

COMMONWEALTH OF MASSACHUSETTS



CONTRACT DOCUMENTS AND SPECIAL PROVISIONS

PROPOSAL NO.	613752-132093
P.V. =	\$4,701,000.00
PLANS	NO

FOR

Bridge Preservation, T-01-058, Bay Street over Interstate 495**in the City of****TAUNTON**

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

This Proposal to be opened and read:

TUESDAY, SEPTEMBER 30, 2025 at 2:00 P.M.

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DOCUMENT 00010

TABLE OF CONTENTS

DOCUMENT 00010	
TABLE OF CONTENTS	00010-1 through 2
DOCUMENT 00102	
NOTICE TO CONTRACTORS	00102- 1 through 2
DOCUMENT 00210	
REQUIREMENTS OF MASSACHUSETTS GENERAL LAWS CHAPTER 30 SECTION 39R; CHAPTER 30, SECTION 39O.....	00210-1 through 4
DOCUMENT 00331	
LOCUS MAP	00331-1 through 2
DOCUMENT 00439	
CONTRACTOR PROJECT EVALUATION FORM	00439-1 through 2
DOCUMENT 00440	
SUBCONTRACTOR PROJECT EVALUATION FORM	00440-1 through 2
DOCUMENT 00710	
GENERAL CONTRACT PROVISIONS.....	00710-1 through 2
DOCUMENT 00715	
SUPPLEMENTAL SPECIFICATIONS	00715-1 through 8
DOCUMENT 00718	
SPECIAL PROVISION FOR PARTICIPATION BY MINORITY OR WOMEN'S BUSINESS ENTERPRISES AND SERVICE- DISABLED VETERAN- OWNED BUSINESS ENTERPRISES	00718-1 through 10
DOCUMENT 00761	
SPECIAL PROVISIONS FOR CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION.....	00761-1 through 4
DOCUMENT 00811	
MONTHLY PRICE ADJUSTMENT FOR HOT MIX ASPHALT (HMA) MIXTURES.....	00811-1 through 2
DOCUMENT 00812	
MONTHLY PRICE ADJUSTMENT FOR DIESEL FUEL AND GASOLINE	00812-1 through 2
DOCUMENT 00813	
PRICE ADJUSTMENT FOR STRUCTURAL STEEL AND REINFORCING STEEL	00813-1 through 4
DOCUMENT 00814	
PRICE ADJUSTMENT FOR PORTLAND CEMENT CONCRETE MIXES	00814-1 through 2
DOCUMENT 00820	
THE COMMONWEALTH OF MASSACHUSETTS SUPPLEMENTAL EQUAL EMPLOYMENT OPPORTUNITY, NON-DISCRIMINATION AND AFFIRMATIVE ACTION PROGRAM.....	00820-1 through 6

TABLE OF CONTENTS (Continued)

DOCUMENT 00821	
ELECTRONIC REPORTING REQUIREMENTS	
CIVIL RIGHTS PROGRAM AND CERTIFIED PAYROLL	00821-1 through 2
DOCUMENT 00859	
CONTRACTOR/SUBCONTRACTOR CERTIFICATION FORM.....	00859-1 through 2
DOCUMENT 00860	
COMMONWEALTH OF MASSACHUSETTS PUBLIC EMPLOYMENT LAWS	00860-1 through 2
DOCUMENT 00861	
STATE PREVAILING WAGE RATES	00861-1 through 34
DOCUMENT A00801	
SPECIAL PROVISIONS	A00801-1 through 92
DOCUMENT A00803	
DRAWINGS AND SKETCHES.....	A00803-1 through 48
DOCUMENT A00820	
REQUEST FOR RELEASE OF MASSDOT AUTOCAD FILES FORM.....	A00820-1 through 2
DOCUMENT A00821	
BRIDGE INSPECTION REPORT.....	A00821-1 through 50
DOCUMENT A00875	
POLICY DIRECTIVE P-22-001 AND POLICY DIRECTIVE P-22-002	A00875-1 through 8
DOCUMENT B00420	
PROPOSAL.....	B00420-1 through 12
DOCUMENT B00842	
SCHEDULE OF PARTICIPATION BY MINORITY OR WOMEN BUSINESS	
ENTERPRISE (M/WBE)	B00842-1 through 2
DOCUMENT B00843	
MINORITY OR WOMENS BUSINESS ENTERPRISE PARTICIPATION	
LETTER OF INTENT.....	B00843-1 through 2
DOCUMENT B00846	
M/WBE OR SDVOBE JOINT CHECK ARRANGEMENT APPROVAL FORM.....	B00846-1 through 2
DOCUMENT B00847	
JOINT VENTURE AFFIDAVIT	B00847-1 through 4

*** END OF DOCUMENT ***

DOCUMENT 00102

**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, SEPTEMBER 30, 2025 at 2:00 P.M. ****TAUNTON****Bridge Preservation, T-01-058, Bay Street over Interstate 495******Date Subject to Change**PROJECT VALUE = \$4,701,000.00

Bidders must be pre-qualified by the Department in the BRIDGE - CONSTRUCTION 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.

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 \$425.13 per ton, diesel fuel \$2.733 per gallon, and gasoline \$2.451 per gallon, and Steel Base Price Index 354.8. 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, AUGUST 23, 2025

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.

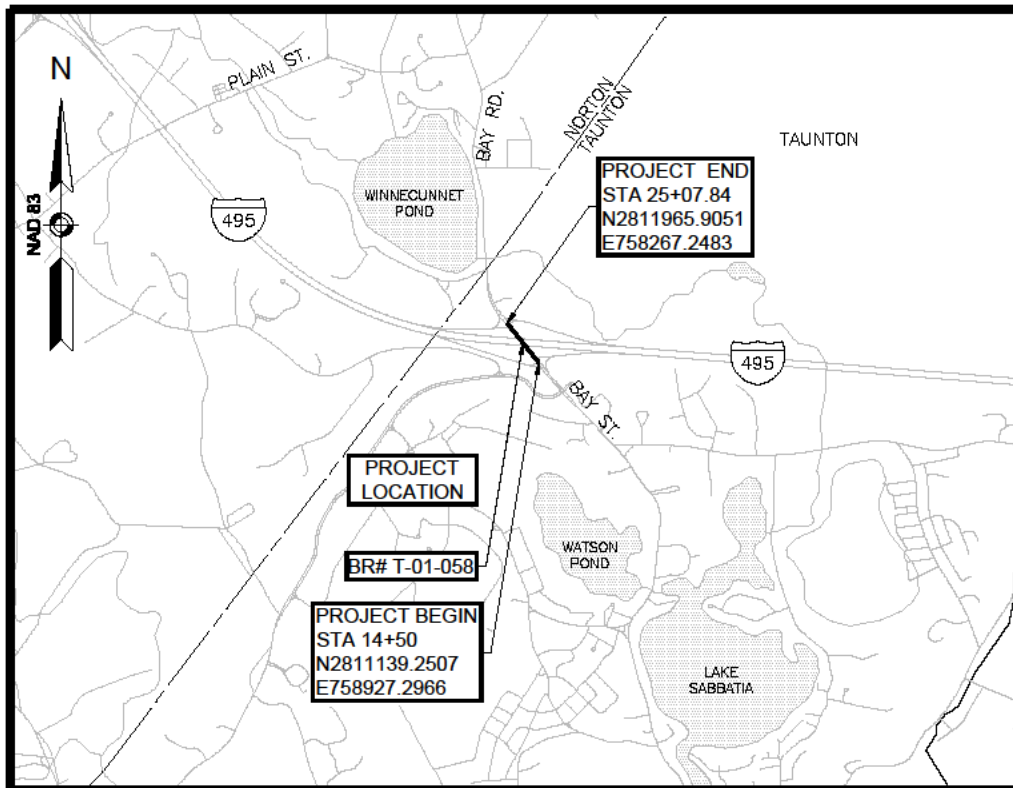
- (a) The awarding authority may order the general contractor in writing to suspend, delay, or interrupt all or any part of the work for such period of time as it may determine to be appropriate for the convenience of the awarding authority; provided however, that if there is a suspension, delay or interruption 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**TAUNTON****Bridge Preservation, T-01-058, Bay Street over Interstate 495**

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DOCUMENT 00439

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/Date _____

Contractor 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: _____

SUBCONTRACTOR PROJECT EVALUATION FORM (Continued)

Date: _____ Contract Number: _____

INFORMATION FOR DISTRICT HIGHWAY DIRECTORS RELATING TO PREQUALIFICATION

A deduction shall be recommended for unsatisfactory performance if computed overall rating is under 80%.

A deduction may be recommended for this project being completed late due to the Contractor's fault.

RECOMMENDATIONS FOR DEDUCTIONS FROM CONTRACTORS' ASSIGNED FACTOR

(Write Yes or No in space provided)

I recommend a deduction for Contractor's unsatisfactory performance: _____

I recommend a deduction for project completed late: _____

Signed: _____
District Highway Director

EXPLANATION OF RATINGS 1 – 8:

This image shows a single page from a notebook or ledger. It features ten evenly spaced, light gray horizontal lines running across the width of the page. The lines are thin and uniform, providing a guide for writing without being distracting. There is no handwriting, printed text, or other markings on the page.

WORK NOT COMPLETED WITHIN SPECIFIED TIME:

Revised: 04/28/17

*** END OF DOCUMENT ***

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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DOCUMENT 00715



SUPPLEMENTAL SPECIFICATIONS

JUNE 30, 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 the first bullet in the third paragraph with the following:

- 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".

DIVISION II
CONSTRUCTION DETAILS
SECTION 300: WATER SYSTEMS
SUBSECTION 301: WATER SYSTEMS

Subsection 301.60G: Laying Pipe

Revise the third paragraph to read as follows:

Pipe sections shall be laid with the bell on the upgrade end. Before laying the pipe, the outside of the spigot and the inside of the bell shall be wire brushed and wiped clean and dry.

Subsection 301.80: Method of Measurement

Delete the words cast iron in the first paragraph.

Replace the second paragraph with the following:

Fittings, consisting of bends, tees, caps, wyes, sleeves, reducers, increasers, blow-off fittings and other special fittings, apply only when new materials are necessary and which are not specifically provided for under other items in the Proposal. Fittings other than new will not be paid separately but only under the applicable pipe items. When new fittings are measured separately for payment, the length of pipe occupied by the fittings will not be measured for payment.

SECTION 800: TRAFFIC CONTROL DEVICES

**SUBSECTION 850: TRAFFIC CONTROLS FOR CONSTRUCTION AND MAINTENANCE
OPERATIONS**

Subsection 850.29: Temporary Barrier and Temporary Barrier Removed and Reset

Delete this subsection.

Subsection 850.49: Temporary Barrier

Delete this subsection.

Subsection 850.69: Temporary Barrier and Temporary Barrier Removed and Reset

Delete this subsection.

Subsection 850.80: Method of Measurement

Delete the fifth paragraph from the end of this subsection.

Subsection 850.81: Basis of Payment

Delete the sixth and seventh paragraphs from the end of this subsection.

SUBSECTION 853: TEMPORARY BARRIER

Subsection 853.: Temporary Barrier

Add this new subsection:

DESCRIPTION

853.20: General

Work under this Subsection consists of furnishing, placing, adjusting, resetting, maintaining, and removing temporary barrier.

MATERIALS

853.40: General

Materials shall meet the requirements specified in the following Subsections of Division III, Materials:

Material	Section
Precast, Prestressed, and Prefabricated Concrete Products	M4.09.0
Temporary Barrier	M10.16.0
Limited Deflection Temporary Barrier	M10.16.1
Delineators for Temporary Barrier	M10.16.2

The Contractor shall supply a temporary barrier system that meets or exceeds the Test Level (TL) designated in the description of the bid item.

If the Contractor uses a proprietary temporary barrier system, it shall be listed on the QTCE.

Temporary barrier segments that appear to be damaged or in otherwise unsuitable condition may be rejected or ordered to be replaced by the Engineer at no additional cost.

853.41: Deflection

The deflection of a temporary barrier system is defined as the measured deflection, permanent and/or dynamic, during MASH Test Designation 2-11 (for TL-2) or Test Designation 3-11 (for TL-3).

The Contractor shall supply a temporary barrier system that is equal to or less than the maximum allowable deflection (permanent and/or dynamic) for each run of temporary barrier, as shown in the Plans or stated in the Special Provisions. If no distinction between permanent and temporary deflection is shown in the plans or Special Provisions, then dynamic deflection shall govern.

853.42: Precast Concrete Barriers

Precast Concrete Barriers used as temporary barriers shall be fabricated in accordance with M4.09.0: Precast, Prestressed, and Prefabricated Concrete Products. The Contractor shall submit a Certificate of Compliance (CoC) attesting to meeting this requirement.

853.43: Delineation

Delineators installed at 20-ft intervals throughout the entire barrier run shall be included. The delineators shall conform to M10.16.2: Delineators for Temporary Barrier. Delineators that may act as a washer on a bolted connection shall not be used unless specifically allowed by the barrier manufacturer. Delineators that are damaged, are no longer reflective, or go missing while temporary barrier is deployed shall be replaced in kind by the Contractor.

Delineators may be top or side-mounted to the barrier and oriented in a manner to maximize reflectivity to approaching traffic.

Temporary barrier placed on the right side of the travel way, or top-mounted and separating two or more lanes traveling in the same direction, shall use white delineators. Temporary barrier placed on the left side of the travel way shall use amber or yellow delineators; if separating two-way traffic and top-mounted, the delineator shall be double-sided.

853.44: Anchored Barrier

Temporary barrier systems that include an anchor system in order to meet performance requirements of the contract and/or meet MASH testing requirements may be accepted for use at the discretion of the Department.

Barrier that utilizes an anchor system shall use the same pattern, placement, and material of anchors that was used in MASH crash testing.

853.45: Shop Drawings

Within 30 days of the Notice to Proceed, the Contractor shall provide Shop Drawings showing the proposed temporary barrier system and confirming that it conforms to 853.40: General and will meet the allowable deflection requirements as described in 853.41: Deflection.

If anchors are proposed, the means, methods, pattern, placement, and materials for anchoring and subsequent pavement and/or deck repairs following removal of the temporary barrier system shall be included in the Shop Drawing submittal. If the use of an anchor system is rejected by the Department, the Contractor shall select an unanchored system that meets or exceeds the contract specified performance requirements, at no additional cost.

Shop Drawings for proprietary barrier systems shall include manufacturer's instructions for installation.

CONSTRUCTION METHODS**853.60: General**

A Traffic Management Plan approved by the Department is required prior to the installation of the temporary barrier system.

The Contractor shall install temporary barrier systems in accordance with the Plans.

Barrier ends shall not be exposed to approaching traffic during installation. Crashworthy shielding or attenuation shall be provided at all times.

Proprietary temporary barrier systems shall be installed per the manufacturer's instructions.

The Contractor shall not place any breaks in the temporary barrier system that will result in sections that are shorter than the tested minimum length-of-need (LON) under MASH Test 2-11 (for TL-2) or 3-11 (for TL-3). Exceptions shall be allowed for gate systems or changeable length segments placed over expansion joints, if those barrier segment types have been determined to be crashworthy per MASH.

Temporary barrier shall not be placed on unpaved surfaces, unless otherwise shown in the Plans.

The Contractor shall not store materials, vehicles, or other equipment within the measured dynamic deflection envelope, as defined in 853.41: Deflection.

853.61: Temporary Barrier Removed and Reset

Temporary Barrier Removed and Reset consists of relocating a string of temporary barrier from one alignment to another to support the sequence and phasing of construction, as shown in the Plans.

Temporary Barrier Removed and Reset does not include moving all or a portion of the temporary barrier system to gain access to a work area, for the convenience of the Contractor, or to realign units that have moved due to construction activities or a traffic incident.

853.62: Quality Control Inspection

After temporary barrier installation is completed, the Contractor shall perform a Quality Control (QC) Inspection in the presence of the Engineer. QC Inspection activities shall include, but are not limited to the following reviews:

- Installation location per the approved Plans.
- Alignment and connection mechanism between adjacent barrier segments.
- Alignment and connection mechanism between barrier segment and attenuator, if present.
- Anchor system installation, if present.

For proprietary barrier systems, the QC Inspection shall also include any manufacturer-specific inspection details or criteria found in the installation instructions.

Work behind the barrier shall not commence until the QC Inspection has been accepted by the Engineer.

COMPENSATION

853.80: Method of Measurement

Temporary Barrier will be measured by the foot installed, in place.

Temporary Barrier Removed and Reset will be measured by the foot removed and reset.

853.81: Basis of Payment

Temporary Barrier will be paid for at the contract unit price per foot which shall provide full compensation for fabrication, storage, transport, furnishment, installation, delineation, alignment, maintenance, repair, and final removal of the temporary barrier.

Temporary Barrier Removed and Reset will be paid for at the contract unit price per foot which shall provide full compensation for removing, relocating, transporting, and installing new anchorage (if used). If more than one accepted temporary barrier system is approved for use in a single contract, the unit cost for Temporary Barrier Removed and Reset shall not differ among systems.

All costs associated with fabrication, installation, and maintenance of temporary barrier delineators shall be considered incidental to the cost of the item.

All costs associated with Shop Drawings and COCs shall be considered incidental to the item.

All costs associated with patching or repairing the road surface or bridge deck due to the installation and removal of temporary barrier and/or anchors for a temporary barrier system shall be considered incidental to the cost of the item.

853.82: Payment Items

Item number	Description	Unit
853.2	Temporary Barrier (TL-2)	Foot
853.21	Temporary Barrier Removed and Reset	Foot
853.23	Temporary Barrier (TL-3)	Foot
853.33	Temporary Barrier – Limited Deflection (TL-3)	Foot

SECTION 900: STRUCTURES

SUBSECTION 902: ULTA HIGH PERFORMANCE CONCRETE

Subsection 902.32: Mockup

In Table 902.32-1 change the Link Slab width to 2 ft – 0 in. and change the Joint Header width to 0 ft – 6 in.

Subsection 902.32: - 902.38

Renumber section 902.32 Surface Preparation to 902.33 Surface Preparation and renumber section 902.33 through 902.38 to 902.34 through 902.39.

DIVISION III

MATERIALS SPECIFICATIONS

SECTION M2: AGGREGATES AND RELATED MATERIALS

Subsection M2.01.0 Crushed Stone

Replace the fourth paragraph and the associated asterisk notes with the following;

The crushed stone shall have a maximum 45% wear as determined by the Los Angeles Abrasion Test (AASHTO T 96)

SECTION M5: PIPE, CULVERT SECTIONS AND CONDUIT

Subsection M5.01.0 Joint Materials for Pipe

Replace this subsection with the following:

- Jute or oakum furnished for use in pipe joints shall be of an accepted grade approved for common usage.
- Mortar shall conform to the requirements of M4.04.0: Cementitious Grout, Mortar and Concrete Products
- Standard couplers as approved by the manufacturer shall be used to join corrugated metal pipe
- Rubber ring or plastic gaskets for concrete pipe joints, or manholes section joints shall be of tough, flexible, chemical-resistant material, and of such size and shape as to ensure satisfactory pipe joints when incorporated in the work and shall conform to AWWA C153.
- Rubber gasket joints for ductile iron pipe shall be Styrene-Butadiene Rubber (SBR), Ethylene Propylene Diene Monomer (EPDM) or Nitrile and conform to AWWA C111

Subsection M5.05.03.B Gate Valves

Replace this subsection with the following:

Gate valves shall conform to the requirements of AWWA Standard C500 and/or to the type used by the municipality as specified in the Special Provisions.

SECTION M7: PAINTS, PROTECTIVE COATINGS AND PAVEMENT MARKINGS

Subsection M7.01.04 Fast Drying White and Yellow Waterborne Traffic Paint

Replace the subsection with the following:

Approved waterborne traffic paint shall be tested in accordance with AASHTO M 348 and be listed on the QCML. The dry paint film shall be under the Toxicity Characteristic Leaching Procedure (TCLP) limits for all contaminants listed in 40 CFR 261.24. The markings shall be installed using reflective glass beads meeting the requirements of M7.01.07. For waterborne yellow paint use Organic Yellow No. 65 or No. 75 pigment.

SECTION M9: MISCELLANEOUS MATERIALS

Subsection M9.12.0 Reflectors for Barriers

Delete this subsection.

SECTION M10: TRAFFIC CONTROL DEVICES

Subsection M10.16.0: Temporary Barrier

Subsection M10.16.1: Limited Deflection Temporary Barrier

Subsection M10.16.2: Delineators for Temporary Barrier

Add these new subsections.

DOCUMENT 00718

SPECIAL PROVISION FOR PARTICIPATION BY MINORITY OR WOMEN'S BUSINESS ENTERPRISES
AND SERVICE- DISABLED VETERAN- OWNED BUSINESS ENTERPRISES(Implementing Chapter 102, Section 24 and
Chapter 273, Section 124, of the Acts of 1994 and Chapter 56, Sections 1 to 5 of the Acts of 2010
and subsequent Acts)

Revised: September 27, 2021

I. PARTICIPATION

M/WBE PARTICIPATION GOAL

On this Contract, the Massachusetts Department of Transportation (MassDOT) has established a goal for participation by Minority or Women Business Enterprise(s) (M/WBE). One half of the goal shall be met in the form of contractor activity. This goal shall remain in effect throughout the life of the Contract.

☒ Design-Bid-Build Projects: M/WBE Participation Goal 0 %
(One half of this goal shall be met in the form of Subcontractor construction activity)

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

SDVOBE PARTICIPATION BENCHMARK

On this Contract, the Massachusetts Department of Transportation (MassDOT) has established a goal for participation by Service- Disabled Veteran- Owned Business Enterprise(s) (SDVOBE). This goal shall remain in effect throughout the life of the Contract.

☐ Design-Bid-Build Projects: SDVOBE Participation Goal %

☐ Design-Build Projects: SDVOBE Design Participation Goal % and SDVOBE
Construction Participation Goal %

II. POLICY

It is the policy of the MassDOT that Minority, Women Business Enterprises (M/WBEs) and Service- Disabled Veteran- Owned Business Enterprises (SDVOBEs) have equal opportunity to receive and participate in the performance of its state funded Contracts.

III. M/WBE and SDVOBE OBLIGATION

The Contractor agrees to take all necessary and reasonable steps to ensure that MBE, WBE, and SDVOBEs have the maximum opportunity to compete for, and to perform, Department Contracts.

IV. FAILURE TO COMPLY WITH M/WBE OR SDVOBE REQUIREMENTS

All Contractors and Subcontractors are hereby advised that failure to carry out the requirements of these Provisions constitutes a breach of Contract which may result in termination of the Contract, a determination that the Contractor or Subcontractor be barred from bidding on Department Contracts for up to three (3) years, or any other remedy as the Department may impose under Section XIV of these Special Provisions.

V. REQUIRED SUBCONTRACT PROVISIONS

The Prime Contractor shall include the Provisions of Sections II, III, and IV above in every subcontract making those provisions binding on each subcontractor, supplier, manufacturer, consultant or service provider.

VI. DEFINITIONS

For the purpose of these Special Provisions, the terms listed below are defined as follows:

Minority Business Enterprise or MBE means any individual, business organization, or non-profit corporation certified as a MBE by the Supplier Diversity Office (SDO), formerly known as the State Office of Minority and Women Business Assistance (SOMWBA), or by the Department for the purposes of a particular bid or proposal to be submitted to the Department.

Women Business Enterprise or WBE means any individual, business or organization, or non-profit corporation certified as a WBE by SDO, or by the Department for the purposes of a particular bid or proposal to be submitted to the Department.

Service- Disabled Veterans- Owned Businesses or SDVOBE means a business not less than 51 percent of which is owned by one or more service- disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and the management and daily business operations of which are controlled by one or more service- disabled veterans or, in the case of a veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

"Contractor activity" means any work, including but not limited to, construction, demolition, renovation, survey, test boring services, or maintenance work performed under the Contract.

"Approved Joint Venture" means a joint venture between M/WBEs and non-M/WBEs, or SDVOBEs and non-SDVOBEs, which has been established for the purpose of participation on a particular contract, where:

1. The M/WBE or SDVOBE partner(s) shares in the ownership, control, management responsibilities, risks and profits of the joint venture; and
2. The Joint Venture has been approved by the Department for M/WBE or SDVOBE participation on the particular contract.

"Equipment Rental Firm" means a firm that owns equipment and assumes actual and contractual responsibility to rent said equipment to perform a useful function of the work of the contract consistent with normal industry practice.

"Material Supplier" means a vendor engaged in sales to the highway construction industry from an established place of business or source of supply, which:

- (a) Manufactures goods from raw materials or substantially alters them before resale, or
- (b) Provides and maintains a storage facility for materials used in the work, consistent with normal industry practice.

"Department" means the Massachusetts Department of Transportation (MassDOT).

"SDO" means the Massachusetts Supplier Diversity Office.

VII. ELIGIBILITY of M/WBEs

Only firms, *OTHER THAN THE PRIME CONTRACTOR*, which have been certified by SDO and/or the Department as eligible to participate on state funded contracts as MBEs or WBEs may be used on this contract for credit toward the toward the M/WBE participation goal.

1. SDO Directory of Certified M/WBEs: The Supplier Diversity Office publishes a Directory of certified MBE and WBEs. This Directory can be obtained from SDO at <https://www.sdo.osd.state.ma.us/>. This site lists those firms which have been certified as minority owned (MBEs) or women owned (WBEs) in accordance with the criteria of 425 CMR 2.00 et seq to participate as M/WBEs on state funded contracts. It also lists the kinds of work in which each firm engages but does not constitute an endorsement of the quality or performance of any business and does not represent Department subcontractor approval.
2. Application for Certification by the Department for a Particular Project: A firm which has (1) submitted a fully completed M/WBE application to SDO at least 30 days previously, (2) has provided in a timely manner, any additional information which may have been requested by SDO, and (3) can provide evidence, satisfactory to the Department, of a bidder's conditional commitment to subcontract with the firm, if certified, may apply directly to the MassDOT Office of Civil Rights to be certified for participation on the particular contract.
3. Joint Venture Approval: To obtain recognition as an approved joint venture between M/WBEs and non-M/WBEs, the Joint Venture must provide to the MassDOT Office of Civil Rights, at least 14 business days before the bid opening date, the Joint Venture Affidavit Document B00847, and a copy of the Joint Venture Agreement, which shall include a detailed breakdown of the following:
 - (a) Capital participation by the M/WBE,
 - (b) Specific equipment to be provided to the Joint Venture by the M/WBE,
 - (c) Specific responsibilities of the M/WBE in the management of the Joint Venture,
 - (d) Workforce and specific skills to be provided to the Joint Venture by the M/WBE, and
 - (e) Percentage distribution to the M/WBE of the projected profit or loss incurred by the Joint Venture.
 - (f) The Joint Venture shall provide all such additional information as may be requested by the Department for the purpose of determining joint venture eligibility.

VIII. ELIGIBILITY of SDVOBEs

Only firms, *OTHER THAN THE PRIME CONTRACTOR*, which have demonstrated that they are listed as a service-disabled veteran- owned small businesses within the VetBiz database may be used on this contract for credit toward the SDVOBE participation goal.

1. VetBiz Database: The website, located at www.VetBiz.gov, listing verified service- disabled veteran- owned businesses.
2. Joint Venture Approval: To obtain recognition as an approved joint venture between SDVOBEs and non-SDVOBEs, the joint venture must provide to the MassDOT Office of Civil Rights, at least 14 business days before the bid opening date, an application for joint venture participation approval, and a copy of the Joint Venture Agreement, which shall include a detailed breakdown of the following:
 - (a) Capital participation by the SDVOBE,
 - (b) Specific equipment to be provided to the joint venture by the SDVOBE,
 - (c) Specific responsibilities of the SDVOBE in the management of the Joint Venture,
 - (d) Workforce and specific skills to be provided to the joint venture by the SDVOBE, and

- (e) Percentage distribution to the SDVOBE of the projected profit or loss incurred by the Joint Venture.
- (f) The Joint Venture shall provide all such additional information as may be requested by the Department for the purpose of determining joint venture eligibility.

IX. COUNTING M/WBE PARTICIPATION AND SDVOBE BENCHMARKS TOWARDS M/WBE AND SDVOBE GOALS

In order for M/WBE participation and SDVOBE benchmarks to count toward the Contract goal, the M/WBE and SDVOBE must have independently managed, supervised and performed the Contract work with its own workforce, equipment and resources. M/WBE and SDVOBE participation which fulfills these requirements shall be counted toward meeting the M/WBE and SDVOBE goals in accordance with the following rules:

- 1 If a firm has been determined to be an eligible MBE, WBE or SDVOBE, the total dollar value of the contract performed by the M/WBE or SDVOBE is counted toward the applicable goal as follows:
 - a. Except as provided below, in Section IX (1)(g), work performed by a M/WBE or a SDVOBE Prime Contractor shall not be counted toward the M/WBE or SDVOBE goal, and all Prime Contractors, including M/WBE or SDVOBE Prime Contractors, must comply with the M/WBE and SDVOBE requirements of this Contract.
 - b. For a M/WBE or SDVOBE material supplier, sixty percent (60%) of the amount to be paid for materials and supplies required under this Contract shall be credited toward the goal.
 - c. For a M/WBE or SDVOBE who provides a bonafide service such as professional, technical, consultant or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, or supplies required for performance of the contract, reasonable fees or commissions charged for the service shall be listed, but the cost of items themselves shall not be credited.
 - d. For a M/WBE or SDVOBE hauler, trucker, or delivery service, which is not also the manufacturer of or a regular dealer in the materials and supplies, reasonable fees charged for delivery of materials and supplies required on the job site shall be credited; the cost of the materials and supplies themselves shall not be credited.
 - e. For a M/WBE or SDVOBE who provides any bonds or insurance specifically required for the performance of the contract, reasonable fees or commissions charged for such service shall be listed, but the face amount or actual premium paid for the bond or insurance shall not be credited.
 - f. The Department shall determine if the fees or commissions listed in accordance with paragraphs (c), (d), and (e) are not excessive as compared with fees or commissions customarily allowed for similar services.
 - g. That portion of the contract total dollar value equal to the percentage of ownership and control of the M/WBE partner(s) or SDVOBE partner(s) in an approved Joint Venture shall be counted toward the Contract goal, except that credit for M/WBE and SDVOBE participation in an approved Prime Joint Venture shall not exceed one half of the Contract goal.

X. JOINT CHECK POLICY

1. 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 M/WBE or SDVOBE third party such as a regular dealer of material or supplies. The Prime Contractor issues the check as payor to the M/WBE or SDVOBE 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 M/WBE or SDVOBE. MassDOT has established criteria to ensure that M/WBEs or SDVOBEs are in fact performing a commercially useful function ("CUF") while using a joint check arrangement. Contractors and M/WBEs or SDVOBEs must meet and conform to these conditions and criteria governing the use of joint checks.

2. In the event that a Contractor, M/WBE or SDVOBE Subcontractor desires to use a joint check, MassDOT will require prior notice and will closely monitor the arrangement for compliance. MassDOT may allow a joint check arrangement and give credit to a Contractor for use of the M/WBE or SDVOBE 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 (M/WBEs, SDVOBE and non-M/WBEs or non-SDVOBEs); 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 M/WBE or SDVOBE (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.
3. Other factors MassDOT may consider:
 - Whether there is a requirement by the Prime Contractor that a M/WBE or SDVOBE should use a specific vendor or supplier to meet their Subcontractor specifications;
 - Whether there is a requirement that a M/WBE or SDVOBE use the Prime Contractor's negotiated price;
 - The independence of the M/WBE or SDVOBE;
 - 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 M/WBE or SDVOBE has made an effort to establish alternate arrangements for following periods (i.e., the M/WBE or SDVOBE 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 M/WBE or SDVOBE remain responsible for compliance with all other elements of the Special Provisions, and must still be able to prove that a commercially useful function is being performed for the Contractor.

XI. JOINT CHECK PROCEDURES

- The M/WBE or SDVOBE 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 B00846) and by notification on the M/WBE Letter of Intent (Document B00843) or SDVOBE Letter of Intent (Document B00845), 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 Contractor and M/WBE or SDVOBE must have:
 - (a) a written agreement with the material supplier/vendor;
 - (b) applied for credit with the subject material supplier and has supplied the vendor's response;

- (c) shown that it will place all orders to the subject material supplier/vendor;
 - (d) made and retains all decision-making responsibilities concerning the materials; and
 - (e) provided a Joint Check Agreement that is acceptable to MassDOT;
- The MassDOT Office of Civil Rights will review the request and render a decision as part of the approval process for M/WBE or SDVOBE 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 M/WBE or SDVOBE 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 M/WBE or SDVOBE (i.e. if possible, funds or the joint check should be processed by the M/WBE or SDVOBE and sent by the M/WBE or SDVOBE 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 M/WBE or SDVOBE 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 M/WBE or SDVOBE Program policies and procedures as part of the Subcontractor approval process.

XII. AWARD DOCUMENTATION AND PROCEDURES

1. The two lowest bidders/the two bidders with the lowest price per quality score point, including any M/WBE bidder or SDVOBE bidder, shall submit, by the close of business on the third business day after the bid opening, a completed Schedule of M/WBE and SDVOBE participation, in the form attached, which shall list:
 - a. The full company name, address and telephone number of each M/WBE or SDVOBE with whom the bidder intends to make a commitment;
 - b. The Contract item(s), by number(s) and quantity(ies), if applicable, or specific description of other business activity to be performed by each M/WBE or SDVOBE 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 Section XII of these Special Provisions.
 - c. The total dollar amount to be paid to each M/WBE or SDVOBE. (Bidders are cautioned that at least one half of the participation goal must be met with Contract work.)
 - d. The total dollar amount to be paid to each M/WBE or SDVOBE which is eligible for credit toward the M/WBE or SDVOBE goal under the crediting rules set out in Section IX.
 - e. The total creditable M/WBE or SDVOBE participation as a percentage of the total bid price.
2. All firms listed on the Schedule must be currently certified.
3. The two lowest bidders/the two bidders with the lowest price per quality score point shall submit with their Schedules of Participation, fully completed, signed Letters of Intent from each of the M/WBEs or SDVOBEs listed on the Schedule. The Letters of Intent shall be in the form attached and shall identify specifically the contract activity the M/WBE or SDVOBE proposes to perform, expressed as contract item number, if applicable, description of the activity, 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.

4. Evidence of good faith efforts will be evaluated by the Department in the selection of the lowest responsible bidder/best value bidder. All information requested by the Department for the purpose of evaluating the bidder's efforts to achieve the goal must be provided within three calendar days and must be accurate and complete in every detail. The apparent low bidder's/best value bidder's attainment of the M/WBE or SDVOBE goal or a satisfactory demonstration of good faith efforts is a prerequisite for Award of the Contract.
5. 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 on the Schedule of Participation, and provide the required Letters of Intent for, M/WBE or SDVOBE 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 the Department, that good faith efforts were made to achieve the goal.
6. If the Department finds that the percentage of M/WBE or SDVOBE participation submitted by the bidder on its Schedule does not meet the Contract goal, or that the 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 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.
7. If, after administrative reconsideration, the Department 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.
8. Actions which constitute evidence of good faith efforts to meet the M/WBE or SDVOBE goals include, but are not limited to, all of the following examples:
 - a. Efforts made to select portions of the work proposed to be performed by M/WBEs or SDVOBEs in order to increase the likelihood of achieving the stated goal, including, where appropriate, but not limited to, breaking down contracts into economically feasible units to facilitate M/WBE and SDVOBE participation. The value of such work is required to at least equal the M/WBE and SDVOBE goal.
 - b. Reasonable written notification prior to the opening of bids soliciting individual M/WBEs or SDVOBEs interested in participation in the contract as subcontractors, regular dealers, manufacturers, consultants, or service providers and identifying the specific items or type of work being solicited.
 - c. Written notification to M/WBE or SDVOBE economic development assistance agencies and organizations which provide assistance in recruitment and placement of M/WBEs and SDVOBEs, describing the type of work, supplies or services being considered for M/WBE or SDVOBE subcontracting on this contract.
 - d. Efforts made to negotiate with M/WBEs or SDVOBEs for specific items of work including evidence of:
 - (1) The names, addresses, telephone numbers of M/WBEs or SDVOBEs who were contacted, the dates of initial contact and whether initial solicitations of interest were followed up by contacts with M/WBEs or SDVOBEs to determine with certainty whether the M/WBEs or SDVOBEs were interested. Personal or phone contacts are expected.
 - (2) A description of the information provided by the M/WBEs or SDVOBEs regarding the plans and specifications and estimated quantities for portions of the work to be performed.
 - (3) A statement of why additional agreements with M/WBEs or SDVOBEs were not reached.
 - (4) Documentation of each M/WBE or SDVOBE contacted but rejected and the reasons for the rejection.
 - e. Absence of any agreements between the Contractor and the M/WBE or SDVOBE in which M/WBE or SDVOBE promises not to provide subcontracting quotations to other bidders.
 - f. Efforts made to assist the M/WBEs or SDVOBEs that need assistance in obtaining bonding, insurance, or lines of credit required by the Contractor.

- g. Documentation that qualified M/WBEs or SDVOBEs are not available, or are not interested.
 - h. Attendance at any meeting scheduled by the Department to encourage better Contractor-M/WBE or Contractor- SDVOBE relationships and/or to inform M/WBEs or SDVOBEs of forthcoming M/WBE or SDVOBE utilization opportunities.
 - i. Advertisement, in general circulation media, in trade association publications and in disadvantaged business enterprise-focused media, of interest in utilizing M/WBEs or SDVOBEs and the area of interest.
 - j. Efforts to effectively use the services of available minority community organizations; women organizations, veteran organizations, minority, women disadvantaged and veteran contractor's groups; local, state and federal disadvantaged business assistance offices; and other organizations that provide assistance in recruitment and placement of M/WBEs or SDVOBEs.
9. The demonstration of good faith efforts must establish that the Contractor has actively and aggressively sought out M/WBEs or SDVOBEs to participate in the project and has taken all actions which could be reasonably expected to achieve the goal. Examples of circumstances or actions not acceptable as reasons for failure to meet the M/WBE or SDVOBE goal, include, but are not limited to:
- a. The M/WBE or SDVOBE was unable to provide performance and/or payment bonds.
 - b. The M/WBEs or SDVOBEs commercially reasonable bid was rejected based on price.
 - c. The M/WBE or SDVOBE would not agree to perform items of work at the unit bid price.
 - d. The Contractor does not want to subcontract a percentage of the work sufficient to meet the goal.
 - e. Solicitation by mail or fax only.

XIII. COMPLIANCE

- 1. All activity performed by a M/WBE or SDVOBE for credit toward the Contract goal must be performed, managed and supervised by the M/WBE or SDVOBE. Prime Contractor shall not enter into, or condone, any other arrangement.
- 2. The Prime Contractor shall not perform with its own organization, or assign to any other business, any activity designated for the M/WBEs or SDVOBEs named on the Schedule submitted by the Prime Contractor under Section IX, or under Section XII(6), without the approval of the Department in accordance with the requirements of Sections XIII(6) and XIII(10).
- 3. The Department may suspend payment for any activity which was not performed by the M/WBE or SDVOBE to whom the activity was committed on the approved Schedule of Participation, or which was not performed in accordance with the requirements of Section XIII(1).
- 4. The Department retains the right to approve or disapprove all subcontractors. Requests by the Prime Contractor for approval of participation by a M/WBE or SDVOBE subcontractor for credit toward the Contract goal must include, in addition to any other requirements for subcontractor approval, the following:
 - a. A copy of the proposed subcontract. The subcontract must be for at least the dollar amount, and for the work described, in the Prime Contractor's Schedule of Participation.
 - b. A resume stating the qualifications and experience of the M/WBE or SDVOBE 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.
 - c. A Schedule of Operations indicating when the M/WBE or SDVOBE is expected to perform the work.

- d. A list of (1) equipment owned by the M/WBE or SDVOBE to be used on the Project, and (2) equipment to be leased by the M/WBE or SDVOBE for use on the Project.
 - e. A list of: (1) all projects (public and private) which the M/WBE or SDVOBE is currently performing, (2) all projects (public and private) to which the M/WBE or SDVOBE is committed, (3) all projects (public and private) to which the M/WBE or SDVOBE 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 M/WBEs or SDVOBEs work schedule for each project.
5. If, pursuant to the subcontractor approval process, the Department finds that a M/WBE or SDVOBE subcontractor does not have sufficient experience or resources to perform, manage and supervise work of the kind proposed in accordance with the requirements of Section XIII(1), approval of the M/WBE or SDVOBE subcontractor may be denied. In the event of such denial, the Prime Contractor shall proceed in accordance with the requirements of Sections XIII(6) and XIII(10).
 6. If, for reasons beyond its control, the Prime Contractor cannot comply with its M/WBE or SDVOBE commitment in accordance with the Schedule of participation submitted under Section IX and the terms of these Special Provisions, the Prime Contractor shall submit to the Department the reasons for its inability to comply with its obligations under Section I and shall submit, and request approval for, a revised Schedule of Participation. If approved by the Department, the revised Schedule shall govern the Prime Contractor's performance in meeting its obligations under these special provisions.
 7. A Prime Contractor's compliance with the participation goal in Section I shall be determined by reference to the required percentage of the total Contract price, including any additions and modifications thereto, provided, however, that no decrease in the dollar amount of a bidder's commitment to any M/WBE or SDVOBE shall be allowed without the approval of the Department.
 8. If the Contract amount is increased, the Prime Contractor shall submit a revised Schedule of Participation in accordance with Sections XIII(6) and XIII(10).
 9. In the event of the decertification of a M/WBE or SDVOBE participating or scheduled to participate on the contract for credit toward the goal, the Contractor shall proceed in accordance with Sections XIII(6) and XIII(10).
 10. The Prime Contractor shall notify the Department immediately of any facts which come to its attention indicating that it may or will be unable to comply with any aspect of its M/WBE or SDVOBE obligation under this Contract.
 11. Any notice required by these Special Provisions shall be given in writing to the Resident Engineer and the district designated Compliance Officer with a copy to the Director of Compliance, Office of Diversity and Civil Rights, 10 Park Plaza, Room 3170, Boston MA 02116.
 12. The Prime Contractor and its subcontractors shall comply with the Department's Electronic Reporting System Requirements (Contract Document 00821) and submit all information required by the Department related to the M/WBE Special Provisions and SDVOBE Special Provisions through the Equitable Business Opportunity Solution (EBO). The Department reserves the right to request reports in the format it deems necessary anytime during the performance of the Contract.
 13. The Contractor shall pay each M/WBE or SDVOBE for satisfactory performance of its Contract no later than 10 days from receipt of payment for the work from the Department. Any delay or postponement of payment to the M/WBEs or SDVOBEs must be for good cause and only with the prior approval of the Department.
 14. The Department may withhold the Contractor's next periodic payment if each M/WBE or SDVOBE is not paid in accordance with Section XIII(13).
 15. The Department may require specific performance of the Prime Contractor's commitment under the Contract by requiring the Prime Contractor to subcontract with a M/WBE or SDVOBE for any contract or specialty item.

XIV. SANCTIONS

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

1. Retain, in connection with final acceptance and final payment, an amount determined by multiplying the total contract amount by the percentage in Section I, less the amount paid to approved M/WBEs or SDVOBEs for work performed under the Contract in accordance with the provisions of Section X. The Prime Contractor shall have the right to appeal such retention of funds in accordance with the provisions of M.G.L. c. 30A s.10.
2. 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.
3. 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 5.07.
4. Initiate debarment proceedings under M.G.L. c.29 §29F.

XV. FURTHER INFORMATION

Any proposed M/WBE, SDVOBE, bidder, Contractor or subcontractor shall provide such information as is necessary in the judgement of the Department to ascertain its compliance with the terms of this Special Provision.

XVI. LIST OF ADDITIONAL DOCUMENTS

1. The following documents shall be completed and signed by the bidder and designated M/WBEs or SDVOBEs in accordance with Section XII - Award Documentation and Procedures. These documents must be returned by the bidder to MassDOT's Bid Document Distribution Center:
 - ☐ Schedule of M/WBEs (Document B00842) or SDVOBE Participation (Document B00844)
 - ☐ Letter of Intent: M/WBEs (Document B00843) or SDVOBE (Document B00845)
 - ☐ M/WBEs or SDVOBE Joint Check Arrangement Approval Form (Document B00846), if Contractor and M/WBE or SDVOBE plan, or if M/WBE or SDVOBE is required to use a Joint Check (when applicable)
2. The following document shall be signed and returned by Contractor and Subcontractors/M/WBEs or SDVOBEs 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 (M/WBEs or SDVOBEs and non-M/WBEs or SDVOBEs alike)).
3. 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:
 - ☐ Joint Venture Affidavit of M/WBE or SDVOBE/Non-M/WBE or Non-SDVOBE (Document B00847)
4. 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)

** END OF DOCUMENT **

DOCUMENT 00761

**SPECIAL PROVISIONS FOR CERTIFICATION REGARDING DEBARMENT,
SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION**

Revised: 02/09/16

I. Instructions for Certification - Primary Covered Transactions:

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

1. 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 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 MassDOT's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
2. The certification in this clause is a material representation of fact upon which reliance was placed when the MassDOT determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available, the MassDOT may terminate this transaction for cause of default.
3. The prospective primary participant shall provide immediate written notice to the MassDOT if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the MassDOT for assistance in obtaining a copy of those regulations.
5. The prospective primary 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 MassDOT.
6. The prospective primary 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 Transaction," provided by the MassDOT, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. 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 may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration and the Debarment Lists compiled by both the Massachusetts Office of the Attorney General and the Department of Capital Asset Management and Maintenance (DCAMM) and published separately in the Central Register.
8. 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.
9. Except for transactions authorized under paragraph 5 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, the MassDOT may terminate this transaction for cause or default.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -- Primary Covered Transactions

The prospective primary 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 covered transactions by any Federal, State or local department or agency;
2. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgement 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;
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 2 of this certification; and
4. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

II. Instructions for Certification - Lower Tier Covered Transactions:

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

1. 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 the MassDOT may pursue available remedies, including suspension and/or debarment.
2. 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.
3. The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the MassDOT for assistance in obtaining a copy of those regulations.
4. 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 MassDOT.
5. 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.
6. 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 may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List and the Debarment Lists.

7. 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.
8. Except for transactions authorized under paragraph 4 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, the MassDOT may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions

The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal, State or local department or agency.

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

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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

August 14, 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	\$0.55
2	ASTM A27 (AASHTO M103) Steel Castings, H-Pile Points & Pipe Pile Shoes (See Note below.)	\$0.76
3	ASTM A668 / A668M (AASHTO M102) Steel Forgings	\$0.76
4	ASTM A108 (AASHTO M169) Steel Forgings for Shear Studs	\$0.78
5	ASTM A709/A709M Grade 36 / AASHTO M270M/M270 Grade 36 or 250 Structural Steel Plate	\$0.82
6	ASTM A709/A709M Grade 36 / AASHTO M270M/M270 Grade 36 or 250 Structural Steel Shapes	\$0.77
7	ASTM A709/A709M Grade 50 / AASHTO M270M/M270 Grade 50 or 345 Structural Steel Plate	\$0.82
8	ASTM A709/A709M Grade 50 / AASHTO M270M/M270 Grade 50 or 345 Structural Steel Shapes	\$0.77
9	ASTM A709/A709M Grade 50WT / AASHTO M270M/M270 Grade 50WT or 345WT Structural Steel Plate	\$0.85
10	ASTM A709/A709M Grade 50WT / AASHTO M270M/M270 Grade 50WT or 345WT Structural Steel Shapes	\$0.78
11	ASTM A709/A709M Grade 50W / AASHTO M270M/M270 Grade 50W 345W Structural Steel Plate	\$0.85
12	ASTM A709/A709M Grade 50W / AASHTO M270M/M270 Grade 50W or 345W Structural Steel Shapes	\$0.78
13	ASTM A709/A709M Grade HPS 50W / AASHTO M270M/M270 Grade HPS 50W or 345W Structural Steel Plate	\$0.89
14	ASTM A709/A709M Grade HPS 70W / AASHTO M270M/M270 Grade HPS 70W or 485W Structural Steel Plate	\$0.96
15	ASTM A514/A514M-05 Grade HPS 100W / AASHTO M270M/M270 Grade HPS 100W or 690W Structural Steel Plate	\$1.47
16	ASTM A992/A992M Grade 50S / AASHTO M270M/M270 Grade 50S or 345S Structural Steel Plate	\$0.85
17	ASTM A992/A992M Grade 50S / AASHTO M270M/M270 Grade 50S or 345S Structural Steel Shapes	\$0.78
18	ASTM A276 Type 316 Stainless Steel	\$4.42
19	ASTM A240 Type 316 Stainless Steel	\$4.42
20	ASTM A148 Grade 80/50 Steel Castings (See Note below.)	\$1.52
21	ASTM A53 Grade B Structural Steel Pipe	\$0.96
22	ASTM A500 Grades A, B, 36 & 50 Structural Steel Pipe	\$0.96
23	ASTM A252, Grades 240 (36 KSI) & 414 (60 KSI) Pipe Pile	\$0.76
24	ASTM 252, Grade 2 Permanent Steel Casing	\$0.76
25	ASTM A36 (AASHTO M183) for H-piles, steel supports and sign supports	\$0.80
26	ASTM A328 / A328M, Grade 50 (AASHTO M202) Steel Sheetpiling	\$1.45
27	ASTM A572 / A572M, Grade 50 Sheetpiling	\$1.45
28	ASTM A36/36M, Grade 50	\$0.82
29	ASTM A570, Grade 50	\$0.80
30	ASTM A572 (AASHTO M223), Grade 50 H-Piles	\$0.82
31	ASTM A1085 Grade A (50 KSI) Steel Hollow Structural Sections (HSS), heat-treated per ASTM A1085 Supplement S1	\$0.96
32	AREA 140 LB Rail and Track Accessories	\$0.50

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.

*** END OF DOCUMENT ***

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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: 132093 Project No. 613752 Federal Aid No.: NFALocation: TAUNTONProject Description: Bridge Preservation, T-01-058, Bay Street over Interstate 495

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.
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: _____

Estimated Start Date: _____

Estimated Completion Date: _____

Estimated Dollar Amount: _____

(Authorized Signature)

(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 weeks 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:	TAUNTON
Contract Number:	132093		
Description of Work:	TAUNTON – Bridge Preservation, T-01-058 (3YF), Bay Street over Interstate 495		
Job Location:	Bay Street over Interstate 495		

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	1/1/2024	\$117.16	\$10.08	\$11.62	\$12.67	\$0.00	\$151.53
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 1)							
For apprentice rates see "Apprentice- PILE DRIVER"							
AIR TRACK OPERATOR	6/1/2025	\$41.09	\$9.90	\$9.25	\$9.11	\$0.00	\$69.35
LABORERS	12/1/2025	\$42.47	\$9.90	\$9.25	\$9.11	\$0.00	\$70.73
LABORERS - ZONE 2	6/1/2026	\$43.91	\$9.90	\$9.25	\$9.11	\$0.00	\$72.17
	12/1/2026	\$45.35	\$9.90	\$9.25	\$9.11	\$0.00	\$73.61
	6/1/2027	\$46.80	\$9.90	\$9.25	\$9.11	\$0.00	\$75.06
	12/1/2027	\$48.25	\$9.90	\$9.25	\$9.11	\$0.00	\$76.51
	6/1/2028	\$49.75	\$9.90	\$9.25	\$9.11	\$0.00	\$78.01
	12/1/2028	\$51.25	\$9.90	\$9.25	\$9.11	\$0.00	\$79.51
For apprentice rates see "Apprentice- LABORER"							
AIR TRACK OPERATOR (HEAVY & HIGHWAY)	6/1/2025	\$41.09	\$9.90	\$9.25	\$9.21	\$0.00	\$69.45
LABORERS	12/1/2025	\$42.47	\$9.90	\$9.25	\$9.21	\$0.00	\$70.83
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$43.91	\$9.90	\$9.25	\$9.21	\$0.00	\$72.27
	12/1/2026	\$45.35	\$9.90	\$9.25	\$9.21	\$0.00	\$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
ASBESTOS WORKER (PIPES & TANKS)	6/1/2025	\$43.80	\$14.50	\$4.30	\$6.75	\$0.00	\$69.35
HEAT & FROST INSULATORS LOCAL 6	12/1/2025	\$44.80	\$14.50	\$4.30	\$6.75	\$0.00	\$70.35
HEAT & FROST INSULATORS LOCAL 6 (SOUTHERN MASS)							
ASPHALT RAKER	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.11	\$0.00	\$68.85
LABORERS	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.11	\$0.00	\$70.23
LABORERS - ZONE 2	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.11	\$0.00	\$71.67
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.11	\$0.00	\$73.11

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	6/1/2027	\$46.30	\$9.90	\$9.25	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.75	\$9.90	\$9.25	\$9.11	\$0.00	\$76.01
	6/1/2028	\$49.25	\$9.90	\$9.25	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.75	\$9.90	\$9.25	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
ASPHALT RAKER (HEAVY & HIGHWAY)	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.21	\$0.00	\$68.95
LABORERS	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.21	\$0.00	\$70.33
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.21	\$0.00	\$71.77
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.21	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE	6/1/2025	\$58.33	\$15.55	\$13.25	\$3.25	\$0.00	\$90.38
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.78	\$15.55	\$13.25	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$61.08	\$15.55	\$13.25	\$3.25	\$0.00	\$93.13
	12/1/2026	\$62.53	\$15.55	\$13.25	\$3.25	\$0.00	\$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
BACKHOE/FRONT-END LOADER	6/1/2025	\$58.33	\$15.55	\$13.25	\$3.25	\$0.00	\$90.38
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.78	\$15.55	\$13.25	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$61.08	\$15.55	\$13.25	\$3.25	\$0.00	\$93.13
	12/1/2026	\$62.53	\$15.55	\$13.25	\$3.25	\$0.00	\$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
BARCO-TYPE JUMPING TAMPER	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.11	\$0.00	\$68.85
LABORERS	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.11	\$0.00	\$70.23
LABORERS - ZONE 2	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.11	\$0.00	\$71.67
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.11	\$0.00	\$73.11
	6/1/2027	\$46.30	\$9.90	\$9.25	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.75	\$9.90	\$9.25	\$9.11	\$0.00	\$76.01
	6/1/2028	\$49.25	\$9.90	\$9.25	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.75	\$9.90	\$9.25	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
BLOCK PAVER, RAMMER / CURB SETTER	6/1/2025	\$41.09	\$9.90	\$9.25	\$9.11	\$0.00	\$69.35
LABORERS	12/1/2025	\$42.47	\$9.90	\$9.25	\$9.11	\$0.00	\$70.73
LABORERS - ZONE 2	6/1/2026	\$43.91	\$9.90	\$9.25	\$9.11	\$0.00	\$72.17
	12/1/2026	\$45.35	\$9.90	\$9.25	\$9.11	\$0.00	\$73.61
	6/1/2027	\$46.80	\$9.90	\$9.25	\$9.11	\$0.00	\$75.06
	12/1/2027	\$48.25	\$9.90	\$9.25	\$9.11	\$0.00	\$76.51
	6/1/2028	\$49.75	\$9.90	\$9.25	\$9.11	\$0.00	\$78.01
	12/1/2028	\$51.25	\$9.90	\$9.25	\$9.11	\$0.00	\$79.51
For apprentice rates see "Apprentice- LABORER"							
BLOCK PAVER, RAMMER / CURB SETTER (HEAVY & HIGHWAY)	6/1/2025	\$41.09	\$9.90	\$9.25	\$9.21	\$0.00	\$69.45
LABORERS	12/1/2025	\$42.47	\$9.90	\$9.25	\$9.21	\$0.00	\$70.83
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$43.91	\$9.90	\$9.25	\$9.21	\$0.00	\$72.27
	12/1/2026	\$45.35	\$9.90	\$9.25	\$9.21	\$0.00	\$73.71
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)	8/1/2025	\$65.81	\$11.49	\$15.57	\$7.33	\$0.00	\$100.20
BRICKLAYERS LOCAL 3	2/1/2026	\$67.16	\$11.49	\$15.57	\$7.33	\$0.00	\$101.55
BRICKLAYERS LOCAL 3 (FOXBORO)	8/1/2026	\$69.36	\$11.49	\$15.57	\$7.33	\$0.00	\$103.75
	2/1/2027	\$70.76	\$11.49	\$15.57	\$7.33	\$0.00	\$105.15

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	\$32.91	\$11.49	\$15.57	\$7.33	\$0.00	\$67.30
2	60.00	\$39.49	\$11.49	\$15.57	\$7.33	\$0.00	\$73.88
3	70.00	\$46.07	\$11.49	\$15.57	\$7.33	\$0.00	\$80.46
4	80.00	\$52.65	\$11.49	\$15.57	\$7.33	\$0.00	\$87.04
5	90.00	\$59.23	\$11.49	\$15.57	\$7.33	\$0.00	\$93.62

Apprentice: BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING)**Effective Date: 2/1/2026**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$33.58	\$11.49	\$15.57	\$7.33	\$0.00	\$67.97
2	60.00	\$40.30	\$11.49	\$15.57	\$7.33	\$0.00	\$74.69
3	70.00	\$47.01	\$11.49	\$15.57	\$7.33	\$0.00	\$81.40
4	80.00	\$53.73	\$11.49	\$15.57	\$7.33	\$0.00	\$88.12
5	90.00	\$60.44	\$11.49	\$15.57	\$7.33	\$0.00	\$94.83

BULLDOZER/GRADER/SCRAPER	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
CAISSON & UNDERPINNING BOTTOM MAN LABORERS LABORERS - FOUNDATION AND MARINE	6/1/2025	\$48.85	\$9.90	\$9.25	\$9.80	\$0.00	\$77.80
	12/1/2025	\$50.35	\$9.90	\$9.25	\$9.80	\$0.00	\$79.30
	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 LABORERS LABORERS - FOUNDATION AND MARINE	6/1/2025	\$47.70	\$9.90	\$9.25	\$9.80	\$0.00	\$76.65
	12/1/2025	\$49.20	\$9.90	\$9.25	\$9.80	\$0.00	\$78.15
	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 LABORERS LABORERS - FOUNDATION AND MARINE	6/1/2025	\$48.03	\$9.90	\$9.25	\$9.80	\$0.00	\$76.98
	12/1/2025	\$49.53	\$9.90	\$9.25	\$9.80	\$0.00	\$78.48
	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 LABORERS LABORERS - ZONE 2	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.11	\$0.00	\$68.85
	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.11	\$0.00	\$70.23
	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.11	\$0.00	\$71.67
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.11	\$0.00	\$73.11
	6/1/2027	\$46.30	\$9.90	\$9.25	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.75	\$9.90	\$9.25	\$9.11	\$0.00	\$76.01
	6/1/2028	\$49.25	\$9.90	\$9.25	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.75	\$9.90	\$9.25	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
CARPENTER CARPENTERS CARPENTERS -ZONE 2 (Eastern Massachusetts)	3/1/2025	\$49.62	\$9.83	\$11.47	\$8.50	\$0.00	\$79.42
	9/1/2025	\$50.87	\$9.83	\$11.47	\$8.50	\$0.00	\$80.67
	3/1/2026	\$52.12	\$9.83	\$11.47	\$8.50	\$0.00	\$81.92
	9/1/2026	\$53.37	\$9.83	\$11.47	\$8.50	\$0.00	\$83.17
	3/1/2027	\$54.62	\$9.83	\$11.47	\$8.50	\$0.00	\$84.42

Apprentice: CARPENTER							
Effective Date: 3/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$22.33	\$9.83	\$0.00	\$1.73	\$0.00	\$33.89
2	45.00	\$22.33	\$9.83	\$0.00	\$1.73	\$0.00	\$33.89
3	55.00	\$27.29	\$9.83	\$0.00	\$3.40	\$0.00	\$40.52
4	55.00	\$27.29	\$9.83	\$0.00	\$3.40	\$0.00	\$40.52
5	70.00	\$34.73	\$9.83	\$11.41	\$5.10	\$0.00	\$61.07
6	70.00	\$34.73	\$9.83	\$11.41	\$5.10	\$0.00	\$61.07
7	80.00	\$39.70	\$9.83	\$11.44	\$6.80	\$0.00	\$67.77
8	80.00	\$39.70	\$9.83	\$11.44	\$6.80	\$0.00	\$67.77

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	\$22.89	\$9.83	\$0.00	\$1.73	\$0.00	\$34.45
2	45.00	\$22.89	\$9.83	\$0.00	\$1.73	\$0.00	\$34.45
3	55.00	\$27.98	\$9.83	\$0.00	\$3.40	\$0.00	\$41.21
4	55.00	\$27.98	\$9.83	\$0.00	\$3.40	\$0.00	\$41.21
5	70.00	\$35.61	\$9.83	\$11.41	\$5.10	\$0.00	\$61.95
6	70.00	\$35.61	\$9.83	\$11.41	\$5.10	\$0.00	\$61.95
7	80.00	\$40.70	\$9.83	\$11.44	\$6.80	\$0.00	\$68.77
8	80.00	\$40.70	\$9.83	\$11.44	\$6.80	\$0.00	\$68.77
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	\$49.19	\$13.35	\$16.43	\$7.78	\$1.80	\$88.55

Construction

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

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

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$24.60	\$13.35	\$16.43	\$0.00	\$0.00	\$54.38
2	60.00	\$29.51	\$13.35	\$16.43	\$2.78	\$1.80	\$63.87
3	65.00	\$31.97	\$13.35	\$16.43	\$3.78	\$1.80	\$67.33
4	70.00	\$34.43	\$13.35	\$16.43	\$4.78	\$1.80	\$70.79
5	75.00	\$36.89	\$13.35	\$16.43	\$5.78	\$1.80	\$74.25
6	80.00	\$39.35	\$13.35	\$16.43	\$6.78	\$1.80	\$77.71
7	90.00	\$44.27	\$13.35	\$16.43	\$7.78	\$1.80	\$83.63

CHAIN SAW OPERATOR	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.11	\$0.00	\$68.85
LABORERS	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.11	\$0.00	\$70.23
LABORERS - ZONE 2	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.11	\$0.00	\$71.67
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.11	\$0.00	\$73.11
	6/1/2027	\$46.30	\$9.90	\$9.25	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.75	\$9.90	\$9.25	\$9.11	\$0.00	\$76.01
	6/1/2028	\$49.25	\$9.90	\$9.25	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.75	\$9.90	\$9.25	\$9.11	\$0.00	\$79.01

For apprentice rates see "Apprentice- LABORER"

CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES	6/1/2025	\$59.51	\$15.55	\$13.25	\$3.25	\$0.00	\$91.56
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$60.98	\$15.55	\$13.25	\$3.25	\$0.00	\$93.03
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$62.31	\$15.55	\$13.25	\$3.25	\$0.00	\$94.36
	12/1/2026	\$63.79	\$15.55	\$13.25	\$3.25	\$0.00	\$95.84

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

COMPRESSOR OPERATOR	6/1/2025	\$37.52	\$15.55	\$13.25	\$3.25	\$0.00	\$69.57
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$38.47	\$15.55	\$13.25	\$3.25	\$0.00	\$70.52
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$39.33	\$15.55	\$13.25	\$3.25	\$0.00	\$71.38
	12/1/2026	\$40.28	\$15.55	\$13.25	\$3.25	\$0.00	\$72.33

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 2							

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

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate																																																
Apprentice: DELEADER (BRIDGE) Effective Date: 1/1/2025 <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>65.00</td><td>\$38.00</td><td>\$9.95</td><td>\$0.00</td><td>\$7.87</td><td>\$0.00</td><td>\$55.82</td></tr><tr><td>5</td><td>70.00</td><td>\$40.92</td><td>\$9.95</td><td>\$11.85</td><td>\$8.47</td><td>\$0.00</td><td>\$71.19</td></tr><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	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
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate																																																
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																																																
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 2	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 2	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	\$48.50	\$9.90	\$9.25	\$9.65	\$0.00	\$77.30																																																
LABORERS	12/1/2025	\$50.00	\$9.90	\$9.25	\$9.65	\$0.00	\$78.80																																																
LABORERS - ZONE 2	6/1/2026	\$51.55	\$9.90	\$9.25	\$9.65	\$0.00	\$80.35																																																
	12/7/2026	\$53.05	\$9.90	\$9.25	\$9.65	\$0.00	\$81.85																																																
	6/7/2027	\$54.65	\$9.90	\$9.25	\$9.65	\$0.00	\$83.45																																																
	12/6/2027	\$56.25	\$9.90	\$9.25	\$9.65	\$0.00	\$85.05																																																
	6/5/2028	\$57.93	\$9.90	\$9.25	\$9.65	\$0.00	\$86.73																																																
	12/4/2028	\$59.60	\$9.90	\$9.25	\$9.65	\$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 2	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"																																																							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
DEMO: JACKHAMMER OPERATOR	6/2/2025	\$48.50	\$9.90	\$9.25	\$9.65	\$0.00	\$77.30
LABORERS	12/1/2025	\$50.00	\$9.90	\$9.25	\$9.65	\$0.00	\$78.80
LABORERS - ZONE 2	6/1/2026	\$51.55	\$9.90	\$9.25	\$9.65	\$0.00	\$80.35
	12/7/2026	\$53.05	\$9.90	\$9.25	\$9.65	\$0.00	\$81.85
	6/7/2027	\$54.65	\$9.90	\$9.25	\$9.65	\$0.00	\$83.45
	12/6/2027	\$56.25	\$9.90	\$9.25	\$9.65	\$0.00	\$85.05
	6/5/2028	\$57.93	\$9.90	\$9.25	\$9.65	\$0.00	\$86.73
	12/4/2028	\$59.60	\$9.90	\$9.25	\$9.65	\$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 2	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"							
DIRECTIONAL DRILL MACHINE OPERATOR	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
DIVER	8/1/2024	\$78.11	\$10.08	\$11.62	\$10.04	\$0.00	\$109.85
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 1)							
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	\$55.79	\$10.08	\$11.62	\$12.67	\$0.00	\$90.16
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 1)							
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 1)							
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 1)							
For apprentice rates see "Apprentice- PILE DRIVER"							
DRAWBRIDGE OPERATOR (Construction)	7/1/2020	\$26.77	\$6.67	\$3.93	\$0.00	\$0.16	\$37.53
DRAWBRIDGE - SEIU LOCAL 888							
DRAWBRIDGE - SEIU LOCAL 888							
ELECTRICIAN	9/1/2024	\$50.02	\$12.00	\$14.22	\$3.50	\$0.00	\$79.74
ELECTRICIANS LOCAL 223	9/1/2025	\$52.25	\$12.25	\$14.86	\$3.75	\$0.00	\$83.11
ELECTRICIANS LOCAL 223							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	9/1/2026	\$54.72	\$12.50	\$15.56	\$4.00	\$0.00	\$86.78

Apprentice: ELECTRICIAN**Effective Date: 9/1/2024**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	\$20.01	\$12.00	\$0.60	\$0.00	\$0.00	\$32.61
2	45.00	\$22.51	\$12.00	\$0.68	\$0.00	\$0.00	\$35.19
3	50.00	\$25.01	\$12.00	\$0.75	\$0.00	\$0.00	\$37.76
4	55.00	\$27.51	\$12.00	\$6.34	\$2.25	\$0.00	\$48.10
5	60.00	\$30.01	\$12.00	\$6.90	\$2.25	\$0.00	\$51.16
6	65.00	\$32.51	\$12.00	\$7.49	\$2.25	\$0.00	\$54.25
7	70.00	\$35.01	\$12.00	\$8.05	\$2.25	\$0.00	\$57.31
8	75.00	\$37.52	\$12.00	\$8.64	\$2.25	\$0.00	\$60.41

Apprentice: ELECTRICIAN**Effective Date: 9/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	\$20.90	\$12.25	\$0.63	\$0.00	\$0.00	\$33.78
2	45.00	\$23.51	\$12.25	\$0.71	\$0.00	\$0.00	\$36.47
3	50.00	\$26.13	\$12.25	\$0.78	\$0.00	\$0.00	\$39.16
4	55.00	\$28.74	\$12.25	\$6.61	\$2.50	\$0.00	\$50.10
5	60.00	\$31.35	\$12.25	\$7.21	\$2.50	\$0.00	\$53.31
6	65.00	\$33.96	\$12.25	\$7.82	\$2.50	\$0.00	\$56.53
7	70.00	\$36.58	\$12.25	\$8.41	\$2.50	\$0.00	\$59.74
8	75.00	\$39.19	\$12.25	\$9.02	\$2.50	\$0.00	\$62.96

ELEVATOR CONSTRUCTOR	1/1/2022	\$65.62	\$16.03	\$10.71	\$9.50	\$0.00	\$101.86
ELEVATOR CONSTRUCTORS LOCAL 4							
ELEVATOR CONSTRUCTORS LOCAL 4							

Apprentice: ELEVATOR CONSTRUCTOR**Effective Date: 1/1/2022**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$32.81	\$16.03	\$0.00	\$0.00	\$0.00	\$48.84
2	55.00	\$36.09	\$16.03	\$10.71	\$9.50	\$0.00	\$72.33
3	65.00	\$42.65	\$16.03	\$10.71	\$9.50	\$0.00	\$78.89
4	70.00	\$45.93	\$16.03	\$10.71	\$9.50	\$0.00	\$82.17
5	80.00	\$52.50	\$16.03	\$10.71	\$9.50	\$0.00	\$88.74

ELEVATOR CONSTRUCTOR HELPER	1/1/2022	\$45.93	\$16.03	\$10.71	\$9.50	\$0.00	\$82.17
ELEVATOR CONSTRUCTORS LOCAL 4							
ELEVATOR CONSTRUCTORS LOCAL 4							

For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
FENCE & GUARD RAIL ERECTOR (HEAVY & HIGHWAY)	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.21	\$0.00	\$68.95
LABORERS	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.21	\$0.00	\$70.33
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.21	\$0.00	\$71.77
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.21	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
FIELD ENG.INST.PERSON-BLDG,SITE,HVY/HWY	5/1/2025	\$53.22	\$15.30	\$13.15	\$3.25	\$0.00	\$84.92
OPERATING ENGINEERS LOCAL 4	11/1/2025	\$54.51	\$15.30	\$13.15	\$3.25	\$0.00	\$86.21
OPERATING ENGINEERS LOCAL 4	5/1/2026	\$55.95	\$15.30	\$13.15	\$3.25	\$0.00	\$87.65
	11/1/2026	\$57.24	\$15.30	\$13.15	\$3.25	\$0.00	\$88.94
	5/1/2027	\$58.67	\$15.30	\$13.15	\$3.25	\$0.00	\$90.37
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY	5/1/2025	\$54.82	\$15.30	\$13.15	\$3.25	\$0.00	\$86.52
OPERATING ENGINEERS LOCAL 4	11/1/2025	\$56.12	\$15.30	\$13.15	\$3.25	\$0.00	\$87.82
OPERATING ENGINEERS LOCAL 4	5/1/2026	\$57.57	\$15.30	\$13.15	\$3.25	\$0.00	\$89.27
	11/1/2026	\$58.87	\$15.30	\$13.15	\$3.25	\$0.00	\$90.57
	5/1/2027	\$60.32	\$15.30	\$13.15	\$3.25	\$0.00	\$92.02
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIELD ENG.ROD PERSON-BLDG,SITE,HVY/HWY	5/1/2025	\$26.22	\$15.30	\$13.15	\$3.25	\$0.00	\$57.92
OPERATING ENGINEERS LOCAL 4	11/1/2025	\$26.98	\$15.30	\$13.15	\$3.25	\$0.00	\$58.68
OPERATING ENGINEERS LOCAL 4	5/1/2026	\$27.83	\$15.30	\$13.15	\$3.25	\$0.00	\$59.53
	11/1/2026	\$28.59	\$15.30	\$13.15	\$3.25	\$0.00	\$60.29
	5/1/2027	\$29.44	\$15.30	\$13.15	\$3.25	\$0.00	\$61.14
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIRE ALARM INSTALLER	9/1/2024	\$50.02	\$12.00	\$14.22	\$3.50	\$0.00	\$79.74
ELECTRICIANS LOCAL 223	9/1/2025	\$52.25	\$12.25	\$14.86	\$3.75	\$0.00	\$83.11
ELECTRICIANS LOCAL 223	9/1/2026	\$54.72	\$12.50	\$15.56	\$4.00	\$0.00	\$86.78
For apprentice rates see "Apprentice- ELECTRICIAN"							
FIRE ALARM REPAIR / MAINTENANCE	9/1/2024	\$50.02	\$12.00	\$14.22	\$3.50	\$0.00	\$79.74
/ COMMISSIONING	9/1/2025	\$52.25	\$12.25	\$14.86	\$3.75	\$0.00	\$83.11
ELECTRICIANS LOCAL 223	9/1/2026	\$54.72	\$12.50	\$15.56	\$4.00	\$0.00	\$86.78
For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"							
FIREMAN (ASST. ENGINEER)	6/1/2025	\$47.02	\$15.55	\$13.25	\$3.25	\$0.00	\$79.07
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$48.19	\$15.55	\$13.25	\$3.25	\$0.00	\$80.24
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$49.25	\$15.55	\$13.25	\$3.25	\$0.00	\$81.30
	12/1/2026	\$50.43	\$15.55	\$13.25	\$3.25	\$0.00	\$82.48
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FLAGGER & SIGNALER (HEAVY & HIGHWAY)	6/1/2025	\$28.09	\$9.90	\$9.25	\$9.21	\$0.00	\$56.45
LABORERS	12/1/2025	\$28.09	\$9.90	\$9.25	\$9.21	\$0.00	\$56.45
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$29.21	\$9.90	\$9.25	\$9.21	\$0.00	\$57.57
	12/1/2026	\$29.21	\$9.90	\$9.25	\$9.21	\$0.00	\$57.57
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
FLOORCOVERER	3/1/2024	\$49.47	\$8.83	\$11.47	\$8.80	\$0.00	\$78.57

