jb

COMMONWEALTH OF MASSACHUSETTS

massDOT
Massachusetts Department of Transportation
Highway Division

CONTRACT DOCUMENTS AND SPECIAL PROVISIONS

PROPOSAL NO.	613196-133292
P.V. =	$11,387,000.00
PLANS	NO

FOR

Bridge Preservation of 10 Bridges carrying I-95

in the Municipalities of

BURLINGTON-LYNNFIELD-WAKEFIELD-WOBURN

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

This Proposal to be opened and read: **TUESDAY, FEBRUARY 24, 2026 at 2:00 P.M.**

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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, FEBRUARY 24, 2026 at 2:00 P.M. **
BURLINGTON-LYNNFIELD-WAKEFIELD-WOBURN
Bridge Preservation of 10 Bridges carrying I-95

****Date Subject to Change**

PROJECT VALUE = $11,387,000.00

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 $625.00 per ton, Portland cement $425.13 per ton, diesel fuel $2.724 per gallon, and gasoline $2.152 per gallon, and Steel Base Price Index 377.1. 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: Phillip Eng, Interim MassDOT Secretary
Jonathan L. Gulliver, Undersecretary and Highway Administrator
SATURDAY, JANUARY 3, 2026

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, § 39O: 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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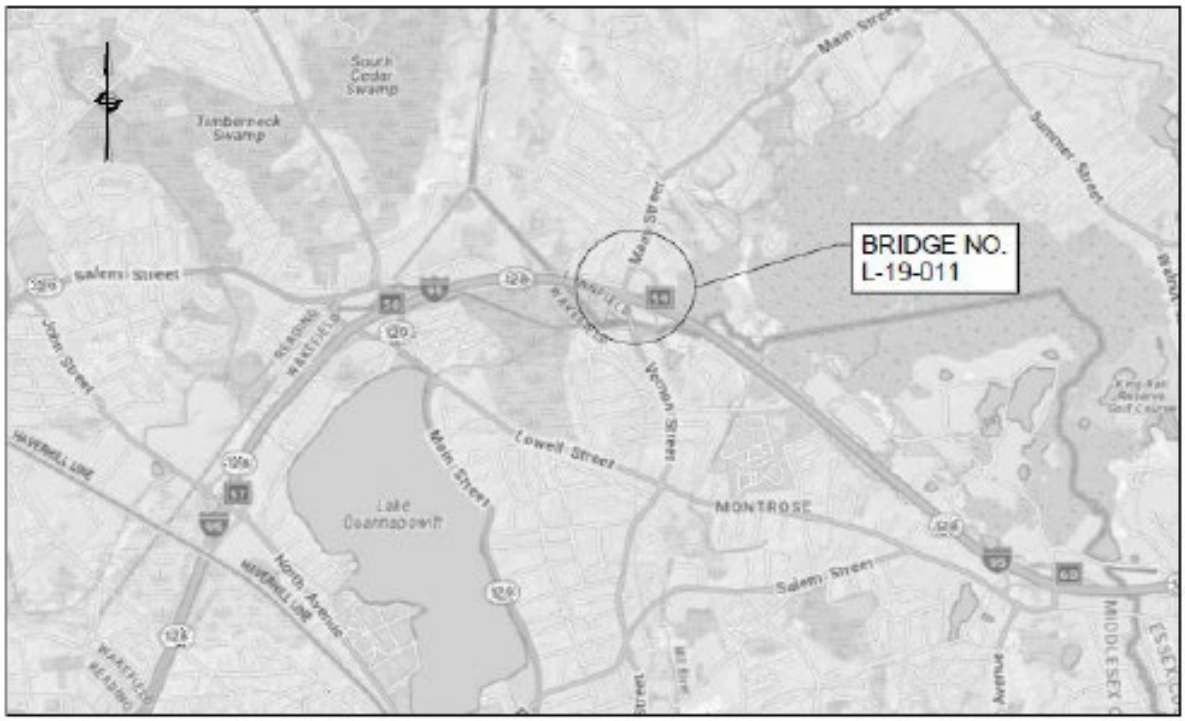
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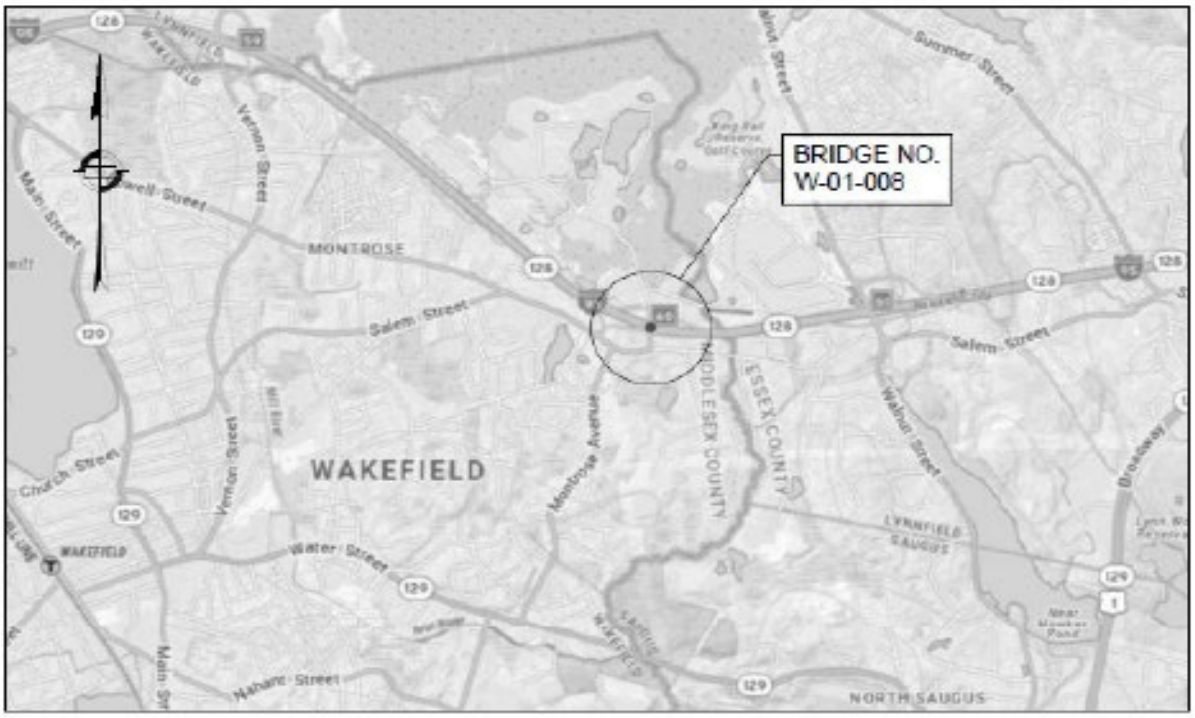
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DOCUMENT 00331

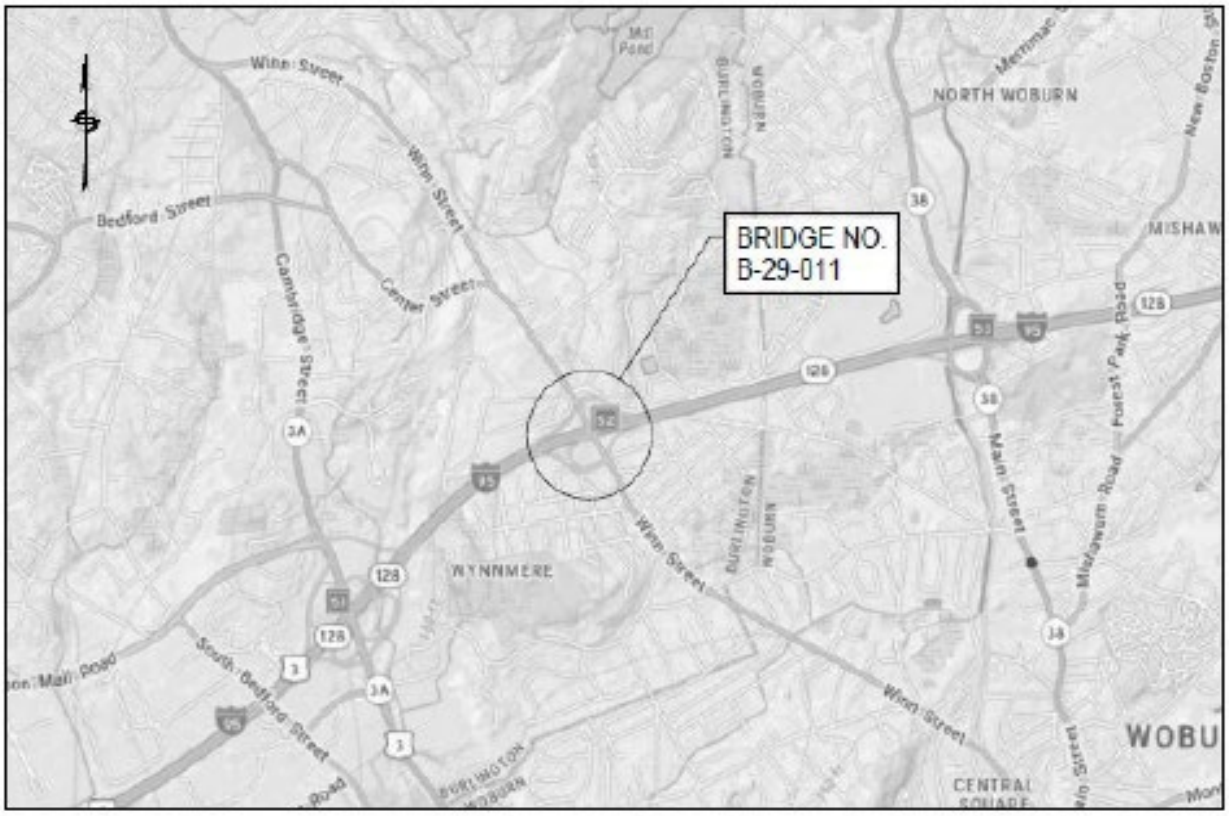
LOCUS MAPS

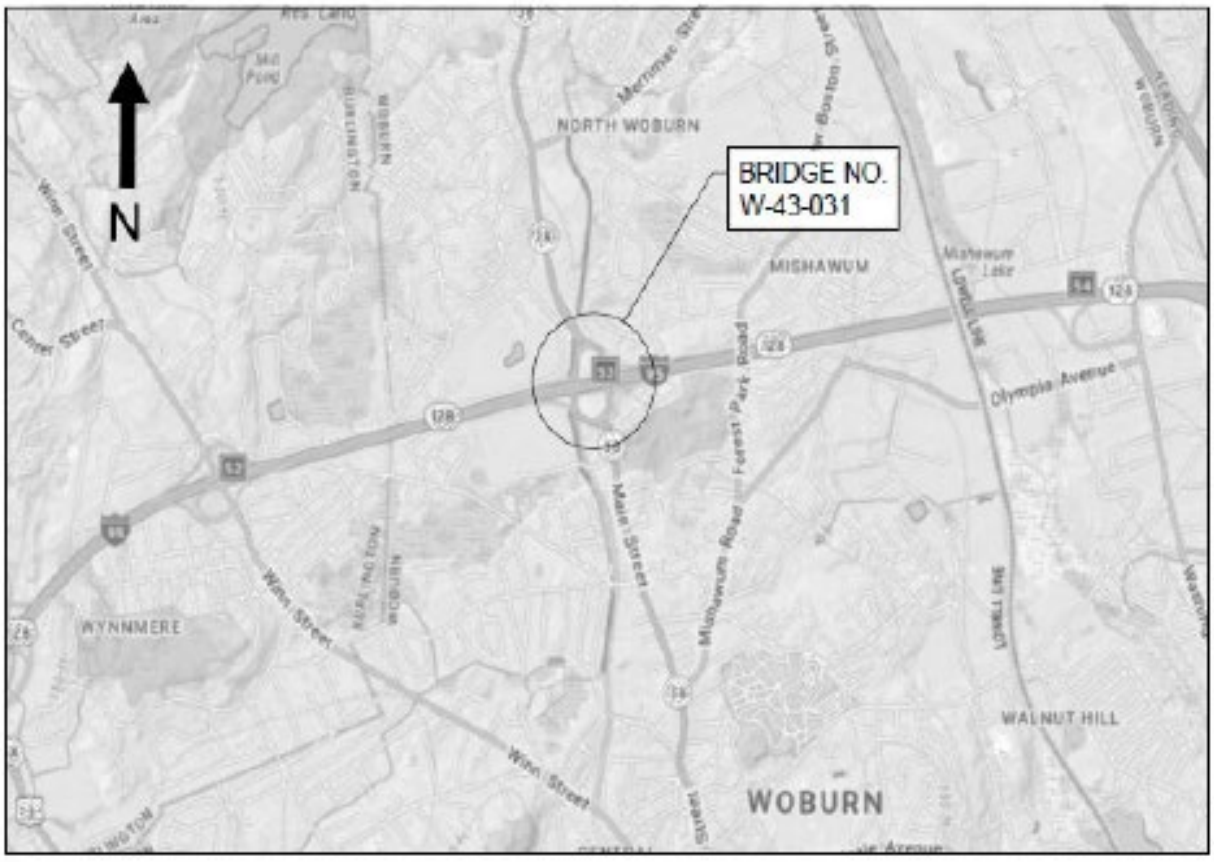
BURLINGTON-LYNNFIELD-WAKEFIELD-WOBURN
Bridge Preservation of 10 Bridges carrying I-95



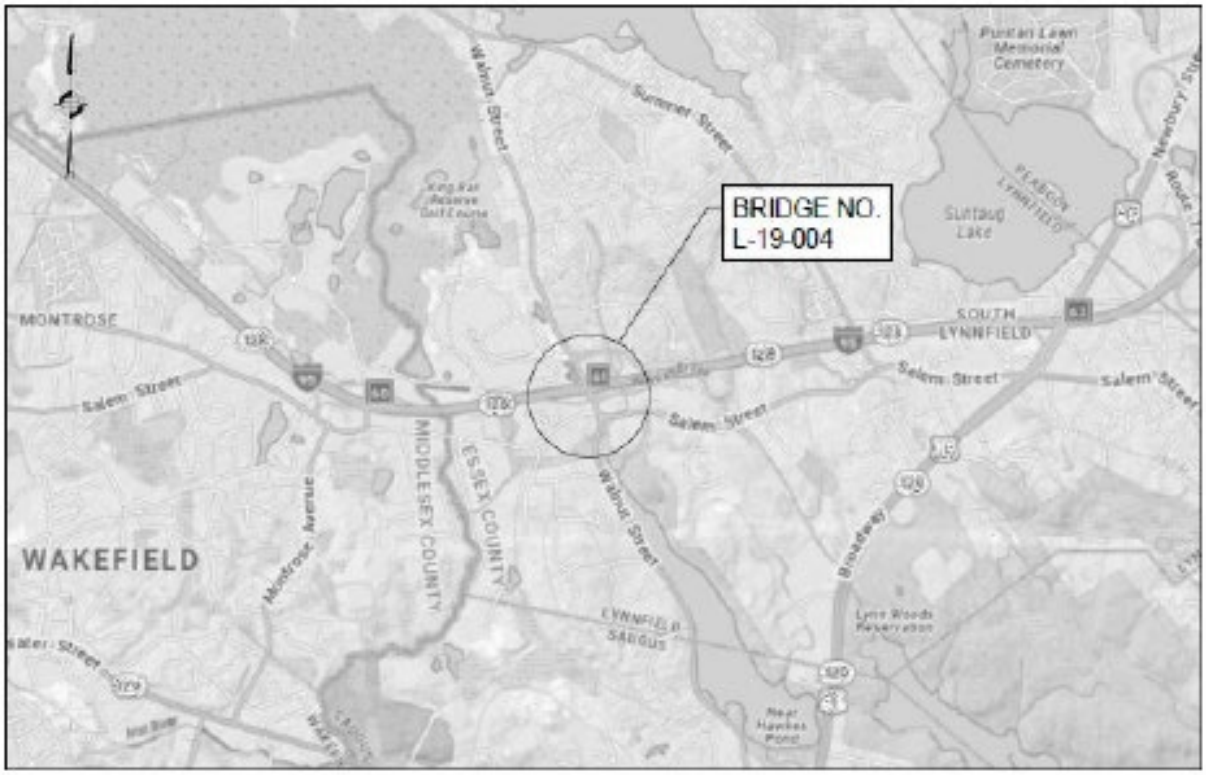


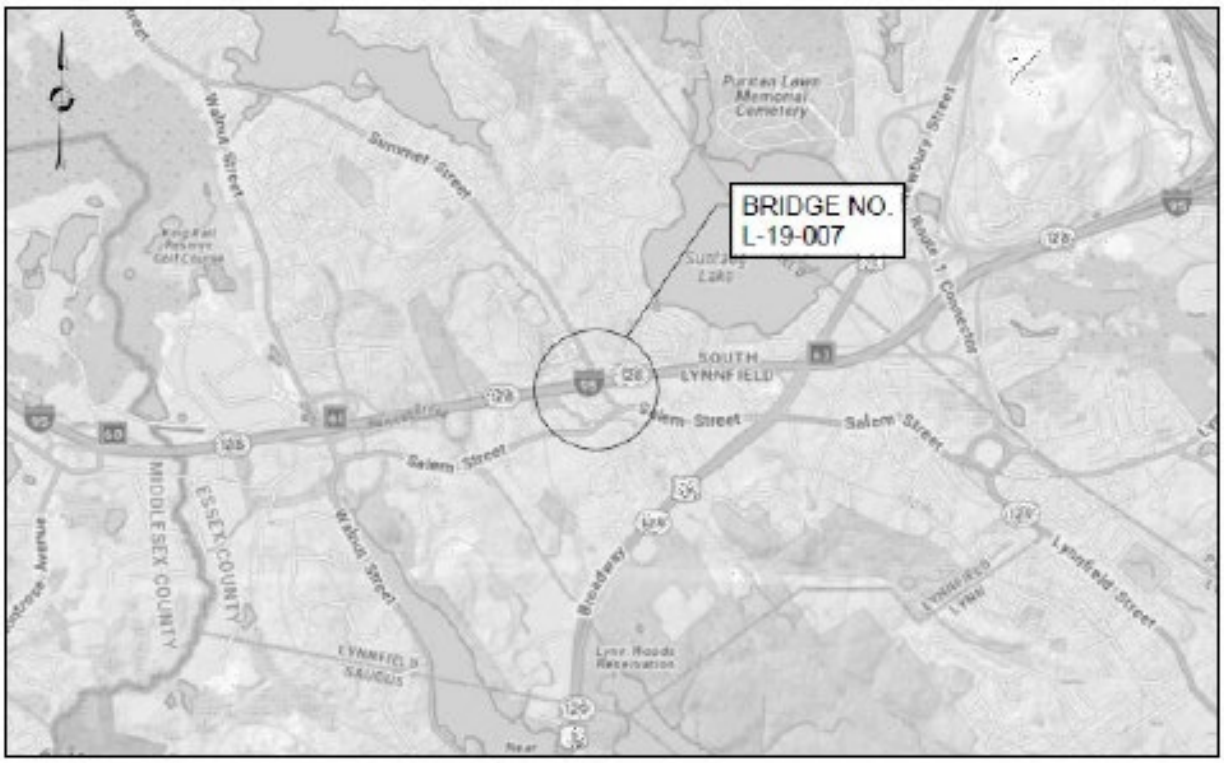
LOCUS MAPS (Continued)





LOCUS MAPS (Continued)





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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): _____

_____

_____

CONTRACTOR 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 – 9: _____

WORK NOT COMPLETED WITHIN SPECIFIED TIME: _____

Revised: 04/28/17

*** END OF DOCUMENT ***

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: _____

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WORK NOT COMPLETED WITHIN SPECIFIED TIME: _____

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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.

*** END OF DOCUMENT ***

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DOCUMENT 00715

SUPPLEMENTAL SPECIFICATIONS

SEPTEMBER 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 3.00: AWARD AND EXECUTION OF THE CONTRACT

Subsection 3.02: Award of Contract
Replace the third paragraph with the following:

The successful bidder will be notified by mail or otherwise that their bid has been accepted and that they have been awarded the Contract.

SECTION 7.00: LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

Subsection 7.01: Laws to be Observed
In paragraph 701.G Buy America Provisions change Federally-aid to Federal-aid.

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.
Replace this subsection with the following;

Subsection 7.22: Labor, Lodging, Board; Maximum Hours of Employment; Minimum Wage Rates; Payment of Wages; Keeping of Payroll Records

Every employee in public work shall lodge, board and trade where and with whom he elects; and no person or their agents or employees under contract with the commonwealth, a county, city or town, or with a department, board, commission or officer acting therefor, for the doing of public work shall directly or indirectly require, as a condition of employment therein, that the employee shall lodge, board or trade at a particular place or with a particular person. This section shall be made a part of the contract for such employment. (M.G.L. c. 149, § 25).

Every contract, except for the purchase of material or supplies, involving the employment of laborers, workers, mechanics, foremen or inspectors, to which the commonwealth or any county or any town, subject to section thirty, is a party, shall contain a stipulation that no laborer, worker, mechanic, foreman or inspector working within the commonwealth, in the employ of the contractor, sub-contractor or other person doing or contracting to do the whole or a part of the work contemplated by the contract, shall be required or permitted to work more than eight hours in any one day or more than forty-eight hours in any one week, or more than six days in any one week, except in cases of emergency, or, in case any town subject to section thirty-one is a party to such a contract, more than eight hours in any one day, except as aforesaid; provided, that in contracts entered into by the department of highways [a predecessor agency to MassDOT] for the construction or reconstruction of highways there may be inserted in said stipulation a provision that said department, or any contractor or sub-contractor for said department, may employ laborers, workers, mechanics, foreman and inspectors for more than eight hours in any one day in such construction or reconstruction when, in the opinion of the commissioner [currently defined in M.G.L. c. 149, § 1 as the director of the Department of Labor Standards], public necessity so requires. Every such contract not containing the aforesaid stipulation shall be null and void. (M.G.L. c. 149, § 34).

Attention of Bidders is called to M.G.L. c. 149, § 26-27H (the Prevailing Wage Law), requiring that the rate per hour of the wages paid to mechanics and apprentices, teamsters, chauffeurs and laborers in the construction of public works shall not be less than the rate or rates of wages to be determined by the director of the department of labor standards, and M.G.L. c. 149, § 148 requiring the weekly or bi-weekly payment of employees.

The Contractor shall furnish certified copies of any or all payrolls for the Contract, showing the name, address, and occupational classification of each employee on said works, and the hours worked by, and the wages paid to each such employee. Such payroll shall also include the rates paid for rented trucks or rental equipment of any kind used on the work. This requirement shall also apply to the work of any Subcontractor, having a Subcontract for any of the work performed on the project. Such records shall be kept in such manner as the Director of Labor Standards shall prescribe, and shall be open to inspection by the Engineer or any authorized representative of the Department of Labor Standards at any reasonable time and as often as may be necessary.

SECTION 8.00: PROSECUTION AND PROGRESS

Subsection 8.01: Subletting or Assignment of Contract

In the first bullet of the third paragraph replace the title of Subsection 7.22 Labor, Lodging, Board; Maximum Hours of Employment; Minimum Wage Rates; Payment of Wages; Keeping of Payroll Records

SECTION 9.00: MEASUREMENT AND PAYMENT

Subsection 9.03: Payment for Extra Work

Replace 903.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 903.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 700: INCIDENTAL WORK

SUBSECTION 715: RURAL MAIL BOXES REMOVED AND RESET

Subsection 715: Rural Mail Boxes Removed and Reset
Change the words mail box and mail boxes to the word mailbox or mailboxes where encountered in the title, and all subsections.

