (BUILDING & SITE)	6/1/2026	\$39.05	\$9.90	\$9.25	\$8.32	\$0.00	\$66.52
	12/7/2026	\$40.35	\$9.90	\$9.25	\$8.32	\$0.00	\$67.82
	6/7/2027	\$41.75	\$9.90	\$9.25	\$8.32	\$0.00	\$69.22
	12/6/2027	\$43.15	\$9.90	\$9.25	\$8.32	\$0.00	\$70.62
	6/5/2028	\$44.65	\$9.90	\$9.25	\$8.32	\$0.00	\$72.12
	12/4/2028	\$46.15	\$9.90	\$9.25	\$8.32	\$0.00	\$73.62
For apprentice rates see "Apprentice- LABORER"							
ROLLER OPERATOR	12/1/2023	\$38.42	\$13.78	\$12.15	\$3.00	\$0.00	\$67.35
OPERATING ENGINEERS LOCAL 98							
OPERATING ENGINEERS LOCAL 98							
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
ROOFER (Coal tar pitch)	10/2/2024	\$42.38	\$10.35	\$8.70	\$9.30	\$0.00	\$70.73
ROOFERS LOCAL 248	7/16/2025	\$43.88	\$10.35	\$8.70	\$9.30	\$0.00	\$72.23
ROOFERS LOCAL 248	10/2/2025	\$44.88	\$10.35	\$8.70	\$9.30	\$0.00	\$73.23
	7/16/2026	\$46.88	\$10.35	\$8.70	\$9.30	\$0.00	\$75.23
For apprentice rates see "Apprentice- ROOFER"							
ROOFER (Inc.Roofing Waterproofing &Roofing Damproofing)	10/2/2024	\$41.88	\$10.35	\$8.70	\$9.30	\$0.00	\$70.23
ROOFERS LOCAL 248	7/16/2025	\$43.38	\$10.35	\$8.70	\$9.30	\$0.00	\$71.73
ROOFERS LOCAL 248	10/2/2025	\$44.38	\$10.35	\$8.70	\$9.30	\$0.00	\$72.73
	7/16/2026	\$46.38	\$10.35	\$8.70	\$9.30	\$0.00	\$74.73
Apprentice: ROOFER (Inc.Roofing Waterproofing &Roofing Damproofing) Effective Date: 10/2/2024							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$25.13	\$10.35	\$0.00	\$0.00	\$0.00	\$35.48
2	65.00	\$27.22	\$10.35	\$8.70	\$9.30	\$0.00	\$55.57
3	70.00	\$29.32	\$10.35	\$8.70	\$9.30	\$0.00	\$57.67
4	75.00	\$31.41	\$10.35	\$8.70	\$9.30	\$0.00	\$59.76
5	80.00	\$33.50	\$10.35	\$8.70	\$9.30	\$0.00	\$61.85
6	85.00	\$35.60	\$10.35	\$8.70	\$9.30	\$0.00	\$63.95
7	90.00	\$37.69	\$10.35	\$8.70	\$9.30	\$0.00	\$66.04
8	95.00	\$39.79	\$10.35	\$8.70	\$9.30	\$0.00	\$68.14
ROOFER SLATE / TILE / PRECAST CONCRETE	10/2/2024	\$42.38	\$10.35	\$8.70	\$9.30	\$0.00	\$70.73
ROOFERS LOCAL 248	7/16/2025	\$43.88	\$10.35	\$8.70	\$9.30	\$0.00	\$72.23
ROOFERS LOCAL 248	10/2/2025	\$44.88	\$10.35	\$8.70	\$9.30	\$0.00	\$73.23

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	7/16/2026	\$46.88	\$10.35	\$8.70	\$9.30	\$0.00	\$75.23
For apprentice rates see "Apprentice- ROOFER"							
SCRAPER	12/1/2023	\$39.03	\$13.78	\$12.15	\$3.00	\$0.00	\$67.96
OPERATING ENGINEERS LOCAL 98							
OPERATING ENGINEERS LOCAL 98							
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
SELF-POWERED ROLLERS AND COMPACTORS (TAMPERS)	12/1/2023	\$38.42	\$13.78	\$12.15	\$3.00	\$0.00	\$67.35
OPERATING ENGINEERS LOCAL 98							
OPERATING ENGINEERS LOCAL 98							
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
SELF-PROPELLED POWER BROOM	12/1/2023	\$35.80	\$13.78	\$12.15	\$3.00	\$0.00	\$64.73
OPERATING ENGINEERS LOCAL 98							
OPERATING ENGINEERS LOCAL 98							
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
SHEETMETAL WORKER	1/1/2025	\$42.23	\$12.20	\$10.79	\$7.95	\$2.13	\$75.30
SHEETMETAL WORKERS LOCAL 63							
SHEETMETAL WORKERS LOCAL 63							

Apprentice: SHEETMETAL WORKER**Effective Date: 1/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$19.00	\$5.49	\$4.86	\$0.00	\$0.85	\$30.20
2	50.00	\$21.12	\$6.10	\$5.40	\$0.00	\$0.94	\$33.56
3	55.00	\$23.23	\$6.71	\$9.71	\$0.00	\$1.15	\$40.80
4	60.00	\$25.34	\$7.32	\$9.71	\$0.00	\$1.23	\$43.60
5	65.00	\$27.45	\$7.93	\$9.71	\$0.00	\$1.31	\$46.40
6	70.00	\$29.56	\$8.54	\$9.71	\$0.00	\$1.39	\$49.20
7	75.00	\$31.67	\$9.15	\$9.71	\$0.00	\$1.47	\$52.00
8	80.00	\$33.78	\$9.76	\$9.71	\$7.95	\$1.78	\$62.98
9	85.00	\$35.90	\$10.37	\$9.71	\$7.95	\$1.86	\$65.79
10	90.00	\$38.01	\$10.98	\$9.71	\$7.95	\$1.94	\$68.59

SPECIALIZED EARTH MOVING EQUIP < 35 TONS	6/1/2025	\$41.24	\$15.57	\$20.17	\$0.00	\$0.00	\$76.98
TEAMSTERS JOINT COUNCIL NO. 10	12/1/2025	\$41.24	\$15.57	\$21.78	\$0.00	\$0.00	\$78.59
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	1/1/2026	\$41.24	\$16.17	\$21.78	\$0.00	\$0.00	\$79.19
	6/1/2026	\$42.24	\$16.17	\$21.78	\$0.00	\$0.00	\$80.19
	12/1/2026	\$42.24	\$16.17	\$23.52	\$0.00	\$0.00	\$81.93
	1/1/2027	\$42.24	\$16.77	\$23.52	\$0.00	\$0.00	\$82.53
SPECIALIZED EARTH MOVING EQUIP > 35 TONS	6/1/2025	\$41.53	\$15.57	\$20.17	\$0.00	\$0.00	\$77.27
TEAMSTERS JOINT COUNCIL NO. 10	12/1/2025	\$41.53	\$15.57	\$21.78	\$0.00	\$0.00	\$78.88
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	1/1/2026	\$41.53	\$16.17	\$21.78	\$0.00	\$0.00	\$79.48
	6/1/2026	\$42.53	\$16.17	\$21.78	\$0.00	\$0.00	\$80.48
	12/1/2026	\$42.53	\$16.17	\$23.52	\$0.00	\$0.00	\$82.22
	1/1/2027	\$42.53	\$16.77	\$23.52	\$0.00	\$0.00	\$82.82

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
SPRINKLER FITTER	4/1/2023	\$47.43	\$11.45	\$7.20	\$9.41	\$0.00	\$75.49
SPRINKLER FITTERS LOCAL 669							
SPRINKLER FITTERS LOCAL 669							

Apprentice: SPRINKLER FITTER**Effective Date: 4/1/2023**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$21.34	\$8.22	\$0.00	\$0.00	\$0.00	\$29.56
2	50.00	\$23.72	\$8.22	\$0.00	\$0.00	\$0.00	\$31.94
3	55.00	\$26.09	\$11.45	\$7.20	\$0.00	\$0.00	\$44.74
4	60.00	\$28.46	\$11.45	\$7.20	\$1.15	\$0.00	\$48.26
5	65.00	\$30.83	\$11.45	\$7.20	\$1.15	\$0.00	\$50.63
6	70.00	\$33.20	\$11.45	\$7.20	\$1.40	\$0.00	\$53.25
7	75.00	\$35.57	\$11.45	\$7.20	\$1.40	\$0.00	\$55.62
8	80.00	\$37.94	\$11.45	\$7.20	\$1.40	\$0.00	\$57.99
9	85.00	\$40.32	\$11.45	\$7.20	\$1.40	\$0.00	\$60.37
10	90.00	\$42.69	\$11.45	\$7.20	\$1.40	\$0.00	\$62.74

TELECOMMUNICATION TECHNICIAN	12/29/2024	\$51.06	\$13.25	\$8.23	\$6.83	\$0.00	\$79.37
ELECTRICIANS LOCAL 7	6/29/2025	\$52.16	\$13.50	\$8.31	\$6.90	\$0.00	\$80.87
ELECTRICIANS LOCAL 7	12/28/2025	\$53.26	\$13.75	\$8.40	\$6.96	\$0.00	\$82.37
	6/28/2026	\$54.41	\$14.00	\$8.43	\$7.03	\$0.00	\$83.87
	1/3/2027	\$55.56	\$14.25	\$8.47	\$7.09	\$0.00	\$85.37

Apprentice: TELECOMMUNICATION TECHNICIAN**Effective Date: 12/29/2024**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	\$20.42	\$7.35	\$0.61	\$0.00	\$0.00	\$28.38
2	45.00	\$22.98	\$7.35	\$0.69	\$0.00	\$0.00	\$31.02
3	50.00	\$25.53	\$13.25	\$7.47	\$0.00	\$0.00	\$46.25
4	55.00	\$28.08	\$13.25	\$7.54	\$0.00	\$0.00	\$48.87
5	65.00	\$33.19	\$13.25	\$9.74	\$0.00	\$0.00	\$56.18
6	70.00	\$35.74	\$13.25	\$11.19	\$0.00	\$0.00	\$60.18

Apprentice: TELECOMMUNICATION TECHNICIAN**Effective Date: 6/29/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	\$20.86	\$7.50	\$0.63	\$0.00	\$0.00	\$28.99
2	45.00	\$23.47	\$7.50	\$0.70	\$0.00	\$0.00	\$31.67
3	50.00	\$26.08	\$13.50	\$7.53	\$0.00	\$0.00	\$47.11
4	55.00	\$28.69	\$13.50	\$7.61	\$0.00	\$0.00	\$49.80
5	65.00	\$33.90	\$13.50	\$9.84	\$0.00	\$0.00	\$57.24
6	70.00	\$36.51	\$13.50	\$11.30	\$0.00	\$0.00	\$61.31

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
TERRAZZO FINISHERS	2/1/2025	\$64.74	\$11.49	\$15.57	\$8.02	\$0.00	\$99.82
BRICKLAYERS LOCAL 3	8/1/2025	\$66.89	\$11.49	\$15.57	\$8.02	\$0.00	\$101.97
BRICKLAYERS LOCAL 3 (SPR/PITT) - MARBLE & TILE	2/10/2026	\$68.24	\$11.49	\$15.57	\$8.02	\$0.00	\$103.32
	8/1/2026	\$70.44	\$11.49	\$15.57	\$8.02	\$0.00	\$105.52
	2/1/2027	\$71.84	\$11.49	\$15.57	\$8.02	\$0.00	\$106.92

Apprentice: TERRAZZO FINISHERS							
Effective Date: 2/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$32.37	\$11.49	\$15.57	\$8.02	\$0.00	\$67.45
2	60.00	\$38.84	\$11.49	\$15.57	\$8.02	\$0.00	\$73.92
3	70.00	\$45.32	\$11.49	\$15.57	\$8.02	\$0.00	\$80.40
4	80.00	\$51.79	\$11.49	\$15.57	\$8.02	\$0.00	\$86.87
5	90.00	\$58.27	\$11.49	\$15.57	\$8.02	\$0.00	\$93.35

Apprentice: TERRAZZO FINISHERS							
Effective Date: 8/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$33.45	\$11.49	\$15.57	\$8.02	\$0.00	\$68.53
2	60.00	\$40.13	\$11.49	\$15.57	\$8.02	\$0.00	\$75.21
3	70.00	\$46.82	\$11.49	\$15.57	\$8.02	\$0.00	\$81.90
4	80.00	\$53.51	\$11.49	\$15.57	\$8.02	\$0.00	\$88.59
5	90.00	\$60.20	\$11.49	\$15.57	\$8.02	\$0.00	\$95.28

TERRAZZO MECHANIC	2/1/2025	\$65.82	\$11.49	\$15.57	\$7.99	\$0.00	\$100.87
BRICKLAYERS LOCAL 3	8/1/2025	\$67.97	\$11.49	\$15.57	\$7.99	\$0.00	\$103.02
BRICKLAYERS LOCAL 3 (SPR/PITT) - MARBLE & TILE	2/1/2026	\$69.32	\$11.49	\$15.57	\$7.99	\$0.00	\$104.37
	8/1/2026	\$71.52	\$11.49	\$15.57	\$7.99	\$0.00	\$106.57
	2/1/2027	\$72.92	\$11.49	\$15.57	\$7.99	\$0.00	\$107.97

Apprentice: TERRAZZO MECHANIC							
Effective Date: 2/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$32.91	\$11.49	\$15.57	\$7.99	\$0.00	\$67.96
2	60.00	\$39.49	\$11.49	\$15.57	\$7.99	\$0.00	\$74.54
3	70.00	\$46.07	\$11.49	\$15.57	\$7.99	\$0.00	\$81.12
4	80.00	\$52.66	\$11.49	\$15.57	\$7.99	\$0.00	\$87.71
5	90.00	\$59.24	\$11.49	\$15.57	\$7.99	\$0.00	\$94.29

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: TERRAZZO MECHANIC Effective Date: 8/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$33.99	\$11.49	\$15.57	\$7.99	\$0.00	\$69.04
2	60.00	\$40.78	\$11.49	\$15.57	\$7.99	\$0.00	\$75.83
3	70.00	\$47.58	\$11.49	\$15.57	\$7.99	\$0.00	\$82.63
4	80.00	\$54.38	\$11.49	\$15.57	\$7.99	\$0.00	\$89.43
5	90.00	\$61.17	\$11.49	\$15.57	\$7.99	\$0.00	\$96.22
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TEST BORING DRILLER	6/1/2025	\$51.70	\$9.90	\$9.25	\$9.80	\$0.00	\$80.65
LABORERS	12/1/2025	\$53.20	\$9.90	\$9.25	\$9.80	\$0.00	\$82.15
LABORERS - FOUNDATION AND MARINE	6/1/2026	\$54.75	\$9.90	\$9.25	\$9.80	\$0.00	\$83.70
	12/1/2026	\$56.25	\$9.90	\$9.25	\$9.80	\$0.00	\$85.20
For apprentice rates see "Apprentice- LABORER"							
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TEST BORING DRILLER HELPER	6/1/2025	\$47.82	\$9.90	\$9.25	\$9.80	\$0.00	\$76.77
LABORERS	12/1/2025	\$49.32	\$9.90	\$9.25	\$9.80	\$0.00	\$78.27
LABORERS - FOUNDATION AND MARINE	6/1/2026	\$50.87	\$9.90	\$9.25	\$9.80	\$0.00	\$79.82
	12/1/2026	\$52.37	\$9.90	\$9.25	\$9.80	\$0.00	\$81.32
For apprentice rates see "Apprentice- LABORER"							
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TEST BORING LABORER	6/1/2025	\$47.70	\$9.90	\$9.25	\$9.80	\$0.00	\$76.65
LABORERS	12/1/2025	\$49.20	\$9.90	\$9.25	\$9.80	\$0.00	\$78.15
LABORERS - FOUNDATION AND MARINE	6/1/2026	\$50.75	\$9.90	\$9.25	\$9.80	\$0.00	\$79.70
	12/1/2026	\$52.25	\$9.90	\$9.25	\$9.80	\$0.00	\$81.20
For apprentice rates see "Apprentice- LABORER"							
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TRACTORS	12/1/2023	\$38.42	\$13.78	\$12.15	\$3.00	\$0.00	\$67.35
OPERATING ENGINEERS LOCAL 98							
OPERATING ENGINEERS LOCAL 98							
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
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TRAILERS FOR EARTH MOVING EQUIPMENT	6/1/2025	\$41.82	\$15.57	\$20.17	\$0.00	\$0.00	\$77.56
TEAMSTERS JOINT COUNCIL NO. 10	12/1/2025	\$41.82	\$15.57	\$21.78	\$0.00	\$0.00	\$79.17
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	1/1/2026	\$41.82	\$16.17	\$21.78	\$0.00	\$0.00	\$79.77
	6/1/2026	\$42.82	\$16.17	\$21.78	\$0.00	\$0.00	\$80.77
	12/1/2026	\$42.82	\$16.17	\$23.52	\$0.00	\$0.00	\$82.51
	1/1/2027	\$42.82	\$16.77	\$23.52	\$0.00	\$0.00	\$83.11
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TUNNEL WORK - COMPRESSED AIR	6/1/2025	\$59.93	\$9.90	\$9.25	\$10.25	\$0.00	\$89.33
LABORERS	12/1/2025	\$61.43	\$9.90	\$9.25	\$10.25	\$0.00	\$90.83
LABORERS (COMPRESSED AIR)	6/1/2026	\$62.98	\$9.90	\$9.25	\$10.25	\$0.00	\$92.38
	12/1/2026	\$64.48	\$9.90	\$9.25	\$10.25	\$0.00	\$93.88
For apprentice rates see "Apprentice- LABORER"							
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TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE)	6/1/2025	\$61.93	\$9.90	\$9.25	\$10.25	\$0.00	\$91.33
LABORERS	12/1/2025	\$63.43	\$9.90	\$9.25	\$10.25	\$0.00	\$92.83

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS (COMPRESSED AIR)	6/1/2026	\$64.98	\$9.90	\$9.25	\$10.25	\$0.00	\$94.38
	12/1/2026	\$66.48	\$9.90	\$9.25	\$10.25	\$0.00	\$95.88
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - FREE AIR LABORERS	6/1/2025	\$52.00	\$9.90	\$9.25	\$10.25	\$0.00	\$81.40
LABORERS (FREE AIR TUNNEL)	12/1/2025	\$53.50	\$9.90	\$9.25	\$10.25	\$0.00	\$82.90
	6/1/2026	\$55.05	\$9.90	\$9.25	\$10.25	\$0.00	\$84.45
	12/1/2026	\$56.55	\$9.90	\$9.25	\$10.25	\$0.00	\$85.95
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - FREE AIR (HAZ. WASTE) LABORERS	6/1/2025	\$54.00	\$9.90	\$9.25	\$10.25	\$0.00	\$83.40
LABORERS (FREE AIR TUNNEL)	12/1/2025	\$55.50	\$9.90	\$9.25	\$10.25	\$0.00	\$84.90
	6/1/2026	\$57.05	\$9.90	\$9.25	\$10.25	\$0.00	\$86.45
	12/1/2026	\$58.55	\$9.90	\$9.25	\$10.25	\$0.00	\$87.95
For apprentice rates see "Apprentice- LABORER"							
VAC-HAUL	6/1/2025	\$41.24	\$15.57	\$20.17	\$0.00	\$0.00	\$76.98
TEAMSTERS JOINT COUNCIL NO. 10	12/1/2025	\$41.24	\$15.57	\$21.78	\$0.00	\$0.00	\$78.59
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	1/1/2026	\$41.24	\$16.17	\$21.78	\$0.00	\$0.00	\$79.19
	6/1/2026	\$42.24	\$16.17	\$21.78	\$0.00	\$0.00	\$80.19
	12/1/2026	\$42.24	\$16.17	\$23.52	\$0.00	\$0.00	\$81.93
	1/1/2027	\$42.24	\$16.77	\$23.52	\$0.00	\$0.00	\$82.53
WAGON DRILL OPERATOR LABORERS	6/2/2025	\$36.50	\$9.90	\$9.25	\$8.32	\$0.00	\$63.97
LABORERS - ZONE 3 (BUILDING & SITE)	12/1/2025	\$37.75	\$9.90	\$9.25	\$8.32	\$0.00	\$65.22
	6/1/2026	\$39.05	\$9.90	\$9.25	\$8.32	\$0.00	\$66.52
	12/7/2026	\$40.35	\$9.90	\$9.25	\$8.32	\$0.00	\$67.82
	6/7/2027	\$41.75	\$9.90	\$9.25	\$8.32	\$0.00	\$69.22
	12/6/2027	\$43.15	\$9.90	\$9.25	\$8.32	\$0.00	\$70.62
	6/5/2028	\$44.65	\$9.90	\$9.25	\$8.32	\$0.00	\$72.12
	12/4/2028	\$46.15	\$9.90	\$9.25	\$8.32	\$0.00	\$73.62
For apprentice rates see "Apprentice- LABORER"							
WAGON DRILL OPERATOR (HEAVY & HIGHWAY) LABORERS	6/1/2025	\$36.50	\$9.90	\$9.25	\$6.31	\$0.00	\$61.96
LABORERS - ZONE 3 (HEAVY & HIGHWAY)	12/1/2025	\$37.74	\$9.90	\$9.25	\$6.31	\$0.00	\$63.20
	6/1/2026	\$39.04	\$9.90	\$9.25	\$6.31	\$0.00	\$64.50
	12/1/2026	\$40.33	\$9.90	\$9.25	\$6.31	\$0.00	\$65.79
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
WATER METER INSTALLER PLUMBERS & PIPEFITTERS LOCAL 104 PLUMBERS & PIPEFITTERS LOCAL 104	3/17/2024	\$49.21	\$9.55	\$10.10	\$7.00	\$0.00	\$75.86
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GASFITTER"							

Additional Apprentice Information

All apprentices must be registered with the Division of Apprenticeship Training(DAS) in accordance with M.G.L.c. 23, §§ 11E-11L. Minimum wage rates for apprentices employed on public works projects are listed above as a percentage of the hourly prevailing wage rate established by the Commissioner under the provisions of M.G.L.c. 149, §§ 26-27D.

Apprentice ratios are established by DAS pursuant to M.G.L.c. 23, §§ 11E-11L. Ratios are expressed as the allowable number of apprentices to journeymen or fraction thereof, unless otherwise specified. The ratios listed herein have been taken from relevant private collective bargaining agreements(CBAs) and are provided for illustrative purposes only. They have not been independently verified as being accurate or continuing to be accurate.

Parties having questions regarding what ratio to use should contact DAS.

DOCUMENT 00870

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT
SPECIFICATIONS
(EXECUTIVE ORDER 11246)
Revised April 9, 2019

1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted:
 - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority.
 - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - d. "Minority" includes:
 - (i) Black (all persons having origins in any of the black African racial groups not of Hispanic origin);
 - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$ 10,000 the provisions of the specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
4. The Contractor shall implement the specific affirmative action standards provided in Paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.
5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
 - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.
 - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
 - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
 - f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
 - g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
 - h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.

- i. Direct its recruitment efforts both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
 - j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work force.
 - k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
 - l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
 - m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
 - n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
 - o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
 - p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female work force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
 9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).
 10. The Contractor shall not use the goals and timetables of affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
 11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as many be required by the Government and keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

APPENDIX A

The following goals and timetables for female utilization shall be included in all Federal and federally assisted construction contracts and subcontracts in excess of \$ 10,000. The goals are applicable to the Contractor's aggregate on-site construction workforce whether or not part of that workforce is performing work on a Federal or federally-assisted construction contract or subcontract.

Area covered: Goal for Women apply nationwide

Goals and TimetablesTimetableGoals (percent)

From Apr. 1, 1980 until further notice

6.9

APPENDIX B-80

Until further notice, the following goals for minority utilization in each construction craft and trade shall included in all Federal or federally assisted construction contracts and subcontracts in excess of \$ 10,000 to be performed in the respective geographical areas. The goals are applicable to each nonexempt contractor's total on- site construction workforce, regardless of whether or not part of that workforce is performing work on a Federal, federally assisted or nonfederally related project, contract or subcontract.

Construction contractors participating in an approved Hometown Plan (see 41 CFR 6-4.5) are required to comply with the goals of the Hometown Plan with regard to construction work they perform in the area covered by the Hometown Plan. With regard to all their other covered construction work, such contractors are required to comply with the applicable SMSA or EA goal contained in this Appendix B-80.

Economic AreasSTATE:Goals (percent)

MASSACHUSETTS

004 Boston MA:

SMSA Counties:

1123 Boston-Lowell-Brockton-Lawrence-Haverhill, MA-NH

4.0

MA Essex, MA Middlesex, MA Norfolk, MA Plymouth,
MA Suffolk, NH Rockingham.

5403 Fall River- New Bedford MA, Bristol

1.6

9243 Worcester-Fitchburg-Leominster, MA

1.6

6323 Springfield-Chicopee-Holyoke MA-CT

4.8

MA Hampden, MA Hampshire

Non-SMSA Counties: MA Barnstable, MA Dukes, MA Nantucket

3.6

Non-SMSA Counties: MA Franklin

5.9

APPENDIX C

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration (FHWA), as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, national origin (including limited English proficiency), age, sex, disability, or low-income status in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
3. **Solicitations for Subcontractors, including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor’s obligations under this contract and the Acts and the Regulations relative to nondiscrimination on the grounds of race, color, national origin (including limited English proficiency), age, sex, disability, or low-income status.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto, and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Massachusetts Department of Transportation (MassDOT) or FHWA to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor will so certify to MassDOT or FHWA, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor’s noncompliance with the Nondiscrimination provisions of this contract, MassDOT will impose such contract sanctions as it or FHWA may determine to be appropriate, including, but not limited to:
 - a. withholding payments to the contractor under the contract until the contractor complies; and/or
 - b. cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations, and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as MassDOT or FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request MassDOT to enter into any litigation to protect the interests of MassDOT. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

APPENDIX D

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor,” which includes consultants) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

PERTINENT NON-DISCRIMINATION AUTHORITIES:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. § 4601) (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-Aid programs and projects)
- Federal-Aid Highway Act of 1973 (23 U.S.C. § 324 *et seq.*) (prohibits discrimination on the basis of sex)
- Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. § 794 *et seq.*), as amended (prohibits discrimination on the basis of disability) and 49 CFR Part 27
- The Age Discrimination Act of 1975, as amended (42 U.S.C. § 6101 *et seq.*) (prohibits discrimination on the basis of age)
- Airport and Airway Improvement Act of 1982 (49 U.S.C. § 471, Section 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex)
- The Civil Rights Restoration Act of 1987 (PL 100-209) (broadened the scope, coverage, and applicability of Title VI of the Civil Rights Act of 1964, the Age Discrimination Act of 1975, and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of Federal-Aid recipients, sub-recipients, and contractors, whether such programs or activities are Federally funded or not)
- Titles II and III of the Americans with Disabilities Act (42 U.S.C. §§ 12131-12189), as implemented by Department of Transportation regulations at 49 CFR parts 37 and 38 (prohibits discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities)
- The Federal Aviation Administration’s Non-Discrimination Statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex)
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations)
- Executive Order 13166, Improving Access to Services for People with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100)
- Title IX of the Education Amendments Act of 1972, as amended (20 U.S.C. 1681 *et seq.*) (prohibits discrimination on the basis of sex in education programs or activities)

*** END OF DOCUMENT ***

DOCUMENT 00880

Revised January 12, 2022



DEPARTMENT OF LABOR

Employment Standards Administration

MINIMUM WAGES FOR FEDERAL AND FEDERALLY ASSISTED CONTRACTS

"General Decision Number: MA20250019 05/16/2025

Superseded General Decision Number: MA20240019

State: Massachusetts

Construction Type: Highway

County: Hampden County in Massachusetts.

HIGHWAY CONSTRUCTION PROJECTS

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

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022: 	. Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least \$17.75 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2025.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022: 	. Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least \$13.30 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2025.

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

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

Modification Number	Publication Date
0	01/03/2025
1	04/11/2025
2	05/16/2025

ENGI0004-019 12/01/2024

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
Group 1.....	\$ 57.03	33.20
Group 2.....	\$ 56.40	33.20

FOOTNOTE FOR POWER EQUIPMENT OPERATORS:

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

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

Group 1: Broom/Sweeper; Crane; Gradall; Post Driver
(Guardrail/Fences)
Group 2: Bulldozer; Grader/Blade

* ENGI0098-010 12/01/2024

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
Group 1.....	\$ 42.88	31.04+A
Group 2.....	\$ 42.57	31.04+A
Group 4.....	\$ 39.12	31.04+A

Footnote:

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

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

Group 1: Backhoe/Excavator/Trackhoe; Bobcat/Skid Steer/Skid
Loader; LoaderGroup 2: Milling Machine; Paver (Asphalt, Aggregate, and
Concrete)

Group 4: Roller

IRON0007-027 03/16/2024

	Rates	Fringes
IRONWORKER (ORNAMENTAL AND STRUCTURAL)	\$ 39.51	32.98

LABO0596-006 12/01/2021

	Rates	Fringes
LABORER (Traffic Control: Flagger)	\$ 24.50	23.96

LABO0999-002 12/02/2024

	Rates	Fringes
LABORER (Common or General)	\$ 35.00	28.87

PAIN0035-023 07/01/2024

	Rates	Fringes
PAINTER (Steel)	\$ 56.76	36.00

SUMA2014-009 01/11/2017

	Rates	Fringes
CARPENTER, Includes Form Work....	\$ 33.03	20.02
CEMENT MASON/CONCRETE FINISHER...	\$ 52.13	20.89
ELECTRICIAN	\$ 47.13	13.41
IRONWORKER, REINFORCING	\$ 46.21	21.27

LABORER: Asphalt, Includes Raker, Shoveler, Spreader and Distributor.....	\$ 33.10	18.09
LABORER: Concrete Saw (Hand Held/Walk Behind).....	\$ 44.43	14.18
LABORER: Landscape.....	\$ 44.11	18.85
OPERATOR: Forklift.....	\$ 51.63	0.00
OPERATOR: Mechanic.....	\$ 48.14	17.02
OPERATOR: Piledriver.....	\$ 43.87	18.04
PAINTER: Spray (Linestriping)....	\$ 38.30	17.43
TRAFFIC CONTROL: Laborer-Cones/ Barricades/Barrels - Setter/Mover/Sweeper.....	\$ 43.73	15.06
TRUCK DRIVER: Concrete Truck....	\$ 33.69	15.79
TRUCK DRIVER: Dump Truck.....	\$ 43.81	5.39
TRUCK DRIVER: Flatbed Truck.....	\$ 48.53	0.00

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

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

Additional information
on contractor requirements and worker protections under the EO
is available at
<https://www.dol.gov/agencies/whd/government-contracts>.

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

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

Union Rate Identifiers

A four-letter identifier beginning with characters other than
""SU"", ""UAVG"", ?SA?, or ?SC? denotes that a union rate was
prevailing for that classification in the survey. Example:
PLUM0198-005 07/01/2024. PLUM is an identifier of the union
whose collectively bargained rate prevailed in the survey for
this classification, which in this example would be Plumbers.
0198 indicates the local union number or district council
number where applicable, i.e., Plumbers Local 0198. The next
number, 005 in the example, is an internal number used in
processing the wage determination. The date, 07/01/2024 in the
example, is the effective date of the most current negotiated
rate.

Union prevailing wage rates are updated to reflect all changes
over time that are reported to WHD in the rates
in the collective bargaining agreement (CBA) governing the
classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for
those classifications, but that 100% of the data reported for
the classifications reflected union rates. EXAMPLE:
UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a
weighted union average rate. OH indicates the State of Ohio.

The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c) (1).

State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

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

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

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

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

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

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

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

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

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

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

=====

END OF GENERAL DECISION"

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DOCUMENT A00801
SPECIAL PROVISIONS

SPRINGFIELD

**Federal Aid Project No. TAP-SRS2(003)X
Rebecca M. Johnson Elementary School Improvements (SRTS)**

Labor participation goals for this project shall be 15.3% for minorities and 6.9% for women for each job category. The goals are applicable to both contractor's and subcontractor's on-site construction workforce. Refer to document 00820 for details.

SCOPE OF WORK

All work under this Contract shall be done in conformance with the *2025 Standard Specifications for Highways and Bridges*, the *Supplemental Specifications* contained in this book, the *Construction Standard Details* in effect as of June, 2025, the *1990 Standard Drawings for Signs and Supports*, the *2015 Overhead Signal Structure and Foundation Standard Drawings*, the *2009 Manual on Uniform Traffic Control Devices (MUTCD) with Revisions 1, 2, and 3* and the *November 2022 Massachusetts Amendments to the MUTCD*, the *1968 Standard Drawings for Traffic Signals and Highway Lighting*, the latest edition of *The American Standard for Nursery Stock*, the Plans and these Special Provisions.

The project proposes to provide multimodal safety improvements for pedestrians and bicyclists to and from the Rebecca M. Johnson Elementary School in Springfield MA. These improvements consist of the following:

1. Pedestrian crossing improvements on Catharine Street on the West side of the school. Two existing crosswalks will be redesigned to reduce vehicular speed and provide safer pedestrian crossings. This will include curb extensions and installation of Rapid Rectangular Flashing Beacons (RRFB).
2. Traffic signal replacement at Bay Street with Catharine Street intersection. The existing signal does not have an exclusive pedestrian phase. The new signal will provide this accommodation.
3. Pedestrian crossing improvements to the Yale, Dartmouth, Bay, and Catharine Street "Triangle". The existing configuration has caused much confusion between motorists, pedestrians, and bicyclists. The new proposed design will provide a safer crossing through these intersections.
4. Additional clarifying safety signage and sidewalk improvements are also proposed in the vicinity of the school.
5. The minimum width for all proposed crossings and curb ramps should be eight feet wide, with ten feet being the ideal width.
6. A School Zone will be implemented on Catharine Street From McKnight Street to State Street.

SUBSECTION 7.05 INSURANCE REQUIREMENTS**B. Public Liability Insurance**

The insurance requirements set forth in this subsection are in addition to the requirements of the Standard Specifications and supersede all other requirements.

Paragraphs 1 and 2

The Massachusetts Department of Transportation and applicable railroads shall be named as additional insureds.

CONTRACTOR QUESTIONS AND ADDENDUM ACKNOWLEDGEMENTS

Prospective bidders are required to submit all questions to the Construction Contracts Engineer by 3:00 P.M. on the Tuesday of the previous week before the scheduled bid opening date. Any questions received after this time will not be considered for review by the Department.

Contractors should email questions and addendum acknowledgements to the following email address massdotSpecifications@dot.state.ma.us The MassDOT proposal number and municipality is to be placed in the subject line.

CONTRACT AWARD AND NOTICE TO PROCEED PROCEDURES

(Amending and Supplementing Subsections 3.03 and 3.05)

The prepared Contract Package is to be completed in duplicate by the successful Bidder who shall execute and deliver the Contract Package and furnish the required surety to the Department. The date of the Contract shall be the date of the Bidder's signature and shall be typed on all forms by the successful Bidder. The Contract Package consists of the contract forms for execution all of which must be returned. These documents are available on www.bidx.com as a separate file.

The company's corporate seal should be affixed to both the Contract and bonds.

The Board of Director's Vote will indicate who is authorized to sign and execute the Contract and bonds and affix the corporate seal. The vote shall show that said vote is in full force and effect and has not been amended or rescinded. The vote of the board of directors should be dated the same date as indicated on the contract form and should bear the imprint of the company's corporate seal.

HOLIDAY WORK RESTRICTIONS

(Supplementing Subsection 7.09)

The District Highway Director (DHD) may authorize work to continue during these specified time periods if it is determined by the District that the work will not negatively impact the traveling public. DHD may allow work in those areas on a case by case basis and where work is behind barrier and will not impact traffic

Below are the holiday work restrictions:

New Years Day (Federal Holiday)

No work on major arterial roadways from 5:00 AM on the day before until the normal start of business on the next subsequent business day. No work on local roadways on the holiday without permission by the DHD and the local police chief.

Martin Luther King's Birthday (Federal Holiday)

No work restrictions due to traffic concerns, however work on local roadways requires permission by the DHD and local police chief.

President's Day (Federal Holiday)

No work restrictions due to traffic concerns, however work on local roadways requires permission by the DHD and local police chief.

Evacuation Day (Suffolk County State Holiday)

No work restrictions due to traffic concerns.

Patriot's Day (State Holiday)

Work restrictions will be in place for Districts 3 and 6 along the entire Boston Marathon route and any other locations that the DHD in those districts determine are warranted so as to not to impact the marathon. All other districts work restrictions will be as per DHD.

Mother's Day

No work on Western Turnpike and Metropolitan Highway System from 5:00 AM on the Friday before, until the normal start of business on the following day.

HOLIDAY WORK RESTRICTIONS (Continued)**Memorial Day (Federal Holiday)**

No work on major arterial roadways from 5:00 AM on the Friday before, until the normal start of business on the following day.

Bunker Hill Day (Suffolk County State Holiday)

No work restrictions due to traffic concerns.

Juneteenth

No work restrictions due to traffic concerns, however work on local roadways requires permission by the DHD and local police chief.

Independence Day (Federal Holiday)

No work on major arterial roadways from 5:00 AM on the day before until the normal start of business on the next subsequent business day. No work on local roadways on the holiday without permission by the DHD and the local police chief.

Labor Day (Federal Holiday)

No work on major arterial roadways from 5:00 AM on the Friday before, until the normal start of business on the following day.

Columbus Day (Federal Holiday)

No work on major arterials from 5:00 AM on the Friday before, until the normal start of business on the following day

Veterans' Day (Federal Holiday)

No work restrictions due to traffic concerns.

Thanksgiving Day (Federal Holiday)

No work on major arterials from 5:00 AM two days before until the normal start of business on the following Monday.

Christmas Day (Federal Holiday)

No work on major arterial roadways from 5:00 AM on the day before until the normal start of business on the next subsequent business day.

WORK SCHEDULE

The Contractor shall note that there will be no lane closures permitted during the weekday peak hour traffic periods of 6:30AM to 9:30AM and 2:00PM to 6:00PM. Work requiring lane closures (drainage, micro milling, paving, etc.) will be permitted outside these hours provided that two lanes of traffic will be maintained during these peak hours. No work on roadways shall be done on this contract on Saturdays, Sundays, or holidays without prior written approval by the Engineer.

The Contractor will provide the Engineer on a weekly basis the work schedule for the upcoming week with a listing of work locations and required lane closures. No work can be done without approval by the Engineer.

SOIL STOCKPILING DIRECTIVE P-22-001

Any stockpiling of soil must be performed in compliance with Policy Directive P-22-001, Off-Site Stockpiling of Soil from MassDOT Construction Projects. This directive limits the allowable locations for off-site stockpiling of soil generated during MassDOT projects and includes various requirements that must be satisfied by the contractor prior to off-site stockpiling. The Contractor is responsible for identifying a suitable stockpile location.

SUBSECTION 8.02 SCHEDULE OF OPERATIONS

Replace this subsection with the following:

An integrated cost and schedule controls program shall be implemented by the Contractor to track and document the progress of the Work from Notice to Proceed (NTP) through the Contractor Field Completion (CFC) Milestone. The Contractor's schedules will be used by the Engineer to monitor project progress, plan the level-of-effort required by the Department's work force and consultants and as a critical decision-making tool. Accordingly, the Contractor shall ensure that it complies fully with the requirements specified herein and that its schedules are both accurate and updated as required by the specification throughout the life of the project. Detailed requirements are provided in Division II, Section 722 Construction Scheduling.

TRUCK SAFETY DEVICES

(Supplementing Subsection 7.04: Motor Vehicles)

All motor vehicles subject to Section 7 of Chapter 90 to be operated under this Contract shall be equipped with safety devices as provided therein and in 540 CMR 4.00.

By December 31, 2025, the Contractor shall certify to the Registry of Motor Vehicles, in a manner prescribed by the Registrar, that all applicable vehicles are equipped with Lateral Protective Devices, Convex Mirrors, Cross Over Mirror(s) and Back Up Cameras in accordance with the requirements of 540 CMR 4.00.

The Contractor shall provide evidence satisfactory to the Department to demonstrate compliance with the above certification requirement for all applicable vehicles operated under this Contract by the Contractor and its subcontractors and vendors in a manner set forth by the Department. Thereafter, the Contractor shall have an affirmative obligation to continue to provide such evidence of compliance on an ongoing basis and no later than 7 days after certification with the Registry of Motor Vehicles of any additional vehicles operated under this Contract by the Contractor and its subcontractors and vendors.

Non-compliance with respect to a vehicle that is subject to 540 CMR 4.00 may subject the Contractor to statutory fines as established in M.G.L. c. 90, § 7 and/or contractual remedies up to and including termination of the Contract.

SUBSECTION 8.14 UTILITY COORDINATION, DOCUMENTATION, AND MONITORING RESPONSIBILITIES**A. GENERAL**

In accordance with the provisions of Section 8.00 Prosecution and Progress, utility coordination is a critical aspect to this Contract. This section defines the responsibility of the Contractor and MassDOT, with regard to the initial utility relocation plan and changes that occur as the prosecution of the Work progresses. The Engineer, with assistance from the Contractor shall coordinate with Utility companies that are impacted by the Contractor's operations. To support this effort, the Contractor shall provide routine and accurate schedule updates, provide notification of delays, and provide documentation of the steps taken to resolve any conflicts for the temporary and/or permanent relocations of the impacted utilities. The Contractor shall provide copies to the Engineer of the Contractor communication with the Utility companies, including but not limited to:

- Providing advanced notice, for all utility-related meetings initiated by the Contractor.
- Providing meeting minutes for all utility-related meetings that the Contractor attends.
- Providing all test pit records.
- Request for Early Utility work requirements of this section (see below).
- Notification letters for any proposed changes to Utility start dates and/or sequencing.
- Written notification to the Engineer of all apparent utility delays within seven (7) Calendar Days after a recognized delay to actual work in the field – either caused by a Utility or the Contractor.
- Any communication, initiated by the Contractor, associated with additional Right-of-Way needs in support of utility work.
- Submission of completed Utility Completion Forms.

B. PROJECT UTILITY COORDINATION (PUC) FORM

The utility schedule and sequence information provided in the Project Utility Coordination Form (if applicable) is the best available information at the time of the bid and has been considered in setting the contract duration. The Contractor shall use all of this information in developing the bid price and the Baseline Schedule Submission, inclusive of the individual utility durations sequencing requirements, and any work that has been noted as potentially concurrent utility installations.

C. INITIATION OF UTILITY WORK

The Engineer will issue all initial notice-to-proceed dates to each Utility company based on either the:

- 1) Contractor's accepted Baseline Schedule
- 2) An approved Early Utility Request in the form of an Early Utility sub-net schedule (in accordance with the requirements of this Subsection)
- 3) An approved Proposal Schedule

C.1 - BASELINE SCHEDULE – UTILITY BASIS

The Contractor shall provide a Baseline Schedule submission in accordance with the requirements of Subsection 8.02 and inclusive of all of the information provided in the PUC Form that has been issued in the Contract documents. This is to include the utility durations, sequencing of work, allowable concurrent work, and all applicable considerations that have been depicted on the PUC Form.

SUBSECTION 8.14 (Continued)**C.2 – EARLY UTILITY REQUEST – (aka SUBNET SCHEDULE) PRIOR TO THE BASELINE**

All early utility work is defined as any anticipated/required utility relocations that need to occur prior to the Baseline Schedule acceptance. In all cases of proposed early utility relocation, the Contractor shall present all known information at the pre-construction conference in the form of a ‘sub-net’ schedule showing when each early utility activity needs to be issued a notice-to-proceed. The Contractor shall provide advance notification of this intent to request early utility work in writing at or prior to the Pre-Construction meeting. Prior to officially requesting approval for early utility work, the Contractor shall also coordinate with MassDOT and all utility companies (private, state or municipal) which may be impacted by the Contract. If this request is acceptable to the Utilities and to MassDOT, the Engineer will issue a notice-to-proceed to the affected Utilities, based on these accepted dates.

C.3 – PROPOSAL SCHEDULE - CHANGES TO THE PUC FORM

If the Contractor intends to submit a schedule (in accordance with MassDOT Standard Specifications, Division I, Subsection 8.02) that contains durations or sequencing that vary from those provided in the Project Utility Coordination (PUC) Form, the Contractor must submit this as an intended change, in the form of a Proposal Schedule and in accordance with MassDOT Standard Specifications, Division I, Subsection 8.02. These proposed changes are subject to the approval of the Engineer and the impacted utilities, in the form of this Proposal Schedule and a proposed revision to the PUC form. The Contractor shall not proceed with any changes of this type without written authorization from the Engineer, that references the approved Proposal Schedule and PUC form changes. The submission of the Baseline Schedule should not include any of these types of proposed utility changes and should not delay the submission of the Baseline Schedule. As a prerequisite to the Proposal Schedule submission, and in advance of the utility notification(s) period, the Contractor shall coordinate the proposed utility changes with the Engineer and the utility companies, to develop a mutually agreed upon schedule, prior to the start of construction.