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
FLOORCOVERERS LOCAL 2168							
FLOORCOVERERS LOCAL 2168 ZONE II							

Apprentice: FLOORCOVERER**Effective Date: 3/1/2024**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$24.74	\$8.83	\$0.00	\$1.76	\$0.00	\$35.33
2	55.00	\$27.21	\$8.83	\$0.00	\$1.76	\$0.00	\$37.80
3	60.00	\$29.68	\$8.83	\$0.00	\$3.52	\$0.00	\$42.03
4	65.00	\$32.16	\$8.83	\$0.00	\$3.52	\$0.00	\$44.51
5	70.00	\$34.63	\$8.83	\$11.47	\$5.28	\$0.00	\$60.21
6	75.00	\$37.10	\$8.83	\$11.47	\$5.28	\$0.00	\$62.68
7	80.00	\$39.58	\$8.83	\$11.47	\$7.04	\$0.00	\$66.92
8	85.00	\$42.05	\$8.83	\$11.47	\$7.04	\$0.00	\$69.39

FORK LIFT/CHERRY PICKER	6/1/2025	\$58.33	\$15.55	\$13.25	\$3.25	\$0.00	\$90.38
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.78	\$15.55	\$13.25	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$61.08	\$15.55	\$13.25	\$3.25	\$0.00	\$93.13
	12/1/2026	\$62.53	\$15.55	\$13.25	\$3.25	\$0.00	\$94.58

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GENERATOR/LIGHTING PLANT/HEATERS	6/1/2025	\$37.52	\$15.55	\$13.25	\$3.25	\$0.00	\$69.57
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$38.47	\$15.55	\$13.25	\$3.25	\$0.00	\$70.52
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$39.33	\$15.55	\$13.25	\$3.25	\$0.00	\$71.38
	12/1/2026	\$40.28	\$15.55	\$13.25	\$3.25	\$0.00	\$72.33

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)	6/1/2020	\$39.18	\$10.80	\$6.70	\$3.75	\$0.00	\$60.43
GLAZIERS LOCAL 1333							
GLAZIERS LOCAL 1333							

Apprentice: GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)**Effective Date: 6/1/2020**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$19.59	\$10.80	\$1.50	\$0.30	\$0.00	\$32.19
2	56.25	\$22.04	\$10.80	\$1.50	\$0.30	\$0.00	\$34.64
3	62.50	\$24.49	\$10.80	\$1.95	\$0.50	\$0.00	\$37.74
4	68.75	\$26.94	\$10.80	\$1.95	\$0.50	\$0.00	\$40.19
5	75.00	\$29.39	\$10.80	\$2.50	\$0.65	\$0.00	\$43.34
6	81.25	\$31.83	\$10.80	\$2.50	\$0.65	\$0.00	\$45.78
7	87.50	\$34.28	\$10.80	\$6.70	\$3.75	\$0.00	\$55.53
8	93.75	\$36.73	\$10.80	\$6.70	\$3.75	\$0.00	\$57.98

HOISTING ENGINEER/CRANES/GRADALLS	6/1/2025	\$58.33	\$15.55	\$13.25	\$3.25	\$0.00	\$90.38
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.78	\$15.55	\$13.25	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$61.08	\$15.55	\$13.25	\$3.25	\$0.00	\$93.13

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	12/1/2026	\$62.53	\$15.55	\$13.25	\$3.25	\$0.00	\$94.58

Apprentice: HOISTING ENGINEER/CRANES/GRADALLS**Effective Date: 6/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	\$32.08	\$0.00	\$0.00	\$0.00	\$0.00	\$32.08
2	60.00	\$35.00	\$15.55	\$13.25	\$3.25	\$0.00	\$67.05
3	65.00	\$37.91	\$15.55	\$13.25	\$3.25	\$0.00	\$69.96
4	70.00	\$40.83	\$15.55	\$13.25	\$3.25	\$0.00	\$72.88
5	75.00	\$43.75	\$15.55	\$13.25	\$3.25	\$0.00	\$75.80
6	80.00	\$46.66	\$15.55	\$13.25	\$3.25	\$0.00	\$78.71
7	85.00	\$49.58	\$15.55	\$13.25	\$3.25	\$0.00	\$81.63
8	90.00	\$52.50	\$15.55	\$13.25	\$3.25	\$0.00	\$84.55

Apprentice: HOISTING ENGINEER/CRANES/GRADALLS**Effective Date: 12/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	\$32.88	\$0.00	\$0.00	\$0.00	\$0.00	\$32.88
2	60.00	\$35.87	\$15.55	\$13.25	\$3.25	\$0.00	\$67.92
3	65.00	\$38.86	\$15.55	\$13.25	\$3.25	\$0.00	\$70.91
4	70.00	\$41.85	\$15.55	\$13.25	\$3.25	\$0.00	\$73.90
5	75.00	\$44.84	\$15.55	\$13.25	\$3.25	\$0.00	\$76.89
6	80.00	\$47.82	\$15.55	\$13.25	\$3.25	\$0.00	\$79.87
7	85.00	\$50.81	\$15.55	\$13.25	\$3.25	\$0.00	\$82.86
8	90.00	\$53.80	\$15.55	\$13.25	\$3.25	\$0.00	\$85.85

HVAC (DUCTWORK)	8/1/2025	\$60.98	\$14.91	\$18.74	\$9.53	\$2.98	\$107.14
SHEETMETAL WORKERS LOCAL 17	2/1/2026	\$62.93	\$14.91	\$18.74	\$9.53	\$2.98	\$109.09
SHEETMETAL WORKERS LOCAL 17 - A							

For apprentice rates see "Apprentice- SHEET METAL WORKER"

HVAC (ELECTRICAL CONTROLS)	9/1/2024	\$50.02	\$12.00	\$14.22	\$3.50	\$0.00	\$79.74
ELECTRICIANS LOCAL 223	9/1/2025	\$52.25	\$12.25	\$14.86	\$3.75	\$0.00	\$83.11
ELECTRICIANS LOCAL 223	9/1/2026	\$54.72	\$12.50	\$15.56	\$4.00	\$0.00	\$86.78

For apprentice rates see "Apprentice- ELECTRICIAN"

HVAC (TESTING AND BALANCING - AIR)	8/1/2025	\$60.98	\$14.91	\$18.74	\$9.53	\$2.98	\$107.14
SHEETMETAL WORKERS LOCAL 17	2/1/2026	\$62.93	\$14.91	\$18.74	\$9.53	\$2.98	\$109.09
SHEETMETAL WORKERS LOCAL 17 - A							

For apprentice rates see "Apprentice- SHEET METAL WORKER"

HVAC (TESTING AND BALANCING -WATER)	8/26/2024	\$52.49	\$10.80	\$16.80	\$4.60	\$0.00	\$84.69
PLUMBERS & PIPEFITTERS LOCAL 51	8/25/2025	\$55.24	\$10.80	\$16.80	\$4.60	\$0.00	\$87.44
PLUMBERS & PIPEFITTERS LOCAL 51							

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

HVAC MECHANIC	8/26/2024	\$52.49	\$10.80	\$16.80	\$4.60	\$0.00	\$84.69

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
PLUMBERS & PIPEFITTERS LOCAL 51	8/25/2025	\$55.24	\$10.80	\$16.80	\$4.60	\$0.00	\$87.44
PLUMBERS & PIPEFITTERS LOCAL 51							

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

HYDRAULIC DRILLS	6/1/2025	\$41.09	\$9.90	\$9.25	\$9.11	\$0.00	\$69.35
LABORERS	12/1/2025	\$42.47	\$9.90	\$9.25	\$9.11	\$0.00	\$70.73
LABORERS - ZONE 2	6/1/2026	\$43.91	\$9.90	\$9.25	\$9.11	\$0.00	\$72.17
	12/1/2026	\$45.35	\$9.90	\$9.25	\$9.11	\$0.00	\$73.61
	6/1/2027	\$46.80	\$9.90	\$9.25	\$9.11	\$0.00	\$75.06
	12/1/2027	\$48.25	\$9.90	\$9.25	\$9.11	\$0.00	\$76.51
	6/1/2028	\$49.75	\$9.90	\$9.25	\$9.11	\$0.00	\$78.01
	12/1/2028	\$51.25	\$9.90	\$9.25	\$9.11	\$0.00	\$79.51

For apprentice rates see "Apprentice- LABORER"

HYDRAULIC DRILLS (HEAVY & HIGHWAY)	6/1/2025	\$41.09	\$9.90	\$9.25	\$9.21	\$0.00	\$69.45
LABORERS	12/1/2025	\$42.47	\$9.90	\$9.25	\$9.21	\$0.00	\$70.83
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$43.91	\$9.90	\$9.25	\$9.21	\$0.00	\$72.27
	12/1/2026	\$45.35	\$9.90	\$9.25	\$9.21	\$0.00	\$73.71

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

INSULATOR (PIPES & TANKS)	9/1/2024	\$51.23	\$14.75	\$9.52	\$10.09	\$0.00	\$85.59
HEAT & FROST INSULATORS LOCAL 6	9/1/2025	\$54.31	\$14.75	\$9.52	\$10.09	\$0.00	\$88.67
HEAT & FROST INSULATORS LOCAL 6 (SOUTHERN MASS)	9/1/2026	\$57.38	\$14.75	\$9.52	\$10.09	\$0.00	\$91.74

Apprentice: INSULATOR (PIPES & TANKS)**Effective Date: 9/1/2024**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$25.62	\$14.75	\$9.27	\$5.05	\$0.00	\$54.69
2	60.00	\$30.74	\$14.75	\$9.32	\$6.05	\$0.00	\$60.86
3	70.00	\$35.86	\$14.75	\$9.37	\$7.06	\$0.00	\$67.04
4	80.00	\$40.98	\$14.75	\$9.42	\$8.07	\$0.00	\$73.22

Apprentice: INSULATOR (PIPES & TANKS)**Effective Date: 9/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$27.16	\$14.75	\$9.27	\$5.05	\$0.00	\$56.23
2	60.00	\$32.59	\$14.75	\$9.32	\$6.05	\$0.00	\$62.71
3	70.00	\$38.02	\$14.75	\$9.37	\$7.06	\$0.00	\$69.20
4	80.00	\$43.45	\$14.75	\$9.42	\$8.07	\$0.00	\$75.69

IRONWORKER/WELDER	3/16/2021	\$42.46	\$7.70	\$12.10	\$5.00	\$0.00	\$67.26
IRONWORKERS LOCAL 37							
IRONWORKERS LOCAL 37							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: IRONWORKER/WELDER Effective Date: 3/16/2021							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	70.00	\$29.72	\$7.70	\$12.10	\$5.00	\$0.00	\$54.52
2	75.00	\$31.85	\$7.70	\$12.10	\$5.00	\$0.00	\$56.65
3	80.00	\$33.97	\$7.70	\$12.10	\$5.00	\$0.00	\$58.77
4	85.00	\$36.09	\$7.70	\$12.10	\$5.00	\$0.00	\$60.89
5	90.00	\$38.21	\$7.70	\$12.10	\$5.00	\$0.00	\$63.01
6	95.00	\$40.34	\$7.70	\$12.10	\$5.00	\$0.00	\$65.14
JACKHAMMER & PAVING BREAKER OPERATOR	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.11	\$0.00	\$68.85
LABORERS	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.11	\$0.00	\$70.23
LABORERS - ZONE 2	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.11	\$0.00	\$71.67
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.11	\$0.00	\$73.11
	6/1/2027	\$46.30	\$9.90	\$9.25	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.75	\$9.90	\$9.25	\$9.11	\$0.00	\$76.01
	6/1/2028	\$49.25	\$9.90	\$9.25	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.75	\$9.90	\$9.25	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
LABORER	6/1/2025	\$40.34	\$9.90	\$9.25	\$9.11	\$0.00	\$68.60
LABORERS	12/1/2025	\$41.72	\$9.90	\$9.25	\$9.11	\$0.00	\$69.98
LABORERS - ZONE 2	6/1/2026	\$43.16	\$9.90	\$9.25	\$9.11	\$0.00	\$71.42
	12/1/2026	\$44.60	\$9.90	\$9.25	\$9.11	\$0.00	\$72.86
	6/1/2027	\$46.05	\$9.90	\$9.25	\$9.11	\$0.00	\$74.31
	12/1/2027	\$47.50	\$9.90	\$9.25	\$9.11	\$0.00	\$75.76
	6/1/2028	\$49.00	\$9.90	\$9.25	\$9.11	\$0.00	\$77.26
	12/1/2028	\$50.50	\$9.90	\$9.25	\$9.11	\$0.00	\$78.76
Apprentice: LABORER Effective Date: 6/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$24.20	\$9.90	\$9.25	\$9.11	\$0.00	\$52.46
2	70.00	\$28.24	\$9.90	\$9.25	\$9.11	\$0.00	\$56.50
3	80.00	\$32.27	\$9.90	\$9.25	\$9.11	\$0.00	\$60.53
4	90.00	\$36.31	\$9.90	\$9.25	\$9.11	\$0.00	\$64.57
Apprentice: LABORER Effective Date: 12/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$25.03	\$9.90	\$9.25	\$9.11	\$0.00	\$53.29
2	70.00	\$29.20	\$9.90	\$9.25	\$9.11	\$0.00	\$57.46

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	\$33.38	\$9.90	\$9.25	\$9.11	\$0.00	\$61.64
4	90.00	\$37.55	\$9.90	\$9.25	\$9.11	\$0.00	\$65.81
LABORER (HEAVY & HIGHWAY)	6/1/2025	\$40.34	\$9.90	\$9.25	\$9.21	\$0.00	\$68.70
LABORERS	12/1/2025	\$41.72	\$9.90	\$9.25	\$9.21	\$0.00	\$70.08
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$43.16	\$9.90	\$9.25	\$9.21	\$0.00	\$71.52
	12/1/2026	\$44.60	\$9.90	\$9.25	\$9.21	\$0.00	\$72.96
Apprentice: LABORER (HEAVY & HIGHWAY) Effective Date: 6/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$24.20	\$9.90	\$9.25	\$9.21	\$0.00	\$52.56
2	70.00	\$28.24	\$9.90	\$9.25	\$9.21	\$0.00	\$56.60
3	80.00	\$32.27	\$9.90	\$9.25	\$9.21	\$0.00	\$60.63
4	90.00	\$36.31	\$9.90	\$9.25	\$9.21	\$0.00	\$64.67
Apprentice: LABORER (HEAVY & HIGHWAY) Effective Date: 12/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$25.03	\$9.90	\$9.25	\$9.21	\$0.00	\$53.39
2	70.00	\$29.20	\$9.90	\$9.25	\$9.21	\$0.00	\$57.56
3	80.00	\$33.38	\$9.90	\$9.25	\$9.21	\$0.00	\$61.74
4	90.00	\$37.55	\$9.90	\$9.25	\$9.21	\$0.00	\$65.91
LABORER: CARPENTER TENDER	6/1/2025	\$40.34	\$9.90	\$9.25	\$9.11	\$0.00	\$68.60
LABORERS	12/1/2025	\$41.72	\$9.90	\$9.25	\$9.11	\$0.00	\$69.98
LABORERS - ZONE 2	6/1/2026	\$43.16	\$9.90	\$9.25	\$9.11	\$0.00	\$71.42
	12/1/2026	\$44.60	\$9.90	\$9.25	\$9.11	\$0.00	\$72.86
	6/1/2027	\$46.05	\$9.90	\$9.25	\$9.11	\$0.00	\$74.31
	12/1/2027	\$47.50	\$9.90	\$9.25	\$9.11	\$0.00	\$75.76
	6/1/2028	\$49.00	\$9.90	\$9.25	\$9.11	\$0.00	\$77.26
	12/1/2028	\$50.50	\$9.90	\$9.25	\$9.11	\$0.00	\$78.76
For apprentice rates see "Apprentice- LABORER"							
LABORER: CEMENT FINISHER TENDER	6/1/2025	\$40.34	\$9.90	\$9.25	\$9.11	\$0.00	\$68.60
LABORERS	12/1/2025	\$41.72	\$9.90	\$9.25	\$9.11	\$0.00	\$69.98
LABORERS - ZONE 2	6/1/2026	\$43.16	\$9.90	\$9.25	\$9.11	\$0.00	\$71.42
	12/1/2026	\$44.60	\$9.90	\$9.25	\$9.11	\$0.00	\$72.86
	6/1/2027	\$46.05	\$9.90	\$9.25	\$9.11	\$0.00	\$74.31
	12/1/2027	\$47.50	\$9.90	\$9.25	\$9.11	\$0.00	\$75.76

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	6/1/2028	\$49.00	\$9.90	\$9.25	\$9.11	\$0.00	\$77.26
	12/1/2028	\$50.50	\$9.90	\$9.25	\$9.11	\$0.00	\$78.76
For apprentice rates see "Apprentice- LABORER"							
LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER LABORERS	6/2/2025	\$40.43	\$9.90	\$9.25	\$9.17	\$0.00	\$68.75
LABORERS - ZONE 2	12/1/2025	\$41.81	\$9.90	\$9.25	\$9.17	\$0.00	\$70.13
	6/1/2026	\$43.25	\$9.90	\$9.25	\$9.17	\$0.00	\$71.57
	12/7/2026	\$44.69	\$9.90	\$9.25	\$9.17	\$0.00	\$73.01
	6/7/2027	\$46.14	\$9.90	\$9.25	\$9.17	\$0.00	\$74.46
	12/6/2027	\$47.59	\$9.90	\$9.25	\$9.17	\$0.00	\$75.91
	6/5/2028	\$49.09	\$9.90	\$9.25	\$9.17	\$0.00	\$77.41
	12/4/2028	\$50.59	\$9.90	\$9.25	\$9.17	\$0.00	\$78.91
For apprentice rates see "Apprentice- LABORER"							
LABORER: MASON TENDER LABORERS	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.11	\$0.00	\$68.85
LABORERS - ZONE 2	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.11	\$0.00	\$70.23
	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.11	\$0.00	\$71.67
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.11	\$0.00	\$73.11
	6/1/2027	\$46.30	\$9.90	\$9.25	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.75	\$9.90	\$9.25	\$9.11	\$0.00	\$76.01
	6/1/2028	\$49.25	\$9.90	\$9.25	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.75	\$9.90	\$9.25	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
LABORER: MASON TENDER (HEAVY & HIGHWAY) LABORERS	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.21	\$0.00	\$68.95
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.21	\$0.00	\$70.33
	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.21	\$0.00	\$71.77
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.21	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
LABORER: MULTI-TRADE TENDER LABORERS	6/1/2025	\$40.34	\$9.90	\$9.25	\$9.11	\$0.00	\$68.60
LABORERS - ZONE 2	12/1/2025	\$41.72	\$9.90	\$9.25	\$9.11	\$0.00	\$69.98
	6/1/2026	\$43.16	\$9.90	\$9.25	\$9.11	\$0.00	\$71.42
	12/1/2026	\$44.60	\$9.90	\$9.25	\$9.11	\$0.00	\$72.86
	6/1/2027	\$46.05	\$9.90	\$9.25	\$9.11	\$0.00	\$74.31
	12/1/2027	\$47.50	\$9.90	\$9.25	\$9.11	\$0.00	\$75.76
	6/1/2028	\$49.00	\$9.90	\$9.25	\$9.11	\$0.00	\$77.26
	12/1/2028	\$50.50	\$9.90	\$9.25	\$9.11	\$0.00	\$78.76
For apprentice rates see "Apprentice- LABORER"							
LABORER: TREE REMOVER LABORERS	6/1/2025	\$40.34	\$9.90	\$9.25	\$9.11	\$0.00	\$68.60
LABORERS - ZONE 2	12/1/2025	\$41.72	\$9.90	\$9.25	\$9.11	\$0.00	\$69.98
	6/1/2026	\$43.16	\$9.90	\$9.25	\$9.11	\$0.00	\$71.42
	12/1/2026	\$44.60	\$9.90	\$9.25	\$9.11	\$0.00	\$72.86
	6/1/2027	\$46.05	\$9.90	\$9.25	\$9.11	\$0.00	\$74.31
	12/1/2027	\$47.50	\$9.90	\$9.25	\$9.11	\$0.00	\$75.76
	6/1/2028	\$49.00	\$9.90	\$9.25	\$9.11	\$0.00	\$77.26
	12/1/2028	\$50.50	\$9.90	\$9.25	\$9.11	\$0.00	\$78.76

This classification applies to the removal of standing trees, and the trimming and removal of branches and limbs when related to public works construction or site clearance incidental to construction . For apprentice rates see "Apprentice- LABORER"

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LASER BEAM OPERATOR	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.11	\$0.00	\$68.85
LABORERS	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.11	\$0.00	\$70.23
LABORERS - ZONE 2	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.11	\$0.00	\$71.67
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.11	\$0.00	\$73.11
	6/1/2027	\$46.30	\$9.90	\$9.25	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.75	\$9.90	\$9.25	\$9.11	\$0.00	\$76.01
	6/1/2028	\$49.25	\$9.90	\$9.25	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.75	\$9.90	\$9.25	\$9.11	\$0.00	\$79.01

For apprentice rates see "Apprentice- LABORER"

LASER BEAM OPERATOR (HEAVY & HIGHWAY)	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.21	\$0.00	\$68.95
LABORERS	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.21	\$0.00	\$70.33
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.21	\$0.00	\$71.77
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.21	\$0.00	\$73.21

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

MARBLE & TILE FINISHERS	8/1/2025	\$52.08	\$11.49	\$15.57	\$6.05	\$0.00	\$85.19
BRICKLAYERS LOCAL 3	2/1/2026	\$53.16	\$11.49	\$15.57	\$6.05	\$0.00	\$86.27
BRICKLAYERS LOCAL 3 - MARBLE & TILE	8/1/2026	\$54.92	\$11.49	\$15.57	\$6.05	\$0.00	\$88.03
	2/1/2027	\$56.04	\$11.49	\$15.57	\$6.05	\$0.00	\$89.15

Apprentice: MARBLE & TILE FINISHERS

Effective Date: 8/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$26.04	\$11.49	\$15.57	\$6.05	\$0.00	\$59.15
2	60.00	\$31.25	\$11.49	\$15.57	\$6.05	\$0.00	\$64.36
3	70.00	\$36.46	\$11.49	\$15.57	\$6.05	\$0.00	\$69.57
4	80.00	\$41.66	\$11.49	\$15.57	\$6.05	\$0.00	\$74.77
5	90.00	\$46.87	\$11.49	\$15.57	\$6.05	\$0.00	\$79.98

Apprentice: MARBLE & TILE FINISHERS

Effective Date: 2/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$26.58	\$11.49	\$15.57	\$6.05	\$0.00	\$59.69
2	60.00	\$31.90	\$11.49	\$15.57	\$6.05	\$0.00	\$65.01
3	70.00	\$37.21	\$11.49	\$15.57	\$6.05	\$0.00	\$70.32
4	80.00	\$42.53	\$11.49	\$15.57	\$6.05	\$0.00	\$75.64
5	90.00	\$47.84	\$11.49	\$15.57	\$6.05	\$0.00	\$80.95

MARBLE MASONS,TILELAYERS & TERRAZZO MECH	8/1/2025	\$67.97	\$11.49	\$15.57	\$7.99	\$0.00	\$103.02
BRICKLAYERS LOCAL 3	2/1/2026	\$69.32	\$11.49	\$15.57	\$7.99	\$0.00	\$104.37
BRICKLAYERS LOCAL 3 - MARBLE & TILE	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

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: MARBLE MASONS,TILELAYERS & TERRAZZO MECH 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
Apprentice: MARBLE MASONS,TILELAYERS & TERRAZZO MECH Effective Date: 2/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$34.66	\$11.49	\$15.57	\$7.99	\$0.00	\$69.71
2	60.00	\$41.59	\$11.49	\$15.57	\$7.99	\$0.00	\$76.64
3	70.00	\$48.52	\$11.49	\$15.57	\$7.99	\$0.00	\$83.57
4	80.00	\$55.46	\$11.49	\$15.57	\$7.99	\$0.00	\$90.51
5	90.00	\$62.39	\$11.49	\$15.57	\$7.99	\$0.00	\$97.44
MECH. SWEEPER OPERATOR (ON CONST. SITES)	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
MECHANICS MAINTENANCE	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
MILLWRIGHT (Zone 2)	1/6/2025	\$45.09	\$10.08	\$11.47	\$10.00	\$0.00	\$76.64
MILLWRIGHTS LOCAL 1121	1/5/2026	\$47.42	\$10.08	\$11.47	\$10.00	\$0.00	\$78.97
MILLWRIGHTS LOCAL 1121 - Zone 2							

Apprentice: MILLWRIGHT (Zone 2) Effective Date: 1/6/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	\$24.80	\$10.08	\$0.00	\$5.50	\$0.00	\$40.38
2	65.00	\$29.31	\$10.08	\$0.00	\$6.50	\$0.00	\$45.89
3	75.00	\$33.82	\$10.08	\$11.47	\$7.50	\$0.00	\$62.87
4	85.00	\$38.33	\$10.08	\$11.47	\$8.50	\$0.00	\$68.38

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: MILLWRIGHT (Zone 2) Effective Date: 1/5/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	\$26.08	\$10.08	\$0.00	\$5.50	\$0.00	\$41.66
2	65.00	\$30.82	\$10.08	\$0.00	\$6.50	\$0.00	\$47.40
3	75.00	\$35.57	\$10.08	\$11.47	\$7.50	\$0.00	\$64.62
4	85.00	\$40.31	\$10.08	\$11.47	\$8.50	\$0.00	\$70.36
MORTAR MIXER	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.11	\$0.00	\$68.85
LABORERS	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.11	\$0.00	\$70.23
LABORERS - ZONE 2	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.11	\$0.00	\$71.67
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.11	\$0.00	\$73.11
	6/1/2027	\$46.30	\$9.90	\$9.25	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.75	\$9.90	\$9.25	\$9.11	\$0.00	\$76.01
	6/1/2028	\$49.25	\$9.90	\$9.25	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.75	\$9.90	\$9.25	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
OILER (OTHER THAN TRUCK CRANES,GRADALLS)	6/1/2025	\$25.97	\$15.30	\$13.15	\$3.25	\$0.00	\$57.67
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$26.63	\$15.30	\$13.15	\$3.25	\$0.00	\$58.33
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$27.22	\$15.30	\$13.15	\$3.25	\$0.00	\$58.92
	12/1/2026	\$27.89	\$15.30	\$13.15	\$3.25	\$0.00	\$59.59
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
OILER (TRUCK CRANES, GRADALLS)	6/1/2025	\$31.80	\$15.30	\$13.15	\$3.25	\$0.00	\$63.50
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$32.60	\$15.30	\$13.15	\$3.25	\$0.00	\$64.30
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$33.32	\$15.30	\$13.15	\$3.25	\$0.00	\$65.02
	12/1/2026	\$34.12	\$15.30	\$13.15	\$3.25	\$0.00	\$65.82
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
OTHER POWER DRIVEN EQUIPMENT - CLASS II	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89
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 2							

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

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
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 \$49.36 \$9.95 \$11.85 \$12.10 \$0.00 \$83.26

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

PAINTERS LOCAL 35

PAINTERS LOCAL 35 - ZONE 2

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	\$24.68	\$9.95	\$0.00	\$0.00	\$0.00	\$34.63
2	55.00	\$27.15	\$9.95	\$0.00	\$6.66	\$0.00	\$43.76
3	60.00	\$29.62	\$9.95	\$0.00	\$7.26	\$0.00	\$46.83
4	65.00	\$32.08	\$9.95	\$0.00	\$7.87	\$0.00	\$49.90
5	70.00	\$34.55	\$9.95	\$11.85	\$8.47	\$0.00	\$64.82
6	75.00	\$37.02	\$9.95	\$11.85	\$9.08	\$0.00	\$67.90
7	80.00	\$39.49	\$9.95	\$11.85	\$9.68	\$0.00	\$70.97
8	90.00	\$44.42	\$9.95	\$11.85	\$10.89	\$0.00	\$77.11

PAINTER (SPRAY OR SANDBLAST, REPAINT) 1/1/2025 \$47.42 \$9.95 \$11.85 \$12.10 \$0.00 \$81.32

PAINTERS LOCAL 35

PAINTERS LOCAL 35 - ZONE 2

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	\$23.71	\$9.95	\$0.00	\$0.00	\$0.00	\$33.66
2	55.00	\$26.08	\$9.95	\$0.00	\$6.66	\$0.00	\$42.69
3	60.00	\$28.45	\$9.95	\$0.00	\$7.26	\$0.00	\$45.66
4	65.00	\$30.82	\$9.95	\$0.00	\$7.87	\$0.00	\$48.64
5	70.00	\$33.19	\$9.95	\$11.85	\$8.47	\$0.00	\$63.46
6	75.00	\$35.57	\$9.95	\$11.85	\$9.08	\$0.00	\$66.45
7	80.00	\$37.94	\$9.95	\$11.85	\$9.68	\$0.00	\$69.42
8	90.00	\$42.68	\$9.95	\$11.85	\$10.89	\$0.00	\$75.37

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
PAINTER / TAPER (BRUSH, NEW) *	1/1/2025	\$47.96	\$9.95	\$11.85	\$12.10	\$0.00	\$81.86
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used.							
PAINTERS LOCAL 35							
PAINTERS LOCAL 35 - ZONE 2							

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	\$23.98	\$9.95	\$0.00	\$0.00	\$0.00	\$33.93
2	55.00	\$26.38	\$9.95	\$0.00	\$6.66	\$0.00	\$42.99
3	60.00	\$28.78	\$9.95	\$0.00	\$7.26	\$0.00	\$45.99
4	65.00	\$31.17	\$9.95	\$0.00	\$7.87	\$0.00	\$48.99
5	70.00	\$33.57	\$9.95	\$11.85	\$8.47	\$0.00	\$63.84
6	75.00	\$35.97	\$9.95	\$11.85	\$9.08	\$0.00	\$66.85
7	80.00	\$38.37	\$9.95	\$11.85	\$9.68	\$0.00	\$69.85
8	90.00	\$43.16	\$9.95	\$11.85	\$10.89	\$0.00	\$75.85

PAINTER / TAPER (BRUSH, REPAINT)	1/1/2025	\$46.02	\$9.95	\$11.85	\$12.10	\$0.00	\$79.92
PAINTERS LOCAL 35							
PAINTERS LOCAL 35 - ZONE 2							

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	\$23.01	\$9.95	\$0.00	\$0.00	\$0.00	\$32.96
2	55.00	\$25.31	\$9.95	\$0.00	\$6.66	\$0.00	\$41.92
3	60.00	\$27.61	\$9.95	\$0.00	\$7.26	\$0.00	\$44.82
4	65.00	\$29.91	\$9.95	\$0.00	\$7.87	\$0.00	\$47.73
5	70.00	\$32.21	\$9.95	\$11.85	\$8.47	\$0.00	\$62.48
6	75.00	\$34.52	\$9.95	\$11.85	\$9.08	\$0.00	\$65.40
7	80.00	\$36.82	\$9.95	\$11.85	\$9.68	\$0.00	\$68.30
8	90.00	\$41.42	\$9.95	\$11.85	\$10.89	\$0.00	\$74.11

PAINTER TRAFFIC MARKINGS (HEAVY/HIGHWAY)	6/1/2025	\$40.34	\$9.90	\$9.25	\$9.21	\$0.00	\$68.70
LABORERS	12/1/2025	\$41.72	\$9.90	\$9.25	\$9.21	\$0.00	\$70.08
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$43.16	\$9.90	\$9.25	\$9.21	\$0.00	\$71.52
	12/1/2026	\$44.60	\$9.90	\$9.25	\$9.21	\$0.00	\$72.96

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

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
PIER AND DOCK CONSTRUCTOR (UNDERPINNING AND DECK)	8/1/2024	\$55.79	\$10.08	\$11.62	\$12.67	\$0.00	\$90.16
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 1)							
For apprentice rates see "Apprentice- PILE DRIVER"							

PILE DRIVER	8/1/2024	\$55.79	\$10.08	\$11.62	\$12.67	\$0.00	\$90.16
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 1)							

Apprentice: PILE DRIVER**Effective Date: 8/1/2024**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$25.11	\$10.08	\$0.00	\$2.53	\$0.00	\$37.72
2	55.00	\$30.68	\$10.08	\$0.00	\$5.07	\$0.00	\$45.83
3	70.00	\$39.05	\$10.08	\$11.62	\$7.60	\$0.00	\$68.35
4	80.00	\$44.63	\$10.08	\$11.62	\$10.14	\$0.00	\$76.47

PIPELAYER	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.11	\$0.00	\$68.85
LABORERS	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.11	\$0.00	\$70.23
LABORERS - ZONE 2	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.11	\$0.00	\$71.67
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.11	\$0.00	\$73.11
	6/1/2027	\$46.30	\$9.90	\$9.25	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.75	\$9.90	\$9.25	\$9.11	\$0.00	\$76.01
	6/1/2028	\$49.25	\$9.90	\$9.25	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.75	\$9.90	\$9.25	\$9.11	\$0.00	\$79.01

For apprentice rates see "Apprentice- LABORER"

PIPELAYER (HEAVY & HIGHWAY)	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.21	\$0.00	\$68.95
LABORERS	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.21	\$0.00	\$70.33
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.21	\$0.00	\$71.77
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.21	\$0.00	\$73.21

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

PLUMBER & PIPEFITTER	8/26/2024	\$52.49	\$10.80	\$16.80	\$4.60	\$0.00	\$84.69
PLUMBERS & PIPEFITTERS LOCAL 51	8/25/2025	\$55.24	\$10.80	\$16.80	\$4.60	\$0.00	\$87.44
PLUMBERS & PIPEFITTERS LOCAL 51							

Apprentice: PLUMBER & PIPEFITTER**Effective Date: 8/26/2024**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	\$21.00	\$10.15	\$2.50	\$0.00	\$0.00	\$33.65
2	50.00	\$26.25	\$10.15	\$2.50	\$0.00	\$0.00	\$38.90
3	60.00	\$31.49	\$10.15	\$8.40	\$0.50	\$0.00	\$50.54
4	70.00	\$36.74	\$10.15	\$13.44	\$0.80	\$0.00	\$61.13
5	80.00	\$41.99	\$10.15	\$16.80	\$1.00	\$0.00	\$69.94

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: PLUMBER & PIPEFITTER Effective Date: 8/25/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	\$22.10	\$10.15	\$2.50	\$0.00	\$0.00	\$34.75
2	50.00	\$27.62	\$10.15	\$2.50	\$0.00	\$0.00	\$40.27
3	60.00	\$33.14	\$10.15	\$8.40	\$0.50	\$0.00	\$52.19
4	70.00	\$38.67	\$10.15	\$13.44	\$0.80	\$0.00	\$63.06
5	80.00	\$44.19	\$10.15	\$16.80	\$1.00	\$0.00	\$72.14
PNEUMATIC CONTROLS (TEMP.)	8/26/2024	\$52.49	\$10.80	\$16.80	\$4.60	\$0.00	\$84.69
PLUMBERS & PIPEFITTERS LOCAL 51	8/25/2025	\$55.24	\$10.80	\$16.80	\$4.60	\$0.00	\$87.44
PLUMBERS & PIPEFITTERS LOCAL 51							
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							
PNEUMATIC DRILL/TOOL OPERATOR	6/1/2025	\$41.09	\$9.90	\$9.25	\$8.29	\$0.00	\$68.53
LABORERS	12/1/2025	\$42.47	\$9.90	\$9.25	\$8.29	\$0.00	\$69.91
LABORERS - ZONE 2	6/1/2026	\$43.91	\$9.90	\$9.25	\$8.29	\$0.00	\$71.35
	12/1/2026	\$45.35	\$9.90	\$9.25	\$8.29	\$0.00	\$72.79
	6/1/2027	\$46.80	\$9.90	\$9.25	\$8.29	\$0.00	\$74.24
	12/1/2027	\$48.25	\$9.90	\$9.25	\$8.29	\$0.00	\$75.69
	6/1/2028	\$49.75	\$9.90	\$9.25	\$8.29	\$0.00	\$77.19
	12/1/2028	\$51.25	\$9.90	\$9.25	\$8.29	\$0.00	\$78.69
For apprentice rates see "Apprentice- LABORER"							
PNEUMATIC DRILL/TOOL OPERATOR (HEAVY & HIGHWAY)	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.21	\$0.00	\$68.95
LABORERS	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.21	\$0.00	\$70.33
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.21	\$0.00	\$71.77
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.21	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
POWDERMAN & BLASTER	6/1/2025	\$41.34	\$9.90	\$9.25	\$9.11	\$0.00	\$69.60
LABORERS	12/1/2025	\$42.72	\$9.90	\$9.25	\$9.11	\$0.00	\$70.98
LABORERS - ZONE 2	6/1/2026	\$44.16	\$9.90	\$9.25	\$9.11	\$0.00	\$72.42
	12/1/2026	\$45.60	\$9.90	\$9.25	\$9.11	\$0.00	\$73.86
	6/1/2027	\$47.05	\$9.90	\$9.25	\$9.11	\$0.00	\$75.31
	12/1/2027	\$48.50	\$9.90	\$9.25	\$9.11	\$0.00	\$76.76
	6/1/2028	\$50.00	\$9.90	\$9.25	\$9.11	\$0.00	\$78.26
	12/1/2028	\$51.50	\$9.90	\$9.25	\$9.11	\$0.00	\$79.76
For apprentice rates see "Apprentice- LABORER"							
POWDERMAN & BLASTER (HEAVY & HIGHWAY)	6/1/2025	\$41.34	\$9.65	\$9.25	\$9.21	\$0.00	\$69.45
LABORERS	12/1/2025	\$42.72	\$9.65	\$9.25	\$9.21	\$0.00	\$70.83
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$44.16	\$9.65	\$9.25	\$9.21	\$0.00	\$72.27
	12/1/2026	\$45.60	\$9.65	\$9.25	\$9.21	\$0.00	\$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
POWER SHOVEL/DERRICK/TRENCHING MACHINE	6/1/2025	\$58.33	\$15.55	\$13.25	\$3.25	\$0.00	\$90.38

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.78	\$15.55	\$13.25	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$61.08	\$15.55	\$13.25	\$3.25	\$0.00	\$93.13
	12/1/2026	\$62.53	\$15.55	\$13.25	\$3.25	\$0.00	\$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PUMP OPERATOR (CONCRETE)	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PUMP OPERATOR (DEWATERING, OTHER)	6/1/2025	\$37.52	\$15.55	\$13.25	\$3.25	\$0.00	\$69.57
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$38.47	\$15.55	\$13.25	\$3.25	\$0.00	\$70.52
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$39.33	\$15.55	\$13.25	\$3.25	\$0.00	\$71.38
	12/1/2026	\$40.28	\$15.55	\$13.25	\$3.25	\$0.00	\$72.33
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
READY-MIX CONCRETE DRIVER TEAMSTERS 170 TEAMSTERS 170 - Dauphinais (Bellingham)	1/1/2025	\$27.60	\$11.26	\$6.15	\$0.00	\$0.00	\$45.01
RECLAIMERS	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
RIDE-ON MOTORIZED BUGGY OPERATOR	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.11	\$0.00	\$68.85
LABORERS	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.11	\$0.00	\$70.23
LABORERS - ZONE 2	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.11	\$0.00	\$71.67
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.11	\$0.00	\$73.11
	6/1/2027	\$46.30	\$9.90	\$9.25	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.75	\$9.90	\$9.25	\$9.11	\$0.00	\$76.01
	6/1/2028	\$49.25	\$9.90	\$9.25	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.75	\$9.90	\$9.25	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
ROLLER/SPREADER/MULCHING MACHINE	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
ROOFER (Inc.Roofer Waterproofing &Roofer Damproofg)	8/1/2025	\$53.53	\$13.28	\$12.67	\$9.03	\$0.00	\$88.51
ROOFERS LOCAL 33	2/1/2026	\$54.78	\$13.28	\$12.67	\$9.03	\$0.00	\$89.76
ROOFERS LOCAL 33							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: ROOFER (Inc.Roofers Waterproofing &Roofers Damproofg)							
Effective Date: 8/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$26.77	\$13.28	\$6.52	\$9.03	\$0.00	\$55.60
2	60.00	\$32.12	\$13.28	\$12.67	\$9.03	\$0.00	\$67.10
3	65.00	\$34.79	\$13.28	\$12.67	\$9.03	\$0.00	\$69.77
4	75.00	\$40.15	\$13.28	\$12.67	\$9.03	\$0.00	\$75.13
5	85.00	\$45.50	\$13.28	\$12.67	\$9.03	\$0.00	\$80.48
Apprentice: ROOFER (Inc.Roofers Waterproofing &Roofers Damproofg)							
Effective Date: 2/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$27.39	\$13.28	\$6.52	\$9.03	\$0.00	\$56.22
2	60.00	\$32.87	\$13.28	\$12.67	\$9.03	\$0.00	\$67.85
3	65.00	\$35.61	\$13.28	\$12.67	\$9.03	\$0.00	\$70.59
4	75.00	\$41.09	\$13.28	\$12.67	\$9.03	\$0.00	\$76.07
5	85.00	\$46.56	\$13.28	\$12.67	\$9.03	\$0.00	\$81.54
ROOFER SLATE / TILE / PRECAST CONCRETE	8/1/2025	\$53.78	\$13.28	\$12.67	\$9.03	\$0.00	\$88.76
ROOFERS LOCAL 33	2/1/2026	\$55.03	\$13.28	\$12.67	\$9.03	\$0.00	\$90.01
ROOFERS LOCAL 33							
For apprentice rates see "Apprentice- ROOFER"							
SHEETMETAL WORKER	8/1/2025	\$60.98	\$14.91	\$18.74	\$9.53	\$2.98	\$107.14
SHEETMETAL WORKERS LOCAL 17	2/1/2026	\$62.93	\$14.91	\$18.74	\$9.53	\$2.98	\$109.09
SHEETMETAL WORKERS LOCAL 17 - A							
Apprentice: SHEETMETAL WORKER							
Effective Date: 8/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	42.00	\$25.61	\$14.91	\$6.13	\$0.00	\$0.00	\$46.65
2	42.00	\$25.61	\$14.91	\$6.13	\$0.00	\$0.00	\$46.65
3	47.00	\$28.66	\$14.91	\$11.01	\$1.25	\$1.62	\$57.45
4	47.00	\$28.66	\$14.91	\$11.01	\$1.25	\$1.62	\$57.45
5	52.00	\$31.71	\$14.91	\$11.74	\$1.50	\$1.74	\$61.60
6	52.00	\$31.71	\$14.91	\$11.74	\$1.75	\$1.75	\$61.86
7	60.00	\$36.59	\$14.91	\$12.90	\$2.00	\$1.93	\$68.33
8	65.00	\$39.64	\$14.91	\$13.63	\$2.25	\$2.04	\$72.47
9	75.00	\$45.74	\$14.91	\$15.09	\$2.75	\$2.28	\$80.77
10	85.00	\$51.83	\$14.91	\$16.55	\$2.75	\$2.49	\$88.53

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: SHEETMETAL WORKER Effective Date: 2/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	42.00	\$26.43	\$14.91	\$6.19	\$0.00	\$0.00	\$47.53
2	42.00	\$26.43	\$14.91	\$6.19	\$0.00	\$0.00	\$47.53
3	47.00	\$29.58	\$14.91	\$10.93	\$1.25	\$1.62	\$58.29
4	47.00	\$29.58	\$14.91	\$10.93	\$1.25	\$1.62	\$58.29
5	52.00	\$32.72	\$14.91	\$11.66	\$1.50	\$1.74	\$62.53
6	52.00	\$32.72	\$14.91	\$11.66	\$1.75	\$1.75	\$62.79
7	60.00	\$37.76	\$14.91	\$12.84	\$2.00	\$1.93	\$69.44
8	65.00	\$40.90	\$14.91	\$13.58	\$2.25	\$2.04	\$73.68
9	75.00	\$47.20	\$14.91	\$15.06	\$2.75	\$2.28	\$82.20
10	85.00	\$53.49	\$14.91	\$16.53	\$2.75	\$2.49	\$90.17
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
SPRINKLER FITTER	3/1/2025	\$72.14	\$11.51	\$7.30	\$16.50	\$0.00	\$107.45
SPRINKLER FITTERS LOCAL 550							
SPRINKLER FITTERS LOCAL 550 - (Section A) Zone 1							

Apprentice: SPRINKLER FITTER Effective Date: 3/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	35.00	\$25.25	\$11.51	\$13.07	\$0.00	\$0.00	\$49.83
2	40.00	\$28.86	\$11.51	\$13.90	\$0.00	\$0.00	\$54.27
3	45.00	\$32.46	\$11.51	\$14.73	\$0.00	\$0.00	\$58.70
4	50.00	\$36.07	\$11.51	\$15.55	\$0.00	\$0.00	\$63.13
5	55.00	\$39.68	\$11.51	\$16.37	\$0.00	\$0.00	\$67.56
6	60.00	\$43.28	\$11.51	\$17.20	\$0.00	\$0.00	\$71.99
7	65.00	\$46.89	\$11.51	\$18.03	\$0.00	\$0.00	\$76.43
8	70.00	\$50.50	\$11.51	\$18.85	\$0.00	\$0.00	\$80.86
9	75.00	\$54.11	\$11.51	\$19.67	\$0.00	\$0.00	\$85.29
10	80.00	\$57.71	\$11.51	\$20.50	\$0.00	\$0.00	\$89.72

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
STEAM BOILER OPERATOR	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

TAMPERS, SELF-PROPELLED OR TRACTOR DRAWN	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

TELECOMMUNICATION TECHNICIAN	9/1/2024	\$40.69	\$11.75	\$11.53	\$3.00	\$0.00	\$66.97
ELECTRICIANS LOCAL 223	9/1/2025	\$42.52	\$12.00	\$12.05	\$3.25	\$0.00	\$69.82
ELECTRICIANS LOCAL 223	9/1/2026	\$44.41	\$12.25	\$12.59	\$3.50	\$0.00	\$72.75
	9/1/2027	\$46.51	\$12.50	\$13.18	\$3.75	\$0.00	\$75.94

Apprentice: TELECOMMUNICATION TECHNICIAN**Effective Date: 9/1/2024**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

TERRAZZO FINISHERS	8/1/2025	\$66.89	\$11.49	\$15.57	\$8.02	\$0.00	\$101.97
BRICKLAYERS LOCAL 3	2/1/2026	\$68.24	\$11.49	\$15.57	\$8.02	\$0.00	\$103.32
BRICKLAYERS LOCAL 3 - MARBLE & TILE	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: 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

Apprentice: TERRAZZO FINISHERS**Effective Date: 2/1/2026**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$34.12	\$11.49	\$15.57	\$8.02	\$0.00	\$69.20
2	60.00	\$40.94	\$11.49	\$15.57	\$8.02	\$0.00	\$76.02
3	70.00	\$47.77	\$11.49	\$15.57	\$8.02	\$0.00	\$82.85

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate																								
Apprentice: TERRAZZO FINISHERS Effective Date: 2/1/2026 <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>80.00</td><td>\$54.59</td><td>\$11.49</td><td>\$15.57</td><td>\$8.02</td><td>\$0.00</td><td>\$89.67</td></tr><tr><td>5</td><td>90.00</td><td>\$61.42</td><td>\$11.49</td><td>\$15.57</td><td>\$8.02</td><td>\$0.00</td><td>\$96.50</td></tr></tbody></table>								Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate	4	80.00	\$54.59	\$11.49	\$15.57	\$8.02	\$0.00	\$89.67	5	90.00	\$61.42	\$11.49	\$15.57	\$8.02	\$0.00	\$96.50
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate																								
4	80.00	\$54.59	\$11.49	\$15.57	\$8.02	\$0.00	\$89.67																								
5	90.00	\$61.42	\$11.49	\$15.57	\$8.02	\$0.00	\$96.50																								
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"																															
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"																															
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"																															
TRACTORS/PORTABLE STEAM GENERATORS	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73																								
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17																								
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45																								
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89																								
For apprentice rates see "Apprentice- OPERATING ENGINEERS"																															
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																								
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"																															
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																								
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																								

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
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 TEAMSTERS JOINT COUNCIL NO. 10	6/1/2025	\$41.24	\$15.57	\$20.17	\$0.00	\$0.00	\$76.98
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/1/2025	\$41.24	\$15.57	\$21.78	\$0.00	\$0.00	\$78.59
	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	6/1/2025	\$42.00	\$9.65	\$9.00	\$8.70	\$0.00	\$69.35
LABORERS - ZONE 2	12/1/2025	\$43.38	\$9.65	\$9.00	\$8.70	\$0.00	\$70.73
	6/1/2026	\$44.82	\$9.65	\$9.00	\$8.70	\$0.00	\$72.17
	12/1/2026	\$46.26	\$9.65	\$9.00	\$8.70	\$0.00	\$73.61
	6/1/2027	\$47.71	\$9.65	\$9.00	\$8.70	\$0.00	\$75.06
	12/1/2027	\$49.16	\$9.65	\$9.00	\$8.70	\$0.00	\$76.51
	6/1/2028	\$50.66	\$9.65	\$9.00	\$8.70	\$0.00	\$78.01
	12/1/2028	\$52.16	\$9.65	\$9.00	\$8.70	\$0.00	\$79.51
For apprentice rates see "Apprentice- LABORER"							
WAGON DRILL OPERATOR (HEAVY & HIGHWAY) LABORERS	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.21	\$0.00	\$68.95
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.21	\$0.00	\$70.33
	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.21	\$0.00	\$71.77
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.21	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
WASTE WATER PUMP OPERATOR OPERATING ENGINEERS LOCAL 4	6/1/2025	\$58.33	\$15.55	\$13.25	\$3.25	\$0.00	\$90.38
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.78	\$15.55	\$13.25	\$3.25	\$0.00	\$91.83
	6/1/2026	\$61.08	\$15.55	\$13.25	\$3.25	\$0.00	\$93.13
	12/1/2026	\$62.53	\$15.55	\$13.25	\$3.25	\$0.00	\$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
WATER METER INSTALLER PLUMBERS & PIPEFITTERS LOCAL 51	8/26/2024	\$52.49	\$10.80	\$16.80	\$4.60	\$0.00	\$84.69
PLUMBERS & PIPEFITTERS LOCAL 51	8/25/2025	\$55.24	\$10.80	\$16.80	\$4.60	\$0.00	\$87.44
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.

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DOCUMENT A00801

SPECIAL PROVISIONS**TAUNTON****Bridge Preservation, T-01-058, Bay Street over Interstate 495**

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.

SCOPE OF WORK

The work under this contract consists of furnishing all necessary labor, materials, and equipment required to perform the proposed work, including:

1. Selective clearing and thinning;
2. Installation of temporary construction signing, pavement markings and other traffic control devices to establish Stage 1 work zone;
3. Removal of the existing concrete bridge median and installation of temporary hot mix asphalt wearing surface to facilitate stage construction;
4. Removal and stacking of existing granite edging, excavation of the existing median island and placement of temporary HMA on the approaches to the bridge to facilitate stage construction;
5. Installation of temporary construction signing, pavement markings, temporary barrier and other traffic control devices to establish Stage 2 work zone;
6. Milling and hydro-excavation of the existing concrete bridge deck;
7. Full depth concrete bridge deck repair;
8. Excavation, forming and installation of new reinforcing steel at bridge joints to retrofit deck-over-backwall and Type III approach slab retrofit to move joint behind the backwall;

SCOPE OF WORK (Continued)

9. Placement of a latex modified concrete overlay;
10. Grooving of the new latex modified concrete wearing surface by sawcutting;
11. Installation of pre-compressed joint seal at abutment joints;
12. Placement of HMA patching and sawing and sealing joints at the expansion key at abutments;
13. Installation of temporary construction signing, pavement markings, temporary barrier and other traffic control devices to establish Stage 3 work zone;
14. Performing the work described in #6-12 within the Stage 3 work area;
15. Reconstruct sidewalk expansion joints with sliding steel plates as proposed in the Contract Plans;
16. Installation of temporary construction signing, pavement markings, temporary barrier and other traffic control devices to establish Stage 4 work zone;
17. Performing the work described in #6-12 within the Stage 4 work area;
18. Reconstruct the concrete bridge median;
19. Resetting granite edging, placement of gravel borrow and placement of new cement concrete approach median surface;
20. Removal of temporary barrier, milling & paving of the approaches and placement of permanent pavement markings;
21. Replacing wire loop detectors for the traffic signals at the I-495 Northbound ramps;
22. Application of concrete protective coating on sidewalk, safety curb, parapets and bridge median; and
23. Other incidental work required to complete the project.

Bridge Location:

- Bridge T-01-058 (3YF) Bay Street over Interstate 495 in Taunton

All work will be performed within the existing State, City or Town roadway layouts. No rights to enter on or occupy private property have been acquired for this project.

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.

SCHEDULE OF WORK

All proposed work hours shall conform to Subsection 7.09 and be subject to the written approval of the Engineer.

Daytime work is permitted when there are no temporary traffic control measures required. Work Schedule during the day shall be based on a normal 8-hour day, 5-day week, between the hours of 7:00 AM and 3:30 PM.

Nighttime work is permitted when temporary traffic control measures are required on I-495 or Bay Street. Work schedule during the night shall be based on an 8-hour day and shall be restricted to the following:

Sunday: 9:00 PM to 5:30 AM Monday
Monday: 9:00 PM to 5:30 AM Tuesday
Tuesday: 9:00 PM to 5:30 AM Wednesday
Wednesday: 9:00 PM to 5:30 AM Thursday
Thursday: 9:00 PM to 5:30 AM Friday

Approval to work beyond the scheduled work will only be given when special conditions exist that warrant working beyond the scheduled work, as determined by the Engineer.

The Contractor may schedule shifts longer than 8-hours with prior approval by the Engineer. No additional compensation will be made for work scheduled during nighttime or longer working hours. These time periods include the "set-up" and "breakdown" of any temporary traffic control pattern employed.

MassDOT has determined that the Contractor shall schedule work to expedite bridge work with a minimum disruption to road users and minimal impact to environmental resources while providing work zone safety. As a result, the Contractor is encouraged to perform concurrent work to facilitate on-time, on-budget project completion.

Once a section of the deck is exposed the Contractor shall work at the exposed bridge deck until the repairs and overlay are completed.

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.

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.

HOLIDAY WORK RESTRICTIONS (Continued)**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.

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.

TEMPORARY TRAFFIC CONTROL

The proposed temporary traffic control plans for this project include long-term temporary traffic control on a heavily traveled corridor. The Contractor shall schedule the work to ensure that the duration is as short as possible. The work in each construction stage that requires installation of temporary barrier, including hydro-excavation and overlay of the bridge deck, is to be completed and the lanes reopened, without delay.

PROPRIETARY PRODUCTS

MassDOT has approved the use of the following proprietary products on this contract pursuant to M.G.L. c. 30, § 39M(b):

Item 866.612 (12-Inch.Recessed White Line, Pre-formed, Wet Reflective).

Item 866.706 (6-Inch Recessed White Line with Black Contrast, Pre-formed, Wet Reflective).

Item 867.706 (6-Inch Recessed Yellow Line with Black Contrast, Pre-formed, Wet Reflective).

Recessed, preformed, wet reflective pavement markings to be used on the exposed concrete bridge deck shall be Stamark 380AW or Stamark 380AW-5 (Contrast) by 3M.

Approval letter has been filed with MassDOT.

2026 FIFA WORLD CUP – BOSTON, MASSACHUSETTS

The 2026 FIFA World Cup will be held at Gillette Stadium in Foxborough and related events will be held throughout the region. Matches and Fan Fest activities are scheduled from June 11, 2026 through July 19, 2026. MassDOT will impose work restrictions as necessary to minimize traffic impacts during FIFA events when the Contractor's operations could impact vehicular traffic, particularly on interstate highways and major arterials throughout the region and local roads near the event site. No additional compensation will be allowed for work restrictions except as determined under Subsection 8.10

PREPARATION OF CONCRETE SURFACES

All concrete surfaces to be patched shall be roughened, cleaned of all laitance, dirt, grease, oil, other contaminants, and all standing water. All reinforcing steel encountered in the excavation shall be thoroughly cleaned by abrasive blasting before being covered with new concrete.

In bonding new concrete to already set concrete, the surface of the concrete shall be thoroughly cleaned, roughened, and ponded with clean water to achieve Saturated Surface Dry (SSD) condition then it shall then be blown off with oil free compressed air. All standing water shall be removed prior to placement of new concrete.

CONTRACTOR ACTIVITY ADJACENT TO WETLANDS

The Contractor shall not stockpile material or equipment, perform maintenance or refuel equipment in a wetland area, within 100 feet of a wetland, or within 200 feet of a river, stream, pond, or other similar open body of water.

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.

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 4.9 Million 18-kip (80-kn) ESALs.

NOTICE TO OWNERS OF UTILITIES

District 5 Utility/Constructability Engineer
Christopher Lockett (508) 884-6633
chris.j.lockett@dot.state.ma.us

If available, existing bridge plans indicate the location of the existing known utilities in the vicinity of the work. As the accuracy and completeness of the plans are not guaranteed in any manner, it is the Contractor's responsibility to make their own investigation to assure that no damage to existing structures, drainage lines, traffic signal conduits, etc., will occur.

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 the Contractor's 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 Engineer.

A list of public and private utilities can be found on the MassDOT website at:
<https://www.mass.gov/info-details/utility-contacts-by-district-and-municipality>

Select District 5

Select the City of Taunton, and then locate the utility

The utility contact list is for guidance only and is not guaranteed to be complete or up to date.

TAUNTON MUNICIPAL LIGHTING PLANT EMERGENCY TELEPHONE NUMBERS**ELECTRIC:**

Outage/ Emergency: 508-824-3111

New Service: 508-824-6976

Customer Support: 508-824-6976

EVERSOURCE EMERGENCY TELEPHONE NUMBERS**GAS:**

Outage/ Emergency: 800-592-2000

New Service: 866-678-2744

Customer Support: 800-592-2000

ENBRIDGE EMERGENCY TELEPHONE NUMBERS**GAS:**

Outage/ Emergency: 888-576-4634

Customer Support: 713-821-2000

NOTIFICATION OF PUBLIC OFFICIALS

Town officials are shown at website

<https://www.mass.gov/lists/massachusetts-cities-and-towns>.

Select the required City of Taunton website.

State Police are shown at website

<https://www.mass.gov/info-details/massachusetts-state-police-troop-boundaries>. Select the area of jurisdiction to find the local station.

The Contractor shall inform the following officials in each area that he is assigned to work in:

Superintendent, Department of Public Works, or Town Engineer. Superintendent, Water Department, Superintendent, Sewer Departments. Police Department, Fire Department, Electric Company, Railroads.

ENVIRONMENTAL PERMITTING

The proposed work does not occur in jurisdictional wetland resources subject to section 401 or section 404 of the Clean Water Act; therefore, the project does not require a Water Quality Certification from the Massachusetts Department of Environmental Protection or authorization from the US Army Corps of Engineers. The proposed work qualifies for the bridge exemption authorized in the Transportation Bond Bill and is therefore not subject to the Massachusetts Wetlands Protection Act, the Massachusetts Public Waterfront Act (Chapter 91), or the Massachusetts Environmental Policy Act.

If field conditions and/or Contractor-proposed erection, demolition, staging, or other procedures require work to occur in or otherwise impact water or wetland resource areas, the Contractor is advised that no associated work can occur until all required environmental permits have been obtained allowing such work. The Contractor must notify the District 5 Highway Director and Resident Engineer in writing at least 60 days prior to desire commencement of the proposed activity. All environmental submittals, including any Contract with Local, State, or Federal environmental agencies, must be coordinated with the District 5 Environmental Engineer. The Contractor is expected to fully cooperate with requests for information and provide same in a timely manner. The Contractor is further advised that the Department will not entertain a delay claim due to the time required to obtain the environmental permits.

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. No soil may be disposed of off-site without proper assessment by the contractor and approval from the Resident Engineer (RE), District Environmental Engineer (DEE), or the project designee.

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. As there is no Federal nexus (Federal funding or permits) for this project, Section 7 consultation was not required or conducted. However, Section 9 of the ESA prohibits anyone from “taking” or harming an endangered species, and the below language shall be adhered to in order to maintain compliance with the ESA.

If any of the project locations require work within U.S. Army Corps of Engineers (ACOE) jurisdictional wetlands, the ACOE will be the lead federal agency for ESA consultation with the U.S. Fish & Wildlife Service (USFWS). Most consultations for the NLEB take 30 days.

The following Avoidance and Minimization Measures (AMMs) must be strictly adhered to in order to protect NLEB and TCB and to be in compliance with the ESA. Contact MassDOT Environmental Services - Wildlife & Endangered Species Unit Supervisor (David Paulson, david.j.paulson@dot.state.ma.us, 857-262-3378) for questions about project limits, restrictions, or conservation measures.

The Resident Engineer can check on the status of AMM applicability by sending a locus map of the proposed work to MassDOT Highway Division’s Environmental Services Section - Wildlife & Endangered Species Unit Supervisor for review and a determination if some of the AMMs and TOY restriction can be waived.

Required AMM for all projects:

- The Contractor shall ensure all personnel working in on the project site are aware of all environmental commitments related to NLEB and TCB, including all applicable AMMs. NLEB Bat information (<https://www.fws.gov/midwest/endangered/mammals/nleb/> and <https://www.fws.gov/species/tricolored-bat-perimyotis-subflavus>) shall be made available to all personnel.

If temporary lighting is proposed within the project scope, the following AMM is applicable:
Lighting AMM:

- Direct temporary lighting away from suitable habitat during the active season: **April 15 to October 31.**

If the Removal of Trees and/or Woody Vegetation >3-inch in diameter is proposed within the project scope, the following AMMs are applicable:

Tree AMMs:

- If additional cutting is proposed by the Contractor that is outside the scope of this contract, additional review is required by the MassDOT Highway Division’s Environmental Services Section, and additional review and restrictions may be required by the USFWS.

NORTHERN LONG-EARED BAT AND TRICOLORED BAT PROTECTION (Continued)

- Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits).
- In order to protect northern long-eared bats and their young during their active season, **no tree cutting shall be conducted during the Time of Year (TOY) restriction of April 15 to October 31.**
- Do not remove **documented** or NLEB roosts that are still suitable for roosting, or trees within 0.25 miles of roosts, or **documented** foraging habitat any time of year (<http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/species-information-and-conservation/rare-mammals/northern-long-eared-bat.html>).
- The Contractor shall ensure all personnel working in on the project site are aware of all environmental commitments related to NLEB and TCB, including the **TOY** restriction.

**If the Bridge Work is proposed within the project scope, the following AMMs are applicable:
Bridge AMMs:**

- **Bridge AMM 1** - To completely avoid direct effects to roosting bats, perform any bridge removal, replacement, and/or maintenance work during the winter hibernation period unless a hibernating colony of bats is present (contact your local USFWS Field Office for exact dates). Also, follow Bridge AMM 4.
 - **Note:** Bridge AMM 1 is an avoidance measure for direct effects; the full implementation of which may

not always be practicable. **If bridge removal, replacement, and/or maintenance work must be performed outside of the winter hibernation period, then follow Bridge AMMs 2-4.**
- **Bridge AMM 2 - Colony or Assuming Presence of Bats**
 - If assuming presence of bats or if bridge assessment or P/A surveys suggest presence of a colony of bats, and work is conducted during the active season, ensure activity will not disturb bats. The following types of bridge work can generally be conducted with the presence of bats:
 - above deck work where construction equipment or materials do not extend to the underside of deck where bats may be located (e.g., materials that may drip down to underside of deck), or does not include percussives (vibration) or noise levels above general traffic (e.g., road line painting, wing-wall work).

NORTHERN LONG-EARED BAT AND TRICOLORED BAT PROTECTION (Continued)

- below deck work that is conducted away from roosting bats and does not involve percussives or noise level above general traffic (e.g., wing-wall work, some abutment, beam end, scour, or pier repair).
- **Bridge AMM 3 - Small Number of Bats**
 - If bridge assessment or P/A surveys suggest presence of a small number of bats (<5 – not a colony), and work is conducted during the active season, the following types of bridge work can generally be conducted with the presence of bats:
 - above deck work where construction equipment or materials do not extend to the underside of deck where bats may be located (e.g., materials that may drip down to underside of deck), or does not include percussives (vibration) or noise levels above general traffic (e.g., road line painting, wing-wall work).
 - below deck work that is conducted away from roosting bats and does not involve percussives or noise level above general traffic (e.g., wing-wall work, some abutment, beam end, scour, or pier repair).
 - any other bridge removal, replacement, and/or maintenance work (which may include activities with percussives) conducted in the evening while the bats are feeding, starting one hour after sunset, and ending one hour before daylight excluding the hours between 10 p.m. and midnight and keep the light localized.
- **Bridge AMM 4** - If assuming presence of bats, or if bridge assessment or P/A surveys suggest presence of bats, ensure suitable roosting habitat is maintained. Suitable roosting sites may be incorporated into the design of a new bridge.

PIGEON WASTE

The Contractor shall remove and dispose of the pigeon waste and any other debris accumulated on the steel members and bridge seats in areas where work is being performed. Pigeon waste and debris material contaminants will require special handling and disposal in accordance with all Federal, state, and local requirements. No separate payment will be made for removal and disposal of pigeon waste. Cost shall be incidental to the contract pay items.

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.

**GENERAL REQUIREMENTS FOR DEMOLITION AND
WORK INVOLVING PAINTED STEEL**

(02/06/2020)

Demolition and work involving painted steel shall conform to the requirements of Subsection 961 of the Standard Specifications.

Work Involving Painted Steel

Hazardous materials shall be removed in the immediate area of any intended welding, heating, saw cutting or burning of steel. Hazardous material removal is required to allow the demolition of structural steel, railings, drainage systems, utility supports, steel lamp posts, etc.

The contractor shall assume that the coatings on the steel contain lead (Pb), unless otherwise determined by testing. The contractor shall certify in writing to the Engineer the results of all testing, and shall also certify that any lead (Pb) coated steel removed from the project was not reused or buried, but was sent to a scrap metal recycling facility.

Implement and maintain programs and procedures, which comply with the requirements of this specification and all applicable standards and regulations. Comply with all applicable regulations even if the regulation is not specifically referenced herein. If a state or local regulation is more restrictive than the regulation of this specification, follow the more restrictive requirements.

This requirement is intended only for the demolition and preparation prior to repair and does not include provisions for recoating of steel.

Environmental

All applicable portions of Subsections 961.65 “Worker Protection” and 961.66 “Environmental Protection and Monitoring” shall be followed when performing this work.

During chemical stripping a hand washing facility may be used in lieu of a decontamination/changing facility.

Hazardous material shall be collected during the disassembly and disposed of as outlined in Subsection 961.68 “Handling of Hazardous Waste and Reporting Release Programs”.

The applicable submittals shall be according to Subsection 961.69 “Submittals”.

**GENERAL REQUIREMENTS FOR DEMOLITION AND
WORK INVOLVING PAINTED STEEL** (Continued)**Cleaning/Removal****Cutting Or Burning Of Steel**

All surfaces to be welded, heated, saw cut or burned shall be cleaned so as to remove all contaminants and/or hazardous materials, which could be discharged to the environment as a function of the subsequent operations.

Lead paint shall be removed in its entirety in an area prescribed by a 6 inch (15 cm) minimum offset from the required work. The paint removal operation may be dry abrasive blasting, wet abrasive blasting or chemical stripping.

Proper level of containment shall be used when performing this work in accordance with Subsection 961.67 "Containment". Full containment is not required during chemical stripping operation however; the Contractor shall install proper shielding and/or tarpaulins under the chemical stripping operations in order to catch all debris generated during this procedure. A cleaned area must be inspected and approved before the demolition operations are started.

During cleaning operations the Contractor shall be required to furnish and erect temporary floodlights illuminating the steel surface at a minimum of 30-foot candles. This lighting shall be used in areas where there is insufficient lighting for proper cleaning operations and inspection. The Contractor shall supply electrical power.

The Contractor shall provide support for interim and final inspection of the bridge during cleaning operations. This support shall include the necessary traffic controls and safe access to the work.

Mechanical Disassembly Of Steel

All surfaces to be mechanically disassembled by shear cutting or removing bolts or rivets shall not require deleading. When shear cutting or removing bolts or rivets, the Contractor shall not use any method that will cause dust and/or particles to be emitted and/or dispersed into the environment to an extent that would expose the workers above the Action Levels of $30\mu\text{g}/\text{m}^3$.

For purposes of limiting the lead (Pb) dust, the Contractor will be required to dampen the lead paint work areas.

The contractor shall install a proper shielding and/or tarpaulins under all lead-paint-coated surfaces to be shear cut or bolts or rivets ordered removed in order to catch any loose lead paint chips, dust or particles.

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.

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.**SELECTIVE CLEARING AND THINNING****ACRE**

The work under this Item shall conform to the relevant provisions of Subsection 101 of the Standard Specifications, and the following:

A minimum 15-foot width shall be cleared of small trees, shrubs, and limbs along the wingwalls and slope paving of the bridge, or as directed by the Engineer.

METHOD OF MEASUREMENT

Item 102. will be measured for payment by the Acre. If the area cleared is less than a full acre it shall be measured to the nearest square foot and converted to acres.

BASIS OF PAYMENT

Item 102. will be paid for at the Contract unit price per Acre, which price shall include all labor, materials, equipment, proper disposal, and all incidental costs required to complete the work.

<u>ITEM 107.491</u>	<u>GALVANIZED, REMOVABLE SLIDING STEEL PLATE</u>	<u>EACH</u>
	<u>FOR WALK</u>	

The work under this Item shall conform to the relevant provisions of Subsection 960 of the Standard Specifications and the following:

The work under this Item consists of fabricating, delivering and installing new galvanized, removable steel plate, with stud anchors, over expansion joints in the sidewalk/curb at the abutment joints, as shown in the details in the Contract drawings. The steel plates will be installed flush with the proposed concrete surface to provide an AAB/ADA accessible surface for the full width of the sidewalk over the expansion joint.