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: ULTRA 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.

M10.16.0: Temporary Barrier

All Temporary Barrier shall be tested to MASH crash testing standards and the results of the following crash test designations must fall within the acceptable impact tolerances and evaluation criteria shown in Table 2-2A of MASH:

- Test Level 2: 2-10, 2-11
- Test Level 3: 3-10, 3-11

M10.16.1: Limited Deflection Temporary Barrier

To be classified as a Limited Deflection Temporary Barrier, the results of MASH Test Designation 3-11 must result in a measured dynamic deflection of 24 in. or less.

M10.16.2: Delineators for Temporary Barrier

Delineators for Temporary Barrier shall consist of a housing, retroreflective material, and an adhesive or mechanical fastener.

Housings for Delineators for Temporary Barrier shall be fabricated from a lightweight polymer material. Metal housings shall not be permitted.

Retroreflection shall be achieved using an acrylic reflector or retroreflective sheeting directly applied to the housing. If used, retroreflective sheeting shall be factory applied and conform to ASTM D4956 Type IV, Type V, or Type IX. A minimum of 8 $in.^2$ of reflective material shall be visible on any traffic-facing portion of the delineator.

Delineators shall be attached to temporary barriers using a manufacturer-approved adhesive or mechanical fastener.

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END OF SUPPLEMENTAL SPECIFICATIONS

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 a use 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 M/WBE is completed, or no later than 30 calendar days after the work of the M/WBE 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/WBE) (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

January 14, 2026

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/Pound X 0.950 = $0.78/Pound

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

If the $0.04 difference shown above was greater than 5% of the Base Price, then the price adjustment would be 1,000 Pounds X $0.04/Pound = $40.00. Since the Period Price of $0.78/Pound is less than the Base Price of $0.82/Pound, indicating a drop in the price of steel between the bid and the delivery of material, a credit of $40.00 would be owed to 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	$0.58
2	ASTM A27 (AASHTO M103) Steel Castings, H-Pile Points & Pipe Pile Shoes (See Note below.)	$0.81
3	ASTM A668 / A668M (AASHTO M102) Steel Forgings	$0.81
4	ASTM A108 (AASHTO M169) Steel Forgings for Shear Studs	$0.83
5	ASTM A709/A709M Grade 36 / AASHTO M270M/M270 Grade 36 or 250 Structural Steel Plate	$0.88
6	ASTM A709/A709M Grade 36 / AASHTO M270M/M270 Grade 36 or 250 Structural Steel Shapes	$0.82
7	ASTM A709/A709M Grade 50 / AASHTO M270M/M270 Grade 50 or 345 Structural Steel Plate	$0.88
8	ASTM A709/A709M Grade 50 / AASHTO M270M/M270 Grade 50 or 345 Structural Steel Shapes	$0.82
9	ASTM A709/A709M Grade 50WT / AASHTO M270M/M270 Grade 50WT or 345WT Structural Steel Plate	$0.91
10	ASTM A709/A709M Grade 50WT / AASHTO M270M/M270 Grade 50WT or 345WT Structural Steel Shapes	$0.83
11	ASTM A709/A709M Grade 50W / AASHTO M270M/M270 Grade 50W 345W Structural Steel Plate	$0.91
12	ASTM A709/A709M Grade 50W / AASHTO M270M/M270 Grade 50W or 345W Structural Steel Shapes	$0.83
13	ASTM A709/A709M Grade HPS 50W / AASHTO M270M/M270 Grade HPS 50W or 345W Structural Steel Plate	$0.95
14	ASTM A709/A709M Grade HPS 70W / AASHTO M270M/M270 Grade HPS 70W or 485W Structural Steel Plate	$1.02
15	ASTM A514/A514M-05 Grade HPS 100W / AASHTO M270M/M270 Grade HPS 100W or 690W Structural Steel Plate	$1.56
16	ASTM A992/A992M Grade 50S / AASHTO M270M/M270 Grade 50S or 345S Structural Steel Plate	$0.91
17	ASTM A992/A992M Grade 50S / AASHTO M270M/M270 Grade 50S or 345S Structural Steel Shapes	$0.83
18	ASTM A276 Type 316 Stainless Steel	$4.70
19	ASTM A240 Type 316 Stainless Steel	$4.70
20	ASTM A148 Grade 80/50 Steel Castings (See Note below.)	$1.61
21	ASTM A53 Grade B Structural Steel Pipe	$1.02
22	ASTM A500 Grades A, B, 36 & 50 Structural Steel Pipe	$1.02
23	ASTM A252, Grades 240 (36 KSI) & 414 (60 KSI) Pipe Pile	$0.81
24	ASTM 252, Grade 2 Permanent Steel Casing	$0.81
25	ASTM A36 (AASHTO M183) for H-piles, steel supports and sign supports	$0.85
26	ASTM A328 / A328M, Grade 50 (AASHTO M202) Steel Sheetpiling	$1.54
27	ASTM A572 / A572M, Grade 50 Sheetpiling	$1.54
28	ASTM A36/36M, Grade 50	$0.88
29	ASTM A570, Grade 50	$0.85
30	ASTM A572 (AASHTO M223), Grade 50 H-Piles	$0.88
31	ASTM A1085 Grade A (50 KSI) Steel Hollow Structural Sections (HSS), heat-treated per ASTM A1085 Supplement S1	$1.02
32	AREA 140 LB Rail and Track Accessories	$0.53

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 l51 B).

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

III. Minority and Women Workforce Participation

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

IV. Liaison Committee

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

V. Reports and Records

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

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

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

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

VI. Access to Work Site

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

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

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

VIII. Sanctions

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

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

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

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

IX. Severability

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

X. Contractor's Certification

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

XI. Subcontractor Requirements

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

Rev'd 03/07/14

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DOCUMENT 00821

ELECTRONIC REPORTING REQUIREMENTS
CIVIL RIGHTS PROGRAMS AND CERTIFIED PAYROLL

Implemented on March 2, 2009 Revised June 04, 2019

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

Contractor and Sub-Contractor EBO User Certification

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

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

Vetting of Firms and Designated Firm Individuals

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

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

Interim Reporting Requirements

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

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DOCUMENT 00859

CONTRACTOR/SUBCONTRACTOR CERTIFICATION FORM ‡

The contractor shall submit this completed document 00859 to MassDOT for each subcontract.

_____ **(Contractor)** **Date:**_____

_____**(Subcontractor)** ☐ District Approved Subcontractor

Contract No: 133292 **Project No.** 613196 **Federal Aid No.:** NFA

Location: BURLINGTON-LYNNFIELD-WAKEFIELD-WOBURN

Project Description: Bridge Preservation of 10 Bridges carrying I-95

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: _____
_____
_____
Telephone Number:_____
Federal I.D. Number:_____
Estimated Start Date:_____
Estimated Completion Date:_____
Estimated Dollar Amount:_____

_____
(Print Name and Title)

_____
(Authorized Signature)

_____
(Date)

Rev'd 09/02/22

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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 that two week before the anniversary of the Notice to Proceed date of the contract to allow for adequate processing by the Department of Labor Standards (DLS). The effective date for the new rates will be the anniversary date of the contract (i.e. the notice to proceed date), regardless of the date of issuance on the schedule from DLS.

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

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DOCUMENT 00861

STATE PREVAILING WAGE RATES

TOWN OF BURLINGTON

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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:	Massachusetts Highway	**City/Town:**	BURLINGTON
Contract Number:	133292		
Description of Work:	BURLINGTON-LYNNFIELD-WAKEFIELD-WOBURN – Bridge Preservation of 10 Bridges carrying I-95 (613196)		
Job Location:	BURLINGTON-LYNNFIELD-WAKEFIELD-WOBURN - I-95		

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 form 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 TEAMSTERS JOINT COUNCIL NO. 10 TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/1/2025	$42.05	$15.41	$21.78	$0.00	$0.00	$79.24
	6/1/2026	$43.05	$15.41	$21.78	$0.00	$0.00	$80.24
	8/1/2026	$43.05	$15.91	$21.78	$0.00	$0.00	$80.74
	12/1/2026	$43.05	$15.91	$23.52	$0.00	$0.00	$82.48
(3 AXLE) DRIVER - EQUIPMENT TEAMSTERS JOINT COUNCIL NO. 10 TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/1/2025	$41.12	$15.41	$21.78	$0.00	$0.00	$78.31
	6/1/2026	$43.12	$15.41	$21.78	$0.00	$0.00	$80.31
	8/1/2026	$43.12	$15.91	$21.78	$0.00	$0.00	$80.81
	12/1/2026	$43.12	$15.91	$23.52	$0.00	$0.00	$82.55
(4 & 5 AXLE) DRIVER - EQUIPMENT TEAMSTERS JOINT COUNCIL NO. 10 TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/1/2025	$42.24	$15.41	$21.78	$0.00	$0.00	$79.43
	6/1/2026	$43.24	$15.41	$21.78	$0.00	$0.00	$80.43
	8/1/2026	$43.24	$15.91	$21.78	$0.00	$0.00	$80.93
	12/1/2026	$43.24	$15.91	$23.52	$0.00	$0.00	$82.67
ADS/SUBMERSIBLE PILOT PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 1) For apprentice rates see "Apprentice- PILE DRIVER"	1/1/2024	$117.16	$10.08	$11.62	$12.67	$0.00	$151.53
AIR TRACK OPERATOR LABORERS LABORERS - ZONE 1 For apprentice rates see "Apprentice- LABORER"	12/1/2025	$49.35	$10.15	$9.50	$9.65	$0.00	$78.65
	6/1/2026	$50.15	$10.15	$9.50	$9.65	$0.00	$79.45
	12/1/2026	$52.40	$10.15	$9.50	$9.65	$0.00	$81.70
	6/1/2027	$54.00	$10.15	$9.50	$9.65	$0.00	$83.30
	12/1/2027	$55.60	$10.15	$9.50	$9.65	$0.00	$84.90
	6/1/2028	$57.28	$10.15	$9.50	$9.65	$0.00	$86.58
	12/1/2028	$58.95	$10.15	$9.50	$9.65	$0.00	$88.25
AIR TRACK OPERATOR (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY) For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"	12/1/2025	$49.45	$10.15	$9.50	$9.65	$0.00	$78.75
	6/1/2026	$51.00	$10.15	$9.50	$9.65	$0.00	$80.30
	12/1/2026	$52.50	$10.15	$9.50	$9.65	$0.00	$81.80
ASBESTOS REMOVER - PIPE / MECH. EQUIPT. HEAT & FROST INSULATORS LOCAL 6 HEAT & FROST INSULATORS LOCAL 6 (BOSTON)	12/1/2025	$44.80	$14.50	$4.30	$6.75	$0.00	$70.35
ASPHALT RAKER LABORERS LABORERS - ZONE 1 For apprentice rates see "Apprentice- LABORER"	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
ASPHALT RAKER (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2025	$48.95	$10.15	$9.50	$9.65	$0.00	$78.25
	6/1/2026	$50.50	$10.15	$9.50	$9.65	$0.00	$79.80
	12/1/2026	$52.00	$10.15	$9.50	$9.65	$0.00	$81.30

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
BACKHOE/FRONT-END LOADER	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
BARCO-TYPE JUMPING TAMPER	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
LABORERS	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
LABORERS - ZONE 1	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
BLOCK PAVER, RAMMER / CURB SETTER	12/1/2025	$49.35	$10.15	$9.50	$9.65	$0.00	$78.65
LABORERS	6/1/2026	$50.15	$10.15	$9.50	$9.65	$0.00	$79.45
LABORERS - ZONE 1	12/1/2026	$52.40	$10.15	$9.50	$9.65	$0.00	$81.70
	6/1/2027	$54.00	$10.15	$9.50	$9.65	$0.00	$83.30
	12/1/2027	$55.60	$10.15	$9.50	$9.65	$0.00	$84.90
	6/1/2028	$57.28	$10.15	$9.50	$9.65	$0.00	$86.58
	12/1/2028	$58.95	$10.15	$9.50	$9.65	$0.00	$88.25
For apprentice rates see "Apprentice- LABORER"							
BLOCK PAVER, RAMMER / CURB SETTER (HEAVY & HIGHWAY)	12/1/2025	$49.45	$10.15	$9.50	$9.65	$0.00	$78.75
LABORERS	6/1/2026	$51.00	$10.15	$9.50	$9.65	$0.00	$80.30
LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2026	$52.50	$10.15	$9.50	$9.65	$0.00	$81.80
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
BOILER MAKER	1/1/2024	$48.12	$7.07	$14.60	$6.00	$0.00	$75.79
BOILERMAKERS LOCAL 29							
BOILERMAKERS LOCAL 29							

Apprentice: BOILER MAKER

Effective Date: 1/1/2024

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	65.00	$31.28	$7.07	$9.32	$3.90	$0.00	$51.57
2	65.00	$31.28	$7.07	$9.32	$3.90	$0.00	$51.57
3	70.00	$33.68	$7.07	$10.03	$4.20	$0.00	$54.98
4	75.00	$36.09	$7.07	$10.74	$4.50	$0.00	$58.40
5	80.00	$38.50	$7.07	$11.45	$4.80	$0.00	$61.82
6	85.00	$40.90	$7.07	$12.18	$5.10	$0.00	$65.25

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: BOILER MAKER

Effective Date: 1/1/2024

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
7	90.00	$43.31	$7.07	$12.88	$5.40	$0.00	$68.66
8	95.00	$45.71	$7.07	$13.62	$5.70	$0.00	$72.10

Apprentice to Journeyworker Ratio: 1:4

BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING) BRICKLAYERS LOCAL 3 BRICKLAYERS LOCAL 3 (WALTHAM)	8/1/2025	$67.95	$11.49	$15.57	$8.02	$0.00	$103.03
	2/1/2026	$69.30	$11.49	$15.57	$8.02	$0.00	$104.38
	8/1/2026	$71.50	$11.49	$15.57	$8.02	$0.00	$106.58
	2/1/2027	$72.90	$11.49	$15.57	$8.02	$0.00	$107.98

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	$33.98	$11.49	$15.57	$8.02	$0.00	$69.06
2	60.00	$40.77	$11.49	$15.57	$8.02	$0.00	$75.85
3	70.00	$47.57	$11.49	$15.57	$8.02	$0.00	$82.65
4	80.00	$54.36	$11.49	$15.57	$8.02	$0.00	$89.44
5	90.00	$61.16	$11.49	$15.57	$8.02	$0.00	$96.24

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	$34.65	$11.49	$15.57	$8.02	$0.00	$69.73
2	60.00	$41.58	$11.49	$15.57	$8.02	$0.00	$76.66
3	70.00	$48.51	$11.49	$15.57	$8.02	$0.00	$83.59
4	80.00	$55.44	$11.49	$15.57	$8.02	$0.00	$90.52
5	90.00	$62.37	$11.49	$15.57	$8.02	$0.00	$97.45

Apprentice to Journeyworker Ratio: 1:5

BULLDOZER/GRADER/SCRAPER OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
CAISSON & UNDERPINNING BOTTOM MAN LABORERS LABORERS - FOUNDATION AND MARINE	12/1/2025	$49.85	$10.15	$9.50	$9.80	$0.00	$79.30
	6/1/2026	$51.40	$10.15	$9.50	$9.80	$0.00	$80.85
	12/1/2026	$52.90	$10.15	$9.50	$9.80	$0.00	$82.35
For apprentice rates see "Apprentice- LABORER"							
CAISSON & UNDERPINNING LABORER	12/1/2025	$48.70	$10.15	$9.50	$9.80	$0.00	$78.15

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS	6/1/2026	$50.25	$10.15	$9.50	$9.80	$0.00	$79.70
LABORERS - FOUNDATION AND MARINE	12/1/2026	$51.75	$10.15	$9.50	$9.80	$0.00	$81.20
For apprentice rates see "Apprentice- LABORER"							
CAISSON & UNDERPINNING TOP MAN	12/1/2025	$49.03	$10.15	$9.50	$9.80	$0.00	$78.48
LABORERS	6/1/2026	$50.58	$10.15	$9.50	$9.80	$0.00	$80.03
LABORERS - FOUNDATION AND MARINE	12/1/2026	$52.08	$10.15	$9.50	$9.80	$0.00	$81.53
For apprentice rates see "Apprentice- LABORER"							
CARBIDE CORE DRILL OPERATOR	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
LABORERS	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
LABORERS - ZONE 1	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
CARPENTER	9/1/2025	$50.35	$10.33	$11.47	$8.50	$0.00	$80.65
CARPENTERS	3/1/2026	$51.60	$10.33	$11.47	$8.50	$0.00	$81.90
CARPENTERS -ZONE 2 (Eastern Massachusetts)	9/1/2026	$52.85	$10.33	$11.47	$8.50	$0.00	$83.15
	3/1/2027	$54.10	$10.33	$11.47	$8.50	$0.00	$84.40

Apprentice: CARPENTER

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	$22.66	$10.33	$0.00	$1.73	$0.00	$34.72
2	45.00	$22.66	$10.33	$0.00	$1.73	$0.00	$34.72
3	55.00	$27.69	$10.33	$0.00	$3.40	$0.00	$41.42
4	55.00	$27.69	$10.33	$0.00	$3.40	$0.00	$41.42
5	70.00	$35.25	$10.33	$11.41	$5.10	$0.00	$62.09
6	70.00	$35.25	$10.33	$11.41	$5.10	$0.00	$62.09
7	80.00	$40.28	$10.33	$11.44	$6.80	$0.00	$68.85
8	80.00	$40.28	$10.33	$11.44	$6.80	$0.00	$68.85

Apprentice: CARPENTER

Effective Date: 3/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	$23.22	$10.33	$0.00	$1.73	$0.00	$35.28
2	45.00	$23.22	$10.33	$0.00	$1.73	$0.00	$35.28
3	55.00	$28.38	$10.33	$0.00	$3.40	$0.00	$42.11
4	55.00	$28.38	$10.33	$0.00	$3.40	$0.00	$42.11
5	70.00	$36.12	$10.33	$11.41	$5.10	$0.00	$62.96
6	70.00	$36.12	$10.33	$11.41	$5.10	$0.00	$62.96
7	80.00	$41.28	$10.33	$11.44	$6.80	$0.00	$69.85

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: CARPENTER

Effective Date: 3/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
8	80.00	$41.28	$10.33	$11.44	$6.80	$0.00	$69.85

Apprentice to Journeyworker Ratio: 1:5

CARPENTER WOOD FRAME CARPENTERS CARPENTERS-ZONE 3 (Wood Frame)	10/1/2025	$27.75	$7.02	$3.80	$1.00	$0.00	$39.57
	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: 10/1/2025

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

Apprentice: CARPENTER WOOD FRAME

Effective Date: 10/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$17.31	$7.02	$0.00	$0.00	$0.00	$24.33
2	60.00	$17.31	$7.02	$0.00	$0.00	$0.00	$24.33
3	65.00	$18.75	$7.02	$0.00	$1.00	$0.00	$26.77
4	70.00	$20.20	$7.02	$0.00	$1.00	$0.00	$28.22
5	75.00	$21.64	$7.02	$3.80	$1.00	$0.00	$33.46
6	80.00	$23.08	$7.02	$3.80	$1.00	$0.00	$34.90
7	85.00	$24.52	$7.02	$3.80	$1.00	$0.00	$36.34
8	90.00	$25.97	$7.02	$3.80	$1.00	$0.00	$37.79

Apprentice to Journeyworker Ratio: 1:5

CEMENT MASONRY/PLASTERING PLASTERERS AND CEMENT MASONS LOCAL 534 Plasterers and Cement Masons - Zone 1	1/1/2026	$53.24	$13.35	$16.43	$7.78	$1.80	$92.60
	7/1/2026	$54.49	$13.35	$16.43	$7.78	$1.80	$93.85
	1/1/2027	$55.94	$13.35	$16.43	$7.78	$1.80	$95.30
	7/1/2027	$57.29	$13.35	$16.43	$7.78	$1.80	$96.65
	1/1/2028	$58.64	$13.35	$16.43	$7.78	$1.80	$98.00

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: CEMENT MASONRY/PLASTERING

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$26.62	$13.35	$16.43	$0.00	$0.00	$56.40
2	60.00	$31.94	$13.35	$16.43	$7.78	$1.80	$71.30
3	65.00	$34.61	$13.35	$16.43	$7.78	$1.80	$73.97
4	70.00	$37.27	$13.35	$16.43	$7.78	$1.80	$76.63
5	75.00	$39.93	$13.35	$16.43	$7.78	$1.80	$79.29
6	80.00	$42.59	$13.35	$16.43	$7.78	$1.80	$81.95
7	90.00	$47.92	$13.35	$16.43	$0.00	$0.00	$77.70

Apprentice: CEMENT MASONRY/PLASTERING

Effective Date: 7/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$27.25	$13.35	$16.43	$0.00	$0.00	$57.03
2	60.00	$32.69	$13.35	$16.43	$7.78	$1.80	$72.05
3	65.00	$35.42	$13.35	$16.43	$7.78	$1.80	$74.78
4	70.00	$38.14	$13.35	$16.43	$7.78	$1.80	$77.50
5	75.00	$40.87	$13.35	$16.43	$7.78	$1.80	$80.23
6	80.00	$43.59	$13.35	$16.43	$7.78	$1.80	$82.95
7	90.00	$49.04	$13.35	$0.00	$7.78	$0.00	$70.17

Apprentice to Journeyworker Ratio: 1:5

CHAIN SAW OPERATOR LABORERS LABORERS - ZONE 1	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$60.48	$16.05	$13.25	$3.25	$0.00	$93.03
	6/1/2026	$61.81	$16.05	$13.25	$3.25	$0.00	$94.36
	12/1/2026	$63.29	$16.05	$13.25	$3.25	$0.00	$95.84
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
COMPRESSOR OPERATOR OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$37.97	$16.05	$13.25	$3.25	$0.00	$70.52
	6/1/2026	$38.83	$16.05	$13.25	$3.25	$0.00	$71.38
	12/1/2026	$39.78	$16.05	$13.25	$3.25	$0.00	$72.33
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
DELEADER (BRIDGE) PAINTERS LOCAL 35 PAINTERS LOCAL 35 - ZONE 2	1/1/2026	$59.56	$10.35	$12.00	$12.60	$0.00	$94.51

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: DELEADER (BRIDGE)

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$29.78	$10.35	$0.00	$0.00	$0.00	$40.13
2	55.00	$32.76	$10.35	$0.00	$6.93	$0.00	$50.04
3	60.00	$35.74	$10.35	$0.00	$7.56	$0.00	$53.65
4	65.00	$38.71	$10.35	$0.00	$8.19	$0.00	$57.25
5	70.00	$41.69	$10.35	$12.00	$8.82	$0.00	$72.86
6	75.00	$44.67	$10.35	$12.00	$9.45	$0.00	$76.47
7	80.00	$47.65	$10.35	$12.00	$10.08	$0.00	$80.08
8	90.00	$53.60	$10.35	$12.00	$11.34	$0.00	$87.29