D. UTILITY DELAYS

The Contractor shall notify the Engineer upon becoming aware that a Utility owner is not advancing the work in accordance with the approved utility schedule. Such notice shall be provided to the Engineer no later than seven (7) calendar days after the occurrence of the event that the Contractor believes to be a utility delay. After such notice, the Engineer and the Contractor shall continue to diligently seek the Utility Owner’s cooperation in performing their scope of Work.

In order to demonstrate that a critical path delay has been caused by a third-party Utility, the Contractor must demonstrate, through the requirements of the monthly Progress Schedule submissions and the supporting contract records associated with Subsection 8.02, 8.10 and 8.14, that the delays were beyond the control of the Contractor.

SUBSECTION 8.14 (Continued)

All documentation provided in this section is subject to the review and verification of the Engineer and, if required, the Utility Owner. In accordance with MassDOT Specifications, Division I, Subsection 8.10, a Time Extension will be granted for a delay caused by a Utility, only if the actual duration of the utility work is in excess of that shown on the Project Utility Coordination Form, and only if;

- 1) proper Notification of Delay was provided to MassDOT in accordance with the time requirements that are specified in this Section
- 2) the utility delay is a critical path impact to the Baseline Schedule (or most recently approved Progress Schedule)

E. LOCATION OF UTILITIES

The locations of existing utilities are shown on the Contract drawings as an approximation only. The Contractor shall perform a pre-construction utility survey, including any required test pits, to determine the location of all known utilities no later than thirty (30) calendar days before commencing physical site work in the affected area.

F. POST UTILITY SURVEY – NOTIFICATION

Following completion of a utility survey of existing locations, the Contractor will be responsible to notify the Engineer of any known conflicts associated with the actual location of utilities prior to the start of the work. The Engineer and the Contractor will coordinate with any utility whose assets are to be affected by the Work of this Contract. A partial list of utility contact information is provided in the Project Utility Coordination Form.

G. MEETINGS AND COOPERATION WITH UTILITY OWNERS

The Contractor shall notify the Engineer in advance of any meeting they initiate with a Utility Owner's representative to allow MassDOT to participate in the meeting if needed.

Prior to the Pre-Construction Meeting, the Contractor should meet with all Utility Owners who will be required to perform utility relocations within the first 6 months of the project, to update the affected utilities of the Project Utility Coordination Form and all other applicable Contract requirements that impact the Utilities. The Contractor shall copy the Engineer on any correspondence between the Utility Owner and the Contractor.

H. FORCE ACCOUNT / UTILITY MONITORING REQUIREMENTS

The Engineer will be responsible for recording daily Utility work force reports. The start, suspension, re-start, and completion dates of each of the Utilities, within each phase of the utility relocation work, will be monitored and agreed to by the Engineer and the Contractor as the work progresses.

I. ACCESS AND INSPECTION

The Contractor shall be responsible for allowing Utility owners access to their own utilities to perform the relocations and/or inspections. The Contractor shall schedule their work accordingly so as not to delay or prevent each utility from maintaining their relocation schedule.

COMPLIANCE WITH THE NATIONAL DEFENSE AUTHORIZATION ACT
(Supplementing Subsection 7.01)

On all projects, the “Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment” Regulation (2 CFR 200.216) prohibits the Contractor from using or furnishing the following telecommunications equipment or services:

- Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
- For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).
- Telecommunications or video surveillance services provided by such entities or using such equipment.
- Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

This prohibition applies to all products manufactured by the aforementioned companies, including any individual components or parts.

By submitting a bid on a project, the Contractor certifies that all work will be in compliance with the terms of 2 CFR 200.216. The Contractor shall submit a COC indicating compliance with the above provisions for all telecommunications equipment or services included in the Contract.

Payment for the item in which the materials are incorporated may be withheld until these COCs are received. Any cost involved in furnishing the certificate(s) shall be borne by the Contractor.

PROTECTION OF UNDERGROUND FACILITIES

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.

The Contractor shall notify Massachusetts DIG SAFE and procure a Dig Safe Number for each location prior to disturbing existing ground in any way. The telephone number of the Dig Safe Call Center is 811 or 1-888-344-7233.

The Contractor may use Test Pits or other means to verify locations and adequate cover of underground utilities.

The Contractor shall immediately notify the Resident Engineer where utility conflicts are observed or where the location of existing utilities differ from those shown on the Drawings. The Contractor shall also notify the Resident Engineer where utilities have inadequate cover.

The Contractor shall show the locations of existing and proposed utilities on As-built Plans to be furnished to MassDOT and the City of Springfield.

AS-BUILT PLANS

The Contractor shall furnish Mylar "AS BUILT" plans of the completed project to the Engineer and the Municipality. Plans shall include rim and invert elevations of all existing and as-built underground utilities within the limits of the project, including but not limited to: gates, manholes, pipes, and outlets. Said plans shall also be furnished as electronic files in AutoCAD Civil 3D, in the most current format acceptable to MassDOT. These "AS BUILT" plans shall be furnished prior to the date of final acceptance. All costs for these plans shall be incidental in the prices for the various items of work and no additional payment will be allowed therefore. The Design Engineer will make the original drawings available to the Contractor for making reproducible duplicates for use in preparing the "AS BUILT" plans.

NOTICE TO OWNERS OF UTILITIES

Written notice shall be given by the Contractor to all public service corporations or officials owning or having charge of publicly or privately owned utilities of his intention to commence operations affecting such utilities at least one week in advance of the commencement of such operations and the Contractor shall at that time file a copy of such notice with the Resident Engineer.

Before the Contractor begins any work or operations that might damage any subsurface structures, he shall carefully locate all such structures and conduct his operations so as to avoid any damage to them.

It shall be the responsibility of the Contractor to coordinate the removal of abandoned utilities to be removed by others when conducting operations which may require utility removal in a timely fashion.

NOTICE TO OWNERS OF UTILITIES (Continued)

<p>Gas: Eversource Gas 995 Belmont Street Brockton, MA 02301 Contact: Richard Salvarezza Tel: 508-895-4818 Email: richard.salvarezza@eversource.com</p> <p>Exxon Mobil 145 Albany Street Springfield, MA 01105 Contact: Mark Whitt</p>	<p>DPW: Springfield City Engineer 70 Tapley Street Springfield, MA 01104 Contact: Christopher Cignoli Tel: 413-787-6224 Email: ccignoli@springfieldcityhall.com</p>
<p>Pole Set Responsibility: Western Massachusetts Electric/Verizon</p> <p>See ELECTRIC</p>	<p>District Utility/Constructability Engineer: MassDOT District 2 Utility/Constructability Engineer 811 N King Street Northampton, MA 01060 Contact: Paul Kelly Tel: 857-368-2066 Email: Paul.Kelly@dot.state.ma.us</p>
<p>Electric: Eversource Electric West 300 Cadwell Drive Springfield, MA 01104 Contact : Nicholas Langone Tel: 413-787-9022 Email : Nicholas.langone@eversource.com</p>	<p>Telephone: Verizon 385 Myles Standish Blvd. Taunton, MA 02780 Contact: Karen Mealey Tel: 774-409-3160 Email: karen.m.mealey@verizon.com</p> <p>AT&T/Teleport Communications America c/o Siena Engineering Group 50 Mall Road – Suite 203 Burlington, MA 01803 Contact: Erica Hudson Tel: 781-221-8400 Email: erica.hudson@sienaengineeringgroup.com</p> <p>T-Mobile 400 Taylor Street Springfield, MA 01105 Contact : Mike Hanifan Tel : 413-237-2598</p>

NOTICE TO OWNERS OF UTILITIES (Continued)

<p>Cable: Comcast Cable Corp. PO Box 650, 5 Omni Way Chelmsford, MA 01824 Contact: Wendy Brown Tel: 978-848-5163 Email: Wendy_Brown@comcast.com</p> <p>Crown Castle 80 Central Street Boxborough, MA 01719 Contact: Mark Bonanno Tel: 508-616-7818 Email: mark.bonanno@crowncastle.com</p> <p>Five Colleges Inc. 97 Spring Street Amherst, MA 01002 Contact: Tom Brennan Email: Tebrennan@fivecolleges.edu</p> <p>MCI-Verizon Business PO Box 600 Charlton, MA 01507 Contact: Stephen Parretti Tel: 508-248-1305 Email: stephen.parretti@verizon.com</p>	<p>Railroad: CSX Transportation 2000 West Cabot Blvd – Suite 130 Langhorne, PA 19047 Contact: Michael Sliper Email: Michael_Sliper@csx.com</p> <p>Pioneer Valley R.R. 100 Springdale Road Westfield, MA 01085 Contact: Larry Bates Tel: 413-568-3331 Email: bates@pvrr.com</p>
<p>Sewer: Springfield Water & Sewer Commission 250 M St. Extension Agawam, MA 01001 Contact: Marty Lobik Tel: 413-452-1319 Email: marty.lobik@waterandsewer.org</p>	<p>Water: Springfield Water & Sewer Commission 250 M St. Extension Agawam, MA 01001 Contact: Marty Lobik Tel: 413-425-1319 Email: marty.lobik@waterandsewer.org</p>

NOTICE TO OWNERS OF UTILITIES (Continued)

Fire Alarm: Springfield Fire Alarm 605 Worthington Street Springfield, MA 01105 Contact: Fire Marshall Captain Rivera Tel: 413-750-2407	Other: Local Linx 30 Elmview Circle Dover, NH 03820 Contact: Jason Wing Tel: 403-538-4545 Email: Jason.wing@locallinx.com
Public Transportation: PVTA PVTA Administration Offices 2808 Main Street Springfield, Ma 01036 Contact: Sandra Sheehan, Administrator Tel: 413-732-6248 EX. 216 Email: ssheehan@pvta.com Contact: Paul Burns-Johnson, Director of Traffic Operations Tel: 413-234-0549 Email: pburns@pvta.com	Lumen 1025 Eldorado Blvd. Broomfield, CO 80021 Contact: Renoy Thomas Tel: 516-712-3041 Email: relocations@lumen.com Verizon Wireless Small Cell 20 Alexander Drive Wallingford, CT 06492 Contact: Liz Glidden Email: elizabeth.glidden@verizonwireless.com

For additional Utility Contacts click on

[Utility contacts by district and municipality | Mass.gov](#)

Select District 2. Select Springfield.

EVERSOURCE EMERGENCY TELEPHONE NUMBERS**GAS:**

Outage/ Emergency: 800-592-2000

New Service: 866-678-2744

Customer Support: 800-592-2000

ELECTRIC:

Outage/ Emergency: 800-592-2000 or 844-726-7562

New Service: 1-888-633-3797 (1-888-need pwr)

Customer Support: 1-800-340-9822

CONTAMINATED SOIL

Soil to be removed from the project area shall not be assumed to be uncontaminated and must be evaluated prior to off-site management for potential contamination with hazardous materials. Quantities for soil disposal are based on the project design, existing knowledge of soil contamination in the project area, the presence of known risk factors for soil contamination in the project area, and the designer's best professional judgment.

EMERALD ASH BORER ADVISORY

To the extent possible, all trees and brush shall be disposed on site, typically chipped and spread in place. When trees or brush must be removed, such as in urban, or otherwise populated areas, Contractor shall identify proposed location for disposal, and provide written notification to the Engineer for approval. Disposal shall be in city or town of project, or at minimum, within county, of construction operations.

PUBLIC SAFETY AND CONVENIENCE

(Supplementing Subsection 7.09)

The Contractor's attention is directed to the fact that the convenience and safety of the public takes precedence over the convenience of the Contractor performing a Massachusetts Department of Transportation contract. The Contractor shall be required, without additional compensation, to provide safe and convenient access to all abutters during the prosecution of the work. Necessary access for fire apparatus and other emergency vehicles shall be maintained throughout the project at all times.

Sweeping and cleaning of all surfaces beyond the limits of the project to clean up material caused by spillage or vehicular tracking during the various phases of the work shall be considered as incidental to the work being performed under the Contract and there will be no additional compensation. When in the opinion of the Engineer, construction operations constitute a hazard to traffic in the area, the Contractor may be required to suspend operations and remove equipment from the roadway. The Engineer may also restrict or suspend operations on any roadway when in the Engineer's opinion this is warranted for the safety of the traveling public. The Contractor may also be required to suspend operations during certain hours and to remove the Contractor's equipment from the roadway at the direction of the Engineer.

ABUTTER ACCESS AND SCHOOL ACCESS

The Contractor shall maintain access to all private property throughout and at the completion of construction. A paved driveway apron shall be constructed to private residences as shown on the plans or otherwise matching existing locations and widths. If conditions warrant that the driveway construction extend beyond the limits shown on the plans, the Contractor shall notify the Engineer immediately and the limit of driveway construction will be approved by the Engineer prior to proceeding with the work.

ABUTTER ACCESS AND SCHOOL ACCESS (Continued)

The Contractor shall maintain unimpeded vehicular access serving the Rebecca M. Johnson Elementary School during the weekday peak hour traffic periods listed in the Work Schedule paragraph. Outside of these hours, unimpeded access shall be maintained to at least one of the drives serving the School. On a weekly basis, the Contractor shall provide the Engineer and School Principal a schedule for the upcoming School driveway closures. No work shall be done at this location without prior approval by the Engineer. Safe pedestrian access to the School must be maintained at all times.

Mr. Chris Sutton, Principal
Rebecca M. Johnson Elementary School
55 Catharine Street
Springfield, MA 01109
Tel: 413-787-6687

EQUIVALENT SINGLE AXLE LOADS (ESALS)

The estimated traffic level to be used for SUPERPAVE HMA mixture designs for this contract, expressed in Equivalent Single Axle Loads (ESALs) for the design travel lane over a 20-year period, is **1.2 Million** 18-kip (80-kn) ESALs.

NORTHERN LONG-EARED BAT AND TRICOLORED BAT PROTECTION

The northern long-eared bat (*Myotis septentrionalis*; NLEB) and tricolored bat (*Perimyotis subflavus*; TCB) are listed as federally endangered or proposed endangered, respectfully, under the Endangered Species Act (ESA). The U.S. Fish and Wildlife Service (USFWS) developed this guidance to address ESA compliance and promote conservation of NLEB and TCB. This project has been consulted with the USFWS through the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and Federal Transit Administration (FTA) Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat revised February 5, 2018 and amended March 31, 2023.

On behalf of FHWA, the lead federal agency for Section 7 consultation, MassDOT submitted a Programmatic Consultation for Transportation Projects affecting NLEB or Indiana Bat to the USFWS through the Information for Planning and Consultation (IPaC) webpage and generated a USFWS No Effect Consistency Letter (see Document A00844), whereby it was determined that this Project will have “No Effect” to the NLEB and TCB. Therefore, the project has completed Section 7 consultation through the Endangered Species Act, and no AMMs apply to the project.

If the project scope changes (i.e., tree clearing, bridge work), additional review is required by the MassDOT Highway Division’s Environmental Services Section. Contact MassDOT Environmental Services - Wildlife & Endangered Species Unit Supervisor (David Paulson, david.j.paulson@dot.state.ma.us, 857-262-3378).

BIDDERS LIST

Pursuant to the provisions of 49 CFR Part 26.11 all official bidders will be required to report the names, addresses and telephone numbers of all firms that submitted bids or quotes in connection with this project. Failure to comply with a written request for this information within 15 business days may result in a recommendation to the Prequalification Committee that prequalification status be suspended until the information is received.

The Department will survey all firms that have submitted bids or quotes during the previous year prior to setting the annual goal and shall request that each firm report its age and gross receipts for the year.

BUILD AMERICA BUY AMERICA PREFERENCE

On Federally-aid projects the Buy America (23.CFR § 635.410) and Build America, Buy America Act. requires the following,

- (1) all iron and steel used in the project are produced in the United States--this means all manufacturing processes, from the initial melting stage through the application of coatings, must occur in the United States. Foreign steel and iron can be used if the cost of the materials does not exceed 0.1% of the total Contract cost or \$2,500, whichever is greater. The action of applying a coating to a covered material (i.e., steel and iron) is deemed a manufacturing process subject to Buy America. Coating includes epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of a material subject to requirements of Build America, Buy America. Steel used for temporary support of excavation, including H piles, soldier piles, and sheeting when the steel is required to be left in place is subject to requirements of Build America, Buy America. Temporary steel, shall remain in place when it falls within the influence zone of the soil supporting any structure or railroad tracks.
- (2) all manufactured products used in the project are produced in the United States—this means the manufactured product was manufactured in the United States and
- (3) all construction materials are manufactured in the United States—this means that all manufacturing processes for the construction material occurred in the United States. “Construction materials” includes an article, material, or supply—other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives—that is or consists primarily of:
 - non-ferrous metals,
 - plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables),
 - glass (including optic glass),
 - lumber; or
 - drywall.

BUILD AMERICA BUY AMERICA PREFERENCE (Continued)

The Buy America preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. As such, it does not apply to tools, equipment, and supplies, such as temporary scaffolding, brought to the construction site and removed at or before the completion of the infrastructure project. Nor does a Buy America preference apply to equipment and furnishings, such as movable chairs, desks, and portable computer equipment, that are used at or within the finished infrastructure project but are not an integral part of the structure or permanently affixed to the infrastructure project.

All articles, materials, and supplies should be classified as an iron or steel product, a manufactured product, or another product as specified by law or in 2 CFR part 184 (such other products specified by law or in 2 CFR part 184 include “excluded materials” and “construction materials”); an article, material, or supply must not be considered to fall into multiple categories.

NOTE: The requirements for manufactured products indicated in paragraph (2) above are not in effect for this contract.

NOTIFICATION OF FUNDING SOURCES FOR WORK TO BE PAID BY OTHERS

This contract has an agreement with the City of Springfield; whereas when the construction costs for the contract scope exceed the total participating contract bid price by more than ten percent (10%), the City shall be responsible for the amount over 110% of the total participating contract bid price.

SECTION 722 CONSTRUCTION SCHEDULING DESCRIPTION

722.20 General

The Contractor's approach to prosecution of the Work shall be disclosed to the Department by submission of a Critical Path Method (CPM) schedule and a cost/resource loaded Construction Schedule as defined by the schedule type set forth below. These requirements are in addition to any requirements imposed in other sections.

This section establishes the requirement for scheduling submissions. There are four schedule types identified as types A, B, C and D.

All schedules shall be prepared and submitted in accordance with this specification and the instructions contained in the Construction Schedule Toolkit located on the MassDOT-Highway Division website at <https://www.mass.gov/info-details/massdot-highway-contractors-schedule-toolkit>.

Type A –

- Schedule Planning Session
- Baseline CPM Schedule
- Monthly Update CPM Schedule
- Short-term Construction Schedule
- Contract Schedule Update Meeting
- Cost-loaded & Resource Loaded CPM
- Resources Graphic Reporting
- Cash Flow Projections from the CPM
- Cash Flow Charts
- Monthly Projected Spending Report (PSR)
- Contractor-furnished CPM software and computer

Type B –

- Schedule Planning Session
- Baseline CPM Schedule
- Monthly Update CPM Schedule
- Short-term Construction Schedule
- Contract Schedule Update Meeting
- Cost-loaded & Resource Loaded CPM
- Monthly Projected Spending Report (PSR)
- Contractor-furnished CPM software and computer

Type C –

- Schedule Planning Session
- Baseline CPM Schedule
- Monthly Update CPM Schedule
- Short-term Construction Schedule
- Contract Schedule Update Meeting
- Monthly Projected Spending Report (PSR)
- Contractor-furnished CPM software and computer

SECTION 722 (Continued)**Type D -**

- Bar chart schedule updated monthly or at the request of the Engineer
- Short-term Construction Schedule
- Monthly Projected Spending Report (PSR)

EQUIPMENT, PERSONNEL**722.40 General****A. Software Requirements**

The Contractor shall use Primavera P6 computer scheduling software.

In addition to the requirements of Section 740 – Engineer’s Field Office and Equipment, the Contractor shall provide to the Department one (1) copy of the scheduling software, one (1) software license and one (1) computer capable of running the scheduling software for the duration of the Contract. This computer and software shall be installed in the Engineer’s Field Office. The computer and software shall be maintained and serviced at no additional cost to the Department.

B. Scheduler Requirements

The Scheduler shall be approved by the Engineer.

For Type A, B and C Schedules the name of the Contractor’s Project Scheduler together with his/her qualifications shall be submitted to the Department for approval by the Engineer within seven (7) Calendar Days after NTP. The Project Scheduler shall have a minimum of five (5) years of project CPM scheduling experience, three (3) years of which shall be on projects of similar scope and value as the project for which the Project Scheduler is being proposed. References shall be provided from past projects that can attest to the capabilities of the Project Scheduler.

SCHEDULING METHODS**722.60 General****A. Schedule Planning Session**

The Contractor shall conduct a schedule planning session prior to submission of the Baseline Schedule. This session will be attended by the Department and its consultants. During this session, the Contractor shall present its planned approach to the project including, but not limited to:

1. the Work to be performed by the Contractor and its subcontractors;
2. the planned construction sequence and phasing; planned crew sizes;
3. summary of equipment types, sizes, and numbers to be used for each work activity;
4. all early work related to third party utilities;
5. identification of the most critical submittals and projected submission timelines;
6. estimated durations of major work activities;
7. the anticipated Critical Path of the project and a summary of the activities on that Critical Path;
8. a summary of the most difficult schedule challenges the Contractor is anticipating and how it plans to manage and control those challenges;

SECTION 722 (Continued)

9. a summary of the anticipated quarterly cash flow over the life of the project.

This will be an interactive session and the Contractor shall answer all questions that the Department and its consultants may have. The Contractor shall provide a written summary of the information presented and discussed during the session to the Engineer. The Contractor's Baseline Schedule and accompanying Schedule Narrative shall incorporate the information discussed at this Schedule Planning Session.

B. Schedule Reviews by the Department**1. Baseline Schedule Reviews**

The Engineer will respond to the Baseline Schedule Submission within thirty (30) Calendar Days of receipt providing comments, questions and/or disposition that either accepts the schedule or requires revision and resubmittal. Rejected Baseline Schedules shall be resubmitted within fifteen (15) Calendar Days after receipt of the Engineer's comments.

2. Contract Progress Schedule / Monthly Update Reviews / Recovery Schedules

The Engineer will respond to each submittal within twenty-one (21) Calendar Days. Rejected schedules shall be resubmitted by the Contractor within five (5) Calendar Days after receipt of the Engineer's comments.

The Engineer's review comments shall not be construed as direction to change the Contractor's means and methods. The review and acceptance of the CPM schedule does not relieve the Contractor of the responsibility for accomplishing the work within the contract required completion dates. Omissions and errors in the accepted CPM schedule shall not excuse performance less than that required by the Contract.

722.61 Schedule Content and Preparation Requirements

All schedules shall be prepared and submitted in accordance with the instructions contained in the Construction Schedule Toolkit located on the MassDOT-Highway Division website at:

<https://www.mass.gov/info-details/massdot-highway-contractors-schedule-toolkit>

and the following:

A. LOGIC

The schedules shall divide the Work into activities with appropriate logic ties to show:

1. conformance with the requirements of this Section and Division I, Subsection 8.02 - Schedule of Operations
2. the Contractor's overall approach to the planning, scheduling, and execution of the Work
3. conformance with any additional sequences of Work required by the Contract Documents, including, but not limited to, Subsection 8.03 - Prosecution of Work and Subsection 8.06 – Limitations of Operations.

SECTION 722 (Continued)**B. ACTIVITIES**

The schedule shall clearly define the progression of the Work from the Notice to Proceed (NTP) to Contractor Field Completion (CFC) by using separate activities, or including attributes within appropriate activities, to address each of the following:

1. Notice to Proceed
2. Work Breakdown Structure
3. The Critical Path is clearly defined and organized.
4. Float shall be clearly identified.
5. Detailed activities to satisfy permit requirements.
6. Subcontractor approvals at fifteen (15) Calendar Days from submittal to response
7. The preparation and submission of shop drawings, procedures, and other required submittals, with a planned duration that is to be demonstrated to the Engineer as reasonable.
8. The review and return of shop drawings, procedures, and other required submittals, approved or with comments, the duration of which shall be thirty (30) Calendar Days, unless otherwise specified or as approved by the Engineer.
9. Procurement of fabricated materials and equipment with long lead times, including time for review and approval of submittals required before procuring and fabricating.
10. Each component of the Work defined by specific activities.
11. Right-of-Way (ROW) takings that have been identified in the Contract.
12. Early Utility Relocation (by others) that has been identified in the Contract.
13. Interfaces with adjacent work, utility companies, other public agencies, sensitive abutters, and/or any other third-party work affecting the Contract.
14. Utility work to be performed in accordance with the Project Utility Coordination (PUC) Form as provided in Section 8.14 - Utilities Coordination, Documentation and Monitoring Responsibilities
15. Access Restraints – restrictions on access to areas of the Work that are defined by the Department in the bid package, in Subsection 8.06 – Limitations of Operations or elsewhere in the Contract
16. Limitations of Work – time of year restrictions and any other limitations identified in the contract
17. Traffic work zone set-up and removal, night work and phasing
18. Material Certifications
19. Milestones listed in Subsection 8.03 - Prosecution of Work or elsewhere in the Contract Documents
20. For Type A and B Contracts only: All items to be paid for, including all Unit Price and Lump Sum pay items, shall be identified by activity. This shall include all non-construction activities such as engineering work; purchase of permanent materials and equipment, purchase of structural steel stock, equipment procurement, equipment delivery to the site or storage location and the representative amount of overhead/indirect costs that was included in the Contractor's Bid Prices.

SECTION 722 (Continued)

21. Contractor's request for validation of FBU (ready to open to traffic)
22. Full Beneficial Use (FBU) Contract Milestone per the following requirements: The majority of contract Work has been completed and the asset(s) has been opened for full multi-modal transportation use, except for limited contract work items that do not materially impair or hinder the intended public use of the transportation facility. All anticipated lane takings have been completed, except for minor, short term work items and as defined in Subsection 8.03 - Prosecution of Work
23. The Department's confirmation of completed work to allow for FBU.
24. Contractor's request for validation of Substantial Completion
25. Department generated punch list of twenty-one (21) Calendar Days
26. Substantial Completion Contract Milestone as defined in the standard specifications.
27. Punch list Completion Period of at least thirty (30) Calendar Days per the requirements of Subsections 5.11 - Final Acceptance, 7.15 - Claims Against Contractors for Payment of Labor, Materials and Other Purposes
28. Contractor confirmation that all punchlist work and documentation has been completed.
29. Physical Completion of the Work Contract Milestone per the requirements of Subsections 5.11 - Final Acceptance and 8.03 - Prosecution of Work
30. Documentation Completion per the requirements of Subsections 5.11 - Final Acceptance and 8.03 - Prosecution of Work
31. Contractor Field Completion Contract Milestone (which can also be considered the completion date) per the following requirements: All physical contract Work is complete including punchlist. The Contractor has fully de-mobilized from field operations and as defined in Subsection 5.11

C. EARLY AND LATE DATES

Early Dates shall be based on proceeding with the Work or a designated part of the Work exactly on the date when the corresponding Contract Time commences. Late Dates shall be based on completing the Work or a designated part of the Work exactly on the corresponding Contract Time, even if the Contractor anticipates early completion.

D. DURATIONS

Activity durations shall be in Work Days. Planned Original Durations shall be established with consideration of resources and production rates that correspond to the Contractor's Bid Price. Within all of the Department-required schedules, the Contractor shall plan the Work using durations for all physical construction activities of no less than one (1) Work Day and no greater than fourteen (14) Work Days, unless approved by the Engineer as part of the Baseline Schedule Review.

SECTION 722 (Continued)

Should there be an activity with a duration that is determined by the Engineer to be unreasonable, the Contractor will be asked to provide a basis of the duration using bid documents, historic production rates for similar work, or other form of validation that is acceptable to the Engineer. Should the Contractor and the Engineer be unable to agree on reasonable activity durations, the Engineer will, at a minimum, note the disagreement in the Baseline Schedule Review along with a duration the Engineer considers reasonable and the basis for that duration. A schedule that contains a substantial number of activities with durations that are deemed unreasonable by the Engineer will not be accepted.

E. MATERIALS ON HAND

The Contractor shall identify in the Baseline Schedule all items of permanent materials (Materials On Hand) for which the Contractor intends to request payment prior to the incorporation of such items into the Work.

F. ACTIVITY DESCRIPTIONS

The Contractor shall use activity descriptions in all schedules that clearly describe the work to be performed using a combination of words, structure numbers, station numbers, bid item numbers, work breakdown structure (WBS) and/or elevations in a concise and compact label.

G. ACTIVITY IDENTIFICATION NUMBERS

The Contractor shall use the activity identification numbering system specified in the MassDOT Highway Division Contractor Construction Schedule Toolkit.

H. ACTIVITY CODES

The Contractor shall use the activity codes specified in the MassDOT Highway Division Contractor Construction Schedule Toolkit.

I. CALENDARS

Different calendars may be created and assigned to all activities or to individual activities. Calendars define the available hours of work in each Calendar Day, holidays and general or project-specific non-Work Days such as Fish Migration Periods, time-of-year (TOY) restrictions and/or area roadway restrictions. All calendars shall extend two years beyond the current project completion date.

Project Special Provisions identify specific calendar restrictions some examples of special calendars include, but are not limited to:

- Winter Shutdown Period, specific work is required by separate special provision to be performed during the winter. See Special Provision 8.03 (if applicable)
- Peak traffic hours on heavily traveled roadways. This shall be from 6:30 am to 9:30 am and from 3:30 pm to 7:00 pm, unless specified differently elsewhere in the Contract.
- Special requirements by sensitive abutters, railroads, utilities and/or other state agencies as defined in the Contract.
- Planting seasons for trees, shrubs and grasses and wetlands mitigation work.

SECTION 722 (Continued)

- Cape Cod and the Islands Summer Roadway Work Restrictions: A general restriction against highway and bridge construction is enforced between Memorial Day and Labor Day, unless otherwise directed by the Engineer. Cape Ann Summer Roadway Work Restrictions: While there are no general restrictions for Cape Ann as there are for Cape Cod and the Islands, project-specific restrictions may be enforced.
- Turtle and/or Fish Migration Periods and/or other in-water work restrictions: Refer to the Project Special Provisions for specific restrictions.
- Working over Waterways Restricted Periods.
- Night-time paving and striping operations, traffic, and temperature restrictions.
- Utility Restrictions shall be as specified within the Contract.

J. FLOAT

For the calculation of float in the CPM schedule, the setting for *Retained Logic* is required for all schedule submissions, starting with the Baseline Schedule Submission. Should the Contractor have a reason to propose that an alternative calculation setting such as *Progress Override* be used, the Contractor shall obtain the Engineer's approval prior to modifying to this setting.

K. COST AND RESOURCE LOADING (Types A and B only)

For all Type A and B Schedules, the Contractor shall provide a cost and resource-loaded schedule with an accurate allocation of the costs and resources necessary to complete the Work. The costs and resources shall be assigned to all schedule activities in order to enable the Contractor to efficiently execute the Contract requirements and the Engineer to validate the original plan, monitor progress, provide cash flow projections, and analyze delays.

1. Each schedule activity shall have an assigned cost that accurately represents the value of the Work. Each schedule activity shall have its resources assigned to it by craft and the anticipated hours to accomplish the work. Each schedule activity's equipment resources shall be assigned to it by equipment type and hours operated. Front-loading or other unbalancing of the cost distribution will not be permitted.
2. The sum of the cost of all schedule activities shall be equal to the Contractor's Bid Price.
3. Indicating the labor hours per individual, per day, by craft and equipment hours/day will be acceptable.
4. The Engineer reserves the right to use the cost-loading as a means to resolve changes, disputes, time entitlement evaluations, increases or decreases in the scope of Work, unit price renegotiations and/or claims.
5. For all Type A and B Schedules, all subnets, fragnets, Proposal Schedules, and Recovery Schedules shall be cost and resource- loaded to help to quickly validate and monitor the duration of the Work to be performed.
6. For Type A Schedules, cost-loading of the schedule will also be used for cash flow projection purposes.
7. The cost-loading of each activity shall indicate the portion of the cost for that activity that is applicable to a specific bid item (cost account.) The total cost for each cost account must equal the bid item price.

SECTION 722 (Continued)**L. NOT TO BE USED IN THE CONTRACTOR'S CPM SCHEDULE**

1. Milestones or constraint dates not specified in the Contract.
2. Scheduled work not required for the accomplishment of a Contract Milestone
3. Use of activity durations, logic ties and/or sequences deemed unreasonable by the Engineer.
4. Delayed starts of follow-on trades.
5. Float suppression techniques.
6. Leads such as leads, lags, SS, SF, & FF relationships without the expressed permission of the Department.

722.62 Submittal Requirements

All schedules shall be prepared and submitted in accordance with the requirements listed below.

Each monthly Contract Progress Schedule submittal shall be uniquely identified.

Each Submission shall, at a minimum, include the following:

- a. Narrative
- b. Schedule submittals shall be signed by the Scheduler
- c. Schedule Printout - All Activities
- d. Schedule Printout - Critical Path Layout
- e. Schedule Printout - Remaining Work
- f. Schedule Printout - Top 3 Float Path
- g. Work Breakdown Structure (WBS) Summary
- h. Project Spending Report (PSR) in Portable Document Format (.PDF)
- i. Project Spending Report (PSR) in Microsoft Excel spreadsheet (.XLS)
- j. Oracle Primavera P6 Schedule File (.XER)

All digital file submittals will be labeled with the following information.

- Contract Number
- Project Number
- Project locations (i.e., town(s))
- Brief description
- Submittal description (i.e., UP07)
- Data Date (MM-DD-YY)
- File Description (i.e., Critical Path)

Example: C110464 (P606309) - Orange Route 2 over 202 – UP23 (07-15-22) - Critical Path

A. Narratives

A written narrative shall be submitted with every schedule submittal. The narrative shall:

1. itemize and describe the flow of work for all activities on the Critical Path in a format that includes any changes made to the schedule since the previous Contract Progress Schedule / Monthly Update or the Baseline Schedule, whichever is most recent.
2. provide a description of any specification requirements that are not being followed. Identify those that are improvements and those that are not considered to be meeting the requirements.

SECTION 722 (Continued)

3. provide all references to any Notice of Delay that has been issued, within the time period of the Contract Progress Schedule Update, by letter to the Engineer. Note that any Notice of Delay that is not issued by letter will not be recognized by the Engineer. See Subsection 722.64.A – Notice of Delay.
4. provide a description of each third-party utility's planned vs. actual progress and note any that are trending late or are late per the durations and commitments as provided in the PUC Form; provide a description of the five (5) most important responses needed from the Department and the need date for the responses in order to maintain the current Schedule of Record.
5. provide a description of all critical issues that are not within the control of the Contractor or the Department (third party) and any impact they had or may have on the Critical Path.
6. provide a description of any possible considerations to improve the probability of completing the project early or on time.
7. compare Early and Late Dates for activities on the Critical Path and describe reasons for changes in the top three (3) most critical paths.
8. describe the Contractor's plan, approach, methodologies, and resources to be employed for completing the various operations and elements of the Work for the top three (3) most critical paths. For update schedules, describe and propose changes to those plans and verify that a Proposal Schedule is not required.
9. describe, in general, the need for shifts that are not 5 days/week, 8 hours/day, the holidays that are inserted into each calendar and a tabulation of each calendar that has been used in the schedule.
10. describe any out-of-sequence logic and provide an explanation of why each out-of-sequence activity does not require a correction, if one has not been provided, and an adequate demonstration that these changes represent the basis of how these activities will be built, including considerations for resources, dependencies, and previously approved production rates.
11. identify any possible duration increases resulting from actual or anticipated unit price item quantity overruns as compared to the baseline duration, with a corresponding suggestion to mitigate any possible delays to the Critical Path. If the delay is anticipated to impact the Critical Path, refer to Subsections 4.06 – Increased or Decreased Contract Quantities and 8.10 – Determination and Extension of Contract Time for Completion and submit a letter to the Engineer notifying of a potential delay.
12. include a schedule log consisting of the name of the schedule, the data date and the date submitted.
13. include and describe any notifications, communications and coordination meetings with third-parties such as utility companies that occurred from the last update including personnel names, job titles and contact information, date of meeting(s)/correspondence(s), topics discussed, and reasons the third party provided for deviations from the PUC form.

SECTION 722 (Continued)**B. CPM Bar Charts**

One (1) timescaled bar chart containing all activities shall be prepared and submitted using a scale that yields readable plots and that meets the requirements of Subsection 722.61 – Schedule Content and Preparation Requirements. Activities shall be linked by logic ties and shown on their Early Dates. Critical Paths shall be highlighted, and Total Float shall be shown for all activities.

A second timescaled bar chart shall also be prepared containing only the Critical Path or, if the Critical Path is not the longest path, the Longest Path using a scale that yields readable plots and that meets the requirements of Subsection 722.61 – Schedule Content and Preparation Requirements. Activities shall be linked by logic ties and shown on their Early Dates. Total Float shall be shown for all activities.

C. Detailed Activity Schedule Comparisons

A Detailed Activity Schedule Comparison (DASC) is a simple reporting tool in the format of a graphical report that will provide Resident Engineers with immediate, timely and up-to-date information. The DASC consists of an updated bar chart that overlays the current time period's bar chart onto the previous time period's bar chart for an easily read comparison of progress during the present and previous reporting periods.

D. Activity Cost Report and Monthly Cash Flow Projections (Type A only)

With each Contractor Quantity Estimate (CQE), the Contractor shall submit an Activity Cost Report and Cash Flow Projection that includes all activities grouped by Contract Bid Item.

The Activity Cost Report shall be generated from the Schedule of Record and shall be the basis of the Monthly Cash Flow Projection. Within each contract Bid Item, activities shall be sequenced by ascending activity identification number and shall show:

1. activity ID and description,
2. forecast start and finish dates for each activity and,
3. when submitted as a revised schedule, actual start, and finish dates for each completed activity.
4. any variance to the estimated contract quantity shall be shown.

E. Resource Graphs (Type A only)

Monthly and cumulative resource graphs for the remaining Contract period using the Early Dates and Late Dates in the Contract Progress Schedule shall be included as part of each schedule submittal.

SECTION 722 (Continued)**F. Projected Spending Reports**

A Projected Spending Report (PSR) shall be prepared and submitted monthly. The PSR shall indicate the monthly spending (cash flow) projection for each month from NTP to Contractor Field Completion (CFC). Each month's actual spending shall be calculated using all CQEs paid during that month. The Projected Spending Report (PSR) shall be depicted in a tabular format and provided in both an .XLS and .PDF.

722.63. Progress Schedule Requirements**A. Baseline Schedule**

The Baseline Schedule shall be due thirty (30) Calendar Days after Notice to Proceed (NTP). The Baseline Schedule shall only reflect the Work awarded to the Contractor and shall not include any additional work involving Extra Work Orders or any other type of alleged delay. The Baseline Schedule shall be prepared and submitted in accordance with Subsections 722.61 - Schedule Content and Preparation Requirements and 722.62 - Submittal Requirements. Once the Baseline Schedule has been accepted by the Engineer, with or without comments, it shall represent the as-planned schedule for the Work and become the Contract Progress Schedule of Record until such time as the schedule is updated or revised under Subsections 722.63.C - Contract Progress Schedules / Monthly Updates, 722.64.C - Recovery Schedules and 722.64.D - Proposal Schedules.

The Cost and Resource-Loading information (Types A and B only) shall be provided by the Contractor within forty-five (45) Calendar Days after NTP.

The Engineer's review comments on the Baseline Schedule and the Contractor's responses to them will be maintained for the duration of the Contract and will be used by the Engineer to monitor the Contractor's work progress by comparing it to the Contract Progress Schedule / Monthly Update.

B. Interim Progress-Only Schedule Submissions

The first monthly update of the Contract Progress Schedule/Monthly Update is due within seventy (70) Calendar Days after Notice to Proceed (NTP.) The Baseline Schedule review period ends at sixty (60) Calendar Days after NTP, see Subsection 722.60.B - Schedule Reviews by the Department. If the Baseline Schedule has not been accepted within sixty (60) Calendar Days after NTP, an Interim Progress-Only Schedule shall be due within seventy (70) Calendar Days after NTP. The purpose of the Interim Progress-Only Schedule is to document the actual progress of all activities, including non-construction activities, from NTP until the Baseline Schedule is accepted.

SECTION 722 (Continued)**C. Contract Progress Schedules / Monthly Updates**

The first Contract Progress Schedule shall be submitted by the Contractor no later than seventy (70) Calendar Days after NTP. The data date for this first Progress Schedule shall be two months (approximately sixty (60) Calendar Days) after NTP. Subsequent Progress Schedules shall be submitted monthly.

Each Contract Progress Schedule shall reflect progress up to the data date. Updated progress shall be limited to asbuilt sequencing and asbuilt dates for completed and inprogress activities. Asbuilt data shall include actual start dates, remaining Work Days and actual finish dates for each activity, but shall not change any activity descriptions, the Original Durations, or the Original Resources (as planned at the time of bid), without the acceptance of the Engineer. If any activities have been completed out-of-sequence, the Contractor shall propose new logic ties for affected in-progress and future activities that accurately reflect the previously approved sequencing. Alternatively, the Contractor may submit to the Engineer for approval an explanation of why an out-of-sequence activity does not require a correction and an adequate demonstration that the changes accurately represent how the activities will be built, including considerations for resources, dependencies, and previously approved production rates. Once approved by the Engineer, the Contractor may incorporate the changes in the next Contract Progress Schedule/Monthly Update with the affected activities clearly identified and explained in the Schedule Narrative.

No revisions to logic ties, sequence, description, or duration of future activities; or planned resource costs shall be made without prior approval by the Engineer.

Any proposed logic changes for in-progress or future activities shall be submitted to the Engineer for approval before being incorporated into a Contract Progress Schedule. The logic changes must be submitted using a Proposal Schedule or a schedule fragnet submission. Once approved by the Engineer, the Contractor may incorporate the logic in the next Contract Progress Schedule/Monthly Update with the affected activities clearly identified and explained in the Schedule Narrative.

For any proposed changes to the original sequence, description or duration of future activities, the Contractor shall submit to the Engineer for approval an explanation of how the proposed description or duration change reflects how the activity will be progressed, including considerations for resources and previously approved production rates. Any description or duration change that does not accurately reflect how the activity will be progressed will not be approved by the Engineer. Once approved by the Engineer, the Contractor may incorporate the changes in the next Contract Progress Schedule/Monthly Update with the affected activities clearly identified and explained in the Schedule Narrative.

Contract Progress Schedules that extend performance beyond the Contract Time or beyond any Contract Milestone shall not be approved by the Engineer. The Contractor shall submit a Recovery Schedule, or a Time Entitlement Analysis, if any Contract Progress Schedule/Monthly Update indicates a failure to meet the Contract Dates.

SECTION 722 (Continued)**D. Short-Term Construction Schedule**

The Contractor shall provide a Short-Term Construction Schedule that details daily work activities, including any multiple shift work that the Contractor intends to conduct, in a spreadsheet format. The daily activities shall directly correspond to the Contract Progress Schedule activities, with a matching reference to the activity identification number in the Contract Progress Schedule and may be at a greater level of detail. The Short-Term Construction Schedule shall be submitted every two weeks. It shall display all work for a thirty-five (35) Calendar Day period consisting of completed work for the two (2) week period prior and all planned work for the following three (3) week period. The initial submission shall be provided no later than thirty (30) Calendar Days after NTP or as required by the Engineer.

The Contractor shall be prepared to discuss the Short-Term Construction Schedule, in detail, with the Engineer in order to coordinate field inspection staff requirements, the schedule of work affecting abutters and any corresponding work with affected utilities. Short-Term Construction Schedules shall be prepared and submitted in accordance with Subsections 722.61 - Schedule Content and Preparation Requirements and 722.62 - Submittal Requirements.

722.64 Impacted Schedule Requirements**A. Notice of Delay**

The Contractor shall notify the Engineer in writing, with copies to the District and State Construction Engineers, within fifteen (15) of the start of any delays to the Critical Path that are caused by actions or inactions that were not within the control of the Contractor. Delay notifications that are not provided in a letter to the Engineer, such as a delay notification in the schedule narrative, will not be recognized as contractual notice in the determination of any Time Extension related to the impacts to the work associated with this specific alleged delay. Should such a delay continue for more than one (1) week, the Contractor shall note it in the Schedule Narrative until the delay is no longer impacting the Critical Path for the completion of the Contract Milestones. The Engineer will evaluate the alleged delay and its impact and will respond to the Contractor within ten (10) Calendar Days after receipt of a notice of delay.

B. Time Entitlement Analysis

A Time Entitlement Analysis (TEA) shall consist of a descriptive narrative, prepared in accordance with Subsection 722.62.A - Narratives, and an as-built CPM schedule, which may be in the form of a schedule fragnet that has been developed from the project's Contract Progress Schedule of Record, and illustrates the impact of a delay to the Critical Path, Contract Milestones and/or Contract Completion Date as required in Subsection 8.10 - Determination and Extension of Contract Time for Completion. TEAs shall also be used to determine the schedule impact of proposed Extra Work Orders (EWO) as also required in Subsection 8.10.