All new structural steel shall be AASHTO M 270 Grade 36 or 50 and shall be hot-dip galvanized after all cutting and welding has been completed. Stainless Steel screws and nuts shall be used to connect the removable, sliding plate to the embedded plate. Fasteners shall be lubricated prior to installation with an acceptable anti-seize lubricant. After placement of the concrete, the contractor shall remove, clean and reinstall all fasteners to ensure that the sliding plate remains removable.

Prior to fabrication, the Contractor shall verify the required dimensions in the field. The removable, sliding steel plate shall extend the full width of the sidewalk.

METHOD OF MEASUREMENT

Items 107.491 will be measured for payment by the each sliding plate joint assembly installed, complete in place.

BASIS OF PAYMENT

Item 107.491 will be paid for at the Contract unit price per Each, which price shall include all labor, equipment, materials, welding, survey, tools, submittal preparation, and all incidental costs required to complete the work as required by the Engineer. The proposed expansion key and sidewalk concrete will be paid separately under Item 904.3.

ITEM 127.1
ITEM 127.42**REINFORCED CONCRETE EXCAVATION**
REINFORCED CONCRETE DECK EXCAVATION
AT JOINTS**CUBIC YARD**
CUBIC YARD

The work under these Items shall conform to the relevant Provisions of Subsection 120 of the Standard Specifications and the following:

The work under Item 127.1 includes consists of the excavation, removal and proper disposal of deteriorated and sound reinforced concrete from the bridge median to facilitate stage construction.

The work Item 127.42 consists of the excavation, removal and proper disposal of deteriorated and sound reinforced concrete from the bridge joints at the South Abutment and the North Abutment, and as directed by the Engineer.

The removal and proper disposal of any existing pavement above the concrete deck will be paid under Item 129.6 Bridge Pavement Excavation. The deck pavement and any existing membrane shall be carefully removed down to the concrete surface without doing any damage to the surface of the concrete.

During the prosecution of the Work, the Engineer may reject the use of any method or equipment which causes undue vibration or possible damage to the structure or any part thereof. In no event shall any pneumatic hammers heavier than the nominal 25 Lbs. be used, unless approved by the Engineer. Also, no use of pneumatic or power-driven chipping hammers over the nominal 15 Lbs. will be permitted to remove any concrete from below any reinforcing bar.

Minimum depth of excavation to sound concrete shall be one inch (1") beyond the nearest layer of reinforcing steel but not less than four and one-half inches (4.5") from the original surface. The edges of the patch shall be cut to neat lines by saw cutting or by methods approved by the Engineer, and the patch areas shall be made rectangular in shape, if possible, with horizontal and vertical edges and square corners.

The Contractor shall take all precautions necessary so as not to damage those portions of the work including reinforcing steel that are to remain. This includes determining the concrete cover to the steel bars at the edge of each patch prior to excavating concrete.

The Contractor shall take all precautions necessary so as not to damage that portion of the deck which is to remain. Any Steel damaged or otherwise made unsatisfactory for continued use, by the Contractor's operation, shall be replaced AT THE CONTRACTOR'S EXPENSE. All reinforcing steel that is loose shall be tied tightly together using wire ties.

Prior to excavation, the Contractor shall cover all drainage structures that may be affected by the work. The structures shall remain covered until the new concrete has set and the area has been cleaned.

The Contractor shall ensure that pedestrian and vehicular traffic is protected all times.

ITEM 127.1 and 127.42 (Continued)

Incidental to these items, if directed by the Engineer, shall be the removal and disposal of the angle of an armored joint if this angle is adjacent to the excavated area.

Also included under this Item are all costs in connection with the cleaning, cutting, and bending of the existing reinforcing steel designated to be retained in the proposed repair.

Immediately before preparation for placement of new concrete, the exposed reinforcing steel and concrete area to be patched shall be free of all oil, grease, rust or other foreign material. These materials shall be removed by abrasive blasting or wire brushing and using compressed air.

SITE CLEANING

The Contractor is required to broom clean all work site areas after the removal of excavated debris regardless of preexisting conditions. This includes areas under the excavated repair area such as pier caps, bridge seats, revetment areas, and bridge shielding areas. Removal of debris, site cleaning, and disposal of debris are considered incidental to this Contract and no additional payment will be made.

METHOD OF MEASUREMENT

Item 127.1 will be measured for payment per Cubic Yard.

Item 127.42 will be measured for payment per Cubic Yard. This item will be paid for excavation within a maximum width of 37 inches on either side of the centerline of the joint.

Excavation of the existing asphalt pavement will be paid under Item 129.6 BRIDGE PAVEMENT EXCAVATION and will not be measured for payment under this item.

BASIS OF PAYMENT

Item 127.1 and 127.42 will be paid for at the respective Contract unit price per Cubic Yard, which price shall include all labor, materials, equipment, sawcutting, disposal of debris and excavated materials, site cleaning and all incidental costs required to complete the work.

Any steel that is unsuitable for further use through no fault of the Contractor shall be replaced under item 910.1 Steel Reinforcement for Structures Epoxy Coated.

ITEM 127.4 REINFORCED CONCRETE DECK EXCAVATION SQUARE YARD
(FULL DEPTH)

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

The work under this Item shall include the full depth excavation, removal, and satisfactory disposal of all deteriorated, disintegrated, cracked, unsound, or soft reinforced concrete in bridge decks, as directed by the Engineer. Areas of full depth excavation and repair are to be identified before milling and hydro-excavation of the bridge deck to prevent blow-through during hydro-excavation. Additional full depth excavation and repair areas may also be identified after hydro-excavation.

Areas determined to be sound, shall not be excavated further. Areas determined to be unsound shall be excavated until sound concrete is found. If the remaining thickness is less than half the thickness of the deck or if sound concrete is not found at half the thickness of the concrete, that area shall be full depth. See the Contract drawings for full depth deck repair details.

Prior to excavation, the Contractor shall cover all drainage structures that may be affected by the work. The structures shall remain covered until the new concrete has set and the area has been cleaned.

EQUIPMENT

The Contractor shall not use any pneumatic or power hammer weighing in excess of 25-pound class to remove concrete. Pneumatic or power hammers heavier than the nominal 15-pound class shall not be used for removing concrete from below any reinforcing steel.

The Contractor shall provide abrasive-blasting equipment that is capable of removing rust and old concrete from exposed reinforcing steel.

The Engineer may reject the use of any method or equipment, which, in his/her opinion, could cause undue vibration or damage to any part, or component of the bridge structure.

CONSTRUCTION METHODS**Saw-Cutting**

The Contractor shall saw-cut the edges of all reinforced concrete to be removed. Care in saw-cutting is to be exercised to protect the existing steel. All equipment used for saw-cutting shall be approved.

Temporary Protective Shielding

Shielding shall be used as required and when directed by the Engineer. A submittal shall be stamped and signed by a Professional Engineer of the appropriate discipline licensed in the state of Massachusetts shall be required if shielding is needed. The Contractor shall follow Special Provision for Item 994.1.

ITEMS 127.4 (Continued)**Final Cleaning**

Immediately before preparation for placement of new concrete, the exposed area to be patched shall be free of all oil, grease, rust, or other foreign material. Abrasive blasting and oil-free compressed air shall be used to remove these materials.

The Contractor shall take all measures necessary to protect pedestrian and vehicular traffic from his/her construction operations. No debris, tools or incidental equipment of any kind will be permitted to fall into vehicular or pedestrian traffic, waterways, or environmentally protected areas. Any material that accidentally falls into such areas shall be removed immediately.

All materials removed under this Item shall become the property of the Contractor and shall be removed from the job site.

The Engineer shall inspect and approve the readiness of the areas of concrete to be placed prior to installation of bonding agent.

Steel Reinforcement

The Contractor shall take all precautions necessary to prevent damage to the steel reinforcement that is to remain. As directed, any existing steel reinforcement damaged as a result of the Contractor's operations shall be repaired at the Contractor's expense. All reinforcing steel that is loose shall be tied tightly together using wire ties.

METHOD OF MEASUREMENT

Item 127.4 will be measured for payment by the Square Yard of reinforced concrete excavated, removed, and disposed.

BASIS OF PAYMENT

Item 127.4 will be paid for at the Contract unit price per Square Yard, which price shall include all labor, materials, equipment, sawcutting, satisfactory disposal of all excavated concrete, and all incidental costs required to complete the work.

If shielding is required, it shall be paid for under Item 994.1.

Any steel reinforcement that is unsuitable for further use through no fault of the Contractor shall be replaced under Item 910.1, Steel Reinforcement for Structures - Epoxy Coated.

ITEM 129.12 **HYDRO-EXCAVATION OF BRIDGE DECK** **SQUARE YARD**
(PARTIAL DEPTH)

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

The work under this Item consists of partial depth reinforced concrete excavation of the bridge deck through hydro-excavation.

The Hydro-Excavation shall be completed by an experienced hydro-excavator who has successfully hydro-excavated at least three (3) verifiable projects of similar size and magnitude within the last five (5) years. A brief description of each project including the location, start and completion dates, and a reference name, with contact information, and the agency for which the work was performed, shall be provided. The supervisor who served in a responsible capacity, along with credentials, for these jobs shall be provided. The experienced supervisor will also be required to be on site for the entirety of both hydro-excavations. All of this information shall be provided to the Resident Engineer at least 60 days prior to beginning work.

DEPTH OF REMOVAL

The minimum depth of removal shall be 1/2 inch (0.50") through hydro-excavation; the depth of which shall be measured to the average mortar line (not the high peaks) calibrated to hydro sound concrete. In addition, hydro-excavation is expected to remove any additional unsound concrete below and generally produce a rough, bondable surface for placement of the new overlay.

GENERAL

Hydro-excavation shall be performed over the full length and full width of the surface of the reinforced concrete bridge deck to provide a highly roughened and clean, bondable surface.

The Contractor shall clean the surface with a vacuum system capable of collecting loose and wet debris and water in the same pass leaving a clean surface sufficient for placement of the proposed overlay on the bridge deck.

HYDRO-EXCAVATION EQUIPMENT

The hydro-excavation equipment shall be a computerized, self-propelled robotic machine that utilizes a high-pressure water jet stream capable of attaining pressures in the range of 14,000 to 18,000 PSI and removing all unsound, or otherwise designated, concrete to the depth specified. The pressure used for this work shall be a minimum of 14,000 PSI and a maximum of 18,000 PSI. Ultra high-pressure machines shall not be permitted. Water usage per minute shall be a minimum of 55 gallons (55 GPM minimum).

The equipment shall be capable of providing a highly roughened and clean bondable surface. The equipment shall only be operated by individuals who have received rigorous training as required by the equipment manufacturer.

ITEM 129.12 (Continued)

The vacuum equipment shall be equipped with fugitive dust control devices and capable of removing wet and dry debris, along with standing water, in the same pass.

Handheld high-pressure wands or 16 lb. maximum Pneumatic or power hammers operated at no more than a 45-degree angle from horizontal shall be used in areas that are inaccessible to the hydro-excavation equipment or in areas that require minor trim work. A request for the use of pneumatic hammers is to be submitted by the Contractor in advance and reviewed and approved by the District Bridge Engineer.

The Contractor shall take steps to prevent damage to existing reinforcing steel or existing steel drainage structures or existing steel joint assemblies. The Contractor shall not place wheels from heavy equipment, such as vacuum trucks, on deck areas where top layer of slab reinforcement, existing steel drainage structures or existing joint assemblies that have been left unsupported by the hydro-excavation process. Equipment shall be operated at speeds and in a manner that will not cause damage to the slab or girders.

TEST AREA

During each construction stage, a test area will be required to establish the operating parameter and to demonstrate that equipment, personnel, and methods of operation are capable of producing satisfactory concrete removal results. The area shall be approximately 50 square feet and shall include areas of both sound and unsound concrete. The intent is to demonstrate the ability to provide a rough, bondable surface and to remove the deteriorated concrete to the required depth as per section titled "Depth of Removal" in Item 129.12, without damaging the existing, sound concrete.

Once satisfactory results are obtained, the quality and depth of removal will become the standard for the project.

SPECIAL CONDITIONS

Prior to beginning any operations, the Contractor shall evaluate the deck to ensure that the proposed equipment does not overload or damage the remaining deck and structure after hydro-excavation has been performed. The Contractor shall consider the construction loads on the structure in his sequencing of the work and operations, including phase construction. The Contractor shall submit his proposed operations for review and approval.

Potable water shall be used and be provided by the Contractor. If planning to access hydrants, it is the Contractor's responsibility to contact and make the appropriate arrangements with the Taunton Water Department.

The Contractor shall take necessary precautions during hydro-excavation to prevent damage to the remaining structure and adjacent property as a result of runoff. Uncontrollable discharge is not allowed. All runoff shall be collected by the contractor, treated, and disposed of offsite. All deck drains, joints, scuppers, troughs and catch basins shall be temporarily blocked to prevent any runoff from entering the drainage system or adjacent properties.

ITEM 129.12 (Continued)

The Contractor shall control dust and run-off in accordance with all applicable regulations. The Contractor is responsible for the disposal of all material removed, including but not limited to, material collected by vacuuming the deck.

Submittals for approval shall include complete manufacturer's data for equipment proposed for use, equipment operator's qualifications to perform the work, placement of machinery, means of controlling runoff, source of water, and any other means and methods necessary for completing the work. No work shall begin until these are approved.

Construction equipment shall be kept off the prepared deck surface prior to overlay installation. If construction traffic is required on the prepared surface, protective measures such as plastic sheeting should be used to prevent surface contamination.

All proposed construction joints will be sawcut to the satisfaction of the Engineer.

METHOD OF MEASUREMENT

Item 129.12 will be measured for payment by the Square Yard of reinforced concrete hydro-excavated, removed, and disposed. The quantity for payment will be based on the actual number of square yards hydro-excavated, regardless of the number of passes required to complete the work.

BASIS OF PAYMENT

Item 129.12 will be paid for at the Contract unit price per Square Yard, which price shall include all labor, materials, equipment, cleaning, containment, satisfactory disposal of all excavated concrete, protection from contamination and all incidental costs required to complete the work. Removal of concrete in areas inaccessible to the hydro-excavation equipment shall be incidental to Item 129.12.

Removal of concrete at the existing joints at the abutments will be paid under Item 127.42 REINFORCED CONCRETE DECK EXCAVATION AT JOINTS and excavation within three feet of the end of the existing deck will not be measured for payment under this item.

ITEM 129.6**BRIDGE PAVEMENT EXCAVATION****SQUARE YARD**

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

The work under this Item shall consist of the removal and disposal existing hot mix asphalt and membrane from the bridge deck and over the backwall at the abutment joints, within 37 inches of the centerline of the existing joint, and as required by the Engineer.

CONSTRUCTION METHODS

Removal and legal disposal of the asphaltic material and membrane removed from the joint is included in the work under this item. The Contractor must retain a complete record of disposal for submission to the Engineer as a part of the project records.

The Contractor shall submit to the Engineer for approval the type of machine that will be used. Bridge deck damaged by the Contractor's operations shall be repaired at the Contractor's own expense.

Where any reinforced concrete is excavated from limited deck areas, the removal shall be paid for under Item 127.1, 127.4 or 127.42, as applicable.

METHOD OF MEASUREMENT

Item 129.6 will be measured for payment by the Square Yard of bridge pavement excavated, removed and properly disposed of. Only the HMA that is over the backwall or deck and that is within 37 inches of the centerline of the joint will be measured for payment under this item. The joint width may vary by location.

BASIS OF PAYMENT

Item 129.6 will be paid for at the Contract unit price per Square Yard, which price shall include all labor, materials, tools, equipment, disposal of the asphalt material and waterproofing membrane, and all incidental costs required to complete the work.

ITEM 415.11**MILLING OF CONCRETE BRIDGE
(PARTIAL DEPTH)****SQUARE YARD**

The work under this Item shall conform to the relevant provisions of Subsection 415 of the Standard Specifications and the following:

The work under this Item consists of removal of the Hot Mix Asphalt overlay and waterproofing membrane and partial depth reinforced concrete excavation of the bridge deck through mechanical scarification (micro milling or other approved mechanical means).

DEPTH OF REMOVAL

The entire depth of the HMA wearing surface and the existing waterproofing membrane on the bridge deck shall be removed. The depth of removal of concrete, beneath the overlay, through mechanical scarification shall be 1/2 inch (0.5") below the top of the concrete bridge deck.

MECHANICAL SCARIFICATION & MILLING OF EXISTING CONCRETE SURFACE

Prior to the micro milling, the depth of the rebar shall be verified in the field by the Contractor. The original bridge deck surface shall be scarified to a depth of 0.5" with a mechanical micro-milling machine capable of accurately and automatically establishing profile grades. Areas adjacent to the curb, scuppers, joints or other locations inaccessible to the milling machine shall be hand chipped. If mechanical milling results in the snagging of reinforcing steel, the operation shall be stopped immediately, and the depth of removal adjusted. Damaged or dislodged reinforcing steel, existing drainage structures or existing joint assemblies, as a result of Contractor negligence during the operation shall be repaired or replaced at the Contractor's expense. All construction debris, wearing surface material or residual materials from the micro milling process shall be completely removed from the bridge deck prior to the commencement of deck hydro-excavation and shall become the property of the Contractor and shall be removed from the job site. Additionally, the milling shall roughen the surface of the concrete below in preparation for hydro-excavation (Item 129.12).

EQUIPMENT

The milling equipment shall be capable of accurately and automatically establishing profile grades along each edge of the machine by referencing the existing bridge deck by means of a ski or matching shoe.

ALTERNATIVE CONSTRUCTION METHODS FOR REMOVAL OF HMA AND WATERPROOFING MEMBRANE

In lieu of milling to remove the wearing surface, the Contractor may elect to remove the Hot Mix Asphalt wearing surface and waterproofing membrane using hand work or alternate machinery.

The Contractor shall submit the methods and type of machinery to be used to the Engineer for approval. Areas of the bridge deck that are damaged by the Contractor's Operations shall be repaired without additional compensation.

ITEM 415.11 (Continued)**METHOD OF MEASUREMENT**

Item 415.11 will be measured for payment by the Square Yard of hot mix asphalt, waterproofing membrane, and concrete bridge deck excavated, removed, and disposed, regardless of the number of passes of the equipment.

BASIS OF PAYMENT

Item 415.11 will be paid for at the Contract unit price per Square Yard, which price shall include all labor, materials, equipment, proper disposal of all excavated concrete, and all incidental costs required to complete the work.

No additional payment will be made for removal of the pavement prior to milling.

ITEM 482.31**SAWING AND SEALING JOINTS IN ASPHALT
PAVEMENT AT BRIDGES****FOOT**

The work to be done under this Item consists of making a sealed kerf across the full width of the finished asphalt pavement at bridge abutments, where called for on the Plans. The shape, width, and depth of the kerf shall be as shown on the Joint Details.

Prior to the start of the asphalt pavement operation, the Contractor shall place a mark on each curb or barrier on either side of the paved roadway. These marks shall be aligned with the actual end of the bridge deck and shall be placed so that they will not be covered or otherwise obscured by the asphalt pavement.

After the completion of the paving operation, the Contractor shall snap a straight chalk line on the pavement between these two marks. The Contractor shall then saw cut the pavement along this line to the depth, width and shape shown on the Plans. The equipment shall be approved by the Engineer prior to commencing work.

After completing the saw cutting, the Contractor shall clean the saw groove of any dust and debris with an oil free air blast. If the groove was wet sawn, the groove shall be cleaned with a water blast to remove any remaining slurry and debris, vacuumed with a Wet-or-Dry vacuum to remove any standing water, and then dried with an air blast from a Hot-Air-Lance.

Once the groove is clean and dry, the Contractor shall fill it completely with a hot-applied bituminous crack sealer meeting the requirements of M3.05.2 in accordance with the manufacturer's application instructions and restrictions regarding ambient and material temperatures. The crack sealer shall be thoroughly cured prior to opening the road to traffic. To reduce tackiness, only boiler slag aggregate (black beauty) shall be scattered over the sealer when deemed necessary by the Engineer. Conventional sand shall not be used for this purpose.

METHOD OF MEASUREMENT

Item 482.31 will be measured for payment by the Foot, of the actual number of feet of kerf sawed and sealed in the asphalt pavement surface, complete in place.

BASIS OF PAYMENT

Item 482.31 will be paid for at the Contract unit price per Foot, which price shall include all labor, materials, equipment, and all incidental costs required to complete the work.

ITEM 583.**EDGING REMOVED AND RESET****FOOT**

The work under this item shall conform to the relevant provisions of Subsection 580 of the Standard Specifications and the following:

Granite edging will be carefully removed from the existing median and stacked off-site for reuse at the end of the project. The edging shall be satisfactorily protected to ensure it does not become damaged in storage. Upon completion of the bridge deck overlay, the granite edging will be returned to the project site for re-installation.

METHOD OF MEASUREMENT

Item 583. will be measured for payment by the Foot of edging removed and reset.

BASIS OF PAYMENT

Item 583. will be paid for at the Contract unit price per Foot, which price shall include all labor, materials, equipment and incidental costs required to complete the work.

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

The work under this item shall conform to the relevant provisions of Subsection 644 of the Standard Specifications and the following:

The Contractor shall provide all labor, materials, equipment and incidental costs required to furnish, install, maintain and remove temporary fencing to prevent pedestrians from accessing the work zone in Stage 3. The temporary fence shall be a pre-fabricated chain link fence, a minimum of 6 feet high and shall be self-supporting, without use of anchors installed in the bridge deck. The base shall be secured against wind by use of a concrete base or ballasted with sand bags. Pedestrians shall be protected from the base and ballast using pedestrian barricades, whose supports will be capable of overlapping the fence bases within the width available in the Stage 3 Temporary Traffic Control drawings. Individual fence segments shall be connected together, such that a continuous barrier is created.

METHOD OF MEASUREMENT

Item 657. will be measured for payment by the Foot of temporary fence installed, measured from the centerline of the first post to the centerline of the last post.

BASIS OF PAYMENT

Temporary Fence will be paid for at the Contract unit price per Foot, which price shall include all labor, materials, equipment and incidental costs required to furnish, install, maintain and remove the temporary fencing. 60% of the unit price bid for this item will be paid when the fence is furnished, installed and accepted. The remaining 40% will be paid once the temporary fence has been removed from the project site. Temporary fence will remain the property of the Contractor at the end of the project. No separate payment will be made for gates and locks, or to maintain (and remove when ordered) the temporary fence, but all costs in connection therewith shall be included in the Contract unit price bit for this item.

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 catch basins and drop inlets within the project limits and as required by the 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

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:

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
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 811.35**PULL BOX ADJUSTED****EACH**

The work under this item shall conform to the relevant provisions of Subsection 800 of the Standard Specifications and the following:

The work under this Item consists of adjusting existing pull box frame & covers to the surface of the reconstructed median.

In addition, this item includes lowering existing pull boxes to a temporary grade, as required for temporary paving of the median for Stage Construction of the bridge deck overlay. The proposed work includes removing and stacking the frame and cover for later reuse and lowering existing traffic signal pull box(es) below the temporary roadway grade. The contractor shall furnish and install a load rated frame and cover, adjusted to the temporary roadway grade, or shall install a steel plate over the pull box and pave over the pull box with a minimum of 4 inches of Hot Mix Asphalt. Prior to placement of the proposed, final median surface any lowered pull boxes shall be raised, the frame and cover will be reinstalled and adjusted to final grade.

METHOD OF MEASUREMENT

Item 811.35 will be measured for payment by the Each pull box lowered to a temporary grade, raised to final grade or adjusted to final grade, complete in place.

BASIS OF PAYMENT

Item 811.35 will be paid for at the Contract unit price per Each, which price shall include all labor, materials, equipment and incidental costs required to complete the work.

Hot mix Asphalt will be paid Under Item 472.

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.

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.

ITEMS 852.11 and 852.12 (Continued)

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 853.8**TEMPORARY ILLUMINATION FOR WORK ZONE****DAY**

The work under this Item shall conform to the relevant provisions of Subsection 850 of the Standard Specification and the following:

The work under this Item shall include furnishing, deploying and maintaining in proper operating condition a LED balloon diffuser lighting system. These portable light towers shall be used throughout the project area for temporary work zone lighting. The use of unshielded high wattage flood lights shall not be permitted.

The Contractor shall illuminate the following work zone areas:

- Change in direction (i.e., work zone entrances and exits, crossovers, etc.)
- Tapered areas
- Actual area where the construction is being performed

Light measurement shall be based on the illuminance method and the lighting levels shall be based on the classification of construction activity that is taking place. At no time shall the light level be below 5 fc and the uniformity shall not exceed 6:1. Task Classifications and recommended illumination levels are shown in Table 1.

Task Classifications	Illumination Level	Average Minimum Maintained Illuminance
All work operations areas, setup of lane or road closures, lane closure tapers, and flagging stations, such as: Excavation (all types), Embankment Fill and Compaction, Reworking Shoulders, Asphalt Pavement Rolling, Subgrade, Stabilization and Construction, Base Course Rolling, Sweeping, Cleaning and Landscaping.	Level I	5 foot-candles
Areas on or around construction equipment; asphalt paving, milling, and concrete placement and/or removal, such as, Milling, Removal of Pavement, Asphalt Paving and Resurfacing, Concrete Pavement, Waterproofing and Sealing, Sidewalk Construction, Base Course Grading and Shaping, Surface Treatment, Bridge Decks, Drainage Structures and Drainage Piping, Other Concrete Structures, Barrier Wall and Traffic Separators, Guardrails and Fencing, Striping and Pavement Markings, Repair of Concrete Pavement, Highway Signs, Hole Filling and Repair of Guardrails and Fencing.	Level II	10 foot-candles
Pavement or structural crack/ pothole filling; joint repair, pavement patching and/or repairs, installation of signal/electrical/mechanical equipment, such as, Traffic Signals, Highway Lighting Systems and Crack Filling	Level III	20 foot-candles

TABLE 1
TASK CLASSIFICATIONS AND ILLUMINATION LEVELS

ITEM 853.8 (Continued)

Prior to commencement of work the Contractor shall submit to MassDOT for approval a description of illumination equipment that is proposed to be used on this project, and shall include photometrics that detail the light levels that are to be provided for the particular operation for the type of equipment, level of luminance and height to be installed.

Any potential glare from the lighting system should be considered from each direction and on all approaching roadways and opposing lanes of traffic. Glare from the illumination system should be minimized as much as possible for both workers and motorists in adjacent active travel lanes. If required, the Contractor shall provide supplemental hardware, such as, visors, louvers, shields, glare screen and barrier to reduce glare in adjacent active travel lanes.

Equipment mounted lighting may be used to supplement light towers to achieve the required lighting levels for the activity involved per Table 1.

The Contractor shall allow MassDOT up to 30 calendar days for review and comment.

METHOD OF MEASUREMENT

Item 853.8 will be measured per Subsection 850.80.

BASIS OF PAYMENT

Item 853.8 will be paid per Subsection 850.81. The cost shall include all labor, materials, equipment, tools and all incidentals required for the design and installation of the work zone lighting system. This shall include, but not be limited to lighting submission preparation, wiring connections, equipment relocations, and include all material and labor incidental for a complete, functional and operational work zone illumination system.

The price of this item shall include the material and labor necessary to install any supplemental hardware required to reduce glare on all adjacent active travel lanes.

The per day price shall be full compensation for all “Temporary Illumination for Work Zone” regardless of the number of concurrent work areas, amount of equipment concurrently in use or the durations of or changes of the work shifts per day.

Furnishing, Installing, resetting, modifying and removing equipment for work zone illumination shall be incidental to Item 853.8.

ITEM 854.016 TEMPORARY PAVING MARKINGS - 6 INCH (PAINTED) FOOT

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

The work under this item includes application, maintenance and removal of temporary pavement markings on the latex modified concrete overlay placed under this contract. Temporary pavement markings removed from the new concrete wearing surface shall be removed using an approved method which shall not cause damage to the wearing surface or a drastic change in texture or appearance. Approved methods include use of High Pressure Air, High Pressure Water (except in cold weather) and Sand Blasting. Grinding to remove markings from new concrete surfaces will not be allowed.

METHOD OF MEASUREMENT

Item 854.016. will be measured for payment by the Foot according to Subsection 860.80 of the Standard Specifications.

BASIS OF PAYMENT

Item 854.016 will be paid for at the Contract unit price per Foot, which price shall include full compensation for furnishing, installing, maintaining and removing the pavement markings.

ITEM 854.6**TEMPORARY PORTABLE RUMBLE STRIP****DAY**

Work under this item consists of furnishing, deploying, maintaining in proper operating conditions, and removing temporary portable rumble strips (TPRS) for temporary lane closures of 24 hours or less.

MATERIALS

The TPRS shall be 10' to 11' wide, measured perpendicular to the path of travel, 12" to 16" long, measured parallel to the path of travel, and 0.5" to 0.75" tall. All edges shall be beveled. The surfaces shall be grooved to limit potential hydroplaning.

The TPRS shall lay flat on the road surface without the use of nails, anchors, or adhesives, and shall be flexible so as to conform to the surface profile.

The TPRS shall be able to withstand vehicle weights of up to 80,000 lbs. and operate in temperatures between 0° to 120° F.

The manufacturer shall certify the TPRS to be safe for use on roads with speed limits of at least 70 mph.

TPRS that appear damaged or functioning in an unsafe manner may be order removed by the Engineer and replaced at no additional cost.

CONSTRUCTION METHODS

The TPRS shall be installed per the plans or at the discretion of the Engineer.

The Contractor shall conform to the manufacturer's specifications for installation and the following:

- A. The road surface shall be cleared of all gravel, sand, and debris.
- B. If RoadQuake 2™ model is used, the modular pieces shall be assembled into 11-foot strips per the manufacturer's instructions in advance of deployment. The interconnected segments shall form a smooth and flat, continuous section.
- C. A Truck-Mounted Attenuator, conforming to Section 850, shall be used as shadow vehicle protection during the deployment and removal of TPRS on any roadway with speeds of 45 mph or greater.
- D. TPRS shall be deployed in conjunction with all other temporary traffic control devices. MA-W28-1 (Rumble Strips Ahead) sign(s) shall be installed per the Temporary Traffic Control Plan.
- E. TPRS deployment:
 1. TPRS shall be placed perpendicular to the direction of travel, centered in the lane.
 2. Three (3) individual strips are required for a single array.
 3. Refer to the Temporary Traffic Control Plan for the location of the array respective to the lane closure.

ITEM 854.6 (Continued)

4. The spacing of the individual strips within the array shall conform to the following table:

Speed Limit	Distance Between Rumble Strips (measured center-to-center)
>55 mph	20 feet
40 mph to 55 mph	15 feet
<40 mph	10 feet

5. The TPRS shall be placed without the use of nails, adhesives, or other methods of affixing them to the road surface.
- F. All TPRS shall be maintained in proper condition, alignment, spacing, and location throughout the duration of the lane closure, at no additional cost.
- G. The TPRS shall be removed prior to the removal of the traffic control devices used to close the travel lane.
- H. TPRS shall not be used during snow events.

METHOD OF MEASUREMENT

An array of three (3) temporary portable rumble strips is considered one (1) unit and will be measured by the day. Each period of up to 24 hours during which this unit is in use will be measured as one day regardless of the number of times the array is deployed, repositioned, or removed.

BASIS OF PAYMENT

Temporary Portable Rumble Strips will be paid for at the contract unit price per day, which shall include full compensation for furnishing, deploying, repositioning, and removing the array of three (3) individual strips as directed by the Engineer.

<u>ITEM 862.506</u>	<u>6-IN. RECESSED WHITE LINE (MC, FD, WR)</u>	<u>FOOT</u>
<u>ITEM 862.512</u>	<u>12-IN. RECESSED WHITE LINE (MC, FD, WR)</u>	<u>FOOT</u>
<u>ITEM 863.506</u>	<u>6-IN. RECESSED YELLOW LINE (MC, FD, WR)</u>	<u>FOOT</u>

The work under these items shall conform to the relevant provisions of Subsection 860 of the Standard Specifications and shall consist of furnishing and installing Recessed Multi-Component (MC), Wet Reflective (WR) Pavement Markings at the locations shown on the plans or as directed by the Engineer.

If the Multi-Component Pavement Marking material is applied over a different pavement marking material, the Contractor shall provide documentation that the Multi-Component Pavement Marking Material being used will adhere to the existing marking material.

MATERIALS

MC pavement markings shall consist of a two-component, 100% solids liquid binder, first drop beads or elements to provide wet and dry retroreflectivity, and second drop glass beads to improve the durability of the pavement marking, reduce track-free times, and provide supplementary retro-reflectivity. MC Pavement Marking binders are typically composed of, but not limited to, Epoxies, Polyureas, or Urethanes.

Classification of dry time is based upon the results of the test procedures found in ASTM D711 (73.5 ± 3.5°F at 50 ± 5% relative humidity) when applied with glass beads. MC Ultra-Fast Dry (MC, UFD) pavement markings shall have a no track time of 3 minutes or less. MC Fast Dry (MC, FD) pavement markings shall have a no track time of 10 minutes or less. MC Standard Dry (MC, SD) pavement markings shall have a no track time of 45 minutes or less. The Contractor shall provide a Certificate of Compliance verifying the product supplied meets the specified dry time requirements per ASTM D711 prior to installation.

The Contractor shall select a liquid binder and bead/element combination that meets these performance specifications.

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 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. 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

ITEMS 862.506, 862.512 and 863.506 (Continued)**CONSTRUCTION METHODS**

The Contractor shall follow all installation instructions from the manufacturer, including allowable ranges of temperature and humidity for installation, unless otherwise approved by the Engineer.

The pavement surface shall be clean, dry and free of laitance, oil, dirt, grease, paint or other foreign contaminants prior to the installation of any new pavement markings. If an air lance is used to clean the surface, air compressors shall initially be blown out away from the application area to prevent compressor condensation build-up. A minimum of 24 hours of dry time following any rainfall is required prior to the placement of pavement markings.

Recessing of markings shall be per Subsection 860.65: Recessed Markings.

Application rate for binder and all glass beads shall consider final pavement surface composition and smoothness in advance of application to ensure proper wet film thickness and embedment of all beads. The Contractor shall provide the Engineer with documentation from the manufacturer with all recommended application rates in advance of any pavement marking installation.

The minimum uniform wet thickness for the MC binder shall be 20 mils but should be increased if recommended by the manufacturer. The line thickness shall be met across at least the middle $\frac{2}{3}$ of the pavement marking width. Wet mil thickness gauges 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.

Glass beads 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 should be embedded in the binder to a depth of approximately 50% of their diameter.

Glass beads shall be applied as a reflective medium, using the double drop method, at a rate in accordance with the manufacturer's specification in order to meet the minimum retro-reflectivity levels.

Newly installed pavement markings shall be protected from tracking during the curing period per Subsection 860.63.

Once the installed pavement markings have been open for traffic for a minimum of 7 days, the Contractor shall perform retro-reflectance 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, and the testing procedures shall follow ASTM E1710 (*Standard Test Method for Measurement of Retroreflective Pavement Marking Materials with CEN-Prescribed Geometry Using a Portable Retro-reflectometer*) and ASTM E2177 (*Standard Test Method for Measuring the Coefficient of Retroreflected Luminance (R_L) of Pavement Markings in a Standard Condition of Wetness*).

ITEMS 862.506, 862.512 and 863.506 (Continued)

The average initial retro-reflectance readings shall exceed the following minimum values:

Test Method	*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 retro-reflectance 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, unless otherwise approved by the Engineer.

METHOD OF MEASUREMENT

Items 862.506, 862.512 and 863.506 will be measured for payment respectively by the FOOT of Recessed Multi-Component (MC), Wet Reflective (WR) Pavement Markings installed, complete in place.

BASIS OF PAYMENT

Items 862.506, 862.512 and 863.506 will be paid for at the respective contract unit price per FOOT, which prices shall include all material, labor, and equipment required or incidental to the satisfactory completion of the work.

ITEM 864.11
ITEM 864.13

LEGENDS (PF)
ARROWS (PF)

EACH
EACH

The work under these Items shall conform to the relevant provisions of Subsection 860 of the Standard Specifications and the following:

The work under these items consists of furnishing and installing pavement marking arrows, symbols, and legends at the locations shown on the plans or as directed by the Engineer..

MATERIALS

Preformed Markings for Legends, Symbols, and Arrows are composed of preformed thermoplastic with pigments, glass spheres or other reflective materials, and other additives to control color, retroreflectivity, and skid resistance.

All pavement marking colors shall be white and conform to MUTCD standards, including the Daytime Color Specification Limits for Retroreflective Pavement Marking Material found in 23 CFR 655, Subpart F.

The dimensions of all pavement marking legends, symbols, and arrows shall conform to Figures 3B-16, 3B-23, 3B-24, 3C-2, 8B-7, 9C-3, 9C-7, and/or 9C-9 of the MUTCD, unless otherwise shown in the drawings, and are generally categorized in the following table.

Item (Type)	Typical Applications
864.11 (Legends)	Legends, typically 8 ft tall, that fit laterally within a single lane (e.g. "ONLY," "BUS," "YIELD")
864.13 (Arrows)	Lane Use Arrows; Lane Use Arrows for Roundabouts
864.14 (Legends, Oversized)	Wrong-Way Arrow; Lane Reduction Arrow; Grade Crossing Symbol with RR Legend; multi-lane legends (e.g. "SCHOOL")
864.21 (Bicycle Legends)	All legends, typically 44 in. tall, used in bike lanes (e.g. "BIKE," "LANE," "JCT")
864.22 (Bicycle Symbols)	Helmeted Bicyclist or Bicycle Outline used in bike lanes; Shared Lane Marking (Sharrow) with chevrons; Bicycle Detector symbol;
864.23 (Bicycle Arrows)	Arrow used with bike lane markings; Lane Use arrows at intersections

Post-installation, the surfaces of all preformed markings shall provide a minimum skid resistance value of 35 British Pendulum Number (BPN) when tested in accordance with ASTM E303, with exception to Preformed Markings for Bicycle Facilities, which shall provide a minimum of 55 BPN.

The leading edge(s) of all preformed markings shall be tapered to minimize risk of plow damage. Retroreflective properties shall be verified by an independent laboratory prior to installation. The average initial retroreflectance readings shall exceed the following minimum values:

Test Method	*White Markings
ASTM E1710 (Dry)	300 mcd/lux/m ²

*Observation Angle = 1.05°, Entrance Angle = 88.8°

ITEMS 864.11 and 864.13 (Continued)

The Contractor shall provide a Certificate of Compliance verifying the product supplied will meet the color, friction, and retroreflectivity requirements prior to installation.

CONSTRUCTION METHODS

The Contractor shall supply Shop Drawings to the Engineer for approval a minimum of 30 days in advance of installation. Shop Drawings shall include the product manufacturer's instructions, material safety data sheets (MSDS) for all components including any primers and sealers, and all tools, equipment, and procedures to be used for the installation. No work shall commence until the Shop Drawings have been approved.

It shall be the responsibility of the Contractor to prepare the surface prior to the installation of any Preformed Markings for Legends, Symbols, and Arrows. Any joints or cracks in the pavement shall be pre-treated per the manufacturer's recommendation. At larger cracks or joints the material shall be laid over the gap and off-cut 1 in. on each side of the crack or joint prior to installation.

The surface shall be clean and dry prior to installation of the system. If additional surface preparation is recommended by the manufacturer, such as the installation of a primer or preheating, it shall be completed per the manufacturer's specifications. All surface preparation shall be considered incidental to the cost of the item.

All existing pavement markings that are to remain, castings, curbs, and rumble strips within the vicinity of the Preformed Markings for Legends, Symbols, and Arrows shall be protected by the Contractor. Existing pavement markings damaged during the installation shall be removed and replaced by the Contractor at no additional cost.

The Contractor shall follow all installation instructions from the manufacturer, including allowable ranges of temperature and humidity for installation, unless otherwise approved by the Engineer.

Upon completion of installation, a sealer shall be applied if recommended by the manufacturer. The sealer shall be installed per the manufacturer's specification. The application of a sealer shall be considered incidental to the cost of the item.

The Contractor shall maintain protection of the Preformed Markings installation from vehicle and foot traffic throughout the minimum cure time recommended by the manufacturer.

METHOD OF MEASUREMENT

Items 864.11 and 864.13 will be measured for payment respectively by EACH Preformed Markings for Legends, Symbols, and Arrows installed, complete in place.

BASIS OF PAYMENT

Items 864.11 and 864.13 will be paid for at the respective contract unit price per EACH, which prices shall include all material, labor, and equipment, and all incidental costs required to complete the work.

<u>ITEM 866.612</u>	<u>12-IN. RECESSED WHITE LINE (PF, WR)</u>	<u>FOOT</u>
<u>ITEM 866.706</u>	<u>6-IN. RECESSED WHITE LINE</u>	<u>FOOT</u>
	<u>WITH BLACK CONTRAST (PF, WR)</u>	
<u>ITEM 867.706</u>	<u>6-IN. RECESSED YELLOW LINE</u>	<u>FOOT</u>
	<u>WITH BLACK CONTRAST (PF, WR)</u>	

The work under these Items shall conform to the relevant provisions of Subsection 860 of the Standard Specifications and the following:

The work under these items consists of furnishing and installing pavement marking lines at the locations shown on the drawings or as directed by the Engineer.

Six inch wide permanent pavement markings placed on the concrete wearing surface of the bridge deck shall be all Stamark All Weather 380AW-5 contrast tape.

MATERIALS

The preformed marking material to be used shall be Stamark 380AW or Stamark 380AW-5 (Contrast) by 3M or approved equal.

Preformed Marking Lines are composed of preformed thermoplastics, tape, or other materials premixed with pigments, glass spheres or other reflective materials, and other additives to control color, retroreflectivity, and skid resistance.

All pavement marking colors shall conform to the MUTCD standards, including the Daytime Color Specification Limits for Retroreflective Pavement Marking Material found in 23 CFR 655, Subpart F.

Post-installation, the surfaces of all preformed markings shall provide a minimum skid resistance value of 35 British Pendulum Number (BPN) when tested in accordance with ASTM E303, with exception to crosswalks, stop lines, and markings that delineate bicycle facilities, which shall provide a minimum of 55 BPN.

Retroreflective properties shall be verified by an independent laboratory prior to installation. The average initial retroreflectance readings shall exceed the following minimum values:

Test Method	*White Markings	*Yellow Markings
ASTM E1710 (Dry)	500 mcd/lux/m ²	300 mcd/lux/m ²
ASTM E2177 (Wet Recovery)	300 mcd/lux/m ²	250 mcd/lux/m ²
ASTM E2832 (Continuous Wetting)	250 mcd/lux/m ²	200 mcd/lux/m ²

*Observation Angle = 1.05°, Entrance Angle = 88.8°

The black contrast shall be non-reflective and 1 to 2 in. wide, adding a total of 2 to 4 in. of nominal width to the line.

The leading edge(s) of all preformed markings shall be tapered to minimize risk of plow damage.

ITEMS 866.612, 866.706 and 867.706 (Continued)

The Contractor shall provide a Certificate of Compliance verifying the product supplied will meet the color, friction, and retroreflectivity requirements prior to installation.

CONSTRUCTION METHODS

The Contractor shall supply Shop Drawings to the Engineer for approval a minimum of 30 days in advance of installation. Shop Drawings shall include the product manufacturer's instructions, material safety data sheets (MSDS) for all components including any primers and sealers, and all tools, equipment, and procedures to be used for the installation. No work shall commence until the Shop Drawings have been approved.

Recessing of markings shall be per 860.65: Recessed Markings.

Lines shall not be placed adjacent to each other to increase line width unless lines greater than 12 in. wide are required and the manufacturer's specifications allow it.

All existing pavement markings that are to remain, castings, curbs, and rumble strips within the vicinity of the Preformed Markings shall be protected by the Contractor. Existing pavement markings damaged during the installation shall be removed and replaced by the Contractor at no additional cost.

The Contractor shall follow all installation instructions from the manufacturer, including allowable ranges of temperature and humidity for installation, unless otherwise approved by the Engineer.

Upon completion of installation, a sealer shall be applied if recommended by the manufacturer. The sealer shall be installed per the manufacturer's specification. The application of a sealer shall be considered incidental to the cost of the item.

The Contractor shall maintain protection of the Preformed Markings installation from vehicle and foot traffic throughout the minimum cure time recommended by the manufacturer.

METHOD OF MEASUREMENT

Items 866.612, 866.706 and 867.706 will be measured for payment respectively by the Foot of Preformed Marking Lines, complete in place, as specified under 860.80.

BASIS OF PAYMENT

Items 866.612, 866.706 and 867.706 will be paid for at the respective Contract unit price per FOOT, which prices shall include all material, labor, and equipment required or incidental to the satisfactory completion of the work. The installation, inspection, and acceptance of the groove shall be considered incidental to the cost of the item(s).

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 Contractor shall carefully remove all existing signs, attachment hardware and sign support posts as shown on the drawings and as directed by the Engineer. Existing foundations shall be removed to a depth of at least 6 inches below the existing ground and the holes backfilled with gravel. The surface shall be patched with a material to match the existing ground or as directed by the Engineer.

Signs and attachment hardware shall be satisfactorily stored and protected until reset in the proposed work. Sign support posts shall be disposed of in a satisfactory manner. New sign support posts shall be provided.

Signs and attachment hardware lost, damaged or otherwise made unsuitable for reuse by the Contractor's operations shall be replaced by the Contractor with new material at no additional compensation. New attachment hardware and posts shall be furnished and installed as necessary to replace any missing or unusable existing hardware.

The sign shall be mounted in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) and the 1990 Standard Drawings for Signs and Supports. Sign panels shall be cleaned before being reset.

METHOD OF MEASUREMENT

Item 874.2 will be measured for payment by the each traffic sign removed and reset, complete in place.

BASIS OF PAYMENT

Item 874.2 will be paid for at the Contract unit price per each, which price shall include all labor, materials, equipment and incidental costs required to complete the work.

No separate payment will be made for dismantling, storing and resetting of the signs as designated above, the excavation and disposal of the existing foundation, the supplying and placing of compacted gravel backfill where foundations and posts are removed and the patching of the existing surface and area restoration, replacement posts but all costs in connection therewith shall be included in the Contract unit price bid.

ITEM 904.3 **5000 PSI, 3/4 INCH, 685 HP CEMENT CONCRETE** **CUBIC YARD**

The work under this Item shall conform to the relevant provisions of Subsection 901 of the Standard Specifications and the following:

The work shall consist of forming, supplying and placing 5000 PSI, 3/4 IN., 685 HP Cement Concrete in areas specified in the Contract Plans for full depth deck repairs, to extend the concrete deck over the backwall, retrofit approach slab expansion keys and reconstruct the wingwalls, sidewalk and safety curb at joints.

This item will also include installation of 1" diameter PVC weep pipes in the abutment expansion keys, as shown in the details in the Construction Drawings, to facilitate drainage from the expansion joint behind the backwall. Weep pipes will be installed at a maximum of 10' O.C. The ends of the pipe will be protected from contamination and clogging during construction of the joint to the satisfaction of the engineer.

Prior to placement of the concrete deck over the backwalls, the top of the backwall will be prepared by cutting off reinforcing steel at the limit of concrete excavation under Item 127.42. A 1" bed or mortar will be placed under this item to create a smooth, level surface for placement on an 1/8" elastomeric pad conforming to M9.14.5 over the length of the backwall, beneath the proposed deck slab. The mortar and 1/8" elastomeric pad shall be considered incidental to this item and will not be measured separately for payment.

Closed cell foam proposed at joints in the Contract Plans are considered incidental to this item and shall not be measured for payment.

PREPARATION FOR PLACEMENT OF NEW CONCRETE

Where new concrete is placed over existing concrete, the existing surface will be roughened by abrasive blasting to a minimum 1/4" amplitude.

Before placing new concrete, the existing surface must be cleaned with oil-free compressed air. After the surface preparation has been accepted by the Engineer, every effort should be made to thoroughly wet the concrete surface, and all porous surfaces to be in contact with new concrete, for 12 hours. This may be accomplished by continuous wetting with soaker hoses or the use of burlap/burlene, etc., where moisture can be maintained. If, in the opinion of the Engineer, conditions or the situation prohibits this, then the surfaces should be wetted for as long as possible. Surfaces must be wetted by a means acceptable to the Engineer using potable water. All reinforcing steel encountered in the excavation shall be thoroughly cleaned by abrasive blasting and coated in zinc-rich primer conforming to MassDOT Standard Specification M7.04.11 before being covered with new concrete.

The Contractor shall remove any puddles of free-standing water with oil-free compressed air, and protect the surfaces from drying, water should be applied for a minimum of 10 minutes to the excavated areas so the existing concrete remains in a clean, saturated surface dry condition until placement of the new concrete.

ITEM 904.3 (Continued)**METHOD OF MEASUREMENT**

Item 904.3 will be measured for payment by the CUBIC YARD of concrete furnished and installed, in place.

BASIS OF PAYMENT

Item 904.3 will be paid at the Contract unit bid price per Cubic Yard of concrete, which price shall include full compensation for all labor, materials, PVC weep pipes in the abutment expansion keys, 1/8" elastomeric pads, closed cell foam, tools, oversight services, equipment, installation and subsequent removal of formwork, materials, and incidental costs required to complete the work.

<u>ITEM 907.1</u>	<u>LATEX MODIFIED CONCRETE OVERLAYMENT</u>	<u>SQUARE YARD</u>
<u>ITEM 907.11</u>	<u>LATEX MODIFIED CONCRETE OVERLAYMENT, ADDITIONAL</u>	<u>CUBIC YARD</u>

The work under these Items shall conform to the relevant provisions of Subsections 476 and 901 of the Standard Specifications, the requirements of Section M4, Sub-Section M4.03.0, and the following:

The work shall consist of furnishing and constructing protective wearing surface of Latex Modified Concrete Overlayment. The final surface shall meet the proposed profile and cross slopes. The final surface shall be grooved after final cure, to the satisfaction of the Engineer, by sawcutting. Texturing shall be included in the cost of installation under Item 907.1. The concrete shall be Non-Gypsum based. The Resident Engineer shall accept the condition of the bridge deck before the Latex Modified Concrete Overlayment shall be placed.

The top 2-1/2" of the overlayment shall be paid under Item 907.1. Any quantity of Latex Modified Concrete placed beyond these limits, after the condition of the bridge deck has been accepted by the Resident Engineer, shall be paid with Item 907.11 Latex Modified Concrete Overlayment, Additional. The entire thickness (both Item 907.1 and Item 907.11) shall be placed simultaneously.

MATERIALS

Materials shall meet the requirements for the respective items in the Standard Specifications with the following exceptions:

Cement - Do not use Type III (high early strength).

Aggregate – Follow M4.01.2 of the Standard Specifications. The nominal size of coarse aggregate shall not be larger than 3/4" and in no case larger than one half the thickness of the section to be placed.

Latex Emulsion Admixture – Use a formulated latex admixture that is a non-hazardous, film forming, polymeric emulsion in water and is homogeneous and uniform in composition. Add all stabilizers at the point of manufacture.

Use a latex modifier conforming to the following requirements:

Polymer Type	Styrene Butadiene
.....	68 ±4% Styrene
.....	32 ±4% Butadiene
Average Polymer Particle Size	1500 to 2500 Angstroms
Emulsion Stabilizers	Anionic and non-ionic surfactants
Percent Solids.....	46.5 to 49.0
Weight per gallon, lbs at 75°F	8.40 to 8.60
pH	9.5 to 11.0
Shelf Life	2 Years
Color.	White

ITEMS 907.1 and 907.11 (Continued)

Provide a Supplier's Certification for each load of latex emulsion admixture in accordance with Standard Specifications. Test admixture samples to verify compliance with the specification requirements before use. Allow 7 days for sampling and testing after delivery to the project.

Do not allow the temperature of latex emulsion admixture to fall below 35°F at any time or exceed 85°F after delivery to the project.

For latex emulsion that has been in storage, use a transfer pump and lines to recirculate it before using.

Latex Modified Concrete – Use a workable mixture that meets the following requirements:

Cement Content, lbs/yd ³	658
Latex Emulsion Admixture, gal/yd ³	24.5
Air Content of Plastic Mix, %	3.5 - 6.5
Slump, inches	3 – 6
% Fine Aggregate as percent of total aggregate by weight	50 - 55
Minimum 7-day compressive strength, psi	4000
Water-Cement Ratio by weight, maximum	0.40

Measure the slump 4 to 5 minutes after discharge from the mixer.

Submit the latex modified concrete mix design, completed by the latex emulsion manufacturer, to the Engineer for review.

EQUIPMENT

Prior to beginning any work, obtain approval for all equipment to be used for deck preparation, mixing, placing, finishing, and curing the latex modified concrete.

Use sandblasting equipment capable of removing all clay, salt deposits, oil and grease deposits and all other foreign matter. Provide traps or separators to remove oil and water from the compressed air. Use traps or separators of adequate size and drain them periodically during operations.

For proportioning and mixing, use self-contained, mobile, and continuously mixing equipment that meets the following requirements:

Use a self-propelled mixer that is capable of carrying sufficient unmixed dry, bulk cement, sand, coarse aggregate, latex modifier, and water to produce at least 6 yd³ of concrete on site.

Use a mixer that is capable of positive measurement of cement introduced into the mix.

Use a recording meter that is visible at all times and equipped with a ticket printout to indicate the quantity of cement.

ITEMS 907.1 and 907.11 (Continued)

Calibrate the mixers to accurately proportion the specified mix. Prior to placing latex modified concrete, perform calibration and yield tests under the Engineer's supervision in accordance with the Department's written instructions. Copies of these written instructions are available from the Materials and Tests Unit. Perform the calibration and yield tests using the material to be used on the project. Recalibrate the mixer after any major maintenance operation, on the mixer, anytime the source of materials changes, or as directed. Furnish all materials and equipment necessary to perform the calibrations and yield tests.

Use a mixer that controls the flow of water and latex emulsion into the mix. Measure the flow rate of water and the latex emulsion with a calibrated flowmeter coordinated with both the cement and aggregate feeding mechanisms and the mixer. Adjust the flow rate, as necessary, to control the slump and ensure that the water-cement ratios are met. In addition to flowmeters, use mixers with accumulative water and latex meters capable of indicating the number of gallons, to the nearest 0.1 gallon, introduced into the mixer. Filter water and latex with a suitable mesh filter before it flows through the accumulative water and latex meters.

Calibrate the mixer to automatically proportion and blend all components of the indicated composition on a continuous or intermittent basis as the finishing operation requires. Provide a mixer that discharges mixed material through a conventional chute and is capable of spraying water over the placement width as it moves ahead to ensure that the surface to be overlaid is wet prior to receiving the modified material.

Mount a tachometer on the unit to indicate the drive shaft speed.

An approved bridge deck finishing machine complying with the following requirements shall be used for consolidating, striking off, and finishing the concrete surface. The finishing machine shall have the necessary adjustments, built in by the manufacturer, to produce the required profile grade, cross-section, and surface smoothness. The supporting frame shall span the section being cast in a transverse direction without intermediate support. The finishing machine(s) shall be self-propelled and capable of forward and reverse movement under positive control. Provisions shall be made for raising all screeds to clear the screeded surface for traveling in reverse. The screed device shall be provided with positive control of the vertical position. The finishing machine(s) shall be self-propelled with two or more rotating cylinder screeds. The rotating cylinder screeds shall rotate in a transverse direction while also traveling in the same direction and shall be operated transversely in overlapping strips in the longitudinal direction not to exceed 6 inches. One or more powered augers shall be operated in advance of the screed(s) and a drag (pan type) float shall follow the screed(s). The surface shall receive an burlap drag.

The burlap drag shall be removed and replaced with a clean burlap drag mat every 10 feet measured along the bridge centerline. The transversely operated rotating cylinders of the finishing machine(s) shall be rotated such that the direction of the rotation of the cylinders at the surface of the concrete is in accordance with the manufacturer's recommendations.

ITEMS 907.1 and 907.11 (Continued)

The finishing machine shall be operated over the full length of the bridge segment to be finished prior to beginning of concrete placement operations. The test run of the self-propelled finishing machine shall be performed in the presence of the Engineer at least 24 hours in advance of the concrete placement with the screed adjusted to its finishing position. During the test run, checks shall be made of the deflection due to the finishing machine, adjustment of guide rails and required thickness of the concrete overlay. Discrepancies so found, which are in excess of the tolerances shall be rectified. All necessary corrections shall be made before concrete placement is begun.

The rate of concrete placement shall be coordinated with the initial strike-off so that the initial strike-off is never more than 10 feet behind the concrete placement.

Concrete immediately in front of the power auger(s) of bridge deck finishing machine shall be placed or cut to a depth no higher than the center of the rotating auger(s). The concrete shall be consolidated just prior to the auger strike off. The Contractor shall utilize approved high frequency internal vibrators (9000 – 13500 vibrations per minute in concrete) that shall be applied in a manner to secure maximum consolidation of the concrete. Consolidation shall leave the concrete free from voids, but shall not be continued so long as to cause segregation or bleeding. The advance auger(s) shall strike off the concrete to approximately ¼ inch above the final grade and then the concrete shall be finished to final grade.

Improper adjustment or operation of the finishing machine that results in inadequate overlay thickness or smoothness shall be corrected immediately. Unsatisfactory performance, particularly with respect to the surface smoothness attained, shall be cause for rejection of the equipment and cement concrete placed.

Work bridges supported on the screed rails shall be provided by the Contractor in order to permit access to the surface of the deck for the purpose of finishing, straight-edging, making corrections, and setting curing materials. The Contractor shall furnish a minimum of two work bridges behind the bridge deck finishing machine, capable of spanning the entire width of the deck and supporting at least a 500-pound load without deflection to the concrete surface. One work bridge shall be used exclusively to facilitate the setting of curing materials. These working bridges shall be available to the Engineer for inspection purposes. Workmen will not be permitted to walk in the fresh concrete overlay after it has been screeded. All finishing work, including application of the fog spray and placement of curing mats, shall be performed from bridges supported above the deck surface.

PREPARATION OF SURFACE

Completely clean all surfaces within the 48 hours prior to placing the overlay unless otherwise approved. Existing concrete surfaces to be in contact with the proposed deck repair concrete must be free of materials such as paint, oil, curing compound, bond breaker, etc., that will inhibit bonding. Existing concrete surfaces shall be hydroblasted with equipment that can remove asphaltic material, oils, dirt, rubber, curing compounds, paint carbonation, laitance, weak surface mortar, and other potentially detrimental materials, which may interfere with the bonding or curing of the proposed deck repair and overlayment concrete.

ITEMS 907.1 and 907.11 (Continued)

Retained reinforcing steel shall be cleaned by abrasive blasting or other mechanical means to achieve a white metal finish.

Thoroughly soak the clean surface for at least 2 hours immediately prior to placing the latex modified concrete. After continuously soaking the surface for at least 2 hours, cover it with a layer of white opaque polyethylene film that is at least 4 mils thick. Immediately prior to placing the latex modified concrete, remove standing water from the surface.

PROPORTIONING AND MIXING OF MODIFIED COMPOSITIONS

Meet the following requirements when proportioning and mixing modified materials:

Use mobile continuous mixers that accurately proportion all materials for the specified mixture.

Operate the proportioning equipment at the manufacturer's recommended speed verified with the tachometer during calibration and normal operations.

Yield checks and other checks are permitted.

PLACING AND FINISHING

Prior to placing modified material, install a bulkhead of easily compressible material at expansion joints to the required grade and profile. Placing material across expansion joints and sawing it later is not permitted.

Place and fasten screed rails in position to ensure finishing the new surface to the required profile.

Brush a latex cement mixture onto the wetted, prepared surface. Carefully give all vertical and horizontal surfaces a thorough, even coating and do not let the brushed material dry before it is covered with the additional material required for the final grade.

Construction joints other than those shown on the plans are not permitted.

Curing shall begin by fog spraying during the placing and finishing operations. Fogging shall continue and shall be applied continuously, rather than intermittently, after the finishing operation until wet covering material has been placed over the concrete surface. Deck finishing machine mounted fogging systems shall be augmented by hand-held fogging equipment as needed.

ITEMS 907.1 and 907.11 (Continued)

Latex Modified Concrete Overlayment shall be water cured only and shall be kept continuously wet for the entire curing period by covering with one layer of wet burlap and either a polyethylene sheet or a polyethylene coated burlap blanket.

Curing protection shall be applied within 15 minutes after the concrete is deposited and before the surface of the concrete has lost its surface "wetness" or "sheen" appearance. The burlap shall be completely saturated over its entire area by being submerged in water for at least 8 hours before the scheduled start of the placement. The burlap shall be drained of excess water prior to application. The burlap shall be free from cuts, tears, uneven weaving and contaminants. The burlap shall be placed such that the edges are lapped a minimum of 6 inches. Continuous burlap wetting shall commence 10 minutes from the time it is placed and shall be kept continuously wet and protected from displacement for the entire curing period in a manner acceptable to the Engineer.

The covering of Latex Modified Concrete Overlayment shall be kept continuously wet for the entire curing period by the use of soaker hoses. The soaker hoses shall circulate water continuously and shall be located to insure a completely wet surface for the entire curing period.

The Contractor shall make sure that adequate personnel are available at the site to carry out the placement, screeding, finishing, fogging and curing operations simultaneously. At least two workers shall continuously place wet burlap curing materials from a dedicated work bridge until the deck is completely covered with wet burlap.

The application of impervious liquid membrane curing compounds shall not be considered a substitute for achieving the curing of the concrete required by these Specifications. Only in the event of an unavoidable delay during concrete placement shall two coats of an approved curing compound be sprayed on to the concrete that has been deposited and not screeded. The curing compound shall conform to the requirements provided under Subsection M9.06.5, except that only AASHTO M 148, Type I shall be permitted. This curing compound shall later be mixed into the concrete by the finishing machine. Curing compounds shall not be applied to the screeded surfaces of bridge decks.

The Latex Modified Concrete Overlayment shall be wet cured for a minimum of 48 hours. The wet curing period shall be followed an additional 96 hours or air curing.

As soon as practical, after the concrete has hardened sufficiently, test the finished surface with an approved rolling straightedge that is designed, constructed, and adjusted so that it will accurately indicate or mark all floor areas which deviate from a plane surface by more than 1/8 inch in 10 feet. Remove all high areas in the hardened surface in excess of 1/8 inch in 10 feet with an approved grinding or cutting machine. Where variations are such that the corrections extend below the limits of the top layer of grout, seal the corrected surface with an approved sealing agent if required by the Engineer. If approved by the Engineer, correct low areas in an acceptable manner.

ITEMS 907.1 and 907.11 (Continued)**JOINT SEALING**

All stage construction joints in the latex modified overlay shall be sawn and sealed with Methacrylate. Joints between the latex modified overlay and the bridge curb will be sealed with Methacrylate. The joint between the median and the surface of the latex modified overlay will be sealed along the proposed median curb, on both sides of the median, as shown in the details.

Before sealing, the concrete must be clean, sound, and free of any contaminants and surface moisture. Any other surface contaminants shall be removed by abrasive blast cleaning. Once all concrete surface contaminants are removed, the concrete shall be swept clean and blown off using oil-free compressed air immediately prior to applying the sealer.

Crack sealing materials shall be applied by skilled applicators under a supervisor with proven successful experience in applications with a similar scope of work. All crack sealing materials shall be applied strictly in accordance with the manufacturer's instructions within the allowable ambient temperature range restrictions. If a heated enclosure is used to accomplish this, the heating units shall be properly vented to the outside of the enclosure to prevent products of combustion from exhausting within the enclosure.

The methacrylate crack sealer shall consist of a high molecular weight low viscosity methacrylate monomer. The methacrylate material shall, as a minimum, provide the following as applied properties:

Property	Value	Test
Viscosity	< 25 cps	ASTM D2393-86
Bond Strength	> 1500 psi	ASTM C882
Tensile Elongation	> 3%	ASTM D638

Stage Construction Joints will be sawcut to the dimensions shown in the details. Where a sawcut is not required, a dam shall be created on either side of the crack with silicone caulk. Methacrylate shall then be poured into the valley created by the sawcut or dam. The methacrylate shall be refilled as necessary as it seeps into the crack to ensure the crack is completely filled. If large quantities of methacrylate are used and the crack is not getting filled, the crack should be filled with pre-bagged dried silica sand filler and the crack shall then be refilled with methacrylate. Once the methacrylate stops seeping into the crack, the Contractor shall remove the silicone caulk dams and any remaining methacrylate contained within with a putty knife or other tool that can scrape them off the concrete surface.

ITEMS 907.1 and 907.11 (Continued)**TEXTURING**

The Latex Modified Concrete Overlayment shall be grooved as specified below by sawcutting. All grooving shall be transverse.

The Latex Modified Overlayment shall be grooved using multi-bladed self-propelled sawcutting equipment. Transverse grooves shall be sawcut no sooner than completion of the 96-hour air curing operation. The grooves shall be rectangular in shape, 1/8 inch wide (plus 1/16 inch, minus 0 inches) and 3/16 inch deep (plus or minus 1/16 inch). The grooves shall be cut at a variable spacing measured from the centerline of grooves as follows: 3/4 inch, 1-1/8 inches, 5/8 inch, 1 inch, 5/8 inch, 1-1/8 inches, and 3/4 inch in 6-inch repetitions across the width to be grooved in one pass of the mechanical saw device. One 6-inch sequence may be adjusted by 1/4 sequence increments to accommodate various cutting head widths provided the general pattern is carried out. The tolerance for the spacing of the grooves is plus or minus 1/16 inch.

The groove sawcutting equipment shall have a depth control device that will detect variations in the surface profile and adjust the cutting head height to maintain the depth of groove specified.

The groove sawcutting equipment shall be provided with devices to control the alignment. Flailing type grooving that is uncontrolled and erratic shall not be permitted. Grooves shall be cut continuously across the roadway, perpendicular to the centerline of the roadway, and shall stop 1 foot from the curb line. Grooves shall be continuous across construction joints. At skewed metal bridge deck expansion joints and at the skewed ends of bridge decks, the groove cutting shall be adjusted by using narrow width cutting heads so that all grooves end within 6 inches of the edge of deck joint measured normal to the centerline of joint or end of deck. No un-grooved deck surface greater than 6 inches in width shall remain. A minimum clearance of 1 inch shall exist between the first groove and the end of deck or edge of metal bridge deck expansion joint. No overlapping or repeating of grooving in the same location by the grooving machine shall be permitted. The pattern of grooving shall be discussed and agreed upon with the Engineer before grooving begins. Debris and residue from the grooving operation shall be continuously removed and disposed of off-site. Residue from grooving operations shall not be permitted to flow into gutters or drainage facilities. The surface of exposed concrete decks shall be left in a washed clean condition that is free from all slipperiness from the sawcutting slurry.

LIMITATIONS OF OPERATIONS

The mixer is not permitted on the bridge deck unless otherwise approved.

No traffic is permitted on the finished latex modified concrete surface until the total specified curing time is completed and until the concrete reaches the minimum specified compressive strength.

Do not place latex modified concrete if the temperature of the concrete surface on which the overlay is to be placed is below 40°F or above 85°F. Measure the surface temperature by placing a thermometer under the insulation against the surface.

ITEMS 907.1 and 907.11 (Continued)

Prior to placing latex modified concrete, the Engineer determines the air temperature and wind speed. Do not place latex modified concrete if the ambient air temperature is below 45°F or above 85°F, or if the wind velocity is in excess of 10 mph. If working at night, provide approved lighting. Provide aggregates for use in the latex modified concrete that are free from ice, frost and frozen particles when introduced into the mixer.

Do not place latex modified concrete when the temperature of the latex modified concrete is below 45°F or above 85°F.

Do not place latex modified concrete if the National Weather Service predicts the air temperature at the site to be below 35°F during the next 72 hours. If this predicted air temperature is above 35°F but below 50°F, then use insulation to protect the latex modified concrete for a period of at least 48 hours.

When using insulation to protect latex modified concrete during the wet curing period, do not remove the insulation until the ambient air temperature is at least 40°F and rising. Leave the latex modified concrete uncovered for the 96-hour air curing period.

Stop all placement operations during periods of precipitation. Take adequate precautions to protect freshly placed latex modified concrete from sudden or unexpected precipitation. Keep an adequate quantity of protective coverings at the worksite to protect the freshly placed pavement from precipitation.

DECK DRAINS

Where existing deck drains are proposed to be removed in the details, the contractor shall remove the drain pipe from the deck by cutting it longitudinally and knocking out the pipe. The penetration in the deck will be formed and latex modified concrete will be placed with the overlay, filling the void. Removal of the deck drain pipes and formwork will be considered incidental Item 907.11.

METHOD OF MEASUREMENT

Item 907.1 will be measured for payment by the Square Yard of latex modified concrete placed, cured, finished and grooved upon the deck, complete in place.

Item 907.11 will be measured for payment by the Cubic Yard of Latex Modified Concrete Overlayment, Additional placed on the surface of the bridge deck, minus the theoretical volume of the overlay. The total volume placed minus the theoretical volume of the overlay shall be the volume paid under Item 907.11.

The theoretical volume of the overlay = (Square yards in place of Item 907.1) x $\frac{\left(2\frac{1}{2}\right) \text{ inches}}{\frac{12 \text{ inches/foot}}{3 \frac{\text{feet}}{\text{yard}}}}$

ITEMS 907.1 and 907.11 (Continued)**BASIS OF PAYMENT**

Item 907.1 will be paid for at the contract unit price per square yard, which price shall include all labor, materials, sawcutting, satisfactory disposal of all sawcut concrete and residue, methacrylate sealer, tools, equipment and incidentals required to furnish, place, finish, cure and texture all Latex Modified Concrete Overlayment.

Item 907.11 will be paid for at the contract unit price per cubic yard, which price shall include all labor, materials, tools, equipment and incidentals required to furnish, place and cure all Latex Modified Concrete Overlayment and for removal of existing deck drains.

ITEM 913.3**CORING AND GROUTING DOWELS****EACH**

The work under this item shall consist of furnishing of all material, products, equipment, and labor for coring and grouting rebars. The embedment length, edge distance, and core hole diameter shall conform to the minimum dimensions shown on the drawings or the recommendations of the manufacturer. The method and equipment used to core the holes, the final embedment length, and diameter of the core hole shall be submitted to the Engineer for approval.

MATERIALS

The grout to be used for these dowels shall be selected from the MassDOT Qualified Construction Materials List for its specific application.

Reinforcing steel shall meet the requirements of AASHTO M31 Grade 60. All reinforcing steel dowels shall be epoxy coated in accordance with ASTM A775.

Construction Methods

All holes shall be diamond core drilled. No impact or percussion type drills will be allowed without prior approval of the Engineer. The inner surfaces of diamond core drilled dowel holes shall be scored to develop sufficient keying action. The method of scoring of the hole's inner surfaces shall be subject to the approval of the Engineer. The holes shall be blown clear of any debris and oil and shall have the approval of the Engineer prior to the placement of any grout material.

If loose cement or concrete spalling is encountered, the Contractor shall perform any necessary repairs before the installation of the dowels. This repair shall be considered incidental.

The drilling operation shall be performed without damage to any portion of the existing structure that is to remain in place. Any damage to any portion of the existing structure that is to remain in place shall be repaired to a condition equal to or better than that existing prior to the beginning of the Contractor's operations and shall be repaired at the Contractor's expense.

The Contractor shall strictly follow the recommendations of the manufacturer for mixing and placing the grout material prior to the placement of the dowels. The Contractor shall, at a minimum, adhere to the ACI code requirements regarding minimum and maximum temperatures while placing the grout. Any excessive grout around the hole after placement of the dowel or anchor bolt shall be struck off smooth while the grout is still fresh.