Apprentice to Journeyworker Ratio: 1:1

DEMO: ADZEMAN LABORERS LABORERS - ZONE 1	12/1/2025	$48.75	$10.15	$9.50	$9.65	$0.00	$78.05
	6/1/2026	$50.30	$10.15	$9.50	$9.65	$0.00	$79.60
	12/7/2026	$51.80	$10.15	$9.50	$9.65	$0.00	$81.10
	6/7/2027	$53.40	$10.15	$9.50	$9.65	$0.00	$82.70
	12/6/2027	$55.00	$10.15	$9.50	$9.65	$0.00	$84.30
	6/5/2028	$56.68	$10.15	$9.50	$9.65	$0.00	$85.98
	12/4/2028	$58.35	$10.15	$9.50	$9.65	$0.00	$87.65
For apprentice rates see "Apprentice- LABORER"							
DEMO: BACKHOE/LOADER/HAMMER OPERATOR LABORERS LABORERS - ZONE 1	12/1/2025	$49.75	$10.15	$9.50	$9.65	$0.00	$79.05
	6/1/2026	$51.30	$10.15	$9.50	$9.65	$0.00	$80.60
	12/7/2026	$52.80	$10.15	$9.50	$9.65	$0.00	$82.10
	6/7/2027	$54.40	$10.15	$9.50	$9.65	$0.00	$83.70
	12/6/2027	$56.00	$10.15	$9.50	$9.65	$0.00	$85.30
	6/5/2028	$57.68	$10.15	$9.50	$9.65	$0.00	$86.98
	12/4/2028	$59.35	$10.15	$9.50	$9.65	$0.00	$88.65
For apprentice rates see "Apprentice- LABORER"							
DEMO: BURNERS LABORERS LABORERS - ZONE 1	12/1/2025	$49.50	$10.15	$9.50	$9.65	$0.00	$78.80
	6/1/2026	$51.05	$10.15	$9.50	$9.65	$0.00	$80.35
	12/7/2026	$52.55	$10.15	$9.50	$9.65	$0.00	$81.85
	6/7/2027	$54.15	$10.15	$9.50	$9.65	$0.00	$83.45
	12/6/2027	$55.75	$10.15	$9.50	$9.65	$0.00	$85.05
	6/5/2028	$57.43	$10.15	$9.50	$9.65	$0.00	$86.73
	12/4/2028	$59.10	$10.15	$9.50	$9.65	$0.00	$88.40
For apprentice rates see "Apprentice- LABORER"							
DEMO: CONCRETE CUTTER/SAWYER LABORERS LABORERS - ZONE 1	12/1/2025	$49.75	$10.15	$9.50	$9.65	$0.00	$79.05
	6/1/2026	$51.30	$10.15	$9.50	$9.65	$0.00	$80.60
	12/7/2026	$52.80	$10.15	$9.50	$9.65	$0.00	$82.10
	6/7/2027	$54.40	$10.15	$9.50	$9.65	$0.00	$83.70
	12/6/2027	$56.00	$10.15	$9.50	$9.65	$0.00	$85.30
	6/5/2028	$57.68	$10.15	$9.50	$9.65	$0.00	$86.98
	12/4/2028	$59.35	$10.15	$9.50	$9.65	$0.00	$88.65

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER"							
DEMO: JACKHAMMER OPERATOR	12/1/2025	$49.50	$10.15	$9.50	$9.65	$0.00	$78.80
LABORERS	6/1/2026	$51.05	$10.15	$9.50	$9.65	$0.00	$80.35
LABORERS - ZONE 1	12/7/2026	$52.55	$10.15	$9.50	$9.65	$0.00	$81.85
	6/7/2027	$54.15	$10.15	$9.50	$9.65	$0.00	$83.45
	12/6/2027	$55.75	$10.15	$9.50	$9.65	$0.00	$85.05
	6/5/2028	$57.43	$10.15	$9.50	$9.65	$0.00	$86.73
	12/4/2028	$59.10	$10.15	$9.50	$9.65	$0.00	$88.40
For apprentice rates see "Apprentice- LABORER"							
DEMO: WRECKING LABORER	12/1/2025	$48.75	$10.15	$9.50	$9.65	$0.00	$78.05
LABORERS	6/1/2026	$50.30	$10.15	$9.50	$9.65	$0.00	$79.60
LABORERS - ZONE 1	12/7/2026	$51.80	$10.15	$9.50	$9.65	$0.00	$81.10
	6/7/2027	$53.40	$10.15	$9.50	$9.65	$0.00	$82.70
	12/6/2027	$55.00	$10.15	$9.50	$9.65	$0.00	$84.30
	6/5/2028	$56.68	$10.15	$9.50	$9.65	$0.00	$85.98
	12/4/2028	$58.35	$10.15	$9.50	$9.65	$0.00	$87.65
For apprentice rates see "Apprentice- LABORER"							
DIRECTIONAL DRILL MACHINE OPERATOR	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
DIVER	8/1/2024	$78.11	$10.08	$11.62	$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	9/1/2025	$66.17	$13.00	$14.37	$8.72	$0.00	$102.26
ELECTRICIANS LOCAL 103	3/1/2026	$66.86	$13.00	$14.64	$9.00	$0.00	$103.50
ELECTRICIANS LOCAL 103	9/1/2026	$68.78	$13.00	$14.69	$9.00	$0.00	$105.47

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	3/1/2027	$69.97	$13.00	$14.73	$9.00	$0.00	$106.70
	9/1/2027	$71.88	$13.00	$14.79	$9.00	$0.00	$108.67
	3/1/2028	$73.08	$13.00	$14.82	$9.00	$0.00	$109.90

Apprentice: ELECTRICIAN

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	$26.47	$13.00	$0.79	$0.00	$0.00	$40.26
2	40.00	$26.47	$13.00	$0.79	$0.00	$0.00	$40.26
3	45.00	$29.78	$13.00	$13.27	$3.92	$0.00	$59.97
4	45.00	$29.78	$13.00	$13.27	$3.92	$0.00	$59.97
5	50.00	$33.09	$13.00	$13.37	$4.36	$0.00	$63.82
6	55.00	$36.39	$13.00	$13.47	$4.80	$0.00	$67.66
7	60.00	$39.70	$13.00	$13.57	$5.23	$0.00	$71.50
8	65.00	$43.01	$13.00	$13.67	$5.67	$0.00	$75.35
9	70.00	$46.32	$13.00	$13.77	$6.10	$0.00	$79.19
10	75.00	$49.63	$13.00	$13.87	$6.54	$0.00	$83.04

Apprentice: ELECTRICIAN

Effective Date: 3/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	$26.74	$13.00	$0.80	$0.00	$0.00	$40.54
2	40.00	$26.74	$13.00	$0.80	$0.00	$0.00	$40.54
3	45.00	$30.09	$13.00	$13.53	$4.05	$0.00	$60.67
4	45.00	$30.09	$13.00	$13.53	$4.05	$0.00	$60.67
5	50.00	$33.43	$13.00	$13.63	$4.50	$0.00	$64.56
6	55.00	$36.77	$13.00	$13.73	$4.95	$0.00	$68.45
7	60.00	$40.12	$13.00	$13.83	$5.40	$0.00	$72.35
8	65.00	$43.46	$13.00	$13.93	$5.85	$0.00	$76.24
9	70.00	$46.80	$13.00	$14.03	$6.30	$0.00	$80.13
10	75.00	$50.15	$13.00	$14.13	$6.75	$0.00	$84.03

Apprentice Notes

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Apprentice to Journeyworker Ratio: 2:3

ELEVATOR CONSTRUCTOR	1/1/2026	$77.26	$16.38	$11.06	$10.70	$0.00	$115.40
ELEVATOR CONSTRUCTORS LOCAL 4	1/1/2027	$80.55	$16.48	$11.16	$11.00	$0.00	$119.19
ELEVATOR CONSTRUCTORS LOCAL 4							

Apprentice: ELEVATOR CONSTRUCTOR

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: ELEVATOR CONSTRUCTOR

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$38.63	$0.00	$0.00	$0.00	$0.00	$38.63
2	55.00	$42.49	$16.38	$11.06	$10.70	$0.00	$80.63
3	65.00	$50.22	$16.38	$11.06	$10.70	$0.00	$88.36
4	70.00	$54.08	$16.38	$11.06	$10.70	$0.00	$92.22
5	80.00	$61.81	$16.38	$11.06	$10.70	$0.00	$99.95

Apprentice: ELEVATOR CONSTRUCTOR

Effective Date: 1/1/2027

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$40.28	$0.00	$0.00	$0.00	$0.00	$40.28
2	55.00	$44.30	$16.48	$11.16	$11.00	$0.00	$82.94
3	65.00	$52.36	$16.48	$11.16	$11.00	$0.00	$91.00
4	70.00	$56.39	$16.48	$11.16	$11.00	$0.00	$95.03
5	80.00	$64.44	$16.48	$11.16	$11.00	$0.00	$103.08

Apprentice to Journeyworker Ratio: 1:1

ELEVATOR CONSTRUCTOR HELPER	1/1/2026	$54.08	$16.38	$11.06	$10.07	$0.00	$91.59
ELEVATOR CONSTRUCTORS LOCAL 4	1/1/2027	$56.39	$16.48	$11.16	$11.00	$0.00	$95.03
ELEVATOR CONSTRUCTORS LOCAL 4							
For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"							
FENCE & GUARD RAIL ERECTOR (HEAVY & HIGHWAY)	12/1/2025	$48.95	$10.15	$9.50	$9.65	$0.00	$78.25
LABORERS	6/1/2026	$50.50	$10.15	$9.50	$9.65	$0.00	$79.80
LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2026	$52.00	$10.15	$9.50	$9.65	$0.00	$81.30
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
FIELD ENG.INST.PERSON-BLDG,SITE,HVY/HWY	11/1/2025	$53.56	$16.05	$13.25	$3.25	$0.00	$86.11
OPERATING ENGINEERS LOCAL 4	5/1/2026	$55.00	$16.05	$13.25	$3.25	$0.00	$87.55
OPERATING ENGINEERS LOCAL 4	11/1/2026	$56.29	$16.05	$13.25	$3.25	$0.00	$88.84
	5/1/2027	$57.72	$16.05	$13.25	$3.25	$0.00	$90.27
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY	11/1/2025	$55.17	$16.05	$13.25	$3.25	$0.00	$87.72
OPERATING ENGINEERS LOCAL 4	5/1/2026	$56.62	$16.05	$13.25	$3.25	$0.00	$89.17
OPERATING ENGINEERS LOCAL 4	11/1/2026	$57.92	$16.05	$13.25	$3.25	$0.00	$90.47
	5/1/2027	$59.37	$16.05	$13.25	$3.25	$0.00	$91.92
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIELD ENG.ROD PERSON-BLDG,SITE,HVY/HWY	11/1/2025	$26.03	$16.05	$13.25	$3.25	$0.00	$58.58
OPERATING ENGINEERS LOCAL 4	5/1/2026	$26.88	$16.05	$13.25	$3.25	$0.00	$59.43
OPERATING ENGINEERS LOCAL 4	11/1/2026	$27.64	$16.05	$13.25	$3.25	$0.00	$60.19
	5/1/2027	$28.49	$16.05	$13.25	$3.25	$0.00	$61.04

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIRE ALARM INSTALLER	9/1/2025	$66.17	$13.00	$14.37	$9.00	$0.00	$102.54
ELECTRICIANS LOCAL 103	3/1/2026	$66.86	$13.00	$14.64	$9.00	$0.00	$103.50
ELECTRICIANS LOCAL 103	9/1/2026	$68.78	$13.00	$14.69	$9.00	$0.00	$105.47
	3/1/2027	$69.97	$13.00	$14.73	$9.00	$0.00	$106.70
	9/1/2027	$71.88	$13.00	$14.79	$9.00	$0.00	$108.67
	3/1/2028	$73.08	$13.00	$14.82	$9.00	$0.00	$109.90
For apprentice rates see "Apprentice- ELECTRICIAN"							
FIRE ALARM REPAIR / MAINTENANCE	9/1/2025	$52.94	$13.00	$13.97	$6.98	$0.00	$86.89
/ COMMISSIONING	3/1/2026	$53.49	$13.00	$14.23	$7.20	$0.00	$87.92
ELECTRICIANS LOCAL 103	9/1/2026	$55.02	$13.00	$14.28	$7.20	$0.00	$89.50
ELECTRICIANS LOCAL 103	3/1/2027	$55.98	$13.00	$14.31	$7.20	$0.00	$90.49
	9/1/2027	$57.50	$13.00	$14.36	$7.20	$0.00	$92.06
	3/1/2028	$58.46	$13.00	$14.38	$7.20	$0.00	$93.04
For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"							
FIREMAN (ASST. ENGINEER)	12/1/2025	$47.69	$16.05	$13.25	$3.25	$0.00	$80.24
OPERATING ENGINEERS LOCAL 4	6/1/2026	$48.75	$16.05	$13.25	$3.25	$0.00	$81.30
OPERATING ENGINEERS LOCAL 4	12/1/2026	$49.93	$16.05	$13.25	$3.25	$0.00	$82.48
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FLAGGER & SIGNALER (HEAVY & HIGHWAY)	12/1/2025	$28.09	$10.15	$9.50	$9.65	$0.00	$57.39
LABORERS	6/1/2026	$29.21	$10.15	$9.50	$9.65	$0.00	$58.51
LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2026	$29.21	$10.15	$9.50	$9.65	$0.00	$58.51
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
FLOORCOVERER	9/1/2025	$57.74	$10.33	$11.47	$8.80	$0.00	$88.34
FLOORCOVERERS LOCAL 2168	3/1/2026	$59.24	$10.33	$11.47	$8.80	$0.00	$89.84
FLOORCOVERERS LOCAL 2168 ZONE I	9/1/2026	$60.74	$10.33	$11.47	$8.80	$0.00	$91.34
	3/1/2027	$62.24	$10.33	$11.47	$8.80	$0.00	$92.84

Apprentice: FLOORCOVERER

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	$25.98	$10.33	$0.00	$1.76	$0.00	$38.07
2	45.00	$25.98	$10.33	$0.00	$1.76	$0.00	$38.07
3	55.00	$31.76	$10.33	$0.00	$3.52	$0.00	$45.61
4	55.00	$31.76	$10.33	$0.00	$3.52	$0.00	$45.61
5	70.00	$40.42	$10.33	$11.47	$5.28	$0.00	$67.50
6	70.00	$40.42	$10.33	$11.47	$5.28	$0.00	$67.50
7	80.00	$46.19	$10.33	$11.47	$7.04	$0.00	$75.03
8	80.00	$46.19	$10.33	$11.47	$7.04	$0.00	$75.03

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
FORK LIFT/CHERRY PICKER	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58

Apprentice: FLOORCOVERER

Effective Date: 3/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	$26.66	$10.33	$0.00	$1.76	$0.00	$38.75
2	45.00	$26.66	$10.33	$0.00	$1.76	$0.00	$38.75
3	55.00	$32.58	$10.33	$0.00	$3.52	$0.00	$46.43
4	55.00	$32.58	$10.33	$0.00	$3.52	$0.00	$46.43
5	70.00	$41.47	$10.33	$11.47	$5.28	$0.00	$68.55
6	70.00	$41.47	$10.33	$11.47	$5.28	$0.00	$68.55
7	80.00	$47.39	$10.33	$11.47	$7.04	$0.00	$76.23
8	80.00	$47.39	$10.33	$11.47	$7.04	$0.00	$76.23

Apprentice Notes

Steps are 750 hrs.

Apprentice to Journeyworker Ratio: 1:1

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GENERATOR/LIGHTING PLANT/HEATERS	12/1/2025	$37.97	$16.05	$13.25	$3.25	$0.00	$70.52
OPERATING ENGINEERS LOCAL 4	6/1/2026	$38.83	$16.05	$13.25	$3.25	$0.00	$71.38
OPERATING ENGINEERS LOCAL 4	12/1/2026	$39.78	$16.05	$13.25	$3.25	$0.00	$72.33

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)	1/1/2026	$49.06	$10.35	$12.00	$12.60	$0.00	$84.01
GLAZIERS LOCAL 35							
GLAZIERS LOCAL 35 (ZONE 2)							

Apprentice: GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$24.53	$10.35	$0.00	$0.00	$0.00	$34.88
2	55.00	$26.98	$10.35	$0.00	$6.88	$0.00	$44.21
3	60.00	$29.44	$10.35	$0.00	$7.50	$0.00	$47.29
4	65.00	$31.89	$10.35	$0.00	$8.13	$0.00	$50.37
5	70.00	$34.34	$10.35	$12.00	$8.75	$0.00	$65.44
6	75.00	$36.80	$10.35	$12.00	$9.38	$0.00	$68.53
7	80.00	$39.25	$10.35	$12.00	$10.00	$0.00	$71.60
8	90.00	$44.15	$10.35	$12.00	$11.25	$0.00	$77.75

Apprentice to Journeyworker Ratio: 1:1

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
HOISTING ENGINEER/CRANES/GRADALLS	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58

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	$16.05	$13.25	$3.25	$0.00	$68.42
3	65.00	$38.86	$16.05	$13.25	$3.25	$0.00	$71.41
4	70.00	$41.85	$16.05	$13.25	$3.25	$0.00	$74.40
5	75.00	$44.84	$16.05	$13.25	$3.25	$0.00	$77.39
6	80.00	$47.82	$16.05	$13.25	$3.25	$0.00	$80.37
7	85.00	$50.81	$16.05	$13.25	$3.25	$0.00	$83.36
8	90.00	$53.80	$16.05	$13.25	$3.25	$0.00	$86.35

Apprentice: HOISTING ENGINEER/CRANES/GRADALLS

Effective Date: 6/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	$33.32	$0.00	$0.00	$0.00	$0.00	$33.32
2	60.00	$36.35	$16.05	$13.25	$3.25	$0.00	$68.90
3	65.00	$39.38	$16.05	$13.25	$3.25	$0.00	$71.93
4	70.00	$42.41	$16.50	$13.25	$3.25	$0.00	$75.41
5	75.00	$45.44	$16.50	$13.25	$3.25	$0.00	$78.44
6	80.00	$48.46	$16.50	$13.25	$3.25	$0.00	$81.46
7	85.00	$51.49	$16.50	$13.25	$3.25	$0.00	$84.49
8	90.00	$54.52	$16.50	$13.25	$3.25	$0.00	$87.52

Apprentice to Journeyworker Ratio: 1:6

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)	9/1/2025	$66.17	$13.00	$14.37	$8.72	$0.00	$102.26
ELECTRICIANS LOCAL 103	3/1/2026	$66.86	$13.00	$14.64	$9.00	$0.00	$103.50
ELECTRICIANS LOCAL 103	9/1/2026	$68.78	$13.00	$14.69	$9.00	$0.00	$105.47
	3/1/2027	$69.97	$13.00	$14.73	$9.00	$0.00	$106.70
	9/1/2027	$71.88	$13.00	$14.79	$9.00	$0.00	$108.67
	3/1/2028	$73.08	$13.00	$14.82	$9.00	$0.00	$109.90

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"

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
HVAC (TESTING AND BALANCING -WATER) PIPEFITTERS LOCAL 537 PIPEFITTERS LOCAL 537	9/1/2025	$69.08	$13.45	$13.75	$9.30	$0.00	$105.58
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							
HVAC MECHANIC PIPEFITTERS LOCAL 537 PIPEFITTERS LOCAL 537	9/1/2025	$69.08	$13.45	$13.75	$9.30	$0.00	$105.58
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							
HYDRAULIC DRILLS	12/1/2025	$49.35	$10.15	$9.50	$9.65	$0.00	$78.65
LABORERS LABORERS - ZONE 1	6/1/2026	$50.15	$10.15	$9.50	$9.65	$0.00	$79.45
	12/1/2026	$52.40	$10.15	$9.50	$9.65	$0.00	$81.70
	6/1/2027	$54.00	$10.15	$9.50	$9.65	$0.00	$83.30
	12/1/2027	$55.60	$10.15	$9.50	$9.65	$0.00	$84.90
	6/1/2028	$57.28	$10.15	$9.50	$9.65	$0.00	$86.58
	12/1/2028	$58.95	$10.15	$9.50	$9.65	$0.00	$88.25
For apprentice rates see "Apprentice- LABORER"							
HYDRAULIC DRILLS (HEAVY & HIGHWAY)	12/1/2025	$49.45	$10.15	$9.50	$9.65	$0.00	$78.75
LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	6/1/2026	$51.00	$10.15	$9.50	$9.65	$0.00	$80.30
	12/1/2026	$52.50	$10.15	$9.50	$9.65	$0.00	$81.80
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
INSULATOR (PIPES & TANKS)	9/1/2025	$60.34	$14.75	$9.52	$10.09	$0.00	$94.70
HEAT & FROST INSULATORS LOCAL 6 HEAT & FROST INSULATORS LOCAL 6 (BOSTON)	9/1/2026	$63.76	$14.75	$9.52	$10.09	$0.00	$98.12

Apprentice: INSULATOR (PIPES & TANKS)

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$30.17	$14.75	$9.27	$5.05	$0.00	$59.24
2	60.00	$36.20	$14.75	$9.32	$6.05	$0.00	$66.32
3	70.00	$42.24	$14.75	$9.37	$7.06	$0.00	$73.42
4	80.00	$48.27	$14.75	$9.42	$8.07	$0.00	$80.51

Apprentice: INSULATOR (PIPES & TANKS)

Effective Date: 9/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$31.88	$14.75	$9.27	$5.05	$0.00	$60.95
2	60.00	$38.26	$14.75	$9.32	$6.05	$0.00	$68.38
3	70.00	$44.63	$14.75	$9.37	$7.06	$0.00	$75.81
4	80.00	$51.01	$14.75	$9.42	$8.07	$0.00	$83.25

Apprentice to Journeyworker Ratio: 1:4

IRONWORKER/WELDER	9/16/2025	$57.87	$9.05	$12.75	$14.50	$0.00	$94.17

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
IRONWORKERS LOCAL 7 IRONWORKERS LOCAL 7 (BOSTON AREA)							

Apprentice: IRONWORKER/WELDER

Effective Date: 9/16/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$34.72	$9.05	$12.75	$4.50	$0.00	$61.02
2	75.00	$43.40	$9.05	$12.75	$4.50	$0.00	$69.70
3	85.00	$49.19	$9.05	$12.75	$4.50	$0.00	$75.49
4	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
5	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
6	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Apprentice to Journeyworker Ratio: 1:4

JACKHAMMER & PAVING BREAKER OPERATOR LABORERS LABORERS - ZONE 1	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75

For apprentice rates see "Apprentice- LABORER"

LABORER LABORERS LABORERS - ZONE 1	12/1/2025	$48.60	$10.15	$9.50	$9.65	$0.00	$77.90
	6/1/2026	$50.15	$10.15	$9.50	$9.65	$0.00	$79.45
	12/1/2026	$51.65	$10.15	$9.50	$9.65	$0.00	$80.95
	6/1/2027	$53.25	$10.15	$9.50	$9.65	$0.00	$82.55
	12/1/2027	$54.85	$10.15	$9.50	$9.65	$0.00	$84.15
	6/1/2028	$56.53	$10.15	$9.50	$9.65	$0.00	$85.83
	12/1/2028	$58.20	$10.15	$9.50	$9.65	$0.00	$87.50

Apprentice: LABORER

Effective Date: 12/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$29.16	$10.15	$9.50	$9.65	$0.00	$58.46
2	70.00	$34.02	$10.15	$9.50	$9.65	$0.00	$63.32
3	80.00	$38.88	$10.15	$9.50	$9.65	$0.00	$68.18
4	90.00	$43.74	$10.15	$9.50	$9.65	$0.00	$73.04

Apprentice: LABORER

Effective Date: 6/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$30.09	$10.15	$9.50	$9.65	$0.00	$59.39

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: LABORER

Effective Date: 6/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
2	70.00	$35.11	$10.15	$9.50	$9.65	$0.00	$64.41
3	80.00	$40.12	$10.15	$9.50	$9.65	$0.00	$69.42
4	90.00	$45.14	$10.15	$9.50	$9.65	$0.00	$74.44