TEAs shall be prepared and submitted in accordance with the requirements of Subsections 722.61 - Schedule Content and Preparation Requirements and 722.62 - Submittal Requirements and shall be based on the Contract Progress Schedule of Record applicable at the start of the delay or impact from an EWO. A TEA fragnet must start with a specific new activity describing the work contained in either a Notice of Delay previously submitted to the Department per Subsection 722.64.A - Notice of Delay or an EWO.

SECTION 722 (Continued)

TEAs shall be submitted:

1. as part of any Extra Work Order that may impact Contract Time,
2. with a request for a Time Extension,
3. within fifteen (15) Calendar Days after a request for a TEA by the Engineer for any other reason.

A TEA shall be submitted to the Engineer before any Time Extension is granted to the Contractor. Time Extensions will not be granted unless the TEA accurately reflects an evaluation of all past delays and the actual events that occurred that impacted the Critical Path. The TEA must also demonstrate a plan for the efficient completion of all of the remaining work through an optimized CPM Schedule. The analysis shall include all delays, including Contractor-caused delays, and shall be subdivided into timeframes and causes of delays.

TEAs shall incorporate any proposed activities, logic ties, resource considerations, and activity costs required to demonstrate the schedule impacts most efficiently in addition to detailing all impacts to existing activities, logic ties, the Critical Path, Contract Milestones, and the Contract Completion Date. In addition, TEAs shall accurately reflect any changes made to activities, logic ties, restraints, and activity costs, necessitated by an Extra Work Order or other schedule impact, for the completion of the remaining work. The Contractor shall provide TEAs that demonstrate that all delays have been mitigated to the fullest extent possible without requiring an Equitable Adjustment to the original bid basis.

All TEAs shall clearly indicate any overtime hours, additional shifts and the resources that are proposed to be incorporated in the schedule. The Engineer shall have final discretion over the use of overtime hours and additional shifts. The Engineer shall have the right to require that overtime hours and/or additional shifts be used to minimize the duration of Time Extensions if it is determined to be in the best interest of the Department to do so.

When accepted, the changes included in a TEA shall be incorporated into the next Contract Progress Schedule per the requirements of Subsection 722.63.C - Contract Progress Schedules / Monthly Updates. During the review of any TEA, all Contract Progress Schedules shall continue to be submitted as required.

The Engineer may request that the Contractor prepare a Proposal Schedule or a Recovery Schedule to further mitigate any delays that are shown in the accepted TEA or Contract Progress Schedule.

C. Recovery Schedules

The Contractor shall promptly report to the Engineer all schedule delays during the prosecution of the Work. Contract Progress Schedules that predict performance extended beyond the Contract Time or beyond any Contract Milestone shall not be approved as the schedule of record. This requirement is critical to the Department's ability to make informed decisions regarding Contract Time and costs.

The Contractor shall submit a Recovery Schedule within fifteen (15) Calendar Days of a Contract Progress Schedule submission that shows failure to meet the Contract Dates unless a recovery schedule is waived by the Department. Waiving the recovery schedule does not relieve the contractor of the responsibility for the delay. The Department may revoke the waiver of a Recovery Schedule, at which time a Recovery Schedule shall be submitted within fifteen (15) Calendar Days of the Contractor being notified.

Changes represented in accepted Recovery Schedules shall be incorporated into the next Contract Progress Schedule.

SECTION 722 (Continued)**D. Proposal Schedules**

A Proposal Schedule is an alternative schedule used to evaluate proposed changes to the Contract scope or significant alternatives to previously approved approaches to complete the Work, which may include changes to activity durations, logic, and sequence. For Types A and B Schedules, the Proposal Schedule shall be cost and resource loaded.

A Proposal Schedule may be requested by the Department at any time or may be offered by the Contractor. The Engineer may request that the Contractor prepare a Proposal Schedule to further mitigate any delays that are shown in an accepted TEA or Contract Progress Schedule.

The Contractor shall submit the Proposal Schedule within thirty (30) Calendar Days of a request from the Department.

The Proposal Schedule shall not be considered a Schedule of Record until the logic, durations, narrative, and basis of the Proposal Schedule have been accepted by the Engineer. If the Proposal Schedule took the form of a fragnet, it must be incorporated into the Contract Progress Schedule of Record showing the current progress of all other activities and the impacts/results of the changes made by the Proposal Schedule before the Proposal Schedule is accepted by the Department.

Proposal Schedules shall clearly indicate any proposed acceleration including overtime hours, additional shifts, and the resources that are proposed to be incorporated in the schedule. The Engineer shall have final discretion over the use of overtime hours and additional shifts. Proposal Schedules that contain a cost element shall be submitted with a separate Cost Proposal.

Changes represented in the accepted Proposal Schedules shall be incorporated into the next Contract Progress Schedule. During the review of any Proposal Schedule, all Contract Progress Schedules shall continue to be required every month.

E. Disputes

All schedules shall be submitted, reviewed, dispositioned, and accepted in the timely manner specified herein so as to provide the greatest possible benefit to the execution of this Contract.

The Contractor may dispute a decision by the Engineer by filing a claim notice within seven (7) days after the Contractor's request for additional time has been denied or if the Contractor does not accept the number of days granted in a time extension. The Contractor's claim notice shall include a revised time entitlement analysis that sufficiently explains the basis of the time-related claim. Failure to submit the required time entitlement analysis with the claim notice shall result in denial of the Contractor's claim. A determination on the Contractor's claim shall be in accordance with Subsection 7.16 Claims of Contractor for Compensation. Pending resolution of any dispute, the last schedule accepted by the Engineer will remain the Contract Schedule of Record.

SECTION 722 (Continued)**722.65 Schedule Type D Requirements**

This section is to detail the requirements for Type D Schedules and is separate from the requirements listed above. These schedules are intended for a project in which a more formal schedule would not be practical.

Schedules for Type D projects shall be submitted for each work assignment. The Schedule Type D shall be submitted electronically in .XLS and .PDF format and meet the following requirements.

The schedule requirements for work assignments that are anticipated to last three weeks or less shall conform to the requirements for Short-term Construction Schedules below.

Work assignments that are anticipated to last longer than three weeks shall submit a bar chart baseline and provided update schedules upon request of the engineer as required under Bar Chart Schedule below in addition to meeting the Short-term Construction schedule requirements.

A. Bar Chart Schedule

A Bar Chart that shall include the following:

- Work Assignment start date.
- Activities to identify.
 - Major work operations broken down to be no longer than 14 days.
 - Procurement of fabricated materials and equipment with long lead times, including time for review and approval of submittals required before procuring and fabricating.
 - The preparation and submission of shop drawings, procedures, and other required submittals, with a planned duration that is to be demonstrated to the Engineer as reasonable.
 - The review and return of shop drawings, procedures, and other required submittals, approved or with comments, the duration of which shall be shown as thirty (30) Calendar Days,
 - Detailed activities to satisfy permit requirements.
 - Subcontractor approvals at fifteen (15) Calendar Days from submittal to response
 - Project Close out activities including a 21-calendar day creation of a punchlist activity and 30 calendar day minimum completion of punchlist activity.
- Interfaces with adjacent work, utility companies, other public agencies, sensitive abutters, and/or any other third-party work affecting the Contract.
- Access Restraints – restrictions on access to areas of the Work
- Traffic work zone set-up and removal, night work and phasing
- Contract Milestones including Full beneficial Use, Substantial Completion and Contractor Field Completion

The Bar Char Schedule shall be provided at the beginning of the project and updated with each work order created for the project.

SECTION 722 (Continued)**B. Short-Term Construction Schedule**

The Contractor shall provide a Short-Term Construction Schedule that details daily work activities, including any multiple shift work that the Contractor intends to conduct, in a spreadsheet format. The daily activities shall directly correspond to the Contract Progress Schedule activities, with a matching reference to the activity identification number in the Contract Progress Schedule and may be at a greater level of detail. See schedule toolkit for suggested format.

The Short-Term Construction Schedule shall be submitted every two weeks. It shall display all work for a thirty-five (35) Calendar Day period consisting of completed work on the assignment for the two week period prior and all planned work for the following three week period. The initial submission shall be provided no later than thirty (30) Calendar Days after NTP or as required by the Engineer.

The Contractor shall be prepared to discuss the Short-Term Construction Schedule, in detail, with the Engineer in order to coordinate field inspection staff requirements, the schedule of work affecting abutters and any corresponding work with affected utilities.

C. Project Spending Report (PSR)

A Projected Spending Report (PSR) shall be prepared and submitted monthly. The PSR shall be for all active work assignments, broken down by work assignment. The PSR shall indicate the monthly spending (cash flow) projection for each month from NTP to Contractor Field Completion (CFC). Each month's actual spending shall be calculated using all CQEs paid during that month. The Projected Spending Report (PSR) shall be depicted in a tabular format and provided in both an .XLS and .PDF

SECTION 722 (Continued)**COMPENSATION****722.80 Method of Measurement****Schedule of Operations (Type A, B and C)**

The project bid documents specify the fixed-price amounts to be paid to the Contractor for the Project Schedule requirements contained herein. Each bidder shall include this fixed price bid item amounts in their bid. Failure to do so may be grounds for the rejection of the bid.

This fixed price amount is for payment purposes only and is separate from what the Department considers to be the Contractor's General Condition costs. If the Contractor deems it necessary to include additional costs to provide all of the requirements of this section, these additional costs shall be included in the Contractor's overall bid price.

All required schedule-related work, including, but not limited to computers, computer software, the planning and coordination with utilities, training, schedule preparation and schedule submittals will be paid for under the fixed price amount.

Twenty percent (20%) of this pay item will be paid upon the Engineer's acceptance of the Contractor's Baseline Schedule, prepared and submitted in accordance with Subsection 722.63.A.

The remaining eighty percent (80%) of this pay item will be paid in equal monthly installments distributed across the Contract Duration from Notice to Proceed (NTP) to Contractor Field Completion (CFC), less the 2 months required for the submittal and review of the Baseline Schedule in accordance with the following formula:

$$\text{Monthly Payment} = \frac{\text{Remaining Fixed Price amount (80\% of the Item Cost.)}}{\text{Contract Duration in whole months} - 2 \text{ months}}$$

The Schedule of Operations pay item will be adjusted to pay for only the actual quantity of schedules that have been submitted in accordance with this section.

Should there be a Time Extension granted to the Contractor, the Engineer may provide an Equitable Adjustment for additional Contract Progress Schedule Updates at intervals directed by the Engineer. The monthly payment will be the basis for this Equitable Adjustment.

Schedule of Operations (Type D)

For projects assigned with Type D schedule requirements, all scheduling work shall be considered incidental to the project with no separate payment under this section.

SECTION 722 (Continued)**722.81 Basis of Payment**

The timely and accurate submission of the Baseline Schedule is critical to the Contract and the Department's ability to make informed decisions. Only payments under Item 740 - Engineer's Field Office and Item 748 - Mobilization will be made until the Baseline Schedule is accepted by the Engineer.

All required schedule-related work, including, but not limited to computers, computer software, the planning and coordination with utilities, training, schedule preparation and schedule submittals (including monthly progress schedules, short-term schedules, project spending reports, TEAs, recovery schedules or impacted schedules) shall be included in this work.

No payment for any other pay item will be processed beyond seventy-five (75) Calendar Days from Notice to Proceed (NTP) until the Baseline Schedule is accepted by the Engineer. Until the Engineer's acceptance of the Baseline Schedule, the combined total of all payments made to the Contractor will be limited to an amount no greater than the total price for Item 748 - Mobilization or 3% of the contract price, whichever is less.

All Contract Progress Schedule Updates submitted later than ten (10) Calendar Days after the CQE (Contract Quantity Estimate) completion date, or greater than forty (40) Calendar Days from the Data Date of the previous submission, will be deemed to be no longer useful and will not qualify for payment. The late submission of Impacted schedules, including TEAs, recovery schedules and proposal schedules will result in the forfeiture of the monthly payment for the month in which they were due and subsequent months until the submission is made. Late submission of missed submittals will not result in recovery of the previously forfeited portion of the Schedule of Operations Fixed Price Payment Item.

Failure to submit schedules as and when required may result in the forfeiture of that portion of the Schedule of Operations Fixed Price Payment and/or the withholding of the full or partial CQE payments by the Engineer.

Failure to submit schedules that are acceptable to the Engineer may result in the forfeiture of that portion of the Schedule of Operations Fixed Price Payment and/or the withholding of the full or partial CQE payments by the Engineer.

The Schedule of Operations pay item will be adjusted to pay for only the actual quantity of schedules that have been submitted in accordance with this section.

The Contractor's failure or refusal to comply with the requirements of this Section shall be reasonable evidence that the Contractor is not prosecuting the Work with due diligence and may result in the Engineer withholding of full or partial payments of all work performed.

722.82 Payment Items

722.1	SCHEDULE OF OPERATIONS (TYPE A) - FIXED PRICE \$ _____	LUMP SUM
722.2	SCHEDULE OF OPERATIONS (TYPE B) - FIXED PRICE \$ _____	LUMP SUM
722.3	SCHEDULE OF OPERATIONS (TYPE C) - FIXED PRICE \$ _____	LUMP SUM

ITEM 102.511 **TREE PROTECTION – ARMORING AND PRUNING** **EACH**

The work under this item shall conform to the relevant provisions of Subsection 771 of the Standard Specifications and the following:

Tree protection – armoring and pruning shall be used for instances where construction activity (the use of heavy equipment), comes within proximity to potentially damage tree trunk(s) or limbs.

The work shall include the furnishing and installing of temporary tree trunk protection, minor limb pruning, or removal of lower tree limbs to prevent injury to the tree from construction equipment and activities; as shown on the Drawings; and/or as required by the Engineer.

REFERENCES

If requested, the Contractor shall provide to the Engineer one copy of the latest edition of the American National Standards Institute (ANSI) A300 Standard Practices for Tree, Shrub, and Other Woody Plant Maintenance: Part 1-Pruning and Part 5-Construction Management Standard. Provision of reference shall be incidental to this item.

MATERIALS

Trunk armoring shall be such that it prevents damage to the trunk from construction equipment. Material used for trunk armoring or mounting shall be such that installation and removal shall not damage the trunk.

Acceptable trunk armoring materials shall include two by four (2x4) wood cladding, mounted with wire or metal strapping, or when duration of construction activities is less than three months, slotted corrugated plastic pipe, mounted with duct tape. Eight (8) once untreated burlap shall be used to wrap the tree trunk prior to installation of cladding.

Alternative armoring methods or materials may be acceptable if approved by the Engineer.

The height of tree trunk cladding shall be measured from the base of the tree (including root flare) to the bottom of the first branch, or to a height of eight (8) feet, or as may be required by the Engineer.

METHODS OF WORK

Prior to construction activities, the Engineer, Contractor, and the Arborist (if item is included in the contract), shall review trees noted on the Drawings to be protected. Final decision and selection of trees to be armored and/or pruned shall be per the Engineer.

Care shall be taken to avoid damage to the bark during installation and removal of armoring. Trunk armoring shall be maintained such that it is effective for as long as required or replaced when materials are found to be damaged or ineffective, as determined by the Engineer. Replacement, if required, shall be incidental to the work. Armoring shall be removed immediately upon completion of work activities adjacent to the protected tree(s).

Pruning of limbs shall conform to the techniques and standards of the most recent ANSI A300 standards.

ITEM 102.511 (Continued)**DAMAGES OR LOSS**

If trees designated for protection under this item are damaged, including root damage from unapproved trespassing onto the root zone, the Contractor shall, at his own expense, secure the services of an Arborist, described in Item 102.55. The Arborist shall be approved by MassDOT.

If, based on the recommendation of the Arborist, the Engineer determines that damages can be remedied by corrective measures, such as repairing trunk or limb injury; soil compaction remediation; pruning; soil injection fertilization; and/or watering; the damage shall be repaired as soon as possible, within the appropriate season for such work and according to industry standards.

If, based on the recommendation of the Arborist, the Engineer determines that damages are irreparable, or that the damages are such that the tree is sufficiently compromised to pose a future safety hazard, the tree shall be removed. Tree removal shall include cleanup of all wood, grinding of the stump to a depth sufficient to plant a replacement tree or plant, removal of all chips from the stump site, and filling the resulting hole with topsoil. Such tree removal(s), grinding, debris removal, and topsoil filling, shall be at the Contractor's expense.

Tree removal from improper or inadequate tree protection shall result in the Engineer assessing the Contractor monetary damages consistent with industry standards for assessed value and/or replacement.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Item 102.511 will be measured and paid at the contract unit price per EACH tree to be armored and pruned. This will include full compensation for all labor, equipment, materials, and incidentals for the satisfactory completion of the work and the subsequent removal and satisfactory disposal of the protective materials upon completion of the contract or as required by the Engineer.

Payment for work under this item will be scheduled as follows:

- 40% of the value shall be paid upon installation of trunk armoring and completion of pruning work, if required.
- 60% of the value shall be paid at the end of construction operations that would potentially damage the tree and after protection materials have been removed and properly disposed of by the Contractor. In the event of repairable damages, payment shall be made after the completion of remediation measures.

No separate payment will be made for costs of remedial actions, including Arborist services, tree removal, but all costs in connection therewith shall be included in the Contract unit price bid.

Tree damages assessed, due to lack of or improper tree and plant protective measures being taken, shall be deducted from the contract price of the work.

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

The work under this Item shall conform to the relevant provisions of Subsections 644 and 771 of the Standard Specifications and the following:

Work under this item shall consist of furnishing, installing, and maintaining tree and plant protection fence(s) in a vertical and taut position; removing and resetting fencing as may be required; and final removal of protection fence(s) at the completion of construction activities, or as otherwise required by the Engineer.

The purpose of the fencing is to signify a construction work-free zone and physical barrier, thereby preventing damage to tree roots, tree trunks, soil, and all other vegetation within this delineated Tree and Plant Protection Zone (TPPZ), as shown on the Drawings, as required by the Engineer, and as described herein.

Protection shall be for the duration of the construction activities unless otherwise required by the Engineer.

MATERIALS

Tree and plant protection fence(s) shall provide a minimum forty-eight (48) inch tall barrier, that remains vertical and taut. The Fence shall be orange plastic safety fence (recommended where high visibility is necessary), or wooden snow fencing, or other approved material. Posts and anchoring materials shall be incidental to the work.

Per requirements of the Engineer, additional posts, deeper post depths, and/or additional attachments shall be used if the fabric or fence sags, leans or otherwise is not providing visible or physical protection to the TPPZ.

REFERENCES

If requested, the Contractor shall provide to the Engineer one copy of the American National Standards Institute (ANSI) A300 Standard Practices for Tree, Shrub, and Other Woody Plant Maintenance Part 1, Pruning and Part 5, Construction Management Standard. Provision of reference shall be incidental to this item.

ESTABLISHMENT OF THE TPPZ

Fencing shall be used to delineate and establish the TPPZ, adjacent to construction areas, staging areas, stockpile areas, as shown on the Drawings, and/or as required by the Engineer.

Fencing shall be located as close to the work zone limit and as far from tree trunk(s) and plants as possible to maximize the area to be protected. Fence shall run parallel and adjacent to construction activity to create a barrier between the work zone and the root zone or designated limit of plants and soils to be protected.

ITEM 102.521 (Continued)

When construction activities surround (or have the potential to surround) trees or plants to be protected, a circular enclosure shall be used. In these instances, the TPPZ limit shall be the drip line of each tree or as close as possible to the drip line, and/or as shown on the Drawings. The drip line is defined as the outermost limit of tree canopy.

The Contractor shall not engage in any construction activity within the TPPZ without the approval of the Engineer. Activities may include operating, moving, or storing equipment, supplies, or materials; and locating temporary facilities, including trailers or portable toilets. Accessing or traversing the TPPZ shall not be permitted.

METHOD OF WORK

TPPZ fencing shall be installed prior to any construction work or staging activities. Fence(s) shall be repositioned where and as necessary for optimum tree and plant protection. Repositioning shall be incidental to this item. TPPZ fencing shall not be moved without prior approval by the Engineer.

The TPPZ shall be protected at all times from compaction of the soil; damage of any kind to trunks, bark, branches, leaves, and roots of all plants; and contamination of the soil with construction materials, debris, silt, fuels, oils, and any chemicals substance.

After construction activities are completed, or when required by the Engineer, fencing, stakes, and other anchoring materials, if any, shall be removed and disposed off-site by the Contractor.

REQUIRED WORK WITHIN THE TPPZ

In the event that grading, trenching, utility work, or storage is unavoidable within the TPPZ, the Engineer shall be notified. Measures may be required for tree protection and preservation, including air spading; the use of six (6) inch depth of wood chips or approved matting for root protection; pruning of branches; and/or trunk protection. These protection measures shall be paid under applicable contract items.

Landscaping work specified within the TPPZ shall be accomplished by hand tools. Where handwork is not feasible, with permission of the Engineer, work shall be conducted with the smallest mechanized equipment necessary.

TREE AND PLANT INJURY OR LOSS

If the TPPZ is encroached by construction activity without approval, at the discretion of the Engineer, the Contractor may be required to provide a more durable barrier (e.g., Jersey Barriers, chain link fence (if not already in use) to secure the area. Costs of furnishing and installing additional or more durable barrier(s) shall be borne by the Contractor.

In such cases of encroachment, soils shall be considered compacted and tree root injury will be assumed. Action shall be taken as specified below.

ITEM 102.521 (Continued)

In the event that trees designated for protection under this item are injured, including root injury from unapproved trespassing onto the root zone, the Contractor shall, at his own expense, secure the services of an Arborist, described under Item 102.55. The Arborist shall be approved by MassDOT.

In the event of spills, compaction or injury, the Contractor shall take corrective action immediately using methods approved by the Engineer, in coordination with the Arborist.

If, based on the recommendations of the Arborist, the Engineer determines that injuries can be remedied by corrective measures, such as repairing trunk or limb injury, soil compaction remediation, pruning, and/or watering; the injury shall be repaired as soon as possible, within the appropriate season for such work, and according to industry standards.

If, based on the recommendations of the Arborist, the Engineer determines that injuries are irreparable, or that the injuries are such that the tree is sufficiently compromised to pose a future safety hazard, the tree shall be removed. Tree removal shall include cleanup of all wood, grinding of the stump to a depth sufficient to plant a replacement tree or plant, removal of all chips from the stump site, and filling the resulting hole with topsoil. Such tree removal(s), grinding, debris removal, and filling, shall be at the Contractor's expense.

Tree removal from improper or inadequate protection of the TPPZ shall result in the Engineer assessing the Contractor monetary damages consistent with industry standards for assessed value and/or replacement.

Shrubs removals from improper or inadequate protection of the TPPZ shall be replaced with plants of similar species and equal size or the largest size plants reasonably available. The Engineer shall approve the size, quality, and quantity of the replacement plant(s). Each replacement shall include a minimum of one year of watering and establishment care, specified under Section 771.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Tree and Plant Protection Fence will be measured by the FOOT, complete in place, by the length along the top of the fence.

Tree and Plant Protection Fence will be paid for under the contract unit price per FOOT, complete in place and shall include all materials, labor, and equipment required to furnish, install, anchor, maintain, and remove the fence upon completion, as described herein. Posts, temporary footings, anchoring and removal upon completion, shall be incidental to this item.

No separate payment will be made for costs of remedial actions, including addition of more durable barriers, Arborist services, tree or plant removal, shrub replacement and establishment, but all costs in connection therewith shall be included in the Contract unit price bid.

Tree damages assessed, due to lack of or improper tree and plant protective measures being taken, shall be deducted from the contract price of the work.

ITEM 102.521 (Continued)

Payment for work under this item will be scheduled as follows:

- Forty (40) percent of the value payment will be made upon installation of fencing.
- Sixty (60) percent of the value payment will be made when fencing materials have been maintained to function as specified, for the intended duration, and removed and disposed off-site at the completion of protection measure requirement.

ITEM 102.531**TREE CARE - PRUNING****EACH**

The work under this item shall conform to the relevant provisions of Subsection 771 and shall be for when specialized or significant limb pruning is required. Pruning shall be to prevent injury to the tree from construction equipment and activities, pruning of dead limbs, and/or pruning for health and balance of the tree to mitigate impacts of construction activities on the root zone.

Trees to be pruned shall be those listed below:

	STA	TYPE	QUANTITY	
Yale St Const BL	70+59, RT	18"	1	
McKnight St Const BL	51+43, LT	12"	1	
	51+42, RT	12"	1	
	52+18, RT	20"	1	
	52+24, LT	20"	1	
Catharine St Const BL	38+70, LT	20"	1	
	41+99, LT	24"	3	
			9	EA

	STA	TYPE	QUANTITY	
Yale St Const BL	70+59, RT	18"	1	
McKnight St Const BL	51+43, LT	12"	1	
	52+24, LT	20"	1	
	52+18, RT	20"	1	
Catharine St Const BL	38+70, LT	20"	1	
	41+99, LT	24"	3	
	41+99, LT	12"	2	
	45+16, LT	12"	1	
			11	EA

QUALIFICATIONS

Individuals performing the work must have, at a minimum, an ISA Certified Tree Worker or demonstrate equivalent training and experience. Certification shall be submitted to the Engineer for approval prior to work.

REFERENCES

If requested, the Contractor shall provide to the Engineer one copy of the latest edition of the American National Standards Institute (ANSI) A300 Standard Practices for Tree, Shrub, and Other Woody Plant Maintenance: Part 1-Pruning and Part 5-Construction Management Standard. Provision of reference shall be incidental to this item.

ITEM 102.531 (Continued)**METHODS OF WORK**

Prior to construction activities, the Engineer, the Contractor, and the Arborist shall review trees noted on the plans and listed herein to be pruned. Final decision as to trees pruned shall be per the Engineer.

Pruning of limbs shall conform to the techniques and standards of the most recent ANSI A300 standards.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Item 102.531 will be measured and paid at the contract unit price per Each. This will include full compensation for all labor, equipment, tools, materials, and incidentals for the satisfactory completion of the work.

ITEM 180.01 ENVIRONMENTAL HEALTH AND SAFETY PROGRAM LUMP SUM

The work shall consist of ensuring the health and safety of the Contractor's employees and subcontracting personnel, the Engineer, their representatives, the environment, and public welfare from any on-site chemical contamination present in air, soil, water and sediment.

The Contractor shall prepare and implement a site-specific Environmental Health and Safety Plan (EHASP) which has been approved and stamped by a Certified Industrial Hygienist (CIH) and includes the preparer's name and work experience. The EHASP shall include appropriate components required by OSHA Standard 29 CFR 1910.120(b) and the Massachusetts Contingency plan (MCP) 310 CMR 40.0018 and must comply with all applicable state and federal laws, regulations, standards and guidelines, and provide a degree of protection and training appropriate for implementation on the project. The EHASP shall be a dynamic document with provision for change to reflect new information, new practices or procedures, changing site environmental conditions or other situations which may affect site workers and the public. The EHASP shall be developed and implemented independently from the standard construction HASP required to work on all MassDOT construction projects.

Health and safety procedures provided by the Contractor shall comply with all the appropriate regulations that address employee working conditions, including but not limited to standards established by OSHA and National Institute for Occupational Safety and Health (NIOSH). Equipment used for the purpose of health and safety shall be approved by and meet pertinent standards and specifications of the appropriate regulatory agencies.

A copy of the most up-to-date version of the EHASP shall be maintained on-site at all times by the Contractor. The on-site copy shall contain the signature of the Engineer and each on-site employee of the MassDOT, Contractor, and Subcontractors involved with on-site activities. The employee's signature on the EHASP shall be deemed prima facie evidence that the employee has read and understands the plan. Updated copies of signature sheets shall be submitted to the Engineer.

The EHASP shall specify a Contractor Site Safety and Health Officer responsible for implementation of the EHASP and to oversee all construction activities, including handling, storage, sampling and transport, which require contact with or exposure to potentially hazardous materials.

The level of protection, required to ensure the health and safety of on-site personnel will be stipulated in the EHASP. The Site Safety and Health Officer shall implement the EHASP based on changing site and weather conditions, type of operation or activity, chemical compounds identified on-site, concentration of the chemicals, air monitoring data, physical state of the hazardous materials, potential duration of exposure to hazardous materials, dexterity required to perform work, decontamination procedures, necessary personnel and type of equipment to be utilized.

ITEM 180.01 (Continued)

During implementation of the EHASP, a daily log shall be kept by the Site Safety and Health Officer and a copy shall be provided weekly to the Engineer. This log shall be used to record a description of the weather conditions, levels of personal protection being employed, screening data and any other information relevant to on-site environmental safety conditions. The Site Safety and Health Officer shall sign and date the daily log.

Method of Measurement and Basis of Payment

Preparation and implementation of the Environmental Health and Safety Program, including the monitoring, protection and storage of all contaminated materials, as well as subsequent modifications to the EHASP, will be measured and paid for at the Lump Sum Bid Price.

Payment of 50% of the Environmental Health and Safety Program contract price will be made upon the initial acceptance of the EHASP by the Engineer. Payment of the remaining 50% of the Environmental Health and Safety Program contract price will be made upon completion of the work. The bid price shall include preparation and implementation of the EHASP as well as the cost for its enforcement by the Site Safety and Health Officer along with any necessary revisions and updates. The work of implementing the Environmental Health and Safety Program includes work involving, but not limited to, the monitoring, protection, and storage of all contaminated materials.

ITEM 180.02**PERSONAL PROTECTION LEVEL C UPGRADE****HOUR**

The work shall consist of providing appropriate personal protective equipment (PPE) for all personnel in an area either containing or suspected of containing a hazardous environment.

Contingencies for upgrading the level of protection for on-site workers will be identified in the EHASP and the Contractor shall have the capability to implement the personal protection upgrade in a timely manner. The protective equipment and its use shall be in compliance with the EHASP and all appropriate regulations and/or standards for employee working conditions.

Personal Protection Level C Upgrade will be measured and paid only upon upgrade to Level C and will be at the contract unit price, per hour, per worker, required in Level C personal protection. No payment will be made to the Contractor to provide Level D PPE.

ITEM 180.03**LICENSED SITE PROFESSIONAL SERVICES****HOUR**

Within limited areas of the project site, media (i.e. soils, sediments, surface water and/or groundwater) requiring evaluation and/or management under the Massachusetts Contingency Plan (MCP) may be encountered. A Licensed Site Professional (LSP) shall be required to provide the services necessary to comply with the requirements of the MCP. These services may include a site walk, field screening, sampling, analysis and characterization of potentially contaminated media, preparation and implementation of Immediate Response Action (IRA) Plans, Utility-Related Abatement Measure (URAM) and Release Abatement Measure (RAM) Plans, Imminent Hazard Evaluations, status reports, transmittal forms, release notification forms, risk assessments, completion statements, and related documents required pursuant to the MCP. LSP services shall also be necessary to temporarily move material generated on the project to an off-site storage location.

The name and qualifications of the LSP and all environmental technicians to be assigned to the project shall be submitted to the Engineer for approval at least four weeks prior to initial site activities. The LSP shall have a current, valid license issued by the Massachusetts Board of Registration of Hazardous Waste Site Cleanup Professionals. The LSP shall have significant experience in the oversight of MCP activities at active construction sites. Qualification packages for the LSP and each technician shall include a resume, all recent work assignments with responsibilities identified (previous 5 years), and applicable training and certifications. A list of all Notices of Noncompliance, Notice of Audit Findings and Enforcement Orders issued by the Massachusetts Department of Environmental Protection (DEP) shall be submitted for all work assignments listed for the LSP and environmental technicians. Upon approval of the LSP Qualifications, the LSP will be designated as the LSP of Record unless MassDOT designates in writing otherwise. The LSP of Record will serve as the primary point of contact for all hazardous material matters on the project.

The LSP shall evaluate soil and/or sediment with discoloration, odor, elevated field screening results, presence of petroleum liquid or sheen on the groundwater surface, or any abnormal gas or materials in the ground which are known or suspected to be oil or hazardous materials. Excavated soil and sediment which is suspected of petroleum contamination shall be field screened using the jar headspace procedures according to established DEP Guidance. All field screening equipment must be pre-approved by the Engineer. The LSP shall ensure proper on-site calibration of all field screening instrumentation.

The Engineer shall be contacted immediately when observations or any field screening results verify contamination requiring further analysis, and/or enhanced management of suspect media. Any enhanced management of contaminated soil to ensure proper stockpiling and storage is incidental to the LSP Services item. The LSP shall evaluate the need for confirmatory sampling prior to backfill in areas where contaminated material has been excavated and disposed off-site for compliance with applicable regulatory requirements. The Engineer shall approve the locations of the testing sites prior to the sampling.

ITEM 180.03 (Continued)

Contaminated media shall be handled in accordance with all applicable state and federal statutes, regulations, and policies. The LSP shall adequately evaluate contaminated media for compliance with the requirements of the MCP and Department Policies.

The Contractor and the LSP shall be aware of the reporting requirements for releases of oil and/or other hazardous material (OHM) as set forth in federal and state laws and regulations and both shall be held responsible for performing the work in accordance with all applicable Federal and State laws and regulations. The LSP shall maintain written records in a clear and concise tabular format which tracks the excavation, stockpiling, analysis and reuse/disposal of all known/suspect contaminated media. These records shall be up-to-date and submitted to the Engineer on a bi-weekly basis. The LSP shall review and summarize the laboratory data from any analyses performed on contaminated media in a tabular format and compare the results to applicable reporting thresholds. A report shall be delivered to the Engineer outlining the material sampling methods, laboratory analysis results, evaluation of applicable regulatory exemptions, reporting obligations, and proposed course of action. The laboratory report together with Chain of Custody forms for all analytical results shall be submitted to the Engineer within 14 days after completion of such analyses.

The LSP and Contractor shall be held responsible for the submission of all MCP-related documents to the Engineer at least 14 days in advance of any timeframe specified in the MCP and for the timely submission of data and tracking information as noted within this Item. All documents prepared under this Item must be reviewed and signed by the approved LSP. The Contractor and LSP shall be responsible for all fines, damages, and enforcement requirements imposed by applicable regulatory agencies for failure to meet regulatory and contract timeframes. No compensation will be provided for such fines, damages, and enforcement actions.

The Contractor and the LSP shall be aware of the reporting requirements for releases of oil and/or other hazardous material (OHM) as set forth in federal and state laws and regulations and shall both be held responsible for performing the work in accordance with all applicable Federal and State laws and regulations.

If the Contractor causes a release of OHM, the Contractor shall be responsible for assessing and remediating the release in accordance with all pertinent State and Federal regulations, including securing the services of a LSP, at his own expense.

The LSP shall coordinate all activities involving both MassDOT and the DEP through the Engineer. Any notification of release shall be approved by the Engineer before submittal to the DEP, except if an imminent hazard condition exists as defined in 309 CMR 4.03(4)(b).

ITEM 180.03 (Continued)**LABORATORY TESTING IN SUPPORT OF LSP SERVICES**

Laboratory testing provides for analytical testing in support of LSP services related to maintaining MCP compliance, such as delineating the extent and type of contamination present. Sampling and testing for disposal purposes are not included and are incidental to Items 181.11-181.14.

In order to maintain compliance with the MCP and Department Policies or other regulatory requirements, the LSP shall request approval from the Engineer to obtain samples from various locations and depths within the project area and to perform laboratory analyses on those samples. No sampling shall be conducted without prior approval from the Engineer. The samples shall be delivered to a DEP-certified laboratory using proper chain-of-custody documentation for analyses which, depending upon site conditions and suspected and/or identified contaminants of concern, may include, but are not limited to, metals, polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, polycyclic aromatic hydrocarbons (PAHs), extractable petroleum hydrocarbons (EPHs) and volatile petroleum hydrocarbons (VPHs). Subsequent testing, depending upon initial results, may be required for Toxicity Characteristic Leaching Procedure (TCLP) analyses (EPA Method 1311) for metals.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

LSP Services for work under this item will be measured per person, per hour of service provided by LSP, Environmental Technicians and other approved personnel. Travel time shall not be included in the billable hours.

The quantity and type of laboratory tests must be approved by the Engineer beforehand. The Contractor will be reimbursed upon satisfactory written evidence of payment. The Contractor may be required to obtain cost estimates from three DEP certified laboratories for the Engineer to choose the service provider.

LSP Services will be paid at the Contractor bid price for each hour, or fraction thereof, spent to perform the work as described above. The bid price shall be a blended rate that includes the cost of the LSP, environmental technicians and other personnel, the performance of all work tasks and field screening, including required equipment, materials and instrumentation, and production of all documentation described above. All requests for payment must be accompanied by the following information: the names of the personnel associated with the work charged under LSP Services, dates and hours worked, work conducted, including, where appropriate, locations as identified on the construction plans, and a copy of the field diary for the dates submitted.

ITEM 180.03 (Continued)

Laboratory testing will be reimbursed upon receipt of paid invoices for testing approved by the Engineer.

This item is for LSP work for compliance with the MCP and Department Policies. LSP hours and any laboratory testing related to off-site disposal of excess soil and sediment is incidental to Items 181.11-181.14 (including, but not limited to, disposal characterization, disposal package preparation, landfill acceptance, shipment paperwork preparation, field screening, and tracking).

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

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

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

CLASSES OF CONTAMINATED SOILS

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

ITEMS 181.11 through 181.14 (Continued)

UNREGULATED SOIL consists of soil, fill and dredged material with measured levels of oil and hazardous material (OHM) contamination at concentrations below the applicable Reportable Concentrations (RCs) presented in the MCP. Unregulated soil consists of material which may be reused (or otherwise disposed) as fill within the Commonwealth of Massachusetts subject to the non-degradation criteria of the MCP (310 CMR 40.0032(3)), in a restricted manner, such that they are sent to a location with equal or higher concentrations of similar contaminants. Disposal areas include licensed disposal facilities, approved industrial settings in areas which will be capped or covered with pavement or loamed and seeded, and for purposes of this project should be reused as fill within the project site construction corridor whenever possible. The material cannot be placed in residential and/or environmentally sensitive (e.g. wetlands) areas. Under no circumstances shall contaminated soils be placed in an uncontaminated or less contaminated area (including the area above the groundwater table if this area shows no sign of contamination).

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

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

ITEMS 181.11 through 181.14 (Continued)

REGULATED SOIL consists of materials containing measurable levels of OHM that are equal to or exceed the applicable Reportable Concentrations for the site as defined by the MCP, 310 CMR 40.0000. Regulated soil which meets the MCP reuse criteria of the applicable soil/groundwater category for this project area may be reused on site provided that it meets the appropriate geotechnical criteria established by the Engineer. Regulated Soil may be reused (as daily or intermediate cover or pre-cap contouring material) or disposed (as buried waste) at lined landfills within the Commonwealth of Massachusetts or at an unlined landfill that is approved by the Massachusetts Department of Environmental Protection (DEP) for accepting such material, in accordance with DEP Policy #COMM-97-001, or at a similar out-of-state facility. It should be noted that soils which exceed the levels and criteria for disposal at in-state landfills, as outlined in COMM-97-001, may be shipped to an in-state landfill, but require approval from the DEP Division of Solid Waste Management and receiving facility. An additional management alternative for this material is recycling into asphalt. Regulated Soils may also be recycled at a DEP approved recycling facility possessing a Class A recycling permit subject to acceptance by the facility and compliance with DEP Policy #BWSC-94-400. Regulated Soil removed from the site for disposal or treatment must be removed via an LSP approved Bill of Lading, Manifest or applicable material tracking form. This type of facility shall be approved/permitted by the State in which it operates to accept the class of contaminated soil in accordance with all applicable local, state and federal regulations.

HAZARDOUS WASTE consists of materials which must be disposed of at a facility permitted and operated in full compliance with Federal Regulation 40 CFR 260-265, Massachusetts Regulation 310 CMR 30.000, Toxic Substances Control Act (TSCA) regulations, or the equivalent regulations of other states, and all other applicable local, state, and federal regulations. All excavated materials classified as hazardous waste shall be disposed of at an out-of-state permitted facility. This facility shall be a RCRA hazardous waste or TSCA facility, or RCRA hazardous waste incinerator. This type of facility shall be approved/permitted by the State in which it operates to accept hazardous waste in accordance with all applicable local, state and federal regulations and shall be permitted to accept all contamination which may be present in the soil excavate. The Contractor shall ensure that, when needed, the facility can accept TSCA waste materials i.e. polychlorinated biphenyls (PCBs). Hazardous waste must be removed from the site for disposal or treatment via an LSP approved Manifest.

MONITORING/SAMPLING/TESTING REQUIREMENTS

The Contractor shall be responsible for monitoring, sampling and testing during and following excavation of contaminated soils to determine the specific class of contaminated material. Monitoring, sampling and testing frequency and techniques should be performed in accordance with Item 180.03 – LSP Services. Additional sampling and analysis may be necessary to meet the requirements of the disposal facility license. The cost of such additional sampling and analysis shall be included in the bid cost for the applicable disposal items. The Contractor shall obtain sufficient information to demonstrate that the contaminated soil meets the disposal criteria set by the receiving facility that will accept the material.

ITEMS 181.11 through 181.14 (Continued)

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

WASTE TRACKING:

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

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

DECONTAMINATION OF EQUIPMENT

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

ITEMS 181.11 through 181.14 (Continued)**REGULATORY REQUIREMENTS**

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

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

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

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

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

The Sampling Results will be presented in tabular format. Each sample will be identified by appropriate identification matching the sample identification shown on the Chain of Custody Record. The sample must also be identified by location (e.g. grid number or stockpile number). For each sample, the following information must be listed: the classification (unregulated, regulated, etc.), proposed disposal option for the stockpile or unit of material represented, and, all analytical results.

ITEMS 181.11 through 181.14 (Continued)

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

II. Stockpiling, Transport, and Disposal.

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

Excavation and Stockpiling Protocol:

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

Disposal and Recycling Facilities:

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

Transportation:

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

III. Material Tracking and Analytical Documentation for Reuse/Disposal.

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

ITEMS 181.11 through 181.14 (Continued)

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

Demolition Debris:

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

Soil/Sediment:

Soil excavation will be identified based on the station-offset of the excavation location limits. The tracking table will identify date and point of generation, any field screening such as PID or dust monitoring, visual observations, quantity, and stockpile number/location. For each unit of material tracked, the table will also track reuse of the material on-site and disposal of the material off-site using the same categories identified for demolition debris above.

Method Of Measurement And Basis Of Payment

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

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

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

ITEMS 181.11 through 181.14 (Continued)

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

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

ITEM 184.1**DISPOSAL OF TREATED WOOD PRODUCTS****TON**

Work under this item shall include the transportation and disposal of all treated existing wood product as directed by the Engineer.

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

Compensation

Measurement and payment will be by the weight, in tons, of treated timber transported and accepted at a licensed facility. The work shall be considered full compensation for all labor, tools, equipment, materials, testing, loading, transportation, approvals, and permits necessary for the completion of the work.

ITEM 476.01 **SCORED CEMENT CONCRETE PAVEMENT** **SQUARE YARD**

The work under this item shall consist of constructing scored cement concrete pavement at locations shown on the Contract Drawings and in accordance with details shown on plate number E 105.2.0, dated October 2017, of the Construction Standard Details and as directed by the Engineer.

Construction methods shall be in accordance with Subsection 476 of the Standard Specifications, as shown on the Contract Documents, and as directed by the Engineer.

METHOD OF MEASUREMENT

Item 476.01 will be measured for payment by the Square Yard.

BASIS OF PAYMENT

Item 476.01 will be paid at the Contract unit price per Square Yard of scored cement concrete pavement, which price will be full compensation for all work, materials including cement and aggregate; for all labor including scoring the pavement; and all incidental costs required to complete the work.

ITEM 657.
ITEM 657.5**TEMPORARY FENCE**
TEMPORARY FENCE REMOVED AND RESET**FOOT**
FOOT

The work under this Item shall conform to the relevant provisions of Section 600 of the Standard Specifications and includes installation of temporary chain link fencing as shown on the plans and the following:

Temporary chain link fence shall be placed around the work area to protect areas with excavation as required by the Engineer and shall meet the requirements of the Standard Specifications and the Construction Standards, except the material need not be in new condition.

Gates shall be used at all locations that are to be opened on a regular basis.

Temporary fence shall be reset as often as required by Contractor activities to meet the project schedule and to stage the construction, subject to approval by the Engineer. The Contractor shall submit a plan to the Engineer indicating the locations and the amount of Temporary Fence and Temporary Fence, Removed and Reset that he anticipates he will install for the project. The methods of installation(s) and fence detail(s) shall also be submitted for approval by the Engineer.

The Contractor shall inspect the condition of temporary fence on a daily basis. Temporary fence that is damaged shall be promptly replaced.

METHOD OF MEASUREMENT

Item 657, Temporary Fence, will be measured for payment by the Foot.

Item 657.5, Temporary Fence Removed and Reset, will be measured for payment by the Foot.

BASIS OF PAYMENT

Item 657, Temporary Fence, will be paid at the Contract unit price per Foot, which price shall include all labor, materials, equipment, and incidental costs required to complete the work including posts, fence fabric, gates, bracing, mounting.

Item 657.5, Temporary Fence Removed and Reset, will be paid at the Contract unit price per Foot to remove and reset temporary fence, as many times as needed or as directed by the Engineer. The Contract unit price will be considered as full compensation for all labor, materials, equipment, and incidental costs required to complete the work, including posts, fence fabric, gates, bracing, mounting, and other appurtenances to supplement the original installation of Temporary Fence.