The Contractor shall perform on site a minimum of one (1) tests of the dowels cored into an existing wingwall for capacity in tension at designated locations on the bridge as required by the Engineer. The test shall be performed in the presence of and to the satisfaction of the Engineer. The testing, including the necessary material and equipment to perform the test, is incidental to the work under this Item.

ITEM 913.3 (Continued)

The pullout force shall correspond to 90% of the yield strength of the bar. If the test bar pulls out or if the concrete utilized in the test shows signs of fracture, the Contractor shall adjust the hole diameter, embedment length, and/or grout material to meet this requirement. The method of applying the tension load to the dowels shall conform to ASTM E488. Details of the test procedure, materials, and equipment shall be submitted to the Engineer for review and approval prior to commencement of the test. Dowels shall not be ordered until the embedment lengths have been approved by the Engineer.

The Contractor shall arrange with the material's manufacturer or distributor to have the services of a competent field representative at the work site prior to any drilling of the proposed dowel holes to instruct the work crews in proper dowel installation procedures. The field representative shall remain at the job site after work commences and continue to instruct until the representative, the

Contractor, and Engineer are satisfied that the crew has mastered the technique of installing the dowels successfully. The representative shall make periodic visits to the project as the work progresses and shall confer on each visit with the Contractor, Inspector and/or Engineer. The manufacturer's field representative must be fully qualified to perform the work and shall be subject to the approval of the Engineer.

METHOD OF MEASUREMENT

Item 913.3 will be measured for payment by Each dowel (rebar) cored and grouted, complete in place.

BASIS OF PAYMENT

Item 913.3 will be paid for at the contract unit price per Each, which price shall include all labor, tools, equipment, testing, and materials, including steel reinforcing bars regardless of length and size to complete the work.

The testing, including the necessary material and equipment to perform the test, is incidental to the work under this Item.

ITEM 964.21**CONCRETE PROTECTIVE COATING****SQUARE FOOT**

The work under this item shall conform to the relevant provisions of Subsection 901 of the Standard Specifications and the following:

The work shall include applying a concrete protective coating to the exposed concrete faces of the parapets, sidewalk, safety curb and median and/or as directed by the Engineer. Where this item is applied to sidewalks, a suitable grit shall be applied in accordance with manufacturer's recommendations.

Surface preparation of surfaces to be painted shall be in accordance with manufacturers recommendations utilizing SSPC-SP 13/NACE No. 6 guidelines.

At a minimum, the Contractor shall pressure wash all concrete surfaces to be painted. Pressure washing shall remove all loose, flaking, peeling and non-adherent coating. Surface cleanliness and adhesion of the prepared surface shall be determined and approved by the Engineer prior to the application of the coating system. Coating shall not be applied until surface is dry.

Portable pressure washing equipment shall be operated at a minimum of 3000 psi, a water temperature of 200 degrees F and a minimum consumption of six gallons per minute shall be used to clean all surfaces to be coated. Pressure washers shall be equipped with gauges to ascertain operating pressure and temperature.

Material to be used shall be an acrylic emulsion system such as the following:

Tnemec: 151-1051 Elasto-Grip FC Primer, and two coats of Enviro-Crete 156 for finish coats.

Sherwin Williams: Loxon A 24-100 primer and two coats of DTM Acrylic Coating for finish coats.

Sikagard 552W Primer and Sikagard 550W finish coats (two coats).

Sikagard 552W Primer and Sika Thorolastic 750 finish coats (two coats).

An approved equal.

Materials shall not be ordered or used until approved by the Engineer. All coating material shall be applied as per the manufacturers current data sheet.

METHOD OF MEASUREMENT

Item 964.21 will be measured for payment by the Square Foot of concrete coated, complete in place.

BASIS OF PAYMENT

Item 964.21 will be paid at the Contract unit price per Square Foot which price shall include all labor, materials, equipment, and all incidental costs required to complete the work.

ITEM 973.2**PRE-COMPRESSED JOINT SEAL****FOOT**

The work under this item shall conform to the relevant provisions of Subsections 971 and 972 of the Standard Specifications, and the following:

The work shall consist of furnishing and installing a continuous pre-compressed seal joint through the roadway, median, sidewalk, curbs, and parapets at bridge locations specified by the Department. The pre-compressed joint sealer shall be installed between ends of the exposed deck and barriers as shown on the Contract plans and as required by these Special Provisions.

The pre-compressed seal joint system assembly shall consist of a preformed (pre-compressed) seal, epoxy adhesive, and injected silicone sealant bands all combined as shown in the Contract drawings.

MATERIAL

The pre-compressed joint seal system shall be approved by the District Bridge Engineer in writing.

All Material for the pre-compressed joint seal system shall be stored indoors, in a dry area out of direct sunlight, at room temperature.

The material of the pre-compressed seal joint system shall be capable of accommodating movements of +60%,-60% (120% total) of mean joint size.

The pre-compressed seal joint system shall be manufactured by EMSEAL JOINT SYSTEMS LTD (BEJS), Watson Bowman Acme (Wabo®FS), Temco (Willseal 250-B), SSI (SILSPEC SES), or an approved equivalent.

The joint system shall be comprised of three components: 1) cellular polyurethane foam impregnated with hydrophobic 100% acrylic (to be certified in writing by independent laboratory tested FTIR and DSC analysis to be free in composition of any waxes or wax compounds), water-based emulsion, factory coated with highway-grade, fuel resistant silicone; 2) field-applied epoxy adhesive primer; 3) field-injected silicone sealant bands. Impregnation agent is to have proven non-migratory characteristics. Silicone coating to be highway-grade, low-modulus, fuel resistant silicone applied to the impregnated foam sealant at a width greater than maximum allowable joint extension and which when cured and compressed will form a bellow. Depth of seal shall be as recommended by manufacturer. The foam seal shall be installed into manufacturer's standard field-applied epoxy adhesive. The sealant system is to be installed recessed from the surface such that when the field applied injection band of silicone is installed between the substrates and the foam-and-silicone-bellow, the highest part of the silicone bellow will be flush with the concrete deck surface.

Changes in plane and direction shall be executed using factory-fabricated "universal 90" or custom transition assemblies supplied by the manufacturer of the pre-compressed seal. Transitions shall be warranted to be watertight at inside and outside corners through the full movement capabilities of the product.

ITEM 973.2 (Continued)**CONSTRUCTION METHOD**

The new deck concrete must be cured and reach its design compressive strength prior to the installation. The Contractor shall produce uniform and parallel surfaces in the formwork within the reinforced concrete deck slabs as detailed on the plans. The joint opening shall be protected by the Contractor to prevent any edge damage by any site equipment throughout the on-going construction process.

Prior to installation of the joint system, the joint opening should be blown clean using oil-free compressed air. The compressed air shall be free of moisture and oil. When the pre-compressed joint system is used as the replacement seal for existing armored joint system, the joint opening and surface of the existing armored joint steel angles shall be cleaned and abrasive blasted to meet the requirements of SSPC SP-10 "Near White Metal". The concrete substrate prep shall follow the ICRI Concrete Surface Profile Standards to achieve a surface profile of CSP 2 (min.) or 3 (preferred). To ensure cleanliness, the joint walls shall be wiped clean with a clean wet cloth to the depth of the bottom of the pre-compressed seal material plus 1" to remove any dust remaining. The joint gap shall be inspected for cleanliness by the Engineer. Should any contaminants remain, the joint must be re-cleaned.

The pre-compressed seal, epoxy adhesive, and injected silicone sealant band shall be installed in accordance with the Contract's drawings. The pre-compressed seal joint system shall be continuous through sidewalks, curbs, medians, and parapets as appropriate to the conditions at hand. Continuity of seal shall be achieved through the use of factory-fabricated universal or custom transitions supplied by the pre-compressed joint seal manufacturer.

MANUFACTURER'S FIELD REPRESENTATIVE

The Contractor shall arrange with the pre-compressed seal joint system's manufacturer or distributor to have the services of a competent field representative at the work site prior to any installation to instruct the work crews in the proper installation procedures. The field representative shall remain at the job site after work commences and continue to instruct until the representative and the Contractor, Inspector and/or Engineer are satisfied that the crew has mastered the technique of installing the system successfully. The representative shall make periodic visits to the project as the work progresses and shall confer on each visit with the Contractor, Inspector and/or Engineer.

The manufacturer's field representative must be fully qualified to perform the work and shall be subject to the approval of the Engineer.

The Contractor shall be completely responsible for the expense of the service of the required field representative and the bid contract price shall be full compensation for all costs in connection therewith.

ITEM 973.2 (Continued)**METHOD OF MEASUREMENT**

Item 973.2 will be measured for payment by the Foot, as measured along the joint centerline at the roadway, safety curb, sidewalk, parapet, and median, complete in place.

BASIS OF PAYMENT

Item 973.2 will be paid for at the Contract unit bid price per Foot, which bid price shall include all labor, material, equipment, manufacturer's representative and all incidental costs required to complete the work.

ITEM 994.1**TEMPORARY PROTECTIVE SHIELDING****SQUARE FOOT**

The work under this item consists of furnishing, maintaining, removing and disposing of a shielding system on and under the bridge in locations required by the Engineer.

The temporary shielding system shall provide for the protection of traffic, persons, and facilities on the roadway beneath bridges from falling debris during the removal of the unsound concrete from bridge decks, parapets, copings and sidewalks. This shall be accomplished by the utilization of adequate shielding methods.

No portion of the bridge deck shall be removed until the protective shielding is in place and complete.

Any equipment necessary to erect the shielding will be considered incidental to this item.

All shielding shall meet the following requirements:

1. Temporary Protective Shielding must be used on bridges over roadways, railroads, and waterways during full depth excavation and when, in the opinion of the Engineer, there is the possibility of dislodging concrete from the bottom of the deck, parapets or coping. In some cases, the Contractor may be able to utilize the bottom flanges of existing beams as supports for the protective shielding. However, the Contractor will not be permitted to weld onto, drill into, or cut any existing structural beams.
2. The Contractor shall submit drawings and calculations stamped by a Professional Engineer of the appropriate discipline registered in Massachusetts of the proposed temporary shielding to the Engineer for approval prior to its installation. The drawings shall include details of all connections, brackets, and fasteners.
3. Shielding shall be designed to safely withstand all loads that it will be subjected to. The allowable design stresses shall be in accordance with AASHTO Standard Specifications for Highway Bridges, 17th Edition. The design shall also include a description of the equipment and construction methods proposed for the deck, parapet, or coping excavation and the maximum size of the area being excavated. The shielding shall also be designed to withstand the maximum size of the excavated area should it fall during excavation or removal. No debris shall be swung over traffic, on or below the bridge.
4. Shielding shall be designed such that impact on traffic during installation and removal shall be minimal. The Contractor shall submit the traffic plan to the Engineer for approval.
5. The shielding shall extend a sufficient distance above and beyond the deck overhang at the fascia where concrete excavation is required outside the fascia beams. The shielding shall extend the length of the damaged or distressed portion of the deck a length of sufficient distance to do the required deck demolition.
6. The area for shielding shall be approved by the Engineer prior to any installation of any shielding. The Contractor may utilize the bottom flanges of existing beams as supports for the protective shielding. However, the Contractor will not be permitted to weld onto, drill into, or cut any existing structural beams. All spaces along the perimeter of the shielding and at the seams shall be sealed to prevent dust, water, and debris from escaping and falling onto traffic below the bridge.

ITEM 994.1 (Continued)

7. The Engineer may request that the shielding be designed so that it may also serve as false work (forms) for all areas of full-depth concrete replacement/repair.
8. The shielding shall not decrease the minimum vertical bridge clearance to the roadway unless otherwise approved by the Engineer.
9. The shielding shall be maintained and remain in place until the strength of the concrete used to repair the deck has cured and reached the design strength requirement, except where shielding needs to be removed and reset to install formwork for the areas of full depth repair. The shielding shall remain the property of the Contractor and shall be removed by the Contractor from the site when no longer needed.

If the Contractor's operations damage any existing portions of the bridge that are to remain, such damage shall be repaired at the Contractor's own expense.

All materials used in the temporary shielding system shall become the property of the Contractor and shall be removed from the site upon the completion of the project.

Existing temporary shielding shall be removed and stacked prior to commencement of any reinforced concrete excavation work and replaced with temporary protective shielding under this item. Removal and stacking of existing shielding shall be incidental to this item.

METHOD OF MEASUREMENT

Item 994.1 will be measured for payment by the Square Foot of shielding installed, complete in place.

BASIS OF PAYMENT

Item 994.1 will be paid at the Contract unit price per Square Foot, which price shall include all labor, materials, equipment, engineering services, submittals, and all incidental costs required to complete the work including shielding installed, maintained, and removed upon completion of repair work as directed by the Engineer, including removal and stacking of any existing shielding.

The Contract price shall include removal and disposal of debris not paid under other items,. Removal and disposal of debris generated by excavation of concrete will be paid under the applicable items, Item 127.1, 127.4, 127.42 and 129.12.

60% of the Unit bid Price will be paid upon installation of the shielding and the remaining 40% will be paid upon complete removal.

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DOCUMENT A00803

DRAWINGS AND SKETCHES

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MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

PLAN AND PROFILE OF

BAY STREET

(BRIDGE NO. T-01-058)

IN THE TAUNTON OF

TAUNTON

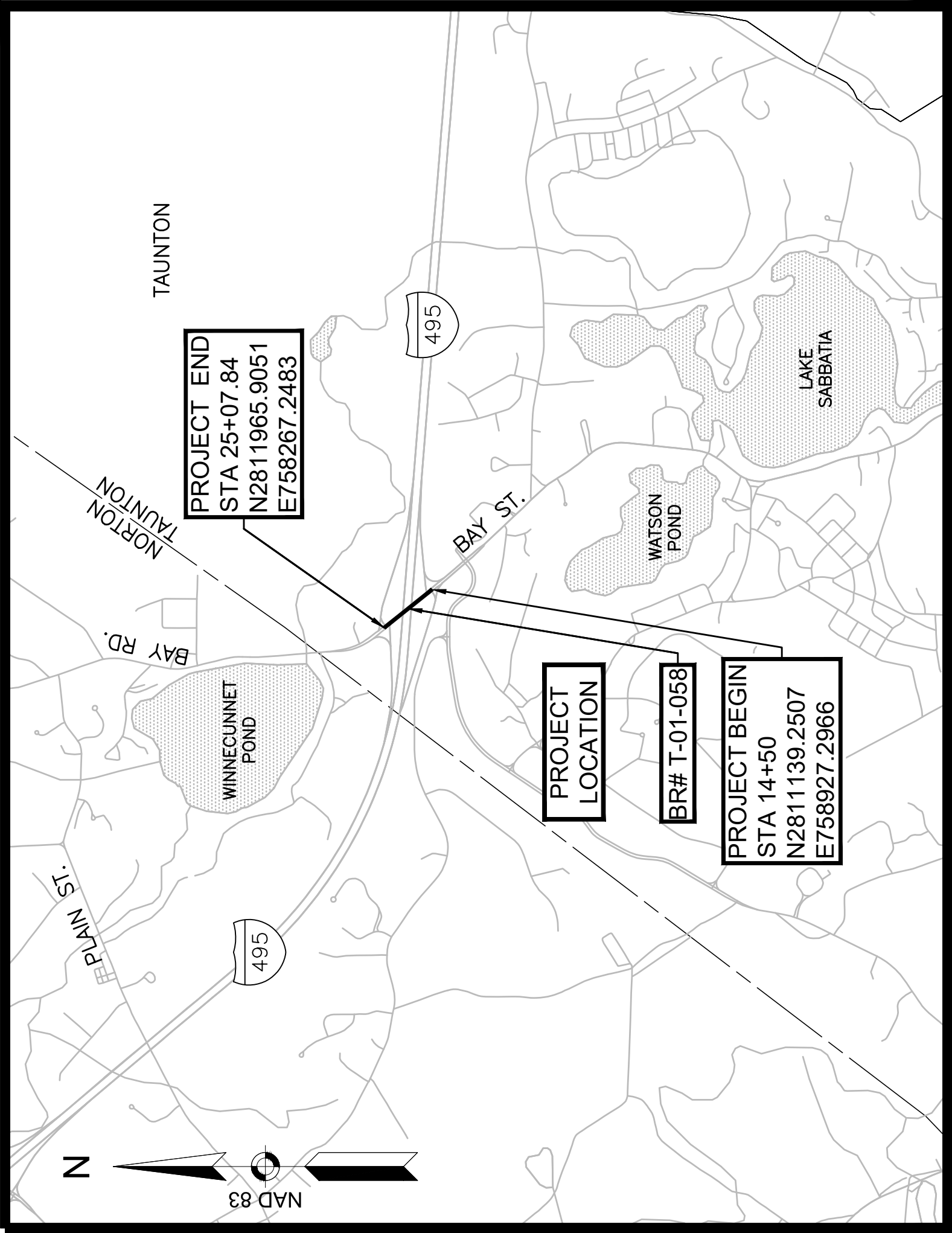
BRISTOL COUNTY

THESE PLANS ARE SUPPLEMENTED BY THE LATEST EDITIONS OF THE FOLLOWING PUBLICATIONS, AS IDENTIFIED IN THE CONTRACT SPECIAL PROVISIONS: THE MASSDOT CONSTRUCTION STANDARD DETAILS, THE MASSDOT STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE MASSDOT STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, THE MASSDOT OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, THE MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS, AND THE ANSI AMERICAN STANDARD FOR NURSERY STOCK.

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	1	44
PROJECT FILE NO. 613752			

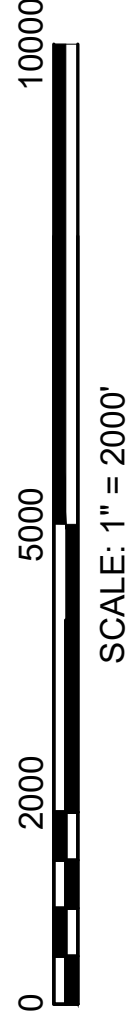
TITLE SHEET

PS&E SUBMISSION



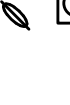
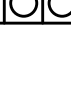
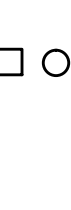
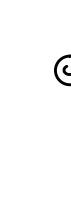
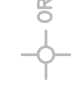
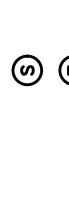
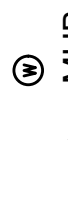
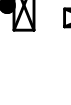
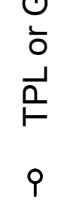
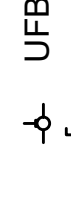
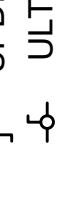
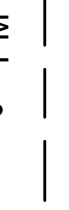
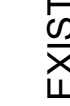
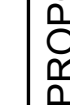
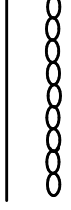
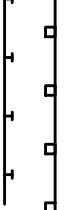
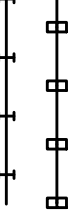
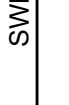
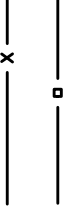
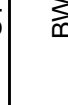
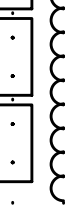
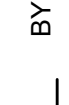
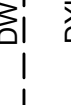
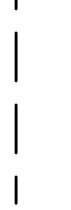
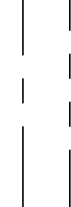
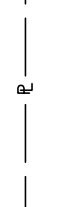
DESIGN DESIGNATION (BAY STREET)	
DESIGN SPEED	30 MPH
ADT (2024)	14,307
ADT (2044)	23,880
K	9%
D	59%
T (PEAK HOUR)	10%
T (AVERAGE DAY)	10.6%
DHV	1,276
DDHV	832
FUNCTIONAL CLASSIFICATION	URBAN MINOR ARTERIAL

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
1	TITLE SHEET & INDEX
2	LEGEND & ABBREVIATIONS
3	TYPICAL SECTIONS
4-5	GENERAL PLAN
6-7	PROFILE
8	CURB TIE & GRADING PLAN
9	TRAFFIC SIGN & PAVEMENT MARKING PLAN
10	BICYCLE LOOP DETECTOR DETAILS
11	ADVANCE SIGN PLAN & TTCIP NOTES
12-23	TEMPORARY TRAFFIC CONTROL PLANS
24	TEMPORARY SIGN SUMMARY SHEET
25-38	BRIDGE PLANS
39-44	CROSS SECTIONS



LENGTH OF PROJECT = 1,507.84 FEET = 0.200 MILES

[illegible]

GENERAL SYMBOLS			TRAFFIC SYMBOLS		ABBREVIATIONS	
EXISTING	PROPOSED	DESCRIPTION	EXISTING	PROPOSED	GENERAL	ANNUAL AVERAGE DAILY TRAFFIC
		JERSEY BARRIER			ADT	ABANDON
		CATCH BASIN			ABAN	ADJUST
		FLAG POLE			ADJ	APPROXIMATE
		GAS PUMP			A.C.	ASPHALT CONCRETE
		MAIL BOX			ACOM PIPE	ASPHALT COATED CORRUGATED METAL PIPE
		POST SQUARE			BIT.	BITUMINOUS
		POST CIRCULAR			BC	BOTTOM OF CURB
		WELL			BD.	BOUND
		ELECTRIC HANDHOLE			BL	BASELINE
		FENCE GATE POST			BM	BENCHMARK
		GAS GATE			BO	BY OTHERS
		BORING HOLE			BOS	BOTTOM OF SLOPE
		MONITORING WELL			BR	BRIDGE
		TEST PIT			CB	CATCH BASIN
		HYDRANT			CBCI	CATCH BASIN WITH CURB INLET
		LIGHT POLE			CC	CEMENT CONCRETE
		COUNTY BOUND			CEM	CEMENT
		GPS POINT			CI	CURB INLET
		CABLE MANHOLE			CIP	CAST IRON PIPE
		DRAINAGE MANHOLE			CLF	CHAIN LINK FENCE
		ELECTRIC MANHOLE			CL	CENTERLINE
		GAS MANHOLE			CLP	CORRUGATED METAL PIPE
		MISC. MANHOLE			CSP	CORRUGATED STEEL PIPE
		SEWER MANHOLE			CO.	COUNTY
		TELEPHONE MANHOLE			CONC	CONCRETE
		WATER MANHOLE			CONT	CONTINUOUS
		MASSACHUSETTS HIGHWAY BOUND			CONST	CONSTRUCTION
		STONE BOUND			CR GR	CROWN GRADE
		TOWN OR CITY BOUND			DHV	DESIGN HOURLY VOLUME
		TRAVERSE OR TRIANGULATION STATION			DIA	DIAMETER
		TROLLEY POLE OR GUY POLE			DIP	DUCTILE IRON PIPE
		TRANSMISSION POLE			DW	STEADY DON'T WALK - PORTLAND ORANGE
		UTILITY POLE W/ FIREBOX			DWY	DRIVEWAY
		UTILITY POLE WITH DOUBLE LIGHT			ELEV (or EL.)	ELEVATION
		UTILITY POLE W/ 1 LIGHT			EMB	EMBANKMENT
		UTILITY POLE			EOP	EDGE OF PAVEMENT
		BUSH			EXIST (or EX)	EXISTING
		TREE			EXC	EXCAVATION
		STUMP			F&C	FRAME AND COVER
		SWAMP / MARSH			F&G	FRAME AND GRATE
		WATER GATE			FDN.	FOUNDATION
		PARKING METER			FOLDSTN	FIELDSTONE
		OVERHEAD CABLE/WIRE			GAR	GARAGE
		CURBING			GD	GROUND
		CONTOURS (ON-THE-GROUND SURVEY DATA)			GI	GUTTER INLET
		CONTOURS (PHOTOGRAMMETRIC DATA)			GIP	GALVANIZED IRON PIPE
		UNDERGROUND DRAIN PIPE (DOUBLE LINE 24 INCH AND OVER)			GRAN	GRANITE
		UNDERGROUND ELECTRIC DUCT (DOUBLE LINE 24 INCH AND OVER)			GRAV	GRAVEL
		UNDERGROUND GAS MAIN (DOUBLE LINE 24 INCH AND OVER)			GRD	GUARD
		UNDERGROUND SEWER MAIN (DOUBLE LINE 24 INCH AND OVER)			HDW	HEADWALL
		UNDERGROUND TELEPHONE DUCT (DOUBLE LINE 24 INCH AND OVER)			HMA	HOT MIX ASPHALT
		UNDERGROUND WATER MAIN (DOUBLE LINE 24 INCH AND OVER)			HOR	HORIZONTAL
		BALANCED STONE WALL			HYD	HYDRANT
		GUARD RAIL - STEEL POSTS			INV	INVERT
		GUARD RAIL - WOOD POSTS			JCT	JUNCTION
		GUARD RAIL - DOUBLE FACE - STEEL POSTS			L	LENGTH OF CURVE
		GUARD RAIL - DOUBLE FACE - WOOD POSTS			LB	LEACH BASIN
		CHAIN LINK OR METAL FENCE			LP	LIGHT POLE
		WOOD FENCE			LT	LEFT
		HAY BALES/SILT FENCE			MAX	MAXIMUM
		TREE LINE			MB	MAILBOX
		SAWCUT LINE			MH	MANHOLE
		TOP OR BOTTOM OF SLOPE			MHB	MASSACHUSETTS HIGHWAY BOUND
		LIMIT OF EDGE OF PAVEMENT OR COLD PLANE AND OVERLAY			MIN	MINIMUM
		BANK OF RIVER OR STREAM			M&O	MILL & OVERLAY
		BORDER OF WETLAND			NO.	NUMBER
		100 FT WETLAND BUFFER			PC	POINT OF CURVATURE
		200 FT RIVERFRONT BUFFER			PCG	POINT OF COMPOUND CURVATURE
		STATE HIGHWAY LAYOUT			PCR	PEDESTRIAN CURB RAMP
		TOWN OR CITY LAYOUT			P.G.L.	PROFILE GRADE LINE
		COUNTY LAYOUT			PI	POINT OF INTERSECTION
		RAILROAD SIDELINE			POC	POINT ON CURVE
		TOWN OR CITY BOUNDARY LINE			POT	POINT ON TANGENT

TAUNTON
BAY STREET

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	3	44
PROJECT FILE NO.		613752	

TYPICAL SECTIONS

PAVEMENT NOTES:

MILLING & RESURFACING:

SURFACE: 1.75" HOT MIX ASPHALT SUPERPAVE SURFACE COURSE – 12.5 POLYMER (SSC–12.5–P) OVER
VARIABLE DEPTH PAVEMENT STANDARD MILLING

CEMENT CONCRETE MEDIAN:

RAMP SURFACE: 4.00" CEMENT CONCRETE (4000 PSI, ¾", 610 LBS)

SUBBASE: 8.00" GRAVEL BORROW, Type c

NOTES:

1. APPLY ASPHALT EMULSION FOR TACK COAT AT A RATE OF 0.07 – 0.09 GAL/SY ON MILLED SURFACES AND 0.06 – 0.08 GAL/SY ON SMOOTH SURFACES
2. THE FINAL COURSE OF PAVEMENT SHALL BE PLACED IN ONE CONTINUOUS OPERATION.

GENERAL NOTES:

DIMENSIONS SHOWN ARE TAKEN FROM ORIGINAL DESIGN DRAWINGS AND ARE NOT GUARANTEED. THE CONTRACTOR SHALL ESTABLISH HIS OWN BASELINE NECESSARY FOR COMPLETION OF ALL WORK BY FIELD MEASUREMENT AND SURVEY. THE COST OF THIS WORK SHALL BE INCIDENTAL TO THE COST OF THE CONTRACT.

EXISTING CONDITIONS:

ALL DIMENSIONS, ELEVATIONS AND DETAILS SHOWN FOR EXISTING CONDITIONS ARE NOT GUARANTEED. THE CONTRACTOR SHALL DETERMINE AND ESTABLISH ALL DIMENSIONS, ELEVATIONS AND DETAILS NECESSARY FOR COMPLETION OF ALL WORK BY FIELD MEASUREMENT AND SURVEY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ADEQUACY AND ACCURACY THEREOF, AND SHALL NOT ORDER ANY MATERIAL OR COMMENCE ANY FABRICATION UNTIL THE PROPOSED WORK HAS BEEN APPROVED BY THE ENGINEER. ANY INTERFERENCE WITH THE PROPOSED CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER.

TRAFFIC:

A MINIMUM OF TWO LANES OF ONE-WAY TRAFFIC ARE TO BE MAINTAINED ON BAY ST. DURING ALL MAJOR CONSTRUCTION STAGES. ONE TRAVEL LANE MAY BE CLOSED IN EACH DIRECTION ON BAY ST. FOR PLACEMENT OF TEMPORARY PAVEMENT MARKINGS AND TEMPORARY BARRIER, ONLY BETWEEN THE HOURS OF 9:00 PM AND 5:30 AM. A MINIMUM OF ONE LANE MUST BE KEPT OPEN AT ALL TIMES.

ALL WORK ON I–495 WILL BE DONE BETWEEN THE HOURS OF 9:00 PM AND 5:30 AM. ONE TRAVEL LANE MUST BE MAINTAINED IN EACH DIRECTION ON I–495 DURING WORKING HOURS AND ALL LANES MUST BE FULLY REOPENED TO TRAFFIC OUTSIDE OF WORKING HOURS.

EXISTING PLANS:

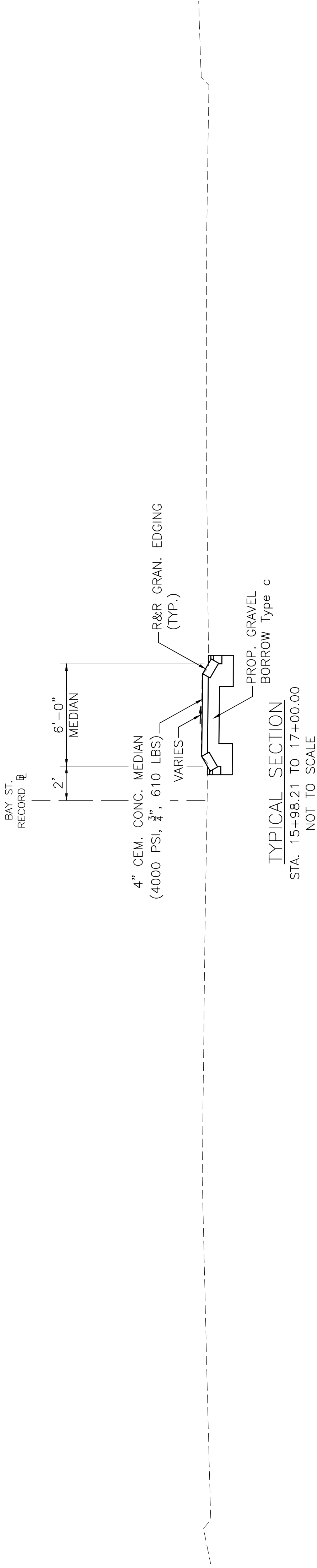
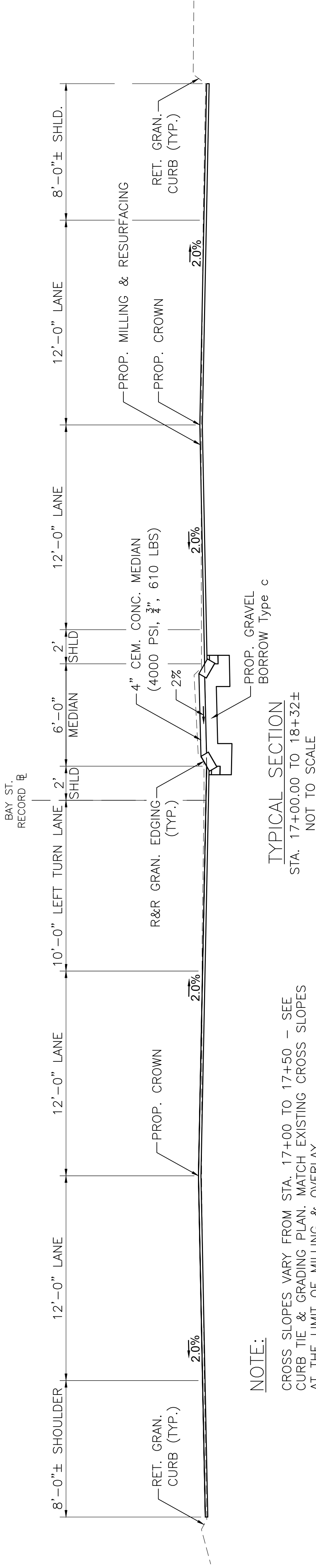
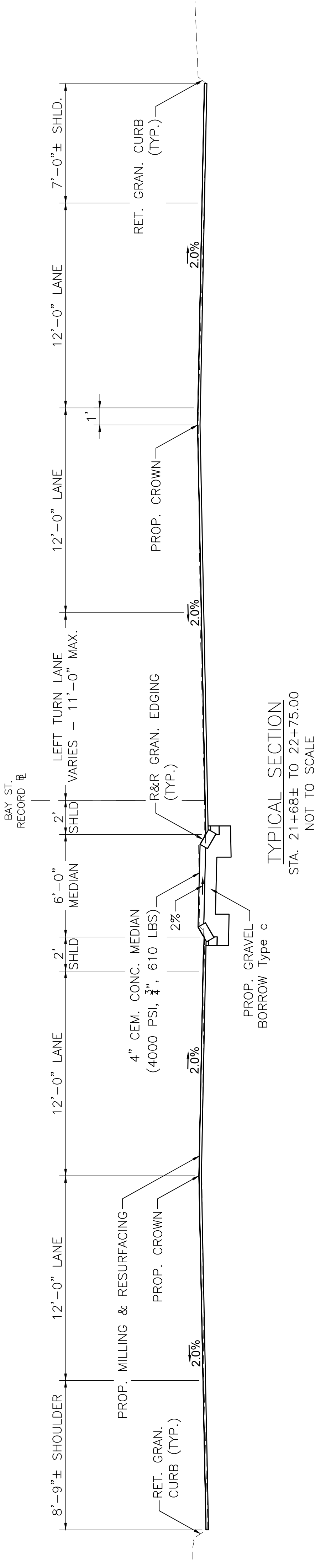
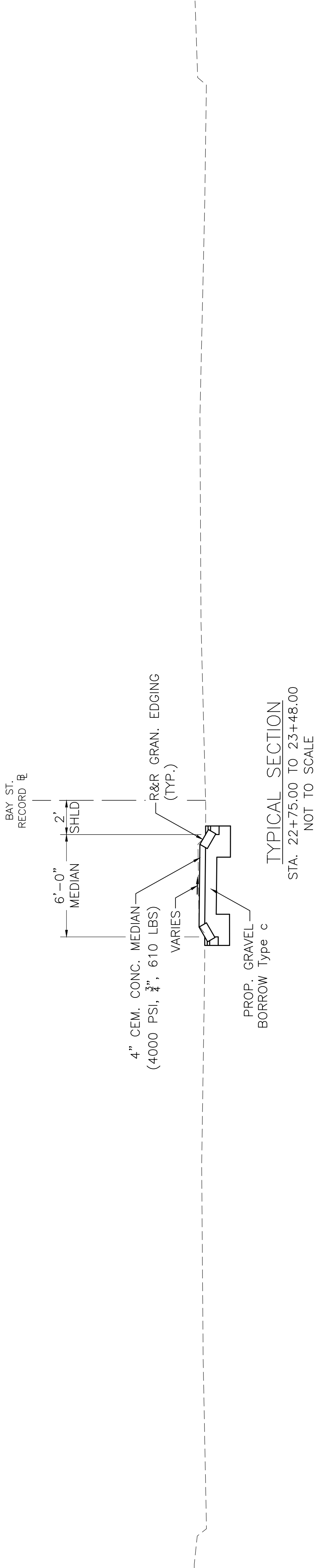
PLANS FOR THE EXISTING BRIDGE ARE AVAILABLE THROUGH THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION – HIGHWAY DIVISION AT 10 PARK PLAZA BOSTON, MA 02116

DESIGN:

1980 CONSTRUCTION PLANS FOR T–01–058 INDICATE THAT THE BRIDGE WAS DESIGNED FOR H20–44 LOADING.

UTILITIES:

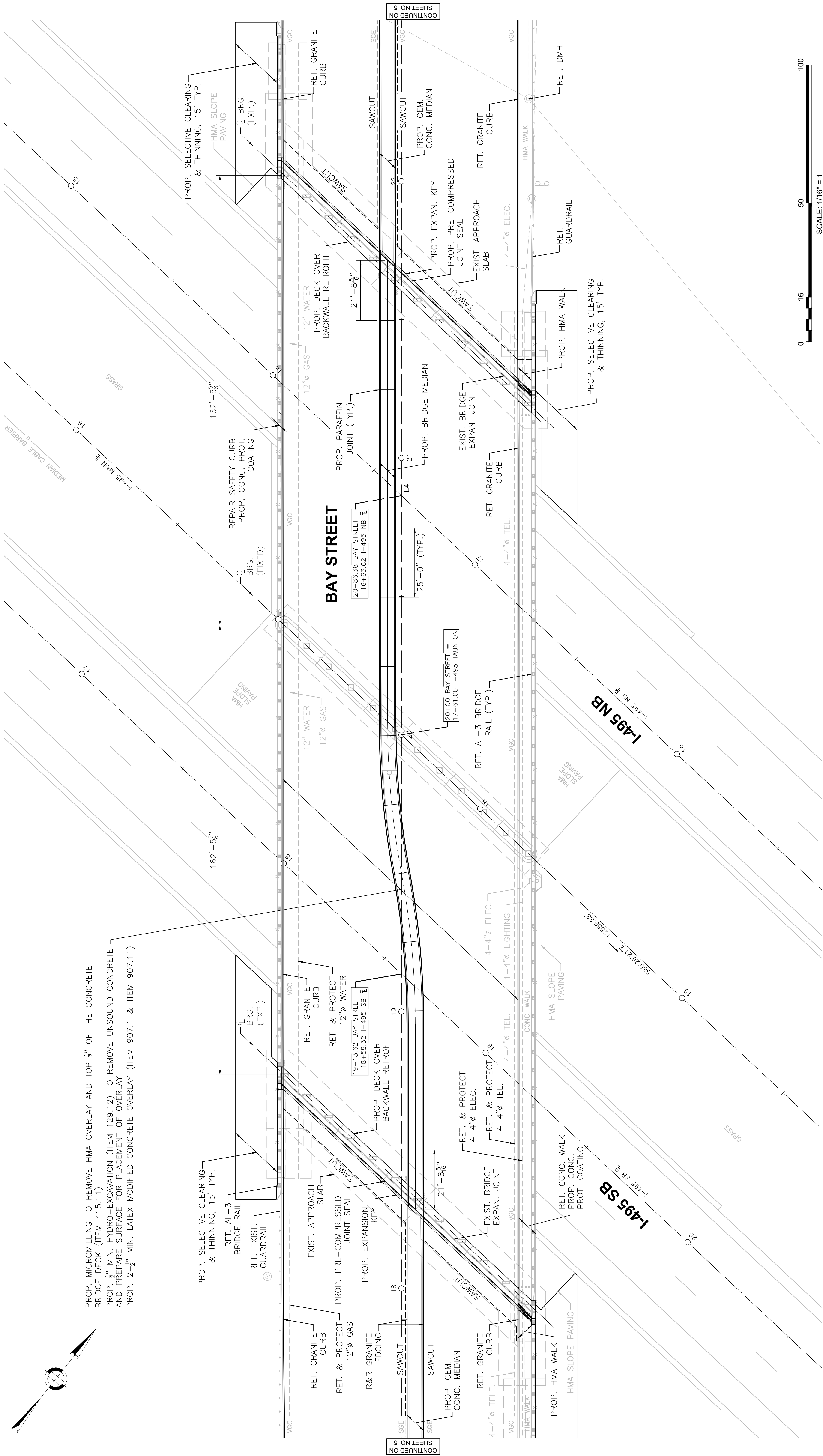
THE CONTRACTOR SHALL LOCATE AND PROTECT EXISTING UTILITIES FROM ALL DAMAGE, INCLUDING THE EXISTING TRAFFIC SIGNAL AND HIGHWAY LIGHTING CONDUIT.



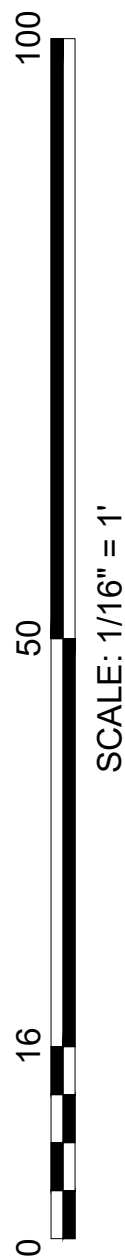
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	4	44
PROJECT FILE NO. 613752			

**TAUNTON
BAY STREET**

GENERAL PLAN



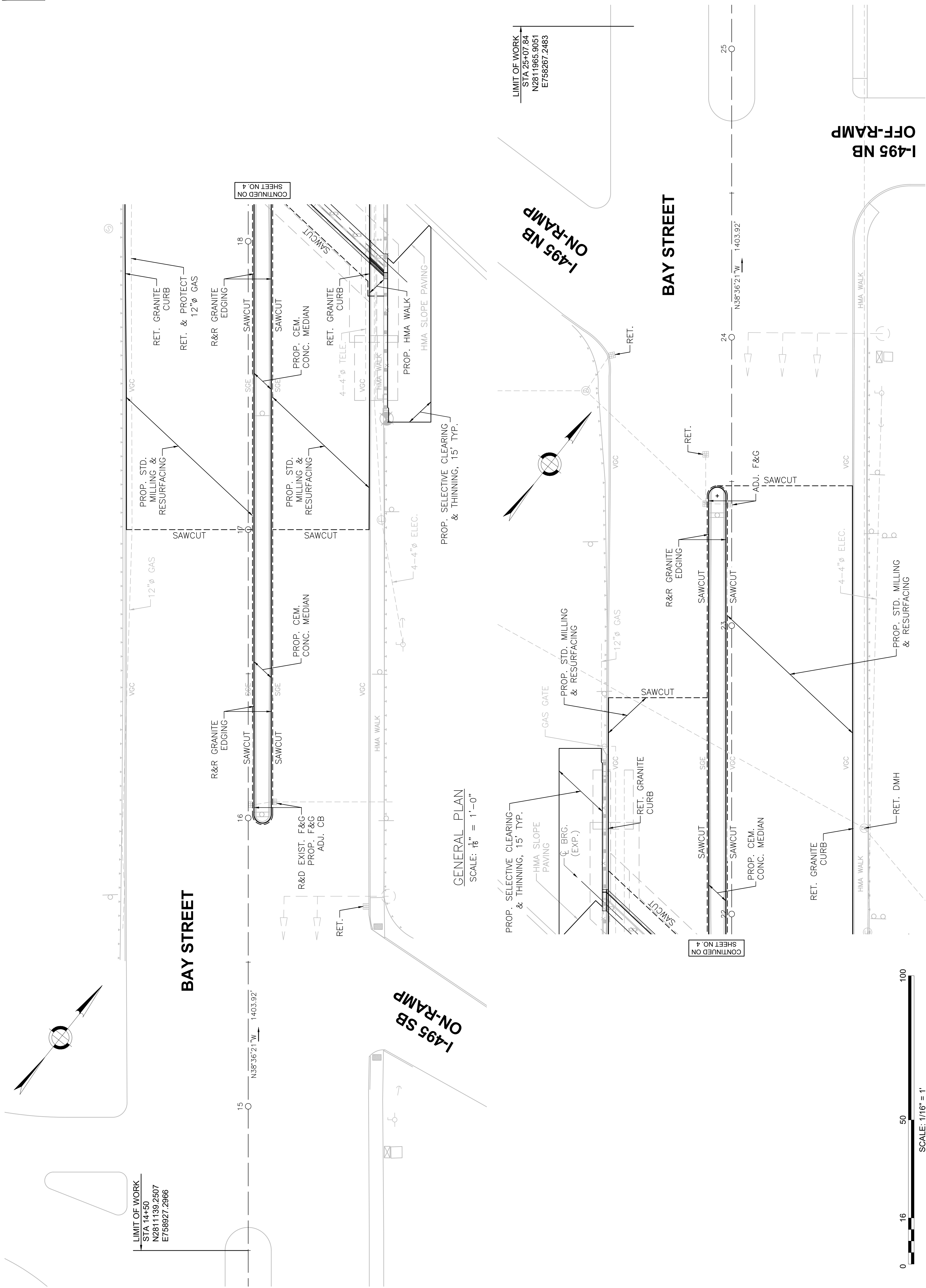
GENERAL PLAN
SCALE: $\frac{1}{16}'' = 1'-0''$



TAUNTON
BAY STREET

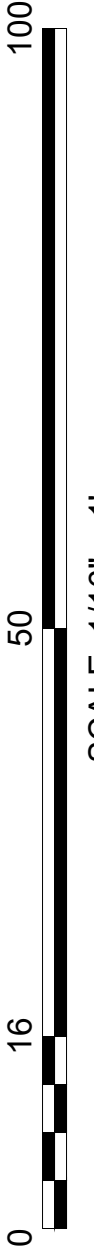
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MA	N.F.A.	5	44
PROJECT FILE NO. 613752			

GENERAL PLAN



GENERAL PLAN
SCALE: 1/8" = 1'-0"

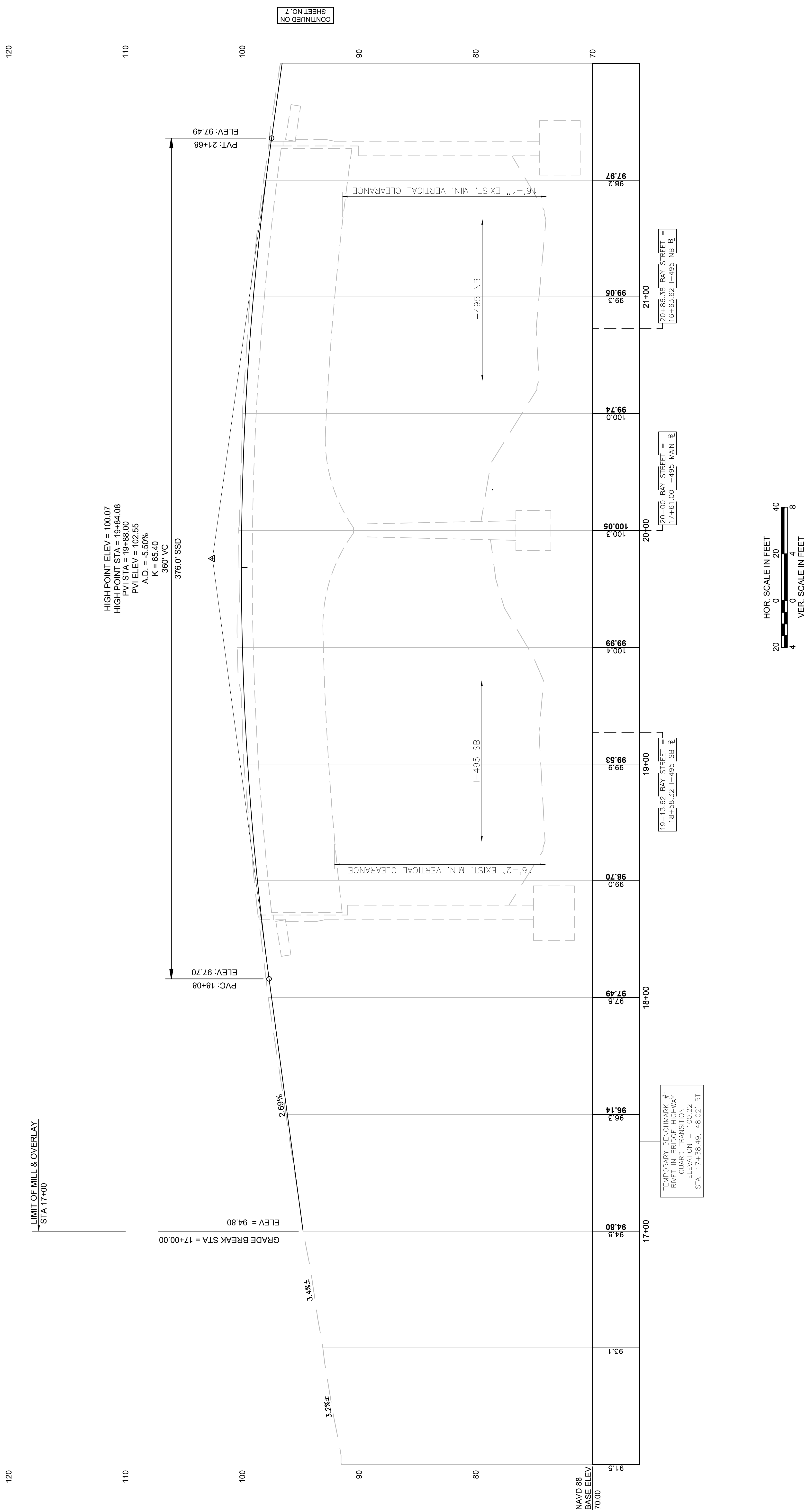
GENERAL PLAN
SCALE: 1/8" = 1'-0"



STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	6	44
PROJECT FILE NO. 613752			

**TAUNTON
BAY STREET**

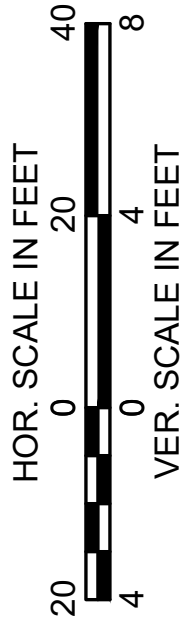
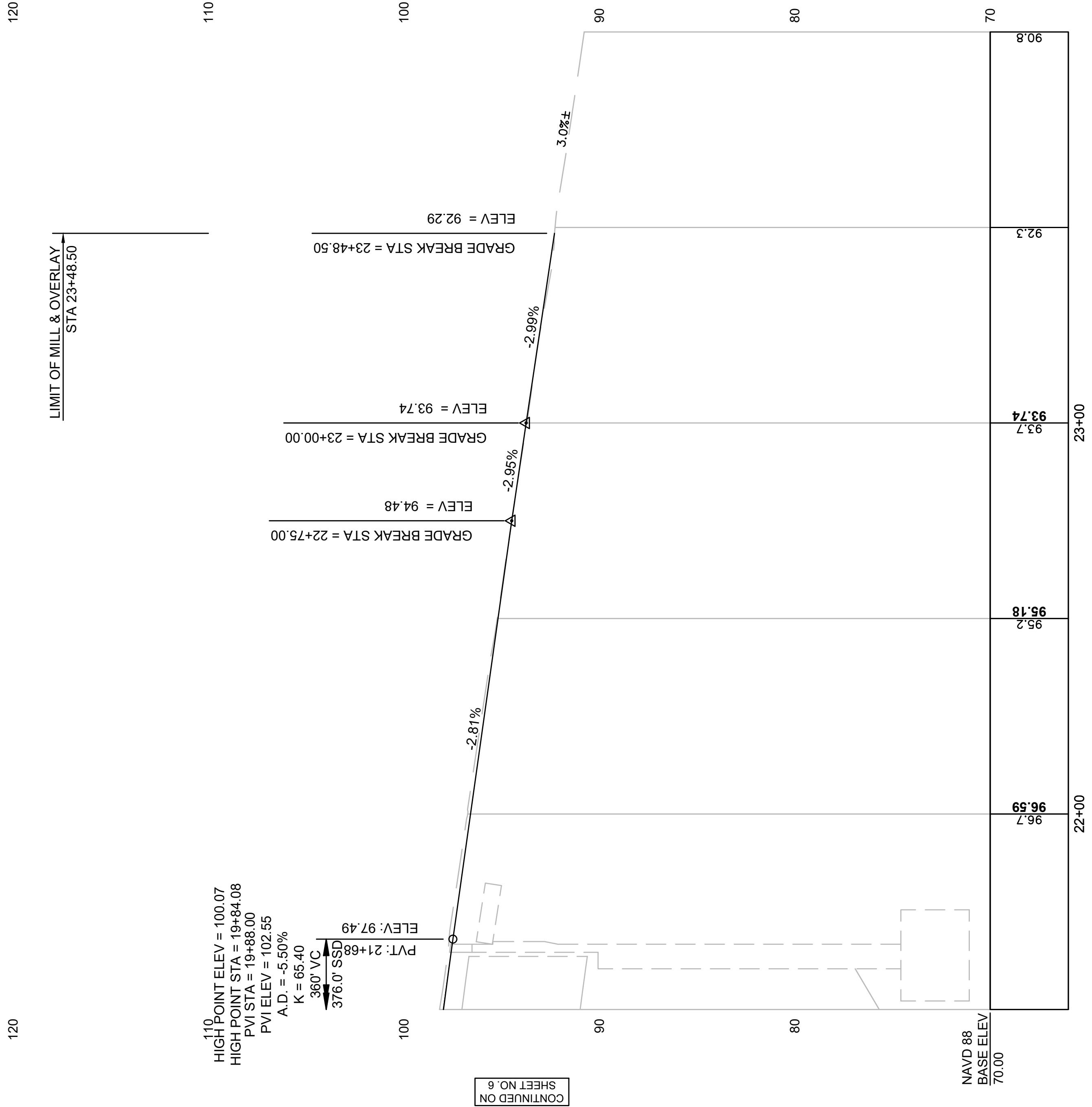
PROFILE



TAUNTON
BAY STREET

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	7	44
PROJECT FILE NO. 613752			

PROFILE



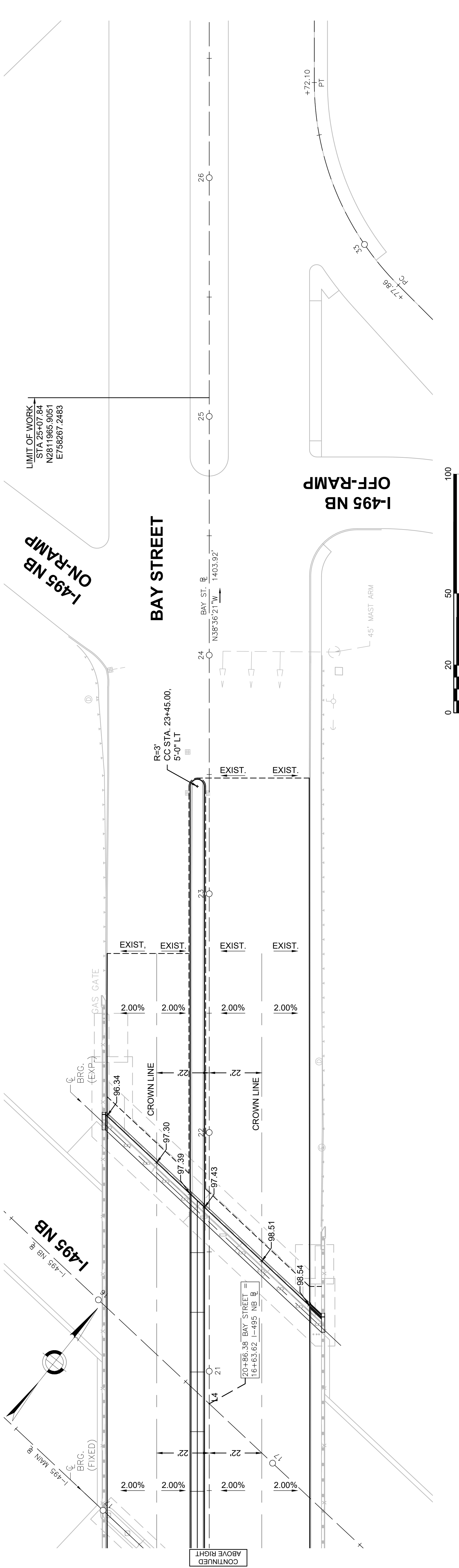
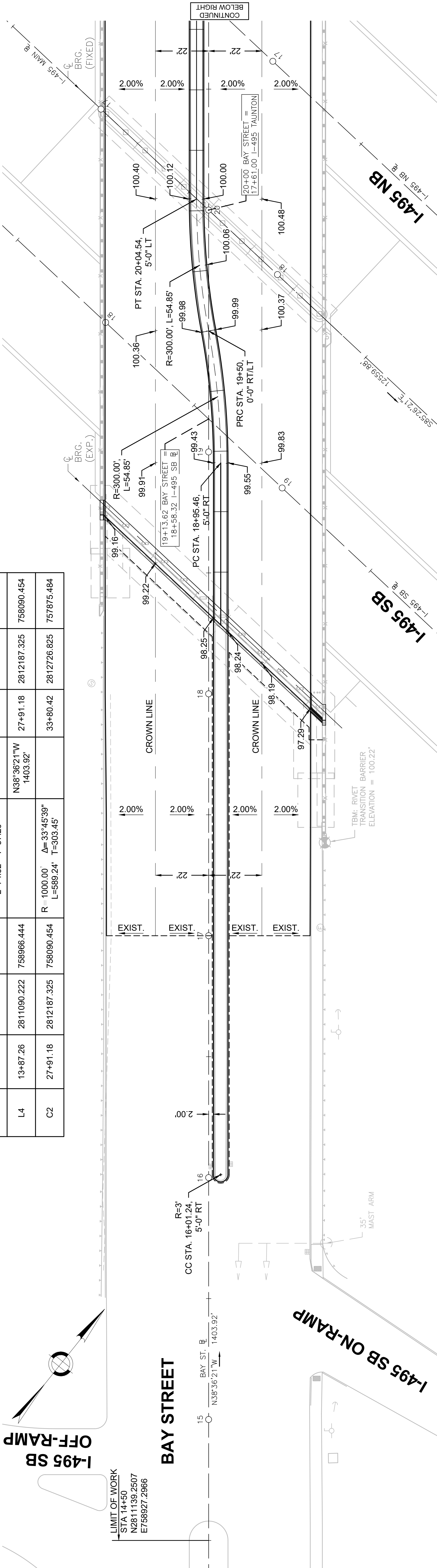
CONTINUED ON
SHEET NO. 8

BAY STREET CONSTRUCTION BASELINE DATA						
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION
C1	13+12.74	2811032.571	759013.660	R = 3000.00' Δ= 1°25'24" L=74.52' T=37.26'	N38°36'21"W 1403.92'	13+87.26
						2811090.222
L4	13+87.26	2811090.222	758986.444	R = 1000.00' Δ= 33°45'39" L=589.24' T=303.45'	N38°36'21"W 1403.92'	27+91.18
						2812187.325
C2	27+91.18	2812187.325	758090.454			33+80.42

2812726.825	757875.484

TAUNTON BAY STREET			
STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	8	44
PROJECT FILE NO. 613752			

CURB TIE & GRADING PLAN

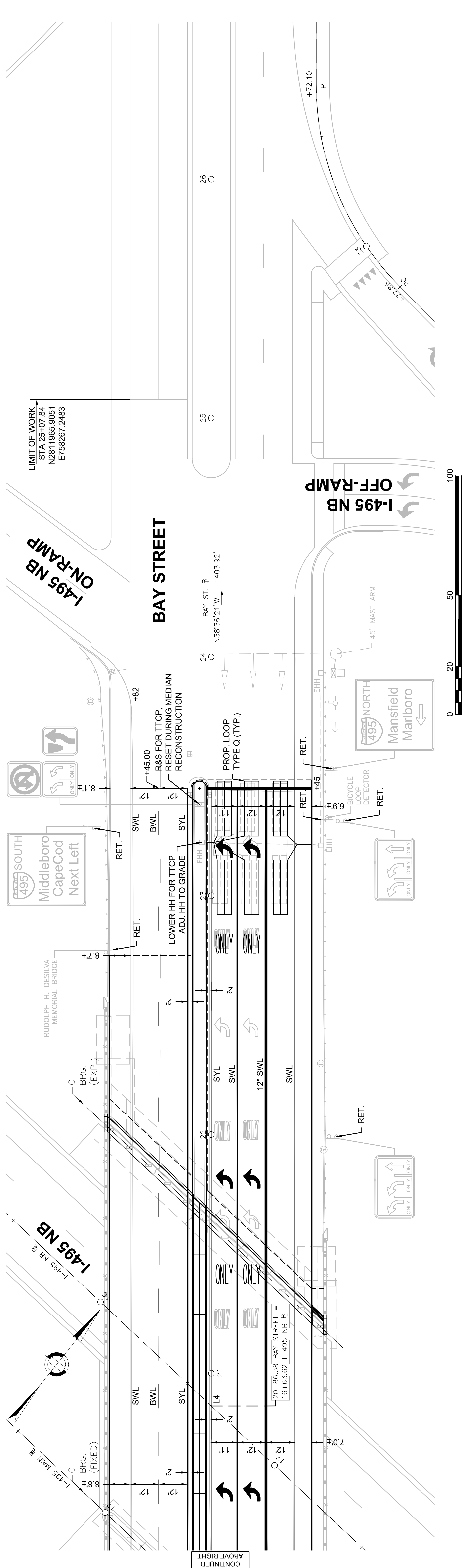
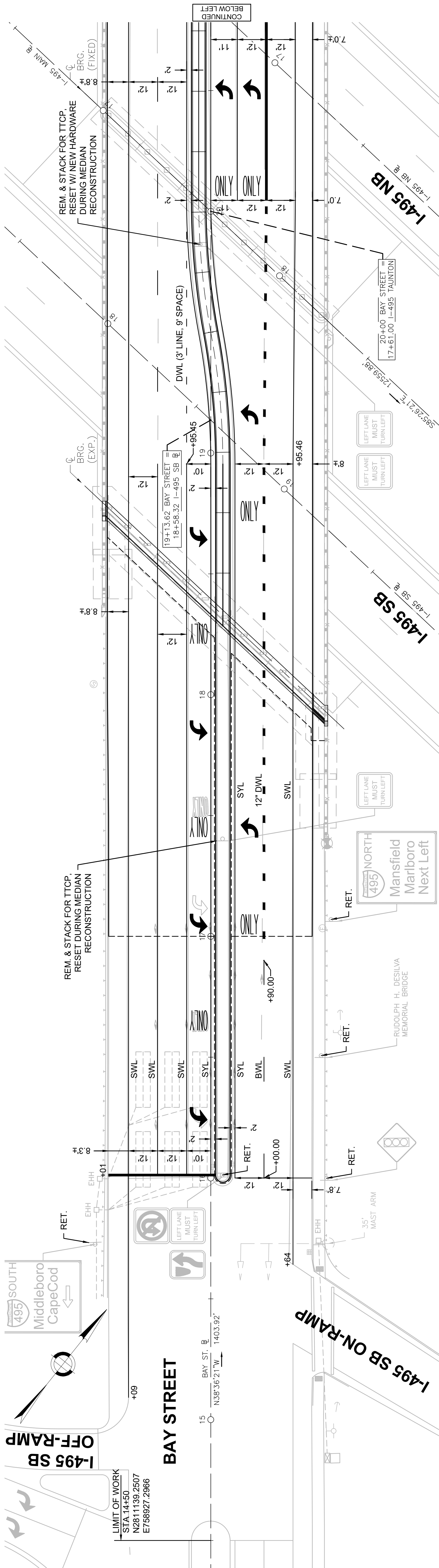


NOTE:

1. PROPOSED 6" WIDE PAVEMENT MARKINGS ON THE CONCRETE BRIDGE DECK SHALL BE RECESSED, PREFORMED, WET REFLECTIVE MARKINGS WITH BLACK CONTRAST. PROPOSED 12" WIDE PAVEMENT MARKINGS ON THE CONCRETE BRIDGE DECK SHALL BE RECESSED, PREFORMED, WET REFLECTIVE MARKINGS.
2. ALL OTHER MARKINGS ARE TO BE RECESSED, MULTI-COMPONENT, FAST DRY, WET REFLECTIVE PAVEMENT MARKINGS.

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	9	44
PROJECT FILE NO.			613752

TRAFFIC SIGN & PAVEMENT MARKING PLAN



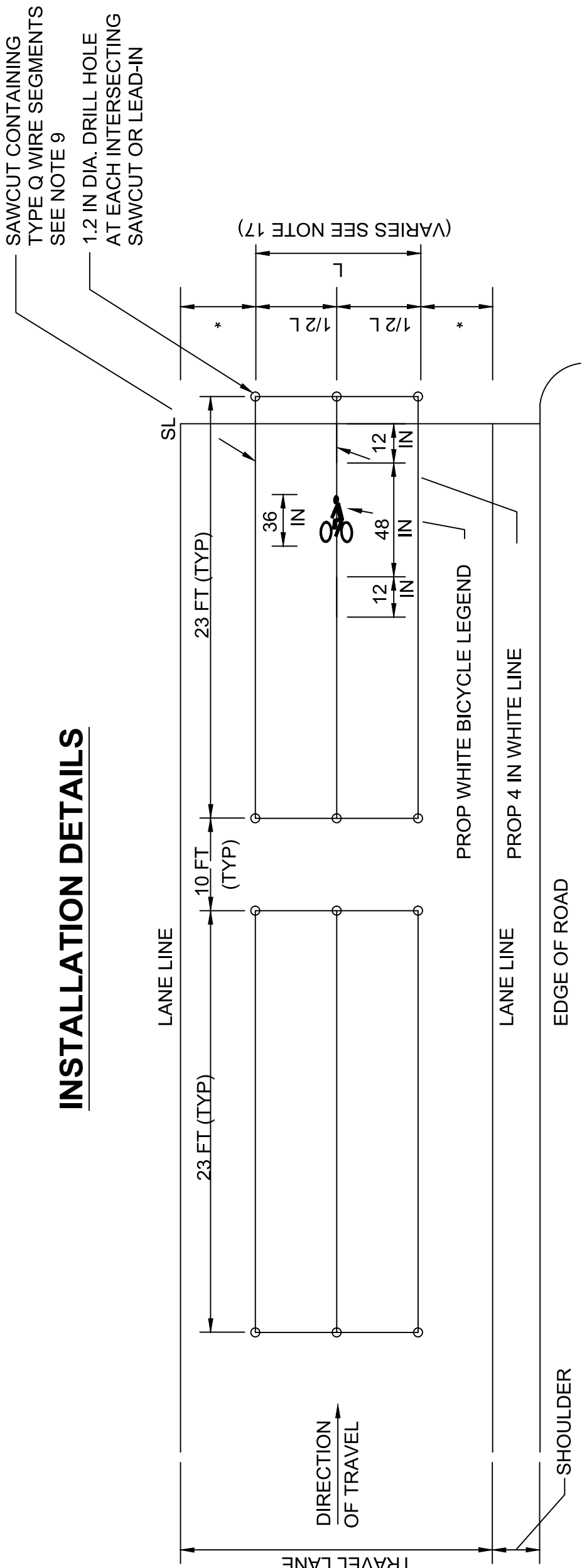
TAUNTON BAY STREET				
STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS	
MA	N.F.A.	10	44	
PROJECT FILE NO. 613752				

BICYCLE LOOP DETECTOR DETAILS

BICYCLE LOOP DETECTOR DETAILS

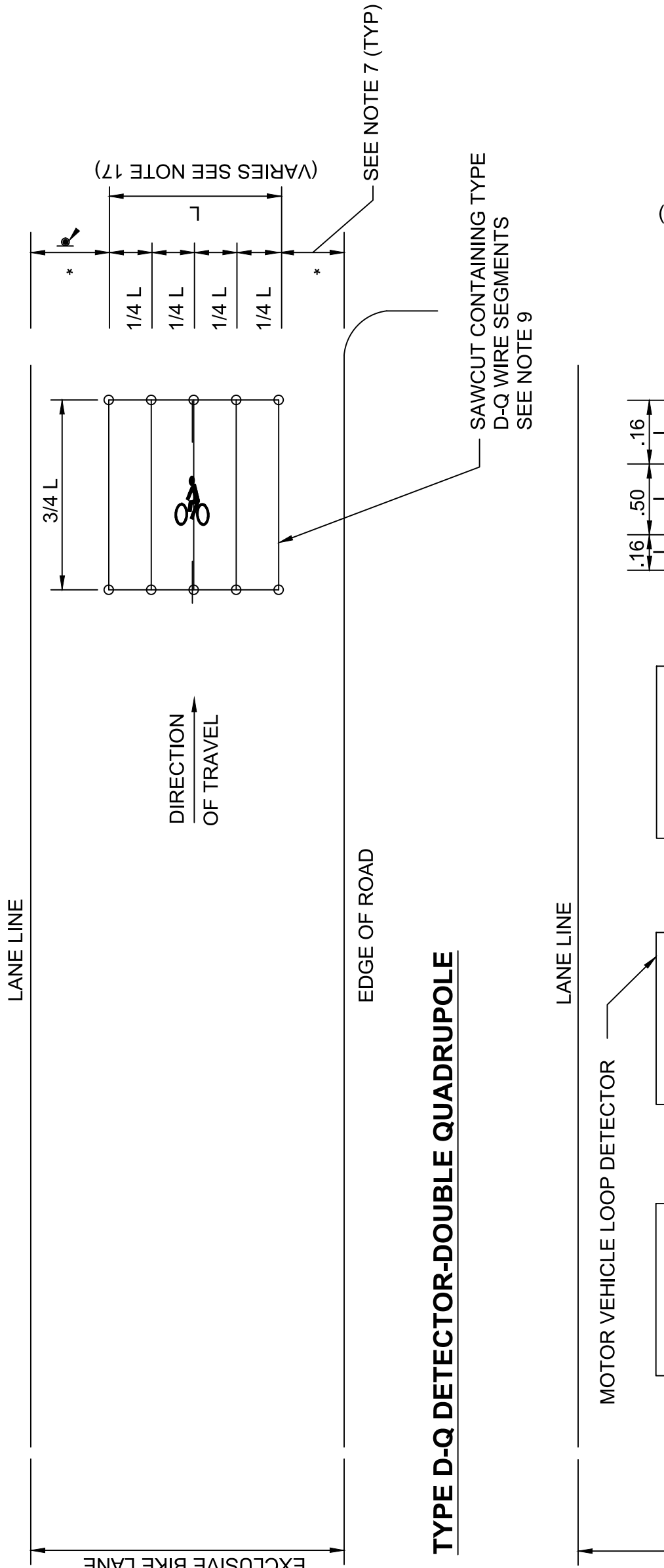
NOTES:

- REFER TO VEHICLE LOOP DETECTOR DETAIL SHEET FOR ADDITIONAL NOTES AND CONSTRUCTION DETAILS.
- ALL DETAILS ARE GRAPHICAL WITH NO SCALE.
- THE NUMBER, SIZE, LOCATION AND LENGTH OF DETECTION AREA VARIES AND SHALL BE DETERMINED BY THE DESIGNER REFER TO TRAFFIC SIGNAL PLAN.
- BICYCLE LOOPS SHALL BE CONNECTED TO SEPARATE LOOP DETECTOR AMPLIFIERS CAPABLE OF HIGHER LEVELS OF SENSITIVITY.
- BICYCLE LOOPS SHALL BE INSTALLED IN THE BASE COURSE OF EXISTING PAVEMENT. THE EXISTING PAVEMENT SHALL BE COLD PLAINED TO THE BASE COURSE AND SAWCUT FOR LOOP INSTALLATION.
- SIGNS AND PAVEMENT MARKINGS SHALL BE INSTALLED FOR ALL BICYCLE DETECTORS TO INFORM CYCLISTS OF THE DETECTION AREA.
- OFFSET'S FROM LANE LINE EQUAL UNLESS OTHERWISE NOTED. SEE PLANS.
- TYPE Q DETECTORS SHALL BE WIRED IN A FIGURE EIGHT PATTERN WITH A DOUBLE LAYER DESIGN (2.4-2") WITH 2 TURNS IN THE PERIMETER SLOTS AND 4 TURNS IN THE CENTER SLOT AS SHOWN IN THE WINDING DETAIL.
- BICYCLES WILL BE DETECTED WITHIN 4 IN. OF THE INTERIOR LONGITUDINAL LOOP WIRES FOR TYPE Q AND D-Q DETECTORS.
- PROVIDE 3 TURNS FOR TYPE D-1 DETECTORS.
- INSTALL 2 LAYERS OF WIRE WOUND IN THE SAME DIRECTION IN BOTH LAYERS FOR TYPE D-2 DETECTORS. THE RESULT IS 4 TURNS IN EACH DIAGONAL.
- RIGHT JUSTIFIED LOOP DETECTORS SHALL BE CONSIDERED FOR THE FOLLOWING CONDITIONS:
12.a. BICYCLE STOPPING ON THE RIGHT SIDE OF A THRU TRAVEL LANE.
12.b. BICYCLE STOPPING ON THE RIGHT SIDE OF AN EXCLUSIVE LEFT TURN LANE.
- LEFT JUSTIFIED LOOP DETECTORS SHALL BE CONSIDERED FOR THE FOLLOWING CONDITIONS:
13.a. BICYCLE STOPPING ON THE LEFT SIDE OF A SHARED LEFT THRU LANE.
13.b. BICYCLE STOPPING JUST TO THE RIGHT OF THE CENTERLINE WHEN TURNING LEFT ON A TWO-LANE ROADWAY.
- RECTANGULAR LOOP DETECTORS SHALL BE CONSIDERED FOR BICYCLES STOPPING ON EITHER THE LEFT OR RIGHT SIDE OF A TWO-LANE ROADWAY. THE MINIMUM OFFSET FROM LANE LINE OR CURB LINE SHALL BE 1.0 FT.
- PAVEMENT CORES OR TEST PITS MAY BE REQUIRED TO DETERMINE THE DEPTH OF EXISTING PAVEMENT AND CONFIRM THAT THE DETECTION OPTION CHOSEN AND CORRESPONDING WINDING PATTERN CAN BE ACCOMMODATED.
- THESE DETAILS APPLY TO BICYCLE LOOPS INSTALLED IN ROADWAYS. PUSH BUTTON ACTUATION SHALL BE CONSIDERED FOR RECREATIONAL BIKE PATHS.
- THE MINIMUM DIMENSION FOR L SHALL BE 6 FT MIN. FOR DETECTORS TYPE D-Q, D-1 & D-2. FINAL DIMENSIONS SHALL BE DETERMINED BY THE DESIGN ENGINEER.