Apprentice to Journeyworker Ratio: 1:5

LABORER (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2025	$48.70	$10.15	$9.50	$9.65	$0.00	$78.00
	6/1/2026	$50.25	$10.15	$9.50	$9.65	$0.00	$79.55
	12/1/2026	$51.75	$10.15	$9.50	$9.65	$0.00	$81.05

Apprentice: LABORER (HEAVY & HIGHWAY)

Effective Date: 12/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$29.22	$10.15	$9.50	$9.65	$0.00	$58.52
2	70.00	$34.09	$10.15	$9.50	$9.65	$0.00	$63.39
3	80.00	$38.96	$10.15	$9.50	$9.65	$0.00	$68.26
4	90.00	$43.83	$10.15	$9.50	$9.65	$0.00	$73.13

Apprentice: LABORER (HEAVY & HIGHWAY)

Effective Date: 6/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$30.15	$10.15	$9.50	$9.65	$0.00	$59.45
2	70.00	$35.18	$10.15	$9.50	$9.65	$0.00	$64.48
3	80.00	$40.20	$10.15	$9.50	$9.65	$0.00	$69.50
4	90.00	$45.23	$10.15	$9.50	$9.65	$0.00	$74.53

Apprentice to Journeyworker Ratio: 1:5

LABORER: CARPENTER TENDER LABORERS LABORERS - ZONE 1	12/1/2025	$48.60	$10.15	$9.50	$9.65	$0.00	$77.90
	6/1/2026	$50.15	$10.15	$9.50	$9.65	$0.00	$79.45
	12/1/2026	$51.65	$10.15	$9.50	$9.65	$0.00	$80.95
	6/1/2027	$53.25	$10.15	$9.50	$9.65	$0.00	$82.55
	12/1/2027	$54.85	$10.15	$9.50	$9.65	$0.00	$84.15
	6/1/2028	$56.53	$10.15	$9.50	$9.65	$0.00	$85.83
	12/1/2028	$58.20	$10.15	$9.50	$9.65	$0.00	$87.50

For apprentice rates see "Apprentice- LABORER"

LABORER: CEMENT FINISHER TENDER LABORERS LABORERS - ZONE 1	12/1/2025	$48.60	$10.15	$9.50	$9.65	$0.00	$77.90
	6/1/2026	$50.15	$10.15	$9.50	$9.65	$0.00	$79.45
	12/1/2026	$51.65	$10.15	$9.50	$9.65	$0.00	$80.95
	6/1/2027	$53.25	$10.15	$9.50	$9.65	$0.00	$82.55

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	12/1/2027	$54.85	$10.15	$9.50	$9.65	$0.00	$84.15
	6/1/2028	$56.53	$10.15	$9.50	$9.65	$0.00	$85.83
	12/1/2028	$58.20	$10.15	$9.50	$9.65	$0.00	$87.50
For apprentice rates see "Apprentice- LABORER"							
LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER LABORERS LABORERS - ZONE 1	12/1/2025	$48.75	$10.15	$9.50	$9.65	$0.00	$78.05
	6/1/2026	$50.30	$10.15	$9.50	$9.65	$0.00	$79.60
	12/7/2026	$51.80	$10.15	$9.50	$9.65	$0.00	$81.10
	6/7/2027	$53.40	$10.15	$9.50	$9.65	$0.00	$82.70
	12/6/2027	$55.00	$10.15	$9.50	$9.65	$0.00	$84.30
	6/5/2028	$56.68	$10.15	$9.50	$9.65	$0.00	$85.98
	12/4/2028	$58.35	$10.15	$9.50	$9.65	$0.00	$87.65
For apprentice rates see "Apprentice- LABORER"							
LABORER: MASON TENDER LABORERS LABORERS - ZONE 1	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
LABORER: MASON TENDER (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2025	$48.95	$10.15	$9.50	$9.65	$0.00	$78.25
	6/1/2026	$50.50	$10.15	$9.50	$9.65	$0.00	$79.80
	12/1/2026	$52.00	$10.15	$9.50	$9.65	$0.00	$81.30
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
LABORER: MULTI-TRADE TENDER LABORERS LABORERS - ZONE 1	12/1/2025	$48.60	$10.15	$9.50	$9.65	$0.00	$77.90
	6/1/2026	$50.15	$10.15	$9.50	$9.65	$0.00	$79.45
	12/1/2026	$51.65	$10.15	$9.50	$9.65	$0.00	$80.95
	6/1/2027	$53.25	$10.15	$9.50	$9.65	$0.00	$82.55
	12/1/2027	$54.85	$10.15	$9.50	$9.65	$0.00	$84.15
	6/1/2028	$56.53	$10.15	$9.50	$9.65	$0.00	$85.83
	12/1/2028	$58.20	$10.15	$9.50	$9.65	$0.00	$87.50
For apprentice rates see "Apprentice- LABORER"							
LABORER: TREE REMOVER LABORERS LABORERS - ZONE 1	12/1/2025	$48.60	$10.15	$9.50	$9.65	$0.00	$77.90
	6/1/2026	$50.15	$10.15	$9.50	$9.65	$0.00	$79.45
	12/1/2026	$51.65	$10.15	$9.50	$9.65	$0.00	$80.95
	6/1/2027	$53.25	$10.15	$9.50	$9.65	$0.00	$82.55
	12/1/2027	$54.85	$10.15	$9.50	$9.65	$0.00	$84.15
	6/1/2028	$56.53	$10.15	$9.50	$9.65	$0.00	$85.83
	12/1/2028	$58.20	$10.15	$9.50	$9.65	$0.00	$87.50
This classification applies to the removal of standing trees, and the trimming and removal of branches and limbs when related to public works construction or site clearance incidental to construction . For apprentice rates see "Apprentice- LABORER"							
LASER BEAM OPERATOR LABORERS LABORERS - ZONE 1	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
LASER BEAM OPERATOR (HEAVY & HIGHWAY)	12/1/2025	$48.95	$10.15	$9.50	$9.65	$0.00	$78.25
LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	6/1/2026	$50.50	$10.15	$9.50	$9.65	$0.00	$79.80
	12/1/2026	$52.00	$10.15	$9.50	$9.65	$0.00	$81.30
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 BRICKLAYERS LOCAL 3 - MARBLE & TILE	2/1/2026	$53.16	$11.49	$15.57	$6.05	$0.00	$86.27
	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

Apprentice to Journeyworker Ratio: 1:5

MARBLE MASONS,TILELAYERS & TERRAZZO MECH	8/1/2025	$67.97	$11.49	$15.57	$7.99	$0.00	$103.02
BRICKLAYERS LOCAL 3 BRICKLAYERS LOCAL 3 - MARBLE & TILE	2/1/2026	$69.32	$11.49	$15.57	$7.99	$0.00	$104.37
	8/1/2026	$71.52	$11.49	$15.57	$7.99	$0.00	$106.57
	2/1/2027	$72.92	$11.49	$15.57	$7.99	$0.00	$107.97

Apprentice: MARBLE MASONS,TILELAYERS & TERRAZZO MECH

Effective Date: 8/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

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

Apprentice to Journeyworker Ratio: 1:5

MECH. SWEEPER OPERATOR (ON CONST. SITES) OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
MECHANICS MAINTENANCE OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
MILLWRIGHT (Zone 1) MILLWRIGHTS LOCAL 1121 MILLWRIGHTS LOCAL 1121 - Zone 1	1/5/2026	$52.97	$10.08	$11.47	$10.25	$0.00	$84.77

Apprentice: MILLWRIGHT (Zone 1)

Effective Date: 1/5/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	$29.13	$10.08	$0.00	$5.64	$0.00	$44.85
2	65.00	$34.43	$10.08	$0.00	$6.66	$0.00	$51.17
3	75.00	$39.73	$10.08	$11.47	$7.69	$0.00	$68.97
4	85.00	$45.02	$10.08	$11.47	$8.71	$0.00	$75.28

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice Notes

Step 1&2 Appr. indentured after 1/6/2020 receive no pension,

Apprentice to Journeyworker Ratio: 1:4

MORTAR MIXER LABORERS LABORERS - ZONE 1	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
OILER (OTHER THAN TRUCK CRANES,GRADALLS) OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$25.68	$16.05	$13.25	$3.25	$0.00	$58.23
	6/1/2026	$26.27	$16.05	$13.25	$3.25	$0.00	$58.82
	12/1/2026	$26.94	$16.05	$13.25	$3.25	$0.00	$59.49
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
OILER (TRUCK CRANES, GRADALLS) OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$31.65	$16.05	$13.25	$3.25	$0.00	$64.20
	6/1/2026	$32.37	$16.05	$13.25	$3.25	$0.00	$64.92
	12/1/2026	$33.17	$16.05	$13.25	$3.25	$0.00	$65.72
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
OTHER POWER DRIVEN EQUIPMENT - CLASS II OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PAINTER (BRIDGES/TANKS) PAINTERS LOCAL 35 PAINTERS LOCAL 35 - ZONE 2	1/1/2026	$59.56	$10.35	$12.00	$12.50	$0.00	$94.41

Apprentice: PAINTER (BRIDGES/TANKS)

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$29.78	$10.35	$0.00	$0.00	$0.00	$40.13
2	55.00	$32.76	$10.35	$0.00	$6.93	$0.00	$50.04
3	60.00	$35.74	$10.35	$0.00	$7.56	$0.00	$53.65
4	65.00	$38.71	$10.35	$0.00	$8.19	$0.00	$57.25
5	70.00	$41.69	$10.35	$12.00	$8.82	$0.00	$72.86
6	75.00	$44.67	$10.35	$12.00	$9.45	$0.00	$76.47
7	80.00	$47.65	$10.35	$12.00	$10.08	$0.00	$80.08
8	90.00	$53.60	$10.35	$12.00	$11.34	$0.00	$87.29

Apprentice to Journeyworker Ratio: 1:1

PAINTER (SPRAY OR SANDBLAST, NEW) *	1/1/2026	$50.46	$10.35	$12.00	$12.60	$0.00	$85.41

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
* 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: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$25.23	$10.35	$0.00	$0.00	$0.00	$35.58
2	55.00	$27.75	$10.35	$0.00	$6.93	$0.00	$45.03
3	60.00	$30.28	$10.35	$0.00	$7.56	$0.00	$48.19
4	65.00	$32.80	$10.35	$0.00	$8.19	$0.00	$51.34
5	70.00	$35.32	$10.35	$12.00	$8.82	$0.00	$66.49
6	75.00	$37.85	$10.35	$12.00	$9.45	$0.00	$69.65
7	80.00	$40.37	$10.35	$12.00	$10.08	$0.00	$72.80
8	90.00	$45.41	$10.35	$12.00	$11.34	$0.00	$79.10

Apprentice to Journeyworker Ratio: 1:1

PAINTER (SPRAY OR SANDBLAST, REPAINT) PAINTERS LOCAL 35 PAINTERS LOCAL 35 - ZONE 2	1/1/2026	$48.52	$10.35	$12.00	$12.60	$0.00	$83.47

Apprentice: PAINTER (SPRAY OR SANDBLAST, REPAINT)

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$24.26	$10.35	$0.00	$0.00	$0.00	$34.61
2	55.00	$26.69	$10.35	$0.00	$6.93	$0.00	$43.97
3	60.00	$29.11	$10.35	$0.00	$7.56	$0.00	$47.02
4	65.00	$31.54	$10.35	$0.00	$8.19	$0.00	$50.08
5	70.00	$33.96	$10.35	$12.00	$8.82	$0.00	$65.13
6	75.00	$36.39	$10.35	$12.00	$9.45	$0.00	$68.19
7	80.00	$38.82	$10.35	$12.00	$10.08	$0.00	$71.25
8	90.00	$43.67	$10.35	$12.00	$11.34	$0.00	$77.36

Apprentice to Journeyworker Ratio: 1:1

PAINTER / TAPER (BRUSH, NEW) * * 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	1/1/2026	$49.06	$10.35	$12.00	$12.60	$0.00	$84.01

Apprentice: PAINTER / TAPER (BRUSH, NEW) *

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
PAINTER / TAPER (BRUSH, REPAINT) PAINTERS LOCAL 35 PAINTERS LOCAL 35 - ZONE 2	1/1/2026	$47.12	$10.35	$12.00	$12.60	$0.00	$82.07
PAINTER TRAFFIC MARKINGS (HEAVY/HIGHWAY) LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2025	$48.70	$10.15	$9.50	$9.65	$0.00	$78.00
	6/1/2026	$50.25	$10.15	$9.50	$9.65	$0.00	$79.55
	12/1/2026	$51.75	$10.15	$9.50	$9.65	$0.00	$81.05
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
PANEL & PICKUP TRUCKS DRIVER TEAMSTERS JOINT COUNCIL NO. 10 TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/1/2025	$41.88	$15.41	$21.78	$0.00	$0.00	$79.07
	6/1/2026	$42.88	$15.41	$21.78	$0.00	$0.00	$80.07
	8/1/2026	$42.88	$15.91	$21.78	$0.00	$0.00	$80.57
	12/1/2026	$42.88	$15.91	$23.52	$0.00	$0.00	$82.31
PIER AND DOCK CONSTRUCTOR (UNDERPINNING AND DECK) PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 1)	8/1/2024	$55.79	$10.08	$11.62	$12.67	$0.00	$90.16
For apprentice rates see "Apprentice- PILE DRIVER"							

Apprentice: PAINTER / TAPER (BRUSH, NEW) *

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$24.53	$10.35	$0.00	$0.00	$0.00	$34.88
2	55.00	$26.98	$10.35	$0.00	$6.93	$0.00	$44.26
3	60.00	$29.44	$10.35	$0.00	$7.56	$0.00	$47.35
4	65.00	$31.89	$10.35	$0.00	$8.19	$0.00	$50.43
5	70.00	$34.34	$10.35	$12.00	$8.82	$0.00	$65.51
6	75.00	$36.80	$10.35	$12.00	$9.45	$0.00	$68.60
7	80.00	$39.25	$10.35	$12.00	$10.08	$0.00	$71.68
8	90.00	$44.15	$10.35	$12.00	$11.34	$0.00	$77.84

Apprentice to Journeyworker Ratio: 1:1

Apprentice: PAINTER / TAPER (BRUSH, REPAINT)

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$23.56	$10.35	$0.00	$0.00	$0.00	$33.91
2	55.00	$25.92	$10.35	$0.00	$6.93	$0.00	$43.20
3	60.00	$28.27	$10.35	$0.00	$7.56	$0.00	$46.18
4	65.00	$30.63	$10.35	$0.00	$8.19	$0.00	$49.17
5	70.00	$32.98	$10.35	$12.00	$8.82	$0.00	$64.15
6	75.00	$35.34	$10.35	$12.00	$9.45	$0.00	$67.14
7	80.00	$37.70	$10.35	$12.00	$10.08	$0.00	$70.13
8	90.00	$42.41	$10.35	$12.00	$11.34	$0.00	$76.10

Apprentice to Journeyworker Ratio: 1:1

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
PILE DRIVER PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 1)	8/1/2024	$55.79	$10.08	$11.62	$12.67	$0.00	$90.16

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

Apprentice to Journeyworker Ratio: 1:5

PIPEFITTER & STEAMFITTER PIPEFITTERS LOCAL 537 PIPEFITTERS LOCAL 537	9/1/2025	$69.08	$13.45	$13.75	$9.30	$0.00	$105.58

Apprentice: PIPEFITTER & STEAMFITTER

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	$27.63	$13.45	$13.75	$9.30	$0.00	$64.13
2	45.00	$31.09	$13.45	$13.75	$9.30	$0.00	$67.59
3	60.00	$41.45	$13.45	$13.75	$9.30	$0.00	$77.95
4	70.00	$48.36	$13.45	$13.75	$9.30	$0.00	$84.86
5	80.00	$55.26	$13.45	$13.75	$9.30	$0.00	$91.76

Apprentice to Journeyworker Ratio: 1:3

PIPELAYER LABORERS LABORERS - ZONE 1	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75

For apprentice rates see "Apprentice- LABORER"

PIPELAYER (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2025	$48.95	$10.15	$9.50	$9.65	$0.00	$78.25
	6/1/2026	$50.50	$10.15	$9.50	$9.65	$0.00	$79.80
	12/1/2026	$52.00	$10.15	$9.50	$9.65	$0.00	$81.30

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

PLUMBERS & GASFITTERS PLUMBERS & GASFITTERS LOCAL 12 PLUMBERS & GASFITTERS LOCAL 12	9/1/2025	$71.74	$14.32	$12.61	$8.00	$0.00	$106.67
	3/2/2026	$73.89	$14.32	$12.61	$8.00	$0.00	$108.82
	8/31/2026	$76.04	$14.32	$12.61	$8.00	$0.00	$110.97
	3/1/2027	$78.19	$14.32	$12.61	$8.00	$0.00	$113.12

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	8/30/2027	$80.34	$14.32	$12.61	$8.00	$0.00	$115.27
	2/28/2028	$82.54	$14.32	$12.61	$8.00	$0.00	$117.47
	9/4/2028	$84.74	$14.32	$12.61	$8.00	$0.00	$119.67
	3/5/2029	$86.94	$14.32	$12.61	$8.00	$0.00	$121.87
	9/3/2029	$89.14	$14.32	$12.61	$8.00	$0.00	$124.07
	3/4/2030	$91.09	$14.32	$12.61	$8.00	$0.00	$126.02

Apprentice: PLUMBERS & GASFITTERS

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	35.00	$25.11	$14.32	$4.61	$2.80	$0.00	$46.84
2	40.00	$28.70	$14.32	$5.22	$3.20	$0.00	$51.44
3	55.00	$39.46	$14.32	$7.07	$4.40	$0.00	$65.25
4	65.00	$46.63	$14.32	$8.30	$5.20	$0.00	$74.45
5	75.00	$53.81	$14.32	$9.53	$6.00	$0.00	$83.66

Apprentice: PLUMBERS & GASFITTERS

Effective Date: 3/2/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	35.00	$25.86	$14.32	$4.61	$2.80	$0.00	$47.59
2	40.00	$29.56	$14.32	$5.22	$3.20	$0.00	$52.30
3	55.00	$40.64	$14.32	$7.07	$4.40	$0.00	$66.43
4	65.00	$48.03	$14.32	$8.30	$5.20	$0.00	$75.85
5	75.00	$55.42	$14.32	$9.53	$6.00	$0.00	$85.27

Apprentice to Journeyworker Ratio: 1:2

PNEUMATIC CONTROLS (TEMP.) PIPEFITTERS LOCAL 537 PIPEFITTERS LOCAL 537	9/1/2025	$69.08	$13.45	$13.75	$9.30	$0.00	$105.58
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							
PNEUMATIC DRILL/TOOL OPERATOR LABORERS LABORERS - ZONE 1	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
PNEUMATIC DRILL/TOOL OPERATOR (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2025	$48.95	$10.15	$9.50	$9.65	$0.00	$78.25
	6/1/2026	$50.50	$10.15	$9.50	$9.65	$0.00	$79.80
	12/1/2026	$52.00	$10.15	$9.50	$9.65	$0.00	$81.30
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
POWDERMAN & BLASTER	12/1/2025	$49.60	$10.15	$9.50	$9.65	$0.00	$78.90

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS LABORERS - ZONE 1	6/1/2026	$51.15	$10.15	$9.50	$9.65	$0.00	$80.45
	12/1/2026	$52.65	$10.15	$9.50	$9.65	$0.00	$81.95
	6/1/2027	$54.25	$10.15	$9.50	$9.65	$0.00	$83.55
	12/1/2027	$55.85	$10.15	$9.50	$9.65	$0.00	$85.15
	6/1/2028	$57.53	$10.15	$9.50	$9.65	$0.00	$86.83
	12/1/2028	$59.20	$10.15	$9.50	$9.65	$0.00	$88.50
For apprentice rates see "Apprentice- LABORER"							
POWDERMAN & BLASTER (HEAVY & HIGHWAY)	12/1/2025	$49.70	$10.15	$9.50	$9.65	$0.00	$79.00
LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	6/1/2026	$51.25	$10.15	$9.50	$9.65	$0.00	$80.55
	12/1/2026	$52.75	$10.15	$9.50	$9.65	$0.00	$82.05
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
POWER SHOVEL/DERRICK/TRENCHING MACHINE OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PUMP OPERATOR (CONCRETE) OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PUMP OPERATOR (DEWATERING, OTHER) OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$37.97	$16.05	$13.25	$3.25	$0.00	$70.52
	6/1/2026	$38.83	$16.05	$13.25	$3.25	$0.00	$71.38
	12/1/2026	$39.78	$16.05	$13.25	$3.25	$0.00	$72.33
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
READY-MIX CONCRETE DRIVER TEAMSTERS 42 - J.G. MacLeallan (Wakefield) TEAMSTERS 42 - J.G. MacLeallan (Wakefield)	5/1/2025	$30.00	$12.00	$7.00	$0.00	$0.00	$49.00
	5/1/2026	$30.50	$12.00	$7.00	$0.00	$0.00	$49.50
RECLAIMERS OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
RIDE-ON MOTORIZED BUGGY OPERATOR LABORERS LABORERS - ZONE 1	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
ROLLER/SPREADER/MULCHING MACHINE OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
ROOFER (Inc.Roofer Waterproofng &Roofer Damproofg)	8/1/2025	$53.53	$13.28	$12.67	$9.03	$0.00	$88.51
ROOFERS LOCAL 33 ROOFERS LOCAL 33	2/1/2026	$54.78	$13.28	$12.67	$9.03	$0.00	$89.76

Apprentice: ROOFER (Inc.Roofer Waterproofng &Roofer 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.Roofer Waterproofng &Roofer 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

Apprentice Notes

** 1:5, 2:6-10, the 1:10; Reroofing: 1:4, then 1:1

Apprentice to Journeyworker Ratio: 1:5

ROOFER SLATE / TILE / PRECAST CONCRETE	8/1/2025	$53.78	$13.28	$12.67	$9.03	$0.00	$88.76
ROOFERS LOCAL 33 ROOFERS LOCAL 33	2/1/2026	$55.03	$13.28	$12.67	$9.03	$0.00	$90.01

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 SHEETMETAL WORKERS LOCAL 17 - A	2/1/2026	$62.93	$14.91	$18.74	$9.53	$2.98	$109.09

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

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: SHEETMETAL WORKER

Effective Date: 8/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
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

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

Apprentice to Journeyworker Ratio: 1:4

SPECIALIZED EARTH MOVING EQUIP < 35 TONS TEAMSTERS JOINT COUNCIL NO. 10 TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/1/2025	$42.34	$15.41	$21.78	$0.00	$0.00	$79.53
	6/1/2026	$43.34	$15.41	$21.78	$0.00	$0.00	$80.53
	8/1/2026	$43.34	$15.91	$21.78	$0.00	$0.00	$81.03
	12/1/2026	$43.34	$15.91	$23.52	$0.00	$0.00	$82.77
SPECIALIZED EARTH MOVING EQUIP > 35 TONS TEAMSTERS JOINT COUNCIL NO. 10 TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/1/2025	$42.63	$15.41	$21.78	$0.00	$0.00	$79.82
	6/1/2026	$43.63	$15.41	$21.78	$0.00	$0.00	$80.82
	8/1/2026	$43.63	$15.91	$21.78	$0.00	$0.00	$81.32
	12/1/2026	$43.63	$15.91	$23.52	$0.00	$0.00	$83.06
SPRINKLER FITTER SPRINKLER FITTERS LOCAL 550 SPRINKLER FITTERS LOCAL 550 - (Section A) Zone 1	1/1/2026	$72.05	$13.45	$7.45	$18.25	$0.00	$111.20