No payment will be made for the final removal of temporary fence. No payment will be made for any component needed to replace defective components.

ITEM 660.**METAL PIPE RAIL****FEET**

The work under this Item shall conform to the relevant provisions of Subsection 660 of the Standard Specifications and the following:

This item is intended for the ramp on the approach to the Rebecca M. Johnson Elementary School on Marion Street as shown on the plans. The contractor is to submit shop drawings for the Engineer's approval before ordering fabrication of the Metal Pipe Rail.

The metal pipe rail shall be installed on each side of the ramp and shall be in strict conformance with the applicable requirements of the Massachusetts Architectural Access Board ("AAB") and the requirements of the Americans with Disabilities Act ("ADA").

METHOD OF MEASUREMENT

Item 660, Metal Pipe Rail, will be measured for payment by the Foot.

BASIS OF PAYMENT

Item 660, Metal Pipe Rail, will be paid at the Contract unit price per Foot.

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

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

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

CONSTRUCTION

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

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

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

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

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

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

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

ITEM 697.1 (Continued)

COMPENSATION

Silt sacks will be measured and paid at the Contract unit price per each, complete in place, which price shall include all labor, materials, equipment and incidental costs required to complete the work. No separate payment will be made for removal and disposal of the sediment from the insert, but all costs in connection therewith shall be included in the Contract unit price bid.

ITEM 740. ENGINEER'S FIELD OFFICE AND EQUIPMENT (TYPE A) MONTH

The work under this Item shall conform to the relevant provisions of Subsection 740 of the Standard Specifications and the following:

Two computer systems and printer system meeting minimum requirements set forth below including installation, maintenance, power, paper, disks, and other supplies shall be provided at the Resident Engineer's Office:

A four-foot smart level shall be provided to the Engineer at the Resident Engineer's Office.

All equipment shall be UL approved and Energy Star compliant.

The Computer System shall meet the following minimum criteria or better:

Processor:	Intel, 3.5 GHz
System Memory (RAM):	12 GB
Hard Drive:	500 GB
Optical Drive:	DVD-RW/DVD+RW/CD-RW/CD+RW
Graphics Card:	8 GB
Network Adapter:	10/100 Mbit/s
USB Ports:	6 USB 3.0 ports
Keyboard:	Generic
Mouse:	Optical mouse with scroll, MS-Mouse compliant

Video/Audio	the computer system shall be capable of allow video calling and recording:
Video camera	shall be High Definition 1080p widescreen capable video calling and recording with built in microphone. The microphone system shall capture natural audio while filtering out background noise.
Audio	shall be stereo multimedia speaker system delivering premium sound.
OS:	Latest Windows Professional with all security updates
Web Browser:	Latest Internet Explorer with all security updates
Applications:	Latest MS Office Professional with all security updates Latest Adobe Acrobat Professional with all security updates Latest Autodesk AutoCAD LT Antivirus software with all current security updates maintained through the life of the contract.

Monitors:	Two 27" LED with Full HD resolution. Max. resolution 1920 x 1080
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Flash drives:	2 (two) - 128GB USB 3.0
Internet access:	High Speed (min. 24 mbps) internet access with wireless router.

ITEM 740. (Continued)

The Multifunction Printer System shall meet the following minimum criteria or better:

Color laser printer, fax, scanner, email and copier all in one with the following minimum capabilities:

- Estimated volume 8,000 pages per month
- LCD touch panel display
- 50 page reversing automatic document feeder
- Reduction/enlargement capability
- Ability to copy and print 11" x 17" paper size
- email and network pc connectivity
- Microsoft and Apple compatibility
- ability to overwrite latent images on hard drive
- 600 x 600 dpi capability
- 30 pages per minute print speed (color),
- 4 Paper Trays Standard (RADF) (not including the bypass tray)
- Automatic duplexing
- Finisher with staple functions
- Standard Ethernet. Print Controller
- Scan documents to PDF, PC and USB
- ability to print with authenticated access protection

The Contractor shall supply a maintenance contract for next day service, and all supplies (toner, staples, paper) necessary to meet estimated monthly usage.

The Engineer's Field Office and the equipment included herein including the computer system, and printer shall remain the property of the Contractor at the completion of the project. Disks, flash drives, and card readers with cards shall become the property of the Department.

Compensation for this work will be made at the contract unit price per month which price includes full compensation for all services and equipment, and incidentals necessary to provide equipment, maintenance, insurance as specified and as directed by the Engineer.

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

The work under this item shall conform to the relevant provisions of Subsections 670, 751 and 767 of the Standard Specifications and shall include the furnishing and placement of a sediment control barrier. Sediment control barrier shall be installed prior to disturbing upslope soil.

The purpose of the sediment control barrier is to slow runoff velocity and filter suspended sediments from storm water flow. Sediment barrier may be used to contain stockpile sediments, to break slope length, and to slow or prevent upgradient water or water off road surfaces from flowing into a work zone. Contractor shall be responsible for ensuring that barriers fulfill the intent of adequately controlling siltation and runoff.

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

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

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

No straw wattles may be used. Additional compost filter tubes (adding depth or height) shall be used at specific locations of concentrated flow such as at gully points, steep slopes, or identified failure points in the sediment capture line.

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

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

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

MATERIALS AND CONSTRUCTION

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

Barriers shall be staked, trenched, and/or wedged as specified herein and according to the Manufacturer's instructions. Barriers shall be securely in contact with existing soil such that there is no flow beneath the barrier.

ITEM 767.121 (Continued)**Compost Filter Tube**

Compost material inside the filter tube shall meet M1.06.0, except for the following: no peat, manure or bio-solids shall be used; no kiln-dried wood or construction debris shall be allowed; material shall pass through a 2-inch sieve; and the C:N ratio shall be disregarded.

Outer tube fabric shall be made of 100% biodegradable materials (i.e., cotton, hemp or jute) and shall have a knitted mesh with openings that allow for sufficient water flow and effective sediment capture.

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

Straw Bales

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

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

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

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

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

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

ITEM 767.121 (Continued)**Sedimentation Fence**

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

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

When used with compost filter tubes, the tube shall be placed on a minimum of 8 inches of folded fabric on the upslope side of the fence. Fabric does not need to be trenched.

When used with straw bales, an 8-inch deep and 4-inch wide trench or V-trench shall be dug on the upslope side of the fence line. One foot of fabric shall be placed in the bottom of the trench followed by backfilling with compacted earth or gravel. Stakes shall be on the down slope side of the trench and shall be spaced such that the fence remains vertical and effective.

Width of fabric shall be sufficient to provide a 36-inch high barrier after fabric is folded or trenched. Sagging fabric will require additional staking or other anchoring.

MAINTENANCE

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

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

Barriers that decompose such that they no longer provide the function required shall be repaired or replaced as directed. If the resulting berm of compost within the fabric tube is sufficiently intact (despite fabric decay) and continues to provide effective water and sediment control, barrier does not necessarily require replacement.

DISMANTLING & REMOVING

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

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

ITEM 767.121 (Continued)

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

- Compost filter tube fabric shall be cut and removed, and compost shall be raked to blend evenly (as would be done with a soil amendment or mulch). No more than a 2-inch depth shall be left on soil substrate.
- Straw bales shall be removed and disposed off-site by the Contractor. Areas of trenching shall be raked smooth and disturbed soils stabilized with a seed mix matching adjacent seeding or existing grasses (i.e., lawn or native grass mix).
- Sedimentation fence, stakes, and other debris shall be removed and disposed off-site. Site shall be restored to a neat and clean condition.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Item 767.121 will be measured and paid for at the contract unit price per foot of sediment control barrier which price shall include all labor, equipment, materials, maintenance, dismantling, removal, restoration of soil, and all incidental costs required to complete the work.

Additional barrier, such as double or triple stacking of compost filter tubes, will be paid for per foot of tube installed.

Barriers that have been driven over or otherwise damaged by construction activities shall be repaired or replaced as directed by the Engineer at the Contractor's expense.

ITEM 816.01 TRAFFIC SIGNAL RECONSTRUCTION LOCATION NO.1 LUMP SUM

Location 1 is the intersection of Bay Street and Catharine Street.

The work under this item shall conform to the relevant provisions of Section 800 of the Standard Specifications, the 2009 Manual on Uniform Traffic Control Devices (MUTCD), and the following:

These provisions are presented under major subheadings as follows: 1) General Requirements for Local Intersection Control Equipment, 2) Local Intersection Controllers, 3) Video Detection System, and 4) APS Pedestrian Pushbuttons.

The work includes furnishing all labor and materials to install mast arm, anchor bolts and foundation; posts and foundations; vehicular signal heads including backplates; countdown pedestrian signal heads; vehicle detectors; APS-style pedestrian pushbuttons; pull boxes and hand holes; all cable and wiring; equipment grounding and bonding; and all other equipment, materials and program signal timing data to the local traffic signal controller and incidental costs necessary to provide a complete, fully operational traffic control signal system as specified herein and as shown on the plans.

The work also includes removing and stacking existing pullboxes, handholes, signal heads, and signal poles; removing and resetting existing pullboxes, handholes, signal heads, and signal poles; or removing and discarding existing pullboxes, handholes, signal heads, and signal poles, where shown on the Drawings or as directed by the Engineer. The equipment removed will be properly stacked at the Springfield Department of Public Works, located at 70 Tapley Street, Springfield, MA 01104. This work shall be considered incidental and payment shall be included in the contract lump sum price for this item.

1) General Requirements for Local Intersection Control Equipment

Before beginning ANY traffic signal work, the individual or contracting organization responsible for any portion of the traffic signal construction shall demonstrate to the Engineer personal possession in the field of all of the following documents:

- Massachusetts Standard Specifications for Highways and Bridges, 2025 Edition
- Construction Standard Details, June 2025
- 2009 Manual on Uniform Traffic Control Devices with all Amendments
- 1968 Standard Drawings for Traffic Signals and Highway Lighting
- 1990 Standard Drawings for Signs and Supports
- All contract drawings showing traffic signal details or traffic signal design
- All contract special provisions

A list of the major traffic signal items required is included on the Plans. All traffic signal equipment installed on this project shall be included on the MassDOT Highway Division Qualified Traffic Control Equipment List.

ITEM 816.01 (Continued)

Within thirty days following the Notice to Proceed, the Contractor shall submit shop drawings for signal supports, a list of equipment, and manufacturer's equipment specifications to the Engineer in accordance with the relevant provisions of Subsection 815.20.

No work shall be commenced by the Contractor until approval of the shop drawings and the manufacturer's data has been received in writing from the Engineer. Approval of these drawings will be general in character and shall not relieve the Contractor from the responsibility of, or the necessity of, furnishing materials and workmanship conforming to the plans and specifications.

Traffic Signal Equipment

All traffic signal control components included in the traffic signal control cabinet shall comply with Subsection 815 of MassDOT Standard Specifications.

Malfunction Management Unit (MMU)

The MMU shall meet the requirements to be used in an Advanced Traffic Controller (ATC) cabinet. The MMU shall be compatible with a ATC traffic signal controller. The MMU shall provide a means of displaying the real time status of operating parameters such as the time and date, compatibility card programming, functional inputs, and the status of MMU switch settings.

The MMU shall provide a settable internal ninety-nine-year clock. This clock shall automatically adjust for daylight savings time. This requirement shall be accomplished by a user programmable function.

The MMU shall store events in a nonvolatile memory and these events shall be retained through indefinite power interruption on event log. A minimum of 100 events shall be logged by time and date of event occurrence. The memory storage algorithm shall be a first-in/first-out system (this type of rolling memory assures that the most recent events are retained). As a minimum, the event log shall contain the following information:

- A. Failure type (date/time stamp)
- B. Display indications at time of failure
- C. Manual reset (date/time stamp)
- D. Manual switch changes (date/time stamp)
- E. Last time/date stamp
- F. Last print out

The MMU shall be furnished and wired such that data is transmitted directly to the controller for remote system access. The data exchange shall provide the ability to, via the controller unit, remotely upload the MMU event log, MMU switch settings, and compatibility card programming information.

ITEM 816.01 (Continued)**Bus Interface Unit (BIU)**

The Bus Interface Unit (BIU) shall be designed to operate in an Advanced Transportation Controller (ATC) cabinet and meet all requirements of AASHTO/NEMA/ITE ATC cabinet standard.. The BIU shall be fully interchangeable with any other manufacturer's unit and interchangeable in a ATC cabinet assembly.

The BIU shall perform the interface function between Port 1 at the controller unit, the malfunction management unit, loop detector rack assembly, and the back panel terminal and facilities.

As a minimum, two (2) LED indicators shall be provided on the BIU front panel. One indicator shall serve a dual use; as a power on indication and as a diagnostic indicator for proper operation of the device. The second indicator shall serve as a transmit indicator illuminating each time data is transmitted.

Flashing Operation

Changes from flashing to stop-and-go operation and from stop-and-go to flashing operation shall occur as set forth in the MUTCD.

Flash Transfer Relay

Flash transfer relays shall be designed operate in an Advanced Transportation Controller (ATC) cabinet.

The field electrical loading for flash operation shall be wired through the transfer relays such that the load on the 2-circuit flasher is as balanced as possible within the limitations of the signal phasing.

Signal Heads

Signal heads shall have yellow housings with black doors. All proposed signal head indications shall be state approved LED. All signal heads shall have 5" flat back plates with 3" yellow retro-reflective border as indicated on the plans.

Pedestrian Signal Heads

Pedestrian signal heads shall have yellow housings with black doors and shall be the LED-type with cap visors displaying a full overlay graphical hand or person symbol with countdown timer, in accordance with the plans. Countdown numerals shall be steady display and not be enabled during the walk interval.

ITEM 816.01 (Continued)**Traffic Signal LED Module**

All signal and pedestrian displays shall be equipped with light emitting diode (LED) signal modules. All red, yellow, green, and pedestrian signal housings with the exception of optically programmed and fiber optic housings shall conform to the following where applicable:

- ITE's Vehicle Traffic Control Signal Heads – Light Emitting Diode (LED) Arrow Traffic Signal Supplement, Dated July 1, 2007.
- ITE's Vehicle Traffic Control Signal Heads – Light Emitting Diode (LED) Circular Signal Supplement, Dated June 27, 2005.
- ITE's Pedestrian and Countdown Signal Modules Compliant to PTCSI - Part 2 Light Emitting Diode (LED), Dated, February 2011.
- On the MassDOT Traffic Signal Approved Equipment List

For an LED module to be installed on this project, the LED module shall have approval from the MassDOT Traffic Control Products Approved Equipment Committee and be included on the Traffic Control Products List prior to the date of this proposal.

To prevent the LED module warranty from being voided, the connecting leads on the module shall not be cut. The original LED module leads shall be connected to the signal head terminal block as continuous wire without splices.

The LED signal module will be replaced or repaired by the manufacturer if it exhibits one of the following:

- A failure due to workmanship or material defects within the first 60 months of field operation
- A greater than 40 percent light output degradation or a fall below the minimum intensity levels (as defined by the latest ITE performance specifications) within the first 36 months of field operation

Posts, Bases and Foundations

Pedestal signal posts shall have steel shafts, yellow color, 4, 8 or 10 feet in height, with transformer bases. Signal base foundations shall not obstruct sidewalks or crosswalks.

Mast Arm Structures and Foundations

The mast arm structures and foundations shall be fabricated and constructed in conformance with the MassDOT Highway Division 2015 Overhead Signal Structure and Foundation Standard Drawings.

ITEM 816.01 (Continued)

Mast arms shall be galvanized steel structures. Longhand design calculations and shop drawings shall be submitted by the contractor for all mast arms. As part of these long-hand calculations, the moment shall be calculated with respect to the elevation of the proposed mast arm foundation top, the roadway clearance requirements, and the resultant mast arm height(s).

Mast arm base foundations shall not obstruct sidewalks or crosswalks. A minimum 3-foot clear path of travel (excluding curb) shall be provided on all sidewalks past the edge of the foundation. The top of mast arm foundations shall be flush with an adjacent sidewalk surface and 3-inches above adjacent non-paved surfaces (see 2015 Overhead Signal Structure and Foundation Standard Drawings, Sheet 5 of 7).

Signal heads and signs shall be rigidly mounted at the same height, with hangers varying in depth as required. The Contractor shall submit shop drawings of all mounting hardware used to mount signal heads, signs, video detection cameras and pre-emption equipment to the mast arm.

Design Requirements for Mast Arm Foundations

All Mast Arm Foundations, anchor bolts, and reinforcement shall be designed and constructed in accordance with the December 2015 MassDOT Standard Drawings for Type II Mast Arms Cored Foundations based on the applicable wind speed classification.

Wind Zone – 110 mph

Soil Type – See Boring Logs

The soil type will be determined by the Engineer and the appropriate foundation design charts are included herein. For bidding purposes, the Contractor shall base assumptions in soil type based on the boring logs.

The Mast Arm Foundations shall be 4000 p.s.i., ¾" aggregate, 610 Cement Concrete Masonry.

ITEM 816.01 (Continued)*Mast Arm Locations*

Boring Number	Mast Arm Location	Mast Arm Length	Soil Type/ Blows per 6"/ Groundwater Depth	Foundation Diameter	Found- ation Depth	Vert Bars	Tie Bars
Catharine Street at Bay Street - Catharine Street Baseline							
N Corner MA-1	Station: 31+61.28 Offset: 18.91 LT	20 feet	SEE BORING LOGS	3'-6"	9'-0"	18- #8	#5@12"
W Corner MA-2B	Station: 32+87.91 Offset: 26.75 RT	25 feet	SEE BORING LOGS	3'-6"	9'-0"	18- #8	#5@12"
E Corner MA-3	Station: 32+11.88 Offset: 22.40 LT	20 feet	SEE BORING LOGS	3'-6"	9'-0"	18- #8	#5@12"
S Corner MA-4	Station: 32+43.29 Offset: 23.21 RT	20 feet	SEE BORING LOGS	3'-6"	9'-0"	18- #8	#5@12"

Variations to the criteria listed shall be determined by the Engineer based on the actual soils encountered on location in the field. The final foundation design shall be approved by the Engineer and any additional depth of the footing required shall be considered incidental to the Lump Sum price of Item 816.01.

The Contractor shall coordinate the anchor bolt circle, sizes and configuration with the mast arm equipment supplier. Anchor bolts shall be set by template only.

The mast arm foundation sizes and depths shall be selected by the Contractor from the 2015 Overhead Signal Structure and Foundation Standard Drawings based on the soil type noted on the boring logs. The Contractor should be aware that high early strength concrete may be substituted for use in the proposed mast arm foundations to expedite construction; however, no additional compensation will be allowed therefore.

The Contractor shall obtain approval from the Engineer of the orientation of the bolt pattern within the foundation before pouring concrete to ensure that the mast arm angle as per the contract plans.

ITEM 816.01 (Continued)

All measurements to determine the exact dimensions and clearances between the mast arm structures and existing overhead utility lines shall be made in the field by the Contractor in the presence of the Engineer for incorporation into the erection plans and shop drawings which are submitted for approval.

Traffic Control Cabinet

The existing controller cabinet at Location 1 shall be removed and disposed as directed by MassDOT or the City. The proposed cabinet shall conform to the requirements defined in the Advanced Transportation Controller Cabinet (ATCC) 5301 V02 Standard. The proposed cabinet shall conform to Section M10.00.0, M10.01.0, and M10.01.1 of the 2025 MassDOT Standard Specifications and the following:

Refer to Section M10.1.1 for the standard P4 cabinet.

Controller cabinet foundations shall not obstruct a sidewalk or crosswalk so that passage by physically challenged persons is impaired.

The following requirements are designed for effective use of a laptop computer in conjunction with traffic signal controllers. These requirements are also designed to permit all engineers, electricians and technicians (including those who are disabled but ambulatory) to work in the cabinet in a safe, effective, and comfortable manner. To this extent, the following meets applicable ADA requirements.

1. Adjust the control cabinet height by use of a cabinet extender, adjust the placement of cabinet shelves, adjust the height of the cabinet foundation or provide any combination of those three items so that the top of the LCD or other visual display window of both the local controller and the master controller is no more than 48" above finished grade in front of the cabinet. The top of the cabinet door opening shall be at least 5'8" above finished grade. Any technical provision, plan detail, standard specification or standard drawing to the contrary shall not apply to the extent that it may conflict with this viewing height requirement.
2. Furnish and install one slide-out/slide-in shelf or swing-out/swing-in shelf appropriate for the size and load of a laptop computer. This moveable shelf shall support the bottom of the laptop computer at a height between 3'-4" and 3'-8" above finished grade in front of the cabinet.
3. Furnish and install a paved pad in front of the control cabinet. This pad may be of bituminous concrete or cement concrete, built in accordance with the sidewalk specification applicable to this project, approximately level, approximately 1" above the surrounding unpaved surface, or at even grade with the adjacent surface if paved. This pad shall abut the front of the cabinet; project at least 1' to each side of the cabinet and at least 3' in front. No pad is required if the front of the cabinet immediately abuts an existing or proposed paved sidewalk or other paved surface.

ITEM 816.01 (Continued)

4. The firmware and software version shall be the latest version available on the market. In addition, the contractor shall promptly furnish to the owner and install all upgraded versions of both firmware and software through the last day of the inspection period, guarantee period or warranty period, whichever day is later.
5. The contractor shall furnish one cable to connect a controller to a laptop computer. This cable shall have a termination at one end to match the controller. It shall have a termination on the other end to match the type of communication interface found on laptop computers. This cable shall be wired to provide communication between the controller and the computer.
6. Payment for the work described above shall be deemed to be incidental to and included in the prices bid for various items of traffic signal work, and no additional payment shall be made for the work described above.

Optical Preemption

The existing optical emergency preemption system at Location 1 shall be removed and disposed as directed by MassDOT or the City. A new optical emergency preemption system should be installed as shown on the plans shall be installed. The new traffic control cabinet shall include all new phase selectors and detection cards as required. The Contractor shall test and ensure the optical emergency preemption system is fully functional at all locations in coordination with the City of Springfield Fire Department and make any adjustments as necessary.

Operation

When optical energy impulses are received at the intersection, control of the signals shall transfer from the local controller to the controller's internal preemption logic which shall cause the signal controller to show a selected display identical to one of the color interval displays normally available as specified, which will assist the vehicle through the intersection without cross street conflict. After the vehicle has passed through the intersection, control of the signals shall then return to normal operation which shall restore the appropriate timings that were in effect prior to preemption.

The following description of work specifies the responsibilities involved in the installation of optical preemption.

The Contractor is required to supply all material and labor, as shown on the plans for the removal and relocation of optical preemption equipment at all specified locations in this project. Intersection preemption equipment required includes optical receivers, cable, interfacing equipment to the local controller, surge protection equipment, making electrical connections, and all required incidentals.

ITEM 816.01 (Continued)

The following are the operational requirements of the optical preemption system.

- Emergency Vehicle Design Speed for all preemption-controlled approaches shall be 45 mph.
- Operating sequence as specified shall be initiated when the optical receiver receives optical energy of the required repetition rate from an emitter.
- Receiver shall transform the optical energy signals into electrical signals and transmit the electrical signals to the local controller for processing.
- The emergency preemption system shall prioritize multiple calls from authorized vehicles.

The optical receiver cable shall meet the specifications of the system manufacturer.

The Contractor shall arrange for a trained representative of the manufacturer of the optical energy preemption equipment to perform the following field supervision and turn-on services:

- The representative shall select the proper quantity and method of installing all components to comply with the operational requirements shown in the preemption schedule included in these Special Provisions.
- The representative shall instruct Contractor and owner personnel in the procedures of installation.
- The representative shall be available to assist, supervise, and check all wiring to ensure proper operation.
- The representative shall perform a final check to include initial adjustment of range and timing to acceptable standards within the capabilities of each intersection.
- The representative shall initiate documentation for as-built drawings.
- The representative shall demonstrate the system and instruct the drivers of authorized emergency vehicles in the operation of the system.
- The representative shall instruct maintenance personnel in routine maintenance and minor troubleshooting of the system.
- Any operation problems occurring within the next thirty days shall be corrected by the Contractor or by a Field Service representative if the Contractor cannot do so. This requirement is not intended to modify the Contractor's twelve-month guarantee obligation, as set forth in an earlier portion of these Special Provisions.

ITEM 816.01 (Continued)

The cost of these field supervision and turn-on services shall be included in the Lump Sum Bid Price, and no additional payment shall be made therefore.

Preemption System Design and Documentation shall include the following:

- Provide the installing agency with location for receiver installation.
- Provide the controller manufacturer, Engineer, and owner with electrical diagrams.

The installer shall install the equipment consistent with the preemption equipment, the manufacturer's recommended installation procedures and electrical diagrams in a neat and workmanlike manner.

The preemption equipment manufacturer shall be responsible for operational checkouts of the specified preemption functions prior to final acceptance and approval by the Engineer.

Operating checkout includes the following:

- Verifying that the priority system timing and range are properly set.
- Preemption equipment warranties are put into effect.

2) Local Intersection Controller

The local intersection controller shall be in an ATC traffic signal cabinet as indicated on the plans. The local intersection controller shall be capable of controlling a fully actuated intersection and shall meet or exceed ATC standards for fully actuated traffic control units. The local controller shall have internal communication capability with direct access to the data memory. The local system controller shall be capable of processing controller, intersection and system detection data and provide all required intersection control functions. The required local controller time-base coordination and preemption functions shall be internal in the timing unit.

New cabinets shall be made of aluminum and painted aluminum and shall conform to the requirements defined in the Advanced Transportation Controller Cabinet (ATCC) 5301 V02 Standard. The proposed cabinet shall conform to Section M10.00.0, M10.01.0, and M10.01.1 of the MassDOT standard specifications and the following:

Refer to Section M10.1.1 for the standard P4 cabinet.

ITEM 816.01 (Continued)

The local system intersection controller shall include all of the following internal functions:

1) software compatible with the control and data protocol of the existing on-street master, central-office computer and field laptop computer; 2) local time base scheduler including automatic accommodation for daylight savings time; 3) local coordination control; 4) local preemption control with at least four programmable internal preemption sequences; 5) data uploading and downloading capability; 6) process system and local intersection detector activity and accumulate samples of vehicle counts, occupancy, speed, stops, and delay; 7) perform extensive failure evaluation of the controller, detectors, and communications; 8) provide local control of remotely selected NEMA and special functions; 9) perform local report generation with printer capability if a printer is attached, including intersection status and performance; and 10) Automax/max extend capable of being programmed to automatically add a max extend value to the max timer, up to a settable limit called Automax, when the associated phase maxes out twice in a row. Conversely, a max extend value would be subtracted upon two gap outs in a row, down to the programmed max value, including max plans if used.

The local system intersection controller shall include an internal fiber-optic modem. An RS-232C interface or any other physical type interface with RS-232C logic and electrical characteristics shall be provided in or with the local controller to allow for local printing of reports and for interconnecting to a remote master controller through the modem.

To minimize training and simplify local programming, all local parameter access shall utilize prompting and English language displays, and all codes needed by the user, if any, shall be on the front panel or on the display screen to avoid the need for memorization or the presence of a manual.

Testing of Grounding System

The Contractor shall perform testing of the equipment grounding system in the presence of the Engineer in accordance with the Standard Specifications. All pull boxes shall be grounded according to 2025 MassDOT Standard Specifications.

3) Video Detection System

The existing detection system shall be removed and disposed as directed by MassDOT or the City. The Contractor shall install video detection cameras as indicated in the contract plans. Proposed video detection camera shall meet the following requirements.

This specification sets forth the minimum requirements for a system that detects vehicles on a roadway using only video images of vehicle traffic.

System Hardware

The video detection system shall consist of one or more video cameras, a video detection processor (VDP) which mounts in a standard detector rack; and a pointing device.

ITEM 816.01 (Continued)**System Software**

The system shall include software that detects vehicles in multiple lanes using only the video image. Detection zones shall be defined using only an on board video menu and a pointing device to place the zones on a video image. Up to 24 detection zones per camera shall be available. A separate computer shall not be required to program the detection zones.

Functional Capabilities

The VDP shall process video from one or two sources as specified. The source can be a video camera or video tape player. The video shall be input to the VDP in RS170 format and shall be digitized and analyzed in real time. Dual video VDPs shall process images from both inputs simultaneously.

The VDP shall detect the presence of vehicles in up to 24 detection zones per camera. A detection zone shall be approximately the width and length of one car or as shown on the plans.

Detection zones shall be programmed via an on board menu displayed on a video monitor 99" B&W at a minimum) and a pointing device connected to the VDP. The detection zones shall initially be programmed by the supplier based on the engineering drawings. Modifications to the zones may be made by the Contractor or supplier in the field based on field observations and conditions. The menu shall facilitate placement of detection zones and setting of zone parameters or to view system parameters. A separate computer shall not be required for programming detection zones or to view system operation.

The VDP shall store up to three different detection zone patterns. The VDP can switch to any one of the three different detection patterns within 1 second of user request via menu selection with the pointing device.

The VDP shall detect vehicles in real time as they travel across each detector zone.

The VDP shall have an RS 232 port for communications with an external computer. The VDP RS 232 port shall be multi-drop compatible.

The VDP shall accept new detector patterns from an external computer through the RS-232 port when the external computer uses the correct communications protocol for downloading detector patterns. A Windows™ -based software designed for local or remote connection and providing video capture, real-time detection indication and detection zone modification capability shall be provided with the system.

The VDP shall send its detection patterns to an external computer through the RS-232 port when requested when the external computer uses the appropriate communications protocol for uploading detector patterns.

ITEM 816.01 (Continued)

The EM shall be available to avoid the need of rewiring the detector rack, by enabling the user to plug an extension module into the appropriate slot in the detector rack. The extension module shall be connected to the VDP by an 8-wire cable with modular connectors. VDP and EM communications shall be accommodated by methods using differential signals to reject electrically coupled noise. The extension module shall be available in both 2 and 4 channel configurations. EM configurations shall be programmable from the VDP.

The TS2 Interface Module (IM) is a Bus Interface Unit (BIU) module that shall allow the VDP to communicate with TS-2 controllers using standard SDLC protocols. The IM module shall collect detection information from the VDP and pass the outputs to the Controller using standard SDLC communications. The IM shall allow up to 64 output channels to the Controller.

The camera system shall be able to transmit an NTSC video signal, with minimal signal degradation up to 1000 feet under ideal conditions.

The associated VDP shall default to a safe condition, such as a constant call on each active detection channel, in the event of loss of video signal.

The system shall be capable of automatically detecting a low-visibility condition such as fog and respond by placing all defined detection zones in a constant call mode. A user-selected output shall be active during the low-visibility condition that can be used to modify the controller operation if connected to the appropriate controller input modifier (s0). The system shall automatically revert to normal detection mode when the low-visibility condition no longer exists.

Vehicle Detection

A minimum of 24 detection zones shall be supported and each detection zone shall be user definable in size and shape to suit the site and the desired vehicle detection region.

A single detection zone shall be able to replace multiple inductive loops and the detection zones shall be OR'ed as the default or may be AND'ed together to indicate vehicle presence on a single phase of traffic movement.

Placement of detection zones shall be done by using only a pointing device, and a graphical interface built into the VDP and displayed on a video monitor, to draw the detection zones on the video image from the video camera. No separate computer shall be required to program the detection zones.

A minimum of 3 detection zone patterns shall be saved within the VDP memory. The VDP's memory shall be non-volatile to prevent data loss during power outages. The VDP shall continue to operate (e.g. detect vehicles) using the existing zone configurations even when the operator is defining/modifying a zone pattern. The new zone configuration shall not go into effect until the configuration is saved by the operator.

ITEM 816.01 (Continued)

The selection of the detection zone pattern for current use shall be done through a menu or remote computer via RS-232 port. It shall be possible to activate a detection zone pattern for a camera from VDP memory and have the detection zone pattern displayed within 1 second of activation.

When a vehicle is detected crossing a detection zone, the corners of the detection zone will flash on the video overlay display screen to confirm the detection of the vehicle.

Detection shall be at least 98% accurate in good weather conditions and at least 96% accurate under adverse weather conditions (rain, snow, or fog). Detection accuracy is dependent upon site geometry, camera placement, camera quality and detection zone locations, and these accuracy levels do not include allowances for occlusion or poor video due to camera location or quality.

Detector placement shall not be more distant from the camera than a distance of ten times the mounting height of the camera.

The VDP shall provide up to 24 channels of vehicle presence detection per camera through a standard detector rack edge connector and one or more extension modules.

The VDP shall provide dynamic zone reconfiguration (DZR) to enable normal detector operation of existing channels except the one where a zone is being added or modified during the setup process. The VDP shall output a constant call on any detection channel corresponding to a zone being modified.

Detection zone setup shall not require site specific information such as altitude, longitude, date and time to be entered into the system.

The VDP shall output a constant call for each enabled detector output channel if a loss of video signal occurs. The VDP shall output a constant call during the background leaning period.

Detection zone outputs shall be configurable to allow the selection of presence, pulse, extend, and delay outputs. Timing parameters of pulse extend, and delay outputs shall be user definable between 0.1 to 25.0 seconds.

Up to six detection zones shall be capable to count the number of vehicle detected. The count value shall be internally stored for later retrieval through the RS-232 port. The data collection interval shall be user definable in periods of 5, 15, 30, or 60 minutes.

VDP, EM and IM Hardware

The VDP, EM and IM shall be specifically designed to mount in a standard TS-2, TS-2, 170 type detector rack, using the edge connector to obtain power and provide contact closure outputs. No adapters shall be required to mount the VDP, EM or IM in a standard detector rack. Detector rack rewiring shall not be required or shall be minimized.

ITEM 816.01 (Continued)

The VDP, EM and IM shall operate in a temperature range from -34 °C to +74 °C and a humidity range from 0% RH to 95% RH, non-condensing.

The VDP, EM and IM shall be powered by 12 or 24 volts DC. These modules shall automatically compensate for the different input voltages.

VDP power and consumption shall not exceed 300 milliamps at 24 VDC. The EM power consumption shall not exceed 120 milliamps at 24 VDC.

The VDP shall include an RS232 port for serial communications with a remote computer. The VDP RS232 port shall be multi-drop compatible. This port shall be a 9-pin "D" subminiature connector on the front of the VDP.

The VDP shall utilize flash memory technology to enable the loading of modified or enhanced software through the RS232 port without modifying the VDP hardware.

The VDP and EM shall include detector output pin out compatibility with industry standard detector racks.

The front of the VDP shall include detection indications, such as LED's, for each channel of detection that display detector outputs in real time when the system is operational.

The front of the VDP shall include one or two British Navel Connectors (BNC) video input connection suitable for RS170 video inputs as required. The video input shall include a switch selectable 75-ohm or high impedance termination to allow camera video to be routed to other devices, as well as input to the VDP for vehicle detection. Video must be inputted via a BNC connector on the front face of the processor. Radio Corporation of America (RCA) type connectors/jacks for video input are not allowed. Video shall not be routed via the edge connectors of the processor.

The front of the VDP shall include one BNC video output providing real time video output that can be routed to other devices. A RCA type connector/jack for video output is not allowed.

The front panel of the VDP and EM shall have a detector test switch to allow the user to place calls on each channel. The test switch shall be able to place either a constant call or a momentary call depending on the position of the switch.

The front panel of the IM shall have up to 16 LEDs to provide status of detector calls. In addition, the IM shall have up to 3 LEDs to provide status on power and communication. The front of the IM shall have up to 8 RJ-45 receptacles.

ITEM 816.01 (Continued)**Video Detection Camera**

The video cameras used for traffic detection shall be furnished by the VDP supplier and shall be qualified by the supplier to ensure proper system operation.

The camera shall produce a useable video image of the bodies of vehicles under all roadway lighting conditions, regardless of time of day. The minimum range of scene luminance over which the camera shall produce a useable video image shall be the minimum range from nighttime to daytime, but not less than the range 0.1 lux to 10,000 lux.

The camera shall use a Charged-Coupled Device (CCD) sensing element and shall output monochrome video with resolution of not less than 380 lines horizontal.

The camera shall include an electronic shutter control based upon average scene luminance and shall be equipped with a factory adjusted manual iris. Auto-iris lenses are not allowed.

The camera shall include a variable focal length lens with variable focus that can be adjusted, without opening up the camera housing, to suit the site geometry by means of a portable interface device designed for that purpose and manufactured by the detection system supplier. The horizontal field of view shall be adjustable from 8.1 to 45.9 degrees. A single camera configuration shall be used for all approaches in order to minimize the setup time and spares required by the user.

The camera electronics shall include Automatic Gain Control (AGC) to produce a satisfactory image at night.

The camera shall be housed in a weather-tight sealed enclosure. The housing shall be field rotate-able to allow proper alignment between the camera and the traveled road surface.

The camera enclosure shall be equipped with a sunshield. The sunshield shall include a provision for water diversion to prevent water from flowing in the camera's field of view. The camera enclosure with sunshield shall be less than 6" diameter, less than 15" long, and shall weigh less than 6 pounds when the camera and lens are mounted inside the enclosure.

The camera enclosure shall include a thermostatically controlled heater to assure proper operation of the lens shutter at low temperatures and prevent moisture condensation on the optical faceplate of the enclosure.

When mounted outdoors in the enclosure, the camera shall operate satisfactorily in a temperature range from -34 °C to +60 °C and a humidity range from 0% RH to 100% RH.

The camera shall be powered by 120-240 VAC 50/60 Hz. Power consumption shall be 15 watts or less under all conditions.

ITEM 816.01 (Continued)

Recommended camera placement height shall be 33 feet (or 10 meters) above the roadway, and over the traveled way on which vehicles are to be detected. For optimum detection the camera should be centered above the traveled roadway. The camera shall view approaching vehicles at a distance not to exceed 350 feet for reliable detection (height to distance ratio of 10:100). Camera placement and field of view (FOV) shall be unobstructed and as noted in the installation documentation provided by the supplier.

The camera enclosure shall be equipped with separate, weather-tight connections for power and setup video cables at the rear of the enclosure. These connections may also allow diagnostic testing and viewing of video at the camera while the camera is installed on a mast arm or pole. Video and power shall not be connected within the same connector.

The video signal output by the camera shall be black and white in RS170 or CCIR format.

The video signal shall be fully isolated from the camera enclosure and power cabling.

Installation

The coaxial cable to be used between the camera and the VDP in the traffic cabinet shall be Belden 8281 or a 75 ohm, precision video cable with 20 gauge solid bare copper conductor (9.9 ohms/M), solid polyethylene insulating dielectric, 98% (min) tinned copper double-braided shield and black polyethylene outer covering. The signal attenuation shall not exceed 0.78 dB per 100 feet at 10 MHz. Nominal outside diameter is 0.304 inches. The coax cable shall be a continuous unbroken run from the camera to the VDP. This cable shall be suitable for installation in conduit. 75-ohm BNC plug connectors should be used at both the camera and cabinet ends. The coaxial cable, BNC connector, and crimping tool shall be approved by the supplier of the video detection system, and the manufacturer's instructions must be followed to ensure proper connection.

Each VDP shall be connected to the EM or the IM using CAT 5e cable as recommended by the supplier.

The power cabling shall be 16 AWG three conductor cable. The cabling shall comply with the National Electric Code, as well as local electrical codes. Cameras may acquire power from luminaire if necessary. The video detection system shall be installed by supplier factory certified installers and as recommended by the supplier and documented in installation materials provided by the supplier. Proof of factor certification shall be provided.

ITEM 816.01 (Continued)**Limited Warranty**

The supplier shall provide a limited two-year warranty on the video detection system. See suppliers standard warranty included in the terms and Conditions of Sale documentation.

During the warranty period, technical support shall be available for the supplier via telephone within 4 hours of the time a call is made by a user, and this support shall be available from factor-certified personnel or factor-certified installers.

During the warranty period, updates to VDP software shall be available from the supplier without charge.

Maintenance and Support

The supplier shall maintain an adequate inventory of parts to support maintenance and repair of the video detection system. These parts shall be available for delivery within 30 days of placement of an acceptable order at the supplier's then current pricing and terms of sale for said parts.

The supplier shall maintain an ongoing program of technical support for the video detection system. This technical support shall be available via telephone or via personnel sent to the installation site upon placement of an acceptable order at the supplier's then current pricing and terms of sale for onsite technical support services.

Installation or training support shall be provided by a factory authorized representative.

All product documentation shall be written in the English language.

4) Accessible Pedestrian Signal Pushbuttons

This Supplemental Specification provides the requirements of accessible pedestrian signal pushbuttons.

The Accessible Pedestrian Signal (APS) Pushbutton shall provide information in a non-visual format. The format shall include, but not be limited to, audible tones, speech messages, as well as vibrating surfaces. APS pushbuttons shall be compliant with the 2009 MUTCD and shall have the capability to provide the following features:

- Pushbutton locator tone
- A visible and audible confirmation indicator, such as a light and speech message, that the button has been pressed
- A vibro-tactile arrow
- A speech walk message when the "WALKING PERSON" indication is shown. The speech walk messages and locations/situations where required, will be provided by the Engineer during review of the shop drawings.

ITEM 816.01 (Continued)

The APS pedestrian pushbutton shall provide visually disabled pedestrians with a locator tone that will assist them in finding the pedestrian pushbutton to activate the walk signal. Once pressed, and the WALK signal has been initiated, the pedestrian pushbutton shall provide an audible and tactile response during the “WALK” interval. An LED shall come on to confirm the button has been pushed and the audible response shall be a message that indicates the name of the street crossing and when the “WALK” phase has started.

The APS housing and pushbutton unit shall meet the following minimum requirements:

- Constructed of cast aluminum with a yellow powder coat finish
- Unit shall be pressure activated with no moving parts
- Pushbutton must be vandal resistant and must be able to withstand significant blunt force, such as impact from a hammer or baseball bat.
- The unit must be able to operate between a temperature range of -34 degrees Celsius and 65 degrees Celsius
- Operating Voltage range shall be between 12 to 65 volts.
- Pushbutton shall be activated with a force of 5 Lbs. or less
- LED confirmation light that indicates that the button has been pressed
- APS Unit shall be designed so that ice is not allowed to form which would impede function of APS unit
- All electronics shall be sealed within the APS unit
- Speaker for APS unit shall be a weatherproof unit with a vandal resistant screen.
- APS pushbutton shall be 2 inches in diameter.

Tactile Arrows and Locator tones shall meet the following minimum requirements:

- The locator tone shall be located at the pushbutton
- The locator tone sound measured at three feet from the APS pushbutton shall be a minimum of 2 dB and 5 dB maximum above the ambient noise level. The locator tone shall be responsive to ambient noise level changes. Tones shall consist of multiple frequencies with a component of 880Hz and the duration shall be 0.15 sec. and repeat at 1 sec. intervals.
- The vibro-tactile arrow shall be aligned parallel to the crosswalk direction. The arrow shall be raised and shall be a minimum of 1.5 inches in length. Arrow shall have high visual contrast with the background.
- Arrow shall vibrate during the “WALK” interval
- Speech walk message shall be audible from the beginning of the associated crosswalk interval.
- The maximum mounting height of the APS button shall be 42 inches above the finished sidewalk.

ITEM 816.01 (Continued)

The APS pedestrian pushbutton shall be installed as recommended by the manufacturer and documented in installation materials provided by the manufacturer. The Contractor and or manufacturer shall be responsible for the proper programming of the APS pushbuttons, the correct orientation of the pushbutton, as well as adjusting of the volume levels and all other work necessary to provide a complete and operational pushbutton system.

The Contractor or manufacturer shall supply one hand held remote configuration unit to the Town, if requested by the Engineer, which will allow adjustment and or configuration of locator tones, audible messages and custom walk sounds. The unit shall use infrared technology with an LCD display to program the APS pushbuttons. The unit shall be password protected.

If requested by the Engineer, the Contractor or manufacturer shall provide 4 hours of training to Town staff at a location within the Town of Plymouth. Each APS pedestrian pushbutton shall have a warranty that the unit will be free from defects in material and workmanship for a period of two years after being accepted by the Engineer.

Fine Tuning, Adjustment, and Testing Period

After the Contractor has finished installing the controller and all other associated signal equipment and after the Contractor has set the signal equipment to operate as specified in the contract documents, the fine tuning, adjustment and testing period shall begin. During this period, the Contractor, under the direction of the Engineer, will make necessary adjustments and tests to ensure safe and efficient operation of the equipment. Final acceptance will not be made until the system has operated satisfactorily, as designed, for a period of *not less than* 30 days from a date designated by the Engineer.

Guarantee After Final Acceptance

The Contractor shall troubleshoot, repair, and/or replace any equipment installed in conjunction with this contract at his own expense if found to be defective in workmanship, material, or manner of functioning within a period of six months from the date of final acceptance of this contract by the Engineer, MassDOT and the Town.

Basis of Payment

Item 816.01 will be paid at the Contract unit price per Lump Sum, which price will include all labor, materials, removal and disposal of the existing equipment, and furnishing and installing the new signal system, foundation, etc. The cost related to conduit will be paid separately under Item 804.3 and the cost for all the handholes and pull boxes shall be paid for separately under 811.22 and 811.31, respectively.