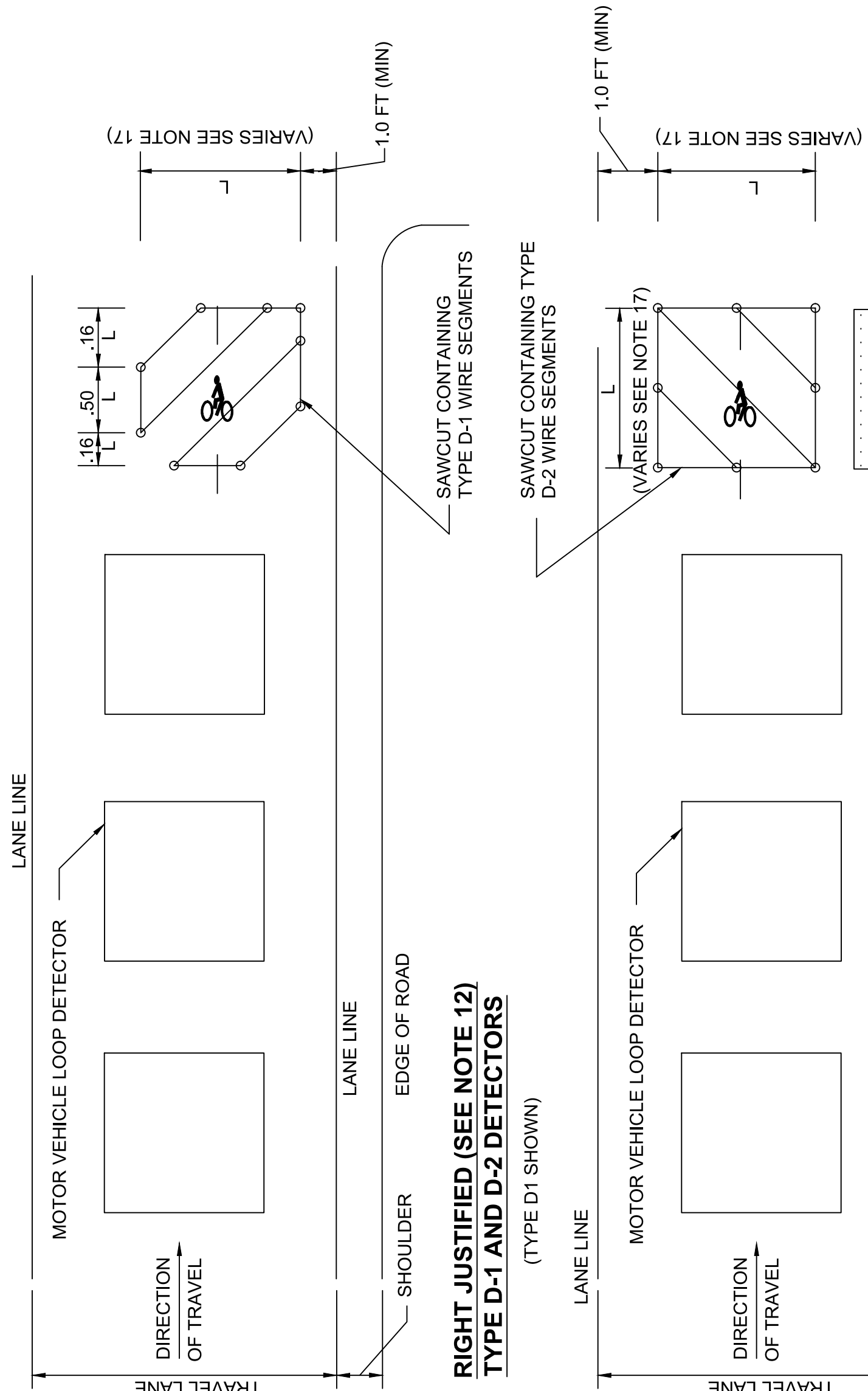


INSTALLATION DETAILS

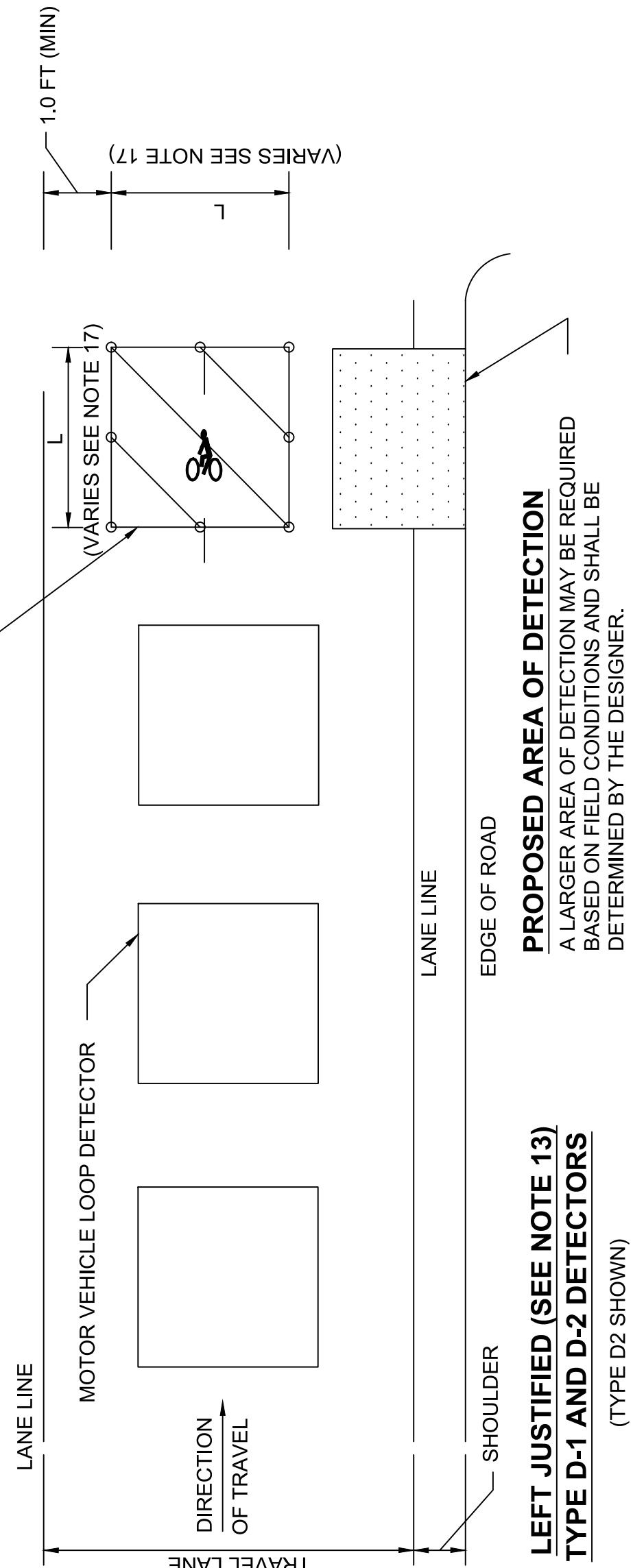
TYPE Q DETECTOR-STANDARD QUADRUPOLE WITH STANDARD PAVEMENT MARKINGS AND SIGNING



TYPE D-Q DETECTOR-DOUBLE QUADRUPOLE



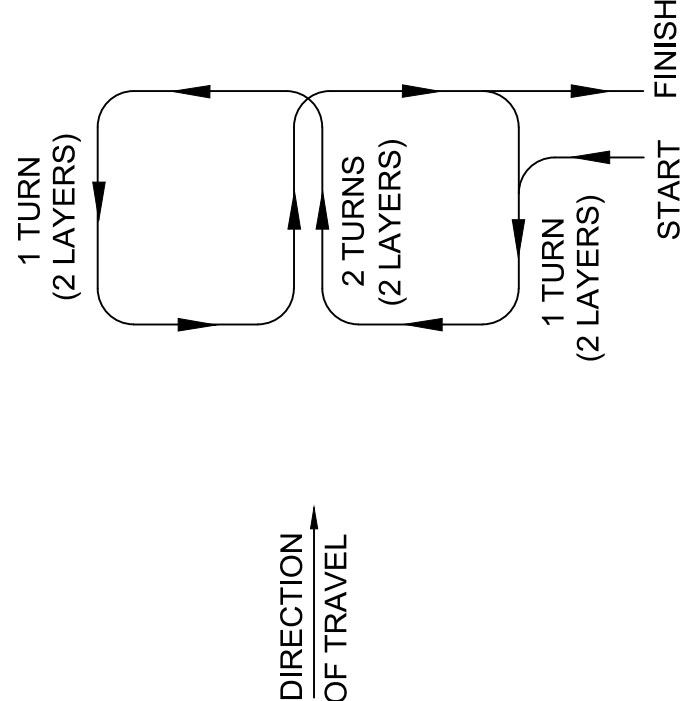
RIGHT JUSTIFIED (SEE NOTE 12) TYPE D-1 AND D-2 DETECTORS (TYPE D1 SHOWN)



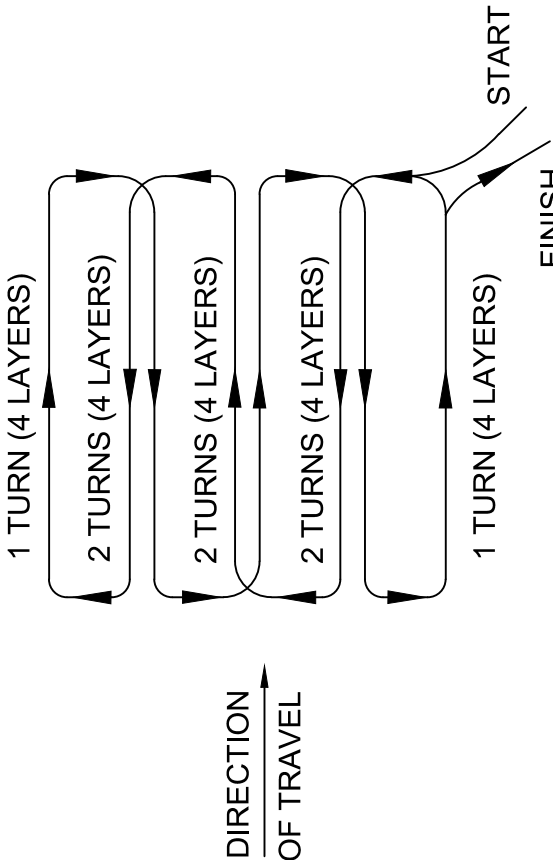
LEFT JUSTIFIED (SEE NOTE 13) TYPE D-1 AND D-2 DETECTORS (TYPE D2 SHOWN)

PROPOSED AREA OF DETECTION
A LARGER AREA OF DETECTION MAY BE REQUIRED BASED ON FIELD CONDITIONS AND SHALL BE DETERMINED BY THE DESIGNER.

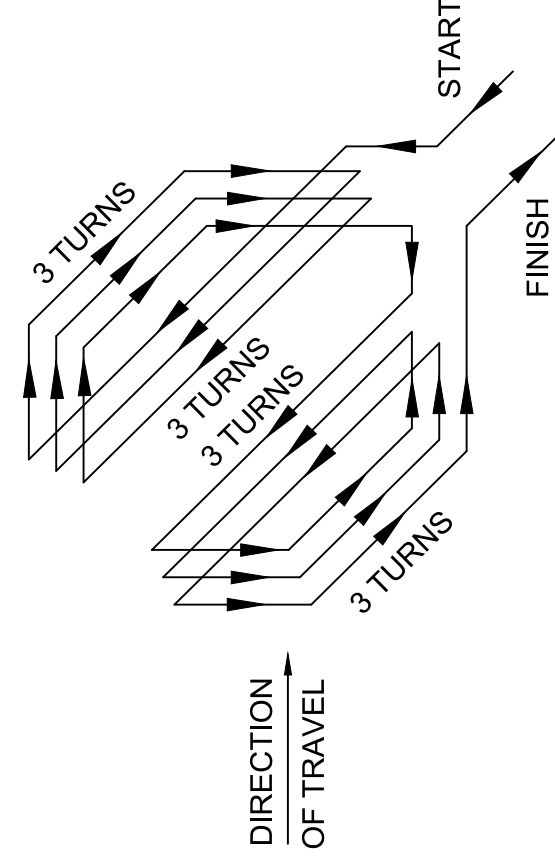
WINDING DETAILS



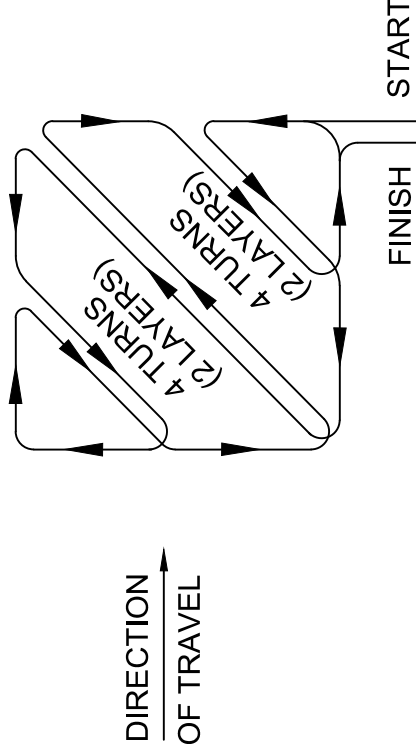
TYPE Q DETECTOR



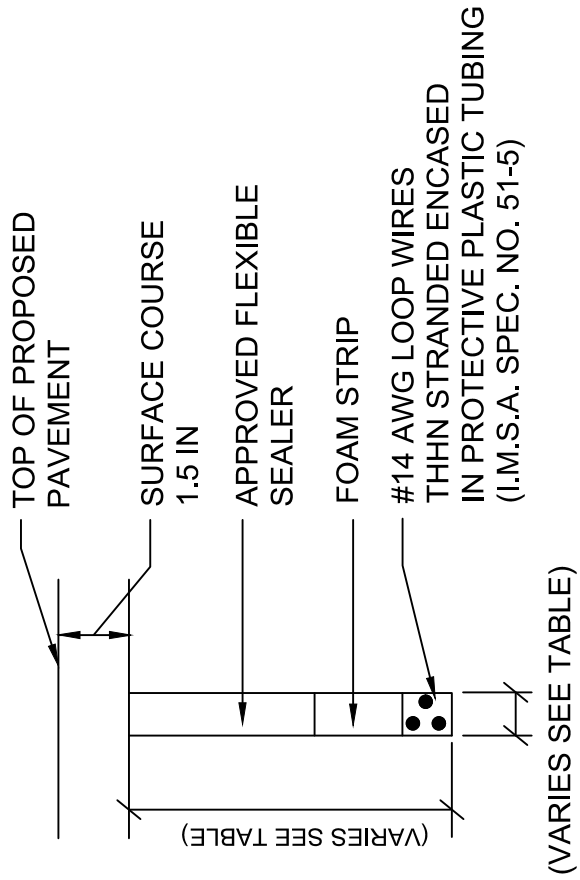
TYPE D-Q DETECTOR



TYPE D-1 DETECTOR

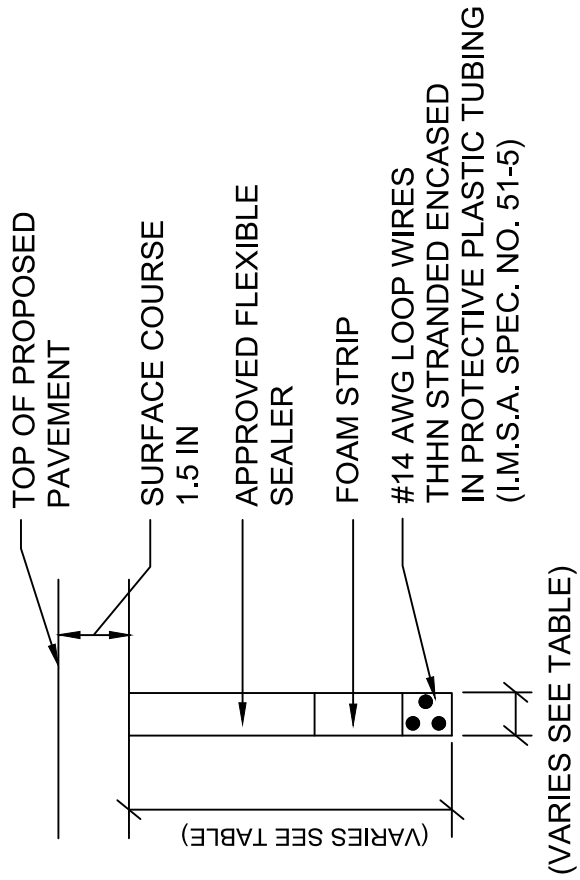


TYPE D-2 DETECTOR



SECTION THRU LOOP DETECTOR

SAWCUT SLOT DEPTH GUIDE		
TURNS OF WIRE	SLOT SIZE	
	DEPTH (IN)	WIDTH (IN)
1	1.5	0.5
2	1.5	0.5
3	1.5	0.5
4	2.0	0.5
5	2.0	0.5
6	2.0	0.5
7	2.0	0.5
8	2.0	0.5



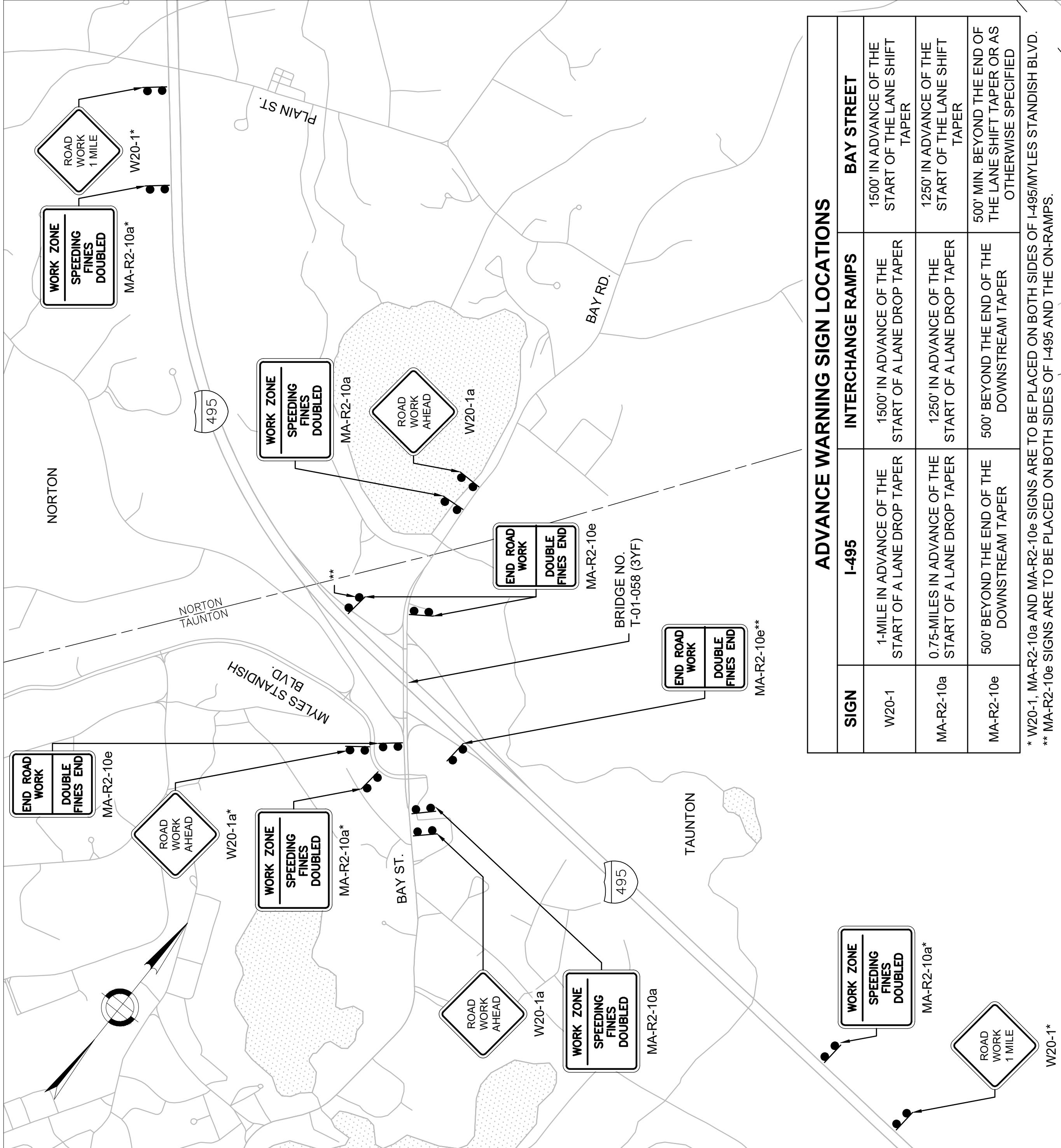
GENERAL NOTES:

- ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND ALL REVISIONS, UNLESS SUPERCEDED BY THESE PLANS.
- AT A MINIMUM, AN 11' LANE MUST BE MAINTAINED IN EACH DIRECTION AT ALL TIMES.
- THE CONTRACTOR MUST MAINTAIN ACCESS TO ALL PROPERTIES WITHIN THE PROJECT LIMITS FOR THE DURATION OF THE PROJECT.
- USE DETAILS ONLY WHERE APPROPRIATE AND WHERE SIGNS WILL NOT INTERFERE WITH OTHER OPERATIONAL SIGNS.
- TEMPORARY CONSTRUCTION SIGNING, BARRICADES AND ALL OTHER NECESSARY WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM THE HIGHWAY OR COVERED WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.
- DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
- WHERE EXISTING DRAINAGE STRUCTURE CASTINGS ARE WITHIN TEMPORARY TRAVEL LANES, THE CONTRACTOR SHALL VERIFY THAT THE GRATE OR COVER DOES NOT ROCK IN ITS FRAME. IF NECESSARY, GRATES AND COVERS WILL BE REMOVED, THE FRAME WILL BE CLEANED AND THE GRATE OR COVER RESET. THIS WORK IS CONSIDERED INCIDENTAL TO THE TEMPORARY TRAFFIC CONTROL ITEMS.
- EXISTING RUMBLE STRIP THAT WILL BE WITHIN THE PROPOSED TEMPORARY TRAVEL LANES SHALL BE MILLED AND PATCHED PRIOR TO OPENING THE TRAVEL LANE TO TRAFFIC.

GRADE DIFFERENCES:

- WHERE THERE IS A LONGITUDINAL DIFFERENCE IN ELEVATION BETWEEN EXISTING PAVEMENT AND MILLED OR NEW PAVEMENT, THE CONTRACTOR SHALL PLACE A TEMPORARY HOT MIX ASPHALT WEDGE WITH A 12:1 (OR FLATTER) SLOPE FOR A SMOOTH TRANSITION.
- CROSS-SECTIONAL GRADE DIFFERENCES IN EXCESS OF 2" DURING NON-WORKING HOURS WILL REQUIRE DELINEATION BY USE OF REFLECTORIZED DRUMS.
- CROSS-SECTIONAL GRADE DIFFERENCES IN EXCESS OF 4" DURING NON-WORKING HOURS SHALL BE PROTECTED BY BACKFILLING WITH A WEDGE OF EARTHWORK TO BE COMPACTED AT A 4:1 SLOPE AND SHALL BE DELINEATED BY USE OF DRUMS.
- A MINIMUM SLOPE OF 4:1 MUST BE MAINTAINED AFTER WORKING HOURS ALONG THE EDGE OF THE TRAVELED WAY.

- THESE TEMPORARY TRAFFIC CONTROL PLANS ARE NOT INTENDED TO BE INCLUSIVE OF ALL SETUPS NECESSARY TO COMPLETE THE PROJECT. FOR TEMPORARY TRAFFIC CONTROL DETAILS NOT INCLUDED IN THESE PLANS SEE THE MASSDOT WORK ZONE SAFETY TYPICAL DETAILS AND DRAWINGS FOR TEMPORARY TRAFFIC CONTROL AND THE MASSDOT CONSTRUCTION STANDARD DETAILS. FOR LANE CLOSURES ON I-495, USE MASSDOT CONSTRUCTION STANDARD DETAILS 852.73, 852.74, 852.78 & 852.79.



ADVANCE WARNING SIGN LOCATIONS			
SIGN	I-495	INTERCHANGE RAMPS	BAY STREET
W20-1	1-MILE IN ADVANCE OF THE START OF A LANE DROP TAPER	1500' IN ADVANCE OF THE START OF THE LANE SHIFT TAPER	1500' IN ADVANCE OF THE START OF THE LANE SHIFT TAPER
MA-R2-10a	0.75-MILES IN ADVANCE OF THE START OF A LANE DROP TAPER	1250' IN ADVANCE OF THE START OF A LANE DROP TAPER	1250' IN ADVANCE OF THE START OF THE LANE SHIFT TAPER
MA-R2-10e	500' BEYOND THE END OF THE DOWNSTREAM TAPER	500' BEYOND THE END OF THE DOWNSTREAM TAPER	500' MIN. BEYOND THE END OF THE LANE SHIFT TAPER OR AS OTHERWISE SPECIFIED

* W20-1, MA-R2-10a AND MA-R2-10e SIGNS ARE TO BE PLACED ON BOTH SIDES OF I-495/MYLES STANDISH BLVD.

** MA-R2-10e SIGNS ARE TO BE PLACED ON BOTH SIDES OF I-495 AND THE ON-RAMPS.

ADVANCE SIGNING PLAN

SCALE: 1" = 1000'

CHANNELIZATION:

- PLASTIC DRUMS WITH ANY LIGHTING DEVICE MOUNTED TO THEM MUST PASS THE CRITERIA SET FORTH IN MASH 2016.
- THE MAXIMUM SPACING BETWEEN CHANNELIZATION DEVICES IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH, OR AS OTHERWISE SPECIFIED IN THESE PLANS.
- THE FIRST TEN DRUMS OF ANY MERGING OR SHIFTING TAPER THAT IS DEPLOYED BETWEEN DUSK AND DAWN SHALL BE EQUIPPED WITH SEQUENTIAL FLASHING WARNING LIGHTS.
- FOR DAYTIME OPERATIONS, THE FIRST FIVE DRUMS USED FOR ANY TAPER SHALL BE EQUIPPED WITH TYPE A FLASHING LIGHTS.
- FOR TYPICAL CHANNELIZING DEVICE DIMENSIONS AND REQUIREMENTS SEE MASSDOT CONSTRUCTION STANDARD DETAIL .851.1.
- FOR PEDESTRIAN CHANNELIZING DEVICES, SEE MASSDOT CONSTRUCTION STANDARD DETAIL 850.1.1 AND 850.1.2.

CONSTRUCTION SIGNING:

- TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
- ALL SIGN LEGEND, BORDERS AND MOUNTING SHALL BE IN ACCORDANCE WITH THE MUTCD.
- ALL CONSTRUCTION SIGNS SHALL BE BLACK LEGEND ON A REFLECTORIZED ORANGE BACKGROUND UNLESS OTHERWISE NOTED.
- ADVANCE WARNING SIGNS SHALL REMAIN IN PLACE FOR THE ENTIRE DURATION OF THE PROJECT, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- ALL SIGNS, INCLUDING EXISTING, THAT ARE NOT REPRESENTATIVE OF ACTUAL WORK CONDITIONS SHALL BE EITHER COVERED OR REMOVED WHEN NOT APPLICABLE.
- SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY MUST PASS THE CRITERIA SET FORTH IN MASH 2016.
- CHANGEABLE MESSAGE SIGNS SHOULD BE USED IN ADDITION TO ADVANCE WARNING SIGNS, AT THE DIRECTION OF THE ENGINEER, TO PROVIDE INFORMATION PRIOR TO THE BEGINNING OF WORK OR IN ADVANCE OF CHANGES IN CONSTRUCTION OPERATIONS OR TRAFFIC PATTERNS. CHANGEABLE MESSAGE SIGNS ARE NOT TO BE USED AS A LONG TERM ADVANCE WARNING SIGN.
- ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.
- A & B DISTANCES SHOWN ON DETAILS SHALL BE PER FIGURE GEN-2 "SUGGESTED WORK ZONE SIGN SPACING" FOUND IN THE MASSDOT WORK ZONE SAFETY TYPICAL DETAILS AND DRAWINGS FOR TEMPORARY TRAFFIC CONTROL.

TWO WEEKS BEFORE		TWO WEEKS BEFORE		TWO WEEKS BEFORE	
STAGE 1 TRAFFIC SHIFT		STAGE 2/3/4 TRAFFIC SHIFT		STARTING NIGHT WORK	
MESSAGE 1:		MESSAGE 2:			
BAY ST BRIDGE WORK		NEW TRAFFIC PATTERN		BAY ST NIGHT WORK	
STARTS XX/XX		STARTS XX/XX		STARTS XX/XX	

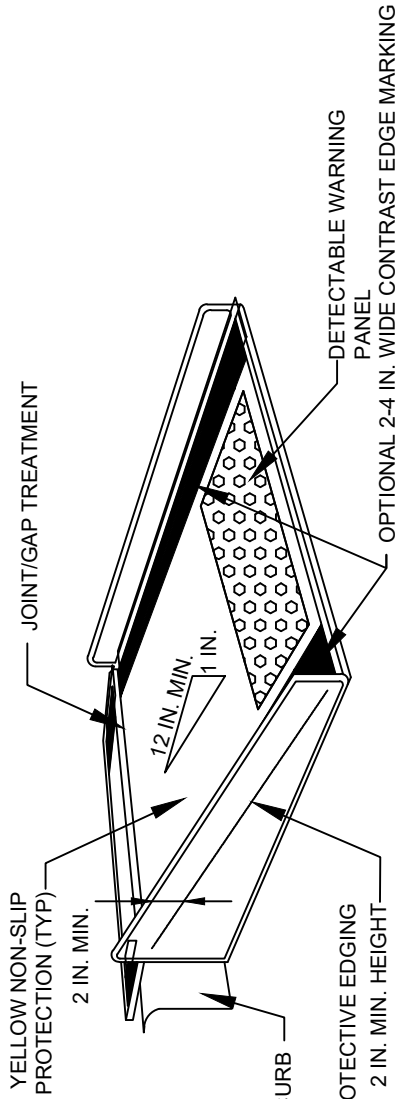
NOTES:

- PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL CONFORM TO THE 11TH EDITION OF THE MUTCD, DATED DECEMBER 2023, AS AMENDED.
- PCMS ARE TO BE LOCATED BEHIND GUARDRAIL OR OUTSIDE OF THE CLEAR ZONE.
- LOCATIONS SHALL BE APPROVED BY THE ENGINEER.

PORTABLE CHANGEABLE MESSAGE SIGNS

TEMPORARY CURB RAMP NOTES:

- CURB RAMPS SHALL BE 60 IN. MINIMUM WIDTH WITH A FIRM, STABLE, AND NON-SLIP SURFACE.
- PROTECTIVE EDGING WITH A 2 IN. MINIMUM HEIGHT SHALL BE INSTALLED WHEN THE CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6 IN. OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN THE CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3 IN. OR MORE.
- PROTECTABLE EDGING WITH 6 IN. MINIMUM HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
- THE CURB RAMP WALKWAY AND LANDING AREA SURFACE SHALL BE OF A SOLID CONTINUOUS CONTRASTING COLOR ABUTTING UP TO THE EXISTING SIDEWALK.
- CURB RAMPS AND LANDINGS SHOULD HAVE A 1:50 (2%) MAX CROSS-SLOPE.
- CLEAR SPACE OF 48x48 IN. MINIMUM SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
- WATER FLOW IN THE GUTTER SYSTEM SHALL HAVE MINIMAL RESTRICTION.
- LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 0.5 IN. WIDTH.
- CHANGES BETWEEN SURFACE HEIGHTS SHOULD NOT EXCEED 0.5 IN. LATERAL EDGES SHOULD BE VERTICAL UP TO 0.25 IN. HIGH, AND BEVELED AT 1:2 BETWEEN 0.25 IN. AND 0.5 IN. HEIGHT.
- IF A TEMPORARY PEDESTRIAN RAMP LEADS TO A CROSSWALK, THEN A DETECTABLE WARNING PAD MUST BE ADHERED TO THE BASE OF THE RAMP. IF IT LEADS TO A PROTECTED PEDESTRIAN BYPASS THAT DOES NOT CONFLICT WITH VEHICULAR TRAFFIC, THEN A PAD SHALL NOT BE INSTALLED ON THE RAMP.
- FOR ADDITIONAL DETAILS, SEE MASSDOT CONSTRUCTION STANDARD DETAIL 850.1.1 AND 850.1.2.



TEMPORARY CURB RAMP-PERPENDICULAR TO CURB

TEMPORARY PEDESTRIAN CURB RAMP

NOT TO SCALE

TAUNTON
BAY STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	11	44
PROJECT FILE NO.		613752	

ADVANCE SIGN PLAN & TTCP NOTES

613752_BR(TTGP).DWG
Plotted on 29-Jul-2025 8:25 AM

INDUSTRIAL PARK ROAD

- NOTES:**
- FOR WORK AT THE ENDS OF THE EXISTING MEDIAN, ADDITIONAL CLOSURES ARE ALLOWABLE DURING WORK HOURS. ALL LANES MUST BE REOPENED DURING NON-WORKING HOURS AND FOR PEAK TRAVEL TIMES.
 - FOR MEDIAN WORK BETWEEN STA. 15+99 AND 17+46, CLOSE THE LEFT LANE ON BAY ST. SOUTHBOUND FROM STA. 16+00 TO 34+40, CLOSE ONE LEFT TURN LANE ON THE I-495 NB OFF-RAMP AND SHIFT THE LEFT TURN LANE FOR THE I-495 SB ON-RAMP USING FIGURE INT-4 IN THE STANDARD DETAILS AND DRAWINGS FOR THE DEVELOPMENT OF TEMPORARY TRAFFIC CONTROL PLANS.
 - FOR MEDIAN WORK BETWEEN STA. 22+37 AND 23+49, CLOSE THE LEFT LANE ON BAY ST. SOUTHBOUND FROM STA. 20+00 TO 34+40, CLOSE ONE LEFT TURN LANE ON THE I-495 NB OFF RAMP AND CLOSE ONE NORTHBOUND LEFT TURN LANE ON BAY ST. AT THE I-495 NORTHBOUND RAMPS.

END ROAD WORK
DOUBLE FINES END
MA-R2-10e

TAUNTON
BAY STREET
TEMPORARY TRAFFIC CONTROL PLAN
STAGE 1

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	13	44
PROJECT FILE NO. 613752		613752	

BAY STREET

SHIFTING TAPER
TAPER CALCULATION
W = 9.0'
S = 30 MPH
L = 0.5 WS ² / 60 = 67.5'
L = 127'



W5-1



W24-1R

SHIFTING TAPER
TAPER CALCULATION
W = 9.0'
S = 30 MPH
L = 0.5 WS ² / 60 = 67.5'
L = 70' MIN.

STAGE 1
WORK AREA
REFLECTORIZED DRUMS
AT 30' O.C. MAX. (TYP.)

SEE NOTES FOR
MEDIAN REMOVAL

BAY STREET

ON-RAMP

SHIFTING TAPER
TAPER CALCULATION
W = 8.0'
S = 30 MPH
L = 0.5 WS ² / 60 = 60'
L = 60' MIN.

60' LANE
SHIFT TAPER

STAGE 3 WORK AREA

SHIFTING TAPER
TAPER CALCULATION
W = 9.0'
S = 30 MPH
L = 0.5 WS ² / 60 = 67.5'
USE = 75' MIN.

SYL

SWL

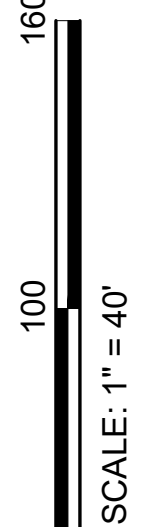
NB ON-RAMP

DWLEX (2' LINE, 6' SPACE)

163' LANE SHIFT TAPER

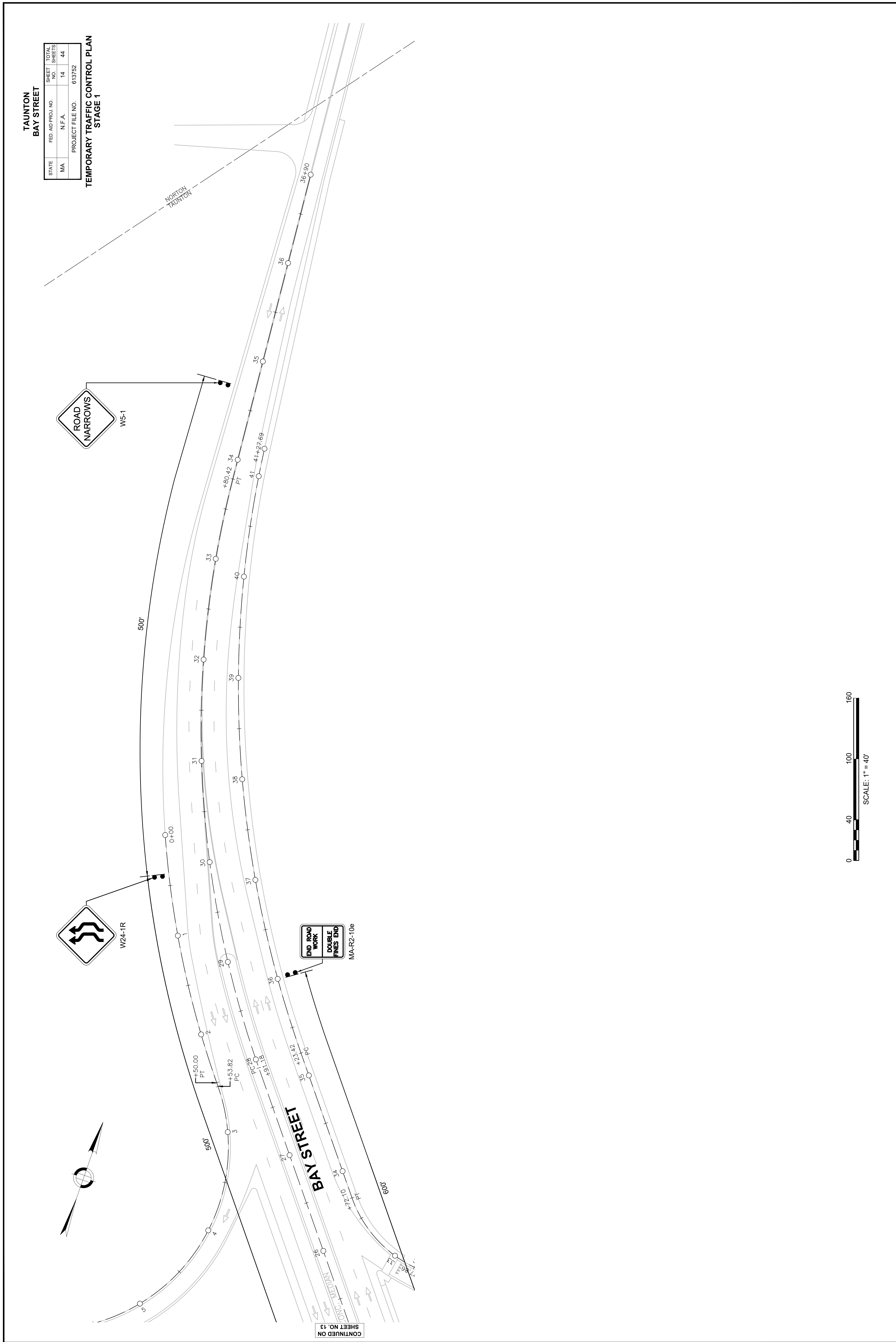
BAY STREET

NB OFF-RAMP



CONTINUED ON
SHEET NO. 14

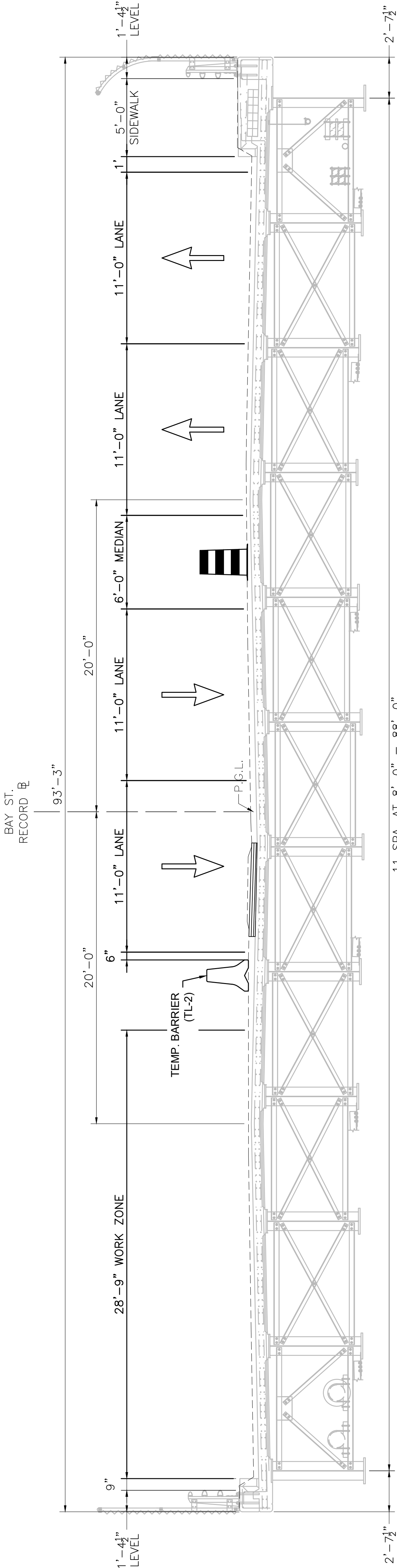
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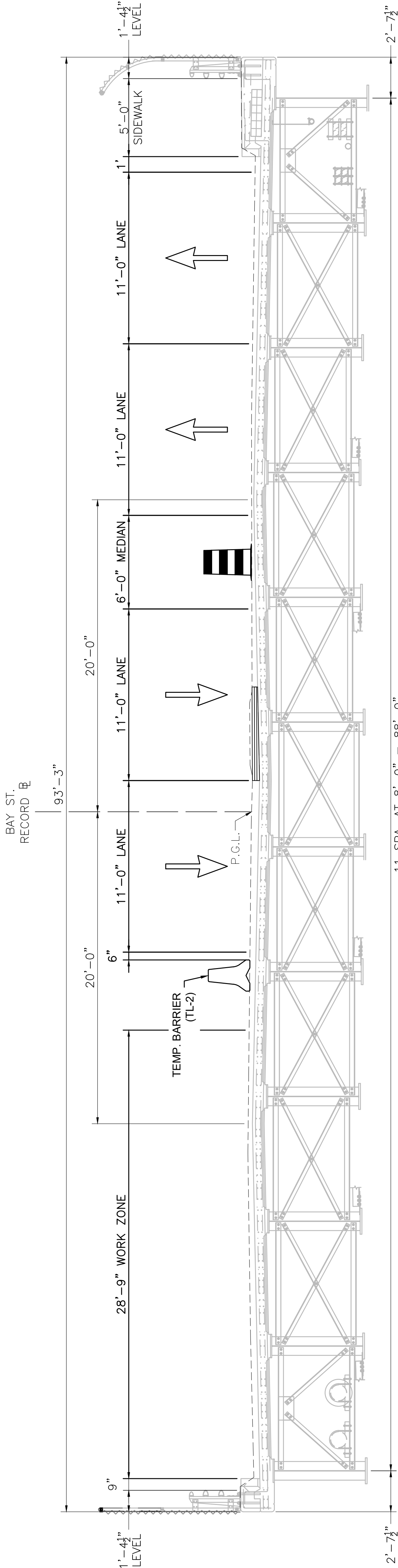
TAUNTON
BAY STREET

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	15	44
PROJECT FILE NO. 613752			

TEMPORARY TRAFFIC CONTROL PLAN
STAGE 2 TYPICAL SECTION



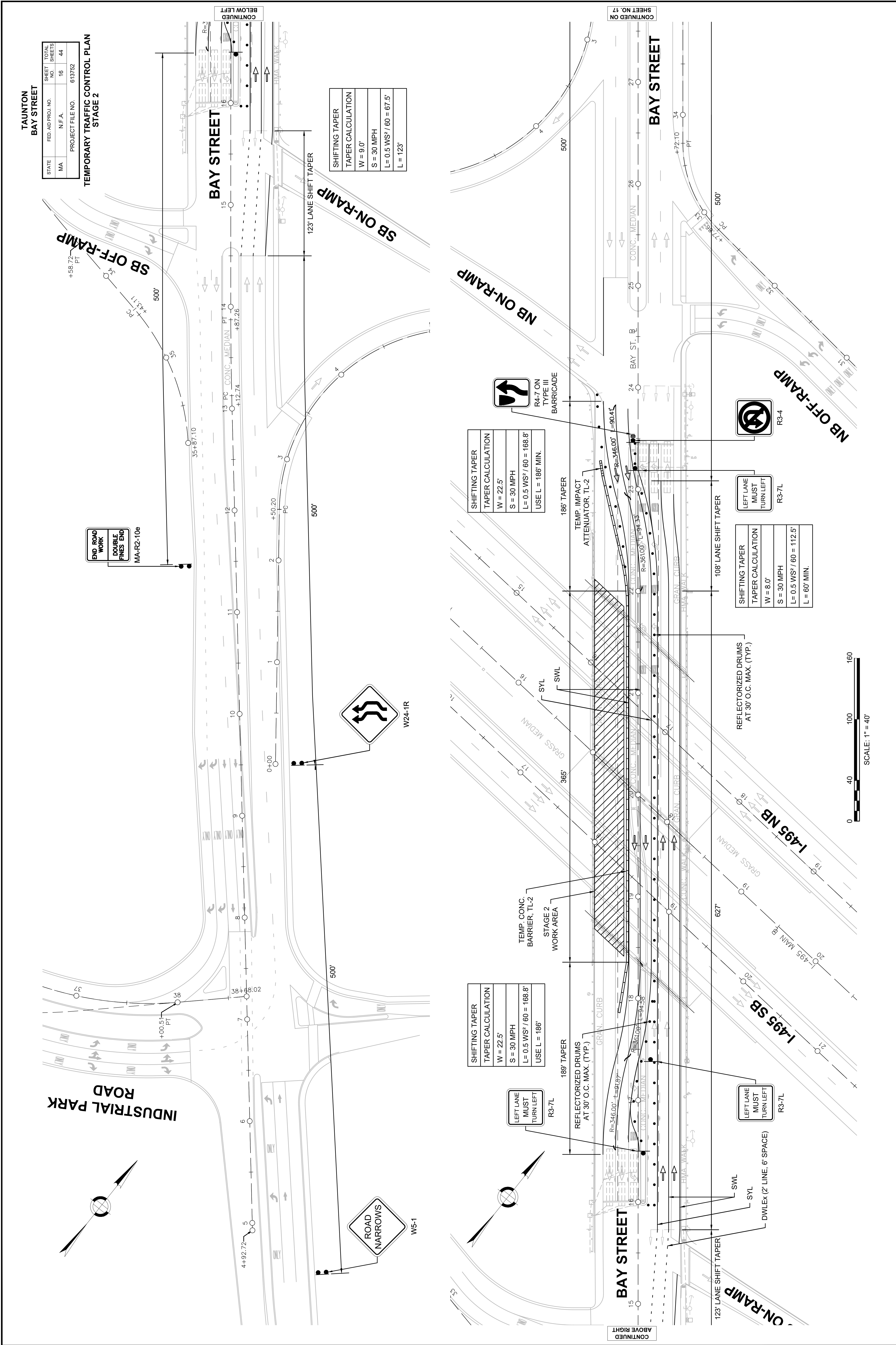
TYPICAL SECTION
STA. 18+95.46 TO 21+62.47
NOT TO SCALE



TYPICAL SECTION
STA. 18+37.53 TO STA. 18+95.46
NOT TO SCALE

SUGGESTED SEQUENCE OF CONSTRUCTION:

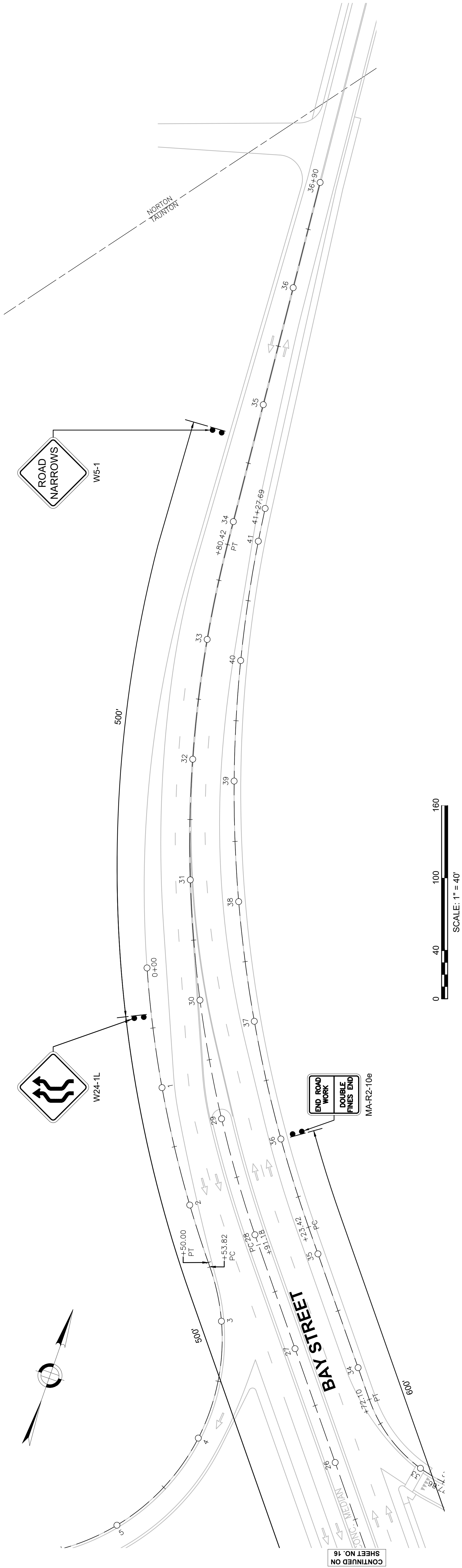
- STAGE 2
1. INSTALL TEMPORARY CONSTRUCTION SIGNING, PAVEMENT MARKINGS, TEMPORARY BARRIER AND OTHER TRAFFIC CONTROL DEVICES TO ESTABLISH STAGE 2 WORK ZONE;
 2. PERFORM MILLING AND HYDRO-EXCAVATION OF THE EXISTING CONCRETE BRIDGE DECK;
 3. COMPLETE FULL DEPTH CONCRETE BRIDGE DECK REPAIR;
 4. EXCAVATE, FORM AND INSTALL NEW REINFORCING STEEL AT BRIDGE JOINTS TO RETROFIT DECK-OVER-BACKWALL AND TYPE III APPROACH SLAB RETROFIT TO MOVE JOINT BEHIND THE BACKWALL;
 5. PLACE LATEX MODIFIED CONCRETE OVERLAY;
 6. SAWCUT GROOVING IN THE NEW LATEX MODIFIED CONCRETE WEARING SURFACE;
 7. INSTALL PRE-COMPRESSED JOINT SEAL AT ABUTMENT JOINTS;
 8. PLACE HMA PATCHING AND SAWING AND SEALING JOINTS AT THE EXPANSION KEY AT ABUTMENTS;



TAUNTON
BAY STREET

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	17	44
PROJECT FILE NO.		613752	

TEMPORARY TRAFFIC CONTROL PLAN
STAGE 2

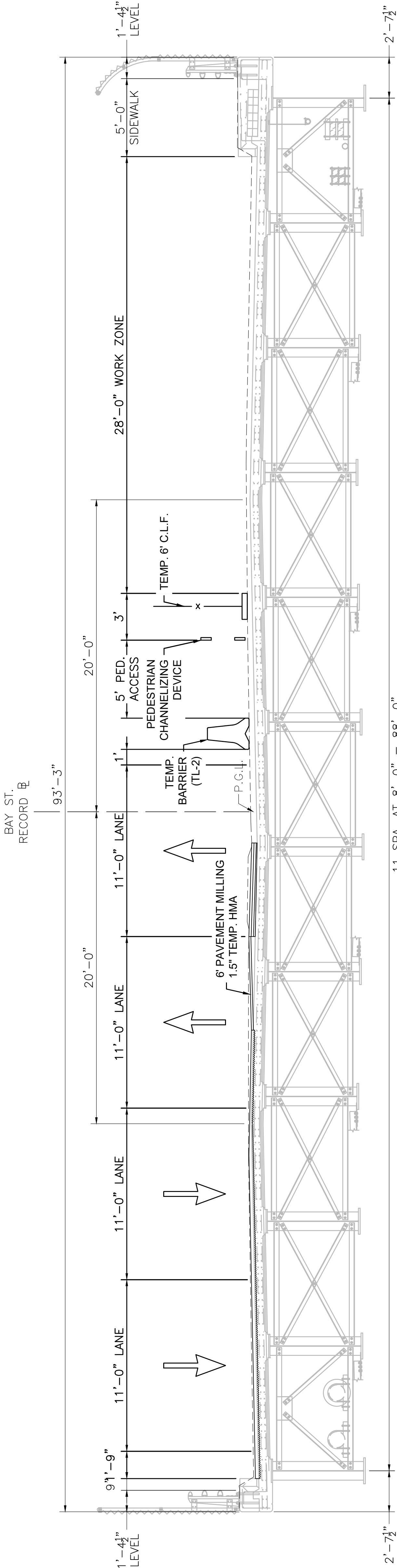


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SHEET NO. 16

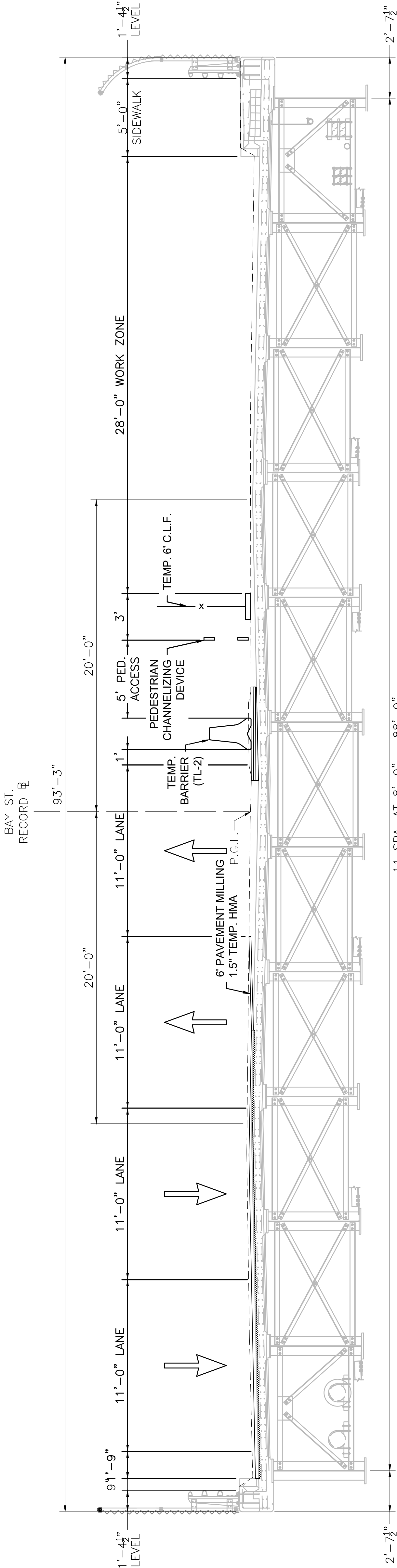
TAUNTON
BAY STREET

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	18	44
PROJECT FILE NO. 613752			

TEMPORARY TRAFFIC CONTROL PLAN
STAGE 3 TYPICAL SECTION



TYPICAL SECTION
STA. 18+95.46 TO 21+62.47
NOT TO SCALE



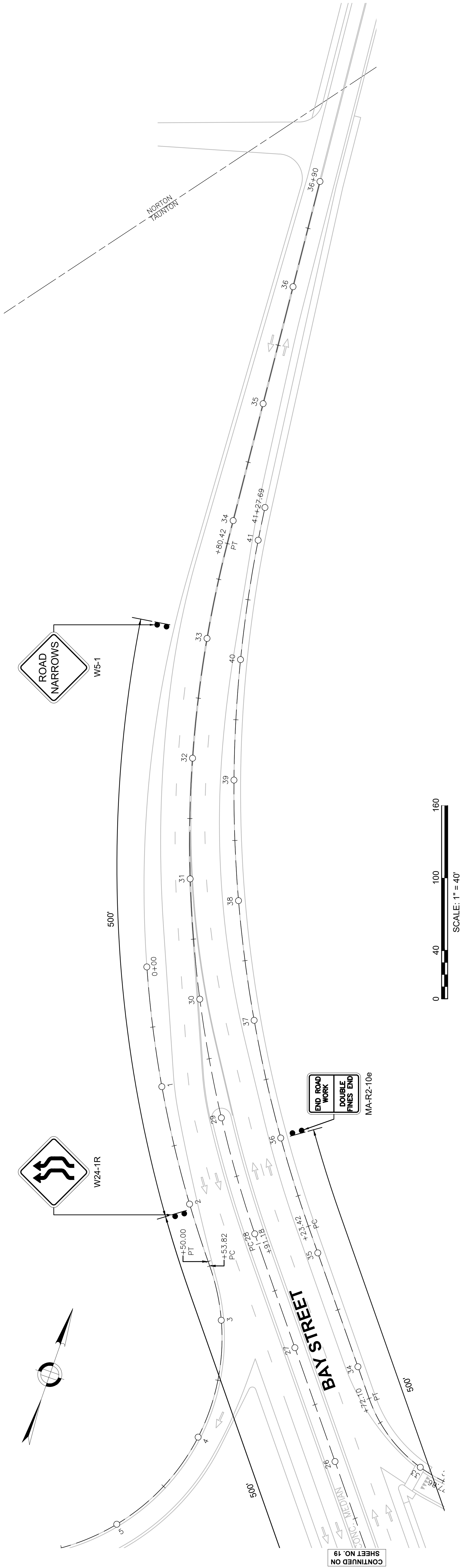
TYPICAL SECTION
STA. 18+37.53 TO STA. 18+95.46
NOT TO SCALE

- SUGGESTED SEQUENCE OF CONSTRUCTION:
- STAGE 3
1. INSTALL TEMPORARY CONSTRUCTION SIGNING, PAVEMENT MARKINGS, TEMPORARY BARRIER AND OTHER TRAFFIC CONTROL DEVICES TO ESTABLISH STAGE 2 WORK ZONE;
 2. PERFORM MILLING AND HYDRO-EXCAVATION OF THE EXISTING CONCRETE BRIDGE DECK;
 3. COMPLETE FULL DEPTH CONCRETE BRIDGE DECK REPAIR;
 4. EXCAVATE, FORM AND INSTALL NEW REINFORCING STEEL AT BRIDGE JOINTS TO RETROFIT DECK-OVER-BACKWALL AND TYPE III APPROACH SLAB RETROFIT TO MOVE JOINT BEHIND THE BACKWALL;
 5. PLACE LATEX MODIFIED CONCRETE OVERLAY;
 6. SAWCUT GROOVING IN THE NEW LATEX MODIFIED CONCRETE WEARING SURFACE;
 7. INSTALL PRE-COMPRESSED JOINT SEAL AT ABUTMENT JOINTS;
 8. PLACE HMA PATCHING AND SAWING AND SEALING JOINTS AT THE EXPANSION KEY AT ABUTMENTS;

TAUNTON
BAY STREET

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	20	44
PROJECT FILE NO.		613752	

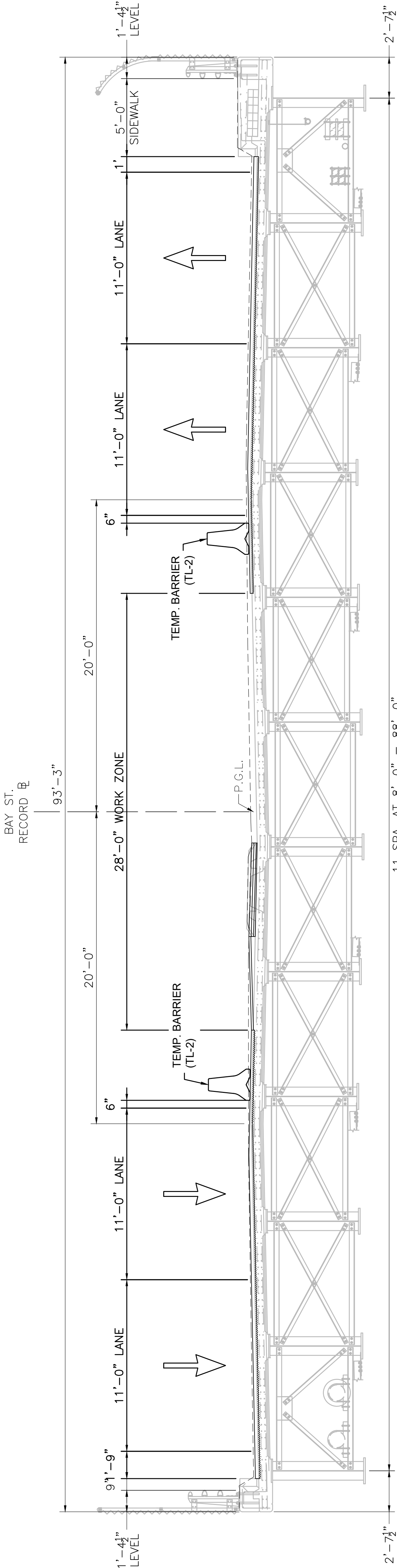
TEMPORARY TRAFFIC CONTROL PLAN
STAGE 3



TAUNTON
BAY STREET

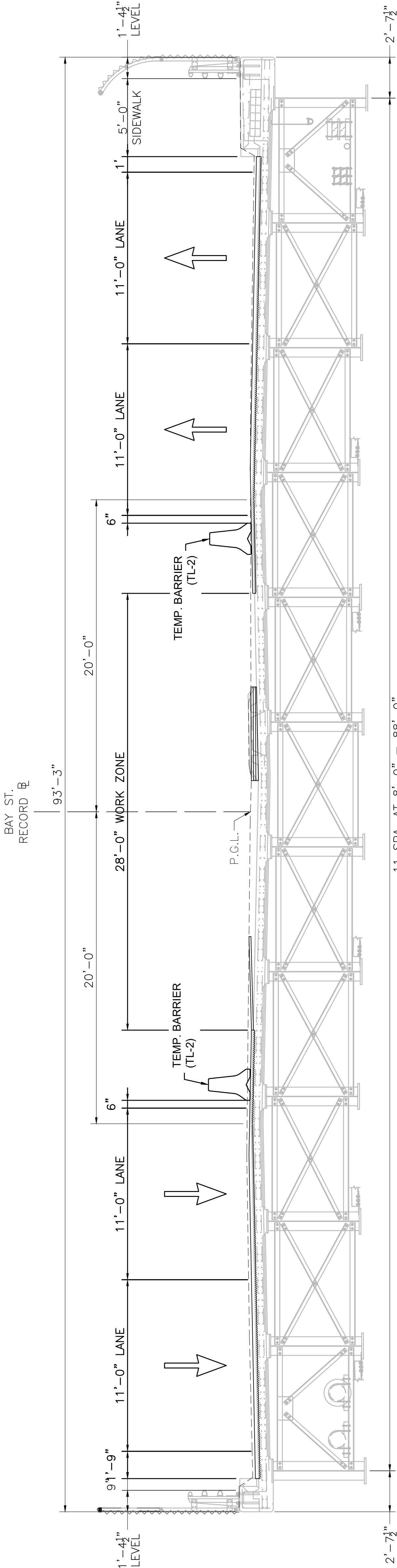
STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	21	44
PROJECT FILE NO. 613752			

TEMPORARY TRAFFIC CONTROL PLAN
STAGE 4 TYPICAL SECTION



TYPICAL SECTION

STA. 18+95.46 TO 21+62.47
NOT TO SCALE



TYPICAL SECTION

STA. 18+37.53 TO STA. 18+95.46
NOT TO SCALE

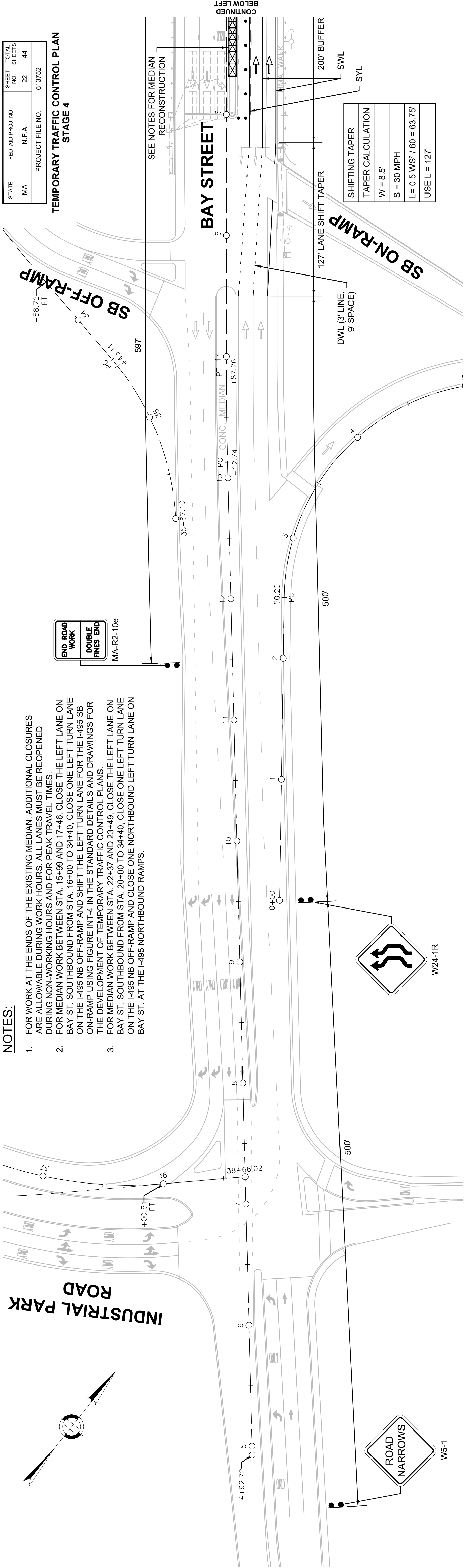
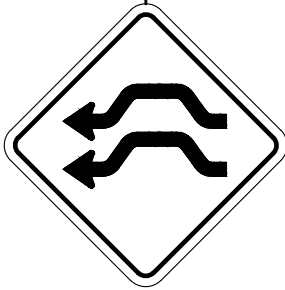
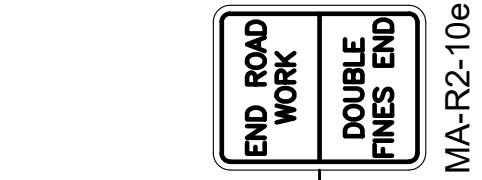
SUGGESTED SEQUENCE OF CONSTRUCTION:

- STAGE 4
1. INSTALL TEMPORARY CONSTRUCTION SIGNING, PAVEMENT MARKINGS, TEMPORARY BARRIER AND OTHER TRAFFIC CONTROL DEVICES TO ESTABLISH STAGE 2 WORK ZONE;
 2. PERFORM MILLING AND HYDRO-EXCAVATION OF THE EXISTING CONCRETE BRIDGE DECK;
 3. COMPLETE FULL DEPTH CONCRETE BRIDGE DECK REPAIR;
 4. EXCAVATE, FORM AND INSTALL NEW REINFORCING STEEL AT BRIDGE JOINTS TO RETROFIT DECK-OVER-BACKWALL AND TYPE III APPROACH SLAB RETROFIT TO MOVE JOINT BEHIND THE BACKWALL;
 5. PLACE LATEX MODIFIED CONCRETE OVERLAY;
 6. SAWCUT GROOVING IN THE NEW LATEX MODIFIED CONCRETE WEARING SURFACE;
 7. INSTALL PRE-COMPRESSED JOINT SEAL AT ABUTMENT JOINTS;
 8. PLACE HMA PATCHING AND SAWING AND SEALING JOINTS AT THE EXPANSION KEY AT ABUTMENTS;
 9. FORM, PLACE REINFORCING STEEL AND POUR BRIDGE MEDIAN;
 10. EXCAVATE TEMPORARY HMA, RESET GRANITE EDGING AND PLACE FINE GRADE AND COMPACT GRAVEL BORROW FOR HIGHWAY APPROACH MEDIAN;
 11. ADJUST DRAINAGE STRUCTURES AND TRAFFIC SIGNAL PULL BOXES TO GRADE AND POUR AND FINISH HIGHWAY MEDIAN;
 12. REMOVE TEMPORARY BARRIER
 13. MILL & OVERLAY HIGHWAY APPROACHES;
 14. REPLACE TRAFFIC SIGNAL LOOP DETECTORS AT I-495 NB RAMP, RESET SIGNS IN MEDIAN AND INSTALL FINAL PAVEMENT MARKINGS; AND
 15. APPLY CONCRETE PROTECTIVE COATING TO PARAPETS, MEDIAN, SAFETY WALK AND SIDEWALK.