Apprentice: SPRINKLER FITTER

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	35.00	$25.22	$13.45	$13.84	$0.00	$0.00	$52.51
2	40.00	$28.82	$13.45	$14.75	$0.00	$0.00	$57.02

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: SPRINKLER FITTER							
Effective Date: 1/1/2026							
Step / Percent		**Apprentice Base Wage**					
3 / 45.00		$32.42	$13.45	$15.67	$0.00	$0.00	$61.54
4 / 50.00		$36.03	$13.45	$16.57	$0.00	$0.00	$66.05
5 / 55.00		$39.63	$13.45	$17.49	$0.00	$0.00	$70.57
6 / 60.00		$43.23	$13.45	$18.40	$0.00	$0.00	$75.08
7 / 65.00		$46.83	$13.45	$19.32	$0.00	$0.00	$79.60
8 / 70.00		$50.44	$13.45	$20.22	$0.00	$0.00	$84.11
9 / 75.00		$54.04	$13.45	$21.15	$0.00	$0.00	$88.64
10 / 80.00		$57.64	$13.45	$22.05	$0.00	$0.00	$93.14
Apprentice Notes							
Apprentice entered prior 9/30/10:							
Apprentice to Journeyworker Ratio: 1:3							
STEAM BOILER OPERATOR	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
TAMPERS, SELF-PROPELLED OR TRACTOR DRAWN	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
TELECOMMUNICATION TECHNICIAN	9/1/2025	$52.94	$13.00	$13.97	$6.98	$0.00	$86.89
TELECOMMUNICATION TECHNICIAN	3/1/2026	$53.49	$13.00	$14.23	$7.20	$0.00	$87.92
ELECTRICIANS LOCAL 103	9/1/2026	$55.02	$13.00	$14.28	$7.20	$0.00	$89.50
ELECTRICIANS LOCAL 103	3/1/2027	$55.98	$13.00	$14.31	$7.20	$0.00	$90.49
	9/1/2027	$57.50	$13.00	$14.36	$7.20	$0.00	$92.06
	3/1/2028	$58.46	$13.00	$14.38	$7.20	$0.00	$93.04
For apprentice rates and ratios see "Apprentice- ELECTRICIAN"							
Apprentice: TELECOMMUNICATION TECHNICIAN							
Effective Date: 9/1/2025							
Step / Percent		**Apprentice Base Wage**					
1 / 45.00		$23.82	$13.00	$0.71	$0.00	$0.00	$37.53
2 / 45.00		$23.82	$13.00	$0.71	$0.00	$0.00	$37.53
3 / 50.00		$26.47	$13.00	$13.17	$3.49	$0.00	$56.13
4 / 50.00		$26.47	$13.00	$13.17	$3.49	$0.00	$56.13
5 / 55.00		$29.12	$13.00	$13.25	$3.84	$0.00	$59.21
6 / 60.00		$31.76	$13.00	$13.33	$4.19	$0.00	$62.28
7 / 65.00		$34.41	$13.00	$13.41	$4.54	$0.00	$65.36

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: TELECOMMUNICATION TECHNICIAN

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
8	70.00	$37.06	$13.00	$13.49	$4.89	$0.00	$68.44
9	75.00	$39.71	$13.00	$13.57	$5.24	$0.00	$71.52
10	80.00	$42.35	$13.00	$13.65	$5.58	$0.00	$74.58

Apprentice: TELECOMMUNICATION TECHNICIAN

Effective Date: 3/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	$24.07	$13.00	$0.72	$0.00	$0.00	$37.79
2	45.00	$24.07	$13.00	$0.72	$0.00	$0.00	$37.79
3	50.00	$26.75	$13.00	$13.43	$3.60	$0.00	$56.78
4	50.00	$26.75	$13.00	$13.43	$3.60	$0.00	$56.78
5	55.00	$29.42	$13.00	$13.51	$3.96	$0.00	$59.89
6	60.00	$32.09	$13.00	$13.59	$4.32	$0.00	$63.00
7	65.00	$34.77	$13.00	$13.67	$4.68	$0.00	$66.12
8	70.00	$37.44	$13.00	$13.75	$5.04	$0.00	$69.23
9	75.00	$40.12	$13.00	$13.83	$5.40	$0.00	$72.35
10	80.00	$42.79	$13.00	$13.91	$5.76	$0.00	$75.46

Apprentice to Journeyworker Ratio: 1:1

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

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: TERRAZZO FINISHERS							
Effective Date: 2/1/2026							
Step / Percent		**Apprentice Base Wage**	**Health**	**Pension**	**Annuity**	**Supplemental Unemployment**	**Total Rate**
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
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
Apprentice to Journeyworker Ratio: 1:5							
TEST BORING DRILLER	12/1/2025	$52.70	$10.15	$9.50	$9.80	$0.00	$82.15
LABORERS	6/1/2026	$54.25	$10.15	$9.50	$9.80	$0.00	$83.70
LABORERS - FOUNDATION AND MARINE	12/1/2026	$55.75	$10.15	$9.50	$9.80	$0.00	$85.20
For apprentice rates see "Apprentice- LABORER"							
TEST BORING DRILLER HELPER	12/1/2025	$48.82	$10.15	$9.50	$9.80	$0.00	$78.27
LABORERS	6/1/2026	$50.37	$10.15	$9.50	$9.80	$0.00	$79.82
LABORERS - FOUNDATION AND MARINE	12/1/2026	$51.87	$10.15	$9.50	$9.80	$0.00	$81.32
For apprentice rates see "Apprentice- LABORER"							
TEST BORING LABORER	12/1/2025	$48.70	$10.15	$9.50	$9.80	$0.00	$78.15
LABORERS	6/1/2026	$50.25	$10.15	$9.50	$9.80	$0.00	$79.70
LABORERS - FOUNDATION AND MARINE	12/1/2026	$51.75	$10.15	$9.50	$9.80	$0.00	$81.20
For apprentice rates see "Apprentice- LABORER"							
TRACTORS/PORTABLE STEAM GENERATORS	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
TRAILERS FOR EARTH MOVING EQUIPMENT	12/1/2025	$42.92	$15.41	$21.78	$0.00	$0.00	$80.11
TEAMSTERS JOINT COUNCIL NO. 10	6/1/2026	$43.92	$15.41	$21.78	$0.00	$0.00	$81.11
TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	8/1/2026	$43.92	$15.91	$21.78	$0.00	$0.00	$81.61
	12/1/2026	$43.92	$15.91	$23.52	$0.00	$0.00	$83.35
TUNNEL WORK - COMPRESSED AIR	12/1/2025	$60.93	$10.15	$9.50	$10.25	$0.00	$90.83
LABORERS	6/1/2026	$62.48	$10.15	$9.50	$10.25	$0.00	$92.38
LABORERS (COMPRESSED AIR)	12/1/2026	$63.98	$10.15	$9.50	$10.25	$0.00	$93.88
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE)	12/1/2025	$62.93	$10.15	$9.50	$10.25	$0.00	$92.83
LABORERS	6/1/2026	$64.48	$10.15	$9.50	$10.25	$0.00	$94.38
LABORERS (COMPRESSED AIR)	12/1/2026	$65.98	$10.15	$9.50	$10.25	$0.00	$95.88
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - FREE AIR	12/1/2025	$53.00	$10.15	$9.50	$10.25	$0.00	$82.90
LABORERS	6/1/2026	$54.55	$10.15	$9.50	$10.25	$0.00	$84.45
LABORERS (FREE AIR TUNNEL)	12/1/2026	$56.05	$10.15	$9.50	$10.25	$0.00	$85.95

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - FREE AIR (HAZ. WASTE)	12/1/2025	$55.00	$10.15	$9.50	$10.25	$0.00	$84.90
LABORERS	6/1/2026	$56.55	$10.15	$9.50	$10.25	$0.00	$86.45
LABORERS (FREE AIR TUNNEL)	12/1/2026	$58.05	$10.15	$9.50	$10.25	$0.00	$87.95
For apprentice rates see "Apprentice- LABORER"							
VAC-HAUL	12/1/2025	$42.34	$15.41	$21.78	$0.00	$0.00	$79.53
TEAMSTERS JOINT COUNCIL NO. 10	6/1/2026	$43.34	$15.41	$21.78	$0.00	$0.00	$80.53
TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	8/1/2026	$43.34	$15.91	$21.78	$0.00	$0.00	$81.03
	12/1/2026	$43.34	$15.91	$23.52	$0.00	$0.00	$82.77
WAGON DRILL OPERATOR	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
LABORERS	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
LABORERS - ZONE 1	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
WAGON DRILL OPERATOR (HEAVY & HIGHWAY)	12/1/2025	$48.95	$10.15	$9.50	$9.65	$0.00	$78.25
LABORERS	6/1/2026	$50.50	$10.15	$9.50	$9.65	$0.00	$79.80
LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2026	$52.00	$10.15	$9.50	$9.65	$0.00	$81.30
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
WASTE WATER PUMP OPERATOR	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
WATER METER INSTALLER	9/1/2025	$71.74	$14.32	$12.61	$8.00	$0.00	$106.67
PLUMBERS & GASFITTERS LOCAL 12	3/2/2026	$73.89	$14.32	$12.61	$8.00	$0.00	$108.82
PLUMBERS & GASFITTERS LOCAL 12	8/31/2026	$76.04	$14.32	$12.61	$8.00	$0.00	$110.97
	3/1/2027	$78.19	$14.32	$12.61	$8.00	$0.00	$113.12
	8/30/2027	$80.34	$14.32	$12.61	$8.00	$0.00	$115.27
	2/2/2028	$82.54	$14.32	$12.61	$8.00	$0.00	$117.47
	9/4/2028	$84.74	$14.32	$12.61	$8.00	$0.00	$119.67
	3/5/2029	$86.94	$14.32	$12.61	$8.00	$0.00	$121.87
	9/3/2029	$89.14	$14.32	$12.61	$8.00	$0.00	$124.07
	3/4/2030	$91.09	$14.32	$12.61	$8.00	$0.00	$126.02
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GASFITTER"							

Outside Electrical

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
CABLE TECHNICIAN (Power Zone)	8/31/2025	$36.55	$10.75	$1.10	$1.00	$0.00	$49.40
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$38.13	$11.00	$1.14	$1.00	$0.00	$51.27
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$39.65	$11.25	$1.19	$1.00	$0.00	$53.09
For apprentice rates see "Apprentice- LINEMAN"							
CABLEMAN (Underground Ducts & Cables)	8/31/2025	$51.78	$10.75	$1.55	$10.71	$0.00	$74.79
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$54.02	$11.00	$1.62	$11.14	$0.00	$77.78
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$56.17	$11.25	$1.69	$11.57	$0.00	$80.68
For apprentice rates see "Apprentice- LINEMAN"							
DRIVER / GROUNDMAN CDL	8/31/2025	$42.64	$10.75	$1.28	$10.45	$0.00	$65.12
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$44.49	$11.00	$1.33	$10.80	$0.00	$67.62
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$46.26	$11.25	$1.39	$11.15	$0.00	$70.05
For apprentice rates see "Apprentice- LINEMAN"							
DRIVER / GROUNDMAN -Inexperienced (<2000 Hrs)	8/31/2025	$33.51	$10.75	$1.01	$1.00	$0.00	$46.27
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$34.95	$11.00	$1.05	$1.00	$0.00	$48.00
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$36.64	$11.25	$1.09	$1.00	$0.00	$49.98
For apprentice rates see "Apprentice- LINEMAN"							
EQUIPMENT OPERATOR (Class A CDL)	8/31/2025	$51.78	$10.75	$1.55	$14.79	$0.00	$78.87
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$54.02	$11.00	$1.62	$15.22	$0.00	$81.86
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$56.17	$11.25	$1.69	$15.65	$0.00	$84.76
For apprentice rates see "Apprentice- LINEMAN"							
EQUIPMENT OPERATOR (Class B CDL)	8/31/2025	$45.69	$10.75	$1.37	$11.27	$0.00	$69.08
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$47.66	$11.00	$1.43	$11.65	$0.00	$71.74
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$49.56	$11.25	$1.49	$12.03	$0.00	$74.33
For apprentice rates see "Apprentice- LINEMAN"							
GROUNDMAN	8/31/2025	$33.51	$10.75	$1.01	$1.00	$0.00	$46.27
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$34.95	$11.00	$1.05	$1.00	$0.00	$48.00
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$36.34	$11.25	$1.09	$1.00	$0.00	$49.68
For apprentice rates see "Apprentice- LINEMAN"							
GROUNDMAN -Inexperienced (<2000 Hrs.)	8/31/2025	$27.41	$10.75	$0.82	$1.00	$0.00	$39.98
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$28.60	$11.00	$0.86	$1.00	$0.00	$41.46
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$29.74	$11.25	$0.89	$1.00	$0.00	$42.88
For apprentice rates see "Apprentice- LINEMAN"							
JOURNEYMAN LINEMAN	8/31/2025	$60.92	$10.75	$1.83	$18.00	$0.00	$91.50
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$63.55	$11.00	$1.91	$18.50	$0.00	$94.96
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$66.08	$11.25	$1.98	$19.00	$0.00	$98.31

Apprentice: JOURNEYMAN LINEMAN

Effective Date: 8/31/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Outside Electrical

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: JOURNEYMAN LINEMAN

Effective Date: 8/31/2025

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
2	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
3	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
4	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
5	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
6	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
7	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Apprentice: JOURNEYMAN LINEMAN

Effective Date: 8/30/2026

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
2	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
3	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
4	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
5	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
6	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
7	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Apprentice to Journeyworker Ratio: 1:2

TELEDATA CABLE SPLICER OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	2/4/2019	$30.73	$4.70	$0.92	$2.25	$0.00	$38.60
TELEDATA LINEMAN/EQUIPMENT OPERATOR OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	2/4/2019	$28.93	$4.70	$0.89	$2.25	$0.00	$36.77
TELEDATA WIREMAN/INSTALLER/TECHNICIAN OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	2/4/2019	$28.93	$4.70	$0.89	$2.25	$0.00	$36.77

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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STATE PREVAILING WAGE RATES

TOWN OF LYNNFIELD

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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:	Massachusetts Highway	**City/Town:**	LYNNFIELD
Contract Number:	133292		
Description of Work:	BURLINGTON-LYNNFIELD-WAKEFIELD-WOBURN – Bridge Preservation of 10 Bridges carrying I-95 (613196)		
Job Location:	BURLINGTON-LYNNFIELD-WAKEFIELD-WOBURN - I-95		

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 form 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 TEAMSTERS JOINT COUNCIL NO. 10 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 TEAMSTERS JOINT COUNCIL NO. 10 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 TEAMSTERS JOINT COUNCIL NO. 10 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 PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 1) For apprentice rates see "Apprentice- PILE DRIVER"	1/1/2024	$117.16	$10.08	$11.62	$12.67	$0.00	$151.53
AIR TRACK OPERATOR LABORERS LABORERS - ZONE 2 For apprentice rates see "Apprentice- LABORER"	12/1/2025	$41.97	$10.15	$9.50	$9.11	$0.00	$70.73
	6/1/2026	$43.41	$10.15	$9.50	$9.11	$0.00	$72.17
	12/1/2026	$44.85	$10.15	$9.50	$9.11	$0.00	$73.61
	6/1/2027	$46.30	$10.15	$9.50	$9.11	$0.00	$75.06
	12/1/2027	$47.75	$10.15	$9.50	$9.11	$0.00	$76.51
	6/1/2028	$49.25	$10.15	$9.50	$9.11	$0.00	$78.01
	12/1/2028	$50.75	$10.15	$9.50	$9.11	$0.00	$79.51
AIR TRACK OPERATOR (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 2 (HEAVY & HIGHWAY) For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"	12/1/2025	$41.97	$10.15	$9.50	$9.21	$0.00	$70.83
	6/1/2026	$43.41	$10.15	$9.50	$9.21	$0.00	$72.27
	12/1/2026	$44.85	$10.15	$9.50	$9.21	$0.00	$73.71
ASBESTOS REMOVER - PIPE / MECH. EQUIPT. HEAT & FROST INSULATORS LOCAL 6 HEAT & FROST INSULATORS LOCAL 6 (BOSTON)	12/1/2025	$44.80	$14.50	$4.30	$6.75	$0.00	$70.35
ASPHALT RAKER LABORERS LABORERS - ZONE 2 For apprentice rates see "Apprentice- LABORER"	12/1/2025	$41.47	$10.15	$9.50	$9.11	$0.00	$70.23
	6/1/2026	$42.91	$10.15	$9.50	$9.11	$0.00	$71.67
	12/1/2026	$44.35	$10.15	$9.50	$9.11	$0.00	$73.11
	6/1/2027	$45.80	$10.15	$9.50	$9.11	$0.00	$74.56
	12/1/2027	$47.25	$10.15	$9.50	$9.11	$0.00	$76.01
	6/1/2028	$48.75	$10.15	$9.50	$9.11	$0.00	$77.51
	12/1/2028	$50.25	$10.15	$9.50	$9.11	$0.00	$79.01
ASPHALT RAKER (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2025	$41.47	$10.15	$9.50	$9.21	$0.00	$70.33
	6/1/2026	$42.91	$10.15	$9.50	$9.21	$0.00	$71.77
	12/1/2026	$44.35	$10.15	$9.50	$9.21	$0.00	$73.21

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
BACKHOE/FRONT-END LOADER	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
BARCO-TYPE JUMPING TAMPER	12/1/2025	$41.47	$10.15	$9.50	$9.11	$0.00	$70.23
LABORERS	6/1/2026	$42.91	$10.15	$9.50	$9.11	$0.00	$71.67
LABORERS - ZONE 2	12/1/2026	$44.35	$10.15	$9.50	$9.11	$0.00	$73.11
	6/1/2027	$45.80	$10.15	$9.50	$9.11	$0.00	$74.56
	12/1/2027	$47.25	$10.15	$9.50	$9.11	$0.00	$76.01
	6/1/2028	$48.75	$10.15	$9.50	$9.11	$0.00	$77.51
	12/1/2028	$50.25	$10.15	$9.50	$9.11	$0.00	$79.01
For apprentice rates see "Apprentice- LABORER"							
BLOCK PAVER, RAMMER / CURB SETTER	12/1/2025	$41.97	$10.15	$9.50	$9.11	$0.00	$70.73
LABORERS	6/1/2026	$43.41	$10.15	$9.50	$9.11	$0.00	$72.17
LABORERS - ZONE 2	12/1/2026	$44.85	$10.15	$9.50	$9.11	$0.00	$73.61
	6/1/2027	$46.30	$10.15	$9.50	$9.11	$0.00	$75.06
	12/1/2027	$47.75	$10.15	$9.50	$9.11	$0.00	$76.51
	6/1/2028	$49.25	$10.15	$9.50	$9.11	$0.00	$78.01
	12/1/2028	$50.75	$10.15	$9.50	$9.11	$0.00	$79.51
For apprentice rates see "Apprentice- LABORER"							
BLOCK PAVER, RAMMER / CURB SETTER (HEAVY & HIGHWAY)	12/1/2025	$41.97	$10.15	$9.50	$9.21	$0.00	$70.83
LABORERS	6/1/2026	$43.41	$10.15	$9.50	$9.21	$0.00	$72.27
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	$44.85	$10.15	$9.50	$9.21	$0.00	$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
BOILER MAKER	1/1/2024	$48.12	$7.07	$14.60	$6.00	$0.00	$75.79
BOILERMAKERS LOCAL 29							
BOILERMAKERS LOCAL 29							

Apprentice: BOILER MAKER

Effective Date: 1/1/2024

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	65.00	$31.28	$7.07	$9.32	$3.90	$0.00	$51.57
2	65.00	$31.28	$7.07	$9.32	$3.90	$0.00	$51.57
3	70.00	$33.68	$7.07	$10.03	$4.20	$0.00	$54.98
4	75.00	$36.09	$7.07	$10.74	$4.50	$0.00	$58.40
5	80.00	$38.50	$7.07	$11.45	$4.80	$0.00	$61.82
6	85.00	$40.90	$7.07	$12.18	$5.10	$0.00	$65.25

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: BOILER MAKER

Effective Date: 1/1/2024

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
7	90.00	$43.31	$7.07	$12.88	$5.40	$0.00	$68.66
8	95.00	$45.71	$7.07	$13.62	$5.70	$0.00	$72.10

Apprentice to Journeyworker Ratio: 1:4

BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING) BRICKLAYERS LOCAL 3 BRICKLAYERS LOCAL 3 (LYNN)	8/1/2025	$67.95	$11.49	$15.57	$8.02	$0.00	$103.03
	2/1/2026	$69.30	$11.49	$15.57	$8.02	$0.00	$104.38
	8/1/2026	$71.50	$11.49	$15.57	$8.02	$0.00	$106.58
	2/1/2027	$72.90	$11.49	$15.57	$8.02	$0.00	$107.98

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	$33.98	$11.49	$15.57	$8.02	$0.00	$69.06
2	60.00	$40.77	$11.49	$15.57	$8.02	$0.00	$75.85
3	70.00	$47.57	$11.49	$15.57	$8.02	$0.00	$82.65
4	80.00	$54.36	$11.49	$15.57	$8.02	$0.00	$89.44
5	90.00	$61.16	$11.49	$15.57	$8.02	$0.00	$96.24

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	$34.65	$11.49	$15.57	$8.02	$0.00	$69.73
2	60.00	$41.58	$11.49	$15.57	$8.02	$0.00	$76.66
3	70.00	$48.51	$11.49	$15.57	$8.02	$0.00	$83.59
4	80.00	$55.44	$11.49	$15.57	$8.02	$0.00	$90.52
5	90.00	$62.37	$11.49	$15.57	$8.02	$0.00	$97.45

Apprentice to Journeyworker Ratio: 1:5

BULLDOZER/GRADER/SCRAPER OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
CAISSON & UNDERPINNING BOTTOM MAN LABORERS LABORERS - FOUNDATION AND MARINE	12/1/2025	$49.85	$10.15	$9.50	$9.80	$0.00	$79.30
	6/1/2026	$51.40	$10.15	$9.50	$9.80	$0.00	$80.85
	12/1/2026	$52.90	$10.15	$9.50	$9.80	$0.00	$82.35
For apprentice rates see "Apprentice- LABORER"							
CAISSON & UNDERPINNING LABORER	12/1/2025	$48.70	$10.15	$9.50	$9.80	$0.00	$78.15

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS	6/1/2026	$50.25	$10.15	$9.50	$9.80	$0.00	$79.70
LABORERS - FOUNDATION AND MARINE	12/1/2026	$51.75	$10.15	$9.50	$9.80	$0.00	$81.20
For apprentice rates see "Apprentice- LABORER"							
CAISSON & UNDERPINNING TOP MAN	12/1/2025	$49.03	$10.15	$9.50	$9.80	$0.00	$78.48
LABORERS	6/1/2026	$50.58	$10.15	$9.50	$9.80	$0.00	$80.03
LABORERS - FOUNDATION AND MARINE	12/1/2026	$52.08	$10.15	$9.50	$9.80	$0.00	$81.53
For apprentice rates see "Apprentice- LABORER"							
CARBIDE CORE DRILL OPERATOR	12/1/2025	$41.47	$10.15	$9.50	$9.11	$0.00	$70.23
LABORERS	6/1/2026	$42.91	$10.15	$9.50	$9.11	$0.00	$71.67
LABORERS - ZONE 2	12/1/2026	$44.35	$10.15	$9.50	$9.11	$0.00	$73.11
	6/1/2027	$45.80	$10.15	$9.50	$9.11	$0.00	$74.56
	12/1/2027	$47.25	$10.15	$9.50	$9.11	$0.00	$76.01
	6/1/2028	$48.75	$10.15	$9.50	$9.11	$0.00	$77.51
	12/1/2028	$50.25	$10.15	$9.50	$9.11	$0.00	$79.01
For apprentice rates see "Apprentice- LABORER"							
CARPENTER	9/1/2025	$50.35	$10.33	$11.47	$8.50	$0.00	$80.65
CARPENTERS	3/1/2026	$51.60	$10.33	$11.47	$8.50	$0.00	$81.90
CARPENTERS -ZONE 2 (Eastern Massachusetts)	9/1/2026	$52.85	$10.33	$11.47	$8.50	$0.00	$83.15
	3/1/2027	$54.10	$10.33	$11.47	$8.50	$0.00	$84.40