<u>ITEM 824.301</u>	<u>FLASHING WARNING BEACON TYPE B</u>	<u>LUMP SUM</u>
	<u>LOCATION 1</u>	
<u>ITEM 824.302</u>	<u>FLASHING WARNING BEACON TYPE B</u>	<u>LUMP SUM</u>
	<u>LOCATION 2</u>	

The work under these Items shall conform to the relevant provisions of Section 800 of the Standard Specification, the 2009 Manual on Uniform Traffic Control Devices (MUTCD) and the following:

This work shall consist of furnishing and installing a school speed limit flashing warning assembly at the locations shown on the Plans. The assembly shall be pre-programmed to turn on at designated times of the day.

Location 1 – Catharine Street Station 37+17.60, 16.60 feet Right

Location 2 – 15 Catharine Street (Final Location to be Determined by the Engineer)

SUBMITTALS

Prior to ordering, Contractor shall submit for Engineer's approval shop drawings for all Flashing Warning Beacon Type B Assembly components.

MATERIALS

A Flashing Warning Beacon Type B Assembly system shall, at a minimum, consist of the following work, which shall be included in the lump sum bid:

- (1) concrete foundation
- (1) 15-foot traffic signal post and pedestal (painted yellow)
- (2) 12-inch circular amber LED beacons with tunnel visors
- (1) S5-1 School/Speed Limit/When Flashing Sign 24 inches x 48 inches
- (1) NEMA Type 4X flasher cabinet assembly

The LED beacons, traffic signal posts and pedestals shall be listed on the Qualified Traffic Control Equipment List.

S5-1 signs shall be Type A aluminum per Subsection 828.42.

Any proprietary software required for the programming and/or operation of the system shall be included at no additional cost.

EQUIPMENT

The School Speed Limit Flasher Assembly shall consist of a cast iron base, steel signal pedestal post, amber signal indication beacons, cement concrete signal foundations, post mounted NEMA electrical enclosure for flasher component, relays and power supply, electrical conduit, grounding rods and cabling, and traffic signs.

The pedestal poles shall meet the requirements of Section 815. The poles shall be painted yellow.

Beacons shall meet the requirements of Section 824 and shall include 12 inch L.E.D. amber lenses with tunnel visors.

ITEMS 824.301 & 824.302 (Continued)

Cement concrete foundations shall meet the requirements of Section 801.62 and shall be pre-cast. The Contractor shall demonstrate that the foundation is able to support the anticipated loading of the assembly.

The two amber beacons on the pedestal post shall begin alternating flash. Each beacon shall begin flashing at a rate of not less than 50 nor more than 60 times per minute. Once the flashing period has expired, the amber beacons shall go dark.

The L.E.D. flashing signals shall be powered by an internally lockable, pole mounted power adapter (NEMA 4X cabinet assembly). The power adapter shall be pre-wired and tested by an authorized factory representative prior to delivery.

The flasher cabinet shall be a NEMA Type 4X enclosure, constructed of aluminum. The cabinet door shall be hinged to the body of the cabinet. A compartment door lock with keyhole cover and two keys shall be furnished to the City of Springfield Engineer.

BASIS OF PAYMENT

Item 824.301 and Item 824.302 will be paid for at the respective Contract unit prices Lump Sum, which price shall include all labor, materials, equipment, transportation, equipment for electric service connection, and all incidental costs required to complete the work.

ITEM 852.11
ITEM 852.12**TEMPORARY PEDESTRIAN BARRICADE**
TEMPORARY PEDESTRIAN CURB RAMP**FOOT**
EACH**Description**

Work under these items consist of furnishing, deploying, maintaining in proper operating conditions, and removing temporary pedestrian barricades and temporary pedestrian ramps as part of a Temporary Pedestrian Access Route (TPAR) in order to guide pedestrians around a fully- or partially-closed sidewalk. These devices are intended to prevent pedestrians from entering the work area and to prevent pedestrians from inadvertently entering the vehicle travel lane by providing visual and physical separation between each space.

Materials

The Temporary Pedestrian Barricade shall have a continuous bottom rail or edge no more than two (2) inches above the ground and eight (8) inches in height (minimum) to accommodate cane users, have a smooth and continuous hand railing along the top edge no less than 32 inches above the ground and not obstruct or project into the pedestrian path of travel. Barricade walls shall be nearly vertical and generally within the same plane.

If exposed to traffic, Temporary Pedestrian Barricades shall be crashworthy.

The Temporary Pedestrian Curb Ramp shall provide a 48 inch minimum width, with a firm, stable, and non-slip surface. Protective edging with a two (2) inch minimum height shall be installed when the curb ramp or landing platform has a vertical drop of six (6) inches or greater.

The Temporary Pedestrian Curb Ramp walkway and landing area surface shall be of a solid, continuous, contrasting color abutting up to the existing sidewalk.

If a Temporary Pedestrian Curb Ramp leads to a crosswalk, a detectable warning pad must be used at the base of the ramp; if it leads to a protected path that does not conflict with vehicular traffic then a detectable pad shall not be used.

Construction Methods

The Temporary Pedestrian Barricade shall be placed in an area that will provide pedestrians with a TPAR on a smooth, continuous hard surface for its entirety. The geometry and alignment of the facility shall meet the applicable requirements of the “Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities” and the Massachusetts Architectural Access Board.

The recommended width of the TPAR is 60 inches, but if constraints exist a minimum clear width of 48 inches shall be provided along its entirety. If a 60 inch width cannot be accommodated in full, a 60 inch by 60 inch passing space shall be provided every 200 feet or less along the TPAR.

Turning areas shall be 60 inches by 60 inches minimum.

ITEMS 852.11 & 852.12 (Continued)

Lateral joints between any surfaces shall not exceed 0.5 inches. Lateral edges may be vertical up to 0.25 inches high and shall be beveled at 1V:2H between 0.25 inches and 0.5 inches.

The TPAR shall be kept clear of debris, snow, and ice and the Temporary Pedestrian Barricades and Temporary Pedestrian Curb Ramps shall not obstruct drainage.

Removal and/or resetting of Temporary Pedestrian Barricades and Temporary Pedestrian Curb Ramps shall be considered incidental.

COMPENSATION

Payment for Temporary Pedestrian Barricades will be made at the contract price per foot installed in place, including all incidental items. This price shall include the cost of furnishing, installing, resetting, removal, and maintaining in good working condition.

Payment for Temporary Pedestrian Curb Ramps will be made at the contract price per each unit installed in place, including all incidental items. This price shall include the cost of furnishing, installing, resetting, removal, and maintaining in good working condition.

ITEM 866.212**12 INCH REFLECTORIZED WHITE LINE
(POLYUREA) (RECESSED)****FOOT****DESCRIPTION**

Work to be completed under this item shall conform to the relevant provisions of Subsection 860 of the Standard Specifications and the following:

Work shall consist of grooving a slot in the pavement surface and the furnishing and installation of wet reflective polyurea pavement markings.

MATERIALS

Wet reflective polyurea pavement markings shall consist of a liquid binder, first drop beads or elements to provide dry and wet retroreflectivity, and second drop glass beads to improve the durability of the pavement marking, reduce track-free times, and provide supplementary dry retroreflectivity.

The Contractor shall use one of the following binders and first drop beads or elements, or approved equivalents:

1. 3M™ Liquid Pavement Marking Series 5000 with 3M™ All Weather Series 90 elements;
2. Epoplex GLOMARC® 90 with Potters VISIMAX® Glass Bead System; or
3. SWARCO MFUA-12 with SWARCO MEGALUX-BEADS®.

Combination of other binder and first drop bead or element series may only be used at the approval of the Engineer.

Second drop beads shall be manufactured from glass of a composition that is highly resistant to traffic wear and to the effects of weathering. If coating is required to meet the performance requirements, the second drop beads shall be coated to ensure satisfactory embedment and adhesion. Second drop beads retained on a No. 40 U.S. Standard Mesh Sieve shall have a minimum crush strength of 30 lbs. when tested in accordance with ASTM D1213.

Second drop beads shall have a minimum refractive index of 1.51 when tested in accordance with AASHTO M247.

Second drop beads passing the No. 30 sieve shall have a minimum of 75 percent true spheres when tested in accordance with ASTM D1155. All second drop beads retained on the No. 20 and No. 30 sieves shall have a minimum of 80 percent true spheres as determined by ASTM D1155.

ITEM 866.212 (Continued)

Second drop beads shall meet the following gradation requirements when tested in accordance with ASTM D1214:

U.S. Standard Sieve No.	Percent Retained
20	3-10
30	15-35
50	45-75
70	0-10
Pan	0-5

CONSTRUCTION METHODS**Installation of Groove**

Prior to cutting out the grooves for all recessed lines, the Contractor shall use a chalk line or other suitable method to layout the proposed pavement markings on the surface course so that the Engineer can inspect the locations. Once the Engineer has inspected and approved the proposed striping layout, the grooves for the proposed pavement markings may be cut. No pavement grooving shall be done without the prior approval of the Engineer.

Groove position shall be a minimum of 4 inches from the edge of the pavement marking to any longitudinal pavement joints. The groove shall not be installed on bridge joints, on drainage structures, or in other areas identified by the Engineer. The groove shall not be installed continuously for intermittent pavement markings, but only where markings are to be applied.

The use of gang stacked diamond cutting blades to grind a smooth square slot is required for producing all grooves. The spacers between blade cuts shall be such that there will be less than a 10 mil rise in the finished groove between the blades. The acceptability of the surface texture will be determined by the Engineer.

The diamond grinder shall have an articulating head so that the slots are installed correctly on grades and super elevated sections.

Grooves that are ground deeper or wider than the specified allowable limits shall be repaired per the direction of the Engineer at no additional cost. Grooves that are ground too shallow, too narrow, or with unacceptable rises between blade cuts shall be reground to the correct size, depth, and surface finish at no additional cost. Slots ground out of alignment shall be patched using an approved method and materials.

Grooves shall be 1 inch \pm ¼ inch wider than the pavement marking material. Groove depth shall be 100 mils \pm 5 mils, unless otherwise approved by the Engineer. Depth shall be consistent across the full width of the groove. Depth plates shall be provided by the Contractor to the Engineer to assure that desired groove depth is achieved.

ITEM 866.212 (Continued)

Grooves shall be clean, dry and free of laitance, oil, dirt, grease, paint or other foreign contaminants. Shrouds and a vacuum apparatus shall be included as part of the grinder to remove larger pieces of pavement that are ground out. If water is used to clean the groove or the grooving process takes place during rainfall, a minimum of 24 hours of dry time is required prior to the placement of pavement markings.

After the depth, width, length, and surface condition has been approved by the Engineer, an air lance shall be used to remove fine particles from the groove. Air compressors shall initially be blown out away from the application area to prevent compressor condensation build-up from entering the groove. The Contractor shall prevent traffic from traversing the grooves and re-clean grooves, as necessary, prior to application of pavement markings at no additional cost to the Department.

All grooves must be given final approval by the Engineer prior to the placement of pavement markings.

Installation of Wet Reflective Polyurea

Installation of wet reflective polyurea pavement markings shall conform to the Manufacturer's specifications and the following:

Application rate for binder and all beads and elements shall consider final pavement surface composition and smoothness in advance of application to ensure proper wet film thickness and embedment of all beads and elements. The Contractor shall provide the Engineer with documentation from the Manufacturer with all recommended application rates (and conformance to initial dry and wet reflectivity requirements) in advance of any pavement marking installation.

The minimum uniform wet thickness for the polyurea binder shall be 25-30 mils. The line thickness shall be met across at least the middle $\frac{2}{3}$ of the pavement marking width. Depth plates shall be provided by the Contractor to the Engineer to assure that desired thickness is achieved.

The finished white color shall be free from tint, with good opacity and visibility under both daylight and artificial light. The finished yellow color shall be defined by Federal Test Standard 595 - Color Chip Number 13538, using Federal Test Standard 141 (Method 4252). The finished lines shall be uniform in color and have clean, well-defined edges.

First and second drop beads and/or elements shall be applied in a manner that does not induce rolling or bouncing, to ensure that exposed portions of beads are free of binder material. Beads and elements should be embedded in the binder to a depth of approximately 50% of their diameter.

Drop rate for first drop bead or element shall be per the Manufacturer's specifications.

Drop rate for second drop glass bead shall be 6.4-10.2 lbs. per gallon.

Newly installed pavement markings shall be protected from tracking during the setting period per Subsection 860.63.

ITEM 866.212 (Continued)

Incidental to the cost of these items, the Contractor shall measure the average retroreflectance of the pavement markings, and report the results to the Engineer. The Contractor shall take retroreflectance measurements between 7 and 14 days from date of application. Contractor shall perform retroreflectance readings per the measurement and sampling procedures contained in ASTM D7585 (Standard Practice for Evaluating Retroreflective Pavement Markings Using Portable Hand-Operated Instruments) using the Referee Evaluation Protocol found in section 6.4. The following tests shall be performed during the measurement and sampling process:

1. ASTM E1710 (Standard Test Method for Measurement of Retroreflective Pavement Marking Materials with CEN-Prescribed Geometry Using a Portable Retroreflectometer); and
2. ASTM E2177 (Standard Test Method for Measuring the Coefficient of Retroreflected Luminance (RL) of Pavement Markings in a Standard Condition of Wetness).

The average initial retroreflectance readings shall exceed the following minimum values:

	*White Markings	*Yellow Markings
ASTM E1710 (Dry)	475 mcd/lux/m ²	375 mcd/lux/m ²
ASTM E2177 (Wet Recovery)	375 mcd/lux/m ²	300 mcd/lux/m ²

*Observation Angle = 1.05°, Entrance Angle = 88.8°

Pavement markings with measured average initial retroreflectance readings that do not meet the specified minimum values using the procedures outlined in subsection 6.4.5 of ASTM D7585 shall be removed by a method approved by the Engineer and reapplied at no additional cost.

Pavement Marking Asset Management

Upon completion of the pavement marking installation, the following data shall be tabulated by the Contractor:

1. Retroreflectance readings, including date(s), time(s), and location(s) where readings took place;
2. Liquid binder type(s) and application rate;
3. Reflective element type and drop rate;
4. Date of groove installation;
5. Lot, batch number, or any other material identifiers and manufacturing information;
6. Date and time of final liquid marking installation;
7. Highway location (including direction) of installation;
8. Air and pavement temperature during application;
9. Measured material application thickness, depth of groove; and
10. Any other pertinent information that may assist MassDOT with Quality Control.

ITEM 866.212 (Continued)

Results for all readings shall be provided within 10 business days of testing to the Engineer, with a second copy sent to:

State Traffic Engineer
Attention: Pavement Marking Installation & Testing
10 Park Plaza, Room 7210
Boston, MA 02116

The cost to prepare and submit this data shall be considered incidental to the cost of the items.

METHOD OF MEASUREMENT

Item 866.212 will be measured for payment by the Foot of the actual length of lines applied.

BASIS OF PAYMENT

Item 866.212 will be paid for at the Contract unit price per Foot, which price will include all material, labor, equipment required and all incidental costs required for the satisfactory completion of the work.

ITEM 874.2**TRAFFIC SIGN REMOVED AND RESET****EACH**

The work under this item shall conform to the relevant provisions of Subsections 828 and 840 of the Standard Specifications and the following:

The work shall include the removal of existing signs for reuse; and the removal and proper disposal of existing hardware, supports, and cement concrete foundation, from existing locations shown on the plans or as directed by the Engineer. The work includes the resetting of the existing signs with new hardware and new supports in their final locations as shown on the plans or as directed by the Engineer. The work shall also include backfilling and overlay of the existing locations as described herein.

Signs shall include signs, traffic signs, street name signs, other panels, or other placards as indicated on the Drawings or as directed by the Engineer. New hardware shall include hardware, fittings, and attachments which will affix the existing sign properly to the new post.

The Contractor shall submit Manufacturer's cut sheets for the proposed sign posts for Approval by the Engineer.

Signs and panels shall be satisfactorily stored and protected until reset in the proposed work. Any signs damaged or lost directly or indirectly as a result of the Contractor's operations shall be replaced by the Contractor at his own expense.

The Contractor shall coordinate the removal of the signs and posts with the Engineer by notifying the Engineer prior to beginning the work. If practicable, existing signs shall remain in place until new sign posts are stable in their final location and the signs can be reset. During the execution of the work, if the absence of existing signs may cause hazardous conditions or excessive disruption to traffic, the Engineer may direct the Contractor to erect temporary signage until the signs are reset in their final locations. Temporary signage will be considered as incidental to this Item.

If signs are reset to another location, post holes shall be backfilled, tamped and graded level to present an undisturbed appearance. Any surface material necessary to overlay the backfill is included in the cost of these Items.

METHOD OF MEASUREMENT

Item 874.2, Traffic Sign Removed and Reset, will be measured for payment by the Each sign assembly.

BASIS OF PAYMENT

Item 874.2, Traffic Sign Removed and Reset, will be paid at the Contract unit price per Each sign assembly, regardless of the number of panels or posts, reset in the designated location, which price shall include all tools, material, equipment and labor to complete the work. Incidentals to the measurement and payment for this Item are: removal, new hardware, any borrow materials, loam and seed, or other surface finishes needed to restore ground from where existing posts have been removed and not reset. If the existing posts for these signs need to be replaced, they will be paid for under item 847.1.

ITEM 874.4**TRAFFIC SIGN REMOVED AND STACKED****EACH**

The work under this item shall conform to the relevant provisions of Subsections 828 and 840 of the Standard Specifications and the following:

The work shall include the removal of signs, traffic signs, street name signs, other panels, or other placards, attached hardware, and supports from locations shown on the plans or as directed by the Engineer.

Any signs or posts damaged or lost directly or indirectly as a result of the Contractor's operations shall be replaced by the Contractor at his own expense. The Contractor shall coordinate the removal of the signs and posts with the Engineer by notifying the Engineer prior to and at the completion of the work.

Signs removed will be properly stacked at the Springfield Department of Public Works, located at 70 Tapley Street, Springfield, MA 01104. Privately owned signs and their supports shall be properly stacked adjacent to the layout at the bottom of the roadway slope but within the temporary easement.

Post holes shall be backfilled, tamped and graded level to present an undisturbed appearance. Any surface material necessary to finish the posthole backfill is included in the cost of this item.

METHOD OF MEASUREMENT

Item 874.4, Traffic Sign Removed and Stacked, will be measured for payment per EACH sign assembly.

BASIS OF PAYMENT

Item 874.4, Traffic Sign Removed and Stacked, will be paid at the Contract Unit Price per each, which price shall include all labor, power disconnection, materials, equipment, transportation and incidental cost to complete the work.

Incidental to this item are any tools, labor, materials, and equipment needed to restore disturbance of the ground due to removal of the designated signs.

ITEM 874.41 **TRAFFIC SIGN REMOVED AND DISCARDED** **EACH**

The work under this item shall conform to the relevant provisions of Subsections 828 and 840 of the Standard Specifications and the following:

The work shall include the removal of signs, traffic signs, street name signs, other panels, or other placards, attached hardware, and supports from locations shown on the plans or as directed by the Engineer. Once removed, the sign assembly shall become the property of the Contractor and shall be disposed of by the Contractor.

The Contractor shall coordinate the removal of the signs and posts with the Engineer by notifying the Engineer prior to and at the completion of the work.

Post holes shall be backfilled, tamped and graded level to present an undisturbed appearance. Any surface material necessary to finish the posthole backfill is included in the cost of this item.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Item 874.4, Traffic Sign Removed and Discarded, will be measured for payment per EACH sign assembly, regardless of the number of panels or posts.

BASIS OF PAYMENT

Item 874.4, Traffic Sign Removed and Discarded, will be paid at the Contract unit price per EACH, which price shall include all labor, power disconnection, materials, equipment, transportation and incidental cost to complete the work.

Incidental to this item are any tools, labor, materials, and equipment needed to restore disturbance of the ground due to removal of the designated signs.

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DETAIL SHEETS

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**THE COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
TEN PARK PLAZA-BOSTON MA**

PRELIMINARY ESTIMATE OF QUANTITIES – DETAIL SHEETS

CITY-TOWN: Springfield
STA: 30+00.00 TO 46+00.00

YEAR: 2025
ROADS: Catharine, Darthmouth, Bay, & Marion Street
CLASS: Local, Local, Minor Arterial, & Local

TYPE OF PROJECT: Safe Routes to School Improvements DATE: April 14th, 2025

Unclassified Excavation	<u>410</u>	CY	Gravel Borrow	<u>210</u>	CY
Class "B" Rock Excavation	<u>10</u>	CY	Gravel Borrow for Backfilling		
Ordinary Borrow	<u>10</u>	CY	Structures and Pipes	<u>20</u>	CY
Special Borrow	<u>10</u>	CY	Crushed Stone	<u>30</u>	Ton
Sand Borrow	<u>10</u>	CY	High Early Strength Concrete	<u>130</u>	SY
Loam for Lawns	<u>40</u>	CY	Seeding	<u>350</u>	SY

**Cement Concrete Sidewalk, Sidewalk at Driveway,
and Pedestrian Curb Ramp**

AREA = 563 SY

Surface: 4" Air-entrained, 4000 psi, ¾", 610 lb cement concrete over
Foundation: 8" Gravel Borrow, Type b

Proposed Narrow Box Widening Less Than 4 FT

AREA = 118 SY

Surface Course: 1 3/4" Superpave Surface Course – 12.5 (SSC – 12.5) over Asphalt Emulsion for
Tack Coat (RS-1h) over
Intermediate Course: 2 1/4" Superpave Intermediate Course – 19.0 (SIC – 19.0) over Asphalt
Emulsion for Tack Coat (RS-1h) over
Base Course: 6" High Early Strength Cement Concrete Base Course over
Subbase: 8" Gravel Borrow Type b

Proposed Hot Mix Asphalt at Driveway

AREA = 12 SY

Surface Course: 1 1/2" Superpave Surface Course – 9.5 (SSC – 9.5) over
2 1/2" Superpave Surface Course – 12.5 (SSC – 12.5) over
Subbase: 8" Gravel Borrow Type b

102.511 Tree Protection – Armoring and Pruning

Yale Street Const BL

Station	Offset	Type
70+59	RT	18"

McKnight Street Const BL

Station	Offset	Type
51+43	LT	12"
51+42	RT	12"
52+18	RT	20"
52+24	LT	20"

Catharine Street Const BL

Station	Offset	Type
38+70	LT	20"
41+99	LT	24" (3)

102.521 Tree and Plant Protection Fence

As needed throughout the project or as directed by the Engineer to protect individual trees from damage during construction.

102.531 Tree Care – Pruning

Yale Street Const BL

Station	Offset	Type
70+59	RT	18"

McKnight Street Const BL

Station	Offset	Type
51+43	LT	12"
52+24	LT	20"
52+18	RT	20"
51+42	RT	12"

Catharine Street Const BL

Station	Offset	Type
38+70	LT	20"
41+99	LT	24" (3)
45+16	LT	12"

201. Catch Basin

Dartmouth Street Const BL

Station	Offset	Type
23+54.64	12.89 LT	CB

Catharine Street Const BL

Station	Offset	Type
32+07.61	35.82 RT	CB
32+38.96	34.37 RT	CB

220.3 Drainage Structure Change in Type

Catharine Street Const BL

Station	Offset
32+03.03	27.43 RT
32+37.43	30.81 RT

476.01 Scored Cement Concrete Pavement

For non-traversable areas, located on PCR 10 & PCR 11, see Construction Plans.

482.4 Sawcutting Portland Cement Concrete

Catharine Street Const BL

Start Station	Start Offset	End Station	End Offset
31+58.55	28.59 LT	31+63.23	31.19 LT
31+76.98	18.76 RT	31+76.97	24.54 RT
32+01.57	46.97 RT	32+06.47	43.82 RT
32+49.28	43.77 RT	32+65.86	19.02 RT
31+96.01	51.05 LT	32+00.81	53.76 LT
32+30.34	18.27 LT	32+30.31	23.90 LT
37+80.02	24.77 RT	37+80.00	18.66 RT
37+82.59	18.98 LT	37+82.62	24.78 LT

ITEM 482.4 (Continued)

Catharine Street Const BL

Start Station	Start Offset	End Station	End Offset
37+96.69	33.70 LT	38+02.83	33.57 LT
37+96.88	33.71 RT	38+02.32	33.75 RT
38+40.68	33.98 RT	38+46.30	34.00 RT
38+41.46	33.29 LT	38+46.39	33.26 LT
38+62.98	25.00 RT	38+62.98	19.00 RT
38+63.18	18.45 LT	38+63.22	24.18 LT
41+54.55	25.00 LT	41+54.66	19.04 LT
41+82.07	24.92 LT	41+95.51	24.99 LT
41+95.51	24.99 LT	41+96.51	25.00 LT
42+08.39	62.57 LT	42+16.75	62.55 LT
42+11.12	19.01 RT	42+11.14	24.54 RT
42+33.29	19.01 RT	42+33.31	24.64 RT
42+57.06	19.27 LT	42+57.07	24.89 LT
44+50.63	19.31 LT	44+50.74	24.84 LT
44+92.23	46.03 LT	45+01.87	46.03 LT
45+11.68	24.80 RT	45+11.71	18.96 RT
45+33.87	19.32 LT	45+33.87	24.93 LT
45+33.89	18.93 RT	45+33.91	24.77 RT

Marion Street Const BL

Start Station	Start Offset	End Station	End Offset
65+05.02	24.60 LT	65+05.06	19.21 LT
65+23.25	19.87 RT	65+23.26	24.86 RT
65+45.82	23.87 LT	65+52.03	27.77 LT
65+46.94	32.60 LT	65+50.45	33.36 LT
65+64.81	36.46 LT	65+66.05	30.72 LT
65+72.23	25.00 RT	65+72.25	20.02 RT

506. Granite Curb Type VB- Straight

As shown on the Construction and Curb Tie Plans.

Yale Street Const BL

Start Station	Start Offset	End Station	End Offset
70+39.29	14.72 LT	70+34.82	14.71 LT

Dartmouth Street Const BL

Start Station	Start Offset	End Station	End Offset
23+34.05	19.16 LT	23+43.75	12.48 LT
23+46.57	11.60 LT	23+47.93	11.60 LT
23+54.94	17.50 RT	23+55.08	32.01 RT
23+59.95	12.45 RT	23+63.71	12.45 RT
23+73.71	12.43 RT	23+74.54	12.43 RT
23+79.31	15.13 RT	23+82.73	18.55 RT
24+00.56	21.02 RT	24+08.94	24.31 RT

ITEM 506 (Continued)

Catharine Street Const BL

Start Station	Start Offset	End Station	End Offset
31+74.17	14.99 RT	31+77.03	15.02 RT
31+77.03	15.02 RT	31+83.48	15.10 RT
31+98.35	21.41 RT	32+00.35	25.00 RT
32+43.66	38.76 RT	32+48.21	42.54 RT
32+53.00	15.15 RT	32+58.93	18.40 RT
32+61.42	19.05 RT	32+65.86	19.02 RT
38+59.12	12.90 LT	38+61.37	14.17 LT
38+59.51	13.33 RT	38+61.09	14.28 RT
41+96.49	17.79 LT	41+96.50	19.00 LT
42+01.50	12.76 LT	42+04.77	12.75 LT
42+11.12	16.22 RT	42+11.12	19.01 RT
42+16.12	11.22 RT	42+18.77	11.22 RT
42+18.08	59.09 LT	42+19.41	57.66 LT
42+22.00	25.00 LT	42+22.04	38.98 LT
42+22.04	38.98 LT	42+22.08	50.83 LT
42+26.77	11.21 RT	42+30.26	11.20 RT
42+31.77	11.43 RT	42+33.19	11.88 RT
42+33.40	11.95 RT	42+41.23	14.42 RT
44+92.23	46.03 LT	44+92.69	32.58 LT
44+92.69	32.58 LT	44+92.87	27.62 LT
45+07.86	13.14 LT	45+12.86	13.14 LT
45+11.19	17.04 RT	45+11.21	14.83 RT
45+12.86	13.14 LT	45+19.36	13.14 LT
45+15.22	10.85 RT	45+19.36	10.86 RT
45+27.36	13.14 LT	45+32.31	13.14 LT
45+27.36	10.87 RT	45+33.01	10.88 RT
45+33.84	13.38 LT	45+38.21	15.09 LT
45+37.99	16.92 RT	45+38.00	15.92 RT

Marion Street Const BL

Start Station	Start Offset	End Station	End Offset
65+05.05	14.99 LT	65+10.05	14.97 LT
65+18.19	24.71 LT	65+18.18	25.80 LT
65+38.33	24.86 LT	65+38.34	26.68 LT
65+46.23	14.72 LT	65+46.34	26.20 LT
65+45.02	36.01 LT	65+52.97	38.81 LT

506.1 Granite Curb Type VB- Curved

As shown on the Construction and Curb Tie Plans.

Dartmouth Street Const BL

Start Station	Start Offset	End Station	End Offset
23+31.19	20.05 LT	23+34.05	19.16 LT
23+43.75	12.48 LT	23+46.57	11.60 LT
23+47.93	11.60 LT	23+50.10	11.71 LT
23+54.94	17.50 RT	23+57.35	13.17 RT
23+67.85	29.07 LT	23+67.93	33.40 LT
23+82.73	18.55 RT	23+86.24	20.01 RT

ITEM 506.1 (Continued)

Catharine Street Const BL

Start Station	Start Offset	End Station	End Offset
31+94.56	17.21 RT	31+98.35	21.41 RT
32+40.01	22.31 RT	32+40.54	21.51 RT
32+41.29	36.29 RT	32+43.66	38.76 RT
32+48.21	42.54 RT	32+49.28	43.77 RT
32+58.93	18.40 RT	32+61.42	19.05 RT
37+97.39	12.39 RT	38+00.53	14.29 RT
37+98.63	14.51 LT	37+99.07	14.75 LT
38+41.80	15.46 RT	38+46.88	12.69 RT
38+43.64	14.16 LT	38+47.03	12.65 LT
38+61.09	14.28 RT	38+63.70	15.00 RT
38+61.37	14.17 LT	38+63.87	14.81 LT
41+96.49	17.79 LT	41+98.48	13.76 LT
42+11.12	16.22 RT	42+12.64	12.63 RT
42+15.91	13.57 LT	42+19.55	16.23 LT
42+16.75	62.55 LT	42+18.08	59.09 LT
42+19.41	57.66 LT	42+22.08	50.83 LT
42+41.23	14.42 RT	42+42.68	14.65 RT
45+00.56	15.04 LT	45+07.86	13.14 LT
45+11.21	14.83 RT	45+12.99	11.52 RT
45+34.02	10.99 RT	45+38.00	15.92 RT
45+38.21	15.09 LT	45+40.00	15.44 LT

Marion Street Const BL

Start Station	Start Offset	End Station	End Offset
65+18.18	25.80 LT	65+18.55	29.23 LT
65+38.34	26.68 LT	65+45.02	36.01 LT

509. Granite Transition Curbs for Pedestrian Curb Ramps - Straight

Transition from 6-inch reveal (unless noted otherwise on pedestrian curb ramp and driveway tables) to flush reveal at sidewalk and driveways.

Yale Street Const BL

Start Station	Start Offset	End Station	End Offset
70+59.34	14.73 LT	70+51.46	14.75 LT
70+45.79	14.74 LT	70+39.29	17.72 LT
70+57.57	15.07 RT	70+49.03	15.13 RT
70+42.62	16.80 RT	70+30.52	24.64 RT

Dartmouth Street Const BL

Start Station	Start Offset	End Station	End Offset
23+59.95	12.45 RT	23+63.71	12.45 RT
23+73.71	12.43 RT	23+74.54	12.43 RT
23+78.08	13.90 RT	23+79.31	15.13 RT

ITEM 509 (Continued)

Catharine Street Const BL

Start Station	Start Offset	End Station	End Offset
31+63.62	14.87 LT	31+65.99	14.88 LT
31+66.80	33.22 LT	31+70.02	27.56 LT
31+72.49	23.21 LT	31+74.71	19.29 LT
31+72.60	14.83 LT	31+74.42	14.75 LT
31+77.03	15.02 RT	31+83.48	15.10 RT
31+92.64	49.11 LT	31+96.40	42.45 LT
31+98.86	38.10 LT	32+02.06	32.44 LT
32+00.35	25.00 RT	32+03.54	30.65 RT
32+06.00	35.01 RT	32+09.89	41.89 RT
32+11.76	18.43 LT	32+14.38	16.99 LT
32+23.86	15.14 LT	32+30.33	15.13 LT
37+87.42	15.16 RT	37+89.06	11.09 RT
37+89.50	15.09 LT	37+90.59	12.92 LT
38+06.26	25.90 RT	38+06.35	33.77 RT
38+06.91	27.60 LT	38+06.94	33.57 LT
38+36.31	33.97 RT	38+36.38	26.85 RT
38+36.39	27.01 LT	38+36.40	33.33 LT
38+55.31	12.00 RT	38+55.92	12.00 RT
38+55.47	11.99 LT	38+56.19	11.99 LT
38+58.50	12.72 RT	38+59.51	13.33 RT
38+58.63	12.63 LT	38+59.12	12.90 LT
42+01.50	12.76 LT	42+04.77	12.75 LT
42+16.12	11.22 RT	42+18.77	11.22 RT
42+22.00	25.00 LT	42+22.04	38.98 LT
42+26.77	11.21 RT	42+30.26	11.20 RT
42+31.77	11.43 RT	42+33.19	11.88 RT
44+92.69	32.58 LT	44+92.87	27.62 LT
45+12.86	13.14 LT	45+19.36	13.14 LT
45+15.22	10.85 RT	45+19.36	10.86 RT
45+27.36	13.14 LT	45+32.31	13.14 LT
45+27.36	10.87 RT	45+33.01	10.88 RT

Marion Street Const BL

Start Station	Start Offset	End Station	End Offset
65+10.05	14.97 LT	65+13.26	14.96 LT
65+33.43	15.03 RT	65+37.93	15.07 RT
65+38.23	14.80 LT	65+38.27	19.46 LT
65+45.93	15.15 RT	65+49.18	15.18 RT

509.1 Granite Transition Curbs for Pedestrian Curb Ramps - Curved

Transition from 6-inch reveal (unless noted otherwise on pedestrian curb ramp and driveway tables) to flush reveal at sidewalk and driveways.

Dartmouth Street Const BL

Start Station	Start Offset	End Station	End Offset
23+50.10	11.71 LT	23+56.34	13.42 LT
23+67.85	29.07 LT	23+66.01	22.87 LT
23+57.35	13.17 RT	23+59.95	12.45 RT
23+74.54	12.43 RT	23+78.08	13.90 RT

Catharine Street Const BL

Start Station	Start Offset	End Station	End Offset
31+88.48	15.13 RT	31+94.56	17.21 RT
32+14.38	16.99 LT	32+18.86	15.40 LT
32+38.48	25.46 RT	32+40.01	22.31 RT
32+38.51	30.46 RT	32+41.29	36.29 RT
32+40.54	21.51 RT	32+42.81	18.86 RT
32+46.72	15.82 RT	32+53.00	15.15 RT
37+94.05	11.34 RT	37+97.39	12.39 RT
37+95.59	13.38 LT	37+98.63	14.51 LT
37+99.08	14.74 LT	38+01.74	16.59 LT
38+00.53	14.29 RT	38+03.01	16.75 RT
38+06.20	24.77 RT	38+06.26	25.90 RT
38+06.52	24.50 LT	38+06.91	27.60 LT
38+36.38	26.85 RT	38+36.52	24.97 RT
38+36.39	27.01 LT	38+36.63	24.33 LT
38+39.39	17.99 RT	38+41.80	15.46 RT
38+40.88	16.30 LT	38+43.64	14.16 LT
38+46.88	12.69 RT	38+50.31	12.04 RT
38+47.03	12.65 LT	38+50.47	12.03 LT
38+55.92	12.00 RT	38+58.50	12.72 RT
38+56.19	11.99 LT	38+58.63	12.63 LT
41+98.49	13.76 LT	42+01.50	12.76 LT
42+12.65	12.64 RT	42+16.12	11.22 RT
42+12.77	12.80 LT	42+15.91	13.57 LT
42+19.55	16.23 LT	42+21.25	18.99 LT
42+30.26	11.20 RT	42+31.77	11.43 RT
44+92.87	27.62 LT	44+93.21	24.92 LT
44+95.73	19.31 LT	45+00.56	15.04 LT
45+12.99	11.52 RT	45+15.22	10.85 RT
45+32.31	13.14 LT	45+33.84	13.38 LT
45+33.01	10.88 RT	45+34.02	10.99 RT

Marion Street Const BL

Start Station	Start Offset	End Station	End Offset
65+13.26	14.96 LT	65+18.23	19.31 LT

514. Granite Curb Inlet - Straight

Catharine Street Const BL

Station	Offset
37+84.49	14.89 RT
37+87.47	14.82 LT

594. Curb Removed and Discarded

As shown on the Drawings, or as directed by the Engineer.

Dartmouth Street Const BL

Start Station	Start Offset	End Station	End Offset
23+31.19	20.30 LT	23+65.77	57.78 LT
23+55.45	21.83 RT	23+86.24	20.01 RT

Yale Street Const BL

Start Station	Start Offset	End Station	End Offset
70+57.57	15.07 RT	70+48.91	14.95 RT
70+43.58	16.45 RT	70+38.12	20.08 RT

Catharine Street Const BL

Start Station	Start Offset	End Station	End Offset
31+63.62	14.87 LT	31+66.53	14.88 LT
31+66.80	33.22 LT	31+74.71	19.29 LT
31+71.22	14.89 LT	31+74.42	14.75 LT
31+74.17	15.03 RT	31+85.17	15.15 RT
31+89.97	15.64 RT	31+96.56	19.59 RT
31+92.66	49.07 LT	32+02.06	32.44 LT
31+99.11	22.81 RT	32+09.89	41.89 RT
32+11.76	18.43 LT	32+18.28	15.71 LT
32+23.86	15.14 LT	32+30.33	15.13 LT
32+38.48	25.46 RT	32+48.91	43.11 RT
32+44.87	17.29 RT	32+65.86	19.03 RT
37+86.32	15.05 RT	38+06.35	33.77 RT
37+88.32	15.02 LT	38+06.94	33.57 LT
38+36.31	33.97 RT	38+63.70	15.02 RT
38+36.44	33.33 LT	38+63.87	14.81 LT
41+97.38	17.02 LT	42+16.75	62.55 LT
42+10.56	16.66 RT	42+42.68	14.65 RT
42+46.36	24.87 LT	42+48.81	19.32 LT
44+57.97	19.25 LT	44+61.61	24.61 LT
44+92.23	46.03 LT	45+40.00	15.44 LT
45+11.19	17.04 RT	45+37.99	16.92 RT

Marion Street Const BL

Start Station	Start Offset	End Station	End Offset
65+33.43	15.03 RT	65+49.18	15.18 RT
65+05.05	14.99 LT	65+13.85	15.00 LT
65+38.23	14.80 LT	65+45.73	14.73 LT

660. Metal Pipe Rail

Marion Street Const BL

Station	Offset
65+55.87	34.53 LT
65+57.10	28.82 LT

697.1 Silt Sack

Install in existing and proposed catch basins to prevent siltation from entering storm water drainage system. Refer to the Drawings for location of catch basins.

Dartmouth Street Const BL

Station	Offset
23+98.41	19.59 RT
24+09.02	28.72 LT
23+54.64	12.89 LT

Catharine Street Const BL

Station	Offset
32+07.61	35.82 RT
32+38.96	34.37 RT
37+84.48	13.91 RT
37+86.55	13.86 LT
38+08.61	28.66 LT
38+35.22	28.40 LT
38+07.73	28.11 RT
38+35.35	33.25 RT
42+46.95	14.08 LT
42+50.14	13.37 RT
44+48.93	14.21 LT
44+48.10	13.86 RT

Bay Street Const BL

Station	Offset
85+50.42	14.02 RT
85+68.14	14.15 LT

Marion Street Const BL

Station	Offset
65+52.77	13.68 LT
65+68.16	17.96 RT

804.3 3 Inch Electrical Conduit Type NM – Plastic – (UL)**811.22 Electrical Handhole – SD2.022****811.31 Pull Box 12 X 12 Inches – SD2.031**

For Traffic Signal Conduit at the Catharine Street and Bay Street Intersection.

811.37 Electric Handhole Adjusted

Catharine Street Const BL

Station	Offset
45+24.22	24.40 LT

816.01 Traffic Signal Reconstruction Location No.1

For Traffic Signal Conduit at the Catharine Street and Bay Street Intersection.

824.301 Flashing Warning Beacon Type B Location 1

Catharine Street Const BL

Station	Offset
37+17.60	16.60 RT

824.302 Flashing Warning Beacon Type B Location 2

Adjacent to 15 Catharine Street (Precise location to be approved by the Engineer.)

825.2 RRFB (2-Post Assembly System)

Dartmouth Street Const BL

23+54 LT & 23+65 RT

Catharine Street Const BL

42+03 LT & 42+28 RT

45+18 LT & 45+29 RT

847.1 Sign Sup (N/Guide)+Rte Mkr w/1 Brkway Post Assembly - Steel

For sign replacements and for new signs throughout the project as shown on sign and pavement marking plans, to replace deficient posts, or as required by the Engineer.