INDUSTRIAL PARK ROAD

NOTES:

1. FOR WORK AT THE ENDS OF THE EXISTING MEDIAN, ADDITIONAL CLOSURES ARE ALLOWABLE DURING WORK HOURS. ALL LANES MUST BE REOPENED DURING NON-WORKING HOURS AND FOR PEAK TRAVEL TIMES.
2. FOR MEDIAN WORK BETWEEN STA. 16+99 AND 17+46, CLOSE THE LEFT LANE ON BAY ST. SOUTHBOUND FROM STA. 16+00 TO 34+40. CLOSE ONE LEFT TURN LANE ON THE I-495 NB OFF-RAMP AND SHIFT THE LEFT TURN LANE FOR THE I-495 SB ON-RAMP USING FIGURE INT-4 IN THE STANDARD DETAILS AND DRAWINGS FOR THE DEVELOPMENT OF TEMPORARY TRAFFIC CONTROL PLANS.
3. FOR MEDIAN WORK BETWEEN STA. 22+37 AND 23+49, CLOSE THE LEFT LANE ON BAY ST. SOUTHBOUND FROM STA. 20+00 TO 34+40. CLOSE ONE LEFT TURN LANE ON THE I-495 NB OFF RAMP AND CLOSE ONE NORTHBOUND LEFT TURN LANE ON BAY ST. AT THE I-495 NORTHBOUND RAMPS.



TAUNTON
BAY STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	22	44

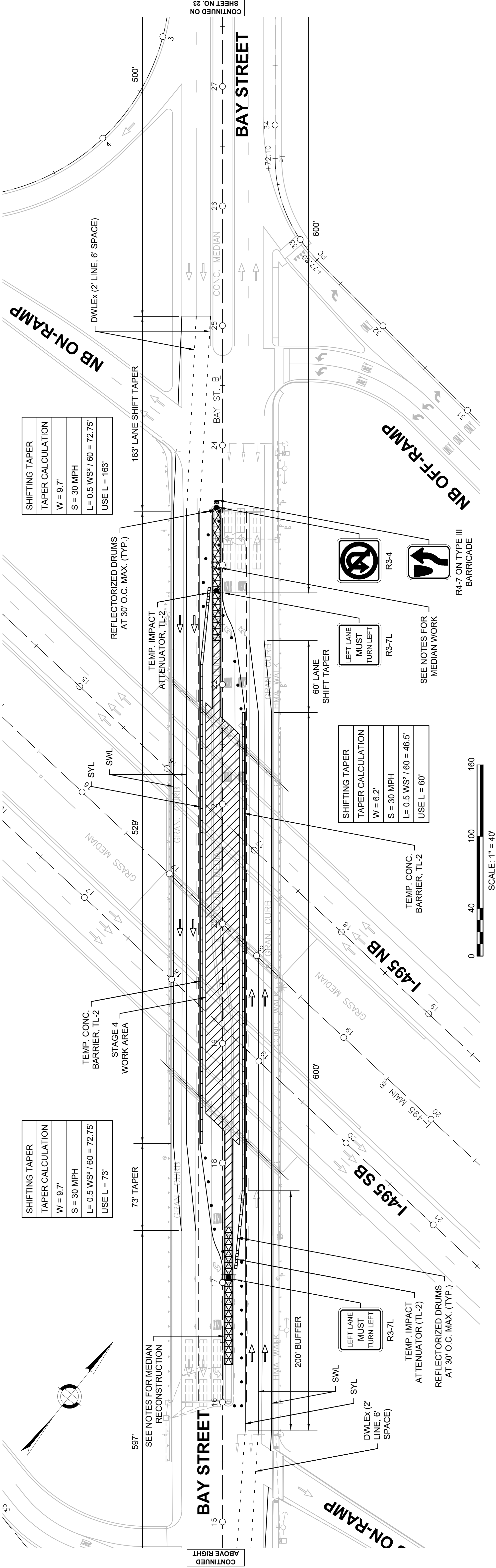
PROJECT FILE NO.	613752

TEMPORARY TRAFFIC CONTROL PLAN
STAGE 4

SHIFTING TAPER
TAPER CALCULATION
W = 8.5'
S = 30 MPH
L = 0.5 WS ² / 60 = 63.75'
USE L = 127'

SHIFTING TAPER
TAPER CALCULATION
W = 9.7'
S = 30 MPH
L = 0.5 WS ² / 60 = 72.75'
USE L = 73'

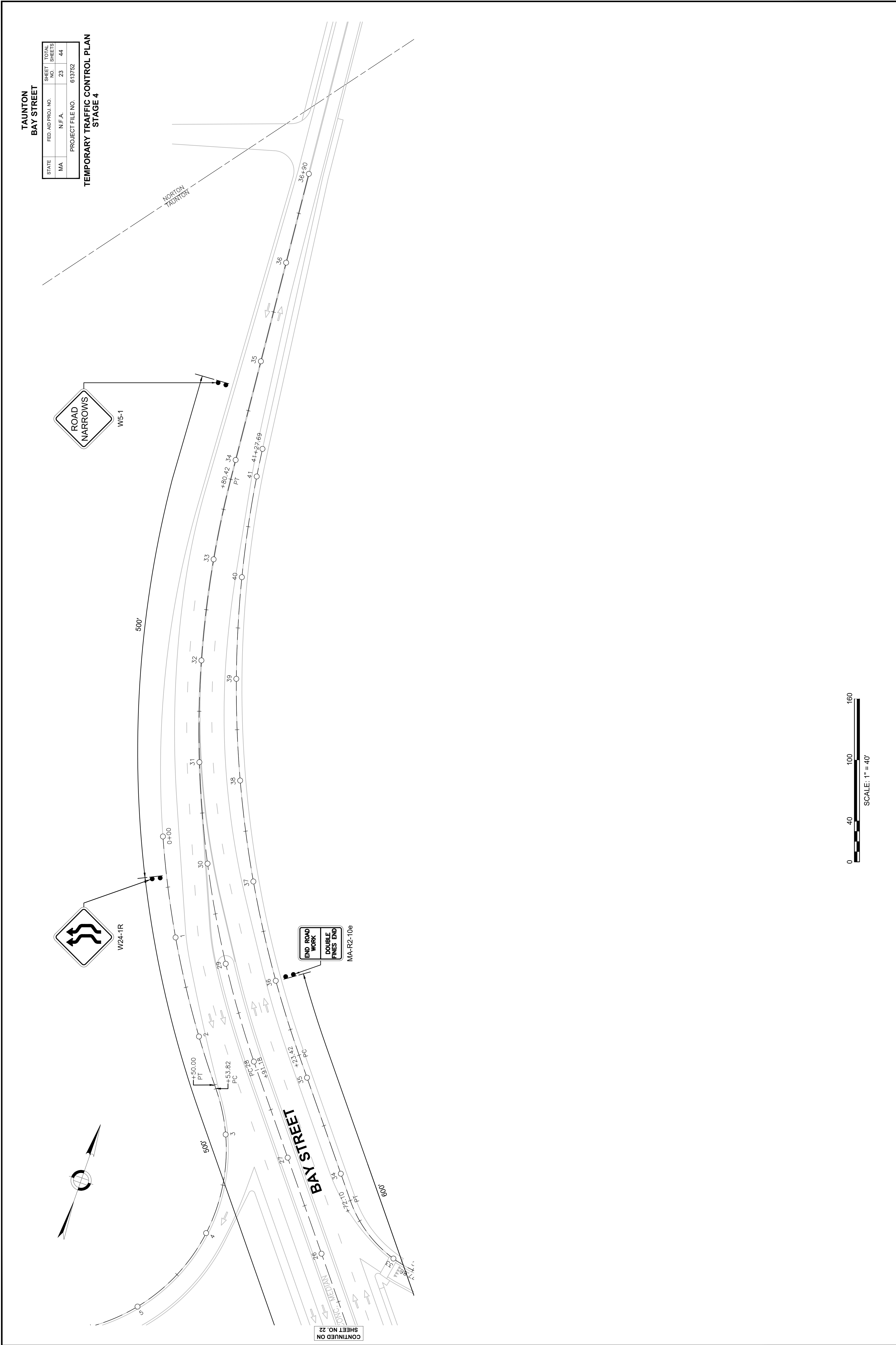
SHIFTING TAPER
TAPER CALCULATION
W = 9.7'
S = 30 MPH
L = 0.5 WS ² / 60 = 72.75'
USE L = 163'



CONTINUED
ABOVE RIGHT

CONTINUED ON
SHEET NO. 23





TAUNTON BAY STREET			
STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	23	44
PROJECT FILE NO. 613752			

TEMPORARY TRAFFIC CONTROL PLAN
STAGE 4

613752_BR(TTCP).DWG
Plotted on 29-Jul-2025 8:26 AM

TAUNTON
BAY STREET

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	24	44
PROJECT FILE NO.		613752	

SIGN SUMMARY SHEET

TRAFFIC SIGN SUMMARY

IDENTIFI- CATION NUMBER	SIZE OF SIGN		SIGN DIAGRAM	# REQ'D	COLOR			UNIT AREA S.F.	AREA IN SQUARE FEET
	WIDTH	HEIGHT			BACK- GROUND	LEGEND	BORDER		
W4-2L	48"	48"		4	FLUOR. ORANGE	BLACK	BLACK	16	64
W4-2R	48"	48"		4	FLUOR. ORANGE	BLACK	BLACK	16	64
W5-1	36"	36"		3	FLUOR. ORANGE	BLACK	BLACK	9	27
W5-1	48"	48"		1	FLUOR. ORANGE	BLACK	BLACK	16	16
W13-1p	30"	30"		6	FLUOR. ORANGE	BLACK	BLACK	6.25	37.5
W20-1	48"	48"		4	FLUOR. ORANGE	BLACK	BLACK	16	64
W20-1a	36"	36"		4	FLUOR. ORANGE	BLACK	BLACK	9	36
W20-5L (1/2 MILE)	48"	48"		2	FLUOR. ORANGE	BLACK	BLACK	16	32
W20-5L (AHEAD)	48"	48"		1	FLUOR. ORANGE	BLACK	BLACK	16	16
W20-5L (AHEAD)	36"	36"		1	FLUOR. ORANGE	BLACK	BLACK	9	9
W20-5R (1/2 MILE)	48"	48"		2	FLUOR. ORANGE	BLACK	BLACK	16	32
W24-1aL	36"	36"		1	FLUOR. ORANGE	BLACK	BLACK	9	9
W24-1aR	36"	36"		2	FLUOR. ORANGE	BLACK	BLACK	9	18

TOTAL AREA = 928 75 SF

TRAFFIC SIGN SUMMARY

IDENTIFI- CATION NUMBER	SIZE OF SIGN		SIGN DIAGRAM	# REQ'D	COLOR			UNIT AREA S.F.	AREA IN SQUARE FEET
	WIDTH	HEIGHT			BACK- GROUND	LEGEND	BORDER		
E5-2	48"	36"		1	FLUOR. ORANGE	BLACK	BLACK	12	12
MA-E5-1wz	48"	48"		1	GREEN	WHITE	WHITE	16	16
MA-R2-10a	60"	48"		4	FLUOR. ORANGE	BLACK	BLACK	20	80
MA-R2-10a	48"	36"		4	FLUOR. ORANGE	BLACK	BLACK	12	48
MA-R2-10e	48"	60"		8	FLUOR. ORANGE	BLACK	BLACK	20	160
MA-R2-10e	36"	48"		4	FLUOR. ORANGE	BLACK	BLACK	12	48
MA- W20-5bL (1/2 MILE)	48"	48"		2	FLUOR. ORANGE	BLACK	BLACK	16	32
MA- W20-5bR (1/2 MILE)	48"	48"		2	FLUOR. ORANGE	BLACK	BLACK	16	32
MA-W28-1	48"	48"		2	FLUOR. ORANGE	BLACK	BLACK	16	32
R3-4	24"	24"		1	WHITE	BLACK / RED	BLACK	4	4
R3-7L	30"	30"		5	WHITE	BLACK	BLACK	6.25	31.25
R4-7*	24"	30"		1	WHITE	BLACK	BLACK	5	5
R9-9	24"	12"		2	WHITE	BLACK	BLACK	2	4

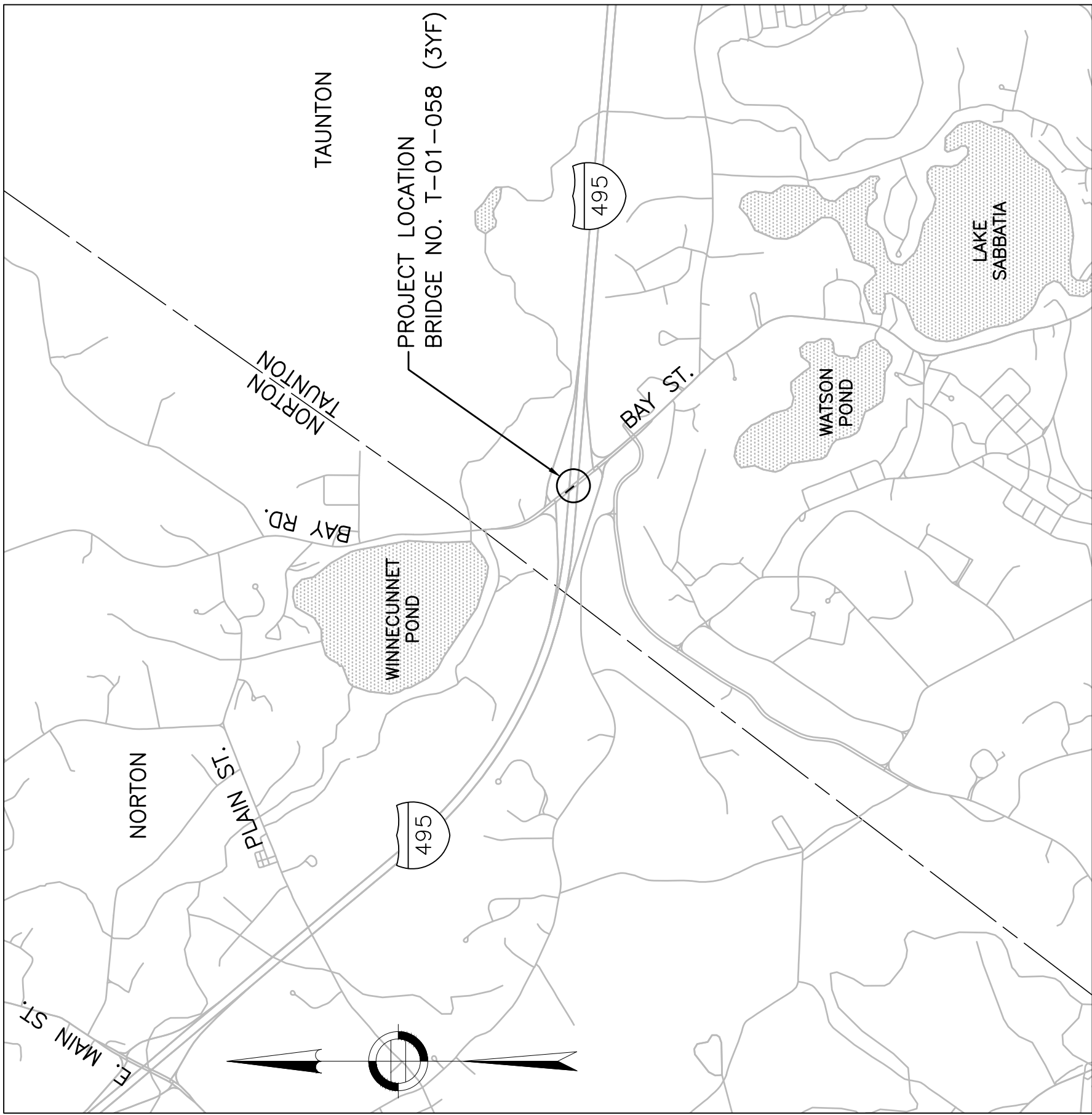
* TEXT DIMENSIONS PER CHAPTER 2 OF THE 2009 MUTCD AND MASSDOT STANDARDS.

TAUNTON
BAY STREET

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	25	44
PROJECT FILE NO. 613752		613752	

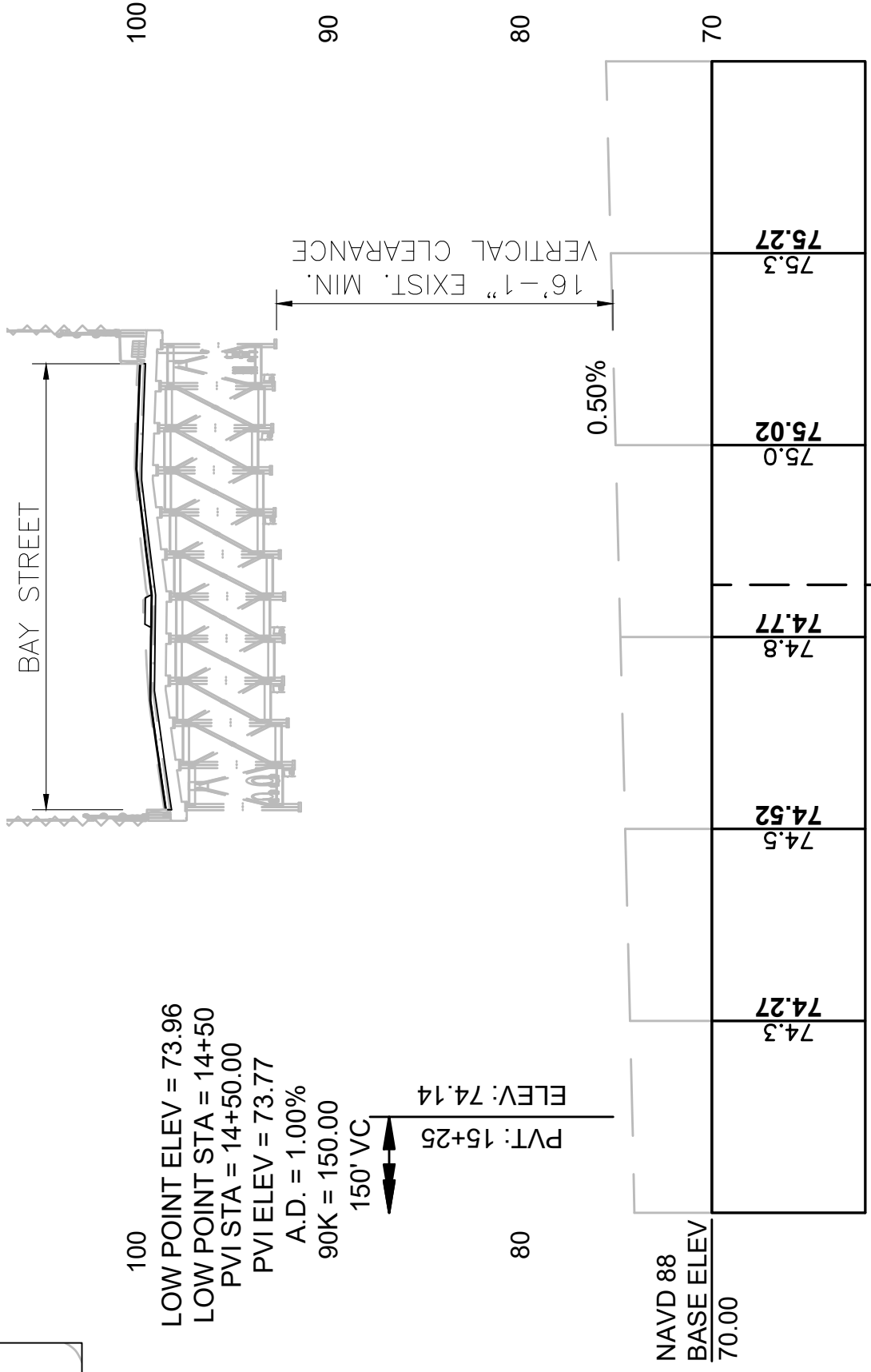
LOCUS KEY PLAN & PROFILES

SHEET NUMBER	SHEET TITLE
1	LOCUS, KEY PLAN & PROFILES
2	TYPICAL SECTIONS
3	DECK EXCAVATION PLAN
4	S. ABUT. PLAN AND ELEVATION
5	N. ABUT. PLAN AND ELEVATION
6	CONCRETE REPAIR NOTES
7	DECK REPAIR DETAILS
8	ABUTMENT JOINT PLAN
9	DECK REINFORCING PLAN
10	SIDEWALK JOINT DETAILS
11	ABUTMENT JOINT DETAILS
12	MEDIAN DETAILS
13	WEST WINGWALL DETAILS
14	GENERAL JOINT DETAILS



LOCUS
SCALE: 1" = 2000'

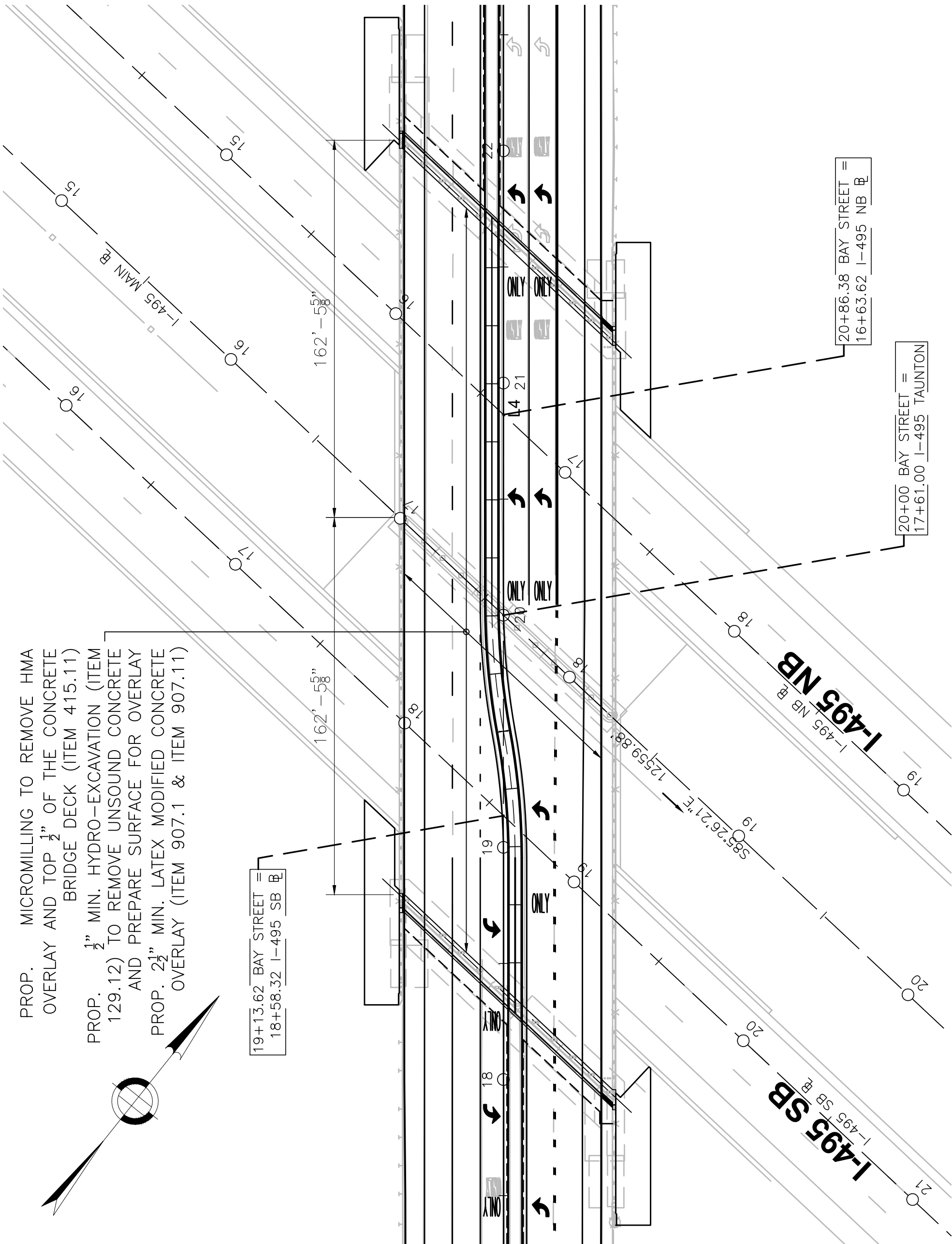
LOW POINT ELEV = 73.96
LOW POINT STA = 14+50
PVI STA = 14+50.00
PVI ELEV = 73.77
A.D. = 1.00%
90K = 150.00
150' VC



PROFILE - I-495 NB
SCALE: 1" = 40' HORIZONTAL
SCALE: 1" = 8' VERTICAL

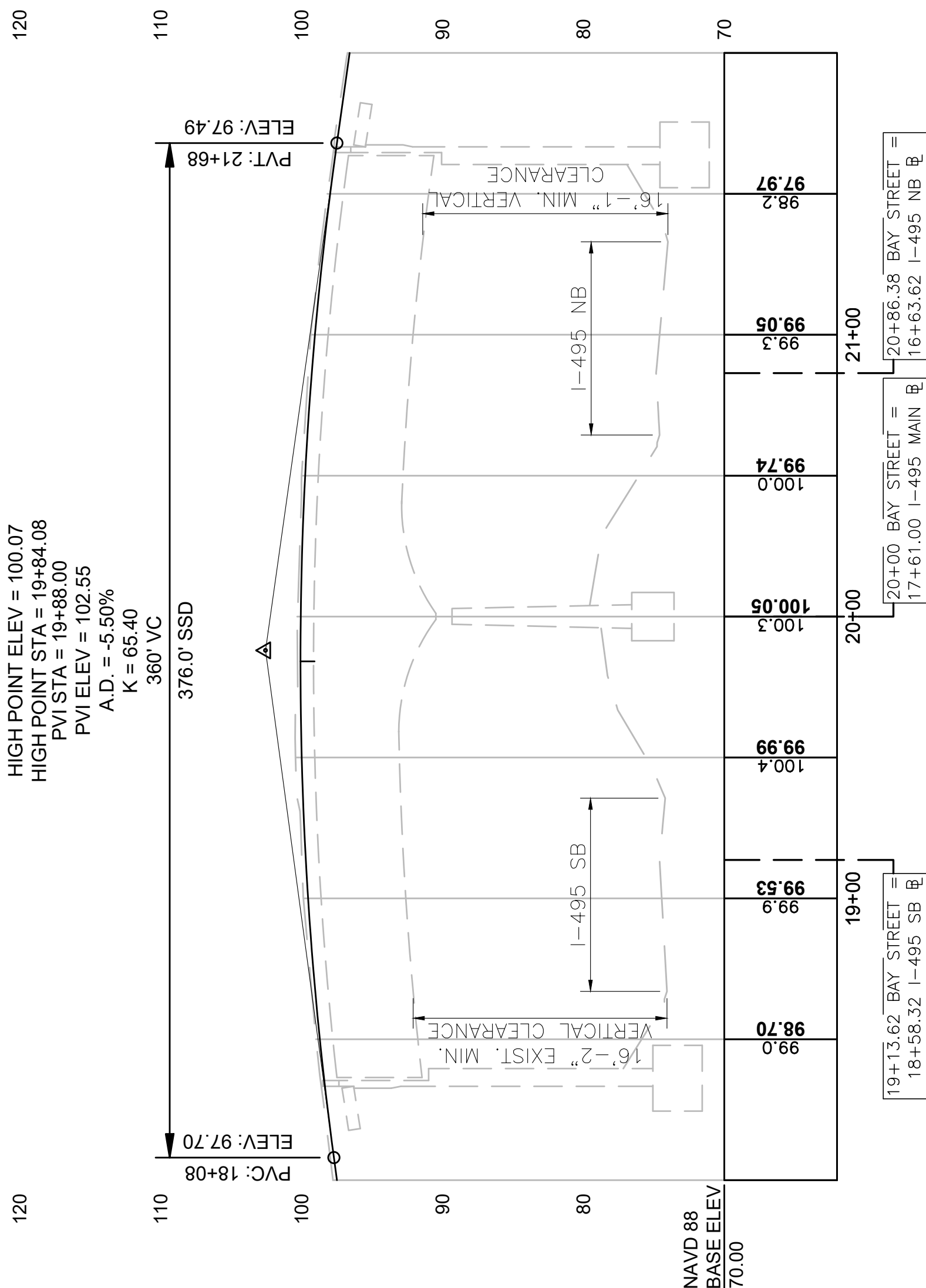
DESIGNED BY A. DUGGAN	AUGUST 1, 2025	ISSUED FOR CONSTRUCTION
DRAWN BY A. DUGGAN		
CHECKED BY A. SILVA		
SPECS BY A. DUGGAN		
APPROVED FOR DESIGN BY S. SOUSA		

BRIDGE PRESERVATION
TAUNTON
BAY STREET
OVER INTERSTATE 495
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION
10 PARK PLAZA BOSTON, MASS

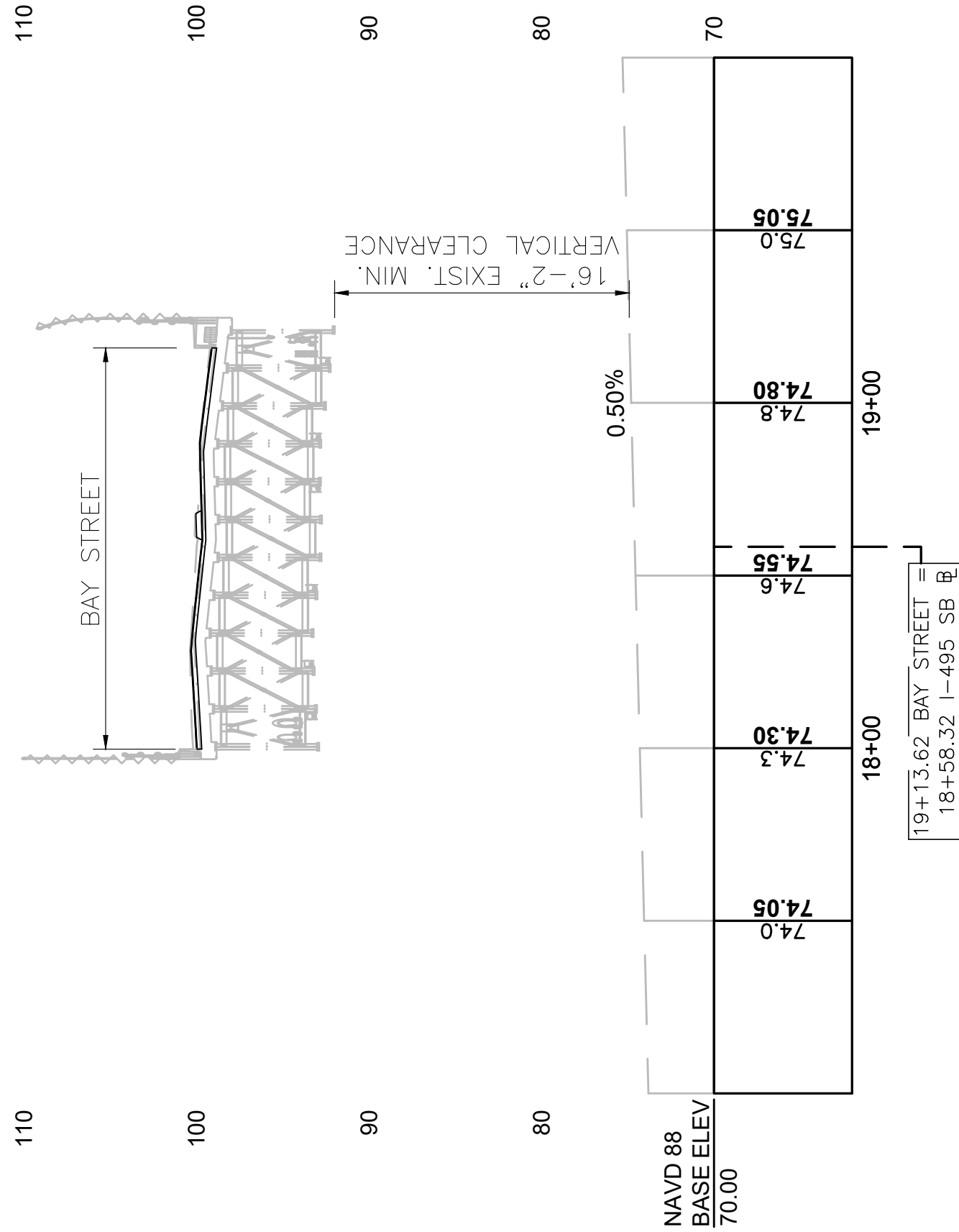


KEY PLAN
SCALE: 1" = 40'

HIGH POINT ELEV = 100.07
HIGH POINT STA = 19+84.08
PVI STA = 19+88.00
PVI ELEV = 102.55
A.D. = -5.50%
K = 65.40
360' VC



PROFILE - BAY STREET
SCALE: 1" = 40' HORIZONTAL
SCALE: 1" = 8' VERTICAL



PROFILE - I-495 SB
SCALE: 1" = 40' HORIZONTAL
SCALE: 1" = 8' VERTICAL

**TAUNTON
BAY STREET**

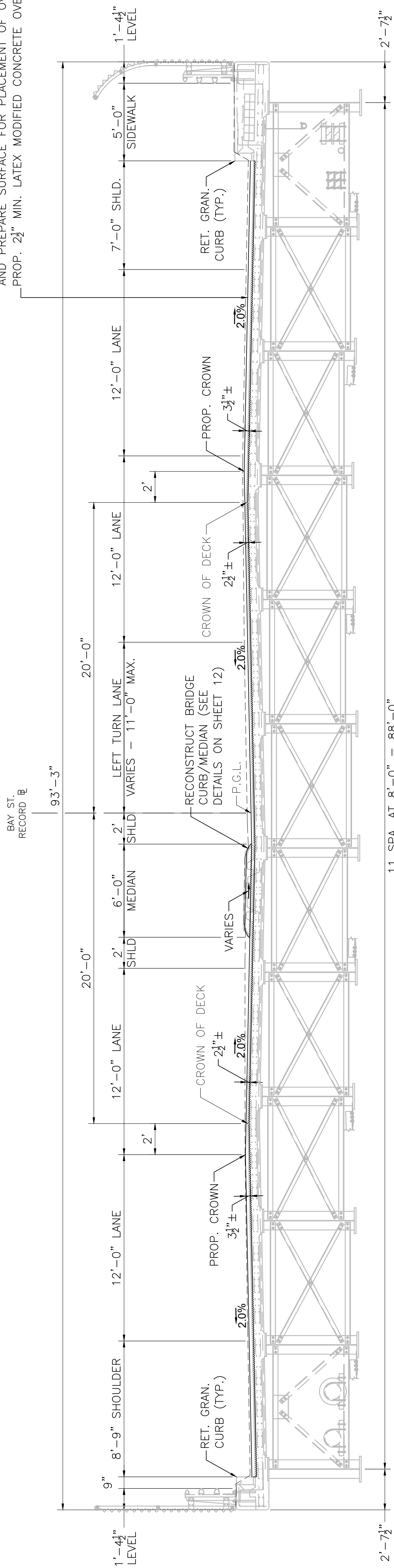
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	26	44
PROJECT FILE NO. 613752			

TYPICAL SECTIONS

PROP. MICROMILLING TO REMOVE HMA OVERLAY AND TOP 1" OF THE CONCRETE
BRIDGE DECK (ITEM 415.11)

PROP. 1" MIN. HYDRO-EXCAVATION (ITEM 129.12) TO REMOVE UNSOUND CONCRETE
AND PREPARE SURFACE FOR PLACEMENT OF OVERLAY

PROP. 2 1/2" MIN. LATEX MODIFIED CONCRETE OVERLAY (ITEM 907.1 & ITEM 907.11)



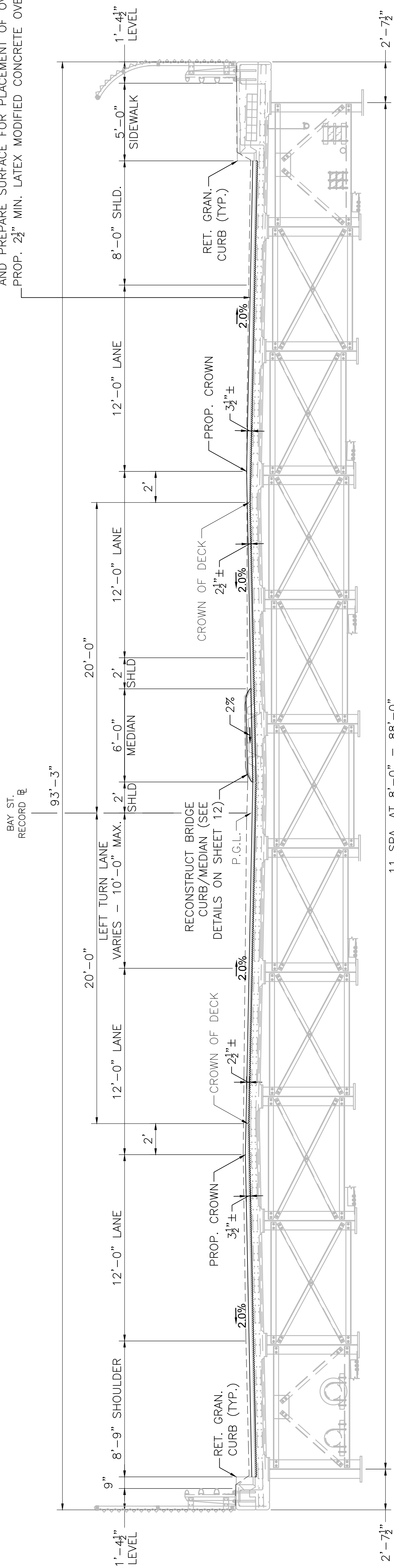
TYPICAL SECTION

STA. 18+95.46 TO 21+68±
NOT TO SCALE

PROP. MICROMILLING TO REMOVE HMA OVERLAY AND TOP 1" OF THE CONCRETE BRIDGE DECK (ITEM 415.11)

PROP. 1" MIN. HYDRO-EXCAVATION (ITEM 129.12) TO REMOVE UNSOUND CONCRETE AND PREPARE SURFACE FOR PLACEMENT OF OVERLAY

PROP. 2 1/2" MIN. LATEX MODIFIED CONCRETE OVERLAY (ITEM 907.1 & ITEM 907.11)



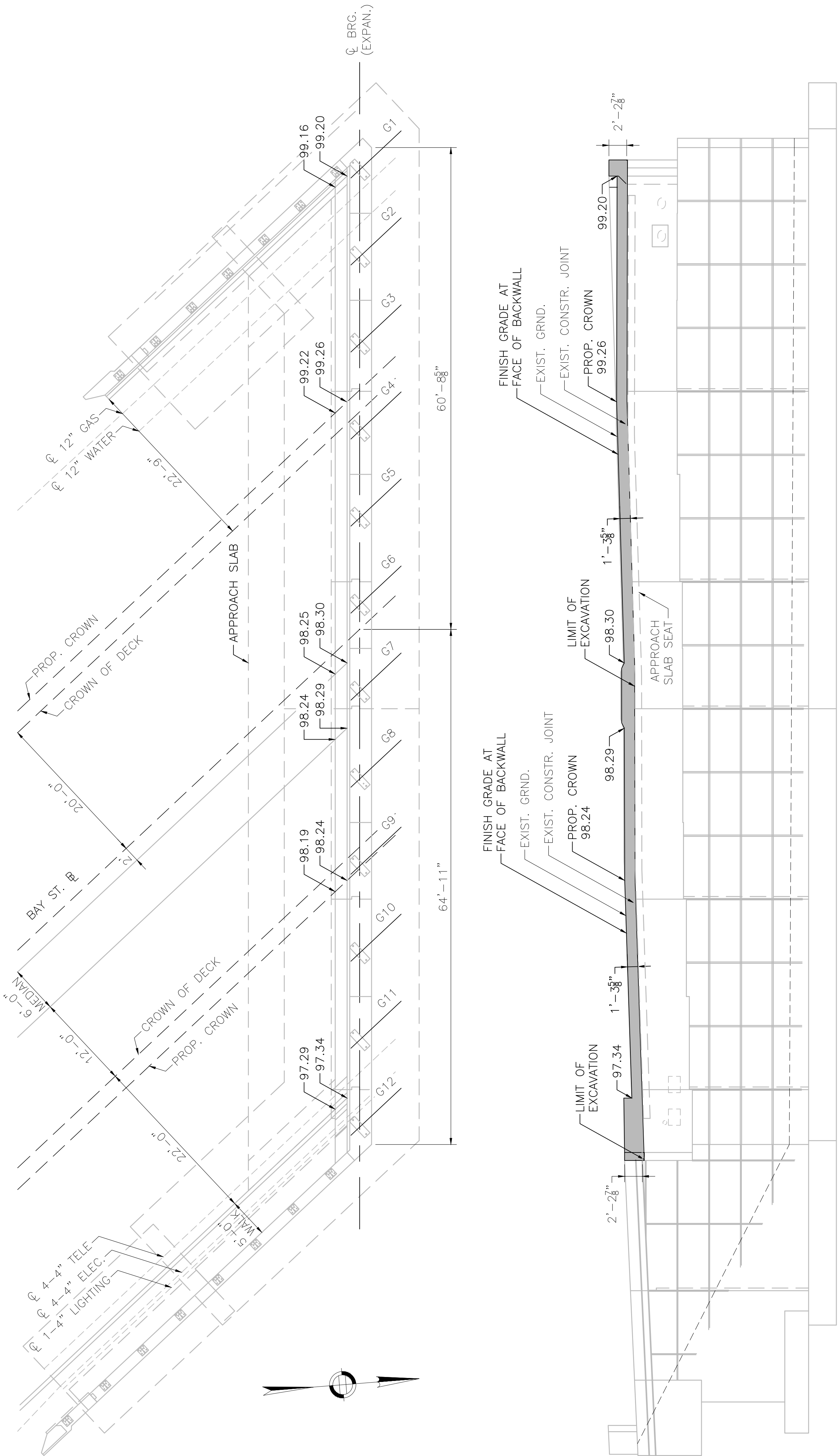
TYPICAL SECTION

STA. 18+32± TO STA. 18+95.46
NOT TO SCALE

ISSUED FOR CONSTRUCTION	AUGUST 1, 2025
DESCRIPTION	DATE
USE ONLY PRINTS OF LATEST DATE	

TAUNTON BAY STREET			
STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	28	44
PROJECT FILE NO. 613752		613752	

S. ABUT. PLAN AND ELEVATION



LEGEND

PROP. REINF. CONC. EXCAV. AT JOINTS

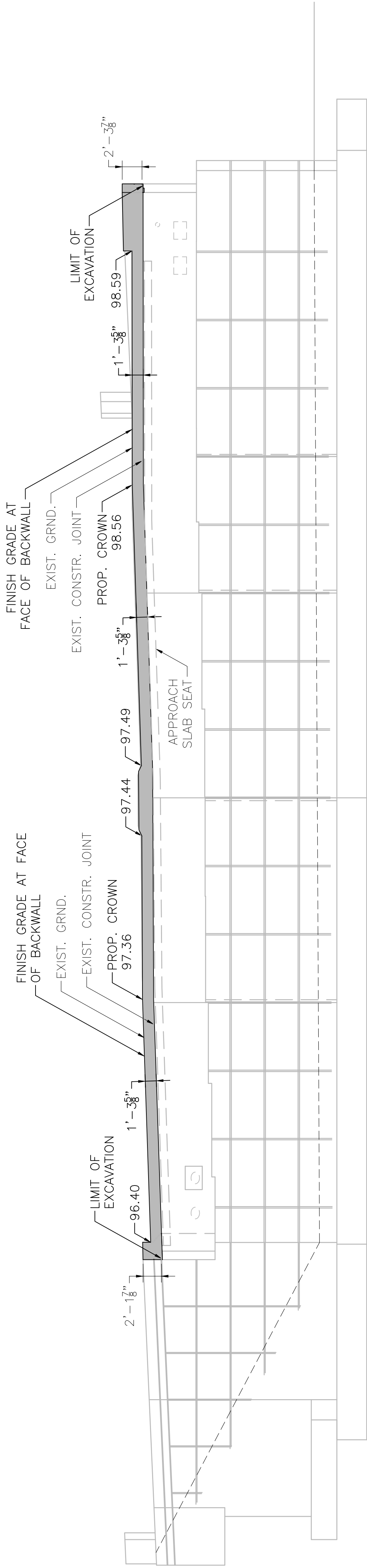
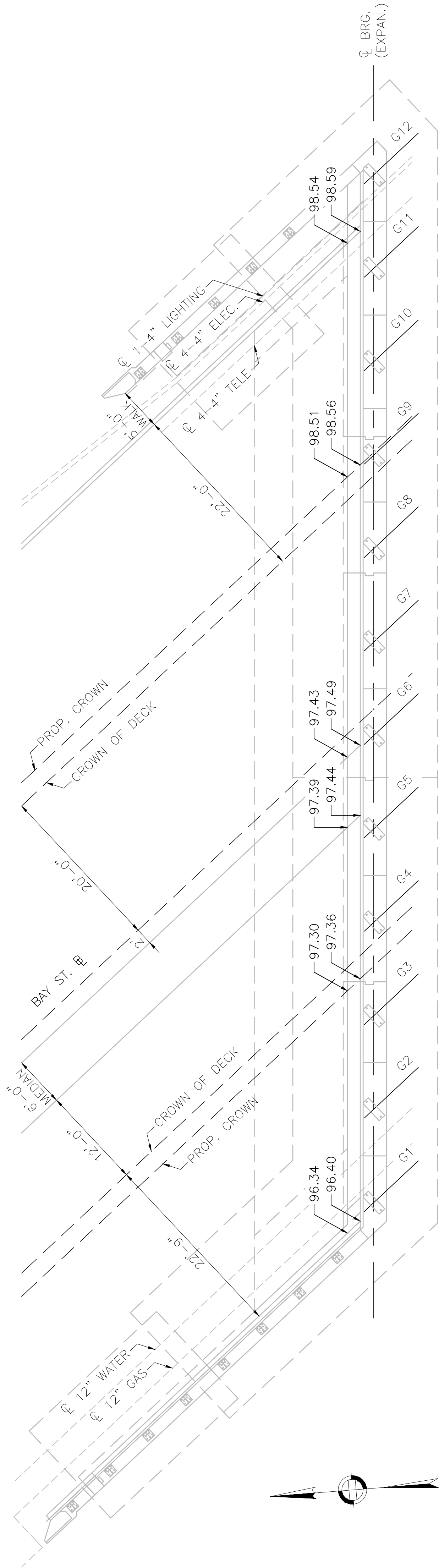
ELEVATION — SOUTH ABUTMENT
SCALE: 1/8" = 1'-0"

NOTE:
PROPOSED FINISH GRADE ELEVATIONS LABELED ON THE ABUTMENT ELEVATION ABOVE ARE AT THE FACE OF THE BACKWALL.

AUGUST 1, 2025	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

TAUNTON BAY STREET			
STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	29	44
PROJECT FILE NO. 613752		613752	

N. ABUT PLAN AND ELEVATION



ELEVATION – NORTH ABUTMENT
SCALE: 3/8"=1'-0"

NOTE:
PROPOSED FINISH GRADE ELEVATIONS LABELED ON THE ABUTMENT ELEVATION ABOVE ARE AT THE FACE OF THE BACKWALL.

LEGEND

■ PROP. REINF. CONC. EXCAV. AT JOINTS

AUGUST 1, 2025	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

SURFACE PREPARATION FOR CONCRETE REPAIR NOTES:

1. EXTENT, LOCATION, AND REPAIR TYPE OF ALL CONCRETE REPAIRS TO BE FIELD VERIFIED AND APPROVED BY THE ENGINEER AFTER CONTRACTOR HAS SOUNDED AND MARKED OUT ALL REPAIR AREAS. REPAIR CONFIGURATIONS SHOULD BE KEPT AS SIMPLE AS POSSIBLE, PREFERABLY WITH SQUARE CORNERS.
2. SAW CUT ALONG NEAT LINES AROUND REPAIR AREA PRIOR TO CONCRETE EXCAVATION. USE SAW CUT DEPTH OF $\frac{3}{4}$ " OR LESS AS REQUIRED TO AVOID CUTTING REINFORCING STEEL (REFER TO SPECIAL PROVISIONS).
3. REMOVE DETERIORATED AND DELAMINATED CONCRETE. UNDERCUT EXPOSED REINFORCING STEEL TO PROVIDE 1" MINIMUM CLEARANCE AROUND BARS. REMOVE ADDITIONAL CONCRETE AS REQUIRED TO PROVIDE MINIMUM REQUIRED THICKNESS OF REPAIR MATERIAL. IF REINFORCING BARS ARE NOT EXPOSED AFTER REMOVING DETERIORATED CONCRETE, REPAIR USING CEMENTITIOUS MORTAR. NOTE: IF REINFORCING BARS ARE EXPOSED IN AREAS OF SOUND CONCRETE AFTER HYDRO-EXCAVATION, 1" CLEARANCE IS NOT REQUIRED.
4. IF REINFORCING STEEL IS EXPOSED, CLEAN BY MECHANICAL MEANS AND HIGH PRESSURE WASHING WITH WATER THAT CONTAINS NO DETERGENTS OR BOND INHIBITING CHEMICALS. WHERE ACTIVE CORROSION HAS OCCURRED THAT WOULD INHIBIT BONDING, ABRASIVE BLAST STEEL TO NEAR WHITE METAL (SSPC-SP10).
5. AFTER PATCH REMOVALS AND EDGE PREPARATIONS ARE COMPLETE, REMOVE BOND INHIBITING MATERIALS (DIRT, GREASE, LOOSELY BONDED AGGREGATE) BY ABRASIVE BLASTING (SP5) OR HIGH PRESSURE WATER BLASTING WITH WATER THAT CONTAINS NO DETERGENTS OR BOND INHIBITING CHEMICALS. CHECK THE CONCRETE SURFACES AFTER CLEANING TO ENSURE THAT SURFACE IS FREE FROM ADDITIONAL LOOSE AGGREGATE OR THAT ADDITIONAL DELAMINATIONS ARE NOT PRESENT.
6. EXISTING CONCRETE SURFACES THAT WILL BE IN CONTACT WITH REPAIR CONCRETE SHALL BE PRE-WETTED FOR A MINIMUM OF 24 HOURS USING POTABLE WATER IN ORDER TO ACHIEVE A SATURATED SURFACE DRY (SSD) CONDITION IMMEDIATELY PRIOR TO PLACEMENT OF REPAIR CONCRETE. REMOVE ALL STANDING WATER.
7. PLACEMENT AND SUBSEQUENT CURING SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND THE SPECIAL PROVISIONS.
8. ALL SURFACES SHALL BE PATCHED AND RUBBED TO PRODUCE A SMOOTH FINISH.

REINFORCEMENT:

REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 31 GRADE 60. UNLESS OTHERWISE NOTED ON THE CONSTRUCTION DRAWINGS, ALL BARS SHALL BE LAPPED AS FOLLOWS.

MODIFICATION CONDITION	#4 BARS	#5 BARS	#6 BARS
1. NONE	16"	17"	21"
2. 12" OF CONCRETE BELOW BAR	18"	22"	27"
3. COATED BARS, COVER < 3d _b , OR CLEAR SPACING < 6d _b	21"	26"	31"
4. COATED BARS, ALL OTHER CASES	17"	21"	25"
5. CONDITION 2. AND 3.	23"	29"	35"
6. CONDITION 2. AND 4.	21"	27"	32"

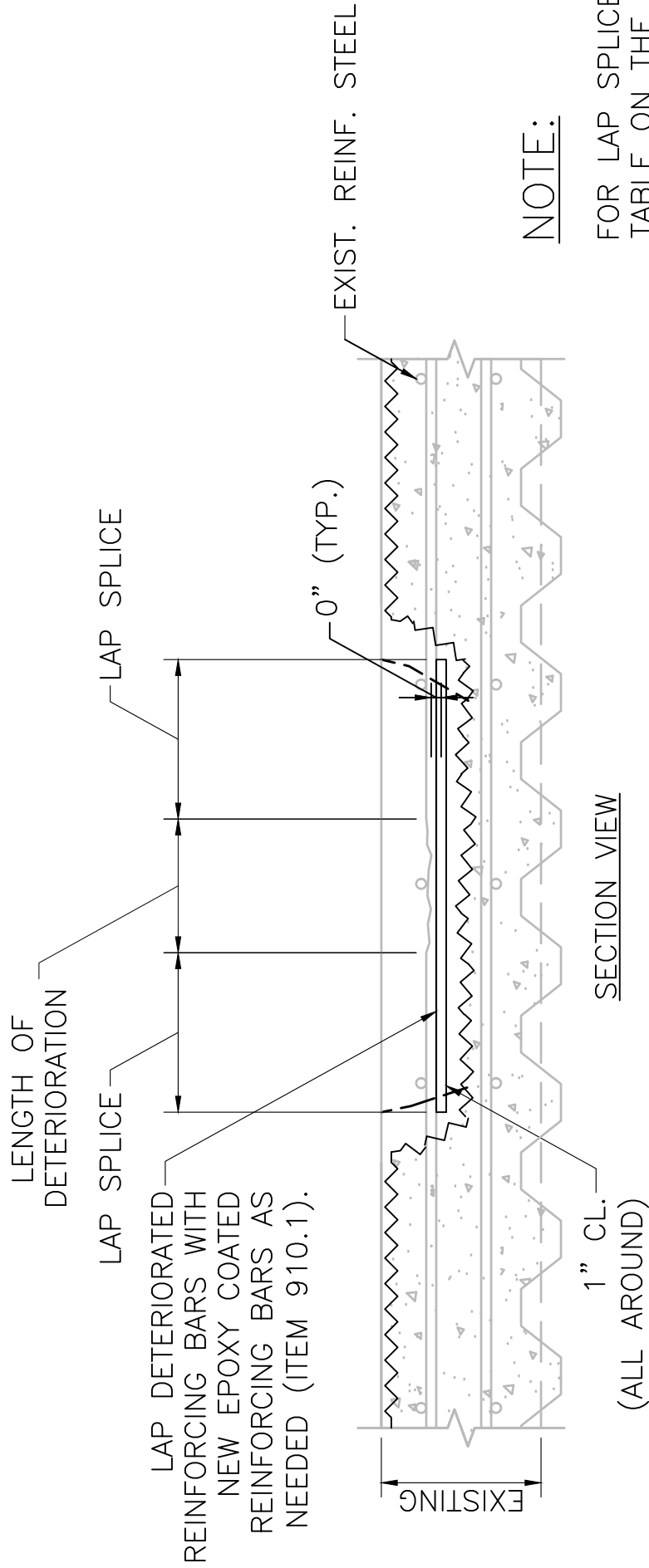
EPOXY COATING:

ALL REINFORCING BARS AND SUPPORT DEVICES SHALL BE EPOXY COATED IN ACCORDANCE WITH AASHTO M 284.

TAUNTON
BAY STREET

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	30	44
PROJECT FILE NO.		613752	

CONCRETE REPAIR NOTES

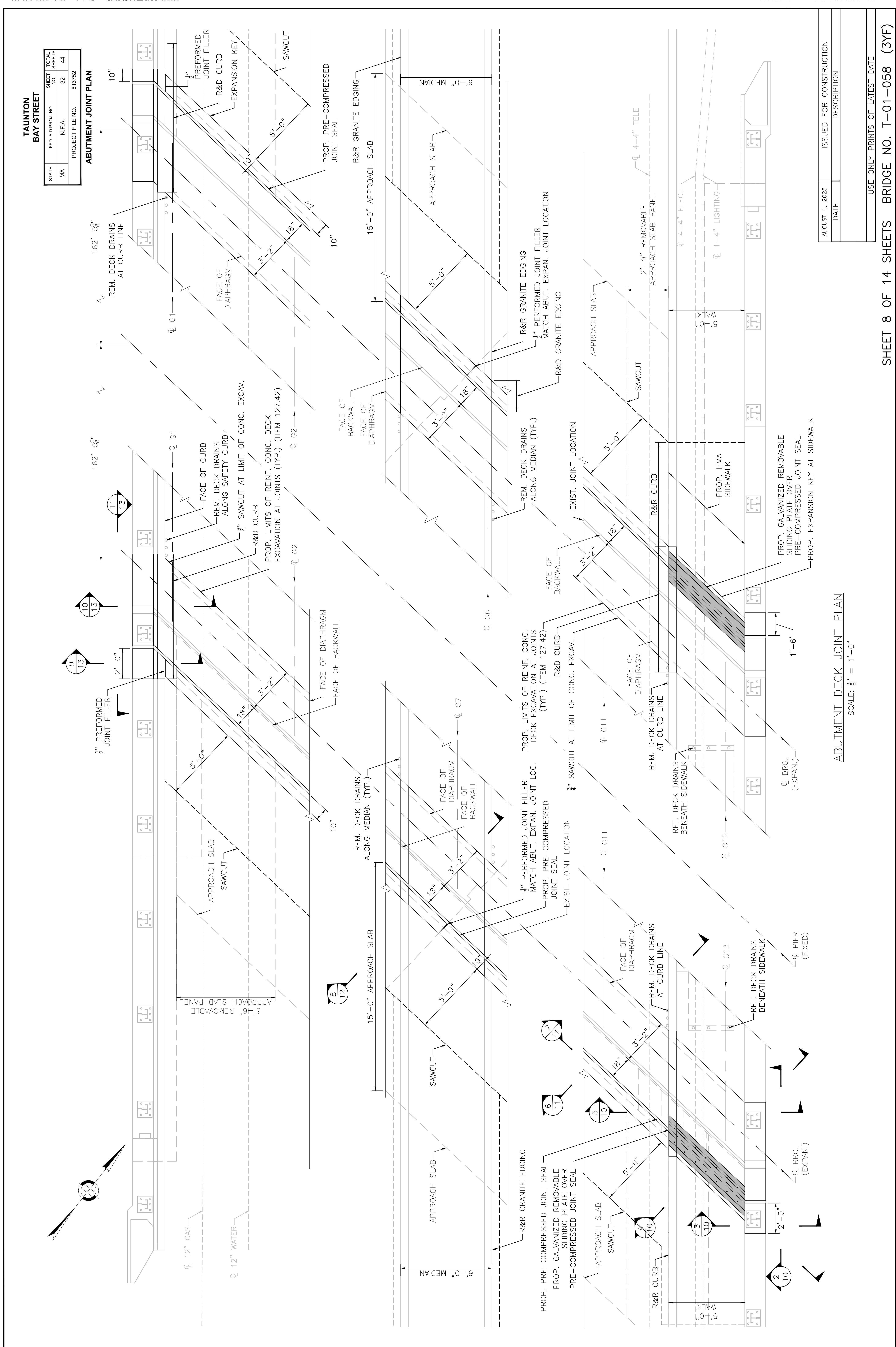


NOTE:

FOR LAP SPLICE LENGTH, REFER TO THE TABLE ON THE LEFT SIDE OF THIS SHEET.

TYPICAL DETERIORATED
REINFORCEMENT STEEL REPAIR
NOT TO SCALE

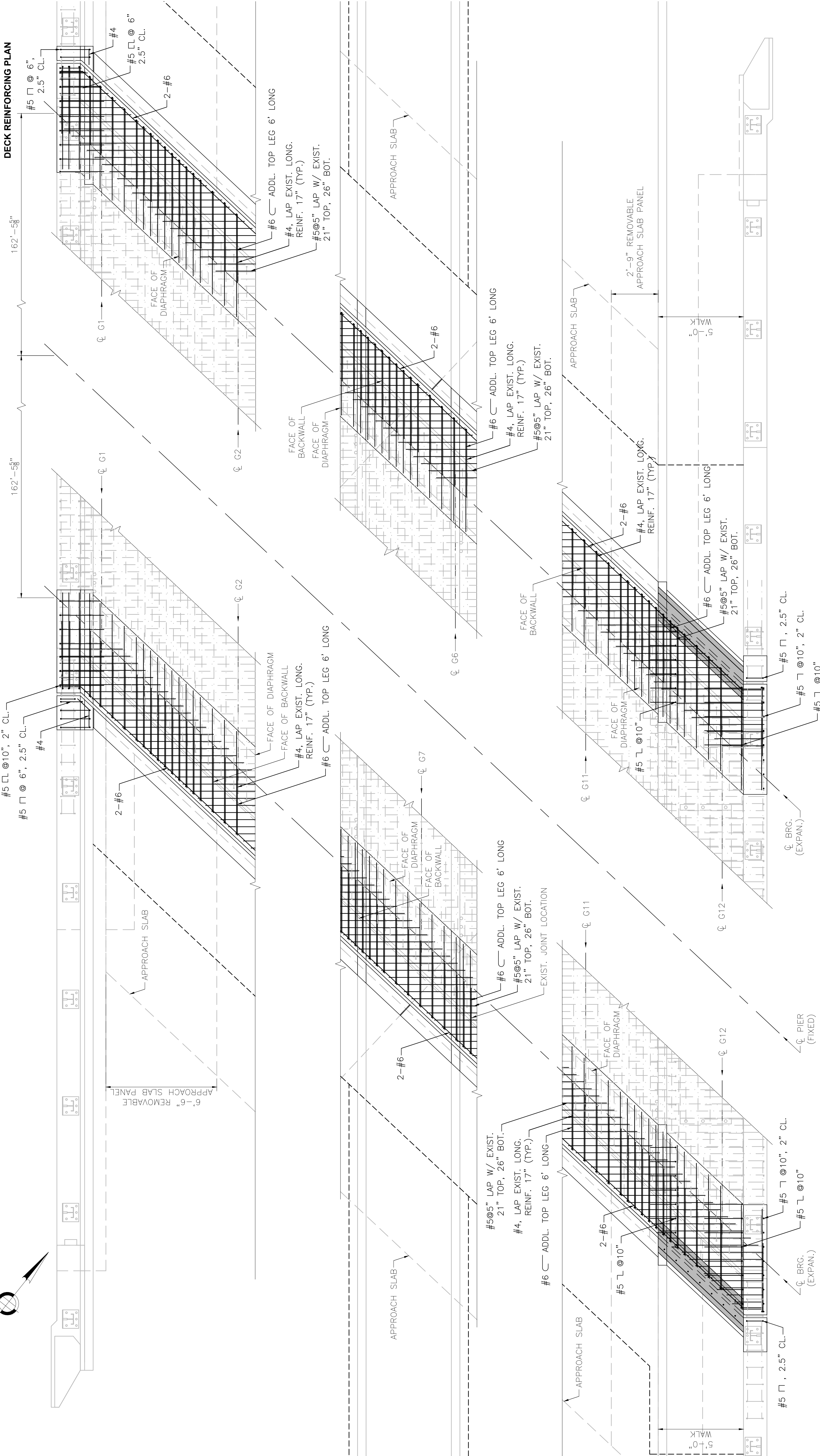
AUGUST 1, 2025	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	



TAUNTON
BAY STREET

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	33	44
PROJECT FILE NO. 613752			

DECK REINFORCING PLAN



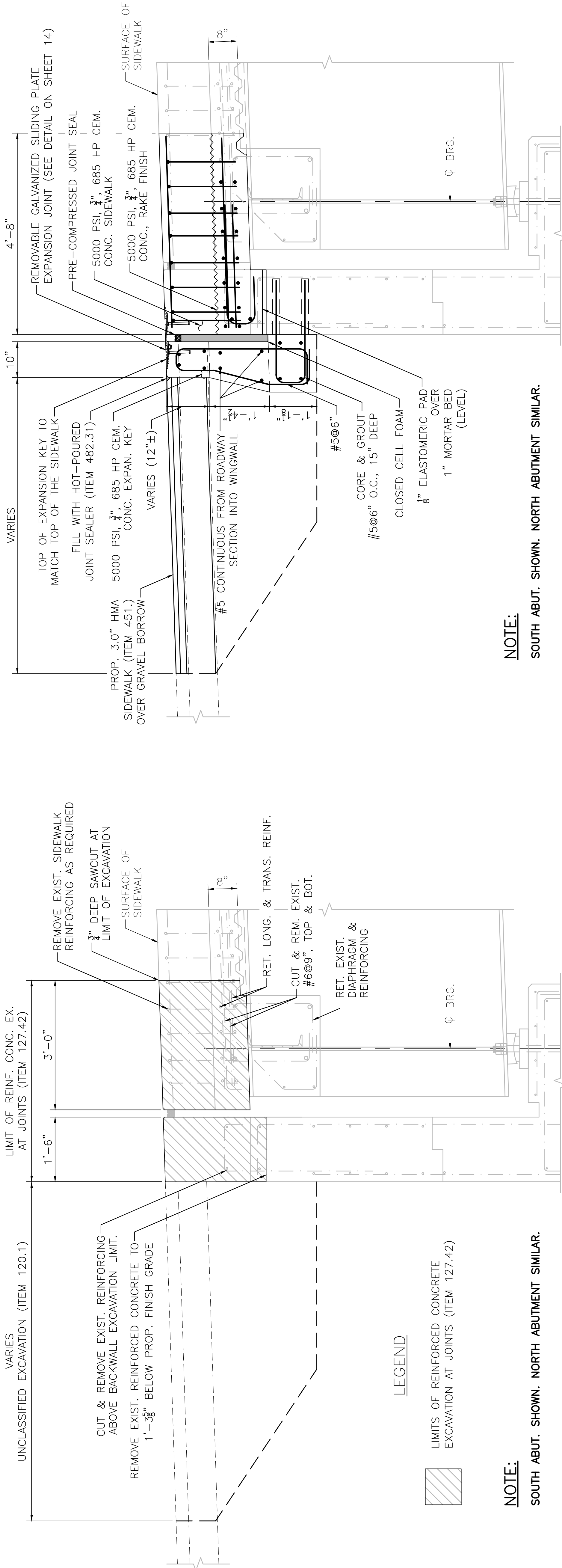
DECK REINFORCING PLAN

SCALE: $\frac{3}{8}$ " = 1'-0"

AUGUST 1, 2025	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	
SHEET 9 OF 14 SHEETS BRIDGE NO. T-01-058 (3YF)	

TAUNTON BAY STREET			
STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	34	44
PROJECT FILE NO. 613752		613752	

SIDEWALK JOINT DETAILS



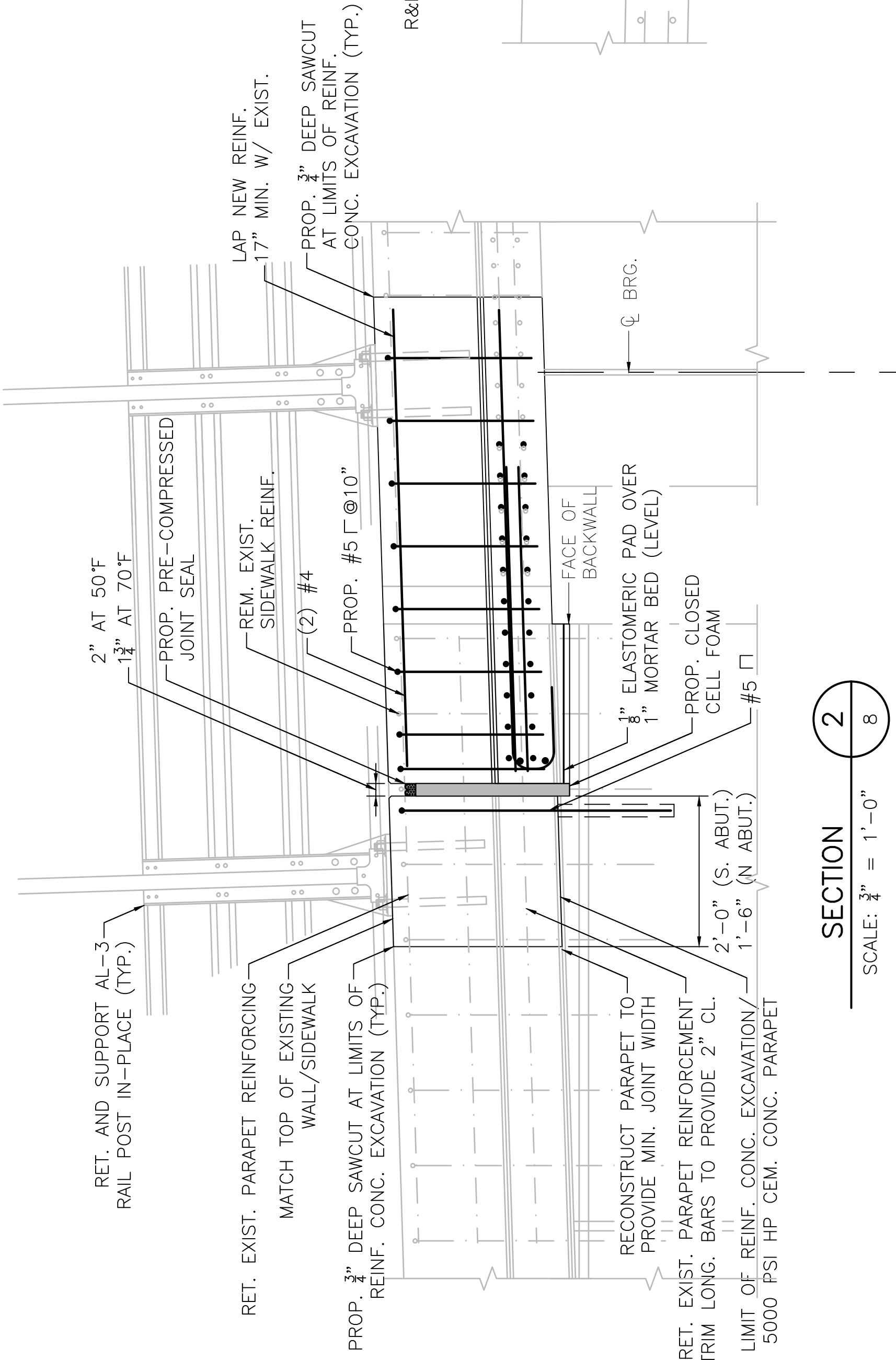
NOTE:

SOUTH ABUT. SHOWN. NORTH ABUTMENT SIMILAR.