Apprentice: CARPENTER

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	$22.66	$10.33	$0.00	$1.73	$0.00	$34.72
2	45.00	$22.66	$10.33	$0.00	$1.73	$0.00	$34.72
3	55.00	$27.69	$10.33	$0.00	$3.40	$0.00	$41.42
4	55.00	$27.69	$10.33	$0.00	$3.40	$0.00	$41.42
5	70.00	$35.25	$10.33	$11.41	$5.10	$0.00	$62.09
6	70.00	$35.25	$10.33	$11.41	$5.10	$0.00	$62.09
7	80.00	$40.28	$10.33	$11.44	$6.80	$0.00	$68.85
8	80.00	$40.28	$10.33	$11.44	$6.80	$0.00	$68.85

Apprentice: CARPENTER

Effective Date: 3/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	$23.22	$10.33	$0.00	$1.73	$0.00	$35.28
2	45.00	$23.22	$10.33	$0.00	$1.73	$0.00	$35.28
3	55.00	$28.38	$10.33	$0.00	$3.40	$0.00	$42.11
4	55.00	$28.38	$10.33	$0.00	$3.40	$0.00	$42.11
5	70.00	$36.12	$10.33	$11.41	$5.10	$0.00	$62.96
6	70.00	$36.12	$10.33	$11.41	$5.10	$0.00	$62.96
7	80.00	$41.28	$10.33	$11.44	$6.80	$0.00	$69.85

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: CARPENTER							
Effective Date: 3/1/2026							
Step / Percent / Apprentice Base Wage							
8 / 80.00		$41.28	$10.33	$11.44	$6.80	$0.00	$69.85
Apprentice to Journeyworker Ratio: 1:5							
CARPENTER WOOD FRAME CARPENTERS CARPENTERS-ZONE 3 (Wood Frame)	10/1/2025	$27.75	$7.02	$3.80	$1.00	$0.00	$39.57
	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: 10/1/2025

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

Apprentice: CARPENTER WOOD FRAME

Effective Date: 10/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$17.31	$7.02	$0.00	$0.00	$0.00	$24.33
2	60.00	$17.31	$7.02	$0.00	$0.00	$0.00	$24.33
3	65.00	$18.75	$7.02	$0.00	$1.00	$0.00	$26.77
4	70.00	$20.20	$7.02	$0.00	$1.00	$0.00	$28.22
5	75.00	$21.64	$7.02	$3.80	$1.00	$0.00	$33.46
6	80.00	$23.08	$7.02	$3.80	$1.00	$0.00	$34.90
7	85.00	$24.52	$7.02	$3.80	$1.00	$0.00	$36.34
8	90.00	$25.97	$7.02	$3.80	$1.00	$0.00	$37.79

Apprentice to Journeyworker Ratio: 1:5

CEMENT MASONRY/PLASTERING PLASTERERS AND CEMENT MASONS LOCAL 534 Plasterers and Cement Masons - Zone 1	1/1/2026	$53.24	$13.35	$16.43	$7.78	$1.80	$92.60
	7/1/2026	$54.49	$13.35	$16.43	$7.78	$1.80	$93.85
	1/1/2027	$55.94	$13.35	$16.43	$7.78	$1.80	$95.30
	7/1/2027	$57.29	$13.35	$16.43	$7.78	$1.80	$96.65
	1/1/2028	$58.64	$13.35	$16.43	$7.78	$1.80	$98.00

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: CEMENT MASONRY/PLASTERING

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$26.62	$13.35	$16.43	$0.00	$0.00	$56.40
2	60.00	$31.94	$13.35	$16.43	$7.78	$1.80	$71.30
3	65.00	$34.61	$13.35	$16.43	$7.78	$1.80	$73.97
4	70.00	$37.27	$13.35	$16.43	$7.78	$1.80	$76.63
5	75.00	$39.93	$13.35	$16.43	$7.78	$1.80	$79.29
6	80.00	$42.59	$13.35	$16.43	$7.78	$1.80	$81.95
7	90.00	$47.92	$13.35	$16.43	$0.00	$0.00	$77.70

Apprentice: CEMENT MASONRY/PLASTERING

Effective Date: 7/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$27.25	$13.35	$16.43	$0.00	$0.00	$57.03
2	60.00	$32.69	$13.35	$16.43	$7.78	$1.80	$72.05
3	65.00	$35.42	$13.35	$16.43	$7.78	$1.80	$74.78
4	70.00	$38.14	$13.35	$16.43	$7.78	$1.80	$77.50
5	75.00	$40.87	$13.35	$16.43	$7.78	$1.80	$80.23
6	80.00	$43.59	$13.35	$16.43	$7.78	$1.80	$82.95
7	90.00	$49.04	$13.35	$0.00	$7.78	$0.00	$70.17

Apprentice to Journeyworker Ratio: 1:5

CHAIN SAW OPERATOR LABORERS LABORERS - ZONE 2	12/1/2025	$41.47	$10.15	$9.50	$9.11	$0.00	$70.23
	6/1/2026	$42.91	$10.15	$9.50	$9.11	$0.00	$71.67
	12/1/2026	$44.35	$10.15	$9.50	$9.11	$0.00	$73.11
	6/1/2027	$45.80	$10.15	$9.50	$9.11	$0.00	$74.56
	12/1/2027	$47.25	$10.15	$9.50	$9.11	$0.00	$76.01
	6/1/2028	$48.75	$10.15	$9.50	$9.11	$0.00	$77.51
	12/1/2028	$50.25	$10.15	$9.50	$9.11	$0.00	$79.01
For apprentice rates see "Apprentice- LABORER"							
CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$60.48	$16.05	$13.25	$3.25	$0.00	$93.03
	6/1/2026	$61.81	$16.05	$13.25	$3.25	$0.00	$94.36
	12/1/2026	$63.29	$16.05	$13.25	$3.25	$0.00	$95.84
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
COMPRESSOR OPERATOR OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$37.97	$16.05	$13.25	$3.25	$0.00	$70.52
	6/1/2026	$38.83	$16.05	$13.25	$3.25	$0.00	$71.38
	12/1/2026	$39.78	$16.05	$13.25	$3.25	$0.00	$72.33
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
DELEADER (BRIDGE) PAINTERS LOCAL 35 PAINTERS LOCAL 35 - ZONE 2	1/1/2026	$59.56	$10.35	$12.00	$12.60	$0.00	$94.51

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: DELEADER (BRIDGE)

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$29.78	$10.35	$0.00	$0.00	$0.00	$40.13
2	55.00	$32.76	$10.35	$0.00	$6.93	$0.00	$50.04
3	60.00	$35.74	$10.35	$0.00	$7.56	$0.00	$53.65
4	65.00	$38.71	$10.35	$0.00	$8.19	$0.00	$57.25
5	70.00	$41.69	$10.35	$12.00	$8.82	$0.00	$72.86
6	75.00	$44.67	$10.35	$12.00	$9.45	$0.00	$76.47
7	80.00	$47.65	$10.35	$12.00	$10.08	$0.00	$80.08
8	90.00	$53.60	$10.35	$12.00	$11.34	$0.00	$87.29

Apprentice to Journeyworker Ratio: 1:1

DEMO: ADZEMAN LABORERS LABORERS - ZONE 2	12/1/2025	$48.75	$10.15	$9.50	$9.65	$0.00	$78.05
	6/1/2026	$50.30	$10.15	$9.50	$9.65	$0.00	$79.60
	12/7/2026	$51.80	$10.15	$9.50	$9.65	$0.00	$81.10
	6/7/2027	$53.40	$10.15	$9.50	$9.65	$0.00	$82.70
	12/6/2027	$55.00	$10.15	$9.50	$9.65	$0.00	$84.30
	6/5/2028	$56.68	$10.15	$9.50	$9.65	$0.00	$85.98
	12/4/2028	$58.35	$10.15	$9.50	$9.65	$0.00	$87.65
For apprentice rates see "Apprentice- LABORER"							
DEMO: BACKHOE/LOADER/HAMMER OPERATOR LABORERS LABORERS - ZONE 2	12/1/2025	$49.75	$10.15	$9.50	$9.65	$0.00	$79.05
	6/1/2026	$51.30	$10.15	$9.50	$9.65	$0.00	$80.60
	12/7/2026	$52.80	$10.15	$9.50	$9.65	$0.00	$82.10
	6/7/2027	$54.40	$10.15	$9.50	$9.65	$0.00	$83.70
	12/6/2027	$56.00	$10.15	$9.50	$9.65	$0.00	$85.30
	6/5/2028	$57.68	$10.15	$9.50	$9.65	$0.00	$86.98
	12/4/2028	$59.35	$10.15	$9.50	$9.65	$0.00	$88.65
For apprentice rates see "Apprentice- LABORER"							
DEMO: BURNERS LABORERS LABORERS - ZONE 2	12/1/2025	$49.50	$10.15	$9.50	$9.65	$0.00	$78.80
	6/1/2026	$51.05	$10.15	$9.50	$9.65	$0.00	$80.35
	12/7/2026	$52.55	$10.15	$9.50	$9.65	$0.00	$81.85
	6/7/2027	$54.15	$10.15	$9.50	$9.65	$0.00	$83.45
	12/6/2027	$55.75	$10.15	$9.50	$9.65	$0.00	$85.05
	6/5/2028	$57.43	$10.15	$9.50	$9.65	$0.00	$86.73
	12/4/2028	$59.10	$10.15	$9.50	$9.65	$0.00	$88.40
For apprentice rates see "Apprentice- LABORER"							
DEMO: CONCRETE CUTTER/SAWYER LABORERS LABORERS - ZONE 2	12/1/2025	$49.75	$10.15	$9.50	$9.65	$0.00	$79.05
	6/1/2026	$51.30	$10.15	$9.50	$9.65	$0.00	$80.60
	12/7/2026	$52.80	$10.15	$9.50	$9.65	$0.00	$82.10
	6/7/2027	$54.40	$10.15	$9.50	$9.65	$0.00	$83.70
	12/6/2027	$56.00	$10.15	$9.50	$9.65	$0.00	$85.30
	6/5/2028	$57.68	$10.15	$9.50	$9.65	$0.00	$86.98
	12/4/2028	$59.35	$10.15	$9.50	$9.65	$0.00	$88.65

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER"							
DEMO: JACKHAMMER OPERATOR	12/1/2025	$49.50	$10.15	$9.50	$9.65	$0.00	$78.80
LABORERS	6/1/2026	$51.05	$10.15	$9.50	$9.65	$0.00	$80.35
LABORERS - ZONE 2	12/7/2026	$52.55	$10.15	$9.50	$9.65	$0.00	$81.85
	6/7/2027	$54.15	$10.15	$9.50	$9.65	$0.00	$83.45
	12/6/2027	$55.75	$10.15	$9.50	$9.65	$0.00	$85.05
	6/5/2028	$57.43	$10.15	$9.50	$9.65	$0.00	$86.73
	12/4/2028	$59.10	$10.15	$9.50	$9.65	$0.00	$88.40
For apprentice rates see "Apprentice- LABORER"							
DEMO: WRECKING LABORER	12/1/2025	$48.75	$10.15	$9.50	$9.65	$0.00	$78.05
LABORERS	6/1/2026	$50.30	$10.15	$9.50	$9.65	$0.00	$79.60
LABORERS - ZONE 2	12/7/2026	$51.80	$10.15	$9.50	$9.65	$0.00	$81.10
	6/7/2027	$53.40	$10.15	$9.50	$9.65	$0.00	$82.70
	12/6/2027	$55.00	$10.15	$9.50	$9.65	$0.00	$84.30
	6/5/2028	$56.68	$10.15	$9.50	$9.65	$0.00	$85.98
	12/4/2028	$58.35	$10.15	$9.50	$9.65	$0.00	$87.65
For apprentice rates see "Apprentice- LABORER"							
DIRECTIONAL DRILL MACHINE OPERATOR	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
DIVER	8/1/2024	$78.11	$10.08	$11.62	$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	9/1/2025	$66.17	$13.00	$14.37	$8.72	$0.00	$102.26
ELECTRICIANS LOCAL 103	3/1/2026	$66.86	$13.00	$14.64	$9.00	$0.00	$103.50
ELECTRICIANS LOCAL 103	9/1/2026	$68.78	$13.00	$14.69	$9.00	$0.00	$105.47

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	3/1/2027	$69.97	$13.00	$14.73	$9.00	$0.00	$106.70
	9/1/2027	$71.88	$13.00	$14.79	$9.00	$0.00	$108.67
	3/1/2028	$73.08	$13.00	$14.82	$9.00	$0.00	$109.90

Apprentice: ELECTRICIAN

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	$26.47	$13.00	$0.79	$0.00	$0.00	$40.26
2	40.00	$26.47	$13.00	$0.79	$0.00	$0.00	$40.26
3	45.00	$29.78	$13.00	$13.27	$3.92	$0.00	$59.97
4	45.00	$29.78	$13.00	$13.27	$3.92	$0.00	$59.97
5	50.00	$33.09	$13.00	$13.37	$4.36	$0.00	$63.82
6	55.00	$36.39	$13.00	$13.47	$4.80	$0.00	$67.66
7	60.00	$39.70	$13.00	$13.57	$5.23	$0.00	$71.50
8	65.00	$43.01	$13.00	$13.67	$5.67	$0.00	$75.35
9	70.00	$46.32	$13.00	$13.77	$6.10	$0.00	$79.19
10	75.00	$49.63	$13.00	$13.87	$6.54	$0.00	$83.04

Apprentice: ELECTRICIAN

Effective Date: 3/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	$26.74	$13.00	$0.80	$0.00	$0.00	$40.54
2	40.00	$26.74	$13.00	$0.80	$0.00	$0.00	$40.54
3	45.00	$30.09	$13.00	$13.53	$4.05	$0.00	$60.67
4	45.00	$30.09	$13.00	$13.53	$4.05	$0.00	$60.67
5	50.00	$33.43	$13.00	$13.63	$4.50	$0.00	$64.56
6	55.00	$36.77	$13.00	$13.73	$4.95	$0.00	$68.45
7	60.00	$40.12	$13.00	$13.83	$5.40	$0.00	$72.35
8	65.00	$43.46	$13.00	$13.93	$5.85	$0.00	$76.24
9	70.00	$46.80	$13.00	$14.03	$6.30	$0.00	$80.13
10	75.00	$50.15	$13.00	$14.13	$6.75	$0.00	$84.03

Apprentice Notes

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Apprentice to Journeyworker Ratio: 2:3

ELEVATOR CONSTRUCTOR	1/1/2026	$77.26	$16.38	$11.06	$10.70	$0.00	$115.40
ELEVATOR CONSTRUCTORS LOCAL 4	1/1/2027	$80.55	$16.48	$11.16	$11.00	$0.00	$119.19
ELEVATOR CONSTRUCTORS LOCAL 4							

Apprentice: ELEVATOR CONSTRUCTOR

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: ELEVATOR CONSTRUCTOR

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$38.63	$0.00	$0.00	$0.00	$0.00	$38.63
2	55.00	$42.49	$16.38	$11.06	$10.70	$0.00	$80.63
3	65.00	$50.22	$16.38	$11.06	$10.70	$0.00	$88.36
4	70.00	$54.08	$16.38	$11.06	$10.70	$0.00	$92.22
5	80.00	$61.81	$16.38	$11.06	$10.70	$0.00	$99.95

Apprentice: ELEVATOR CONSTRUCTOR

Effective Date: 1/1/2027

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$40.28	$0.00	$0.00	$0.00	$0.00	$40.28
2	55.00	$44.30	$16.48	$11.16	$11.00	$0.00	$82.94
3	65.00	$52.36	$16.48	$11.16	$11.00	$0.00	$91.00
4	70.00	$56.39	$16.48	$11.16	$11.00	$0.00	$95.03
5	80.00	$64.44	$16.48	$11.16	$11.00	$0.00	$103.08

Apprentice to Journeyworker Ratio: 1:1

ELEVATOR CONSTRUCTOR HELPER	1/1/2026	$54.08	$16.38	$11.06	$10.07	$0.00	$91.59
ELEVATOR CONSTRUCTORS LOCAL 4 ELEVATOR CONSTRUCTORS LOCAL 4	1/1/2027	$56.39	$16.48	$11.16	$11.00	$0.00	$95.03
For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"							
FENCE & GUARD RAIL ERECTOR (HEAVY & HIGHWAY)	12/1/2025	$41.47	$10.15	$9.50	$9.21	$0.00	$70.33
LABORERS	6/1/2026	$42.91	$10.15	$9.50	$9.21	$0.00	$71.77
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	$44.35	$10.15	$9.50	$9.21	$0.00	$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
FIELD ENG.INST.PERSON-BLDG,SITE,HVY/HWY	11/1/2025	$53.56	$16.05	$13.25	$3.25	$0.00	$86.11
OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	5/1/2026	$55.00	$16.05	$13.25	$3.25	$0.00	$87.55
	11/1/2026	$56.29	$16.05	$13.25	$3.25	$0.00	$88.84
	5/1/2027	$57.72	$16.05	$13.25	$3.25	$0.00	$90.27
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY	11/1/2025	$55.17	$16.05	$13.25	$3.25	$0.00	$87.72
OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	5/1/2026	$56.62	$16.05	$13.25	$3.25	$0.00	$89.17
	11/1/2026	$57.92	$16.05	$13.25	$3.25	$0.00	$90.47
	5/1/2027	$59.37	$16.05	$13.25	$3.25	$0.00	$91.92
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIELD ENG.ROD PERSON-BLDG,SITE,HVY/HWY	11/1/2025	$26.03	$16.05	$13.25	$3.25	$0.00	$58.58
OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	5/1/2026	$26.88	$16.05	$13.25	$3.25	$0.00	$59.43
	11/1/2026	$27.64	$16.05	$13.25	$3.25	$0.00	$60.19
	5/1/2027	$28.49	$16.05	$13.25	$3.25	$0.00	$61.04

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIRE ALARM INSTALLER	9/1/2025	$66.17	$13.00	$14.37	$9.00	$0.00	$102.54
ELECTRICIANS LOCAL 103	3/1/2026	$66.86	$13.00	$14.64	$9.00	$0.00	$103.50
ELECTRICIANS LOCAL 103	9/1/2026	$68.78	$13.00	$14.69	$9.00	$0.00	$105.47
	3/1/2027	$69.97	$13.00	$14.73	$9.00	$0.00	$106.70
	9/1/2027	$71.88	$13.00	$14.79	$9.00	$0.00	$108.67
	3/1/2028	$73.08	$13.00	$14.82	$9.00	$0.00	$109.90
For apprentice rates see "Apprentice- ELECTRICIAN"							
FIRE ALARM REPAIR / MAINTENANCE	9/1/2025	$52.94	$13.00	$13.97	$6.98	$0.00	$86.89
/ COMMISSIONING	3/1/2026	$53.49	$13.00	$14.23	$7.20	$0.00	$87.92
ELECTRICIANS LOCAL 103	9/1/2026	$55.02	$13.00	$14.28	$7.20	$0.00	$89.50
ELECTRICIANS LOCAL 103	3/1/2027	$55.98	$13.00	$14.31	$7.20	$0.00	$90.49
	9/1/2027	$57.50	$13.00	$14.36	$7.20	$0.00	$92.06
	3/1/2028	$58.46	$13.00	$14.38	$7.20	$0.00	$93.04
For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"							
FIREMAN (ASST. ENGINEER)	12/1/2025	$47.69	$16.05	$13.25	$3.25	$0.00	$80.24
OPERATING ENGINEERS LOCAL 4	6/1/2026	$48.75	$16.05	$13.25	$3.25	$0.00	$81.30
OPERATING ENGINEERS LOCAL 4	12/1/2026	$49.93	$16.05	$13.25	$3.25	$0.00	$82.48
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FLAGGER & SIGNALER (HEAVY & HIGHWAY)	12/1/2025	$28.09	$10.15	$9.50	$9.21	$0.00	$56.95
LABORERS	6/1/2026	$29.21	$10.15	$9.50	$9.21	$0.00	$58.07
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	$29.21	$10.15	$9.50	$9.21	$0.00	$58.07
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
FLOORCOVERER	9/1/2025	$57.74	$10.33	$11.47	$8.80	$0.00	$88.34
FLOORCOVERERS LOCAL 2168	3/1/2026	$59.24	$10.33	$11.47	$8.80	$0.00	$89.84
FLOORCOVERERS LOCAL 2168 ZONE I	9/1/2026	$60.74	$10.33	$11.47	$8.80	$0.00	$91.34
	3/1/2027	$62.24	$10.33	$11.47	$8.80	$0.00	$92.84

Apprentice: FLOORCOVERER

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	$25.98	$10.33	$0.00	$1.76	$0.00	$38.07
2	45.00	$25.98	$10.33	$0.00	$1.76	$0.00	$38.07
3	55.00	$31.76	$10.33	$0.00	$3.52	$0.00	$45.61
4	55.00	$31.76	$10.33	$0.00	$3.52	$0.00	$45.61
5	70.00	$40.42	$10.33	$11.47	$5.28	$0.00	$67.50
6	70.00	$40.42	$10.33	$11.47	$5.28	$0.00	$67.50
7	80.00	$46.19	$10.33	$11.47	$7.04	$0.00	$75.03
8	80.00	$46.19	$10.33	$11.47	$7.04	$0.00	$75.03

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
FORK LIFT/CHERRY PICKER	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
GENERATOR/LIGHTING PLANT/HEATERS	12/1/2025	$37.97	$16.05	$13.25	$3.25	$0.00	$70.52
OPERATING ENGINEERS LOCAL 4	6/1/2026	$38.83	$16.05	$13.25	$3.25	$0.00	$71.38
OPERATING ENGINEERS LOCAL 4	12/1/2026	$39.78	$16.05	$13.25	$3.25	$0.00	$72.33
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)	1/1/2026	$49.06	$10.35	$12.00	$12.60	$0.00	$84.01
GLAZIERS LOCAL 35							
GLAZIERS LOCAL 35 (ZONE 2)							

Apprentice: FLOORCOVERER

Effective Date: 3/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	$26.66	$10.33	$0.00	$1.76	$0.00	$38.75
2	45.00	$26.66	$10.33	$0.00	$1.76	$0.00	$38.75
3	55.00	$32.58	$10.33	$0.00	$3.52	$0.00	$46.43
4	55.00	$32.58	$10.33	$0.00	$3.52	$0.00	$46.43
5	70.00	$41.47	$10.33	$11.47	$5.28	$0.00	$68.55
6	70.00	$41.47	$10.33	$11.47	$5.28	$0.00	$68.55
7	80.00	$47.39	$10.33	$11.47	$7.04	$0.00	$76.23
8	80.00	$47.39	$10.33	$11.47	$7.04	$0.00	$76.23

Apprentice Notes

Steps are 750 hrs.