866.212 12 Inch Reflectorized White Line (Polyurea) (Recessed)

Dartmouth Street Const BL

Start Station	Start Offset	End Station	End Offset
23+57.73	14.12 RT	23+63.39	12.45 RT
23+58.36	11.16 LT	23+68.14	13.24 LT
23+58.98	8.22 LT	23+68.76	10.30 LT
23+59.61	5.29 LT	23+69.39	7.37 LT
23+60.23	2.35 LT	23+70.01	4.43 LT
23+60.85	0.58 LT	23+70.63	1.50 LT
23+61.48	3.51 RT	23+71.26	1.44 RT
23+62.10	6.45 RT	23+71.88	4.37 RT
23+62.72	9.38 RT	23+72.50	7.31 RT
23+66.01	22.87 RT	23+73.61	12.43 RT
23+66.37	55.50 LT	23+80.74	55.65 LT
23+66.41	51.50 LT	23+96.24	51.81 LT
23+67.27	41.51 LT	24+00.30	41.85 LT
23+69.40	51.76 LT	23+70.26	41.77 LT
23+72.39	52.02 LT	23+73.25	42.02 LT
23+75.44	51.60 LT	23+76.29	41.60 LT
23+78.45	51.63 LT	23+79.30	41.63 LT
23+81.46	51.66 LT	23+82.31	41.66 LT
23+84.46	51.69 LT	23+85.32	41.70 LT
23+87.47	51.72 LT	23+88.33	41.73 LT
23+90.48	51.75 LT	23+91.34	41.76 LT
23+93.49	51.78 LT	23+94.34	41.79 LT
25+62.62	20.99 RT	25+71.78	0.49 RT
25+66.27	22.62 LT	25+85.13	19.59 LT
25+66.61	21.87 RT	25+76.60	24.81 RT
25+67.84	19.11 RT	25+77.54	21.96 RT
25+69.08	16.34 RT	25+78.76	19.19 RT
25+70.31	13.58 RT	25+79.99	16.43 RT
25+70.95	16.89 RT	25+78.76	19.19 RT
25+70.95	16.89 RT	25+78.76	19.19 RT
25+71.55	10.82 RT	25+81.50	13.75 RT
25+72.78	8.05 RT	25+82.46	10.90 RT
25+73.28	31.45 LT	25+96.83	21.28 LT
25+74.02	5.29 RT	25+83.70	8.14 RT
25+75.25	2.53 RT	25+84.93	5.37 RT
25+76.48	0.24 RT	25+86.59	2.73 RT
25+77.72	3.00 LT	25+87.92	0.00 LT
25+78.95	5.77 LT	25+88.63	2.92 LT
25+80.19	8.53 LT	25+89.87	5.68 LT
25+81.42	11.29 LT	25+91.10	8.45 LT
25+82.59	10.95 LT	25+89.01	9.06 LT
25+82.84	14.01 LT	25+92.34	11.21 LT
25+84.28	16.71 LT	25+93.97	13.86 LT

ITEM 866.212 (Continued)

Catharine Street Const BL

Start Station	Start Offset	End Station	End Offset
31+65.07	13.41 RT	31+80.58	14.07 RT
31+65.94	11.85 LT	31+77.49	11.74 LT
31+66.84	33.21 LT	31+79.91	40.60 LT
31+67.47	0.31 RT	31+75.20	14.00 RT
31+67.65	8.84 LT	31+79.20	8.72 LT
31+68.81	29.73 LT	31+95.17	44.63 LT
31+69.35	5.82 LT	31+80.55	5.70 LT
31+70.23	30.54 LT	31+75.16	21.83 LT
31+71.05	2.80 LT	31+82.34	2.69 LT
31+72.76	0.22 RT	31+83.97	0.33 RT
31+72.85	32.02 LT	31+77.77	23.31 LT
31+73.73	21.02 LT	32+00.09	35.92 LT
31+74.46	3.23 RT	31+85.93	3.35 RT
31+75.46	33.49 LT	31+80.38	24.79 LT
31+76.17	6.25 RT	31+87.71	6.37 RT
31+76.27	13.90 RT	31+92.49	14.99 RT
31+77.87	9.27 RT	31+89.42	9.39 RT
31+78.07	34.97 LT	31+82.99	26.26 LT
31+79.57	12.29 RT	31+91.09	12.40 RT
31+80.68	36.45 LT	31+85.60	27.74 LT
31+83.29	37.92 LT	31+88.21	29.22 LT
31+85.90	39.40 LT	31+90.82	30.69 LT
31+88.51	40.87 LT	31+93.44	32.17 LT
31+91.13	42.35 LT	31+96.05	33.65 LT
31+93.74	43.83 LT	31+98.66	35.12 LT
32+03.46	28.47 RT	32+38.94	22.15 RT
32+05.37	28.13 RT	32+10.58	37.36 RT
32+08.32	27.60 RT	32+13.54	36.83 RT
32+08.67	37.70 RT	32+38.09	32.45 RT
32+11.28	27.08 RT	32+16.49	36.30 RT
32+13.26	17.60 RT	32+39.96	20.60 RT
32+14.23	26.55 RT	32+19.44	35.78 RT
32+16.95	12.00 LT	32+28.98	12.16 LT
32+17.18	26.02 RT	32+22.40	35.25 RT
32+19.25	9.03 LT	32+31.34	9.20 LT
32+20.14	25.50 RT	32+25.35	34.73 RT
32+21.33	6.06 LT	32+33.41	6.22 LT
32+23.09	24.97 RT	32+28.30	34.20 RT
32+23.41	3.09 LT	32+35.49	3.25 LT
32+25.01	38.85 RT	32+39.98	36.21 RT
32+25.48	0.11 LT	32+37.56	0.28 LT
32+26.04	24.44 RT	32+31.26	33.67 RT
32+26.48	0.11 LT	32+36.53	0.25 LT
32+27.18	15.14 RT	32+47.73	14.27 RT
32+27.56	2.86 RT	32+39.64	2.69 RT
32+29.00	23.92 RT	32+34.21	33.15 RT
32+29.64	5.83 RT	32+41.72	5.66 RT
32+30.21	15.48 LT	32+30.21	15.48 LT
32+31.71	8.80 RT	32+43.79	8.63 RT

ITEM 866.212 (Continued)

Catharine Street Const BL

Start Station	Start Offset	End Station	End Offset
32+31.79	15.52 LT	32+42.37	0.39 LT
32+31.95	23.39 RT	32+37.16	32.62 RT
32+33.79	11.77 RT	32+45.87	11.60 RT
32+35.08	22.83 RT	32+37.34	26.84 RT
32+35.86	14.74 RT	32+46.92	14.59 RT
37+84.05	12.50 LT	37+84.13	0.00 LT
37+88.05	11.36 LT	37+88.22	13.21 LT
37+88.07	8.43 RT	37+98.07	8.50 RT
37+88.09	5.43 RT	37+98.09	5.50 RT
37+88.11	2.43 RT	37+98.11	2.50 RT
37+88.13	0.57 LT	37+98.13	0.50 LT
37+88.15	3.57 LT	37+98.15	3.50 LT
37+88.17	6.57 LT	37+98.17	6.50 LT
37+88.19	9.57 LT	37+98.19	9.50 LT
37+98.05	12.51 LT	37+98.22	13.14 LT
38+03.42	16.60 RT	38+38.76	17.17 RT
38+03.88	16.40 LT	38+41.05	16.14 LT
38+07.25	26.67 RT	38+35.28	27.12 RT
38+07.81	30.37 LT	38+21.66	30.28 LT
38+07.89	26.37 LT	38+36.42	26.17 LT
38+09.14	26.70 RT	38+09.30	16.70 RT
38+09.67	16.36 LT	38+09.74	26.36 LT
38+12.14	26.75 RT	38+12.30	16.75 RT
38+12.67	16.34 LT	38+12.74	26.34 LT
38+15.14	26.79 RT	38+15.30	16.79 RT
38+15.67	16.32 LT	38+15.74	26.32 LT
38+18.14	26.84 RT	38+18.30	16.84 RT
38+18.67	16.30 LT	38+18.74	26.30 LT
38+21.14	26.89 RT	38+21.30	16.89 RT
38+21.66	30.90 RT	38+35.54	31.12 RT
38+21.67	16.28 LT	38+21.74	26.27 LT
38+24.14	26.94 RT	38+24.30	16.94 RT
38+24.67	16.25 LT	38+24.74	26.25 LT
38+27.14	26.99 RT	38+27.30	16.99 RT
38+27.67	16.23 LT	38+27.74	26.23 LT
38+30.14	27.03 RT	38+30.30	17.04 RT
38+30.67	16.21 LT	38+30.74	26.21 LT
38+33.14	27.08 RT	38+33.30	17.08 RT
38+33.67	16.19 LT	38+33.74	26.19 LT
38+45.61	12.14 RT	38+45.84	11.99 RT
38+45.64	9.01 LT	38+55.64	9.11 LT
38+45.67	6.01 LT	38+55.67	6.11 LT
38+45.70	3.01 LT	38+55.70	3.11 LT
38+45.73	0.01 LT	38+55.73	0.11 LT
38+45.75	2.99 RT	38+55.75	2.89 RT
38+45.78	5.99 RT	38+55.78	5.89 RT
38+45.81	8.98 RT	38+55.81	8.89 RT
38+55.61	12.81 RT	38+55.85	12.50 RT
38+59.60	13.72 LT	38+59.73	0.00 LT

ITEM 866.212 (Continued)

Catharine Street Const BL

Start Station	Start Offset	End Station	End Offset
42+02.88	12.76 RT	42+16.98	11.22 RT
42+04.48	10.03 LT	42+16.13	9.96 LT
42+06.26	7.02 LT	42+17.90	6.94 LT
42+08.03	4.01 LT	42+19.67	3.93 LT
42+09.80	1.00 LT	42+21.44	0.92 LT
42+11.57	2.01 RT	42+23.22	2.09 RT
42+13.34	5.03 RT	42+24.99	5.10 RT
42+14.31	13.04 RT	42+28.57	11.21 RT
42+15.11	8.04 RT	42+26.76	8.12 RT
42+20.69	17.07 LT	42+50.79	17.00 LT
42+22.00	27.07 LT	42+46.05	27.01 LT
42+22.01	31.07 LT	42+46.06	31.01 LT
44+56.19	16.35 LT	45+03.97	16.03 LT
44+62.05	26.31 LT	44+95.07	26.09 LT
45+18.36	13.14 RT	45+18.36	10.86 RT
45+18.36	0.00 LT	45+28.36	0.00 LT
45+18.36	9.00 RT	45+28.36	9.00 RT
45+18.36	3.00 LT	45+28.36	3.00 LT
45+18.36	3.00 RT	45+28.36	3.00 RT
45+18.36	6.00 RT	45+28.36	6.00 RT
45+18.36	6.00 LT	45+28.36	6.00 LT
45+18.36	9.00 LT	45+28.36	9.00 LT
45+18.36	12.00 LT	45+28.36	12.00 LT
45+28.36	13.14 RT	45+28.36	10.87 RT

Marion Street Const BL

Start Station	Start Offset	End Station	End Offset
61+39.48	12.07 LT	61+47.49	12.13 LT
61+39.50	9.07 LT	61+47.52	9.13 LT
61+39.52	6.07 LT	61+47.54	6.13 LT
61+39.54	3.07 LT	61+47.56	3.13 LT
61+39.56	0.07 LT	61+47.58	0.13 LT
61+39.59	2.93 RT	61+47.61	2.87 RT
61+39.61	5.93 RT	61+47.63	5.87 RT
61+39.63	8.93 RT	61+47.65	8.87 RT
61+39.65	11.93 RT	61+47.67	11.87 RT
61+53.54	16.35 LT	61+53.63	24.12 LT
61+53.60	23.85 RT	61+53.62	16.01 RT
61+56.54	16.31 LT	61+56.63	24.09 LT
61+56.60	23.86 RT	61+56.62	16.01 RT
61+59.54	16.27 LT	61+59.63	24.05 LT
61+59.60	23.87 RT	61+59.62	16.02 RT
61+62.54	16.24 LT	61+62.63	24.02 LT
61+62.60	23.88 RT	61+62.62	16.03 RT
61+65.54	16.20 LT	61+65.63	23.98 LT
61+65.60	23.88 RT	61+65.62	16.04 RT
61+68.54	16.17 LT	61+68.63	23.94 LT
61+68.60	23.89 RT	61+68.62	16.05 RT
61+71.54	16.13 LT	61+71.63	23.91 LT

ITEM 866.212 (Continued)

Marion Street Const BL

Start Station	Start Offset	End Station	End Offset
61+71.60	23.90 RT	61+71.62	16.05 RT
61+74.54	16.09 LT	61+74.63	23.87 LT
61+74.60	23.91 RT	61+74.62	16.06 RT
61+77.54	16.06 LT	61+77.63	23.83 LT
61+77.60	23.91 RT	61+77.62	16.07 RT
61+83.09	11.80 LT	61+91.26	11.96 LT
61+83.15	8.81 LT	61+91.31	8.96 LT
61+83.20	5.81 LT	61+91.37	5.96 LT
61+83.26	2.81 LT	61+91.43	2.96 LT
61+83.32	0.19 RT	61+91.48	0.04 RT
61+83.37	3.19 RT	61+91.54	3.04 RT
61+83.43	6.19 RT	61+91.59	6.04 RT
61+83.48	9.19 RT	61+91.65	9.04 RT
61+83.54	12.19 RT	61+91.70	12.04 RT
65+36.19	15.05 LT	65+36.49	14.82 LT
65+36.22	12.12 RT	65+46.22	12.22 RT
65+36.25	9.12 RT	65+46.25	9.22 RT
65+36.28	6.12 RT	65+46.28	6.22 RT
65+36.31	3.12 RT	65+46.31	3.22 RT
65+36.34	0.12 RT	65+46.34	0.22 RT
65+36.37	2.88 LT	65+46.37	2.78 LT
65+36.40	5.88 LT	65+46.40	5.78 LT
65+36.43	8.88 LT	65+46.43	8.78 LT
65+36.46	11.88 LT	65+46.46	11.78 LT
65+46.19	15.15 LT	65+46.49	14.72 LT

874.2 Traffic Sign Removed and Reset

As shown on the Sign and Pavement Plans.

Catharine Street Const BL

Station	Offset
32+63.99	16.76 LT
37+84.06	16.76 RT
38+38.50	31.20 RT
38+61.66	16.31 LT
44+70.85	16.31 RT

Yale Street Const BL

Station	Offset
70+41.47	28.09 LT

Bay Street Const BL

Station	Offset
86.39.95	16.22 RT

874.4 Traffic Sign Removed and Stacked

For removal and stacking of traffic signs as shown on the Sign and Pavement Marking Plans.

Catharine Street Const BL

Station	Offset
42+56.94	17.04 LT
42+14.81	16.16 RT
44+86.93	17.52 RT

Also, "School Speed Limit 20 MPH" sign at 15 Catharine Street

874.41 Traffic Sign Removed and Discarded

For removal and stacking of traffic signs as shown on the Sign and Pavement Marking Plans.

Catharine Street Const BL

Station	Offset
31+35.37	16.38 LT
34+41.95	16.76 LT
38+49.98	16.77 LT
44+45.92	17.11 LT

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GEOTECHNICAL REPORT

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April 11, 2025

Project No. 100911.000

Mr. Keith Lincoln, PE
Chappell Engineering Associates, LLC
Chief Civil Engineer
201 Boston Post Road West, Suite 101
Marlboro, MA 01752
Office: (508) 481-7400
klincoln@chappellengineering.com

Re: Geotechnical Letter Report
Rebecca M. Johnson Elementary School Improvements (SRTS)
Catharine Street & Bay Street Intersection
Springfield, Massachusetts
MassDOT Contract No. 115755
MassDOT Project No. 612080

Dear Mr. Lincoln:

Nobis Group® (Nobis) has prepared this geotechnical report summarizing the results of our subsurface explorations for the proposed improvements at the Catharine Street and Bay Street intersection located in Springfield, Massachusetts (hereby known as the “Site”). The objective of our work was to provide geotechnical data and recommendations to assist Chappell Engineering Associates, LLC (Chappell) with the design of the proposed traffic signal mast arm foundations at the Site. Our services were performed in accordance with the subconsultant agreement dated January 10, 2025 including our proposal dated November 4, 2024. This report is subject to the limitations in **Appendix A**.



Photo 1: Image showing the intersection along Bay Street with view of 256 Bay St in the background.



BACKGROUND

It is our understanding that Chappell has been retained by MassDOT to prepare the design for improvements at the intersection of Catharine Street and Bay Street related to the proposed Rebecca M. Johnson Elementary School Improvements - Safe Route to School (SRTS) project. New cantilever traffic signal mast arms with a horizontal length of 20 to 25 feet are proposed at each corner of the intersection for a total of four (4) mast arms. A site-focused locus plan is depicted on **Figure 1**.

SITE CONDITIONS

Adjacent to the Site are residential houses to the east and west, a commercial business building to the south, and a city park to the north. Most of the Site is either paved or landscaped. Multiple utilities exist throughout the Site, which include, but are not limited to, underground gas, water, sewer, electric, and fiber-optic lines. An aerial view of the Site is depicted on **Figure 2**.

Elevations provided herein are in feet and are relative to the North American Datum of 1988 (NAVD88).

GEOLOGIC INFORMATION

Based on a review of a surficial geology map, entitled “Geologic Map of the Springfield South Quadrangle, Massachusetts”, prepared by Hartshorn and Koteff, dated 1967, the Site is mapped as delta-outwash plain deposits. These deposits are described as proglacial kettled to unkettled outwash grading downstream into topset and forest beds of yellowish-brown to reddish-brown gravel, sand, silt, and clay deposited into glacial Lake Hitchcock. Refer to **Figure 3** for a site-focused excerpt of the surficial geologic map.

SUBSURFACE EXPLORATIONS

Four (4) test borings for the proposed cantilever mast arm foundations were marked at the Site by Nobis personnel on January 17, 2025 using taped measurements from prominent site features, based on the mast arm location plans received from Chappell.

A ground penetration radar (GPR) survey was performed by a private utility locator, as a subconsultant to the retained drilling subcontractor, to evaluate the location and/or to confirm the absence of existing utilities at each proposed test boring location.



Seaboard Drilling, LLC of Chicopee, Massachusetts advanced five (5) test borings, referred to as MA-1, MA-2A, MA-2B, MA-3, and MA-4, on April 3 and 4, 2025 to depths of approximately 27 feet below the existing ground surface (bgs), with the exception of boring MA-2A due to encountering shallow refusal at 1.5 feet bgs.

The test borings were advanced using hollow stem auger drilling techniques, utilizing a 2-1/4-inch inner-diameter auger. Standard Penetration Tests (SPT) were performed with a 140-pound hammer and split-spoon samples were generally collected at continuous intervals to a depth of approximately 12 feet and at five-foot intervals thereafter. Split-spoon samples obtained from the test borings were classified by a Nobis representative using the Modified Burmister classification system. Other observations, including estimated percentage (by weight) and gradation of soil, qualitative descriptions of in-place density, and depth to groundwater were also documented.

For the approximate location of the test borings performed, refer to the attached **Figure 2**. The test borings were observed and logged by Nobis personnel, and the logs are included in **Appendix B**.

SUBSURFACE CONDITIONS

The generalized soil stratigraphy encountered in the borings consisted of asphalt, concrete, or topsoil, over fill soil, overlying outwash plain deposits. A generalized description of the soils encountered are discussed below in order of increasing depth.

Asphalt – Bituminous pavement was encountered in borings MA-2A, MA-2B, and MA-4. The thickness encountered varied between approximately 2.5 and 3 inches at these locations.

Concrete – Concrete was encountered in boring MA-3 which was performed at a sidewalk. The thickness was approximately 5.8 inches at this location.

Topsoil – Topsoil was encountered in boring MA-1. The topsoil consisted of loose fine to medium sand with few roots/grass fibers and was approximately 2 feet thick.

Fill – Fill was encountered in each boring except at boring MA-1. The fill consisted of fine to coarse sand with little (10 to 20%) amounts of fine to coarse gravel and little to trace (0-10%) amounts of silt. The fill varied from very loose to medium dense with SPT N-values ranging from 4 to 14. The fill stratum extended to depths ranging from 1.5 to 2.5 feet bgs.



Outwash Plain Deposits – Sand deposits were encountered beneath the asphalt, topsoil, and/or fill in each test boring. This stratum generally consisted of fine to coarse sand with none to trace amounts of fine to coarse gravel and little to trace amounts of silt. The sand deposits varied from loose to medium dense with SPT N-values ranging from 5 to 14, with most generally being loose. The completed borings terminated in this stratum at 27 feet bgs.

Groundwater – At the time of drilling, groundwater was observed to be approximately 12.3 to 15.5 feet bgs. Groundwater level fluctuations occur due to seasonal variations in the amount of rainfall, runoff, and other factors not consistently evident at the time the explorations were performed. The possibility of groundwater level fluctuations should be considered during the design and construction of the project.



Photo 2: Split Spoon sample S-2, from 2 to 4 feet bgs, from boring MA-4.

LABORATORY TESTING

Four (4) soil samples were selected by Nobis and submitted to Yankee Engineering, of Worcester, Massachusetts for laboratory testing. The following tests were performed:

- Four (4) grain size (sieve only) analysis (in accordance with ASTM D422).

The laboratory tests were performed to confirm the visual classifications observed during drilling. Refer to **Appendix C** for the laboratory test results.

GEOTECHNICAL DESIGN RECOMMENDATIONS

The following section presents our geotechnical recommendations relative to the proposed cantilever traffic signal mast arm pier foundations. The recommendations herein are based on the observed subsurface conditions, the average SPT N-values encountered in the test borings, and the MassDOT Standard Drawing “Overhead Signal Structure & Foundation Mast Arm Cored Pier Foundations” dated December 2015 using the table labeled “Pier Foundations for 110 MPH Wind Speed Zone” (Refer to **Appendix D**).



We recommend that the table in **Appendix D** can be used for all four mast arm pier foundations. The following **Table 1** provides the recommended Soil Type for pier foundations. Mast arm lengths were provided by Chappell in an email on April 3, 2025. If a change to a mast arm length is required, then Nobis should be consulted to assess if a change in the recommended Soil Type for pier foundations is warranted.

Table 1 – Soil Type for Catharine & Bay Street Mast Arm Pier Foundations

Boring I.D.	Approx. Ground Surface El. (ft)	Mast Arm Length (ft)	Mast Arm Pier Foundation Diameter (ft) ¹	Encountered Average N-value for Pier Depth	Required Mast Arm Pier Depth (ft) ¹	Recommended Soil Type for Pier Foundation
MA-1	207	20	3.5	8	8.5	Dry Sand (Loose)
MA-2B	206	25	3.5	11	9	Dry Sand (Loose)
MA-3	207	20	3.5	8	8.5	Dry Sand (Loose)
MA-4	206	20	3.5	8	8.5	Dry Sand (Loose)

Notes:

¹ Required pier diameter and depths were obtained from the MassDOT Standard Drawings Overhead Signal Structure & Foundation Mast Arm Cored Pier Foundations, Sheet 5 of 7, dated December 2015, based a design wind speed of 110 miles per hour and our recommended soil type.

CONSTRUCTION CONSIDERATIONS

Pier foundation installations should meet the requirements of Note 2 and excavations should meet the requirements of Notes 6, 7, and 8 of the standard drawing in **Appendix D**. Alternative methods of excavation may be submitted to MassDOT for approval if they meet the requirements listed in the **Appendix D** notes.

Utilities should be protected or relocated during excavation.



Thank you for the opportunity to be of service. Should you require additional information, please contact us.

Very truly yours,

NOBIS GROUP®

Kamil A. Kocia
Project Engineer

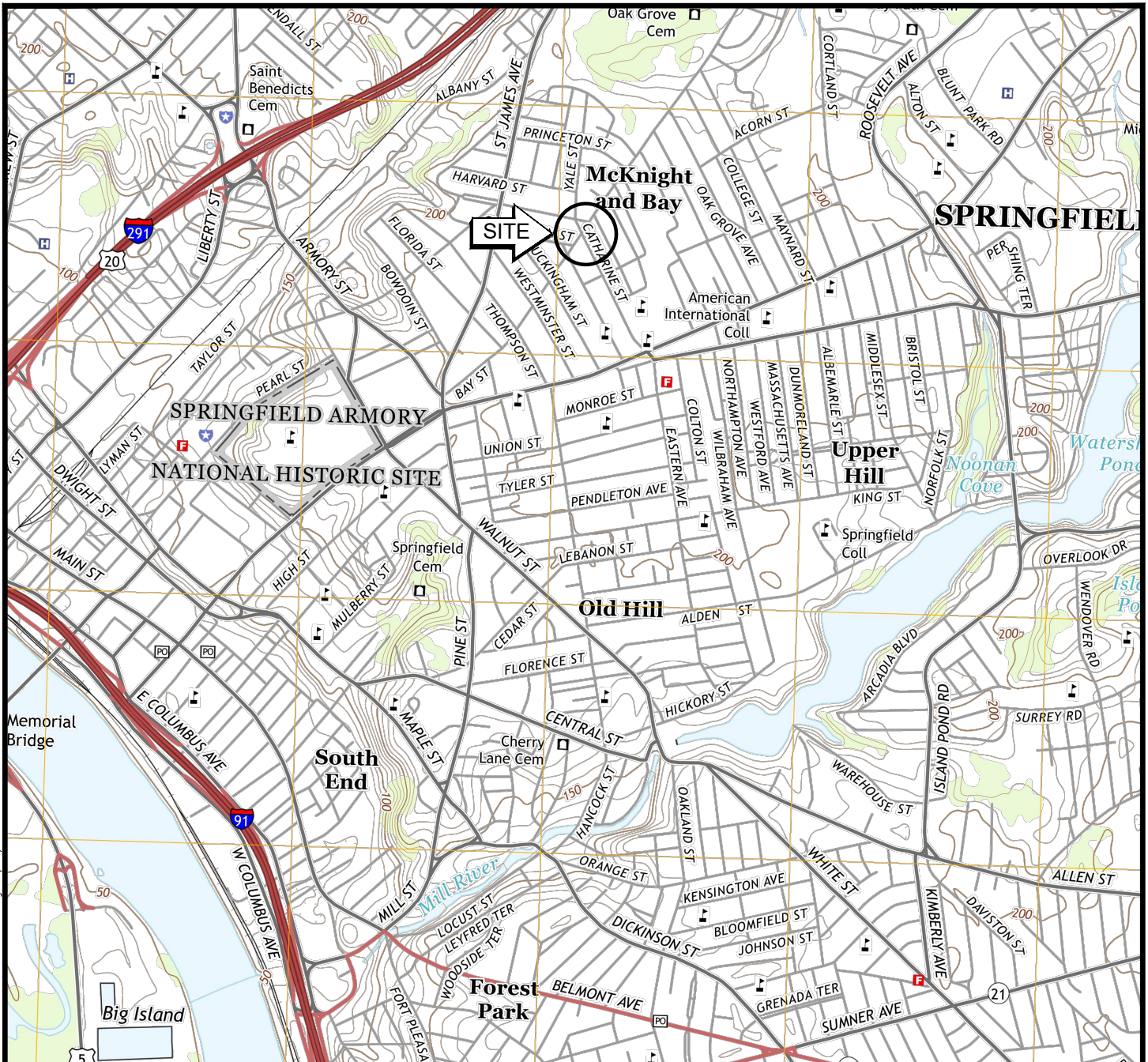
Kurt Jelinek, PE
Director of Transportation Projects

Attachments:

Figure 1	Site Locus Plan
Figure 2	Boring Location Plan
Figure 3	Surficial Geology Plan
Appendix A	Limitations
Appendix B	Test Boring Logs
Appendix C	Laboratory Testing Results
Appendix D	MassDOT Standard Drawing

J:\100911.000 MassDOT Catharine & Bay St SRTS, Springfield\Deliverables\Mast Arm Report\100911.000 MassDOT Catharine & Bay Street, Springfield, MA - 4.11.2025.docx

FIGURES

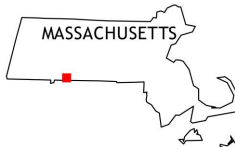


2021 USGS TOPOGRAPHIC MAPS
EXCERPTED FROM: SPRINGFIELD SOUTH QUADRANGLES,
MASSACHUSETTS-CONNECTICUT
CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

APPROXIMATE SCALE
1 INCH = 2,000 FEET



nobis



QUADRANGLE LOCATION



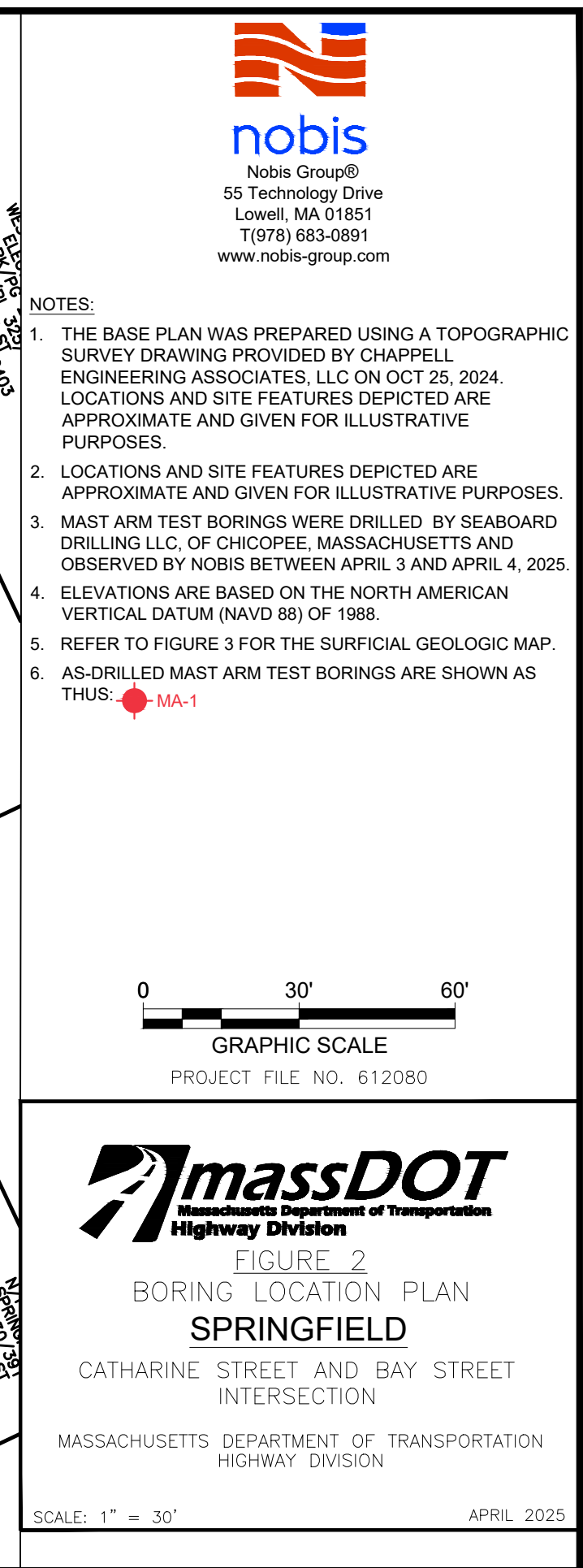
FIGURE 1
SITE LOCUS PLAN
SPRINGFIELD

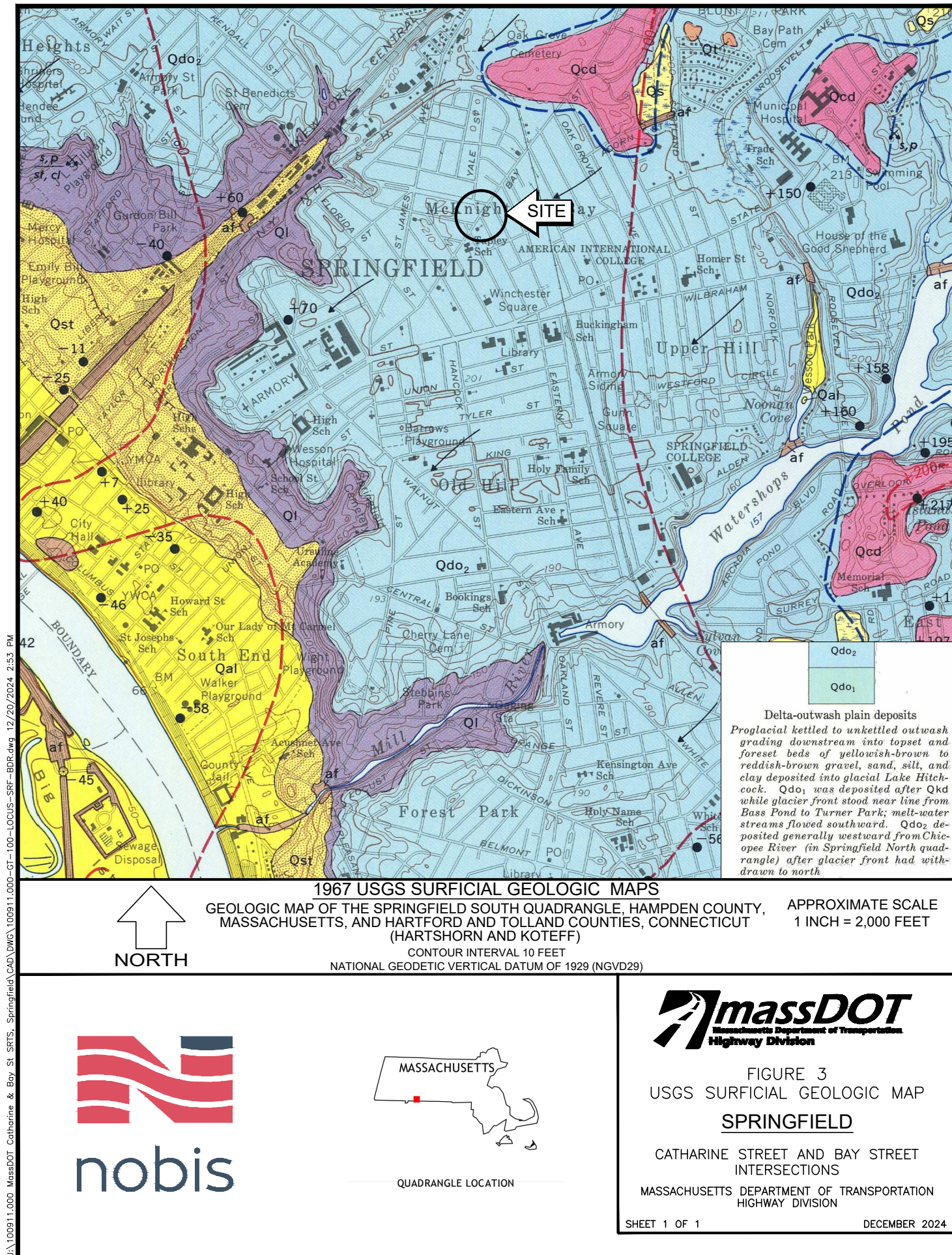
CATHARINE STREET AND BAY STREET
INTERSECTIONS

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

SHEET 1 OF 1

DECEMBER 2024





APPENDIX A – Limitations

GEOTECHNICAL LIMITATIONS

Explorations and Subsurface Conditions

1. The analyses and design recommendations submitted in this report are based in part upon the data obtained from subsurface explorations. The nature and extent of variations between these explorations may not become evident until construction. If variations then appear evident, it will be necessary to reevaluate the recommendations of this report.

In preparing this report, Nobis relied on certain information provided by the Client and other parties referenced therein which were made available to Nobis at the time of our evaluation. Nobis did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this evaluation.

2. The generalized soil profile described in the text is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized and have been developed by interpretations of widely spaced explorations and samples; actual soil transitions are probably more erratic. For specific information, refer to the exploration logs.
3. Water level readings have been made in the explorations at times and under conditions stated on the logs. These data have been reviewed and interpretations have been made in the text of this report. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall, temperature, and other factors occurring since the time measurements were made. The water table encountered in the course of the work may differ from that indicated in the Report.

Recommendations for foundation drainage, waterproofing, and moisture control address the conventional geotechnical engineering aspects of seepage control. These recommendations may not preclude an environment that allows the infestation of mold or other biological pollutants.

4. Nobis' geotechnical services did not include an assessment of the presence of oil or hazardous materials at the property. Consequently, we did not consider the potential impacts (if any) that contaminants in soil or groundwater may have on construction activities, or the use of structures on the property.

Additional Services

5. Nobis recommends that we be retained to provide services during future site observations, design, implementation activities, construction and/or property development/redevelopment. This will allow us the opportunity to: i) observe conditions and compliance with our recommendations, design concepts and/or opinions; ii) allow for changes in the event that conditions are other than anticipated; iii) provide modifications to our design recommendations; and iv) assess the consequences of changes in technologies and/or regulations.

Use of Report

6. Nobis prepared this report on behalf of, and for the exclusive use of our Client for the stated purpose(s) and location(s) identified in our proposal and/or report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Reliance by any party not expressly identified in the agreement, for any use, without our prior written permission, shall be at that party's sole risk, and without any liability to Nobis.

This report is for design purposes only and is not sufficient to prepare an accurate construction bid. Contractors wishing a copy of the report may secure it with the understanding that its scope is limited to design considerations only.

7. Nobis' findings and conclusions are based on the work conducted as part of the scope of work set forth in our proposal and/or report, and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions considering the limited data gathered during the course of our work. If conditions other than those described in this report are found at the subject location(s), or the project design has been altered in any way, Nobis shall be so notified and afforded the opportunity to revise the report, as appropriate, to reflect the unanticipated changed conditions.
8. Nobis' services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services, at the same time, under similar conditions, at the same or a similar property. No warranty, expressed or implied, is made.

Compliance with Codes and Regulations

9. Nobis used reasonable care in identifying and interpreting applicable codes and regulations. These codes and regulations are subject to various, and possibly contradictory, interpretations. Compliance with codes and regulations by other parties is beyond our control.

Opinion of Cost

10. This report may contain or be based on comparative cost opinions for the purpose of evaluating alternative foundation schemes. These opinions may also involve approximate quantity evaluations. It should be noted that quantity estimates may not be accurate enough for construction bids. In addition, since we are not professional estimators of labor and materials cost, the evaluation of construction costs should be considered as approximate guidelines and could vary significantly from actual costs. Nobis does not guarantee the accuracy of our cost opinions as compared to contractor's bids for construction costs.

END OF LIMITATIONS

APPENDIX B – Test Boring Logs

**BORING LOG**

Project: MassDOT Catharine & Bay Street Intersection
Contract No. 115755; Project No. 612080
 Location: Springfield, Massachusetts
 Nobis Project No.: 100911.000

Boring No.: MA-1
 Boring Location: See Exploration Location Plan
 Checked by: J. Vanoti
 Date Start: April 3, 2025
 Date Finish: April 3, 2025

Contractor: Seaboard Drilling, LLC
 Driller: J. Nitsch
 Nobis Rep.: K. Kocia

Rig Type / Model: Track / B-53 Mobile
 Hammer Type: Automatic Hammer
 Hammer Hoist: Automatic

Ground Surface Elev.: (+/-) 207
 Datum: NAVD 88

	Drilling Method	Sampler	Groundwater Observations					
Type	Hollow Stem Auger	Split-Spoon	Date	Time	Depth Below Ground (ft.)	Depth of Casing (ft.)	Depth to Bottom of Hole (ft.)	Stabilization Time
			▼ 04/03/25	10:15	15.5	(HSA) 25	27	10 minutes
Size ID (in.)	2-1/4	1-3/8						
Advancement	Augered	140-lb Hammer						

SAMPLE INFORMATION					LITHOLOGY		SAMPLE DESCRIPTION AND REMARKS (Classification System: Modified Burmister)		NOTES
Depth (ft.)	Type & No.	Rec (in.)	Depth (ft.)	Blows/ 6 in.	Ground Water	Graphic			
1	S-1	8	0-2	2			S-1: Loose, dark brown, fine to medium SAND, some Silt. few roots / grass fibers. Moist.		
2				2					
3				3					
4				2					
5	S-2	6	2-4	4			S-2: Loose, brown - tan, fine to medium SAND, trace Silt. Dry - Moist.		
6				4					
7				4					
8				5					
9	S-3	15	4-6	5			S-3: Medium dense, tan, fine to coarse SAND, trace Silt. Moist.		
10				5					
11				5					
12				4					
13	S-4	16	6-8	5			S-4: Medium dense, tan - orangish-brown, fine to coarse SAND, trace Silt. Moist. Faint redoximorphic staining present.		
14				5					
15				6					
16	S-5	16	8-10	3			S-5: Loose, tan, fine to coarse SAND, trace fine Gravel, trace Silt. Moist. [Laboratory Tests Performed (Grain Size Analysis): GRAVEL = 6.3%, SAND = 92.2%, FINES = 1.5%].		
17				4					
18				4					
19				3					
20	S-6	20	10-12	2			S-6: Loose, tan - orangish-brown, fine to medium SAND, trace Silt. Moist. Intermittent redoximorphic staining present. Trace coarse Sand present in last 5-inches of sample.		
21				3					
22				5					
23				6					
24									
25									
26									
27	S-7	19	15-17	5			S-7: Loose, brownish-gray, fine to medium SAND, trace Silt. Wet.		
28				4					
29				3					
30				2					
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									

Soil	Percentage	Non-Soil
trace	5 - 10	very few
little	10 - 20	few
some	20 - 35	several
and	35 - 50	numerous

NOTES:

Soil descriptions, and lithology, are based on visual classifications and should be considered approximate. Stratification lines are approximate boundaries between strata; transitions may be gradual.

**BORING LOG**

Project: MassDOT Catharine & Bay Street Intersection
Contract No. 115755; Project No. 612080
 Location: Springfield, Massachusetts
 Nobis Project No.: 100911.000


Boring No.: MA-1
 Boring Location: See Exploration Location Plan
 Checked by: J. Vanoti
 Date Start: April 3, 2025
 Date Finish: April 3, 2025

Contractor: Seaboard Drilling, LLC
 Driller: J. Nitsch
 Nobis Rep.: K. Kocia

Rig Type / Model: Track / B-53 Mobile
 Hammer Type: Automatic Hammer
 Hammer Hoist: Automatic

Ground Surface Elev.: (+/-) 207
 Datum: NAVD 88

	Drilling Method	Sampler	Groundwater Observations					
Type	Hollow Stem Auger	Split-Spoon	Date	Time	Depth Below Ground (ft.)	Depth of Casing (ft.)	Depth to Bottom of Hole (ft.)	Stabilization Time
			▼ 04/03/25	10:15	15.5	(HSA) 25	27	10 minutes
Size ID (in.)	2-1/4	1-3/8						
Advancement	Augered	140-lb Hammer						

SAMPLE INFORMATION					LITHOLOGY		SAMPLE DESCRIPTION AND REMARKS (Classification System: Modified Burmister)	NOTES	
Depth (ft.)	Type & No.	Rec (in.)	Depth (ft.)	Blows/ 6 in.	Ground Water	Graphic			Stratum Elev. / Depth (ft.)
21	S-8	24	20-22	6			OUTWASH PLAIN DEPOSITS	S-8: Medium dense, tan - gray, fine to medium SAND, trace Silt. Wet.	1
				5					
				5					
22				6					
23									
24									
25									
	S-9	22	25-27	7					
26				8					
				5					
27				4					
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									

Soil	Percentage	Non-Soil
trace	5 - 10	very few
little	10 - 20	few
some	20 - 35	several
and	35 - 50	numerous

NOTES:

1) Boring backfilled with spoils to approximate ground level.

**BORING LOG**

Project: MassDOT Catharine & Bay Street Intersection
Contract No. 115755; Project No. 612080
 Location: Springfield, Massachusetts
 Nobis Project No.: 100911.000



Boring No.: MA-2A
 Boring Location: See Exploration Location Plan
 Checked by: J. Vanoti
 Date Start: April 3, 2025
 Date Finish: April 3, 2025

Contractor: Seaboard Drilling, LLC
 Driller: J. Nitsch
 Nobis Rep.: K. Kocia

Rig Type / Model: Track / B-53 Mobile
 Hammer Type: Automatic Hammer
 Hammer Hoist: Automatic

Ground Surface Elev.: (+/-) 206
 Datum: NAVD 88

	Drilling Method	Sampler	Groundwater Observations					
Type	Hollow Stem Auger	Split-Spoon	Date	Time	Depth Below Ground (ft.)	Depth of Casing (ft.)	Depth to Bottom of Hole (ft.)	Stabilization Time
			04/03/25	12:11	Not Encountered	OUT	1.5	1 minute
Size ID (in.)	2-1/4	1-3/8						
Advancement	Augered	140-lb Hammer						

Depth (ft.)	SAMPLE INFORMATION				Ground Water	LITHOLOGY		SAMPLE DESCRIPTION AND REMARKS (Classification System: Modified Burmister)	NOTES
	Type & No.	Rec (in.)	Depth (ft.)	Blows/ 6 in.		Graphic	Stratum Elev. / Depth (ft.)		
1	S-1	0	0.5-1.5	5			ASPHALT 205.7 / 0.3	Approximately 2.5 inches of Asphalt encountered.	1
				8			FILL	S-1: No recovery. Strong resistance encountered at 1.5 feet bgs. Stopped advancing borehole due to suspicion of possible utility present. Offset boring 1-foot to boring MA-2B location.	
2							204.5 / 1.5	Boring terminated at 1.5 feet on refusal.	
3									
4									
5									
6									
7									
8									
9									
10									

Soil	Percentage	Non-Soil
trace	5 - 10	very few
little	10 - 20	few
some	20 - 35	several
and	35 - 50	numerous

NOTES:

1) Boring backfilled with gravel and spoils to 6-inches bgs and then topped with asphalt cold patch to approximate ground level.

**BORING LOG**

Project: MassDOT Catharine & Bay Street Intersection
Contract No. 115755; Project No. 612080
 Location: Springfield, Massachusetts
 Nobis Project No.: 100911.000




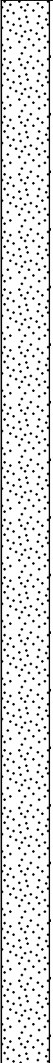
Boring No.: MA-2B
 Boring Location: See Exploration Location Plan
 Checked by: J. Vanoti
 Date Start: April 3, 2025
 Date Finish: April 3, 2025

Contractor: Seaboard Drilling, LLC
 Driller: J. Nitsch
 Nobis Rep.: K. Kocia

Rig Type / Model: Track / B-53 Mobile
 Hammer Type: Automatic Hammer
 Hammer Hoist: Automatic

Ground Surface Elev.: (+/-) 206
 Datum: NAVD 88

	Drilling Method	Sampler	Groundwater Observations					
Type	Hollow Stem Auger	Split-Spoon	Date	Time	Depth Below Ground (ft.)	Depth of Casing (ft.)	Depth to Bottom of Hole (ft.)	Stabilization Time
			▼ 04/03/25	14:00	13.7	(HSA) 25	27	15 minutes
Size ID (in.)	2-1/4	1-3/8						
Advancement	Augered	140-lb Hammer						

SAMPLE INFORMATION					LITHOLOGY		SAMPLE DESCRIPTION AND REMARKS (Classification System: Modified Burmister)	NOTES		
Depth (ft.)	Type & No.	Rec (in.)	Depth (ft.)	Blows/ 6 in.	Ground Water	Graphic			Stratum Elev. / Depth (ft.)	
1	S-1	15	0.5-2	6			205.7 / 0.3 ASPHALT	Asphalt encountered, approximately 2.5-inches in thickness.	1	
				6			FILL	S-1: Medium dense, black - brown, fine to coarse SAND, little fine Gravel, trace Silt. several asphalt fragments / particles. Moist.		
2				8						
	S-2	18	2-4	6				203.5 / 2.5		S-2A (4"): Loose, black - gray - brown, fine to coarse SAND, little fine Gravel, trace Silt. few asphalt fragments / particles. Dry.
3				3						S-2B (14"): Loose, tan, fine to coarse SAND, trace Silt. Moist.
				6						
4				6						
	S-3	15	4-6	5						S-3: Medium dense, tan - white, fine to medium SAND, trace Silt. Moist.
5				6						
				6						
6				7						
	S-4	21	6-8	6						S-4: Medium dense, tan, fine to coarse SAND, trace Silt. Moist.
7				5						
				7						
8				7						
	S-5	15	8-10	5						S-5: Medium dense, tan - orangish-brown, fine to coarse SAND, little fine Gravel, trace Silt. Moist. Strong redoximorphic staining present.
9				6						
				5						
10				5						
	S-6	16	10-12	5						S-6: Medium dense, tan, fine to medium SAND, trace Silt. Moist.
11				5						
				5						
12				5						
13										
14										
15	S-7	22	15-17	4				S-7: Loose, brownish-gray, fine to medium SAND, trace Silt. Wet. Faint redoximorphic staining seams, 1/2 to 2-inches in thickness present. [Laboratory Tests Performed (Grain Size Analysis): GRAVEL = 0.0%, SAND = 93.6%, FINES = 6.4%].		
16				4						
				3						
17				4						
18										
19										
20										

Soil	Percentage	Non-Soil	NOTES:
trace	5 - 10	very few	1) Upon completion of boring, when pulling auger head, unknown electrical wire present. Noted possible electrical ocncnection at 1.5 feet bgs. See photo in report for additional details.
little	10 - 20	few	
some	20 - 35	several	
and	35 - 50	numerous	

NOTES:

1) Upon completion of boring, when pulling auger head, unknown electrical wire present. Noted possible electrical connection at 1.5 feet bgs. See photo in report for additional details.