EXIST. ABUT. JOINT
SECTION AT SIDEWALK

SCALE: 3/4" = 1'-0"

4 8



SECTION

SCALE: 3/4" = 1'-0"

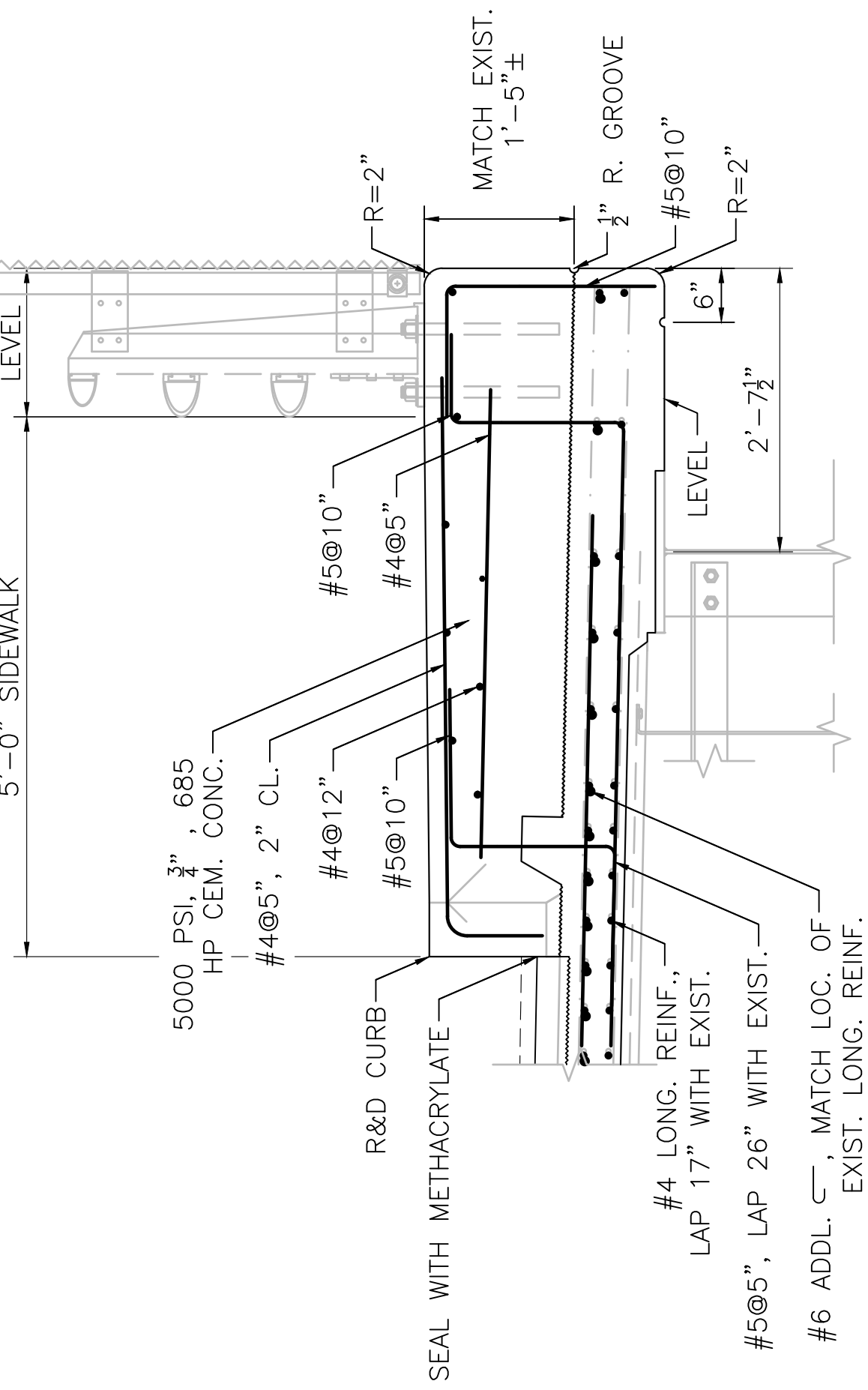
2

8

PROP. ABUT. JOINT
SECTION AT SIDEWALK

SCALE: 3/4" = 1'-0"

4 8



SECTION

SCALE: 3/4" = 1'-0"

5

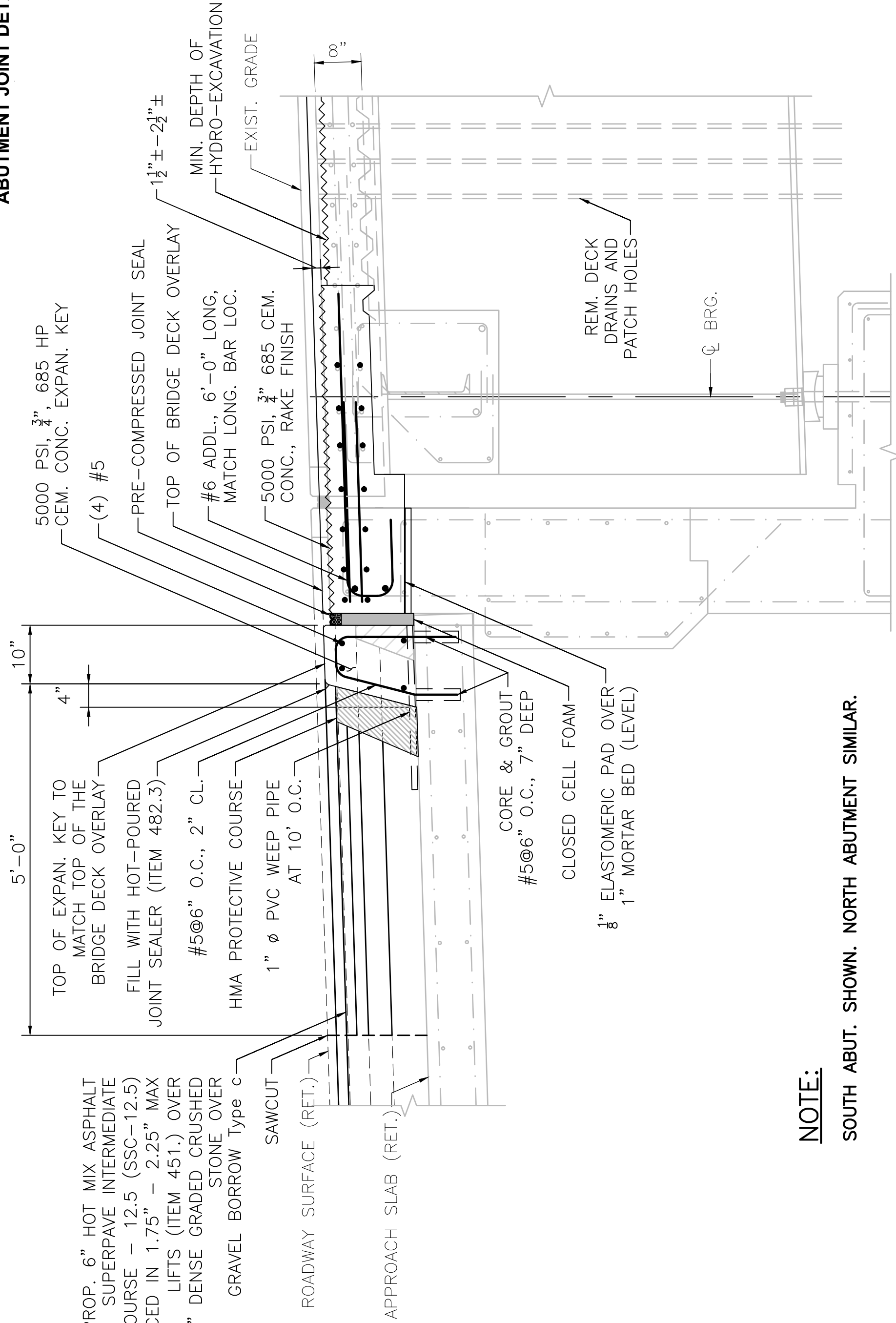
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AUGUST 1, 2025	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

TAUNTON
BAY STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	35	44
PROJECT FILE NO. 613752			

ABUTMENT JOINT DETAILS

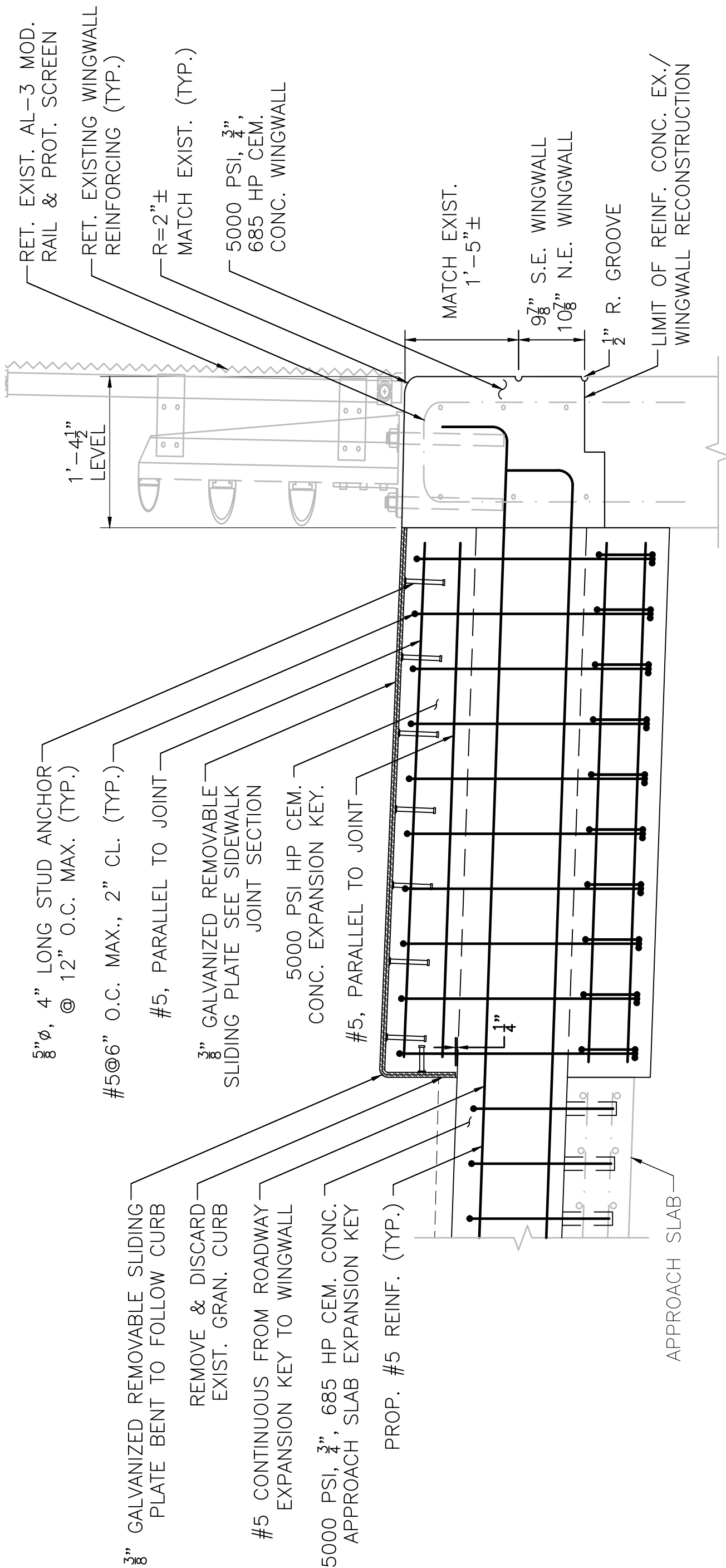


NOTE:

SOUTH ABUT. SHOWN. NORTH ABUTMENT SIMILAR.

EXIST. ABUT. JOINT
SECTION AT ROADWAY

SCALE: $\frac{3}{8}'' = 1'-0''$



SECTION

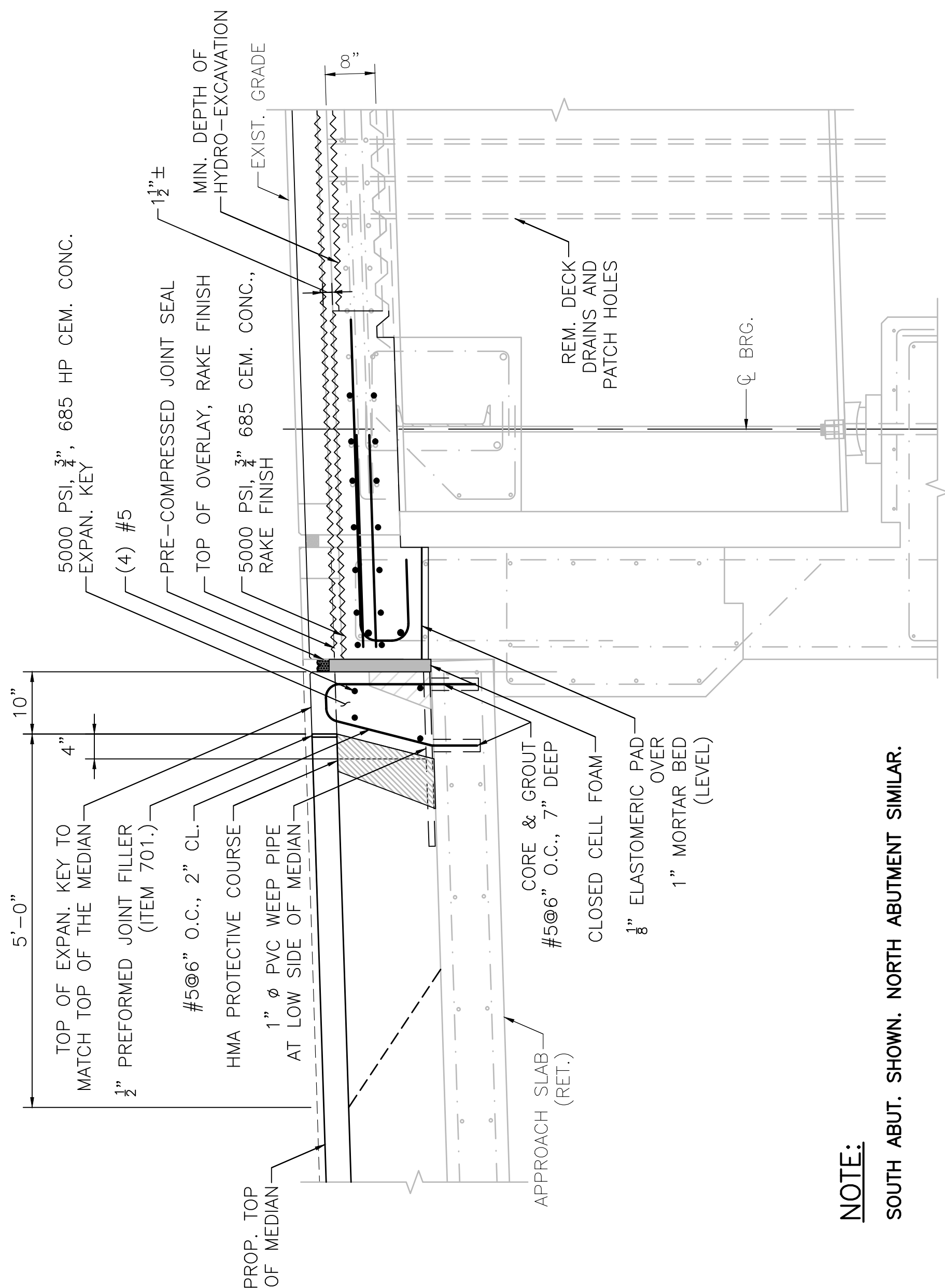
SCALE: $\frac{3}{8}'' = 1' - 0''$

AUGUST 1, 2025	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

**TAUNTON
BAY STREET**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	36	44
PROJECT FILE NO. 613752			

MEDIAN DETAILS

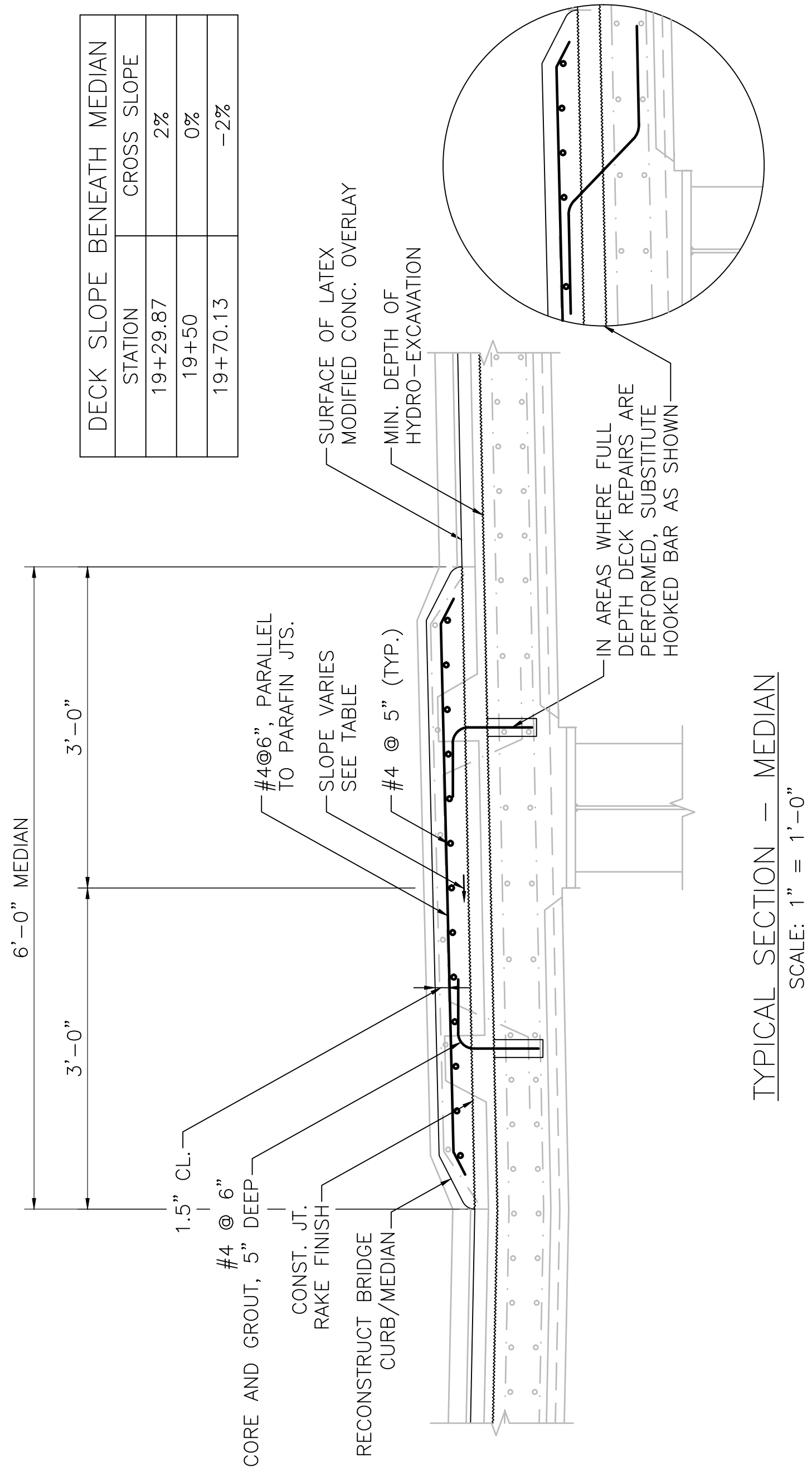


NOTE:

SOUTH ABUT. SHOWN. NORTH ABUTMENT SIMILAR.

EXIST. ABUT. JOINT
SECTION AT MEDIAN

SCALE: $\frac{3}{4}$ " = 1'-0"

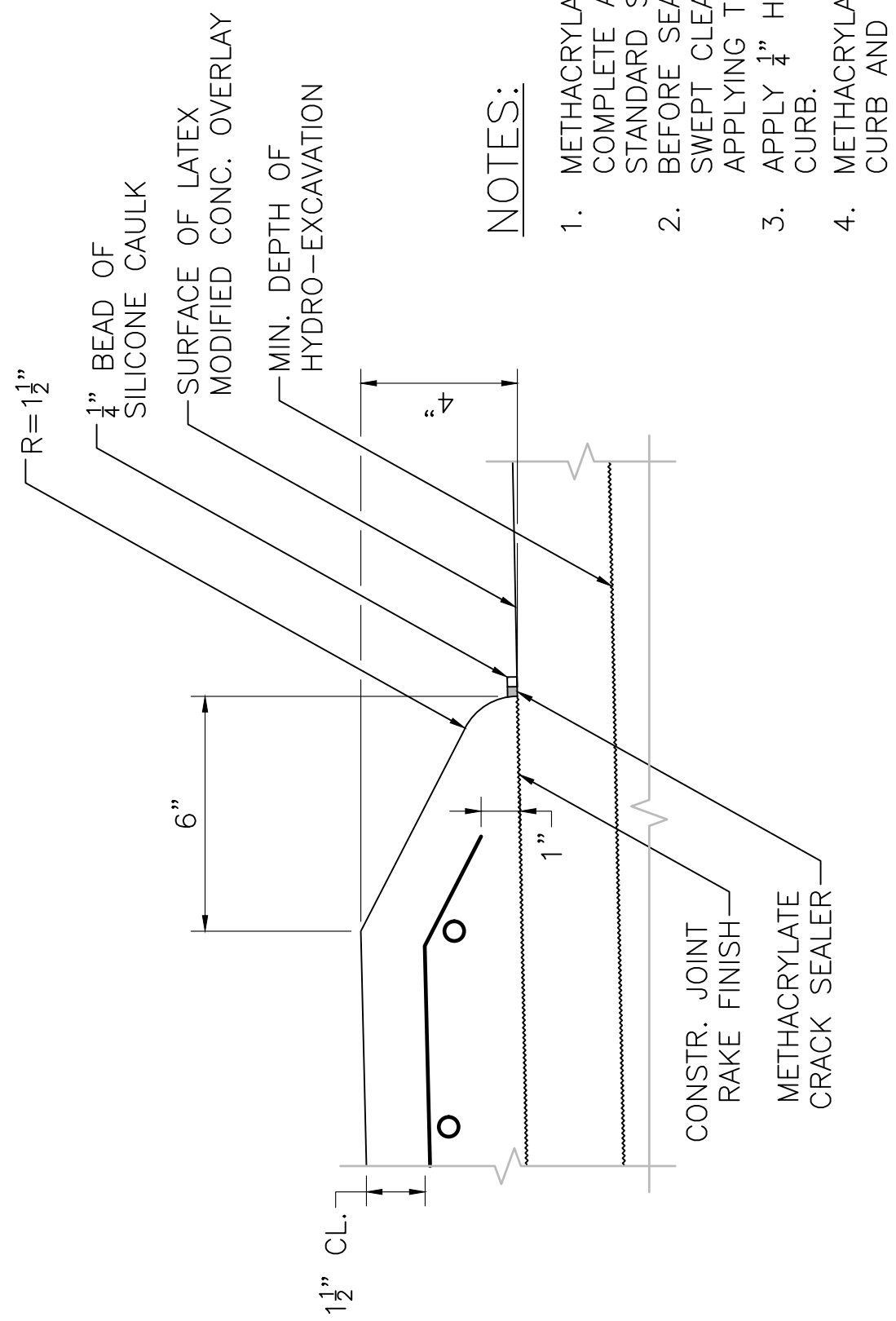


TYPICAL SECTION - MEDIAN
SCALE: 1" = 1'-0"

SCALE: 3" = 1'-0"

PROP. ABUT. JOINT
SECTION AT MEDIAN

SCALE: $\frac{3}{4}$ " = 1'-0"



MEDIAN CURB DETAIL

NOTES:

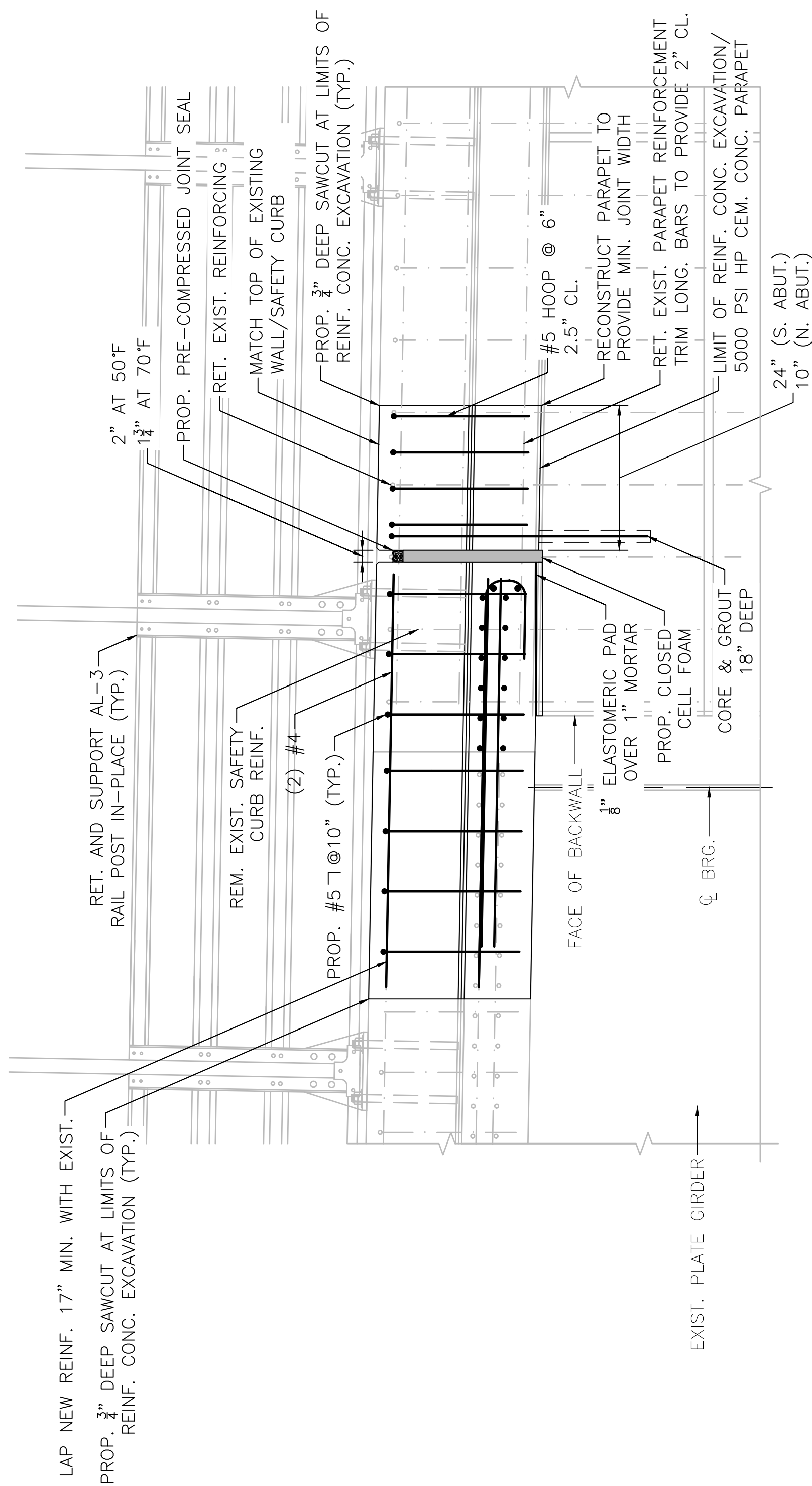
1. METHACRYLATE CRACK SEALER SHALL BE APPLIED AFTER MEDIAN CURING PERIOD IS COMPLETE AND IN ACCORDANCE WITH THE REQUIREMENTS OF MANUFACTURER AND THE STANDARD SPECIFICATIONS.
2. BEFORE SEALING, THE CONCRETE AT THE INTERFACE OF THE DECK AND CURB SHALL BE SWEEPED CLEAN AND BLOWN OFF USING OIL FREE COMPRESSED AIR IMMEDIATELY PRIOR TO APPLYING THE SEALER.
3. APPLY $\frac{1}{4}$ " HIGH BEAD OF SILICONE CAULKING COMPOUND ABOUT $\frac{1}{4}$ " FROM THE FACE OF CURB.
4. METHACRYLATE SHALL THEN BE POURED INTO THE $\frac{1}{4}$ " WIDE GAP BETWEEN THE FACE OF CURB AND THE BEAD OF CAULK.

ISSUED FOR CONSTRUCTION	AUGUST 1, 2025
DESCRIPTION	DATE
USE ONLY PRINTS OF LATEST DATE	

**TAUNTON
BAY STREET**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	37	44
PROJECT FILE NO. 613752			

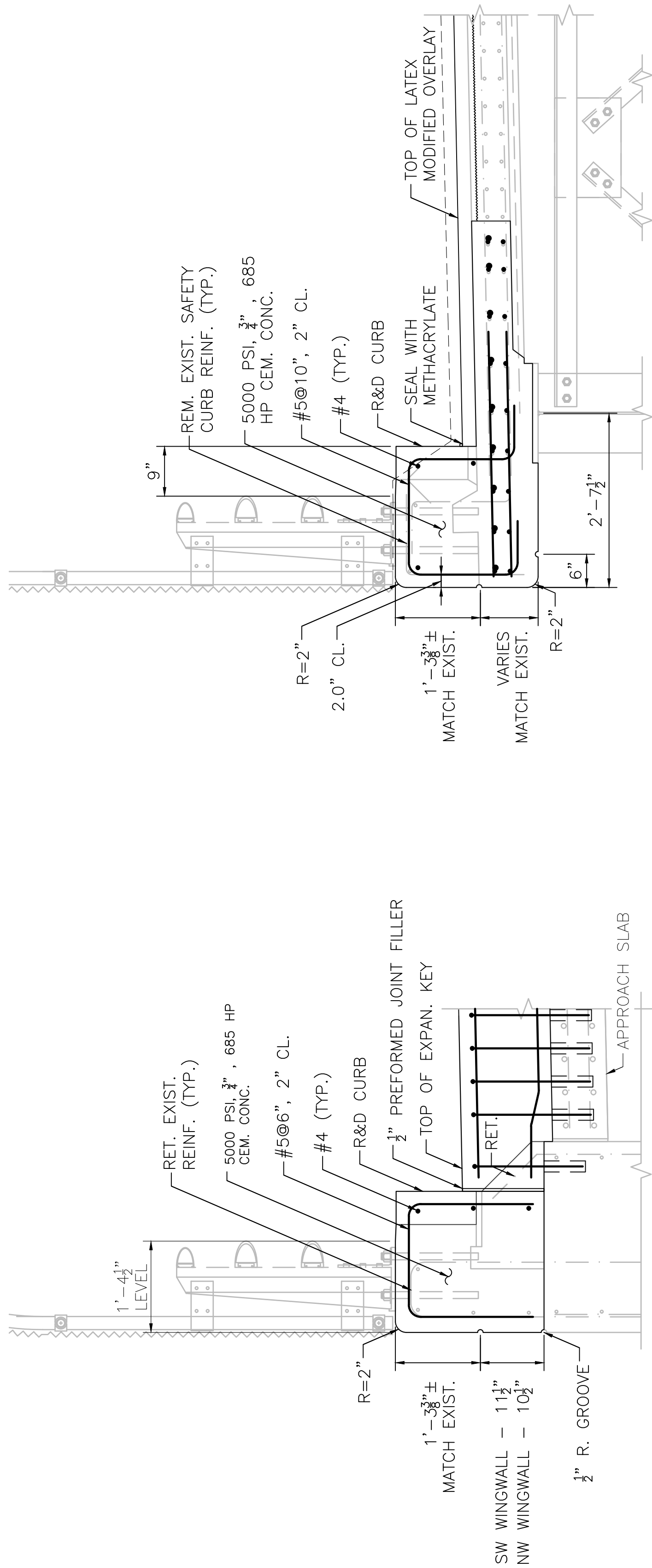
WEST WINGWALL DETAILS



SECTION

SCALE: $\frac{3}{4}$ " = 1'-0"

11



SECTION 9
SCALE: $\frac{3}{4}$ " = 1' - 0"

SECTION
SCALE: $\frac{3}{4}$ " = 1'-0"
10
8

NOTES:

SOUTHWEST WINGWALL SHOWN. NORTHWEST WINGWALL SIMILAR.

ISSUED FOR CONSTRUCTION	DATE
DESCRIPTION	
USE ONLY PRINTS OF LATEST DATE	

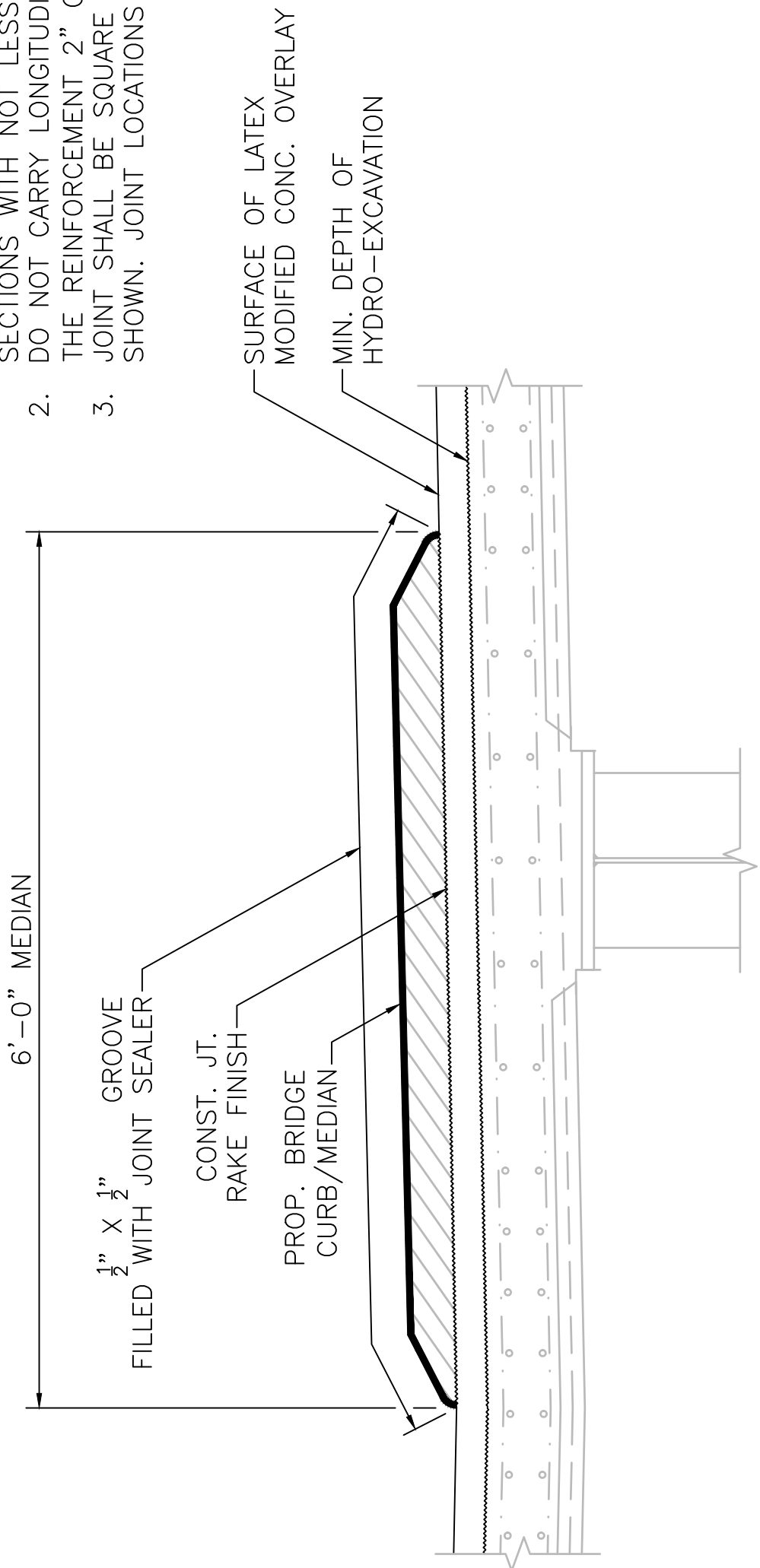
**TAUNTON
BAY STREET**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	38	44
PROJECT FILE NO. 613752			

GENERAL JOINT DETAILS

NOTES:

1. MEDIAN CONCRETE ABOVE SLAB SHALL BE POURED IN ALTERNATING SECTIONS WITH NOT LESS THAN 3 DAYS BETWEEN POURES.
2. DO NOT CARRY LONGITUDINAL BARS THROUGH PARAFFIN JOINTS. END OF THE REINFORCEMENT 2" CLEAR OF JOINT.
3. JOINT SHALL BE SQUARE TO THE FACE OF CURB UNLESS OTHERWISE SHOWN. JOINT LOCATIONS ARE SPECIFIED ON THE GENERAL PLAN.



MEDIAN PARAFFIN JOINT DETAIL

SCALE: 1" = 1'-0"

NOTES:

1. DEPTH OF SEAL BENEATH THE ROADWAY PER MANUFACTURER RECOMMENDATION, $\frac{3}{4}$ " MIN. FROM THE BOTTOM OF THE CHAMFER.
2. PROP. JOINT OPENING IS TO BE 2" AT 50°F AND $1\frac{3}{4}$ " AT 70°F. INSTALL A $2\frac{1}{4}$ " NOMINAL PRE-COMPRESSED SEAL.
3. THE CONCRETE SUBSTRATE PREP SHALL FOLLOW THE IRI CONCRETE SURFACE PROFILE STANDARDS TO ACHIEVE A SURFACE PROFILE OF CSP 2 (MIN.) OR 3 (PREFERRED).

PAVEMENT SAW AND SEAL AT EXPOSED DECK

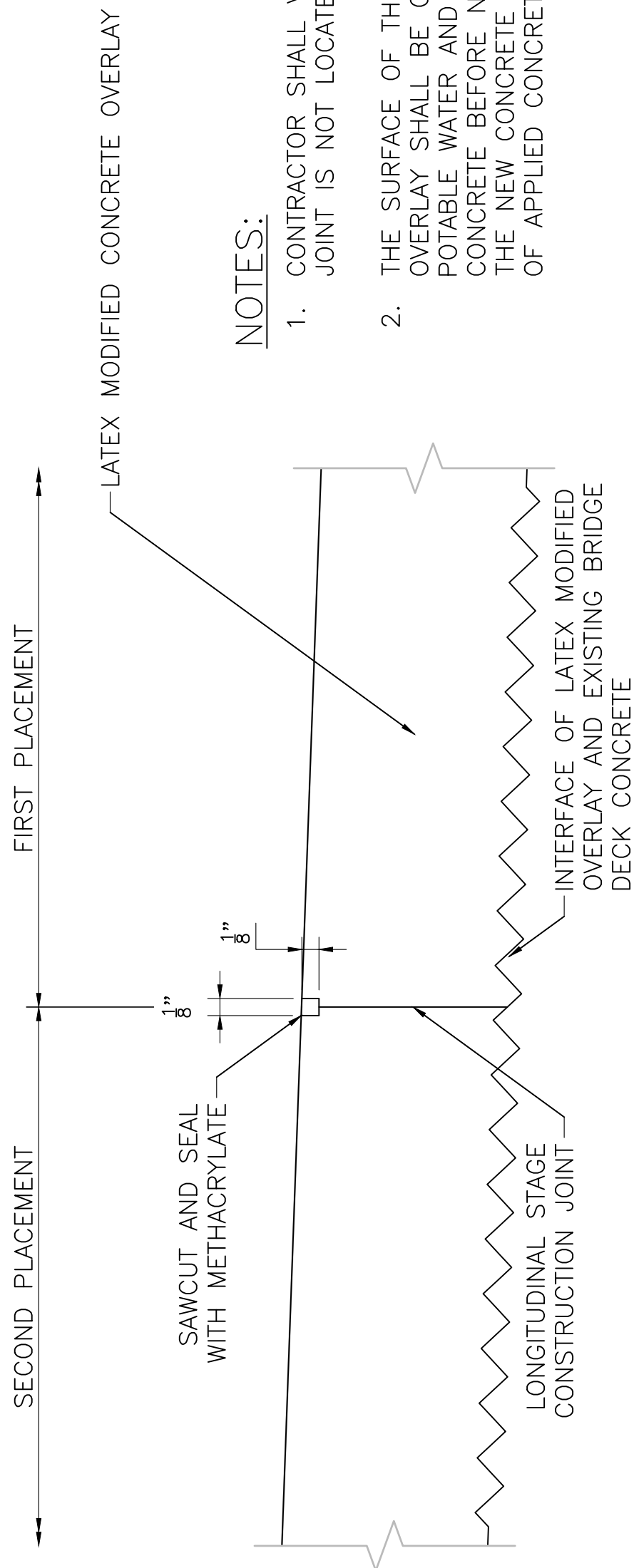
NOT TO SCALE

PRE-COMPRESSED JOINT WITH EXPOSED DECK

NOT TO SCALE

NOTES:

1. CONTRACTOR SHALL VERIFY THAT THE STAGE CONSTRUCTION JOINT IS NOT LOCATED ALONG REINFORCING BARS.
2. THE SURFACE OF THE PREVIOUSLY PLACED (STAGE 2/3) OVERLAY SHALL BE CLEANED, ROUGHENED, WETTED WITH POTABLE WATER AND FLUSHED WITH LATEX MODIFIED CONCRETE BEFORE NEW CONCRETE IS PLACED IN STAGE 4. THE NEW CONCRETE SHALL BE PLACED BEFORE THE LAYER OF APPLIED CONCRETE HAS TAKEN INITIAL SET.



LONGITUDINAL STAGE CONSTRUCTION JOINT

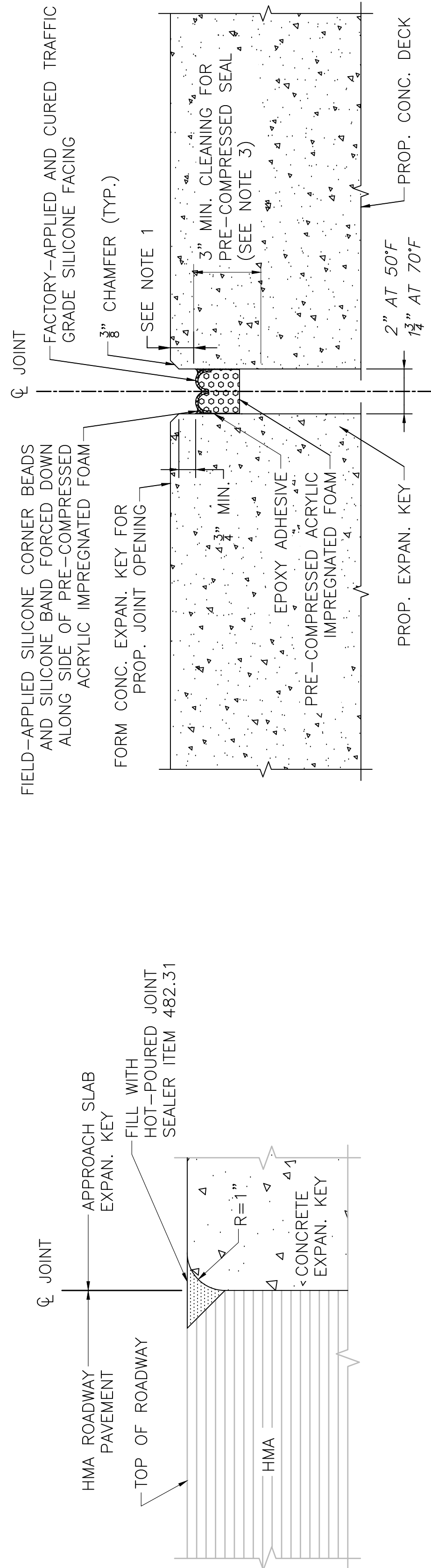
FOR LATEX MODIFIED OVERLAYMENT

NOT TO SCALE

NOTES:

1. ALL STRUCTURAL STEEL COMPONENTS SHALL CONFORM TO AASHTO M270 GRADE 36. AFTER COMPLETION OF ALL WELDING OPERATIONS STEEL PLATE ASSEMBLIES SHALL BE HOT-DIP GALVANIZED.
2. PRIOR TO PLACEMENT OF SIDEWALK/SAFETY CURB CONCRETE, LUBRICATE STAINLESS STEEL SCREWS WITH GRAPHITE AND SET SECURELY IN PLACE. MACHINE SCREWS TO BE TEMPORARILY REMOVED AFTER CONCRETE HAS ATTAINED FINAL SET.

$\frac{3}{8}$ " THICK, $9\frac{1}{8}$ " WIDE
GALVANIZED REMOVABLE
SLIDING PLATE



PRE-COMPRESSED JOINT WITH EXPOSED DECK

NOT TO SCALE

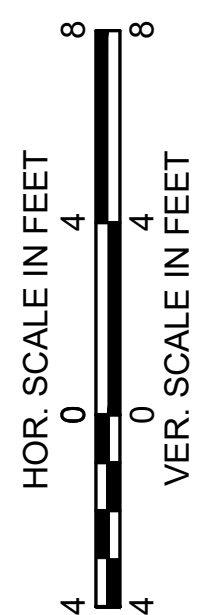
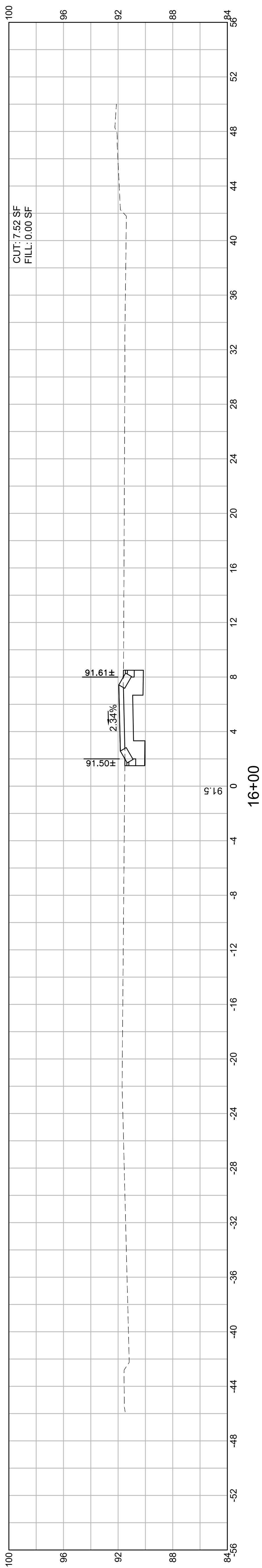
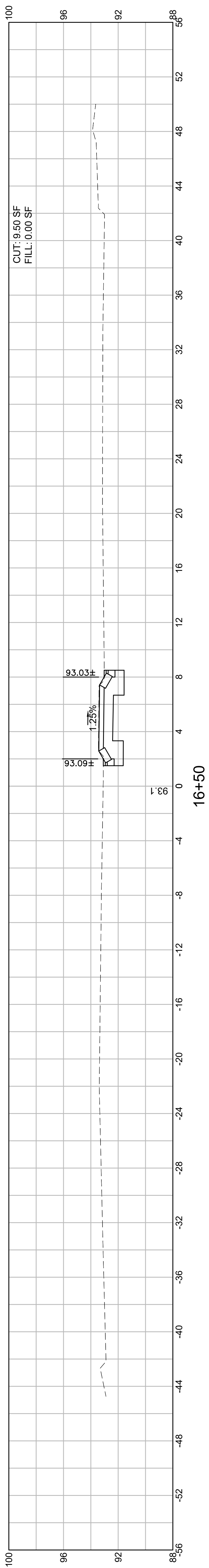
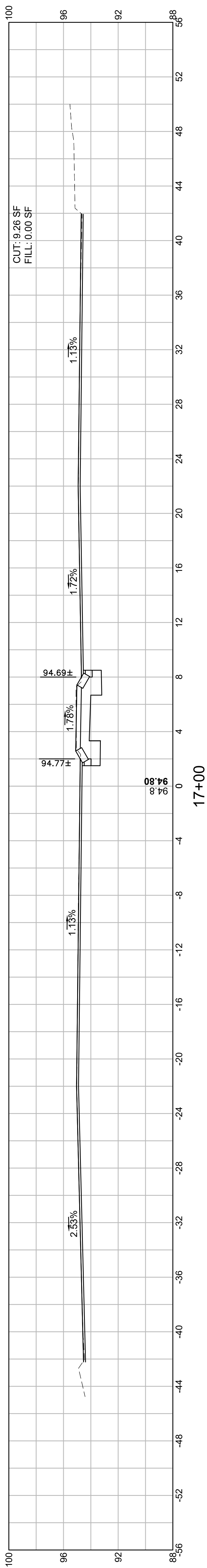
SIDEWALK JOINT SECTION

SCALE: 3" = 1'-0"

ISSUED FOR CONSTRUCTION	AUGUST 1, 2025
DESCRIPTION	DATE
USE ONLY PRINTS OF LATEST DATE	

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	39	44
PROJECT FILE NO.			613752

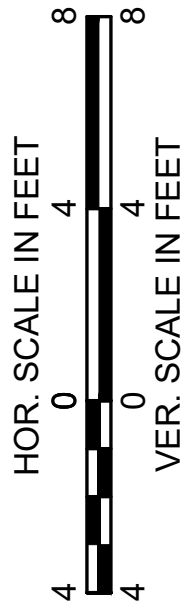
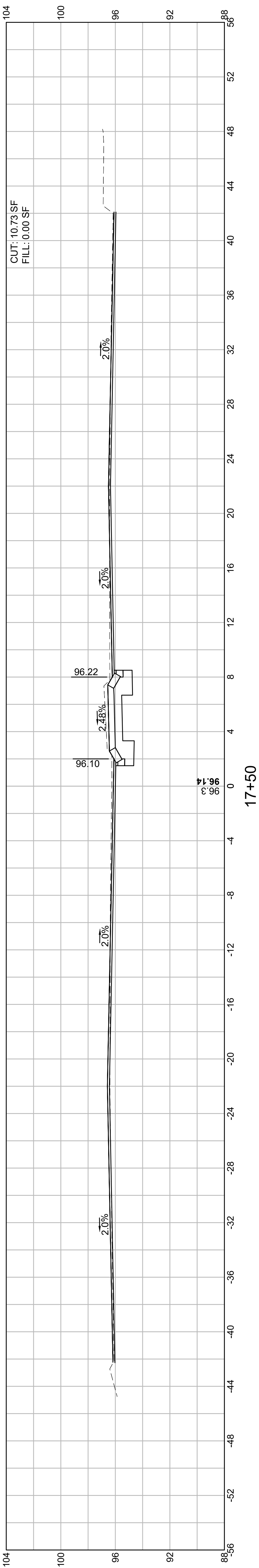
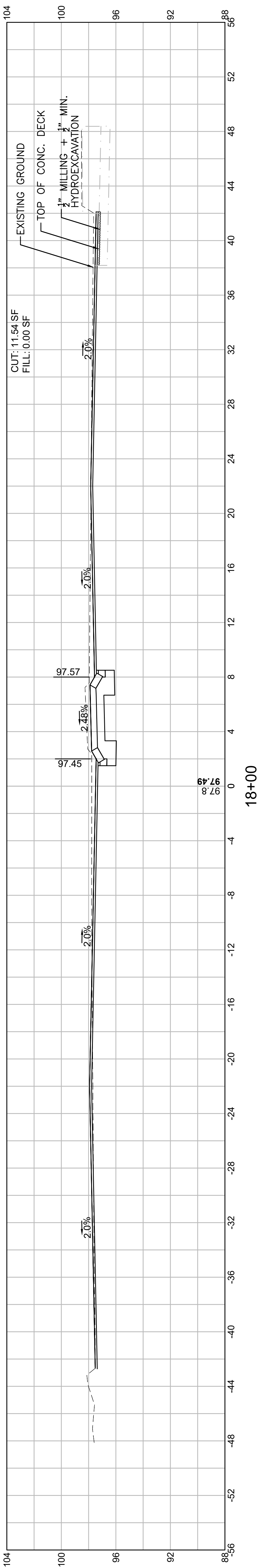
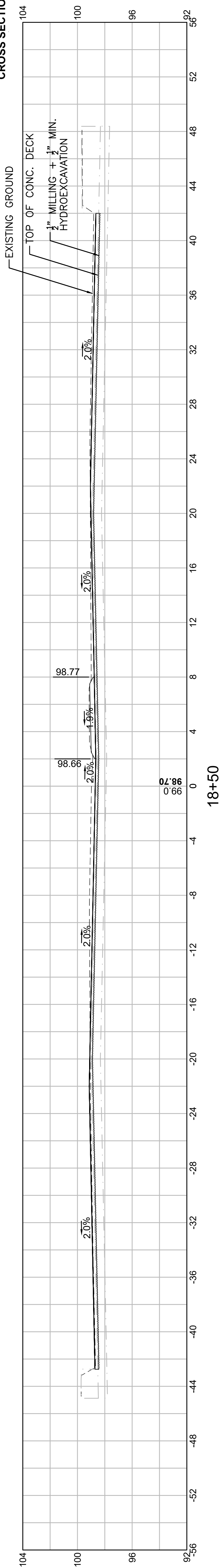
CROSS SECTIONS



TAUNTON
BAY STREET

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	40	44
PROJECT FILE NO. 613752			

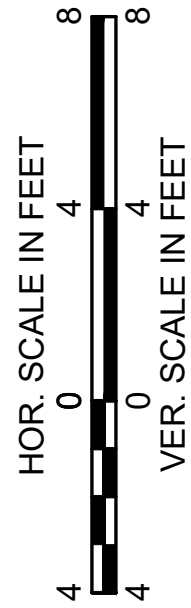
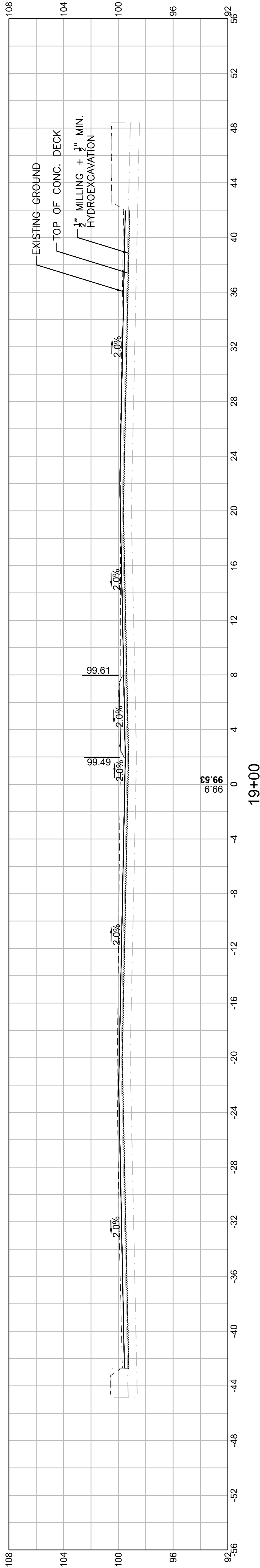
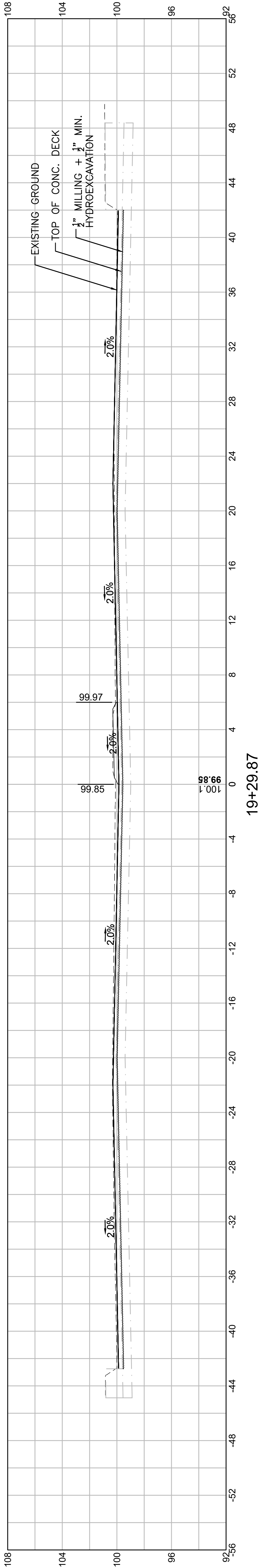
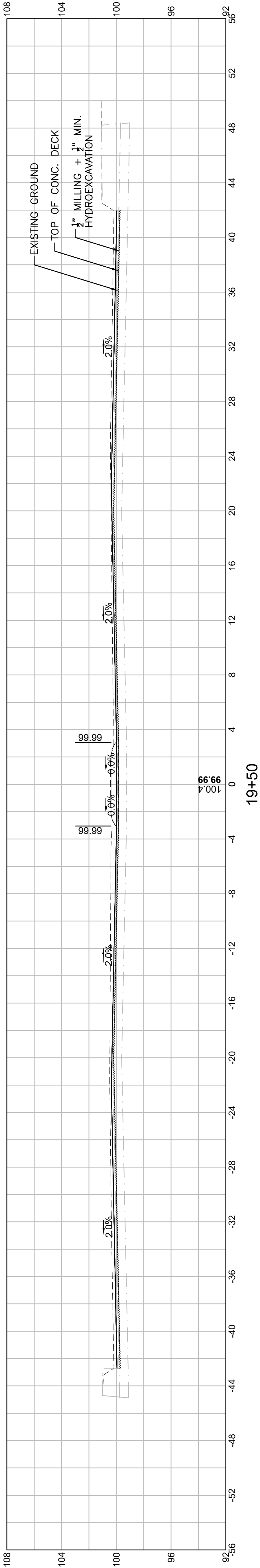
CROSS SECTIONS



TAUNTON
BAY STREET

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	41	44
PROJECT FILE NO. 613752			

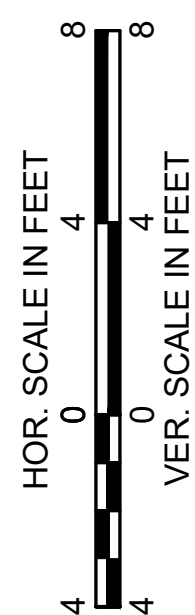
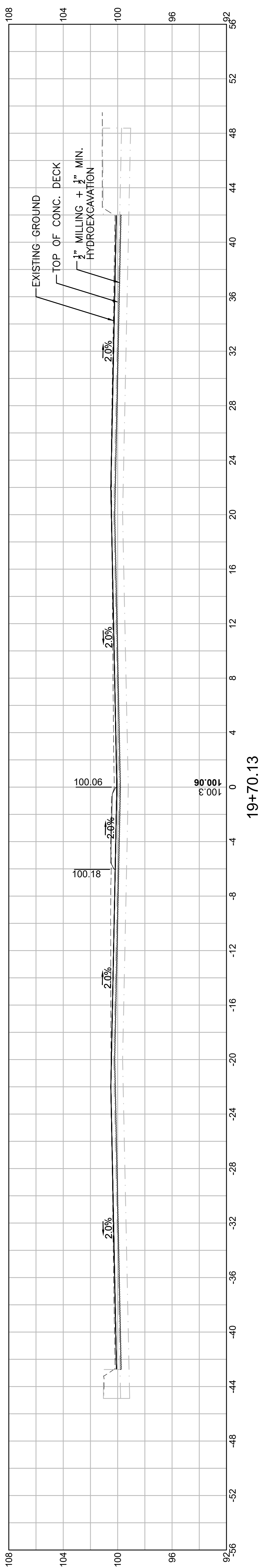
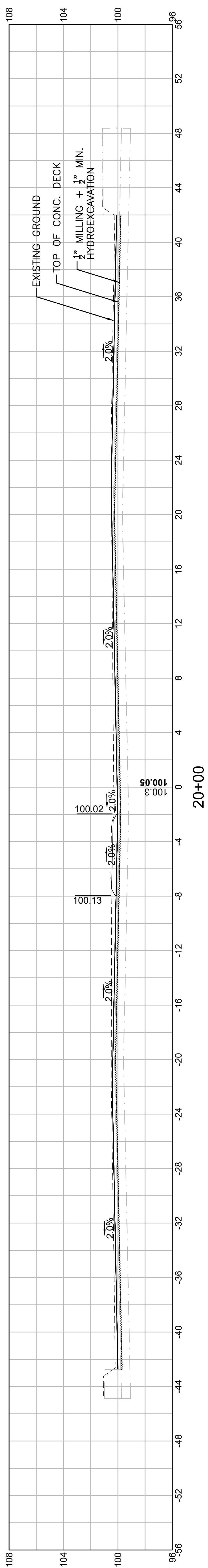
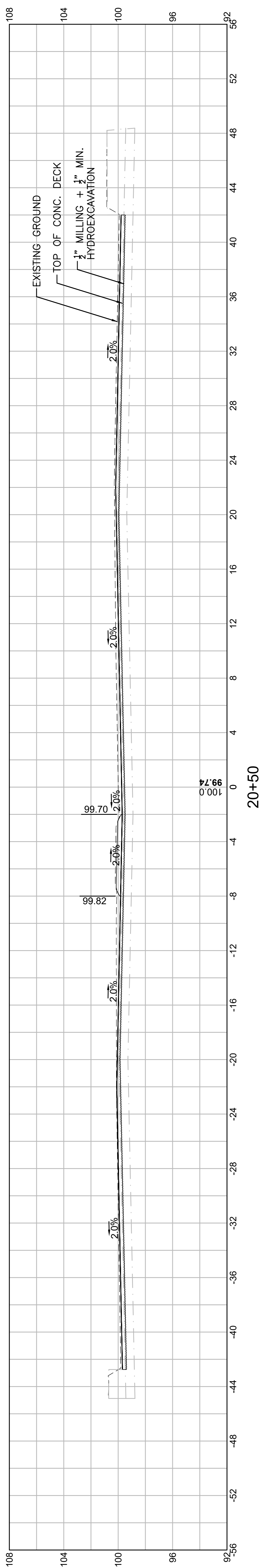
CROSS SECTIONS



STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	42	44
PROJECT FILE NO.			613752

TAUNTON
BAY STREET

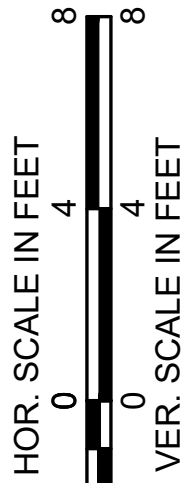
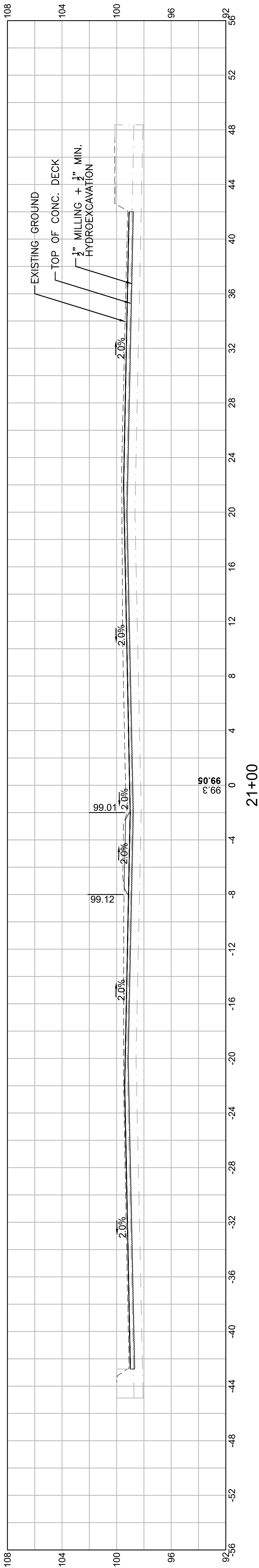
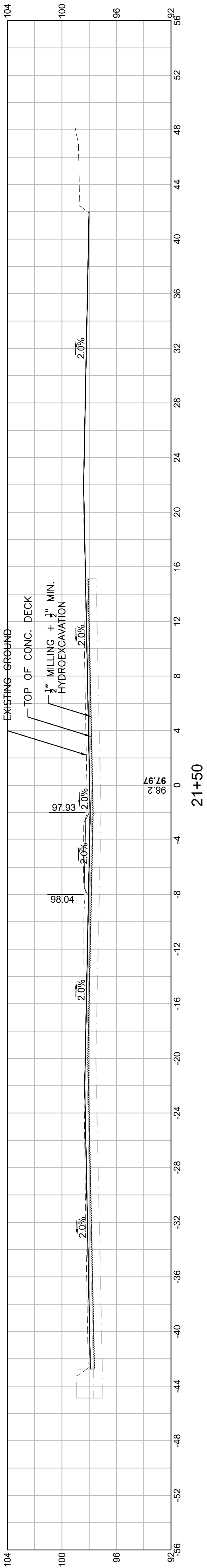
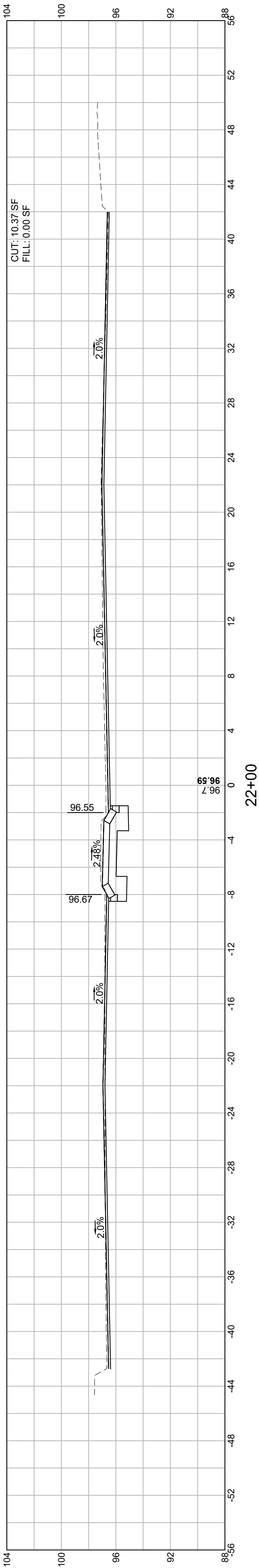
CROSS SECTIONS



TAUNTON
BAY STREET

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	43	44
PROJECT FILE NO. 613752		613752	

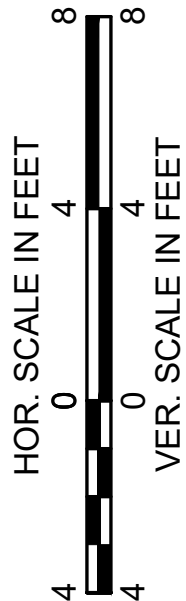
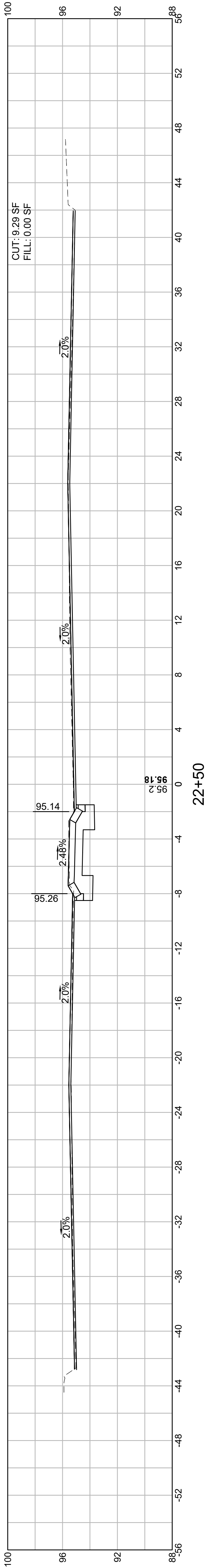
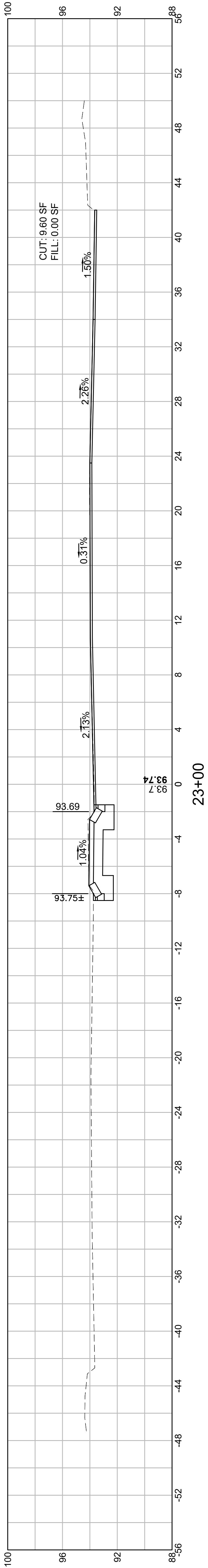
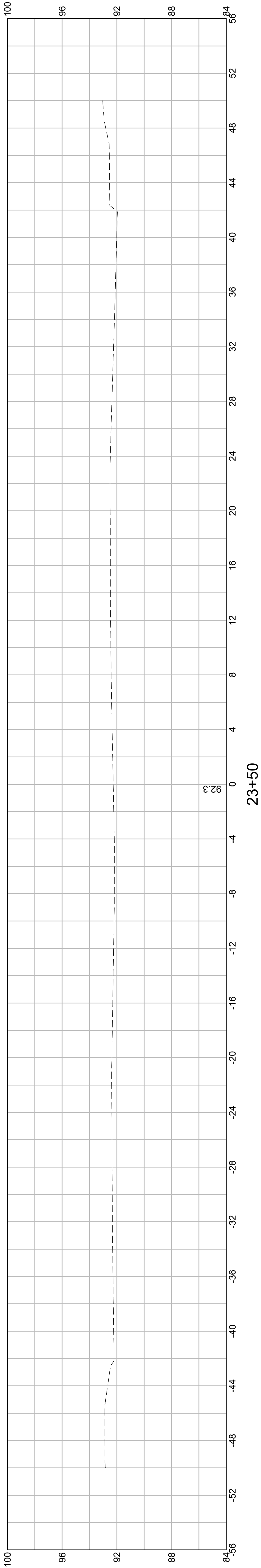
CROSS SECTIONS



TAUNTON
BAY STREET

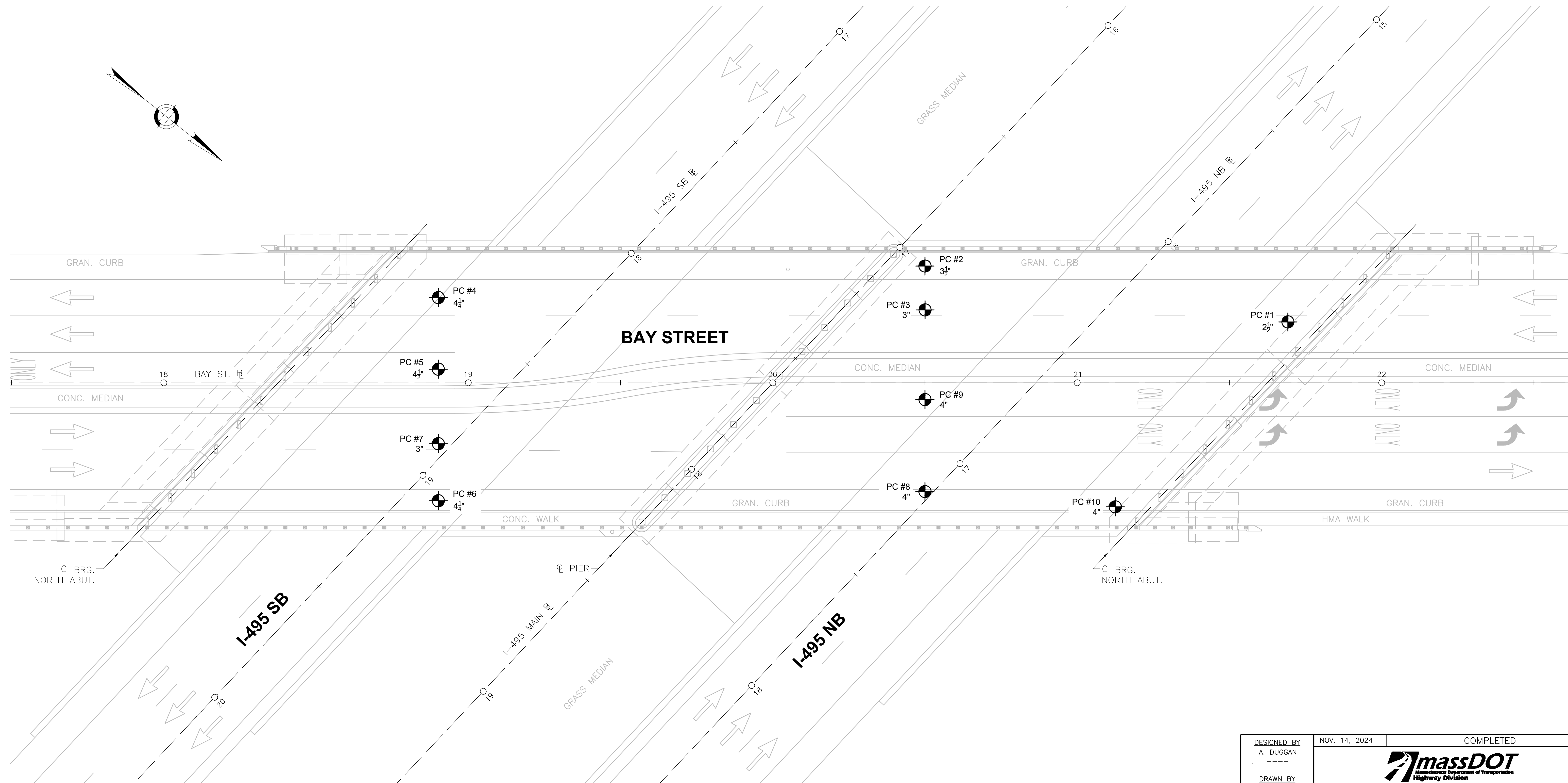
STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	44	44
PROJECT FILE NO. 613752		613752	

CROSS SECTIONS



TAUNTON BAY STREET OVER I-495			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	N.F.A.	1	1
PROJECT FILE NO.		613752	

PAVEMENT CORE LOCATION PLAN



PAVEMENT CORE LOCATION PLAN
SCALE: 1/16" = 1'-0"

NOTE:
PAVEMENT CORES PERFORMED BY DISTRICT BRIDGE MAINTENANCE STAFF ON 11/5/2024.