Apprentice to Journeyworker Ratio: 1:1

Apprentice: GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$24.53	$10.35	$0.00	$0.00	$0.00	$34.88
2	55.00	$26.98	$10.35	$0.00	$6.88	$0.00	$44.21
3	60.00	$29.44	$10.35	$0.00	$7.50	$0.00	$47.29
4	65.00	$31.89	$10.35	$0.00	$8.13	$0.00	$50.37
5	70.00	$34.34	$10.35	$12.00	$8.75	$0.00	$65.44
6	75.00	$36.80	$10.35	$12.00	$9.38	$0.00	$68.53
7	80.00	$39.25	$10.35	$12.00	$10.00	$0.00	$71.60
8	90.00	$44.15	$10.35	$12.00	$11.25	$0.00	$77.75

Apprentice to Journeyworker Ratio: 1:1

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
HOISTING ENGINEER/CRANES/GRADALLS	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58

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	$16.05	$13.25	$3.25	$0.00	$68.42
3	65.00	$38.86	$16.05	$13.25	$3.25	$0.00	$71.41
4	70.00	$41.85	$16.05	$13.25	$3.25	$0.00	$74.40
5	75.00	$44.84	$16.05	$13.25	$3.25	$0.00	$77.39
6	80.00	$47.82	$16.05	$13.25	$3.25	$0.00	$80.37
7	85.00	$50.81	$16.05	$13.25	$3.25	$0.00	$83.36
8	90.00	$53.80	$16.05	$13.25	$3.25	$0.00	$86.35

Apprentice: HOISTING ENGINEER/CRANES/GRADALLS

Effective Date: 6/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	$33.32	$0.00	$0.00	$0.00	$0.00	$33.32
2	60.00	$36.35	$16.05	$13.25	$3.25	$0.00	$68.90
3	65.00	$39.38	$16.05	$13.25	$3.25	$0.00	$71.93
4	70.00	$42.41	$16.50	$13.25	$3.25	$0.00	$75.41
5	75.00	$45.44	$16.50	$13.25	$3.25	$0.00	$78.44
6	80.00	$48.46	$16.50	$13.25	$3.25	$0.00	$81.46
7	85.00	$51.49	$16.50	$13.25	$3.25	$0.00	$84.49
8	90.00	$54.52	$16.50	$13.25	$3.25	$0.00	$87.52

Apprentice to Journeyworker Ratio: 1:6

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)	9/1/2025	$66.17	$13.00	$14.37	$8.72	$0.00	$102.26
ELECTRICIANS LOCAL 103	3/1/2026	$66.86	$13.00	$14.64	$9.00	$0.00	$103.50
ELECTRICIANS LOCAL 103	9/1/2026	$68.78	$13.00	$14.69	$9.00	$0.00	$105.47
	3/1/2027	$69.97	$13.00	$14.73	$9.00	$0.00	$106.70
	9/1/2027	$71.88	$13.00	$14.79	$9.00	$0.00	$108.67
	3/1/2028	$73.08	$13.00	$14.82	$9.00	$0.00	$109.90

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"

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
HVAC (TESTING AND BALANCING -WATER) PIPEFITTERS LOCAL 537 PIPEFITTERS LOCAL 537	9/1/2025	$69.08	$13.45	$13.75	$9.30	$0.00	$105.58
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							
HVAC MECHANIC PIPEFITTERS LOCAL 537 PIPEFITTERS LOCAL 537	9/1/2025	$69.08	$13.45	$13.75	$9.30	$0.00	$105.58
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							
HYDRAULIC DRILLS	12/1/2025	$41.97	$10.15	$9.50	$9.11	$0.00	$70.73
LABORERS LABORERS - ZONE 2	6/1/2026	$43.41	$10.15	$9.50	$9.11	$0.00	$72.17
	12/1/2026	$44.85	$10.15	$9.50	$9.11	$0.00	$73.61
	6/1/2027	$46.30	$10.15	$9.50	$9.11	$0.00	$75.06
	12/1/2027	$47.75	$10.15	$9.50	$9.11	$0.00	$76.51
	6/1/2028	$49.25	$10.15	$9.50	$9.11	$0.00	$78.01
	12/1/2028	$50.75	$10.15	$9.50	$9.11	$0.00	$79.51
For apprentice rates see "Apprentice- LABORER"							
HYDRAULIC DRILLS (HEAVY & HIGHWAY)	12/1/2025	$41.97	$10.15	$9.50	$9.21	$0.00	$70.83
LABORERS LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	$43.41	$10.15	$9.50	$9.21	$0.00	$72.27
	12/1/2026	$44.85	$10.15	$9.50	$9.21	$0.00	$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
INSULATOR (PIPES & TANKS)	9/1/2025	$60.34	$14.75	$9.52	$10.09	$0.00	$94.70
HEAT & FROST INSULATORS LOCAL 6 HEAT & FROST INSULATORS LOCAL 6 (BOSTON)	9/1/2026	$63.76	$14.75	$9.52	$10.09	$0.00	$98.12

Apprentice: INSULATOR (PIPES & TANKS)

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$30.17	$14.75	$9.27	$5.05	$0.00	$59.24
2	60.00	$36.20	$14.75	$9.32	$6.05	$0.00	$66.32
3	70.00	$42.24	$14.75	$9.37	$7.06	$0.00	$73.42
4	80.00	$48.27	$14.75	$9.42	$8.07	$0.00	$80.51

Apprentice: INSULATOR (PIPES & TANKS)

Effective Date: 9/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$31.88	$14.75	$9.27	$5.05	$0.00	$60.95
2	60.00	$38.26	$14.75	$9.32	$6.05	$0.00	$68.38
3	70.00	$44.63	$14.75	$9.37	$7.06	$0.00	$75.81
4	80.00	$51.01	$14.75	$9.42	$8.07	$0.00	$83.25

Apprentice to Journeyworker Ratio: 1:4

IRONWORKER/WELDER	9/16/2025	$57.87	$9.05	$12.75	$14.50	$0.00	$94.17

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
IRONWORKERS LOCAL 7 IRONWORKERS LOCAL 7 (BOSTON AREA)							

Apprentice: IRONWORKER/WELDER

Effective Date: 9/16/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$34.72	$9.05	$12.75	$4.50	$0.00	$61.02
2	75.00	$43.40	$9.05	$12.75	$4.50	$0.00	$69.70
3	85.00	$49.19	$9.05	$12.75	$4.50	$0.00	$75.49
4	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
5	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
6	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Apprentice to Journeyworker Ratio: 1:4

JACKHAMMER & PAVING BREAKER OPERATOR LABORERS LABORERS - ZONE 2	12/1/2025	$41.47	$10.15	$9.50	$9.11	$0.00	$70.23
	6/1/2026	$42.91	$10.15	$9.50	$9.11	$0.00	$71.67
	12/1/2026	$44.35	$10.15	$9.50	$9.11	$0.00	$73.11
	6/1/2027	$45.80	$10.15	$9.50	$9.11	$0.00	$74.56
	12/1/2027	$47.25	$10.15	$9.50	$9.11	$0.00	$76.01
	6/1/2028	$48.75	$10.15	$9.50	$9.11	$0.00	$77.51
	12/1/2028	$50.25	$10.15	$9.50	$9.11	$0.00	$79.01

For apprentice rates see "Apprentice- LABORER"

LABORER LABORERS LABORERS - ZONE 2	12/1/2025	$41.22	$10.15	$9.50	$9.11	$0.00	$69.98
	6/1/2026	$42.66	$10.15	$9.50	$9.11	$0.00	$71.42
	12/1/2026	$44.10	$10.15	$9.50	$9.11	$0.00	$72.86
	6/1/2027	$45.55	$10.15	$9.50	$9.11	$0.00	$74.31
	12/1/2027	$47.00	$10.15	$9.50	$9.11	$0.00	$75.76
	6/1/2028	$48.50	$10.15	$9.50	$9.11	$0.00	$77.26
	12/1/2028	$50.00	$10.15	$9.50	$9.11	$0.00	$78.76

Apprentice: LABORER

Effective Date: 12/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$25.03	$10.15	$9.50	$9.11	$0.00	$53.79
2	70.00	$29.20	$10.15	$9.50	$9.11	$0.00	$57.96
3	80.00	$33.38	$10.15	$9.50	$9.11	$0.00	$62.14
4	90.00	$37.55	$10.15	$9.50	$9.11	$0.00	$66.31

Apprentice: LABORER

Effective Date: 6/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$25.60	$10.15	$9.50	$9.11	$0.00	$54.36

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: LABORER

Effective Date: 6/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
2	70.00	$29.86	$10.15	$9.50	$9.11	$0.00	$58.62
3	80.00	$34.13	$10.15	$9.50	$9.11	$0.00	$62.89
4	90.00	$38.39	$10.15	$9.50	$9.11	$0.00	$67.15

Apprentice to Journeyworker Ratio: 1:5

LABORER (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2025	$41.22	$10.15	$9.50	$9.21	$0.00	$70.08
	6/1/2026	$42.66	$10.15	$9.50	$9.21	$0.00	$71.52
	12/1/2026	$44.10	$10.15	$9.50	$9.21	$0.00	$72.96

Apprentice: LABORER (HEAVY & HIGHWAY)

Effective Date: 12/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$25.03	$10.15	$9.50	$9.21	$0.00	$53.89
2	70.00	$29.20	$10.15	$9.50	$9.21	$0.00	$58.06
3	80.00	$33.38	$10.15	$9.50	$9.21	$0.00	$62.24
4	90.00	$37.55	$10.15	$9.50	$9.21	$0.00	$66.41

Apprentice: LABORER (HEAVY & HIGHWAY)

Effective Date: 6/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$25.60	$10.15	$9.50	$9.21	$0.00	$54.46
2	70.00	$29.86	$10.15	$9.50	$9.21	$0.00	$58.72
3	80.00	$34.13	$10.15	$9.50	$9.21	$0.00	$62.99
4	90.00	$38.39	$10.15	$9.50	$9.10	$0.00	$67.14

Apprentice to Journeyworker Ratio: 1:5

LABORER: CARPENTER TENDER LABORERS LABORERS - ZONE 2	12/1/2025	$41.22	$10.15	$9.50	$9.11	$0.00	$69.98
	6/1/2026	$42.66	$10.15	$9.50	$9.11	$0.00	$71.42
	12/1/2026	$44.10	$10.15	$9.50	$9.11	$0.00	$72.86
	6/1/2027	$45.55	$10.15	$9.50	$9.11	$0.00	$74.31
	12/1/2027	$47.00	$10.15	$9.50	$9.11	$0.00	$75.76
	6/1/2028	$48.50	$10.15	$9.50	$9.11	$0.00	$77.26
	12/1/2028	$50.00	$10.15	$9.50	$9.11	$0.00	$78.76

For apprentice rates see "Apprentice- LABORER"

LABORER: CEMENT FINISHER TENDER LABORERS LABORERS - ZONE 2	12/1/2025	$41.22	$10.15	$9.50	$9.11	$0.00	$69.98
	6/1/2026	$42.66	$10.15	$9.50	$9.11	$0.00	$71.42
	12/1/2026	$44.10	$10.15	$9.50	$9.11	$0.00	$72.86
	6/1/2027	$45.55	$10.15	$9.50	$9.11	$0.00	$74.31

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	12/1/2027	$47.00	$10.15	$9.50	$9.11	$0.00	$75.76
	6/1/2028	$48.50	$10.15	$9.50	$9.11	$0.00	$77.26
	12/1/2028	$50.00	$10.15	$9.50	$9.11	$0.00	$78.76
For apprentice rates see "Apprentice- LABORER"							
LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER LABORERS LABORERS - ZONE 2	12/1/2025	$41.31	$10.15	$9.50	$9.65	$0.00	$70.61
	6/1/2026	$42.75	$10.15	$9.50	$9.65	$0.00	$72.05
	12/7/2026	$44.19	$10.15	$9.50	$9.65	$0.00	$73.49
	6/7/2027	$45.64	$10.15	$9.50	$9.65	$0.00	$74.94
	12/6/2027	$47.09	$10.15	$9.50	$9.65	$0.00	$76.39
	6/5/2028	$48.59	$10.15	$9.50	$9.65	$0.00	$77.89
	12/4/2028	$50.09	$10.15	$9.50	$9.65	$0.00	$79.39
For apprentice rates see "Apprentice- LABORER"							
LABORER: MASON TENDER LABORERS LABORERS - ZONE 2	12/1/2025	$41.47	$10.15	$9.50	$9.11	$0.00	$70.23
	6/1/2026	$42.91	$10.15	$9.50	$9.11	$0.00	$71.67
	12/1/2026	$44.35	$10.15	$9.50	$9.11	$0.00	$73.11
	6/1/2027	$45.80	$10.15	$9.50	$9.11	$0.00	$74.56
	12/1/2027	$47.25	$10.15	$9.50	$9.11	$0.00	$76.01
	6/1/2028	$48.75	$10.15	$9.50	$9.11	$0.00	$77.51
	12/1/2028	$50.25	$10.15	$9.50	$9.11	$0.00	$79.01
For apprentice rates see "Apprentice- LABORER"							
LABORER: MASON TENDER (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2025	$41.47	$10.15	$9.50	$9.21	$0.00	$70.33
	6/1/2026	$42.91	$10.15	$9.50	$9.21	$0.00	$71.77
	12/1/2026	$44.35	$10.15	$9.50	$9.21	$0.00	$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
LABORER: MULTI-TRADE TENDER LABORERS LABORERS - ZONE 2	12/1/2025	$41.22	$10.15	$9.50	$9.11	$0.00	$69.98
	6/1/2026	$42.66	$10.15	$9.50	$9.11	$0.00	$71.42
	12/1/2026	$44.10	$10.15	$9.50	$9.11	$0.00	$72.86
	6/1/2027	$45.55	$10.15	$9.50	$9.11	$0.00	$74.31
	12/1/2027	$47.00	$10.15	$9.50	$9.11	$0.00	$75.76
	6/1/2028	$48.50	$10.15	$9.50	$9.11	$0.00	$77.26
	12/1/2028	$50.00	$10.15	$9.50	$9.11	$0.00	$78.76
For apprentice rates see "Apprentice- LABORER"							
LABORER: TREE REMOVER LABORERS LABORERS - ZONE 2	12/1/2025	$41.22	$10.15	$9.50	$9.11	$0.00	$69.98
	6/1/2026	$42.66	$10.15	$9.50	$9.11	$0.00	$71.42
	12/1/2026	$44.10	$10.15	$9.50	$9.11	$0.00	$72.86
	6/1/2027	$45.55	$10.15	$9.50	$9.11	$0.00	$74.31
	12/1/2027	$47.00	$10.15	$9.50	$9.11	$0.00	$75.76
	6/1/2028	$48.50	$10.15	$9.50	$9.11	$0.00	$77.26
	12/1/2028	$50.00	$10.15	$9.50	$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"							
LASER BEAM OPERATOR LABORERS LABORERS - ZONE 2	12/1/2025	$41.47	$10.15	$9.50	$9.11	$0.00	$70.23
	6/1/2026	$42.91	$10.15	$9.50	$9.11	$0.00	$71.67
	12/1/2026	$44.35	$10.15	$9.50	$9.11	$0.00	$73.11
	6/1/2027	$45.80	$10.15	$9.50	$9.11	$0.00	$74.56

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	12/1/2027	$47.25	$10.15	$9.50	$9.11	$0.00	$76.01
	6/1/2028	$48.75	$10.15	$9.50	$9.11	$0.00	$77.51
	12/1/2028	$50.25	$10.15	$9.50	$9.11	$0.00	$79.01
For apprentice rates see "Apprentice- LABORER"							
LASER BEAM OPERATOR (HEAVY & HIGHWAY)	12/1/2025	$41.47	$10.15	$9.50	$9.21	$0.00	$70.33
LABORERS LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	$42.91	$10.15	$9.50	$9.21	$0.00	$71.77
	12/1/2026	$44.35	$10.15	$9.50	$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 BRICKLAYERS LOCAL 3 - MARBLE & TILE	2/1/2026	$53.16	$11.49	$15.57	$6.05	$0.00	$86.27
	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

Apprentice to Journeyworker Ratio: 1:5

MARBLE MASONS,TILELAYERS & TERRAZZO MECH	8/1/2025	$67.97	$11.49	$15.57	$7.99	$0.00	$103.02
BRICKLAYERS LOCAL 3 BRICKLAYERS LOCAL 3 - MARBLE & TILE	2/1/2026	$69.32	$11.49	$15.57	$7.99	$0.00	$104.37
	8/1/2026	$71.52	$11.49	$15.57	$7.99	$0.00	$106.57
	2/1/2027	$72.92	$11.49	$15.57	$7.99	$0.00	$107.97

Apprentice: MARBLE MASONS,TILELAYERS & TERRAZZO MECH

Effective Date: 8/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

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

Apprentice to Journeyworker Ratio: 1:5

MECH. SWEEPER OPERATOR (ON CONST. SITES) OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
MECHANICS MAINTENANCE OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
MILLWRIGHT (Zone 1) MILLWRIGHTS LOCAL 1121 MILLWRIGHTS LOCAL 1121 - Zone 1	1/5/2026	$52.97	$10.08	$11.47	$10.25	$0.00	$84.77

Apprentice: MILLWRIGHT (Zone 1)

Effective Date: 1/5/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	$29.13	$10.08	$0.00	$5.64	$0.00	$44.85
2	65.00	$34.43	$10.08	$0.00	$6.66	$0.00	$51.17
3	75.00	$39.73	$10.08	$11.47	$7.69	$0.00	$68.97
4	85.00	$45.02	$10.08	$11.47	$8.71	$0.00	$75.28

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice Notes							
Step 1&2 Appr. indentured after 1/6/2020 receive no pension,							
Apprentice to Journeyworker Ratio: 1:4							
MORTAR MIXER	12/1/2025	$41.47	$10.15	$9.50	$9.11	$0.00	$70.23
LABORERS	6/1/2026	$42.91	$10.15	$9.50	$9.11	$0.00	$71.67
LABORERS - ZONE 2	12/1/2026	$44.35	$10.15	$9.50	$9.11	$0.00	$73.11
	6/1/2027	$45.80	$10.15	$9.50	$9.11	$0.00	$74.56
	12/1/2027	$47.25	$10.15	$9.50	$9.11	$0.00	$76.01
	6/1/2028	$48.75	$10.15	$9.50	$9.11	$0.00	$77.51
	12/1/2028	$50.25	$10.15	$9.50	$9.11	$0.00	$79.01
For apprentice rates see "Apprentice- LABORER"							
OILER (OTHER THAN TRUCK CRANES,GRADALLS)	12/1/2025	$25.68	$16.05	$13.25	$3.25	$0.00	$58.23
OPERATING ENGINEERS LOCAL 4	6/1/2026	$26.27	$16.05	$13.25	$3.25	$0.00	$58.82
OPERATING ENGINEERS LOCAL 4	12/1/2026	$26.94	$16.05	$13.25	$3.25	$0.00	$59.49
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
OILER (TRUCK CRANES, GRADALLS)	12/1/2025	$31.65	$16.05	$13.25	$3.25	$0.00	$64.20
OPERATING ENGINEERS LOCAL 4	6/1/2026	$32.37	$16.05	$13.25	$3.25	$0.00	$64.92
OPERATING ENGINEERS LOCAL 4	12/1/2026	$33.17	$16.05	$13.25	$3.25	$0.00	$65.72
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
OTHER POWER DRIVEN EQUIPMENT - CLASS II	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PAINTER (BRIDGES/TANKS)	1/1/2026	$59.56	$10.35	$12.00	$12.50	$0.00	$94.41
PAINTERS LOCAL 35							
PAINTERS LOCAL 35 - ZONE 2							

Apprentice: PAINTER (BRIDGES/TANKS)

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$29.78	$10.35	$0.00	$0.00	$0.00	$40.13
2	55.00	$32.76	$10.35	$0.00	$6.93	$0.00	$50.04
3	60.00	$35.74	$10.35	$0.00	$7.56	$0.00	$53.65
4	65.00	$38.71	$10.35	$0.00	$8.19	$0.00	$57.25
5	70.00	$41.69	$10.35	$12.00	$8.82	$0.00	$72.86
6	75.00	$44.67	$10.35	$12.00	$9.45	$0.00	$76.47
7	80.00	$47.65	$10.35	$12.00	$10.08	$0.00	$80.08
8	90.00	$53.60	$10.35	$12.00	$11.34	$0.00	$87.29

Apprentice to Journeyworker Ratio: 1:1							
PAINTER (SPRAY OR SANDBLAST, NEW) *	1/1/2026	$50.46	$10.35	$12.00	$12.60	$0.00	$85.41

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
* 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: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$25.23	$10.35	$0.00	$0.00	$0.00	$35.58
2	55.00	$27.75	$10.35	$0.00	$6.93	$0.00	$45.03
3	60.00	$30.28	$10.35	$0.00	$7.56	$0.00	$48.19
4	65.00	$32.80	$10.35	$0.00	$8.19	$0.00	$51.34
5	70.00	$35.32	$10.35	$12.00	$8.82	$0.00	$66.49
6	75.00	$37.85	$10.35	$12.00	$9.45	$0.00	$69.65
7	80.00	$40.37	$10.35	$12.00	$10.08	$0.00	$72.80
8	90.00	$45.41	$10.35	$12.00	$11.34	$0.00	$79.10

Apprentice to Journeyworker Ratio: 1:1

PAINTER (SPRAY OR SANDBLAST, REPAINT) PAINTERS LOCAL 35 PAINTERS LOCAL 35 - ZONE 2	1/1/2026	$48.52	$10.35	$12.00	$12.60	$0.00	$83.47

Apprentice: PAINTER (SPRAY OR SANDBLAST, REPAINT)

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$24.26	$10.35	$0.00	$0.00	$0.00	$34.61
2	55.00	$26.69	$10.35	$0.00	$6.93	$0.00	$43.97
3	60.00	$29.11	$10.35	$0.00	$7.56	$0.00	$47.02
4	65.00	$31.54	$10.35	$0.00	$8.19	$0.00	$50.08
5	70.00	$33.96	$10.35	$12.00	$8.82	$0.00	$65.13
6	75.00	$36.39	$10.35	$12.00	$9.45	$0.00	$68.19
7	80.00	$38.82	$10.35	$12.00	$10.08	$0.00	$71.25
8	90.00	$43.67	$10.35	$12.00	$11.34	$0.00	$77.36

Apprentice to Journeyworker Ratio: 1:1

PAINTER / TAPER (BRUSH, NEW) * * 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	1/1/2026	$49.06	$10.35	$12.00	$12.60	$0.00	$84.01

Apprentice: PAINTER / TAPER (BRUSH, NEW) *

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: PAINTER / TAPER (BRUSH, NEW) *

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$24.53	$10.35	$0.00	$0.00	$0.00	$34.88
2	55.00	$26.98	$10.35	$0.00	$6.93	$0.00	$44.26
3	60.00	$29.44	$10.35	$0.00	$7.56	$0.00	$47.35
4	65.00	$31.89	$10.35	$0.00	$8.19	$0.00	$50.43
5	70.00	$34.34	$10.35	$12.00	$8.82	$0.00	$65.51
6	75.00	$36.80	$10.35	$12.00	$9.45	$0.00	$68.60
7	80.00	$39.25	$10.35	$12.00	$10.08	$0.00	$71.68
8	90.00	$44.15	$10.35	$12.00	$11.34	$0.00	$77.84

Apprentice to Journeyworker Ratio: 1:1

PAINTER / TAPER (BRUSH, REPAINT) PAINTERS LOCAL 35 PAINTERS LOCAL 35 - ZONE 2	1/1/2026	$47.12	$10.35	$12.00	$12.60	$0.00	$82.07