**BORING LOG**

Project: MassDOT Catharine & Bay Street Intersection
Contract No. 115755; Project No. 612080
 Location: Springfield, Massachusetts
 Nobis Project No.: 100911.000


Boring No.: MA-2B
 Boring Location: See Exploration Location Plan
 Checked by: J. Vanoti
 Date Start: April 3, 2025
 Date Finish: April 3, 2025

Contractor: Seaboard Drilling, LLC
 Driller: J. Nitsch
 Nobis Rep.: K. Kocia

Rig Type / Model: Track / B-53 Mobile
 Hammer Type: Automatic Hammer
 Hammer Hoist: Automatic

Ground Surface Elev.: (+/-) 206
 Datum: NAVD 88

	Drilling Method	Sampler	Groundwater Observations					
Type	Hollow Stem Auger	Split-Spoon	Date	Time	Depth Below Ground (ft.)	Depth of Casing (ft.)	Depth to Bottom of Hole (ft.)	Stabilization Time
			▼ 04/03/25	14:00	13.7	(HSA) 25	27	15 minutes
Size ID (in.)	2-1/4	1-3/8						
Advancement	Augered	140-lb Hammer						

Depth (ft.)	SAMPLE INFORMATION				Ground Water	LITHOLOGY		SAMPLE DESCRIPTION AND REMARKS (Classification System: Modified Burmister)	NOTES		
	Type & No.	Rec (in.)	Depth (ft.)	Blows/ 6 in.		Graphic	Stratum Elev. / Depth (ft.)				
21	S-8	24	20-22	5		OUTWASH PLAIN DEPOSITS	179.0 / 27.0	S-8: Medium dense, brownish-gray, fine to medium SAND, little Silt. Wet.	2		
				6							
				6							
22				8							
23											
24											
25											
26	S-9	24	25-27	8							
				5							
				4							
27				5							
28								Boring terminated at 27 feet.			
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
Soil	Percentage	Non-Soil		NOTES:							
trace	5 - 10	very few		2) Boring backfilled with spoils to 6-inches bgs and then topped with asphalt cold patch to approximate ground level.							
little	10 - 20	few									
some	20 - 35	several									
and	35 - 50	numerous									

Soil descriptions, and lithology, are based on visual classifications and should be considered approximate. Stratification lines are approximate boundaries between strata; transitions may be gradual.

**BORING LOG**

Project: MassDOT Catharine & Bay Street Intersection
Contract No. 115755; Project No. 612080
 Location: Springfield, Massachusetts
 Nobis Project No.: 100911.000

Boring No.: MA-3
 Boring Location: See Exploration Location Plan
 Checked by: J. Vanoti
 Date Start: April 4, 2025
 Date Finish: April 4, 2025

Contractor: Seaboard Drilling, LLC
 Driller: J. Nitsch
 Nobis Rep.: K. Kocia

Rig Type / Model: Track / B-53 Mobile
 Hammer Type: Automatic Hammer
 Hammer Hoist: Automatic

Ground Surface Elev.: (+/-) 207
 Datum: NAVD 88

	Drilling Method	Sampler	Groundwater Observations					
Type	Hollow Stem Auger	Split-Spoon	Date	Time	Depth Below Ground (ft.)	Depth of Casing (ft.)	Depth to Bottom of Hole (ft.)	Stabilization Time
			▼ 04/04/25	13:30	15.5	(HSA) 25	27	5 minutes
Size ID (in.)	2-1/4	1-3/8						
Advancement	Augered	140-lb Hammer						

SAMPLE INFORMATION					LITHOLOGY		SAMPLE DESCRIPTION AND REMARKS (Classification System: Modified Burmister)	NOTES	
Depth (ft.)	Type & No.	Rec (in.)	Depth (ft.)	Blows/ 6 in.	Ground Water	Graphic			Stratum Elev. / Depth (ft.)
							CONCRETE 206.5 / 0.5	Concrete sidewalk present, approximately 5.8-inches in thickness.	
1	S-1	17	0.5-2	3			FILL 205.0 / 2.0	S-1A (7"): Very loose, dark brown - gray, fine to coarse SAND, some fine Gravel, trace Silt. very few asphalt fragments / particles. Dry.	
2				2				S-1B (10"): Very loose, brown, fine to coarse SAND, little Silt. few roots. Dry - Moist.	
3	S-2	20	2-4	3				S-2: Loose, tan - brown, fine to coarse SAND, trace Silt. Dry - Moist.	
				3					
				3					
4				4					
	S-3	19	4-6	3				S-3: Loose, tan, fine to coarse SAND, trace fine Gravel, trace Silt. Dry - Moist. [Laboratory Tests Performed (Grain Size Analysis): GRAVEL = 6.8%, SAND = 91.5%, FINES = 1.7%].	
5				4					
				4					
6				6					
	S-4	16	6-8	5				S-4: Medium dense, tan, fine to medium SAND, trace Silt. Moist.	
7				5					
				5					
8				6					
	S-5	21	8-10	4				S-5: Loose, tan - brown, fine to coarse SAND, trace Silt. Moist.	
9				4					
				5					
10				5					
	S-6	18	10-12	3				S-6: Loose, tan - brown, fine to coarse SAND, trace Silt. Moist. Faint redoximorphic staining seam present, 1/2-inch in thickness.	
11				5					
				5					
12				6					
13									
14									
15									
	S-7	19	15-17	3				S-7: Loose, tan - brown, fine to coarse SAND, trace Silt. Moist - Wet. Faint redoximorphic staining present.	
16				3					
				4					
17				4					
18									
19									
20									
Soil	Percentage	Non-Soil	NOTES:						
trace	5 - 10	very few							
little	10 - 20	few							
some	20 - 35	several							
and	35 - 50	numerous							

Soil	Percentage	Non-Soil
trace	5 - 10	very few
little	10 - 20	few
some	20 - 35	several
and	35 - 50	numerous

NOTES:

Soil descriptions, and lithology, are based on visual classifications and should be considered approximate. Stratification lines are approximate boundaries between strata; transitions may be gradual.

**BORING LOG**

Project: MassDOT Catharine & Bay Street Intersection
Contract No. 115755; Project No. 612080
 Location: Springfield, Massachusetts
 Nobis Project No.: 100911.000

Boring No.: MA-3
 Boring Location: See Exploration Location Plan
 Checked by: J. Vanoti
 Date Start: April 4, 2025
 Date Finish: April 4, 2025

Contractor: Seaboard Drilling, LLC
 Driller: J. Nitsch
 Nobis Rep.: K. Kocia

Rig Type / Model: Track / B-53 Mobile
 Hammer Type: Automatic Hammer
 Hammer Hoist: Automatic

Ground Surface Elev.: (+/-) 207
 Datum: NAVD 88

	Drilling Method	Sampler	Groundwater Observations					
Type	Hollow Stem Auger	Split-Spoon	Date	Time	Depth Below Ground (ft.)	Depth of Casing (ft.)	Depth to Bottom of Hole (ft.)	Stabilization Time
			▼ 04/04/25	13:30	15.5	(HSA) 25	27	5 minutes
Size ID (in.)	2-1/4	1-3/8						
Advancement	Augered	140-lb Hammer						

SAMPLE INFORMATION					LITHOLOGY		SAMPLE DESCRIPTION AND REMARKS (Classification System: Modified Burmister)		NOTES
Depth (ft.)	Type & No.	Rec (in.)	Depth (ft.)	Blows/6 in.	Ground Water	Graphic	Stratum Elev. / Depth (ft.)		
21	S-8	24	20-22	2				S-8: Loose, brownish-gray, fine to medium SAND, little Silt. Wet.	
22				3					
23				2					
24				2					
25									
26	S-9	24	25-27	5				S-9: Medium dense, brownish-gray, fine to medium SAND, little Silt. Wet. One (1) organic fiber present.	
27				7					
28				6					
29				6					
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									

Soil	Percentage	Non-Soil
trace	5 - 10	very few
little	10 - 20	few
some	20 - 35	several
and	35 - 50	numerous

NOTES:

1) Boring backfilled with spoils to 6-inches bgs and then topped with concrete mix to approximate ground level.

**BORING LOG**

Project: MassDOT Catharine & Bay Street Intersection
Contract No. 115755; Project No. 612080
 Location: Springfield, Massachusetts
 Nobis Project No.: 100911.000

Boring No.: MA-4
 Boring Location: See Exploration Location Plan
 Checked by: J. Vanoti
 Date Start: April 4, 2025
 Date Finish: April 4, 2025

Contractor: Seaboard Drilling, LLC
 Driller: J. Nitsch
 Nobis Rep.: K. Kocia

Rig Type / Model: Track / B-53 Mobile
 Hammer Type: Automatic Hammer
 Hammer Hoist: Automatic

Ground Surface Elev.: (+/-) 206
 Datum: NAVD 88

	Drilling Method	Sampler	Groundwater Observations					
Type	Hollow Stem Auger	Split-Spoon	Date	Time	Depth Below Ground (ft.)	Depth of Casing (ft.)	Depth to Bottom of Hole (ft.)	Stabilization Time
Size ID (in.)	2-1/4	1-3/8	▼ 04/04/25	10:50	12.3	(HSA) 25	27	5 minutes
Advancement	Augered	140-lb Hammer						

SAMPLE INFORMATION					LITHOLOGY		SAMPLE DESCRIPTION AND REMARKS (Classification System: Modified Burmister)	NOTES
Depth (ft.)	Type & No.	Rec (in.)	Depth (ft.)	Blows/6 in.	Ground Water	Graphic		
1	S-1	13	0.5-2	8		205.7 / 0.3 ASPHALT	Asphalt encountered, approximately 3-inches in thickness.	
				5		FILL	S-1A (8"): Loose, brown - gray, fine to coarse SAND, little fine Gravel, trace Silt. very few asphalt fragments / particles. Dry.	
2				2		204.5 / 1.5	S-1B (5"): Loose, brown, fine to coarse SAND, trace Silt. Dry - Moist.	
	S-2	19	2-4	3			S-2: Loose, tan - brown, fine to coarse SAND, trace Silt. Dry - Moist.	
3				4				
				3				
4				3				
	S-3	17	4-6	3			S-3: Loose, tan, fine to coarse SAND, trace Silt. Dry - Moist.	
5				3				
				3				
6				5				
	S-4	18	6-8	5			S-4: Medium dense, tan, fine to coarse SAND, trace Silt. Dry - Moist.	
7				5				
				5				
8				5				
	S-5	23	8-10	3			S-5: Loose, tan, fine to medium SAND, trace Silt. Moist.	
9				4				
				5				
10				7				
	S-6	17	10-12	6			S-6: Medium dense, tan - brown, fine to coarse SAND, trace Silt. Moist. Very faint redoximorphic staining seams present, 1/4 to 1-inch in thickness.	
11				6		OUTWASH PLAIN DEPOSITS		
				6				
12				7				
13								
14								
15								
	S-7	22	15-17	2			S-7A (13"): Loose, tan - orangish-brown, fine to coarse SAND, trace Silt. Wet. Redoximorphic staining present.	
16				4				
				4				
17				5			S-7B (9"): Loose, gray - orangish-brown, fine to medium SAND, some Silt. Wet. Redoximorphic staining present. [Laboratory Tests Performed (Grain Size Analysis): GRAVEL = 0.0%, SAND = 78.6%, FINES = 21.4%].	
18								
19								
20								

Soil	Percentage	Non-Soil
trace	5 - 10	very few
little	10 - 20	few
some	20 - 35	several
and	35 - 50	numerous

NOTES:

Soil descriptions, and lithology, are based on visual classifications and should be considered approximate. Stratification lines are approximate boundaries between strata; transitions may be gradual.

**BORING LOG**

Project: MassDOT Catharine & Bay Street Intersection
Contract No. 115755; Project No. 612080
 Location: Springfield, Massachusetts
 Nobis Project No.: 100911.000


Boring No.: MA-4
 Boring Location: See Exploration Location Plan
 Checked by: J. Vanoti
 Date Start: April 4, 2025
 Date Finish: April 4, 2025

Contractor: Seaboard Drilling, LLC
 Driller: J. Nitsch
 Nobis Rep.: K. Kocia

Rig Type / Model: Track / B-53 Mobile
 Hammer Type: Automatic Hammer
 Hammer Hoist: Automatic

Ground Surface Elev.: (+/-) 206
 Datum: NAVD 88

	Drilling Method	Sampler	Groundwater Observations					
Type	Hollow Stem Auger	Split-Spoon	Date	Time	Depth Below Ground (ft.)	Depth of Casing (ft.)	Depth to Bottom of Hole (ft.)	Stabilization Time
Size ID (in.)	2-1/4	1-3/8	▼ 04/04/25	10:50	12.3	(HSA) 25	27	5 minutes
Advancement	Augered	140-lb Hammer						

Depth (ft.)	SAMPLE INFORMATION				Ground Water	LITHOLOGY		SAMPLE DESCRIPTION AND REMARKS (Classification System: Modified Burmister)	NOTES
	Type & No.	Rec (in.)	Depth (ft.)	Blows/ 6 in.		Graphic	Stratum Elev. / Depth (ft.)		
21	S-8	24	20-22	3		OUTWASH PLAIN DEPOSITS	S-8: Loose, brownish-gray, fine to medium SAND, trace Silt. Wet.		
				3					
				4					
22				7					
23									
24									
25									
	S-9	24	25-27	6			S-9: Medium dense, brownish-gray, fine to medium SAND, little Silt. Wet. In tip of split-spoon, predominanetly silt present.		
26				6					
				8					
27				17					
						179.0 / 27.0	Boring terminated at 27 feet.	1	
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									

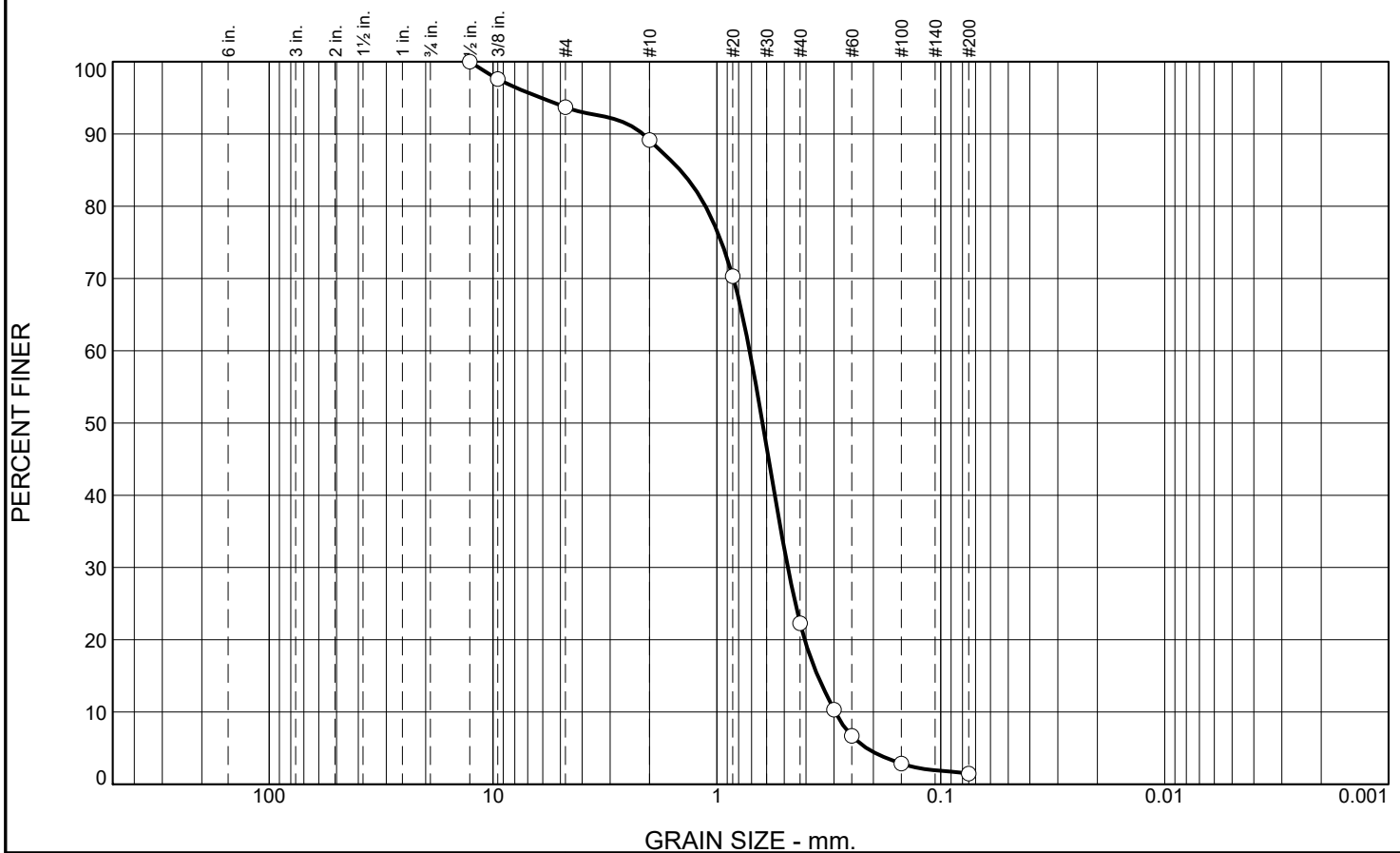
Soil	Percentage	Non-Soil
trace	5 - 10	very few
little	10 - 20	few
some	20 - 35	several
and	35 - 50	numerous

NOTES:

1) Boring backfilled with spoils to 6-inches bgs and then topped with asphalt cold patch to approximate ground level.

APPENDIX C – Laboratory Test Results

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	6.3	4.5	66.9	20.8	1.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1/2"	100.0		
3/8"	97.6		
#4	93.7		
#10	89.2		
#20	70.3		
#40	22.3		
#50	10.3		
#60	6.7		
#100	2.9		
#200	1.5		

* (no specification provided)

Material Description

Tan m/f SAND trace gravel trace silt

Atterberg Limits

PL= NP

LL= NV

PI= NP

Coefficients

D₈₅= 1.4589

D₆₀= 0.7144

D₅₀= 0.6256

D₃₀= 0.4822

D₁₅= 0.3546

D₁₀= 0.2965

C_u= 2.41

C_c= 1.10

Classification

USCS= SP

AASHTO= A-1-b

Remarks

Sample submitted by the client on 04/04/25

Sample No.: L-36027
Location: Boring MA1 S5

Source of Sample: Catherine St > Bay St - Springfield MA

Date: 4/10/25

Elev./Depth: 8'-10'

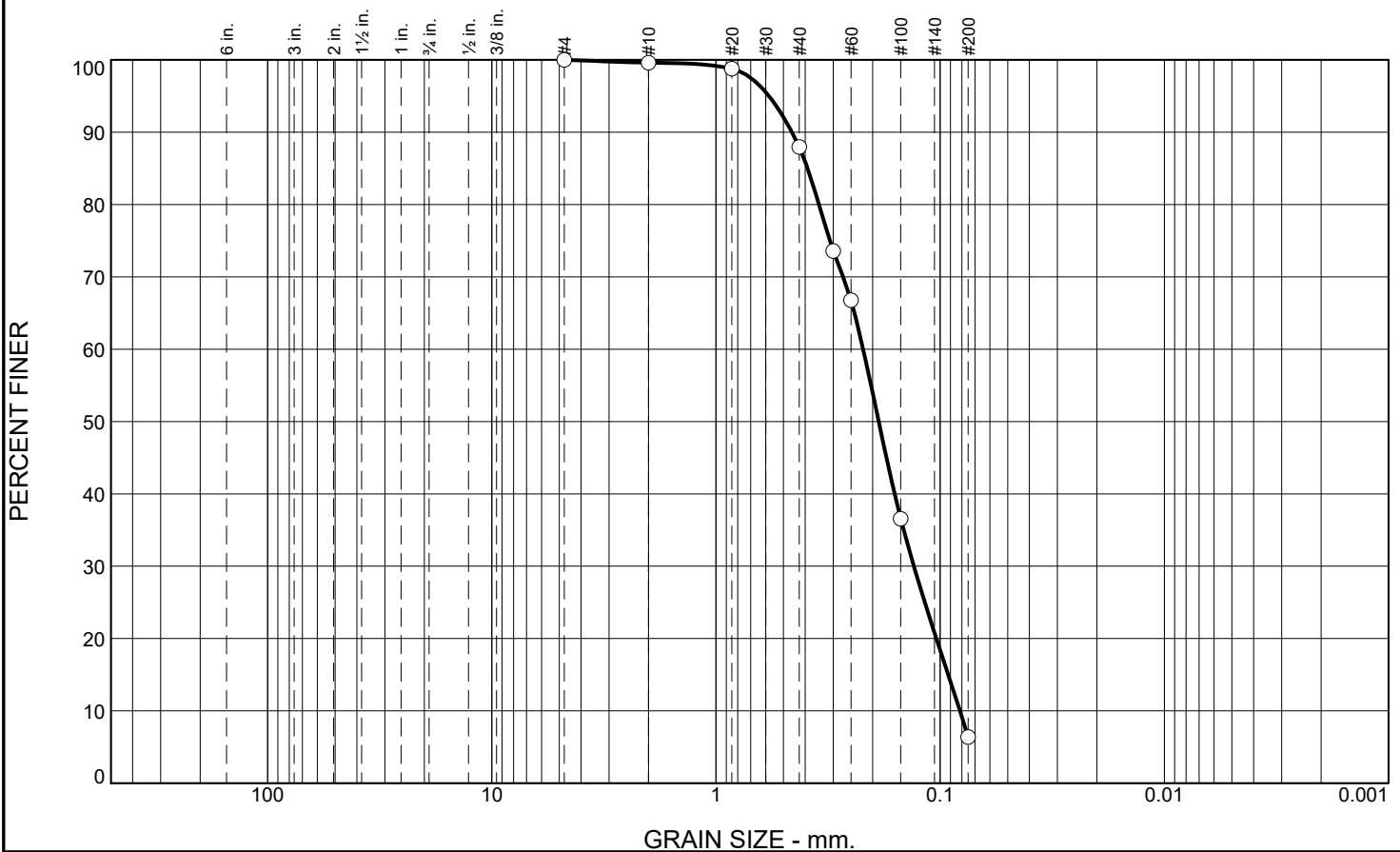
**YANKEE ENGINEERING
& TESTING, INC.**

Client: Nobis Engineering
Project: Nobis Engineering
Various Projects / Sites
Project No: 2023-129

Tested By: AK

Checked By: SMM

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.4	11.6	81.6	6.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.6		
#20	98.8		
#40	88.0		
#50	73.6		
#60	66.8		
#100	36.6		
#200	6.4		

* (no specification provided)

Material Description

Brown/tan f/m SAND trace silt

Atterberg Limits

PL= NP

LL= NV

PI= NP

Coefficients

D₈₅= 0.3899D₆₀= 0.2207D₅₀= 0.1880D₃₀= 0.1310D₁₅= 0.0921D₁₀= 0.0816C_u= 2.70C_c= 0.95

Classification

USCS= SP-SM

AASHTO= A-3

Remarks

Sample submitted by the client on 04/04/25

Sample No.: L-36028

Source of Sample: Catherine St > Bay St - Springfield MA

Date: 4/10/25

Location: Boring MA2B S7

Elev./Depth: 15'-17'

**YANKEE ENGINEERING
& TESTING, INC.**

Client: Nobis Engineering

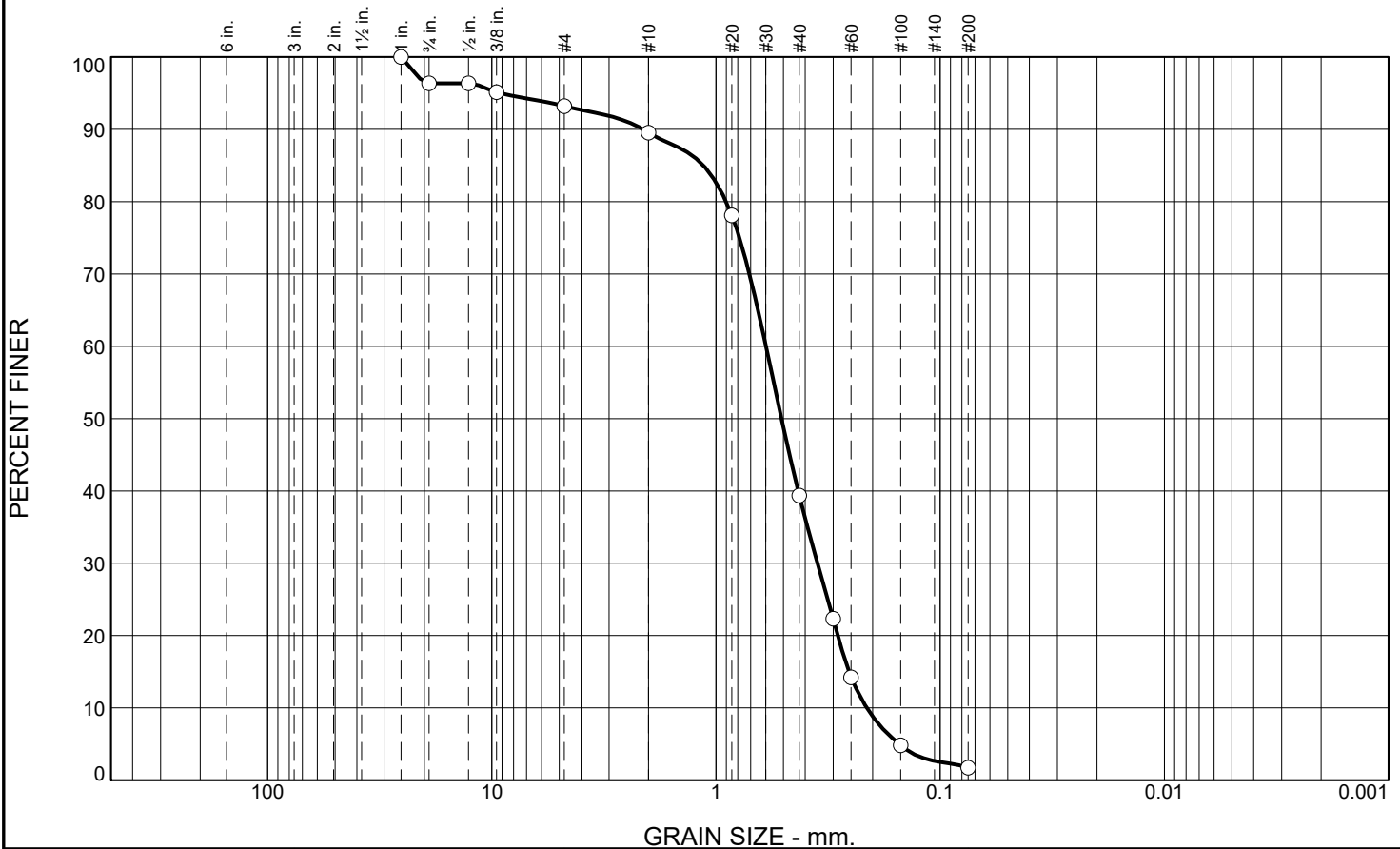
Project: Nobis Engineering
Various Projects / Sites

Project No: 2023-129

Tested By: AK

Checked By: SMM

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	3.6	3.2	3.7	50.1	37.7	1.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1"	100.0		
3/4"	96.4		
1/2"	96.4		
3/8"	95.1		
#4	93.2		
#10	89.5		
#20	78.1		
#40	39.4		
#50	22.3		
#60	14.2		
#100	4.8		
#200	1.7		

* (no specification provided)

Material Description

Tan m/f SAND trace gravel trace silt

Atterberg Limits

PL= NP

LL= NV

PI= NP

Coefficients

D₈₅= 1.1380

D₆₀= 0.5984

D₅₀= 0.5103

D₃₀= 0.3527

D₁₅= 0.2558

D₁₀= 0.2126

C_u= 2.81

C_c= 0.98

Classification

USCS= SP

AASHTO= A-1-b

Remarks

Sample submitted by the client on 04/04/25

Sample No.: L-36029
Location: Boring MA3 S3

Source of Sample: Catherine St > Bay St - Springfield MA

Date: 4/10/25

Elev./Depth: 4'-6'

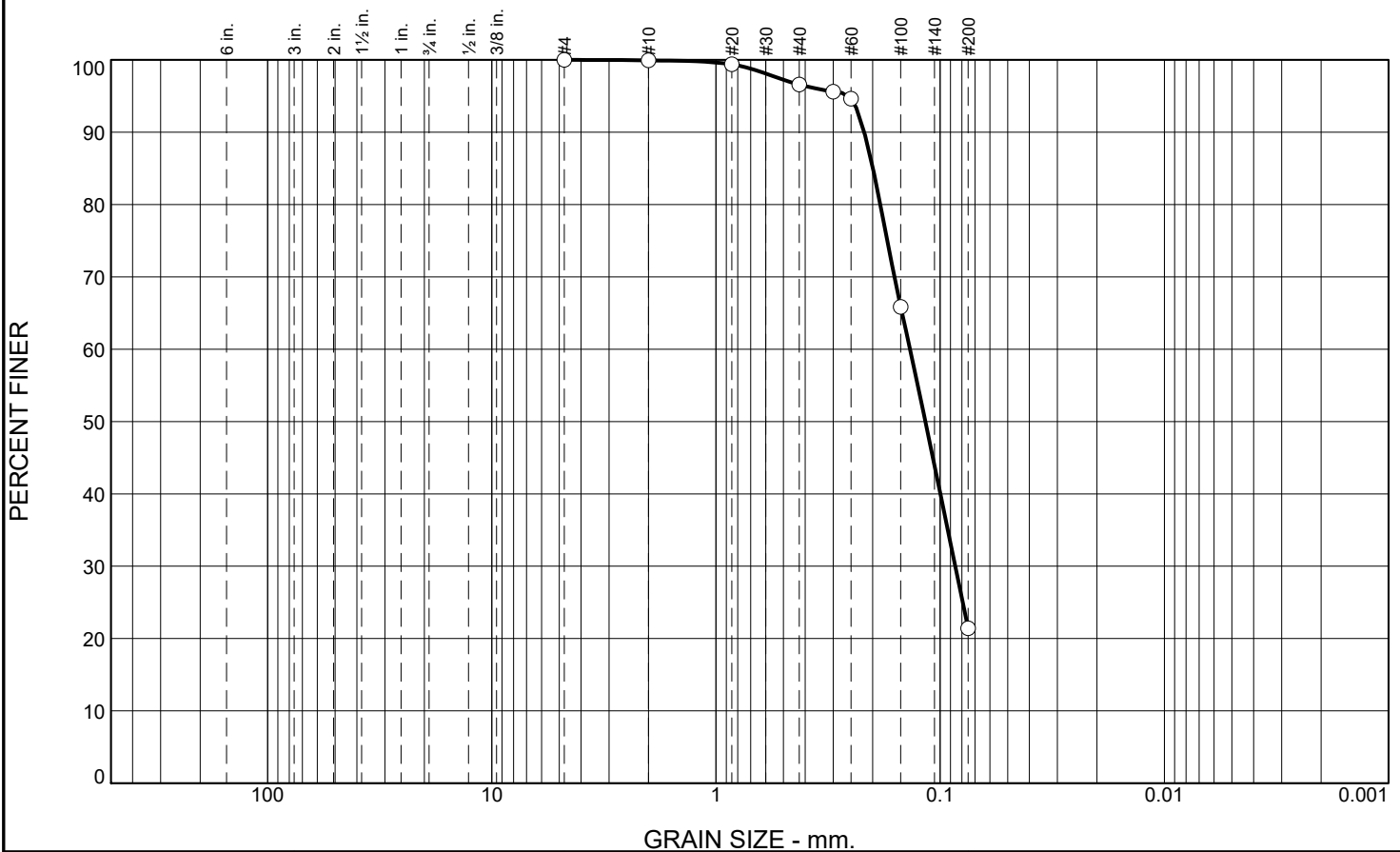
**YANKEE ENGINEERING
& TESTING, INC.**

Client: Nobis Engineering
Project: Nobis Engineering
Various Projects / Sites
Project No: 2023-129

Tested By: AK

Checked By: SMM

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.1	3.3	75.2	21.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#20	99.4		
#40	96.6		
#50	95.6		
#60	94.6		
#100	65.8		
#200	21.4		

* (no specification provided)

Material Description

Brown silty fine SAND

Atterberg Limits

PL= NP

LL= NV

PI= NP

Coefficients

D₈₅= 0.1996D₆₀= 0.1363D₅₀= 0.1164D₃₀= 0.0856D₁₅=D₁₀=C_u=C_c=

Classification

USCS= SM

AASHTO= A-2-4(0)

Remarks

Sample submitted by the client on 04/04/25

Sample No.: L-36030

Source of Sample: Catherine St > Bay St - Springfield MA

Date: 4/10/25

Location: Boring MA4 S7B

Elev./Depth: 15'-17'

**YANKEE ENGINEERING
& TESTING, INC.**

Client: Nobis Engineering

Project: Nobis Engineering
Various Projects / Sites

Project No: 2023-129

Tested By: AK

Checked By: SMM

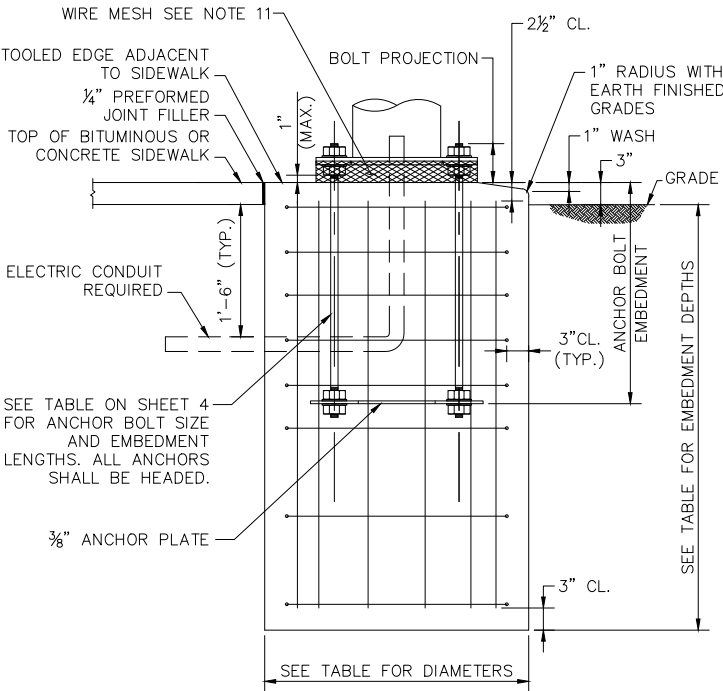
APPENDIX D – MassDOT Standard Drawing – Sheet 5 of 7

PIER FOUNDATIONS FOR 110 MPH WIND SPEED ZONE																				
SOIL TYPE	15' & 20' MAST ARMS				25' & 30' MAST ARMS				35' & 40' MAST ARMS				45' & 50' MAST ARMS				55' & 60' MAST ARMS			
	DIAMETER	DEPTH	VERT. BARS	TIE BARS	DIAMETER	DEPTH	VERT. BARS	TIE BARS	DIAMETER	DEPTH	VERT. BARS	TIE BARS	DIAMETER	DEPTH	VERT. BARS	TIE BARS	DIAMETER	DEPTH	VERT. BARS	TIE BARS
DRY SAND (LOOSE)	3'-6"	8'-6"	18-#8	#5 @ 12"	3'-6"	9'-0"	18-#8	#5 @ 12"	3'-6"	11'-6"	18-#8	#5 @ 9"	4'-0"	12'-0"	18-#9	#5 @ 9"	4'-6"	13'-0"	18-#10	#5 @ 6"
DRY SAND (DENSE)	3'-6"	7'-6"	18-#8	#5 @ 12"	3'-6"	7'-6"	18-#8	#5 @ 12"	3'-6"	8'-6"	18-#8	#5 @ 9"	4'-0"	9'-0"	18-#9	#5 @ 9"	4'-6"	9'-6"	18-#10	#5 @ 6"
WET SAND (LOOSE)	3'-6"	9'-6"	18-#8	#5 @ 12"	3'-6"	11'-6"	18-#8	#5 @ 12"	3'-6"	14'-6"	18-#8	#5 @ 9"	4'-0"	15'-6"	18-#9	#5 @ 9"	4'-6"	16'-6"	18-#10	#5 @ 6"
WET SAND (DENSE)	3'-6"	8'-6"	18-#8	#5 @ 12"	3'-6"	9'-0"	18-#8	#5 @ 12"	3'-6"	10'-6"	18-#8	#5 @ 9"	4'-0"	11'-6"	18-#9	#5 @ 9"	4'-6"	12'-0"	18-#10	#5 @ 6"
CLAY (SOFT TO MEDIUM STIFF)	3'-6"	12'-0"	18-#8	#5 @ 12"	3'-6"	12'-0"	18-#8	#5 @ 12"	3'-6"	13'-0"	18-#8	#5 @ 9"	4'-0"	14'-0"	18-#9	#5 @ 9"	4'-6"	15'-6"	18-#10	#5 @ 6"
CLAY (STIFF)	3'-6"	10'-6"	18-#8	#5 @ 12"	3'-6"	10'-6"	18-#8	#5 @ 12"	3'-6"	11'-0"	18-#8	#5 @ 9"	4'-0"	12'-0"	18-#9	#5 @ 9"	4'-6"	13'-6"	18-#10	#5 @ 6"

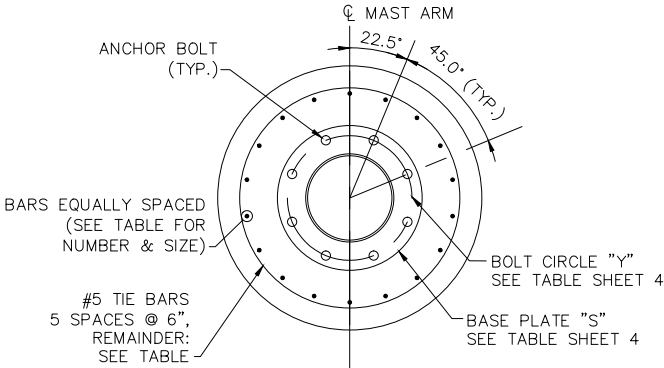
PIER FOUNDATIONS FOR 130 MPH WIND SPEED ZONE																				
SOIL TYPE	15' & 20' MAST ARMS				25' & 30' MAST ARMS				35' & 40' MAST ARMS				45' & 50' MAST ARMS				55' & 60' MAST ARMS			
	DIAMETER	DEPTH	VERT. BARS	TIE BARS	DIAMETER	DEPTH	VERT. BARS	TIE BARS	DIAMETER	DEPTH	VERT. BARS	TIE BARS	DIAMETER	DEPTH	VERT. BARS	TIE BARS	DIAMETER	DEPTH	VERT. BARS	TIE BARS
DRY SAND (LOOSE)	3'-6"	10'-0"	18-#8	#5 @ 12"	3'-6"	10'-6"	18-#8	#5 @ 12"	3'-6"	13'-6"	18-#8	#5 @ 8"	4'-0"	14'-6"	18-#9	#5 @ 6"	4'-6"	15'-6"	18-#10	#5 @ 5"
DRY SAND (DENSE)	3'-6"	8'-6"	18-#8	#5 @ 12"	3'-6"	9'-0"	18-#8	#5 @ 12"	3'-6"	10'-0"	18-#8	#5 @ 8"	4'-0"	11'-0"	18-#9	#5 @ 6"	4'-6"	11'-6"	18-#10	#5 @ 5"
WET SAND (LOOSE)	3'-6"	11'-6"	18-#8	#5 @ 12"	3'-6"	13'-6"	18-#8	#5 @ 12"	3'-6"	17'-0"	18-#8	#5 @ 8"	4'-0"	18'-6"	18-#9	#5 @ 6"	4'-6"	19'-6"	18-#10	#5 @ 5"
WET SAND (DENSE)	3'-6"	10'-0"	18-#8	#5 @ 12"	3'-6"	10'-0"	18-#8	#5 @ 12"	3'-6"	12'-6"	18-#8	#5 @ 8"	4'-0"	13'-6"	18-#9	#5 @ 6"	4'-6"	14'-6"	18-#10	#5 @ 5"
CLAY (SOFT TO MEDIUM STIFF)	3'-6"	12'-6"	18-#8	#5 @ 12"	3'-6"	13'-0"	18-#8	#5 @ 12"	3'-6"	14'-0"	18-#8	#5 @ 8"	4'-0"	16'-0"	18-#9	#5 @ 6"	4'-6"	17'-6"	18-#10	#5 @ 5"
CLAY (STIFF)	3'-6"	11'-0"	18-#8	#5 @ 12"	3'-6"	11'-0"	18-#8	#5 @ 12"	3'-6"	12'-0"	18-#8	#5 @ 8"	4'-0"	13'-0"	18-#9	#5 @ 6"	4'-6"	14'-0"	18-#10	#5 @ 5"

BASIS OF DESIGN			
ALL MAST ARM STRUCTURES AND FOUNDATIONS ARE DESIGNED IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS, SIXTH EDITION 2013, AND THE FOLLOWING PARAMETERS:			
OVERTURNING DESIGN	FOUNDATIONS ARE SIZED TO RESIST OVERTURNING ACCORDING TO BROMS' DESIGN METHOD WITH A SAFETY FACTOR THAT INCLUDES AN OVERLOAD FACTOR OF 2.0 AND A SOIL UNDERSTRENGTH FACTOR OF 0.7.		
SOIL PARAMETERS	LOOSE DRY SAND:	UNIT WEIGHT $\gamma = 102$ PCF	FRICTION ANGLE $\phi = 33^\circ$
	DENSE DRY SAND:	$\gamma = 116$ PCF	$\phi = 39^\circ$
	LOOSE WET SAND:	$\gamma = 125$ PCF	$\phi = 33^\circ$
	DENSE WET SAND:	$\gamma = 135$ PCF	$\phi = 39^\circ$
	SOFT TO MEDIUM STIFF CLAY:	UNIT WEIGHT $\gamma = 113$ PCF	SHEAR STRENGTH $S_u = 1.0$ KSF
DEFLECTION LIMITS	STIFF CLAY:	$\gamma = 120$ PCF	$S_u = 1.9$ KSF
	MAXIMUM LATERAL DEFLECTION AT TOP OF MAST ARM FOUNDATION SHAFTS: $\frac{1}{2}$ "		

- NOTES:
- FOUNDATIONS SHALL BE 4000 PSI, 565 MASSDOT APPROVED MIX DESIGN.
 - FOUNDATIONS SHALL BE INSTALLED IN ACCORDANCE WITH MASSDOT STANDARD SPECIFICATIONS ITEM 945 – DRILLED SHAFTS
 - REINFORCEMENT SHALL BE ASTM A615 GRADE 60.
 - ANCHOR BOLTS SHALL BE SET BY TEMPLATE.
 - PROVIDE FOR ELECTRICAL CONDUIT.
 - EXCAVATION SHALL BE BY THE AUGER METHOD TO THE NEAT LINES OF THE OUTSIDE DIMENSION OF THE FOUNDATIONS WITHOUT DISTURBING THE SOIL AROUND AND BELOW THE PROPOSED FOUNDATION BOTTOM. ALTERNATE METHODS OF EXCAVATION MAY BE SUBMITTED TO MASSDOT FOR APPROVAL IF THEY MEET THE REQUIREMENTS LISTED IN NOTES 6, 7, AND 8.
 - THE EARTH WALLS OF THE FOUNDATION SHALL BE ADEQUATELY AND SECURELY PROTECTED AT ALL TIMES AGAINST CAVE-INS, DISPLACEMENT OF THE SURROUNDING EARTH AND FOR THE EXCLUSION OF GROUND WATER. THIS MAY BE DONE BY THE USE OF STEEL CYLINDER LINERS OR CASINGS THAT ARE APPROVED BY MASSDOT. IF LINERS ARE USED THEY MAY BE RECLAIMED PROVIDED THAT THEY ARE WITHDRAWN AS THE CONCRETE IS BEING PLACED, MAINTAINING A SUFFICIENT HEAD OF CONCRETE WITHIN THE LINER TO PREVENT REDUCTION IN THE FOUNDATION DIAMETER AND TO PREVENT EXTRANEOUS MATERIAL FROM FALLING IN FROM THE SIDES AND MIXING WITH THE CONCRETE.
 - IF THE SOIL IS DISTURBED OR REMOVED BEYOND THE NEAT LINES OF THE OUTSIDE DIMENSION OF THE FOUNDATION, IT SHALL BE REPLACED WITH CONCRETE. ANY ADDITIONAL COST FOR THE CONCRETE SHALL BE PAID FOR BY THE CONTRACTOR.
 - SPECIAL CARE SHOULD BE GIVEN TO AREAS WHERE WET SOIL IS ENCOUNTERED, TO INSURE THAT THE PREAUGERED HOLE DOES NOT COLLAPSE. THIS MAY REQUIRE THE USE OF STEEL CYLINDER LINERS OR CASINGS TO HOLD THE SOIL IN PLACE UNTIL READY FOR CONCRETE PLACEMENT, UPON APPROVAL FROM THE MASSDOT. THE STEEL CYLINDERS OR CASINGS SHALL BE WITHDRAWN AS THE FOUNDATION CONCRETE IS PLACED.
 - IF LEDGE OR UNSUITABLE SOIL IS ENCOUNTERED (i.e. ONE WHICH DOES NOT APPLY TO THE DESIGN TABLES SHOWN ON THIS SHEET), AN ALTERNATIVE DESIGN SHALL BE PROVIDED BY THE DESIGN ENGINEER. IF UTILITIES OR OTHER UNDERGROUND OBSTRUCTIONS ARE ENCOUNTERED, THE CONTRACTOR SHALL BACKFILL THE AREA TO ITS ORIGINAL CONDITION UNTIL AN ALTERNATE DESIGN HAS BEEN PROVIDED BY THE DESIGN ENGINEER AND APPROVED BY MASSDOT. SPECIAL FOUNDATIONS SHALL BE DESIGNED IN ACCORDANCE WITH BASIS OF DESIGN TABLE ABOVE.
 - A GALVANIZED WIRE MESH SCREEN SHALL BE INSTALLED AT BASE OF POLE. SCREEN SHALL BE PRESS-FORMED OF 3 OR 4 MESH, 21 GAGE OR HEAVIER, STAINLESS STEEL OR HOT DIPPED GALVANIZED WIRE SCREEN OR APPROVED EQUIVALENT. SCREEN SHALL BE SCREWED INTO POLE BASE PLATE, AND SHALL BE FLUSH WITH THE TOP OF THE PIER FOUNDATION.
 - SANDY SOILS WITH STANDARD PENETRATION VALUES GREATER THAN 20 BLOWS PER FOOT SHALL BE CLASSIFIED AS DENSE DRY SAND AND DENSE WET SAND. SANDY SOILS WITH STANDARD PENETRATION VALUES RANGING FROM 6 TO 20 BLOWS PER FOOT SHALL BE CLASSIFIED LOOSE DRY SAND AND LOOSE WET SAND. SANDY SOILS WITH FEWER THAN 6 BLOWS PER FOOT SHALL REQUIRE SPECIAL FOUNDATION DESIGNS BY THE DESIGN ENGINEER AND APPROVED BY MASSDOT. SPECIAL FOUNDATIONS SHALL BE DESIGNED IN ACCORDANCE WITH BASIS OF DESIGN TABLE ABOVE.
 - CLAYS WITH STANDARD PENETRATION VALUES GREATER THAN 6 BLOWS PER FOOT SHALL BE CLASSIFIED AS STIFF CLAY. CLAYS WITH STANDARD PENETRATION VALUES RANGING FROM 2 TO 6 BLOWS PER FOOT SHALL BE CLASSIFIED AS SOFT TO MEDIUM STIFF CLAY. CLAYS WITH FEWER THAN 2 BLOWS PER FOOT SHALL REQUIRE SPECIAL FOUNDATION DESIGNS BY THE DESIGN ENGINEER AND APPROVED BY MASSDOT. SPECIAL FOUNDATIONS SHALL BE DESIGNED IN ACCORDANCE WITH BASIS OF DESIGN TABLE ABOVE.
 - A SANDY SOIL SHALL ONLY BE CLASSIFIED AS 'DRY' IF THE ENTIRE DRY SAND SHAFT LENGTH SITS ABOVE WET SOILS ACCORDING TO THE BORING LOGS. IF ANY PART OF THE SHAFT LENGTH IS CAST AT OR BELOW THE GROUNDWATER LEVEL, THE SOIL SHALL BE CLASSIFIED AS 'WET'.
 - WHERE THE PREDOMINATING SOIL TYPE IS INORGANIC SILT, THE SOIL SHOULD BE TREATED AS CLAY OR WET LOOSE SAND, WHICHEVER LEADS TO A MORE CONSERVATIVE FOUNDATION. INORGANIC SILTS WITH STANDARD PENETRATION N-VALUES LESS THAN 2 BLOWS PER FOOT, ORGANIC SILTS, AND PEAT SHALL REQUIRE SPECIAL FOUNDATION DESIGNS BY THE DESIGN ENGINEER AND APPROVED BY MASSDOT. SPECIAL FOUNDATIONS SHALL BE DESIGNED IN ACCORDANCE WITH BASIS OF DESIGN TABLE ABOVE.
 - WHERE FILL CONTAINS CLAY OR SILT, IT SHOULD BE TREATED AS SOFT CLAY.
 - MAST ARM FOUNDATIONS ARE DESIGNED TO SUPPORT MAST ARMS WITH OR WITHOUT OPTIONAL LUMINAIRE.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT FOUNDATION DIAMETER IS AT LEAST 17.5" GREATER THAN BOLT CIRCLE DIAMETER FOR ALL STRUCTURES
 - IN ORDER TO CREATE A FLUSH SURFACE, CONTRACTOR SHALL REFER TO THE FINAL ELEVATIONS SHOWN ON THE DESIGN PLANS WHEN INSTALLING FOUNDATIONS IMMEDIATELY ADJACENT TO OR WITHIN A SIDEWALK AREA.