LEGEND:
PC #X
PROP. WEARING SURFACE
DEPTH MEASUREMENT LOCATION

DESIGNED BY A. DUGGAN ----	NOV. 14, 2024	COMPLETED
DRAWN BY A. DUGGAN ----	 BAY STREET OVER I-495 TAUNTON OVER FEATURE INTERSECTED MASSACHUSETTS DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION 10 PARK PLAZA BOSTON, MASS	
CHECKED BY 1ST CHECKER ----		
SPECS BY ----		
APPROVED FOR DESIGN BY -----		
APPROVED BY -----	STATE BRIDGE ENGINEER	CHIEF ENGINEER

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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: TAUNTONProject File Number: 613752Contract Number: 132093Project Description: Bridge Preservation, T-01-058, Bay Street over Interstate 495

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 A00821

BRIDGE INSPECTION REPORT

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STRUCTURES INSPECTION FIELD REPORT

ROUTINE INSPECTION

BR. DEPT. NO.

T-01-058

2-DIST 05	B.I.N. 3YF					
CITY/TOWN TAUNTON		8-STRUCTURE NO. T01058-3YF-DOT-NBI		11-Kilo. POINT 000.000	41-STATUS A:OPEN	90-ROUTINE INSP. DATE DEC 12, 2024
07-FACILITY CARRIED HWY BAY ST		MEMORIAL NAME/LOCAL NAME HON. RUDOLPH H. DESILVA		27-YR BUILT 1980	106-YR REBUILT 0000	YR REHAB'D (NON 106) 2013
06-FEATURES INTERSECTED I 495		26-FUNCTIONAL CLASS Urban Collector		DIST. BRIDGE INSPECTION ENGINEER G. Simpson		
43-STRUCTURE TYPE 402 : Steel continuous Stringer/Girder		22-OWNER State Highway Agency	21-MAINTAINER State Highway Agency	TEAM LEADER M. Marshall		
107-DECK TYPE 1 : Concrete Cast-in-Place		WEATHER Clear	TEMP. (air) 3°C	TEAM MEMBERS P. RIENDEAU, N. L. EICHMAN		

ITEM 58			5			ITEM 59			5			ITEM 60			6		
DECK			DEF			SUPERSTRUCTURE			DEF			SUBSTRUCTURE			DEF		
1. Wearing Surface	5	S-A	1. Stringers	N	-	1. Abutments	Dive	Cur	6								
2. Deck Condition	5	S-A	2. Floorbeams	N	-	a. Pedestals	N	N									
3. Stay in Place Forms	5	S-A	3. Floor System Bracing	N	-	b. Bridge Seats	N	5									
4. Curbs	7	-	4. Girders or Beams	5	M-P	c. Backwalls	N	6									
5. Median	6	M-P	5. Trusses - General	N	-	d. Breastwalls	N	6									
6. Sidewalks	5	M-P	a. Upper Chords	N	-	e. Wingwalls	N	7									
7. Parapets	N	-	b. Lower Chords	N	-	f. Slope Paving/Rip-Rap	N	7									
8. Railing	7	M-P	c. Web Members	N	-	g. Pointing	N	N									
9. Anti Missile Fence	7	M-P	d. Lateral Bracing	N	-	h. Footings	N	H									
10. Drainage System	6	M-P	e. Sway Bracings	N	-	i. Piles	N	N									
11. Lighting Standards	7	-	f. Portals	N	-	j. Scour	N	N									
12. Utilities	5	S-A	g. End Posts	N	-	k. Settlement	N	7									
13. Deck Joints	5	S-A	6. Pin & Hangers	N	-	l.	N	N									
14. Shielding	6	S-P	7. Conn Plt's, Gussets & Angles	5	S-P	m.	N	N									
15.	N	-	8. Cover Plates	N	-	2. Piers or Bents			7								
16.	N	-	9. Bearing Devices	6	M-P	a. Pedestals	N	7									
CURB REVEAL (In millimeters)			E	260	W	260	b. Caps	N	N								
APPROACHES			DEF			10. Diaphragms/Cross Frames	5	S-P	c. Columns	N	N						
a. Appr. Pavement Condition	6	M-P	11. Rivets & Bolts	N	-	11. Piers or Bents	N	-	d. Stems/Webs/Pierwalls	N	7						
b. Appr. Roadway Settlement	7	-	12. Welds	7	-	12. Piers or Bents	N	-	e. Pointing	N	N						
c. Appr. Sidewalk Settlement	5	S-P	13. Member Alignment	7	-	13. Piers or Bents	N	-	f. Footing	N	H						
d.	N	-	14. Paint/Coating	5	S-P	14. Piers or Bents	N	-	g. Piles	N	N						
OVERHEAD SIGNS (Attached to bridge)			(Y/N)	N	Year Painted			2013	h. Scour	N	N						
			DEF			COLLISION DAMAGE: Please explain			i. Settlement	N	7						
a. Condition of Welds	N	-				None (X) Minor () Moderate () Severe ()			j.	N	N						
b. Condition of Bolts	N	-				LOAD DEFLECTION: Please explain			k.	N	N						
c. Condition of Signs	N	-				None () Minor (X) Moderate () Severe ()			3. Pile Bents			N					
						LOAD VIBRATION: Please explain			a. Pile Caps	N	N						
						None () Minor (X) Moderate () Severe ()			b. Piles	N	N						
						Any Fracture Critical Member: (Y/N)			c. Diagonal Bracing	N	N						
						N			d. Horizontal Bracing	N	N						
						Any Cracks: (Y/N)			e. Fasteners	N	N						
						Y			UNDERMINING (Y/N) If YES please explain			N					
									COLLISION DAMAGE:								
									None (X) Minor () Moderate () Severe ()								
									SCOUR: Please explain								
									None (X) Minor () Moderate () Severe ()								
									I-60 (Dive Report):			N	I-60 (This Report):	6			
									93B-U/W (DIVE) Insp			00/00/0000					

Y=UNKNOWN

N=NOT APPLICABLE

H=HIDDEN/INACCESSIBLE

R=REMOVED

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

ITEM 61 CHANNEL & CHANNEL PROTECTION <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th></th> <th>Dive</th> <th>Cur</th> <th>DEF</th> </tr> </thead> <tbody> <tr><td>1.Channel Scour</td><td>N</td><td>N</td><td>-</td></tr> <tr><td>2.Embankment Erosion</td><td>N</td><td>N</td><td>-</td></tr> <tr><td>3.Debris</td><td>N</td><td>N</td><td>-</td></tr> <tr><td>4.Vegetation</td><td>N</td><td>N</td><td>-</td></tr> <tr><td>5.Utilities</td><td>N</td><td>N</td><td>-</td></tr> <tr><td>6.Rip-Rap/Slope Protection</td><td>N</td><td>N</td><td>-</td></tr> <tr><td>7.Aggradation</td><td>N</td><td>N</td><td>-</td></tr> <tr><td>8.Fender System</td><td>N</td><td>N</td><td>-</td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table> STREAM FLOW VELOCITY: Tidal () High () Moderate () Low () None (X) ITEM 61 (Dive Report): ☐ N ITEM 61 (This Report): ☐ N 93b-U/W INSP. DATE: 00/00/0000		Dive	Cur	DEF	1.Channel Scour	N	N	-	2.Embankment Erosion	N	N	-	3.Debris	N	N	-	4.Vegetation	N	N	-	5.Utilities	N	N	-	6.Rip-Rap/Slope Protection	N	N	-	7.Aggradation	N	N	-	8.Fender System	N	N	-													N	ITEM 36 TRAFFIC SAFETY <table border="1" style="width:100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th></th> <th>36</th> <th>COND</th> <th>DEF</th> </tr> </thead> <tbody> <tr><td>A. Bridge Railing</td><td>0</td><td>7</td><td>M-P</td></tr> <tr><td>B. Transitions</td><td>0</td><td>7</td><td>-</td></tr> <tr><td>C. Approach Guardrail</td><td>0</td><td>7</td><td>M-P</td></tr> <tr><td>D. 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RATING Rating Report (Y/N): ☐ Y Date: 08/01/2010 Inspection data at time of existing rating I 58: 6 I 59: 7 I 60: 6 Date : 12/15/2008	Recommend for Rating or Rerating (Y/N): ☐ N REASON: _____ If YES please give priority: HIGH () MEDIUM () LOW ()

CONDITION RATING GUIDE			(For Items 58, 59, 60 and 61)
CODE	CONDITION	DEFECTS	
N	NOT APPLICABLE		
G 9	EXCELLENT	Excellent condition.	
G 8	VERY GOOD	No problem noted.	
G 7	GOOD	Some minor problems.	
F 6	SATISFACTORY	Structural elements show some minor deterioration.	
F 5	FAIR	All primary structural elements are sound but may have minor section loss, cracking, spalling or scour.	
P 4	POOR	Advanced section loss, deterioration, spalling or scour.	
P 3	SERIOUS	Loss of section, deterioration, spalling or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present.	
C 2	CRITICAL	Advanced deterioration of primary structural elements. Fatigue cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored it may be necessary to close the bridge until corrective action is taken.	
C 1	"IMMINENT" FAILURE	Major deterioration or section loss present in critical structural components or obvious vertical or horizontal movement affecting structure stability. Bridge is closed to traffic but corrective action may put it back in light service.	
0	FAILED	Out of service - beyond corrective action.	

DEFICIENCY REPORTING GUIDE	
DEFICIENCY:	A defect in a structure that requires corrective action.
CATEGORIES OF DEFICIENCIES:	
M= Minor Deficiency	Deficiencies which are minor in nature, generally do not impact the structural integrity of the bridge and could easily be repaired. Examples include but are not limited to: Spalled concrete, Minor pot holes, Minor corrosion of steel, Minor scouring, Clogged drainage, etc.
S= Severe/Major Deficiency	Deficiencies which are more extensive in nature and need more planning and effort to repair. Examples include but are not limited to: Moderate to major deterioration in concrete, Exposed and corroded rebars, Considerable settlement, Considerable scouring or undermining, Moderate to extensive corrosion to structural steel with measurable loss of section, etc.
C-S= Critical Structural Deficiency	A deficiency in a structural element of a bridge that poses an extreme unsafe condition due to the failure or imminent failure of the element which will affect the structural integrity of the bridge.
C-H= Critical Hazard Deficiency	A deficiency in a component or element of a bridge that poses an extreme hazard or unsafe condition to the public, but does not impair the structural integrity of the bridge. Examples include but are not limited to: Loose concrete hanging down over traffic or pedestrians, A hole in a sidewalk that may cause injuries to pedestrians, Missing section of bridge railing, etc.
URGENCY OF REPAIR:	
I = Immediate-	[Inspector(s) immediately contact District Bridge Inspection Engineer (DBIE) to report the Deficiency and to receive further instruction from him/her].
A = ASAP-	[Action/Repair should be initiated by District Maintenance Engineer or the Responsible Party (if not a State owned bridge) upon receipt of the Inspection Report].
P = Prioritize-	[Shall be prioritized by District Maintenance Engineer or the Responsible Party (if not a State owned bridge) and repairs made when funds and/or manpower is available].

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8.-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

REMARKS

BRIDGE ORIENTATION

This two span structure carries Bay Street over Interstate 495. For this report the abutments are labeled south and north, and spans are numbered from the south. The twelve girders and eleven bays are numbered from west to east. **Sketch 1.**

GENERAL REMARKS

Access:

Due to heavy to severe pigeon debris at the abutments, slopes, and the utilities in Bays 1 and 11, hands-on access was limited. **Photo 1.**

Span 1 bay 4 had two (2) unsecured timber boards sitting on bottom flange, these were removed by inspection team at this inspection. **Photo 2.**

ITEM 58 - DECK

Item 58.1 - Wearing Surface

There is minor to moderate wheel rutting, random cracking (typically 1/16" wide), and debris along the curblines throughout.

Specific deficiencies are listed below:

Span 1:

- Previous reported Southbound right travel and breakdown lanes, heavy to severe wheel rutting starting at the South Abutment and extending to the Pier has been repaved, with minor to moderate at the south end.
- Previous reported Northbound left travel lane and left shoulder adjacent to South Abutment, area of heavy wheel rutting and potholes with exposed deck has been repaired and repaved measuring full length x up to 14' wide. **Photos 3 & 4.**
- Northbound right travel lane patched pothole measuring 12' long x 1.5' wide. **Photo 5.**

Span 2:

- Northbound breakdown lane over the Interstate 495 median, area of moderate heaving adjacent to the east curb measuring 10' long x up to 1.5' wide.
- Southbound right travel lane has been repaved since previous inspection. Previous reported cracking was not seen at this inspection. **Photo 6.**
- Southbound left travel lane adjacent to North Abutment, area of alligator cracking measuring 1/16" wide.
- Northbound left travel lane adjacent to North Abutment, area moderate to heavy wheel rutting measuring up to 2" high. **Photo 7.**

Item 58.2 - Deck Condition

Both deck overhangs have areas of transverse cracking (up to 1/16" wide) with efflorescence.

There are several areas of spalling with exposed rebar.

See item 58.1 Wearing Surface.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

REMARKS

Specific deficiencies are listed below:

Span 1:

- **Bay 5 adjacent to the Pier, spall with exposed rebar and failed SIP form measuring up to 5' long x up to full width x 3". Photo 8.**
- **Bay 11 adjacent to the Pier, spall with exposed rebar and failed SIP form measuring 2' long x full width x up to 5" deep. Photos 9 & 10.**

Span 2:

- West deck overhang at North Abutment, spall with exposed rebar measuring 1.5' long x 5" wide x 1.5" deep.
- Bay 5 adjacent to the splice plate, minor spalling and failed SIP form measuring 2.5' long x up to full width x up to 1/2" deep.
- **Bay 5 over the right travel lane, two spalls with exposed rebar, efflorescence/active leakage, and failed SIP form with the southern spall measuring 2' long x up to full width x 3" deep and the northern spall measuring 5' long x full width x 5" deep. These locations are currently shield. Photos 11 & 30.**
- **Bay 5 over the breakdown lane/slope, spalling/scaled area and failed SIP form measuring 6' long x up to full width x 1" deep. Photo 12.**
- Bay 11 over the breakdown lane, minor spalling and failed SIP form measuring 1.5' long x 3' wide.

Item 58.3 - Stay in Place Forms

There are numerous areas of corrosion and failed Stay In Place (SIP) forms throughout with the worst areas in Bay 5 in both spans.

Typically, adjacent to the deck drains throughout the structure there are areas of heavy corrosion and failed SIP forms. Photos 13 & 14.

See Item 58.2 - Deck Condition.

Specific deficiencies are listed below:

Span 1:

- Bay 6 adjacent to the Pier along Girder 6, several areas of heavy corrosion. **Photo 15.**

Span 2:

- Bay 5 adjacent to the North Abutment along Girder 5, several areas of minor to moderate corrosion/efflorescence.
- Bay 5 above left travel lane and slope, minor to moderate corrosion/efflorescence. **Photo 16.**
- **Bay 11 adjacent to the Pier, area of heavy corrosion measuring 3' wide x 1' long.**
- **Bay 11 above the left travel lane, area of heavy corrosion with 100% section loss measuring 1' in diameter.**

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8.-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

REMARKS

- Bay 11 above the breakdown lane, area of heavy corrosion and failed SIP form measuring 1' long x 2.5' wide. **Photo 17.**

Item 58.4 - Curbs
The granite curbs exhibit minor chipping and minor rust staining.

Item 58.5 - Median
There are random transverse cracks (up to 1/8" wide) throughout and isolated areas with minor spalling and peeling protective coating. **Photo 18.**

Item 58.6 - Sidewalks
Along the west safety walk over the full length there are numerous spalls/delaminations with debris and vegetation along the granite curb each measuring up to 5' long x up to 5" wide x up to 2" deep. **Photo 19.**

The east sidewalk has areas of transverse cracking (up to 1/16" wide) and scaling throughout.

Item 58.8 - Railing
There are minor scrapes throughout, and heavy vegetation growth that extends onto the bridge through the railing at all four corners.

Item 58.9 - Anti Missile Fence
At the southwest corner of the bridge, fourth panel from the south end, the bottom rail is bent outward and is disconnected from the posts.

At all four corners of the bridge there is heavy vegetation (vine) growth.

Item 58.10 - Drainage System
At the South Abutment above the outside face of Girder 12 there is a missing deck drain extension.

Item 58.12 - Utilities
In Bays 1 and 11 there are random areas of corrosion throughout.

In Bay 11 there are several random areas where the utility conduits are separated. **Photos 20 & 21.**

Specific deficiencies are listed below:

Span 1

- Bay 1 adjacent to the Pier, area of heavy efflorescence/rust staining.

- Bay 11 adjacent to the Pier, utility conduits for the light standard have heavy corrosion along the top flange.

Item 58.13 - Deck Joints
Both deck joints have areas of separated/punctured joint seal (up to 3' long), transverse cracks (1/8" wide) and/or raveling at the headers, debris impaction along the curbs, uneven seal placement and moderate to heavy leakage. **Photos 22 & 23.**

At the North Abutment northbound roadway, approximately 30% of the joint seal is failed/missing. **Photos 24 - 27.**

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8.-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

REMARKS

At the South Abutment southbound roadway there are several areas of the headers breaking up each measuring up to 2' long. Photos 28 & 29.

Item 58.14 - Shielding
In Span 1 Bay 4 adjacent to the Pier, there are two timber boards over the slope.

In Span 2 Bay 5 over the right travel lane, the expanded metal shielding has areas of moderate efflorescence/ rust staining and a 8" long x 3" wide corrosion hole. **Photo 30.**

APPROACHES

Approaches a - Appr. Pavement Condition
Both approaches have areas of minor to moderate wheel rutting and random cracks up to 1/8" wide. **Photos 31 & 32.**

Approaches c - Appr. Sidewalk Settlement
Both of the eastern approach sidewalks have areas of settlement over the full width of the sidewalk. **Photo 33.**

Approach sidewalk settlements are listed below:

- Southeast = 2"
- Northeast = 2"

ITEM 59 - SUPERSTRUCTURE

Item 59.4 - Girders or Beams
Typically, there are areas of minor corrosion along the lower webs, bottom flanges and adjacent to areas of SIP form corrosion throughout the superstructure.

At both abutments, several of the girder webs past the bearing are bowed out of plane measuring between 1/8" and 3/4" (no changes noted from the previous inspections).

The girder ends at both abutments have numerous areas of heavy pigeon debris.

At the South Abutment there are areas of moderate to heavy corrosion.

In both spans the splice plates have areas of minor corrosion/pack rust throughout.

At the Pier, the girder stiffeners have several areas of pitting measuring full width x 5" high x 1/16" deep.

See General Remarks.

Notable deficiencies for the girder ends are listed below:

South Abutment (see **Sketch 2**):

- Girder 4 east face, area of pitting measuring 5" long x 2" high x 1/8" deep.
- Girder 5 east face, area of pitting measuring 2' long x 3" high x 1/16" deep and an isolated area of 100% section loss. **Photo 34.**

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8.-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

REMARKS

- Girder 7 east face, area of pitting measuring 2' long x 4" high x 1/8" deep and two areas of 100% section loss. **Photos 35 - 37**
- Girder 9 east face, area of pitting measuring 2' long x 3" high x 1/16" deep and an area of 100% section loss. **Photo 38.**
- Girder 10 east face, area of pitting measuring 12" long x 4" high x 1/16" deep and an isolated area of 100% section loss. **Photo 39.**
- Girder 11 east face, area of pitting measuring 1' long x 4" high x 1/8" deep and an area of 100% section loss.
- Girder 11 adjacent to the utility support along the east face, area of pitting measuring 3' long x 2" high x 1/16" deep.
- Girder 12 east face below deck drain, area of moderate corrosion to both flanges and web. **Photo 40.**

North Abutment:

- Girder 6 east face, area of pitting measuring from the girder end to the breakdown lane x 2" high x 1/16" deep.

Specific deficiencies for the splice plates are listed below:

Span 1:

- Girder 1 at the southeast corner, plate bent down 3/8".
- Girder 2 at the southwest corner, plate bent down 3/8".
- Girder 4 at the southeast corner, plate bent down 1/4".
- Girder 7 at the center of the splice, plate bent down up to 1/2".

Span 2:

- Girder 8 at the southeast corner, plate bent down 1/8".

Item 59.7 - Conn Plt's, Gussets & Angles

In both spans several of the interior connection plates have bowed downward up to 1.25".

Specific deficiencies are listed below:

South Abutment:

- Girder 7 to 8 connection plate, knife edged and the steel angle has a hole measuring 9" long x 4" wide. **Photo 35.**
- Girder 9 to 10 connection plate, knife edged with a 1" diameter hole and is twisted downward. **Photo 41.**
- Girder 11 to 12 connection plate, knife edged and bent down up to 1" with a hole at the southwestern corner measuring 7" long x 2" wide. **Photo 42.**

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8.-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

REMARKS

Item 59.9 - Bearing Devices
The bearings have areas of minor corrosion throughout the superstructure. **Photos 43 & 44.**

At the South Abutment, the bearings under Girders 2, 3, 6, and 8 have surrounding concrete debris.

Girder 3 east anchor bolt at south abutment is bent to the south. **Photo 45.**

At the North Abutment, the bearings have minor over expansion towards the north.

Item 59.10 - Diaphragms/Cross Frames
The steel intermediate diaphragms have moderate corrosion and pack rust with the worst areas along the bottom flanges.

Several of the concrete end diaphragms exhibit cracking and/or spalling with exposed rebar along the bottom face.

In Span 1, Bay 1 adjacent to the splice plate, the utility support has a missing bolt at the Girder 2 connection.

In Span 1, Bay 1, 6th utility support from pier missing bolts with slight tilt at Girder 2. **Photo 46.**

In Span 1, Bay 11 at the South Abutment, the utility support has several areas of 100% section loss. **Photo 47.**

In Span 1, Bay 11 at the Pier, the support has several areas of 100% section loss. **Photo 48.**

Item 59.14 - Paint/Coating
The girder ends at both abutments are painted and have isolated areas of minor corrosion/rust staining.

The bottom flanges over the roadway are painted and have numerous areas of rust staining and peeling paint.

The remainder of the weathering steel patina exhibits varying levels of corrosion, scale, and flaking throughout, with the worst areas being over the roadway.

SuperStructure Load Deflection Notes
There is minor deflection under live loads.

SuperStructure Load Vibration Notes
There is minor vibration under live loads.

ITEM 60 - SUBSTRUCTURE

Item 60.1 - Abutments
Item 60.1.b - Bridge Seats
There are several areas of ponding water at both abutments, with worst areas in Bay 11 at the South Abutment.

Both bridge seats have numerous areas of concrete and pigeon debris, map cracking (1/16" wide), and isolated delaminations throughout. **Photos 49 & 50.**

At the South Abutment there are several spalls along the back of the bridge seat.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8.-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

REMARKS

See General Remarks.

Specific deficiencies are listed below:

South Abutment:

- Behind Girder 2, spall measuring 1.5' long x 7" wide x 3" deep.
- Behind Girder 3, spall measuring 1' long x 4.5" wide x 3" deep.
- Behind Girder 6, spall measuring 1.5' long x 6" wide x 3" deep.
- Bay 8, spall measuring 2.5' long x 10" wide x 3" deep.

North Abutment:

- Adjacent to Girder 4, delamination measuring 1.5' long x 8" wide.
- Bay 4, areas of heavy debris and joint backer rod.

Item 60.1.c - Backwalls

Both backwalls have areas of map cracking up to 1/16" wide, rust staining, form work in place along the top edge, and several spalls with exposed rebar.

Specific deficiencies are listed below:

South Abutment:

- Behind Girder 1, spall with exposed rebar measuring 3.5' long x up to 10" high x 2" deep. **Photo 51.**
- Behind Girder 7 at top edge, spall with exposed rebar measuring 2' long x 1' high x up to 5" deep.

North Abutment:

- West end, spalling with exposed rebar (at the top half) measuring up to 6" long x full height x typically 1" deep (up to 3" deep at the top corner). **Photo 52.**

Item 60.1.d - Breastwalls

Both breastwalls have areas of random/map cracking up to 1/16" wide, scaling, efflorescence/rust staining, and isolated spalling/delaminations. **Photo 53.**

Specific deficiencies are listed below:

South Abutment:

- West End at top corner, spall/delamination with exposed rebar measuring 3.5' high x 2.5' wide x up to 4" deep along with vertical cracks up to 1/2" wide. **Photo 54.**
- Bay 1 along the top, cracked and delaminated area with rust measuring 10' long x 7' high.
- Bay 2 along the top, cracked and delaminated area measuring 2' long x 3' high.
- Bay 4 at mid height, cracked and delaminated area measuring 2.5' long x 3' high with an adjacent horizontal crack with efflorescence measuring 3.5' long x 1/8" wide. **Photo 55.**
- Girder 7, delaminated area measuring 1' in diameter and a vertical crack measuring full height x 1/2" wide.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8.-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

REMARKS

North Abutment

- West end full height 1/8" wide map cracking with minor staining. **Photo 56.**
- Girder 2, spall along the top measuring 1' in diameter x 1" deep and a delaminated area at mid height measuring 5' long x 6.5' high.
- Bay 9 along the top, area of moderate efflorescence.
- Bay 11 at mid-height, cracked and delaminated area with efflorescence measuring 6' long x 7' high.
- East End along the bottom, cracked and delaminated area measuring 2' long x 2.5' high.

Item 60.1.e - Wingwalls
At the Northeast Wingwall, there is moderate full-height map cracking up to 1/8" wide and minor vegetation growth.

Item 60.1.f - Slope Paving/Rip-Rap
There are up to 1/4" wide cracks in the slope paving at the abutments and piers.

At both abutments there is heavy pigeon debris.

Item 60.2 - Piers or Bents

Item 60.2.a - Pedestals
At pedestal 10 along the west face (previously reported east), there is a spall/delamination with exposed rebar measuring 1.5' long x 6" high x 1.5" deep.

Item 60.2.d - Stems/Webs/Pierwalls
The pier exhibits areas of minor honeycombing and rust staining.

There are several hairline to 1/16" wide cracks that extend for the full height of the pier, some of which extend across the top of the pier.

TRAFFIC SAFETY

Item 36a - Bridge Railing
The bridge rail consist of a Type AL-3 railing (non standard).

See Item 58.8 - Railing for condition comments.

Item 36b - Transitions
The transitions consist of w-beam panels mounted on steel posts and spacers (non-standard).

Item 36c - Approach Guardrail
The approach guardrails are a continuation of the transitions (non-standard).

At the northeast approach guardrail, there is an area of minor impact damage.

Item 36d - Approach Guardrail Ends
The approach guardrails are continuous with the roadway.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
TAUNTON	3YF	T-01-058	T01058-3YF-DOT-NBI	DEC 12, 2024
REMARKS				
Sketch / Photo Log				
Sketch 1 :	Framing Plan, not to scale			
Sketch 2 :	Girder losses at South Abutment			
Photo 1 :	Span 2 bay 10 heavy pigeon presence at the north abutment, bay 11 similar.			
Photo 2 :	Span 1 bay 4 over median unsecured timber boards, removed by inspection team at inspection.			
Photo 3 :	Northbound LTL patched looking north.			
Photo 4 :	Northbound span 1 LTL patched looking south.			
Photo 5 :	Northbound lane span 1 RTL patched pothole looking south at pier.			
Photo 6 :	Southbound general wearing surface with patched RTL looking south.			
Photo 7 :	Northbound lane span 2, left turn lane settlement and heaving looking south.			
Photo 8 :	Span 1 bay 5 Sip corrosion over median slope looking south.			
Photo 9 :	Span 1 bay 11 over median slope utility SIP corrosion looking north.			
Photo 10 :	Span 1 bay 11 over median slope utility SIP corrosion looking north close up.			
Photo 11 :	Span 2 bay 5 over RTL SIP corrosion and spalling with exposed rebar looking south.			
Photo 12 :	Span 2 bay 5 over BDL SIP corrosion looking north.			
Photo 13 :	Span 1 bay 6 minor SIP corrosion around deck drains at south abutment.			
Photo 14 :	Span 1 bay 7 SIP corrosion around deck drains.			
Photo 15 :	Span 1 bay 6 Sip corrosion over median slope looking south.			
Photo 16 :	Span 2 bay 5 SIP corrosion over median slope/LTL looking north.			
Photo 17 :	Span 2 bay 11 over BDL heavy pigeon presence and SIP corrosion above utility looking north.			
Photo 18 :	Median with transverse cracking throughout looking south.			
Photo 19 :	West safetywalk spalling/scaling with debris throughout looking south.			
Photo 20 :	Span 2 bay 11 utility disconnected over median slope looking north.			
Photo 21 :	Span 1 bay 11 over median slope/LTL disconnected utility conduit looking south.			
Photo 22 :	Southbound north joint with cracking uneven seal placement looking east.			
Photo 23 :	Northbound south joint with cracking uneven seal placement looking east.			
Photo 24 :	Northbound north joint with depressed and failed seal looking west.			
Photo 25 :	Northbound north joint failed seal in left turn lane looking west.			
Photo 26 :	Northbound north joint failed seal in RTL looking west.			
Photo 27 :	Northbound north joint failed seal looking east.			
Photo 28 :	Southbound south joint with asphalt break up and settlement looking east.			
Photo 29 :	Southbound south joint close up asphalt break up in RTL looking east.			
Photo 30 :	Span 2 bay 5 over RTL shielding with corrosion hole looking south.			
Photo 31 :	Northbound north approach with patches and cracking looking east.			
Photo 32 :	Southbound north approach looking east.			
Photo 33 :	Northeast approach sidewalk settlement.			
Photo 34 :	Girder 5 east face section loss hole at south abutment.			
Photo 35 :	Girder 7 east face and support corrosion/section loss hole at south abutment.			
Photo 36 :	Girder 7 east face section loss hole at south abutment.			
Photo 37 :	Girder 7 east face section loss hole at south abutment close up.			
Photo 38 :	Girder 9 east face section loss hole at south abutment.			
Photo 39 :	Girder 10 east face section loss hole at south abutment.			
Photo 40 :	Girder 12 east face top flange surface corrosion looking north.			
Photo 41 :	Girder 9 to 10 support at south abutment twisted to the west at Girder 9.			
Photo 42 :	Girder 11 to 12 support at south abutment section loss and bent down plate at Girder 11.			
Photo 43 :	Girder 1 bearing typical rusting at the south abutment.			
Photo 44 :	Girder 2 bearing at pier overall in good condition.			
Photo 45 :	Girder 3 bent anchor bolt at south abutment.			
Photo 46 :	Span 1 bay 1 6th utility from pier missing bolts at Girder 2 looking south.			
Photo 47 :	Span 1 bay 11 utility support 100% corrosion at south abutment.			

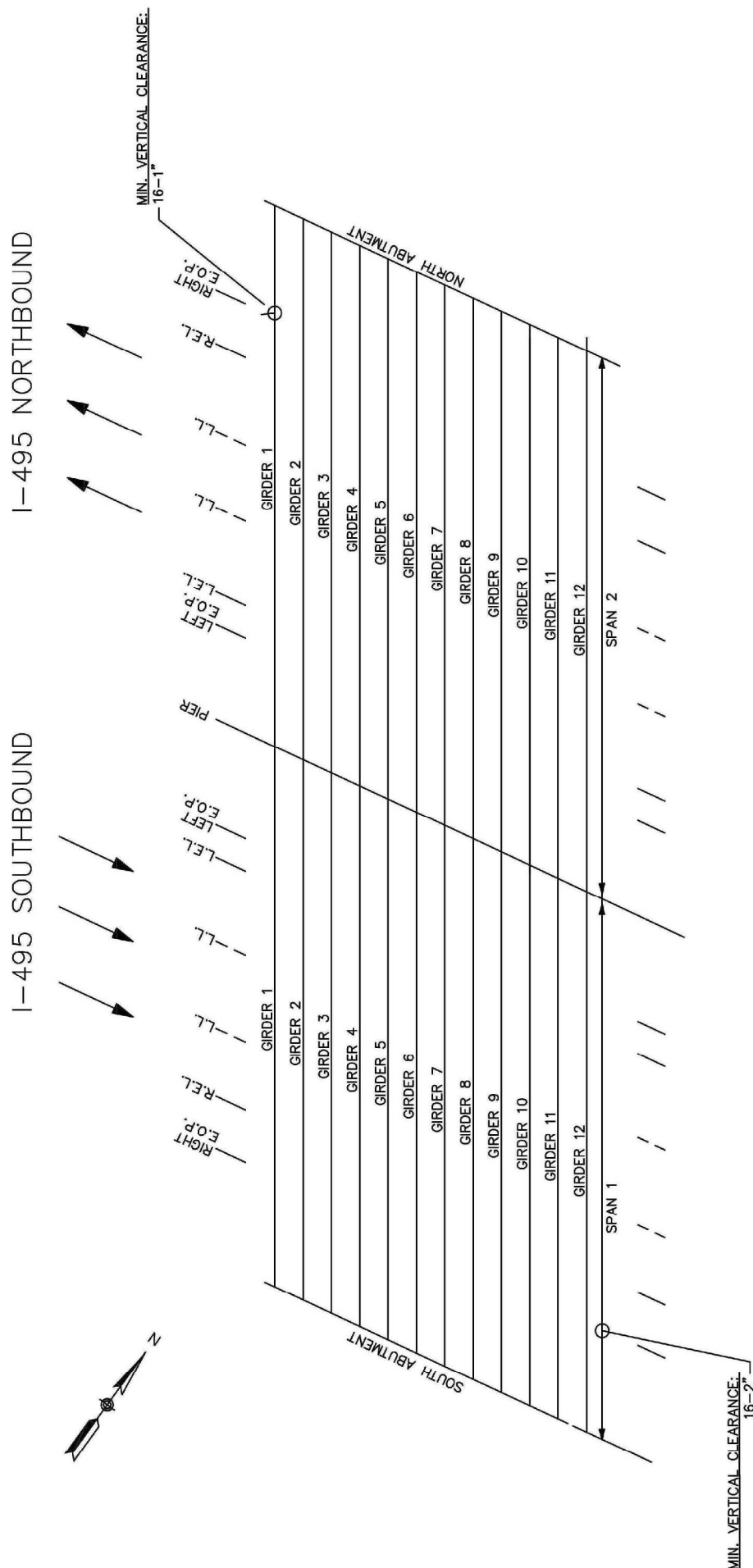
CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
TAUNTON	3YF	T-01-058	T01058-3YF-DOT-NBI	DEC 12, 2024

REMARKS

Photo 48 : Span 1 bay 11 support from Girder 11 to 12 at pier section loss looking north.
Photo 49 : South abutment bay 2 bridge seat debris behind Girder 3.
Photo 50 : South abutment bay 5 bridge seat debris behind Girder 6 covering bearing.
Photo 51 : South abutment bay 1 backwall cracking, staining and spalling with exposed rebar.
Photo 52 : North abutment west end backwall spalling and cracking.
Photo 53 : North abutment overview with cracking and staining looking west.
Photo 54 : South abutment west end cracking and spalling.
Photo 55 : South abutment under bay 4 cracking with staining.
Photo 56 : North abutment west end cracking and staining.

TY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
AUNTON	3YF	T-01-058	T01058-3YF-DOT-NBI	DEC 12, 2024

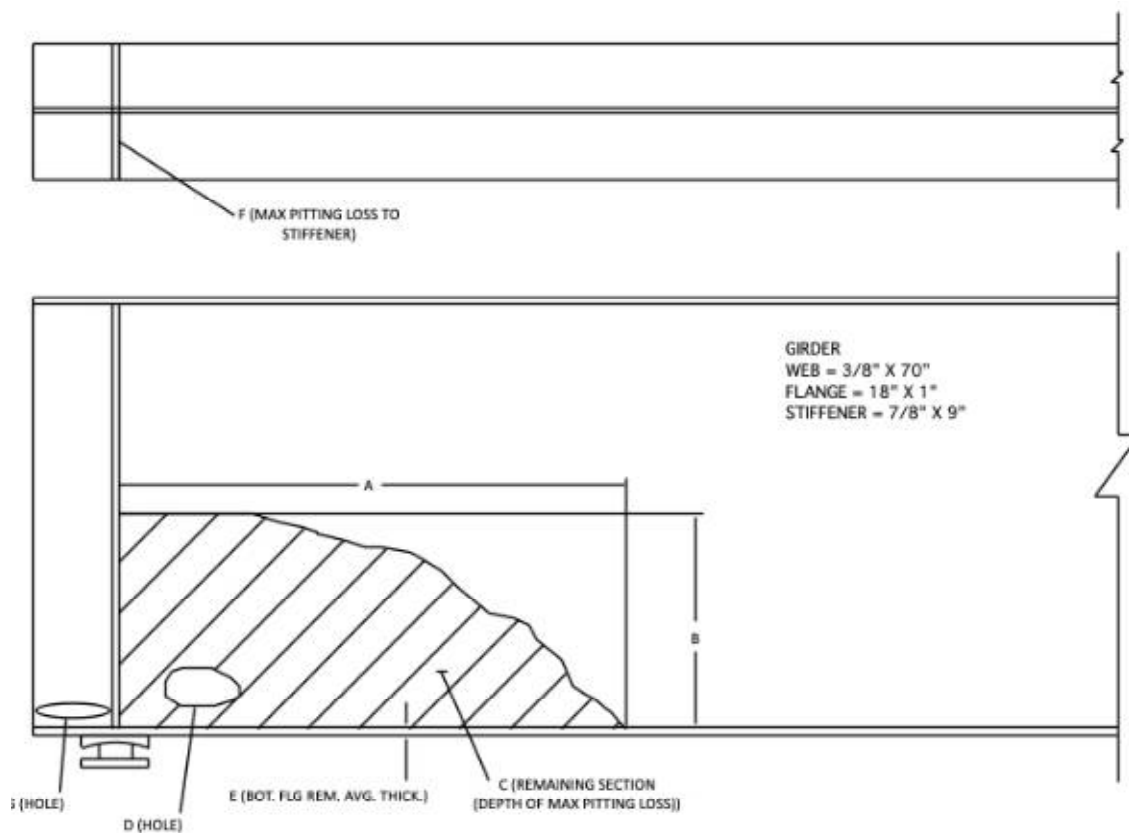
SKETCHES



Sketch 1: Framing Plan, not to scale

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8.-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

SKETCHES



GIRDER LOSSES AT SOUTH ABUTMENT
NOT TO SCALE

 **CHANGES SINCE LAST INSPECTION**

Girder #	A	B	C	D	E	F	G
1	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-
4	5"	2"	0.25" (1/8")	-	-	-	-
5	24"	3"	0.31 (1/16")	1" x 1/2"	5/16"	-	-
6	-	-	-	-	-	-	-
7	24"	4"	0.25" (1/8")	7" x 1-1/2"	1/4"	7" H x 3/8"	FL x 1/2" H
8	-	-	-	-	-	-	-
9	24"	3"	0.31 (1/16")	3-1/2" x 3/4"	1/4"	3-1/2" x 3/16"	-
10	12"	4"	0.31 (1/16")	-	5/16"	3" x 1/8"	11" x 1"
11	12"	4"	0.25" (1/8")	2" x 1-1/2"	5/16"	7" x 1/4"	-
12	-	-	-	-	-	-	-

Sketch 2: Girder losses at South Abutment

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8.-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS

Photo 1: Span 2 bay 10 heavy pigeon presence at the north abutment, bay 11 similar.



Photo 2: Span 1 bay 4 over median unsecured timber boards, removed by inspection team at inspection.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8.-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS

Photo 3: Northbound LTL patched looking north.



Photo 4: Northbound span 1 LTL patched looking south.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8.-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS

Photo 5: Northbound lane span 1 RTL patched pothole looking south at pier.



Photo 6: Southbound general wearing surface with patched RTL looking south.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS



Photo 7: Northbound lane span 2, left turn lane settlement and heaving looking south.



Photo 8: Span 1 bay 5 Sip corrosion over median slope looking south.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS

Photo 9: Span 1 bay 11 over median slope utility SIP corrosion looking north.



Photo 10: Span 1 bay 11 over median slope utility SIP corrosion looking north close up.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8.-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS

Photo 11: Span 2 bay 5 over RTL SIP corrosion and spalling with exposed rebar looking south.



Photo 12: Span 2 bay 5 over BDL SIP corrosion looking north.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8.-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS

Photo 13: Span 1 bay 6 minor SIP corrosion around deck drains at south abutment.



Photo 14: Span 1 bay 7 SIP corrosion around deck drains.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8.-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS

Photo 15: Span 1 bay 6 Sip corrosion over median slope looking south.



Photo 16: Span 2 bay 5 SIP corrosion over median slope/LTL looking north.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8.-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS



Photo 17: Span 2 bay 11 over BDL heavy pigeon presence and SIP corrosion above utility looking north.



Photo 18: Median with transverse cracking throughout looking south.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8.-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS



Photo 19: West safetywalk spalling/scaling with debris throughout looking south.



Photo 20: Span 2 bay 11 utility disconnected over median slope looking north.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8.-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS

Photo 21: Span 1 bay 11 over median slope/LTL disconnected utility conduit looking south.



Photo 22: Southbound north joint with cracking uneven seal placement looking east.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8.-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS

Photo 23: Northbound south joint with cracking uneven seal placement looking east.



Photo 24: Northbound north joint with depressed and failed seal looking west.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS

Photo 25: Northbound north joint failed seal in left turn lane looking west.



Photo 26: Northbound north joint failed seal in RTL looking west.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8.-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS

Photo 27: Northbound north joint failed seal looking east.



Photo 28: Southbound south joint with asphalt break up and settlement looking east.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8.-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS

Photo 29: Southbound south joint close up asphalt break up in RTL looking east.



Photo 30: Span 2 bay 5 over RTL shielding with corrosion hole looking south.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS

Photo 31: Northbound north approach with patches and cracking looking east.



Photo 32: Southbound north approach looking east.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS

Photo 33: Northeast approach sidewalk settlement.



Photo 34: Girder 5 east face section loss hole at south abutment.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS

Photo 35: Girder 7 east face and support corrosion/section loss hole at south abutment.



Photo 36: Girder 7 east face section loss hole at south abutment.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8.-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS

Photo 37: Girder 7 east face section loss hole at south abutment close up.



Photo 38: Girder 9 east face section loss hole at south abutment.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8.-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS

Photo 39: Girder 10 east face section loss hole at south abutment.



Photo 40: Girder 12 east face top flange surface corrosion looking north.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS



Photo 41: Girder 9 to 10 support at south abutment twisted to the west at Girder 9.



Photo 42: Girder 11 to 12 support at south abutment section loss and bent down plate at Girder 11.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8.-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS

Photo 43: Girder 1 bearing typical rusting at the south abutment.



Photo 44: Girder 2 bearing at pier overall in good condition.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS

Photo 45: Girder 3 bent anchor bolt at south abutment.



Photo 46: Span 1 bay 1 6th utility from pier missing bolts at Girder 2 looking south.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS

Photo 47: Span 1 bay 11 utility support 100% corrosion at south abutment.



Photo 48: Span 1 bay 11 support from Girder 11 to 12 at pier section loss looking north.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS

Photo 49: South abutment bay 2 bridge seat debris behind Girder 3.



Photo 50: South abutment bay 5 bridge seat debris behind Girder 6 covering bearing.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8.-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS

Photo 51: South abutment bay 1 backwall cracking, staining and spalling with exposed rebar.



Photo 52: North abutment west end backwall spalling and cracking.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8.-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS

Photo 53: North abutment overview with cracking and staining looking west.



Photo 54: South abutment west end cracking and spalling.

CITY/TOWN TAUNTON	B.I.N. 3YF	BR. DEPT. NO. T-01-058	8.-STRUCTURE NO. T01058-3YF-DOT-NBI	INSPECTION DATE DEC 12, 2024

PHOTOS

Photo 55: South abutment under bay 4 cracking with staining.



Photo 56: North abutment west end cracking and staining.

Report Date: May 29, 2025

HON. RUDOLPH H. DESILVA

State Information				Classification				Code			
BDEPT#= T01058				Agency Br.No.				(112) NBIS Bridge Length Y			
Town= Taunton				L.O. MHD				(104) Highway System N			
B.I.N= 3YF				AASHTO= 076.3				(26) Functional Class - Urban Collector 17			
RANK= 2129 H.I.= 97.1 %				FHWA Select List= N (6/21/2017)				(100) Defense Highway 0			
Identification								(101) Parallel Structure N			
(8) Structure Number				T010583YFDOTNBI				(102) Direction of Traffic - 2-way traffic 2			
(5) Inventory Route				151000000				(103) Temporary Structure N			
(2) State Highway Department District				05				(105) Federal Lands Highways 0			
(3) County Code 005 (4) Place code				69170				(110) Designated National Network N			
(6) Features Intersected				I 495				(20) Toll - On free road 3			
(7) Facility Carried				HWY BAY ST				(21) Maintain - State Highway Agency 01			
(9) Location				.4 MI E OF NORTON T.L.				(22) Owner - State Highway Agency 01			
(11) Kilometerpoint				0000.000				(37) Historical Significance built after 1949 presumed to be not eligit Z			
(12) Base Highway Network				N				Condition Code			
(13) LRS Inventory Route & Subroute				000000000000				(58) Deck 5			
(16) Latitude				41 DEG 57 MIN 44.79 SEC				(59) Superstructure 5			
(17) Longitude				71 DEG 07 MIN 24.42 SEC				(60) Substructure 6			
(98) Border Bridge State Code				Share %				(61) Channel & Channel Protection N			
(99) Border Bridge Structure No. #								(62) Culverts N			
Structure Type and Material								Load Rating and Posting Code			
(43) Structure Type Main: Steel continuous				Code 402				(31) Design Load - H 20=M 18 4			
Stringer/Girder				Jointless bridge type: Not applicable				(63) Operating Rating Method - Load Factor (LF) 1			
(44) Structure Type Appr:								(64) Operating Rating 77.3			
Other				Code 000				(65) Inventory Rating Method - Load Factor (LF) 1			
(45) Number of spans in main unit				002				(66) Inventory Rating 46.3			
(46) Number of approach spans				0000				(70) Bridge Posting 5			
(107) Deck Structure Type - Concrete Cast-in-Place				Code 1				(41) Structure - Open A			
(108) Wearing Surface / Protective System:								Appraisal Code			
A) Type of wearing surface - Bituminous				Code 6				(67) Structural Evaluation 5			
B) Type of membrane - Built-up				Code 1				(68) Deck Geometry 9			
C) Type of deck protection - None				Code 0				(69) Underclearances, vert. and horiz. 3			
Age and Service								(71) Waterway adequacy N			
(27) Year Built				1980				(72) Approach Roadway Alignment 8			
(106) Year Reconstructed				0000				(36) Traffic Safety Features 0 0 0 N			
(42) Type of Service: On - Highway-Ped								(113) Scour Critical Bridges N			
Under - Highway				Code 51				Inspections			
(28) Lanes: On Structure 05 Under structure				06				(90) Inspection Date 12/12/24 (91) Frequency 24 MO			
(29) Average Daily Traffic				016571				(92) Critical Feature Inspection: (93) CFI DATE			
(30) Year of ADT 2024 (109) Truck ADT				09 %				(A) Fracture Critical Detail N 00 MO A) 00/00/00			
(19) Bypass, detour length				006 KM				(B) Underwater Inspection N 00 MO B) 00/00/00			
Geometric Data								(C) Other Special Inspection N 00 MO C) 00/00/00			
(48) Length of maximum span				0036.0 M				(*) Other Inspection (maint. request) N 00 MO *) 06/29/13			
(49) Structure Length				00074.4 M				(*) Closed Bridge N 00 MO *) 00/00/00			
(50) Curb or sidewalk: Left 00.2 M Right				01.5 M				(*) UW Special Inspection N 00 MO *) 00/00/00			
(51) Bridge Roadway Width Curb to Curb				025.8 M				(*) Damage Inspection MO *) 00/00/00			
(52) Deck Width Out to Out				028.2 M				Rating Loads			
(32) Approach Roadway Width (w/shoulders)				025.9 M				Report Date 08/01/10 H20 Type 3 Type 3S2 Type HS			
(33) Bridge Median - Closed median (no barrier)				Code 2				Operating 44.0 81.0 90.0 79.0			
(34) Skew 43 DEG (35) Structure Flared				N				Inventory 27.0 42.0 43.0 42.0			
(10) Inventory Route MIN Vert Clear				99.99 M				Field Posting			
(47) Inventory Route Total Horiz Clear				25.8 M				Status LEGAL Posting Date 09/20/10			
(53) Min Vert Clear Over Bridge Rdwy				99.99 M				2 Axle 3 Axle 5 Axle Single			
(54) Min Vert Underclear ref H				04.90 M				Actual			
(55) Min Lat Underclear RT ref H				00.0 M				Recommended			
(56) Min Lat Underclear LT				13.4 M				Missing Signs N			
Navigation Data								Misc.			
(38) Navigation Control - Not applicable, no waterway				Code N				Bridge Name HON. RUDOLPH H. DESILVA			
(111) Pier Protection				Code				Y Anti-missile fence N Acrow Panel N Jointless Bridge			
(39) Navigation Vertical Clearance				000.0 M				Freeze/Thaw 3 : No Deteriorated concrete; No known problematic history			
(116) Vert-lift Bridge Nav Min Vert Clear				M				# Stairs On/Adjacent 0 Stair Owner(s)			
(40) Navigation Horizontal Clearance				0000.0 M				Accessibility (Needed/Used)			
								Y / Y Liftbucket N / N Rigging _ / _ Other			
								P / N Ladder N / N Staging			
								N / N Boat Y / Y Traffic Control			
								N / N Wader N / N RR Flagperson Inspection Hours: 030			
								Y / Y Police			

National Bridge Element Inspection

BDEPT# **T-01-058**Date **12/12/2024**B.I.N. **3YF**District Bridge Inspection Eng'r **Grant Simpson**Item 8 **T01058-3YF-DOT-NBI**Inspecting Agency **Mass. Highway Dept.**Span Group **1**Team Leader **Marquis Marshall**Town **Taunton**Team **Patrick Riendeau, Nicholas L.**District **5**Member(s) **Eichman**

El #	Element Name	Units	Env.	Total Q.	% or Q	State 1	State 2	State 3	State 4
12	Re Concrete Deck	sq feet	2	30,400.000	☐ %	25,300.000	4,600.000	500.000	
Notes :									
> 1080	Delamination/Spall/Patched Area	sq feet	2	3,100.000	☐ %		3,000.000	100.000	
Notes : Assume 10% accounting for all minor spalling and SIP deficiencies.									
> 1090	Exposed Rebar	sq feet	2	400.000	☐ %			400.000	
Notes : 1% assumes all exposed rebar from spalls noted during inspection.									
> 1130	Cracking (RC and Other)	sq feet	2	1,600.000	☐ %		1,600.000		
Notes : For cracking at the overangs, assumes additional cracking continues but is hidden behind SIP forms.									
> 510	Wearing Surfaces	sq feet	2	27,600.000	☐ %	26,750.000	850.000		
Notes :									
> > 3230	Effectiveness (Wearing Surface)	sq feet	2	850.000	☐ %		850.000		
Notes :									
107	Steel Opn Girder/Beam	feet	2	3,782.000	☐ %	3,749.000	33.000		
Notes :									
> 1000	Corrosion	feet	2	28.000	☐ %		28.000		
Notes : For section losses noted during the inspection.									
> 1020	Connection	feet	2	5.000	☐ %		5.000		
Notes :									
> 515	Steel Protective Coating	sq feet	2	70,240.000	☐ %	4,640.000	57,000.000	8,600.000	
Notes :									
> > 3430	Ox Flm/Txt Adhr(Stl Prot Coat)	sq feet	2	70,240.000	☐ %	4,640.000	57,000.000	8,600.000	
Notes :									
107	Steel Opn Girder/Beam	feet	3	120.000	☐ %	109.000		11.000	
Notes :									

National Bridge Element Inspection

BDEPT# **T-01-058**Date **12/12/2024**B.I.N. **3YF**District Bridge Inspection Eng'r **Grant Simpson**Item 8 **T01058-3YF-DOT-NBI**Inspecting Agency **Mass. Highway Dept.**Span Group **1**Team Leader **Marquis Marshall**Town **Taunton**Team **Patrick Riendeau, Nicholas L.**Member(s) **Eichman**District **5**

El #	Element Name	Units	Env.	Total Q.	% or Q	State 1	State 2	State 3	State 4
> 1000	Corrosion	feet	3	11.000	☐ %			11.000	
Notes : For holes and corrosion noted in Sketch 2 of the report.									
> 515	Steel Protective Coating	sq feet	3	2,160.000	☐ %	1,080.000	756.000	324.000	
Notes :									
> > 3440	Eff (Stl Protect Coat)	sq feet	3	2,160.000	☐ %	1,080.000	756.000	324.000	
Notes :									
210	Re Conc Pier Wall	feet	2	126.000	☐ %	114.000	10.000	2.000	
Notes : Minor cracking and 1 pedestal spall.									
> 1090	Exposed Rebar	feet	2	2.000	☐ %			2.000	
Notes : Pedestal spall.									
> 1130	Cracking (RC and Other)	feet	2	10.000	☐ %		10.000		
Notes :									
215	Re Conc Abutment	feet	3	252.000	☐ %	155.000	67.000	30.000	
Notes : There is extensive cracking with efflorescence. Spalls beneath bearings.									
> 1080	Delamination/Spall/Patched Area	feet	3	9.000	☐ %		4.000	5.000	
Notes :									
> 1120	Efflorescence/Rust Staining	feet	3	25.000	☐ %			25.000	
Notes :									
> 1130	Cracking (RC and Other)	feet	3	63.000	☐ %		63.000		
Notes :									
301	Pourable Joint Seal	feet	3	187.000	☐ %	53.000	20.000	46.000	68.000
Notes :									
> 2310	Leakage	feet	3	16.000	☐ %			16.000	
Notes : Two areas where active leakage is noted (each 8' long approx.).									

National Bridge Element Inspection

BDEPT# **T-01-058**Date **12/12/2024**B.I.N. **3YF**District Bridge Inspection Eng'r **Grant Simpson**Item 8 **T01058-3YF-DOT-NBI**Inspecting Agency **Mass. Highway Dept.**Span Group **1**Team Leader **Marquis Marshall**Town **Taunton**Team **Patrick Riendeau, Nicholas L.**Member(s) **Eichman**District **5**

El #	Element Name	Units	Env.	Total Q.	% or Q	State 1	State 2	State 3	State 4
> 2320	<i>Seal Adhesion</i>	feet	3	25.000	☐ %			25.000	
Notes :									
> 2350	<i>Debris Impaction</i>	feet	3	78.000	☐ %		5.000	5.000	68.000
Notes :									
> 2360	<i>Adjacent Deck or Header</i>	feet	3	15.000	☐ %		15.000		
Notes :									
311	Moveable Bearing	each	3	24	☐ %	20	1	3	
Notes :									
> 1020	<i>Connection</i>	each	3	1	☐ %		1		
Notes : 2 bearings have tilted anchor bolts (1 of 2 also has loss of bearing area so is recorded there).									
> 2240	<i>Loss of Bearing Area</i>	each	3	3	☐ %			3	
Notes :									
> 515	Steel Protective Coating	sq feet	3	72.000	☐ %		72.000		
Notes : Minor rusting throughout.									
> > 3440	<i>Eff (Stl Protect Coat)</i>	sq feet	3	72.000	☐ %		72.000		
Notes :									
313	Fixed Bearing	each	2	12	☐ %	10	2		
Notes :									
> 1020	<i>Connection</i>	each	2	2	☐ %		2		
Notes : 2 bearings with minor gaps between nut and bolt washer.									
> 515	Steel Protective Coating	sq feet	2	36.000	☐ %		36.000		
Notes :									
> > 3440	<i>Eff (Stl Protect Coat)</i>	sq feet	2	36.000	☐ %		36.000		
Notes : Minor rust noted throughout.									

National Bridge Element Inspection

BDEPT# **T-01-058**Date **12/12/2024**B.I.N. **3YF**District Bridge Inspection Eng'r **Grant Simpson**Item 8 **T01058-3YF-DOT-NBI**Inspecting Agency **Mass. Highway Dept.**Span Group **1**Team Leader **Marquis Marshall**Town **Taunton**Team **Patrick Riendeau, Nicholas L.**District **5**Member(s) **Eichman**

El #	Element Name	Units	Env.	Total Q.	% or Q	State 1	State 2	State 3	State 4
330	Metal Bridge Railing	feet	2	650.000	☐ %	610.000	40.000		
Notes :									
> 7000	<i>Damage</i>	feet	2	40.000	☐ %		40.000		
Notes : For minor scrapes throughout, 5% of railing length.									

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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

TAUNTONFor: **Bridge Preservation, T-01-058, Bay Street over Interstate 495**

COMMONWEALTH OF MASSACHUSETTS

LOCATION

The work referred to herein is in the City of TAUNTON in Bristol 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:

Bay Street**Beginning – Station 14+50.00 +/-****Bridge T-01-058****Ending –Station 25+07.84 +/-**

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 **730 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 # 613752		Contract # 132093		
Location : TAUNTON				
Description : Bridge Preservation, T-01-058 (3YF), Bay Street over Interstate 495				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
102.	0.12	SELECTIVE CLEARING AND THINNING AT _____ PER ACRE		
107.491	2	GALVANIZED, REMOVABLE SLIDING STEEL PLATE FOR WALK AT _____ EACH		
120.1	350	UNCLASSIFIED EXCAVATION AT _____ PER CUBIC YARD		
127.1	45	REINFORCED CONCRETE EXCAVATION AT _____ PER CUBIC YARD		
127.4	465	REINFORCED CONCRETE DECK EXCAVATION (FULL DEPTH) AT _____ PER SQUARE YARD		
127.42	60	REINFORCED CONCRETE DECK EXCAVATION AT JOINTS AT _____ PER CUBIC YARD		
129.12	3,200	HYDRO-EXCAVATION OF BRIDGE DECK (PARTIAL DEPTH) AT _____ PER SQUARE YARD		
129.6	120	BRIDGE PAVEMENT EXCAVATION AT _____ PER SQUARE YARD		
151.01	130	GRAVEL BORROW - TYPE C AT _____ PER CUBIC YARD		

Project # 613752		Contract # 132093		
Location : TAUNTON				
Description : Bridge Preservation, T-01-058 (3YF), Bay Street over Interstate 495				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
170.	260	FINE GRADING AND COMPACTING - SUBGRADE AREA AT _____ PER SQUARE YARD		
220.	5	DRAINAGE STRUCTURE ADJUSTED AT _____ EACH		
222.1	2	FRAME AND GRATE - MASSDOT CASCADE TYPE AT _____ EACH		
223.2	2	FRAME AND GRATE (OR COVER) REMOVED AND DISCARDED AT _____ EACH		
415.1	3,000	PAVEMENT STANDARD MILLING AT _____ PER SQUARE YARD		
415.11	3,170	MILLING OF CONCRETE BRIDGE (PARTIAL DEPTH) AT _____ PER SQUARE YARD		
450.231	270	SUPERPAVE SURFACE COURSE - 12.5 POLYMER (SSC - 12.5 - P) AT _____ PER TON		
450.711	14	SUPERPAVE BRIDGE PROTECTIVE COURSE - 12.5POLYMER (SPC-B - 12.5 - P) AT _____ PER TON		
451.	100	HMA FOR PATCHING AT _____ PER TON		

Project # 613752		Contract # 132093		
Location : TAUNTON				
Description : Bridge Preservation, T-01-058 (3YF), Bay Street over Interstate 495				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
452.	220	ASPHALT EMULSION FOR TACK COAT AT _____ PER GALLON		
453.	1,255	HMA JOINT ADHESIVE AT _____ PER FOOT		
472.	250	TEMPORARY ASPHALT PATCHING AT _____ PER TON		
482.31	230	SAWING AND SEALING JOINTS IN ASPHALT PAVEMENT AT BRIDGES AT _____ PER FOOT		
511.1	85	GRANITE EDGING TYPE SB - STRAIGHT AT _____ PER FOOT		
512.1	20	GRANITE EDGING TYPE SB (RADIUS 10 FEET OR LESS) AT _____ PER FOOT		
580.	20	CURB REMOVED AND RESET AT _____ PER FOOT		
583.	765	EDGING REMOVED AND RESET AT _____ PER FOOT		
594.	45	CURB REMOVED AND DISCARDED AT _____ PER FOOT		

Project # 613752		Contract # 132093		
Location : TAUNTON				
Description : Bridge Preservation, T-01-058 (3YF), Bay Street over Interstate 495				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
597.	85	EDGING REMOVED AND DISCARDED AT _____ PER FOOT		
628.314	2	TEMPORARY IMPACT ATTENUATOR, REDIRECTIVE, TL-2 AT _____ EACH		
628.4	2	TEMPORARY IMPACT ATTENUATOR, REMOVED AND RESET AT _____ EACH		
657.	550	TEMPORARY FENCE AT _____ PER FOOT		
697.1	8	SILT SACK AT _____ EACH		
701.	240	CEMENT CONCRETE SIDEWALK AT _____ PER SQUARE YARD		
722.3	1	SCHEDULE OF OPERATIONS (TYPE C) - FIXED PRICE \$36500 AT Thirty Six Thousand Five Hundred Dollars LUMP SUM	\$36,500.00	\$36,500.00
740.	24	ENGINEER'S FIELD OFFICE AND EQUIPMENT (TYPE A) AT _____ PER MONTH		
748.	1	MOBILIZATION AT _____ LUMP SUM		

Project # 613752		Contract # 132093		
Location : TAUNTON				
Description : Bridge Preservation, T-01-058 (3YF), Bay Street over Interstate 495				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
811.35	2	PULL BOX ADJUSTED AT _____ EACH		
819.831	600	WIRE LOOP INSTALLED IN ROADWAY AT _____ PER FOOT		
850.41	64	ROADWAY FLAGGER AT _____ PER HOUR		
851.1	100	TRAFFIC CONES FOR TRAFFIC MANAGEMENT AT _____ PER DAY		
852.	1,025	SAFETY SIGNING FOR TRAFFIC MANAGEMENT AT _____ PER SQUARE FOOT		
852.11	600	TEMPORARY PEDESTRIAN BARRICADE AT _____ PER FOOT		
852.12	2	TEMPORARY PEDESTRIAN CURB RAMP AT _____ EACH		
853.1	4	PORTABLE BREAKAWAY BARRICADE TYPE III AT _____ EACH		
853.2	950	TEMPORARY BARRIER (TL-2) AT _____ PER FOOT		

Project # 613752		Contract # 132093		
Location : TAUNTON				
Description : Bridge Preservation, T-01-058 (3YF), Bay Street over Interstate 495				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
853.21	1,100	TEMPORARY BARRIER REMOVED AND RESET AT _____ PER FOOT		
853.403	65	TRUCK MOUNTED ATTENUATOR AT _____ PER DAY		
853.8	100	TEMPORARY ILLUMINATION FOR WORK ZONE AT _____ PER DAY		
854.016	29,000	TEMPORARY PAVING MARKINGS - 6 INCH (PAINTED) AT _____ PER FOOT		
854.036	9,500	TEMPORARY PAVING MARKINGS - 6 INCH (TAPE) AT _____ PER FOOT		
854.1	2,450	PAVEMENT MARKING REMOVAL AT _____ PER SQUARE FOOT		
854.5	15	RAISED PAVEMENT MARKER REMOVAL AT _____ EACH		
854.6	55	TEMPORARY PORTABLE RUMBLE STRIP AT _____ PER DAY		
856.	80	ARROW BOARD AT _____ PER DAY		

Project # 613752		Contract # 132093		
Location : TAUNTON				
Description : Bridge Preservation, T-01-058 (3YF), Bay Street over Interstate 495				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
856.12	450	PORTABLE CHANGEABLE MESSAGE SIGN AT _____ PER DAY		
859.	11,000	REFLECTORIZED DRUM AT _____ PER DAY		
859.1	550	REFLECTORIZED DRUMS WITH SEQUENTIAL FLASHING WARNING LIGHTS AT _____ PER DAY		
862.506	1,900	6-IN. RECESSED WHITE LINE (MC, FD, WR) AT _____ PER FOOT		
862.512	335	12-IN. RECESSED WHITE LINE (MC, FD, WR) AT _____ PER FOOT		
863.506	730	6-IN. RECESSED YELLOW LINE (MC, FD, WR) AT _____ PER FOOT		
864.11	11	LEGENDS (PF) AT _____ EACH		
864.13	12	ARROWS (PF) AT _____ EACH		
866.612	20	12-IN. RECESSED WHITE LINE (PF, WR) AT _____ PER FOOT		

Project # 613752		Contract # 132093		
Location : TAUNTON				
Description : Bridge Preservation, T-01-058 (3YF), Bay Street over Interstate 495				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
866.706	1,375	6-IN. RECESSED WHITE LINE WITH BLACK CONTRAST (PF, WR) AT _____ PER FOOT		
867.706	840	6-IN. RECESSED YELLOW LINE WITH BLACK CONTRAST (PF, WR) AT _____ PER FOOT		
874.2	4	TRAFFIC SIGN REMOVED AND RESET AT _____ EACH		
904.3	195	5000 PSI, 3/4 INCH, 685 HP CEMENT CONCRETE AT _____ PER CUBIC YARD		
907.1	3,300	LATEX MODIFIED CONCRETE OVERLAYMENT AT _____ PER SQUARE YARD		
907.11	130	LATEX MODIFIED CONCRETE OVERLAYMENT, ADDITIONAL AT _____ PER CUBIC YARD		
910.1	21,300	STEEL REINFORCEMENT FOR STRUCTURES - EPOXY COATED AT _____ PER POUND		
913.3	2,225	CORING AND GROUTING DOWELS AT _____ EACH		
964.21	7,600	CONCRETE PROTECTIVE COATING AT _____ PER SQUARE FOOT		

Project # 613752		Contract # 132093		
Location : TAUNTON				
Description : Bridge Preservation, T-01-058 (3YF), Bay Street over Interstate 495				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
973.2	275	PRE-COMPRESSED JOINT SEAL AT _____ PER FOOT		
994.1	7,025	TEMPORARY PROTECTIVE SHIELDING AT _____ PER SQUARE FOOT		
Total Qty: 119,987.12				

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DOCUMENT B00842

SCHEDULE OF PARTICIPATION
BY MINORITY OR WOMEN BUSINESS ENTERPRISES (M/WBE)

MASSDOT PROJECT NUMBER: 613752PROJECT LOCATION: TAUNTON

DATE OF BID OPENING: _____

NAME OF PRIME BIDDER: _____

Name Address and Phone Number of M/WBE	Name of Activity	(a) M/WBE Contractor Activity Amount	(b) M/WBE Other Business Amount	(c) Total amount eligible for credit under rules in Section VIII of the Special Provisions
Total Bid Amount	TOTALS:	\$		\$
\$	M/WBE Percentage of Total bid:	%		%

Column (a) must be at least one-half of the M/WBE percentage goal.

SIGNATURE: _____ Date: _____ Tel No: _____

NAME AND TITLE (PRINT): _____

BIDDERS ARE CAUTIONED TO REVIEW DOCUMENT 00718 -- SPECIAL PROVISION FOR
PARTICIPATION BY MINORITY OR WOMEN BUSINESS ENTERPRISES AND SERVICE DISABLED
VETERAN OWNED BUSINESS ENTERPRISES.

*** END OF DOCUMENT ***

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DOCUMENT B00843

MINORITY OR WOMEN'S BUSINESS ENTERPRISE PARTICIPATION LETTER OF INTENT
PAGE 1 OF 2

MASSDOT PROJECT NUMBER: 613752

PROJECT LOCATION: TAUNTON

DATE OF BID OPENING:

FROM

(Minority or Women's Business Enterprise Company)

TO:

(Name of Prime Contractor)

1. My company is currently certified as an MBE or WBE by the Massachusetts Supplier Diversity Office, formerly known as the State Office of Minority and Women Business Assistance (SOMWBA). There have been no changes affecting the ownership, control or independence of my company since my last certification review.
2. If any such change occurs prior to my company's completion of this proposed work, I will give written notification to your firm and to the Massachusetts Department of Transportation (MassDOT).
3. (For contractor activity only.) My firm will provide to you, upon request, for the purpose of obtaining subcontractor approval from MassDOT; (1) a resume stating the qualifications and experience of the superintendent or foreperson who will supervise on site-work; (2) a list of equipment owned or leased by my firm for use on the project; (3) a list of all projects (public or private) which my firm is currently performing, is committed to perform, or intends to make a commitment to perform. I shall include, for each project, the names and telephone number of a contact person for the contracting organization, the dollar value of the work, a description of the work, and my firm's work schedule for the Project.
4. If you are awarded the Contract, my company intends to enter into an agreement with your firm to perform the items of work or other activity described on the following sheet for the prices indicated.
5. My firm has the ability to manage, supervise and perform the activity described on the following page.

M/WBE Authorized Signature

Date

MINORITY OR WOMEN'S BUSINESS ENTERPRISE PARTICIPATION LETTER OF INTENT
PAGE 2 OF 2MASSDOT PROJECT NUMBER: 613752PROJECT LOCATION: TAUNTON

DATE OF BID OPENING: _____

NAME OF PRIME BIDDER: _____

<u>Item number</u> if applicable	<u>Description of Activity</u> with notations such as Installation Only, Material Only, or Complete	<u>Quantity</u>	<u>Unit</u> <u>Price</u>	<u>Amount</u>
TOTAL AMOUNT:				

M/WBE COMPANY NAME: _____

M/WBE AUTHORIZED SIGNATURE: _____

NAME AND TITLE (PRINT): _____

TELEPHONE NUMBER: _____ FAX NUMBER: _____

*** END OF DOCUMENT ***

Rev'd 9/20/19

DOCUMENT B00846

M/WBE OR SDVOBE JOINT CHECK ARRANGEMENT APPROVAL FORM

*(to be submitted by Prime Contractor)*Contract No: 132093 Project No. 613752Location: TAUNTON Bid Opening Date: _____Project Description: Bridge Preservation, T-01-058, Bay Street over Interstate 495

We have received the attached request for the use of a joint check arrangement from _____, a M/WBE or SDVOBE on the above- referenced Contract and _____, a Material Supplier/Vendor for the subject Contract. The M/WBE or SDVOBE has complied with the requirements of Special Provision Document 00718. In particular, the M/WBE or SDVOBE 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 M/WBE or SDVOBE) for payment of sums due pursuant to invoices from the Supplier/Vendor and M/WBE or SDVOBE.

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 B00847

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 M/WBE or SDVOBE, 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 M/WBE or SDVOBE Venturer; (4) the commitment of management, supervisory and operative personnel employed by the M/WBE or SDVOBE 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, M/WBE or SDVOBE 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 ***