PIER FOUNDATION DETAIL
NO SCALE



PIER FOUNDATION PLAN
NO SCALE



STANDARD DRAWINGS

OVERHEAD SIGNAL STRUCTURE & FOUNDATION
MAST ARM CORED PIER FOUNDATIONS

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION
10 PARK PLAZA BOSTON, MASS

DECEMBER, 2015

SHEET 5 OF 7 SHEETS

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DOCUMENT A00820

**Massachusetts Department of Transportation
Conditions of Custody****REQUEST FOR RELEASE OF MASSDOT AUTOCAD FILES FORM**

(Only to be used following award of contract)

City/Town: SPRINGFIELDProject File Number: 612080Contract Number: 130935Project Description: Rebecca M. Johnson Elementary School Improvements (SRTS)

All AutoCAD files are provided solely as a courtesy to facilitate public access to information. MassDOT attempts to provide current and accurate information but cannot guarantee so. MassDOT provides such documents, files or other data "as is" without any warranty of any kind, either expressed or implied, including but not limited to, accuracy, reliability, omissions, completeness and currentness. The Commonwealth of Massachusetts and its Consultants shall not be liable for any claim for damages, including lost profits or other consequential, exemplary, incidental, indirect or special damages, relating in any way to the documents, files or other data accessible from this file, including, but not limited to, claims arising out of or related to electronic access or transmission of data or viruses. Because data stored on electronic media can deteriorate undetected or be modified without our knowledge, MassDOT cannot be held liable for its completeness or correctness. MassDOT makes no representation as to the compatibility of these files beyond the version of the stated CAD software.

By signing this form, I agree that it shall be my responsibility to reconcile this electronic data with the conformed contract documents, and that only the conformed contract documents shall be regarded as legal documents for this Project. I understand that this authorization does not give me the right to distribute the files. I agree to the terms above and wish to receive the AutoCAD files.

This signed form shall be emailed to the Highway Design Engineer at the MassDOT -Highway Division at the following email address:

DOTHighwayDesign@dot.state.ma.us

Attn: AutoCAD Files

Name of person requesting AutoCAD files: _____

Affiliation/Company: _____

Address: _____

Telephone number: _____

Email address: _____

Signature/Date: _____

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DOCUMENT A00844

U.S. FISH AND WILDLIFE SERVICE

NLAA CONCURRENCE VERIFICATION LETTER

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104



In Reply Refer To:

06/13/2024 14:31:39 UTC

Project code: 2024-0103574

Project Name: 612080 - SPRINGFIELD - REBECCA M. JOHNSON ELEMENTARY SCHOOL IMPROVEMENTS (SRTS)

Subject: Consistency letter for the '612080 - SPRINGFIELD - REBECCA M. JOHNSON ELEMENTARY SCHOOL IMPROVEMENTS (SRTS)' project under the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (NLEB).

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request dated June 13, 2024 to verify that the **612080 - SPRINGFIELD - REBECCA M. JOHNSON ELEMENTARY SCHOOL IMPROVEMENTS (SRTS)** (Proposed Action) may rely on the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action will have no effect on the endangered Indiana bat (*Myotis sodalis*) or the endangered northern long-eared bat (*Myotis septentrionalis*). If the Proposed Action is not modified, **no consultation is required for these two species**. If the Proposed Action is modified, or new information reveals that it may affect the Indiana bat and/or northern long-eared bat in a manner or to an extent not considered in the PBO, further review to conclude the requirements of ESA section 7(a)(2) may be required.

For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities:

If your initial bridge/culvert or structure assessment failed to detect Indiana bats and/or NLEBs use or occupancy, yet later detected prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office within 2 working days of the incident. In these instances, potential incidental

take of Indiana bats and/or NLEBs may be exempted provided that the take is reported to the Service.

If the Proposed Action may affect any other federally-listed or proposed species and/or designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please advise the lead Federal action agency accordingly.

The following species may occur in your project area and **are not** covered by this determination:

- Monarch Butterfly *Danaus plexippus* Candidate
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered

PROJECT DESCRIPTION

The following project name and description was collected in IPaC as part of the endangered species review process.

NAME

612080 - SPRINGFIELD - REBECCA M. JOHNSON ELEMENTARY SCHOOL
IMPROVEMENTS (SRTS)

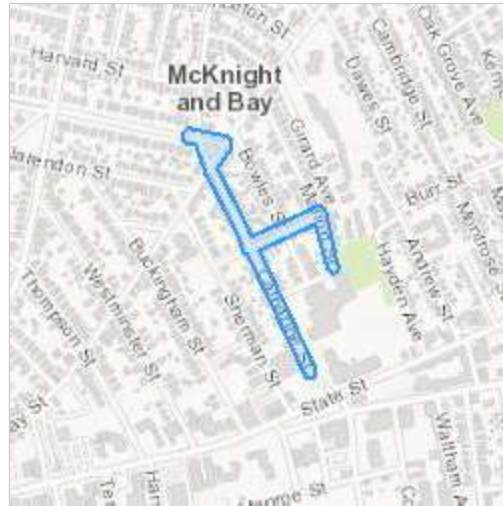
DESCRIPTION

Intersection improvements to Dartmouth, Bay, Yale, & Catherine Streets. Sidewalk improvement in proximity to school, and traffic calming on Catherine Street

Monarch Butterfly: Candidate Species only, no conservation measures at this time.

Tricolor Bat: Proposed Endangered Species only, no conservation measures at this time.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@42.1141246,-72.56643388003664,14z>



DETERMINATION KEY RESULT

Based on the information you provided, you have determined that the Proposed Action will have no effect on the endangered Indiana bat and/or the endangered northern long-eared bat.

Therefore, no consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required for these two species.

QUALIFICATION INTERVIEW

1. Is the project within the range of the Indiana bat^[1]?

[1] See [Indiana bat species profile](#)

Automatically answered

No

2. Is the project within the range of the northern long-eared bat^[1]?

[1] See [northern long-eared bat species profile](#)

Automatically answered

Yes

3. [Semantic] Does your proposed action intersect an area where Indiana bats and northern long-eared bats are not likely to occur?

Automatically answered

Yes

DETERMINATION KEY DESCRIPTION: FHWA, FRA, FTA PROGRAMMATIC CONSULTATION FOR TRANSPORTATION PROJECTS AFFECTING NLEB OR INDIANA BAT

This key was last updated in IPaC on October 30, 2023. Keys are subject to periodic revision.

This decision key is intended for projects/activities funded or authorized by the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and/or Federal Transit Administration (FTA), which may require consultation with the U.S. Fish and Wildlife Service (Service) under Section 7 of the Endangered Species Act (ESA) for the endangered **Indiana bat** (*Myotis sodalis*) and the endangered **northern long-eared bat** (NLEB) (*Myotis septentrionalis*).

This decision key should only be used to verify project applicability with the Service's [amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion \(dated March 23, 2023\) for Transportation Projects](#). The programmatic biological opinion covers limited transportation activities that may affect either bat species, and addresses situations that are both likely and not likely to adversely affect either bat species. This decision key will assist in identifying the effect of a specific project/activity and applicability of the programmatic consultation. The programmatic biological opinion is not intended to cover all types of transportation actions. Activities outside the scope of the programmatic biological opinion, or that may affect ESA-listed species other than the Indiana bat or NLEB, or any designated critical habitat, may require additional ESA Section 7 consultation.

IPAC USER CONTACT INFORMATION

Agency: Massachusetts Department of Transportation

Name: Ian Battles

Address: 10 Park Plaza

City: Boston

State: MA

Zip: 02116

Email: ian.h.battles@dot.state.ma.us

Phone: 8572623378

LEAD AGENCY CONTACT INFORMATION

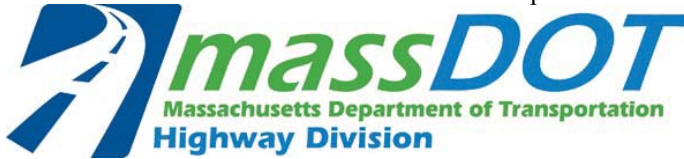
Lead Agency: Federal Highway Administration

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DOCUMENT A00875

**POLICY DIRECTIVE P-22-001
AND
POLICY DIRECTIVE P-22-002**

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Number: P-22-001Date: 9/23/22

POLICY DIRECTIVE

Jonathan Gulliver (signature on original)

HIGHWAY ADMINISTRATOR

Off-Site Stockpiling of Soil from MassDOT Construction Projects

Purpose

The purpose of this Policy Directive is to formally establish a policy and procedures for managing and stockpiling soil generated and transported from MassDOT construction projects. This Policy Directive does not supersede any Federal, State, or Local regulations.

Date of Effect

This Policy Directive is effective immediately for all projects, including active construction projects.

For active construction projects and for other projects advertised prior to October 15, 2022, changes to the contract documents needed to implement the requirements of this Policy Directive will be considered on a case-by-case basis and shall be approved by the District Highway Director, as necessary.

For projects advertised on or after October 15, 2022, MassDOT will include the requirements and implementation procedures of this Policy Directive in the construction contract documents.

Policy Requirements

This policy is intended to prevent the off-site relocation of excavated soil generated from MassDOT projects to areas near residential receptors and to control potential fugitive dusts and/or contaminants. To that end, excavated soil may not be moved from the project site without knowledge of the content of the material. Knowledge may include visual field observations for presence of staining, odor, and/or debris, screening with a photoionization detector (PID), laboratory analysis, and/or site history. Pavement millings and other non-soil materials are not subject to the requirements of this Policy Directive.

Moving soil from a MassDOT project site to a temporary off-site storage location must be approved in writing by the District Highway Director.

The Contractor must select a storage location that is at least 500 feet away from residential receptors, as defined herein to include, but not be limited to, residential dwellings, residentially

zoned property, schools, daycare facilities, playgrounds, parks, recreational areas, hospitals, elderly housing and convalescent facilities.

Temporary off-site storage of excavated soil from a MassDOT project is only permissible at a location approved and permitted by MassDOT. The temporary storage location should be located within the same municipality where the soil was excavated, where possible. Stockpiled soil must be securely covered, and appropriate measures must be taken to minimize fugitive dust and erosion.

Signs indicating the source of the soil, the date the soil was generated, and contact information must be erected and maintained until the stockpiled soils are transported to a disposal facility or reused on the project site.

Implementation Procedures

To ensure that off-site storage of excavated soils is managed properly on MassDOT projects, this policy requires the following:

1. Off-Site Stockpile Storage Locations

- a. The Contractor shall provide proposed off-site storage locations to the Engineer for approval at least 30 days prior to transporting soil off site. Off-site storage locations should be in the same municipality as the work site.
- b. The Contractor shall keep excavated soil on site until adequately characterized to the satisfaction of the Engineer.
- c. The Contractor shall provide notification of the approved off-site storage location to the local Board of Health and the Town Manager's/Mayor's Office at least 7-days prior to transporting soil off site.
- d. The Contractor shall provide the Engineer with at least 3-days' notice prior to transporting soil off site.
- e. For off-site storage locations on MassDOT property, the Contractor is required to obtain an Access Permit through the District Permits Office prior to storage of soil or other materials. MassDOT will issue these permits at no cost to the Contractor. Information to be submitted by the Contractor as part of the permit application shall include:
 - i. A description of material to be stored off-site, including available analytical data;
 - ii. A figure of the location with distances to residences and residential receptors; and
 - iii. Anticipated duration of temporary storage.
- f. Stockpile locations should not be within 500 feet of residential receptors (e.g., residential dwellings, residentially zoned property, schools, daycare facilities, playgrounds, parks, recreational areas, hospitals, elderly housing and convalescent facilities).
 - i. If the stockpile location must be within 500 feet of residential receptors, then soil must be less than RCS-1 (per 310 CMR 40.1600) and free of potentially hazardous or regulated items.

- g. For off-site storage locations on non-MassDOT property, the Contractor must notify the property owner(s) at least 7 days prior to transporting material.
- h. Exceptions to these rules will be reviewed by MassDOT and may be approved by the District Highway Director on a case-by-case basis.

2. Off-Site Stockpile Management

- a. The Contractor shall keep soil stockpiles on impermeable surfaces (e.g., asphalt or concrete) or on 10-mil polyethylene sheeting.
- b. The Contractor shall cover soil stockpiles with 10-mil polyethylene sheeting and surround with a berm made of hay bales, straw wattles, or similar.
 - i. Piles that are actively being worked on must be covered and re-secured at the end of the work shift.
- c. The Contractor shall label stockpiles with signs, including:
 - i. Location of origin (including any Release Tracking Numbers)
 - ii. Stockpile ID number (including MassDOT District office-assigned tracking ID, if different)
 - iii. Date of initial accumulation
 - iv. Applicable telephone numbers for the Contractor and MassDOT.
- d. The Contractor shall mitigate fugitive dust at storage locations under the direction of an appropriately trained/certified environmental professional.
- e. The Contractor shall remedy noncompliance with this policy within 48 hours.
- f. The Contractor shall remedy noncompliance with this policy on the SAME DAY for potentially hazardous material, as determined by the Engineer.
- g. The Contractor shall handle excavated soil according to federal, state, and local regulations.
- h. The Contractor shall use appropriate shipping documents for all movements of excavated soil on public roadways (e.g., Bill of Lading, Material Shipping Record, Manifest, Asbestos Waste Shipment Record, etc.).

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Number: P-22-002Date: 9/23/22

POLICY DIRECTIVE

Jonathan Gulliver (signature on original)

HIGHWAY ADMINISTRATOR

Use of MassDOT Property for Staging and other Construction-Related Operations

Purpose

This Policy Directive is intended to address the use of MassDOT property by MassDOT Contractors for construction staging and other construction-related operations that are not specifically defined in the construction contract. Such use of MassDOT property will only be allowed if permitted by the District Office in accordance with 700 CMR 13.00, Approval of Access to MassDOT Highways and Other Property. This includes the use of MassDOT property for staging, laydown, and storage of equipment and materials, including soil excavated from a project site.

This Policy Directive requires the Contractor/applicant to obtain a Non-Vehicular Access Permit from MassDOT to use MassDOT property for these purposes.

This Policy Directive is effective immediately and applies to all MassDOT construction projects.

General Permit Considerations and Conditions

In addition to other normal MassDOT Access Permit procedures, MassDOT shall consider the following during the application, review, implementation and monitoring processes of Access Permits required by this Policy Directive:

- Storage and placement of the Contractor's equipment and materials should not be allowed within the clear zone of the roadway.
- Stockpiled soils should not be located within 500 feet of residential receptors, as defined herein to include, but not be limited to, residential dwellings, residentially zoned property, schools, daycare facilities, playgrounds, parks, recreational areas, hospitals, elderly housing and convalescent facilities.
- The Contractor/applicant shall identify the access/egress locations of the proposed storage areas. MassDOT will only approve locations determined to be safe for roadway users, construction workers and the general public.
- The Contractor may be required to submit a Traffic Management Plan and/or Lighting Plan for MassDOT review and approval as part of the permit application, depending on the proposed use of the area.

- The Contractor shall submit the permit application through MassDOT's online State Highway Access Permit System (SHAPS).
- MassDOT will waive the permit application fee for any application received from a MassDOT Contractor for any permit required by this Policy Directive and will waive any subsequent amendment and extension fees that may otherwise be required.
- MassDOT will review the permit application in accordance with applicable standard procedures and will apply standard permit terms and conditions, as necessary.
- The Resident Engineer will verify that the permit is approved before allowing the Contractor to use the affected area for the requested purpose.
- Areas permitted are for use by the approved applicant only and are not to be shared with or used by other vendors. Subcontractors specifically engaged with the applicant working on the specific MassDOT project will be allowed to use the area in accordance with the terms of the permit.
- Permits are issued on an annual basis and will require the Contractor to file for an extension each year to continue use.

Exemptions from Permit Requirements

Equipment and materials being used for active construction operations and located within the work zone of the construction contract are exempt from this permit requirement, provided they do not interfere with the safety or operation of the roadway or the work zone. Examples of these types of exempt uses are:

- Equipment and materials parked or stored within a protected (barriered) work zone.
- Materials placed in the work zone prior to same-day installation or use.
- Soils excavated temporarily and scheduled to be replaced, such as for trenching operations or for installation of drainage structures.

DOCUMENT B00420

PROPOSAL

SPRINGFIELD

For: **Rebecca M. Johnson Elementary School Improvements (SRTS)**

COMMONWEALTH OF MASSACHUSETTS

LOCATION

The work referred to herein is in the City of SPRINGFIELD in Hampden County, in the Commonwealth of Massachusetts, and is shown by the locus map (Document 00331) in the Proposal Pamphlet, the work locations extend as follows:

Catharine Street

Beginning – Station 30+00.00 +/-

Ending –Station 46+00.00 +/-

The contract prices shall include the furnishing of all materials (except as otherwise herein specified), the performing of all the labor requisite or proper, the providing of all necessary machinery, tools, apparatus and other means of construction, the doing of all the abovementioned work in the manner set forth, described and shown in the specifications and on the drawings for the work, and in the form of contract, and the completion thereof within **490 CALENDAR DAYS** upon receipt of a Notice to Proceed, except that if the completion date falls between December 1 and March 15 then the same number of days beyond December 1st will be extended after March 15th.

The Work of this project is described by the following Items and quantities.

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Project # 612080		Contract # 130935		
Location : SPRINGFIELD				
Description : Rebecca M. Johnson Elementary School Improvements (SRTS)				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
102.511	10	TREE PROTECTION - ARMORING AND PRUNING AT _____ EACH		
102.521	40	TREE AND PLANT PROTECTION FENCE AT _____ PER FOOT		
102.531	15	TREE CARE - PRUNING AT _____ EACH		
103.	1	TREE REMOVED - DIAMETER UNDER 24 INCHES AT _____ EACH		
104.	2	TREE REMOVED - DIAMETER 24 INCHES AND OVER AT _____ EACH		
120.1	410	UNCLASSIFIED EXCAVATION AT _____ PER CUBIC YARD		
141.1	10	TEST PIT FOR EXPLORATION AT _____ PER CUBIC YARD		
144.	10	CLASS B ROCK EXCAVATION AT _____ PER CUBIC YARD		
146.	1	DRAINAGE STRUCTURE REMOVED AT _____ EACH		

Project # 612080		Contract # 130935		
Location : SPRINGFIELD				
Description : Rebecca M. Johnson Elementary School Improvements (SRTS)				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
150.	10	ORDINARY BORROW AT _____ PER CUBIC YARD		
150.1	10	SPECIAL BORROW AT _____ PER CUBIC YARD		
151.	210	GRAVEL BORROW AT _____ PER CUBIC YARD		
151.2	20	GRAVEL BORROW FOR BACKFILLING STRUCTURES AND PIPES AT _____ PER CUBIC YARD		
154.	10	SAND BORROW AT _____ PER CUBIC YARD		
156.	30	CRUSHED STONE AT _____ PER TON		
170.	725	FINE GRADING AND COMPACTING - SUBGRADE AREA AT _____ PER SQUARE YARD		
180.01	1	ENVIRONMENTAL HEALTH AND SAFETY PROGRAM AT _____ LUMP SUM		
180.02	40	PERSONAL PROTECTION LEVEL C UPGRADE AT _____ PER HOUR		

Project # 612080		Contract # 130935		
Location : SPRINGFIELD				
Description : Rebecca M. Johnson Elementary School Improvements (SRTS)				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
180.03	40	LICENSED SITE PROFESSIONAL SERVICES AT _____ PER HOUR		
181.11	220	DISPOSAL OF UNREGULATED SOIL AT _____ PER TON		
181.12	50	DISPOSAL OF REGULATED SOIL - IN-STATE FACILITY AT _____ PER TON		
181.13	50	DISPOSAL OF REGULATED SOIL - OUT-OF-STATE FACILITY AT _____ PER TON		
181.14	20	DISPOSAL OF HAZARDOUS WASTE AT _____ PER TON		
184.1	1	DISPOSAL OF TREATED WOOD PRODUCTS AT _____ PER TON		
201.	3	CATCH BASIN AT _____ EACH		
220.	4	DRAINAGE STRUCTURE ADJUSTED AT _____ EACH		
220.2	50	DRAINAGE STRUCTURE REBUILT AT _____ PER FOOT		

Project # 612080		Contract # 130935		
Location : SPRINGFIELD				
Description : Rebecca M. Johnson Elementary School Improvements (SRTS)				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
220.3	2	DRAINAGE STRUCTURE CHANGE IN TYPE AT _____ EACH		
221.	5	FRAME AND COVER AT _____ EACH		
222.1	10	FRAME AND GRATE - MASSDOT CASCADE TYPE AT _____ EACH		
227.3	10	REMOVAL OF DRAINAGE STRUCTURE SEDIMENT AT _____ PER CUBIC YARD		
227.31	50	REMOVAL OF DRAINAGE PIPE SEDIMENT AT _____ PER FOOT		
238.10	20	10 INCH DUCTILE IRON PIPE AT _____ PER FOOT		
402.	20	DENSE GRADED CRUSHED STONE FOR SUB-BASE AT _____ PER CUBIC YARD		
431.	130	HIGH EARLY STRENGTH CEMENT CONCRETE BASE COURSE AT _____ PER SQUARE YARD		
443.	3	WATER FOR ROADWAY DUST CONTROL AT _____ PER 1000 GALLONS		

Project # 612080		Contract # 130935		
Location : SPRINGFIELD				
Description : Rebecca M. Johnson Elementary School Improvements (SRTS)				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
450.23	30	SUPERPAVE SURFACE COURSE - 12.5 (SSC - 12.5) AT _____ PER TON		
450.32	35	SUPERPAVE INTERMEDIATE COURSE - 19.0 (SIC - 19.0) AT _____ PER TON		
451.	70	HMA FOR PATCHING AT _____ PER TON		
452.	25	ASPHALT EMULSION FOR TACK COAT AT _____ PER GALLON		
453.	1,000	HMA JOINT ADHESIVE AT _____ PER FOOT		
472.	40	TEMPORARY ASPHALT PATCHING AT _____ PER TON		
476.01	20	SCORED CEMENT CONCRETE PAVEMENT AT _____ PER SQUARE YARD		
482.4	240	SAWCUTTING PORTLAND CEMENT CONCRETE AT _____ PER FOOT		
506.	230	GRANITE CURB TYPE VB - STRAIGHT AT _____ PER FOOT		

Project # 612080		Contract # 130935		
Location : SPRINGFIELD				
Description : Rebecca M. Johnson Elementary School Improvements (SRTS)				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
506.1	130	GRANITE CURB TYPE VB - CURVED AT _____ PER FOOT		
509.	220	GRANITE TRANSITION CURB FOR PEDESTRIAN CURB RAMPS - STRAIGHT AT _____ PER FOOT		
509.1	140	GRANITE TRANSITION CURB FOR PEDESTRIAN CURB RAMPS - CURVED AT _____ PER FOOT		
514.	2	GRANITE CURB INLET - STRAIGHT AT _____ EACH		
594.	675	CURB REMOVED AND DISCARDED AT _____ PER FOOT		
657.	100	TEMPORARY FENCE AT _____ PER FOOT		
657.5	100	TEMPORARY FENCE REMOVED AND RESET AT _____ PER FOOT		
660.	50	METAL PIPE RAIL AT _____ PER FOOT		
697.1	25	SILT SACK AT _____ EACH		

Project # 612080		Contract # 130935		
Location : SPRINGFIELD				
Description : Rebecca M. Johnson Elementary School Improvements (SRTS)				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
701.	100	CEMENT CONCRETE SIDEWALK AT _____ PER SQUARE YARD		
701.1	20	CEMENT CONCRETE SIDEWALK AT DRIVEWAYS AT _____ PER SQUARE YARD		
701.2	500	CEMENT CONCRETE PEDESTRIAN CURB RAMP AT _____ PER SQUARE YARD		
702.	5	HOT MIX ASPHALT SIDEWALK OR DRIVEWAY AT _____ PER TON		
722.3	1	SCHEDULE OF OPERATIONS (TYPE C) - FIXED PRICE \$5,500 AT Five Thousand Five Hundred Dollars LUMP SUM	\$5,500.00	\$5,500.00
740.	16	ENGINEER'S FIELD OFFICE AND EQUIPMENT (TYPE A) AT _____ PER MONTH		
748.	1	MOBILIZATION AT _____ LUMP SUM		
751.1	40	LOAM FOR LAWNS AT _____ PER CUBIC YARD		
765.	350	SEEDING AT _____ PER SQUARE YARD		

Project # 612080		Contract # 130935		
Location : SPRINGFIELD				
Description : Rebecca M. Johnson Elementary School Improvements (SRTS)				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
767.121	100	SEDIMENT CONTROL BARRIER AT _____ PER FOOT		
794.731	4	SUMMERSWEET SHRUB 18-24 INCH / #2 AT _____ EACH		
804.3	250	3 INCH ELECTRICAL CONDUIT TYPE NM - PLASTIC -(UL) AT _____ PER FOOT		
811.22	3	ELECTRIC HANDHOLE - SD2.022 AT _____ EACH		
811.31	3	PULL BOX 12 X 12 INCHES - SD2.031 AT _____ EACH		
811.37	1	ELECTRIC HANDHOLE ADJUSTED AT _____ EACH		
816.01	1	TRAFFIC SIGNAL RECONSTRUCTION LOCATION NO. 1 AT _____ LUMP SUM		
824.301	1	FLASHING WARNING BEACON TYPE B LOCATION 1 AT _____ LUMP SUM		
824.302	1	FLASHING WARNING BEACON TYPE B LOCATION 2 AT _____ LUMP SUM		

Project # 612080		Contract # 130935		
Location : SPRINGFIELD				
Description : Rebecca M. Johnson Elementary School Improvements (SRTS)				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
825.2	3	RRFB (2-POST ASSEMBLY SYSTEM) AT _____ EACH		
832.	140	WARNING-REGULATORY AND ROUTE MARKER - ALUMINUM PANEL (TYPE A) AT _____ PER SQUARE FOOT		
847.1	20	SIGN SUP (N/GUIDE)+RTE MKR W/1 BRKWAY POST ASSEMBLY - STEEL AT _____ EACH		
850.41	30	ROADWAY FLAGGER AT _____ PER HOUR		
852.	750	SAFETY SIGNING FOR TRAFFIC MANAGEMENT AT _____ PER SQUARE FOOT		
852.11	100	TEMPORARY PEDESTRAIN BARRICADE* AT _____ PER FOOT		
852.12	10	TEMPORARY PEDESTRIAN CURB RAMP* AT _____ EACH		
853.1	10	PORTABLE BREAKAWAY BARRICADE TYPE III AT _____ EACH		
854.1	1,050	PAVEMENT MARKING REMOVAL AT _____ PER SQUARE FOOT		

Project # 612080		Contract # 130935		
Location : SPRINGFIELD				
Description : Rebecca M. Johnson Elementary School Improvements (SRTS)				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
856.	50	ARROW BOARD AT _____ PER DAY		
856.12	220	PORTABLE CHANGEABLE MESSAGE SIGN AT _____ PER DAY		
859.	3,000	REFLECTORIZED DRUM AT _____ PER DAY		
866.212	3,100	12 INCH REFLECTORIZED WHITE LINE (POLYUREA) (RECESSED) AT _____ PER FOOT		
874.	4	STREET NAME SIGN AT _____ EACH		
874.2	7	TRAFFIC SIGN REMOVED AND RESET AT _____ EACH		
874.4	4	TRAFFIC SIGN REMOVED AND STACKED AT _____ EACH		
874.41	4	TRAFFIC SIGN REMOVED AND DISCARDED AT _____ EACH		
Total Qty:		15,274		

DOCUMENT B00853

SCHEDULE OF PARTICIPATION BY DISADVANTAGED BUSINESS ENTERPRISES (DBES)

PRIME BIDDER: _____

DATE OF BID OPENING: _____ PROJECT NO.: 612080FEDERAL AID PROJECT NO. TAP-SRS2(003)XPROJECT LOCATION: SPRINGFIELD

Name, Address, and Phone Number(s) of DBE	Name of Activity	(a) [†] DBE Contractor Activity Amount <i>Construction Work</i>	(b) DBE Other Business Amount <i>Services, Supplies, Material</i>	(c) Total amount eligible for credit under rules in Section 6 of Document 00719 - DBE Special Provisions
Total Bid Amount	TOTALS:	\$	\$	\$
\$	DBE Percentage of Total Bid:	%	%	%

[†]Column (a) must be at least one-half of the DBE participation goal. Attach additional sheets as necessary.Is MassDOT Document B00855 (Joint Check Approval) being submitted for any of the above? ☐ Yes ☐ No☐ Not Known at This TimeWill any of the contractors listed above be using a third party (i.e. manufacturer) to deliver materials or perform any portion of work by a third party? ☐ Yes ☐ No

CERTIFICATION: I HEREBY DECLARE, TO THE BEST OF MY KNOWLEDGE, THAT **I HAVE READ THE SPECIAL PROVISIONS FOR PARTICIPATION BY DISADVANTAGED BUSINESS ENTERPRISES - DOCUMENT 00719.** BOTH THIS SCHEDULE AND THE RELEVANT AND ACCOMPANYING LETTER(S) OF INTENT ARE IN FULL COMPLIANCE WITH THE PROVISIONS OF, AND IN ACCORDANCE WITH, TITLE 49 CODE OF FEDERAL REGULATIONS, PART 26 (49 CFR Part 26).

SIGNATURE: _____ DATE _____

NAME AND TITLE (*PRINT*): _____

EMAIL ADDRESS: _____ TEL NO.: _____

*** END OF DOCUMENT ***

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DOCUMENT B00854

DISADVANTAGED BUSINESS ENTERPRISES (DBE) PARTICIPATION
LETTER OF INTENT

(To be completed by the DBE – Page 1 of 2)

TO: _____ (Prime Bidder)

FROM: _____ (DBE Firm)

RE: PROJECT NO.: 612080 FEDERAL AID PROJECT NO.: TAP-SRS2(003)XPROJECT LOCATION: SPRINGFIELD

DATE OF BID OPENING: _____

I, _____, authorized signatory of the above-referenced DBE firm hereby declare:
Print Name

1. My company is currently certified as a Disadvantaged Business Enterprise (DBE) by the Massachusetts Supplier Diversity Office (“SDO”), formerly known as the State Office of Minority and Women Business Assistance (SOMWBA), as a: (check all applicable, see Section 1 of the Special Provisions For Participation By Disadvantaged Business Enterprises, MassDOT Document 00719 additional guidance is available at Title 49, Code of Federal Regulations, Part 26.55 (49 CFR Part 26.55)):

() CONTRACTOR () REGULAR DEALER () BROKER
() MANUFACTURER () TRUCKING OPERATIONS () PROFESSIONAL SERVICES

2. My firm has the ability to manage, supervise and perform the activity described on page 2 of this Letter of Intent. If you are awarded the contract, my company intends to enter into a contract with your firm to perform the items of work or other activity described on the following sheet for the prices indicated.
3. There have been no changes affecting the ownership, control or independence of my company since my last certification review on _____, 20____. If any such change is planned or occurs prior to my company's completion of this proposed work, I will give prior written notification to your firm and to the Massachusetts Department of Transportation (“MassDOT”) Office of Civil Rights and SDO.
4. I have read the MassDOT proposal for the Project which may be entitled “Project Contract Documents and Special Provisions” or the draft “Contract” which includes MassDOT Document 00719, and acknowledge that my company will comply with that document and the requirements of 49 CFR Part 26.
5. For the purpose of obtaining subcontractor approval from MassDOT, my firm will provide to you:

A. **The following construction work:**

- (i) a resume, stating the qualifications and experience, of the superintendent or foreperson who will supervise on site-work;
- (ii) a list of equipment owned or leased by my firm for use on this project; and
- (iii) a list of all projects (public or private) upon which my firm is currently performing, is committed to perform, or intends to make a commitment to perform. I shall also include, for each project: the name and telephone number of a contact person for the contracting authority, person, or organization; the dollar value of the work; a description of the work; and my firm's work schedule for the project.

B. **The following services, materials or supplies:**

- (i) a written agreement and invoices for the materials or supplies, and any other documents evidencing the terms of providing such items;
- (ii) information concerning brokers fees and commissions for providing services or materials; and
- (iii) a statement concerning whether my firm intends or will be required to use a joint check arrangement; and any other documents that may be required by MassDOT.

DBE Company Authorized Signature

Date _____

DISADVANTAGED BUSINESS ENTERPRISES (DBE) PARTICIPATION
LETTER OF INTENT
(To be completed by the DBE – Page 2 of 2)

DATE OF BID OPENING: _____

PROJECT NUMBER: 612080FEDERAL AID PROJECT NUMBER: TAP-SRS2(003)XPROJECT LOCATION: SPRINGFIELD

PRIME BIDDER: _____

DBE COMPANY NAME: _____

<u>Item number</u> if applicable	<u>NAICS</u> <u>Code</u>	<u>Description of Activity</u> with notations such as Services, or Brokerage, Installation Only, Material Only, or Complete	<u>Quantity</u>	<u>Unit Price</u>	<u>Amount</u>
				TOTAL AMOUNT:	

Please give full explanations, attach additional sheets if necessary.

I HEREBY VERIFY THAT _____ WILL SOLELY
(DBE company name)
PERFORM THE WORK, OR PROVIDE THE SERVICES OR MATERIALS, AS DESCRIBED ABOVE.

DBE AUTHORIZED SIGNATURE: _____

NAME AND TITLE (PRINT): _____

TELEPHONE NUMBER: _____ FAX NUMBER: _____

EMAIL ADDRESS: _____

*** END OF DOCUMENT ***

Rev'd 9/20/19

DOCUMENT B00855

DBE JOINT CHECK ARRANGEMENT APPROVAL FORM

(to be submitted by Prime Contractor)

Contract No: 130935 Project No. 612080 Federal Aid No.: TAP-SRS2(003)XLocation: SPRINGFIELD Bid Opening Date: _____Project Description: Rebecca M. Johnson Elementary School Improvements (SRTS)

We have received the attached request for the use of a joint check arrangement from _____, a DBE on the above- referenced Contract and _____, a Material Supplier/Vendor for the subject Contract. The DBE has complied with the requirements of 49 CFR Part 26.55(c)(1). In particular, the DBE has:

- a written agreement with the material supplier/vendor;
- applied for credit with the subject material supplier and has supplied the vendor's response;
- shown that it will place all orders to the subject material supplier/vendor;
- made and retains all decision-making responsibilities concerning the materials; and
- provided a Joint Check Agreement that is acceptable to MassDOT;

As the Contractor for the Project, we agree to issue joint checks (made payable to the Material Supplier/Vendor and the DBE) for payment of sums due pursuant to invoices from the Supplier/Vendor and DBE.

Contractor:_____
Company Name_____
Signature
Duly Authorized_____
Printed Name_____
Date_____
Title**SubContractor:**_____
Company Name_____
Signature –
Duly Authorized_____
Printed Name_____
Date_____
Title

*** END OF DOCUMENT ***

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DOCUMENT B00856

JOINT VENTURE AFFIDAVIT

(All Firms)

- All Information Requested By This Schedule Must Be Answered. Additional Sheets May Be Attached.
- If, there is any change in the information submitted, the Joint Venture parties must inform MassDOT Pre-Qualifications Office (and, if one of the companies is a DBE, the Director of Contract Compliance, Office of Civil Rights) *prior* to such change, in writing, either directly or through the Prime Contractor if the Joint Venture is a subcontractor.
- If the Joint Venture Entity will be the bidder on a prime Contract, it must bid and submit all required documents (insurance, worker's compensation, bonds, etc.) in the name of the Joint Venture Entity.

I. Name of Joint Venture: _____

Type of Entity if applicable (Corp., LLC): _____ Filing State _____

Address of joint venture: _____

Phone No(s) for JV Entity: _____ E-mail: _____

Contact Person(s) _____

Tax ID/EIN of Joint Venture: _____ Vendor Code: _____

II. Identify each firm or party to the Joint Venture:

Name of Firm: _____

Address: _____

Phone : _____ E-mail: _____

Contact person(s) _____

Name of Firm: _____

Address: _____

Phone: _____ E-mail: _____

Contact Person(s) _____

III. Describe the role(s) of the each party to the Joint Venture:_____

- IV. Attach a copy of the Joint Venture Agreement.** The proposed Joint Venture Agreement should include specific details including, but not limited to: (1) the contributions of capital and equipment; (2) work items to be performed by each company's forces, (3) work items to be performed under the supervision of any DBE Venturer; (4) the commitment of management, supervisory and operative personnel employed by the DBE to be dedicated to the performance of the Project; and (5) warranty, guaranty, and indemnification clauses.

V. Attach any applicable Corporate or LLC Votes, Authorizations, etc.

VI. Ownership of the Joint Venture:

A. What is the percentage(s) of each company's ownership in the Joint Venture?

ownership percentage(s): _____

ownership percentage(s): _____

B. Specify percentages for each of the following (provide narrative descriptions and other detail as applicable):

1. Sharing of profit and loss: _____

2. Capital contributions:

(a) Dollar amounts of initial contribution: _____

(b) Dollar amounts of anticipated on-going contributions: _____

(c) Contributions of equipment (specify types, quality and quantities of equipment to be provided by each firm): _____

4. Other applicable ownership interests, including ownership options or other agreements, which restrict or limit ownership and/or control:

5. Provide copies of all other written agreements between firms concerning bidding and operation of this Project or projects or contracts.

6. Identify all current contracts and contracts completed during the past two (2) years by either of the Joint Venture partners to this Joint Venture:

VII. Control of and Participation in the Joint Venture. Identify by name and firm those individuals who are, or will be, responsible for and have the authority to engage in the following management functions and policy decisions. (Indicate any limitations to their authority such as dollar limits and co-signatory requirements.):

A. Joint Venture check signing:

B. Authority to enter Contracts on behalf of the Joint Venture:

C. Signing, co-signing and/or collateralizing loans:

D. Acquisition of lines of credit:

E. Acquisition and indemnification of payment and performance bonds:

F. Negotiating and signing labor agreements:

G. Management of contract performance. (*Identify by name and firm only*):

1. Supervision of field operations: _____
2. Major purchases: _____
3. Estimating: _____
4. Engineering: _____

VIII. Financial Controls of Joint Venture:

A. Which firm and/or individual will be responsible for keeping the books of account?

B. Identify the "Managing Partner," if any, and describe the means and measure of their compensation:

C. What authority does each firm have to commit or obligate the other to insurance and bonding companies, financing institutions, suppliers, subcontractors, and/or other parties participating in the performance of this Contract or the work of this Project?

IX. Personnel of Joint Venture: State the approximate number of personnel (by trade) needed to perform the Joint Venture's work under this Contract. Indicate whether they will be employees of the majority firm, DBE firm, or the Joint Venture.

	Firm 1 (number)	Firm 2 (number)	Joint Venture (number)
Trade			
Professional			
Administrative/Clerical			
Unskilled Labor			

Will any personnel proposed for this Project be employees of the Joint Venture?: _____

If so, who: _____

A. Are any proposed Joint Venture employees currently employed by either firm?

Employed by Firm 1: _____ Employed by firm 2 _____

B. Identify by name and firm the individual who will be responsible for Joint Venture hiring: _____

X. Additional Information. Please state any material facts and additional information pertinent to the control and structure of this Joint Venture.

XI. AFFIDAVIT OF JOINT VENTURE PARTIES. The undersigned affirm that the foregoing statements and attached documents are correct and include all material information necessary to identify and explain the terms and operations of our Joint Venture and the intended participation of each firm in the undertaking. Further, the undersigned covenant and agree to provide to MassDOT current, complete and accurate information regarding actual Joint Venture work, payments, and any proposed changes to any provisions of the Joint Venture, or the nature, character of each party to the Joint Venture. We understand that any material misrepresentation will be grounds for terminating any Contract awarded and for initiating action under Federal or State laws concerning false statements.

Firm 1

Firm 2

Signature
Duly Authorized

Signature
Duly Authorized

Printed Name and Title

Printed Name and Title

Date

Date

*** END OF DOCUMENT ***