Apprentice: PAINTER / TAPER (BRUSH, REPAINT)

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$23.56	$10.35	$0.00	$0.00	$0.00	$33.91
2	55.00	$25.92	$10.35	$0.00	$6.93	$0.00	$43.20
3	60.00	$28.27	$10.35	$0.00	$7.56	$0.00	$46.18
4	65.00	$30.63	$10.35	$0.00	$8.19	$0.00	$49.17
5	70.00	$32.98	$10.35	$12.00	$8.82	$0.00	$64.15
6	75.00	$35.34	$10.35	$12.00	$9.45	$0.00	$67.14
7	80.00	$37.70	$10.35	$12.00	$10.08	$0.00	$70.13
8	90.00	$42.41	$10.35	$12.00	$11.34	$0.00	$76.10

Apprentice to Journeyworker Ratio: 1:1

PAINTER TRAFFIC MARKINGS (HEAVY/HIGHWAY)	12/1/2025	$41.22	$10.15	$9.50	$9.21	$0.00	$70.08
LABORERS LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	$42.66	$10.15	$9.50	$9.21	$0.00	$71.52
	12/1/2026	$44.10	$10.15	$9.50	$9.21	$0.00	$72.96
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
PANEL & PICKUP TRUCKS DRIVER	1/1/2026	$40.78	$16.17	$21.78	$0.00	$0.00	$78.73
TEAMSTERS JOINT COUNCIL NO. 10 TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	6/1/2026	$41.78	$16.17	$21.78	$0.00	$0.00	$79.73
	12/1/2026	$41.78	$16.17	$23.52	$0.00	$0.00	$81.47
	1/1/2027	$41.78	$16.77	$23.52	$0.00	$0.00	$82.07
PIER AND DOCK CONSTRUCTOR (UNDERPINNING AND DECK) PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 1)	8/1/2024	$55.79	$10.08	$11.62	$12.67	$0.00	$90.16
For apprentice rates see "Apprentice- PILE DRIVER"							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
PILE DRIVER PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 1)	8/1/2024	$55.79	$10.08	$11.62	$12.67	$0.00	$90.16

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

Apprentice to Journeyworker Ratio: 1:5

PIPEFITTER & STEAMFITTER PIPEFITTERS LOCAL 537 PIPEFITTERS LOCAL 537	9/1/2025	$69.08	$13.45	$13.75	$9.30	$0.00	$105.58

Apprentice: PIPEFITTER & STEAMFITTER

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	$27.63	$13.45	$13.75	$9.30	$0.00	$64.13
2	45.00	$31.09	$13.45	$13.75	$9.30	$0.00	$67.59
3	60.00	$41.45	$13.45	$13.75	$9.30	$0.00	$77.95
4	70.00	$48.36	$13.45	$13.75	$9.30	$0.00	$84.86
5	80.00	$55.26	$13.45	$13.75	$9.30	$0.00	$91.76

Apprentice to Journeyworker Ratio: 1:3

PIPELAYER LABORERS LABORERS - ZONE 2	12/1/2025	$41.47	$10.15	$9.50	$9.11	$0.00	$70.23
	6/1/2026	$42.91	$10.15	$9.50	$9.11	$0.00	$71.67
	12/1/2026	$44.35	$10.15	$9.50	$9.11	$0.00	$73.11
	6/1/2027	$45.80	$10.15	$9.50	$9.11	$0.00	$74.56
	12/1/2027	$47.25	$10.15	$9.50	$9.11	$0.00	$76.01
	6/1/2028	$48.75	$10.15	$9.50	$9.11	$0.00	$77.51
	12/1/2028	$50.25	$10.15	$9.50	$9.11	$0.00	$79.01

For apprentice rates see "Apprentice- LABORER"

PIPELAYER (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2025	$41.47	$10.15	$9.50	$9.21	$0.00	$70.33
	6/1/2026	$42.91	$10.15	$9.50	$9.21	$0.00	$71.77
	12/1/2026	$44.35	$10.15	$9.50	$9.21	$0.00	$73.21

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

PLUMBERS & GASFITTERS PLUMBERS & GASFITTERS LOCAL 12 PLUMBERS & GASFITTERS LOCAL 12	9/1/2025	$71.74	$14.32	$12.61	$8.00	$0.00	$106.67
	3/2/2026	$73.89	$14.32	$12.61	$8.00	$0.00	$108.82
	8/31/2026	$76.04	$14.32	$12.61	$8.00	$0.00	$110.97
	3/1/2027	$78.19	$14.32	$12.61	$8.00	$0.00	$113.12

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	8/30/2027	$80.34	$14.32	$12.61	$8.00	$0.00	$115.27
	2/28/2028	$82.54	$14.32	$12.61	$8.00	$0.00	$117.47
	9/4/2028	$84.74	$14.32	$12.61	$8.00	$0.00	$119.67
	3/5/2029	$86.94	$14.32	$12.61	$8.00	$0.00	$121.87
	9/3/2029	$89.14	$14.32	$12.61	$8.00	$0.00	$124.07
	3/4/2030	$91.09	$14.32	$12.61	$8.00	$0.00	$126.02

Apprentice: PLUMBERS & GASFITTERS

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	35.00	$25.11	$14.32	$4.61	$2.80	$0.00	$46.84
2	40.00	$28.70	$14.32	$5.22	$3.20	$0.00	$51.44
3	55.00	$39.46	$14.32	$7.07	$4.40	$0.00	$65.25
4	65.00	$46.63	$14.32	$8.30	$5.20	$0.00	$74.45
5	75.00	$53.81	$14.32	$9.53	$6.00	$0.00	$83.66

Apprentice: PLUMBERS & GASFITTERS

Effective Date: 3/2/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	35.00	$25.86	$14.32	$4.61	$2.80	$0.00	$47.59
2	40.00	$29.56	$14.32	$5.22	$3.20	$0.00	$52.30
3	55.00	$40.64	$14.32	$7.07	$4.40	$0.00	$66.43
4	65.00	$48.03	$14.32	$8.30	$5.20	$0.00	$75.85
5	75.00	$55.42	$14.32	$9.53	$6.00	$0.00	$85.27

Apprentice to Journeyworker Ratio: 1:2

PNEUMATIC CONTROLS (TEMP.) PIPEFITTERS LOCAL 537 PIPEFITTERS LOCAL 537	9/1/2025	$69.08	$13.45	$13.75	$9.30	$0.00	$105.58
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							
PNEUMATIC DRILL/TOOL OPERATOR LABORERS LABORERS - ZONE 2	12/1/2025	$41.47	$10.15	$9.50	$9.11	$0.00	$70.23
	6/1/2026	$42.91	$10.15	$9.50	$9.11	$0.00	$71.67
	12/1/2026	$44.35	$10.15	$9.50	$9.11	$0.00	$73.11
	6/1/2027	$45.80	$10.15	$9.50	$9.11	$0.00	$74.56
	12/1/2027	$47.25	$10.15	$9.50	$9.11	$0.00	$76.01
	6/1/2028	$48.75	$10.15	$9.50	$9.11	$0.00	$77.51
	12/1/2028	$50.25	$10.15	$9.50	$9.11	$0.00	$79.01
For apprentice rates see "Apprentice- LABORER"							
PNEUMATIC DRILL/TOOL OPERATOR (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2025	$41.47	$10.15	$9.50	$9.21	$0.00	$70.33
	6/1/2026	$42.91	$10.15	$9.50	$9.21	$0.00	$71.77
	12/1/2026	$44.35	$10.15	$9.50	$9.21	$0.00	$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
POWDERMAN & BLASTER	12/1/2025	$42.22	$10.15	$9.50	$9.11	$0.00	$70.98

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS LABORERS - ZONE 2	6/1/2026	$43.66	$10.15	$9.50	$9.11	$0.00	$72.42
	12/1/2026	$45.10	$10.15	$9.50	$9.11	$0.00	$73.86
	6/1/2027	$46.55	$10.15	$9.50	$9.11	$0.00	$75.31
	12/1/2027	$48.00	$10.15	$9.50	$9.11	$0.00	$76.76
	6/1/2028	$49.50	$10.15	$9.50	$9.11	$0.00	$78.26
	12/1/2028	$51.00	$10.15	$9.50	$9.11	$0.00	$79.76
For apprentice rates see "Apprentice- LABORER"							
POWDERMAN & BLASTER (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2025	$42.22	$9.90	$9.50	$9.21	$0.00	$70.83
	6/1/2026	$43.66	$9.90	$9.50	$9.21	$0.00	$72.27
	12/1/2026	$45.10	$9.90	$9.50	$9.21	$0.00	$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
POWER SHOVEL/DERRICK/TRENCHING MACHINE OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PUMP OPERATOR (CONCRETE) OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PUMP OPERATOR (DEWATERING, OTHER) OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$37.97	$16.05	$13.25	$3.25	$0.00	$70.52
	6/1/2026	$38.83	$16.05	$13.25	$3.25	$0.00	$71.38
	12/1/2026	$39.78	$16.05	$13.25	$3.25	$0.00	$72.33
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
READY-MIX CONCRETE DRIVER TEAMSTERS 42 - J.G. MacLeallan (Wakefield) TEAMSTERS 42 - J.G. MacLeallan (Wakefield)	5/1/2025	$30.00	$12.00	$7.00	$0.00	$0.00	$49.00
	5/1/2026	$30.50	$12.00	$7.00	$0.00	$0.00	$49.50
RECLAIMERS OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
RIDE-ON MOTORIZED BUGGY OPERATOR LABORERS LABORERS - ZONE 2	12/1/2025	$41.47	$10.15	$9.50	$9.11	$0.00	$70.23
	6/1/2026	$42.91	$10.15	$9.50	$9.11	$0.00	$71.67
	12/1/2026	$44.35	$10.15	$9.50	$9.11	$0.00	$73.11
	6/1/2027	$45.80	$10.15	$9.50	$9.11	$0.00	$74.56
	12/1/2027	$47.25	$10.15	$9.50	$9.11	$0.00	$76.01
	6/1/2028	$48.75	$10.15	$9.50	$9.11	$0.00	$77.51
	12/1/2028	$50.25	$10.15	$9.50	$9.11	$0.00	$79.01
For apprentice rates see "Apprentice- LABORER"							
ROLLER/SPREADER/MULCHING MACHINE OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
ROOFER (Inc.Roofer Waterproofng &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							

Apprentice: ROOFER (Inc.Roofer Waterproofng &Roofer 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.Roofer Waterproofng &Roofer 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

Apprentice Notes

** 1:5, 2:6-10, the 1:10; Reroofing: 1:4, then 1:1

Apprentice to Journeyworker Ratio: 1:5

ROOFER SLATE / TILE / PRECAST CONCRETE	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

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: SHEETMETAL WORKER

Effective Date: 8/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
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

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

Apprentice to Journeyworker Ratio: 1:4

SPECIALIZED EARTH MOVING EQUIP < 35 TONS TEAMSTERS JOINT COUNCIL NO. 10 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 TEAMSTERS JOINT COUNCIL NO. 10 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 SPRINKLER FITTERS LOCAL 550 SPRINKLER FITTERS LOCAL 550 - (Section A) Zone 1	1/1/2026	$72.05	$13.45	$7.45	$18.25	$0.00	$111.20

Apprentice: SPRINKLER FITTER

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	35.00	$25.22	$13.45	$13.84	$0.00	$0.00	$52.51
2	40.00	$28.82	$13.45	$14.75	$0.00	$0.00	$57.02

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: SPRINKLER FITTER							
Effective Date: 1/1/2026							
Step / Percent		**Apprentice Base Wage**					
3 / 45.00		$32.42	$13.45	$15.67	$0.00	$0.00	$61.54
4 / 50.00		$36.03	$13.45	$16.57	$0.00	$0.00	$66.05
5 / 55.00		$39.63	$13.45	$17.49	$0.00	$0.00	$70.57
6 / 60.00		$43.23	$13.45	$18.40	$0.00	$0.00	$75.08
7 / 65.00		$46.83	$13.45	$19.32	$0.00	$0.00	$79.60
8 / 70.00		$50.44	$13.45	$20.22	$0.00	$0.00	$84.11
9 / 75.00		$54.04	$13.45	$21.15	$0.00	$0.00	$88.64
10 / 80.00		$57.64	$13.45	$22.05	$0.00	$0.00	$93.14
Apprentice Notes							
Apprentice entered prior 9/30/10:							
Apprentice to Journeyworker Ratio: 1:3							
STEAM BOILER OPERATOR	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
TAMPERS, SELF-PROPELLED OR TRACTOR DRAWN	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
TELECOMMUNICATION TECHNICIAN	9/1/2025	$52.94	$13.00	$13.97	$6.98	$0.00	$86.89
TELECOMMUNICATION TECHNICIAN	3/1/2026	$53.49	$13.00	$14.23	$7.20	$0.00	$87.92
ELECTRICIANS LOCAL 103	9/1/2026	$55.02	$13.00	$14.28	$7.20	$0.00	$89.50
ELECTRICIANS LOCAL 103	3/1/2027	$55.98	$13.00	$14.31	$7.20	$0.00	$90.49
	9/1/2027	$57.50	$13.00	$14.36	$7.20	$0.00	$92.06
	3/1/2028	$58.46	$13.00	$14.38	$7.20	$0.00	$93.04
For apprentice rates and ratios see "Apprentice- ELECTRICIAN"							
Apprentice: TELECOMMUNICATION TECHNICIAN							
Effective Date: 9/1/2025							
Step / Percent		**Apprentice Base Wage**					
1 / 45.00		$23.82	$13.00	$0.71	$0.00	$0.00	$37.53
2 / 45.00		$23.82	$13.00	$0.71	$0.00	$0.00	$37.53
3 / 50.00		$26.47	$13.00	$13.17	$3.49	$0.00	$56.13
4 / 50.00		$26.47	$13.00	$13.17	$3.49	$0.00	$56.13
5 / 55.00		$29.12	$13.00	$13.25	$3.84	$0.00	$59.21
6 / 60.00		$31.76	$13.00	$13.33	$4.19	$0.00	$62.28
7 / 65.00		$34.41	$13.00	$13.41	$4.54	$0.00	$65.36

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: TELECOMMUNICATION TECHNICIAN

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
8	70.00	$37.06	$13.00	$13.49	$4.89	$0.00	$68.44
9	75.00	$39.71	$13.00	$13.57	$5.24	$0.00	$71.52
10	80.00	$42.35	$13.00	$13.65	$5.58	$0.00	$74.58

Apprentice: TELECOMMUNICATION TECHNICIAN

Effective Date: 3/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	$24.07	$13.00	$0.72	$0.00	$0.00	$37.79
2	45.00	$24.07	$13.00	$0.72	$0.00	$0.00	$37.79
3	50.00	$26.75	$13.00	$13.43	$3.60	$0.00	$56.78
4	50.00	$26.75	$13.00	$13.43	$3.60	$0.00	$56.78
5	55.00	$29.42	$13.00	$13.51	$3.96	$0.00	$59.89
6	60.00	$32.09	$13.00	$13.59	$4.32	$0.00	$63.00
7	65.00	$34.77	$13.00	$13.67	$4.68	$0.00	$66.12
8	70.00	$37.44	$13.00	$13.75	$5.04	$0.00	$69.23
9	75.00	$40.12	$13.00	$13.83	$5.40	$0.00	$72.35
10	80.00	$42.79	$13.00	$13.91	$5.76	$0.00	$75.46

Apprentice to Journeyworker Ratio: 1:1

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

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: TERRAZZO FINISHERS							
Effective Date: 2/1/2026							
Step / Percent		**Apprentice Base Wage**	**Health**	**Pension**	**Annuity**	**Supplemental Unemployment**	**Total Rate**
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
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
Apprentice to Journeyworker Ratio: 1:5							
TEST BORING DRILLER	12/1/2025	$52.70	$10.15	$9.50	$9.80	$0.00	$82.15
LABORERS	6/1/2026	$54.25	$10.15	$9.50	$9.80	$0.00	$83.70
LABORERS - FOUNDATION AND MARINE	12/1/2026	$55.75	$10.15	$9.50	$9.80	$0.00	$85.20
For apprentice rates see "Apprentice- LABORER"							
TEST BORING DRILLER HELPER	12/1/2025	$48.82	$10.15	$9.50	$9.80	$0.00	$78.27
LABORERS	6/1/2026	$50.37	$10.15	$9.50	$9.80	$0.00	$79.82
LABORERS - FOUNDATION AND MARINE	12/1/2026	$51.87	$10.15	$9.50	$9.80	$0.00	$81.32
For apprentice rates see "Apprentice- LABORER"							
TEST BORING LABORER	12/1/2025	$48.70	$10.15	$9.50	$9.80	$0.00	$78.15
LABORERS	6/1/2026	$50.25	$10.15	$9.50	$9.80	$0.00	$79.70
LABORERS - FOUNDATION AND MARINE	12/1/2026	$51.75	$10.15	$9.50	$9.80	$0.00	$81.20
For apprentice rates see "Apprentice- LABORER"							
TRACTORS/PORTABLE STEAM GENERATORS	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
TRAILERS FOR EARTH MOVING EQUIPMENT	1/1/2026	$41.82	$16.17	$21.78	$0.00	$0.00	$79.77
TEAMSTERS JOINT COUNCIL NO. 10	6/1/2026	$42.82	$16.17	$21.78	$0.00	$0.00	$80.77
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	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	12/1/2025	$60.93	$10.15	$9.50	$10.25	$0.00	$90.83
LABORERS	6/1/2026	$62.48	$10.15	$9.50	$10.25	$0.00	$92.38
LABORERS (COMPRESSED AIR)	12/1/2026	$63.98	$10.15	$9.50	$10.25	$0.00	$93.88
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE)	12/1/2025	$62.93	$10.15	$9.50	$10.25	$0.00	$92.83
LABORERS	6/1/2026	$64.48	$10.15	$9.50	$10.25	$0.00	$94.38
LABORERS (COMPRESSED AIR)	12/1/2026	$65.98	$10.15	$9.50	$10.25	$0.00	$95.88
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - FREE AIR	12/1/2025	$53.00	$10.15	$9.50	$10.25	$0.00	$82.90
LABORERS	6/1/2026	$54.55	$10.15	$9.50	$10.25	$0.00	$84.45
LABORERS (FREE AIR TUNNEL)	12/1/2026	$56.05	$10.15	$9.50	$10.25	$0.00	$85.95

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - FREE AIR (HAZ. WASTE)	12/1/2025	$55.00	$10.15	$9.50	$10.25	$0.00	$84.90
LABORERS	6/1/2026	$56.55	$10.15	$9.50	$10.25	$0.00	$86.45
LABORERS (FREE AIR TUNNEL)	12/1/2026	$58.05	$10.15	$9.50	$10.25	$0.00	$87.95
For apprentice rates see "Apprentice- LABORER"							
VAC-HAUL	1/1/2026	$41.24	$16.17	$21.78	$0.00	$0.00	$79.19
TEAMSTERS JOINT COUNCIL NO. 10	6/1/2026	$42.24	$16.17	$21.78	$0.00	$0.00	$80.19
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/1/2026	$42.24	$16.17	$23.52	$0.00	$0.00	$81.93
	1/1/2027	$42.24	$16.77	$23.52	$0.00	$0.00	$82.53
WAGON DRILL OPERATOR	12/1/2025	$41.47	$10.15	$9.50	$9.11	$0.00	$70.23
LABORERS	6/1/2026	$42.91	$10.15	$9.50	$9.11	$0.00	$71.67
LABORERS - ZONE 2	12/1/2026	$44.35	$10.15	$9.50	$9.11	$0.00	$73.11
	6/1/2027	$45.80	$10.15	$9.50	$9.11	$0.00	$74.56
	12/1/2027	$47.25	$10.15	$9.50	$9.11	$0.00	$76.01
	6/1/2028	$48.75	$10.15	$9.50	$9.11	$0.00	$77.51
	12/1/2028	$50.25	$10.15	$9.50	$9.11	$0.00	$79.01
For apprentice rates see "Apprentice- LABORER"							
WAGON DRILL OPERATOR (HEAVY & HIGHWAY)	12/1/2025	$41.47	$10.15	$9.50	$9.21	$0.00	$70.33
LABORERS	6/1/2026	$42.91	$10.15	$9.50	$9.21	$0.00	$71.77
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	$44.35	$10.15	$9.50	$9.21	$0.00	$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
WASTE WATER PUMP OPERATOR	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
WATER METER INSTALLER	9/1/2025	$71.74	$14.32	$12.61	$8.00	$0.00	$106.67
PLUMBERS & GASFITTERS LOCAL 12	3/2/2026	$73.89	$14.32	$12.61	$8.00	$0.00	$108.82
PLUMBERS & GASFITTERS LOCAL 12	8/31/2026	$76.04	$14.32	$12.61	$8.00	$0.00	$110.97
	3/1/2027	$78.19	$14.32	$12.61	$8.00	$0.00	$113.12
	8/30/2027	$80.34	$14.32	$12.61	$8.00	$0.00	$115.27
	2/2/2028	$82.54	$14.32	$12.61	$8.00	$0.00	$117.47
	9/4/2028	$84.74	$14.32	$12.61	$8.00	$0.00	$119.67
	3/5/2029	$86.94	$14.32	$12.61	$8.00	$0.00	$121.87
	9/3/2029	$89.14	$14.32	$12.61	$8.00	$0.00	$124.07
	3/4/2030	$91.09	$14.32	$12.61	$8.00	$0.00	$126.02
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GASFITTER"							

Outside Electrical

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
CABLE TECHNICIAN (Power Zone)	8/31/2025	$36.55	$10.75	$1.10	$1.00	$0.00	$49.40
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$38.13	$11.00	$1.14	$1.00	$0.00	$51.27
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$39.65	$11.25	$1.19	$1.00	$0.00	$53.09
For apprentice rates see "Apprentice- LINEMAN"							
CABLEMAN (Underground Ducts & Cables)	8/31/2025	$51.78	$10.75	$1.55	$10.71	$0.00	$74.79
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$54.02	$11.00	$1.62	$11.14	$0.00	$77.78
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$56.17	$11.25	$1.69	$11.57	$0.00	$80.68
For apprentice rates see "Apprentice- LINEMAN"							
DRIVER / GROUNDMAN CDL	8/31/2025	$42.64	$10.75	$1.28	$10.45	$0.00	$65.12
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$44.49	$11.00	$1.33	$10.80	$0.00	$67.62
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$46.26	$11.25	$1.39	$11.15	$0.00	$70.05
For apprentice rates see "Apprentice- LINEMAN"							
DRIVER / GROUNDMAN -Inexperienced (<2000 Hrs)	8/31/2025	$33.51	$10.75	$1.01	$1.00	$0.00	$46.27
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$34.95	$11.00	$1.05	$1.00	$0.00	$48.00
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$36.64	$11.25	$1.09	$1.00	$0.00	$49.98
For apprentice rates see "Apprentice- LINEMAN"							
EQUIPMENT OPERATOR (Class A CDL)	8/31/2025	$51.78	$10.75	$1.55	$14.79	$0.00	$78.87
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$54.02	$11.00	$1.62	$15.22	$0.00	$81.86
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$56.17	$11.25	$1.69	$15.65	$0.00	$84.76
For apprentice rates see "Apprentice- LINEMAN"							
EQUIPMENT OPERATOR (Class B CDL)	8/31/2025	$45.69	$10.75	$1.37	$11.27	$0.00	$69.08
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$47.66	$11.00	$1.43	$11.65	$0.00	$71.74
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$49.56	$11.25	$1.49	$12.03	$0.00	$74.33
For apprentice rates see "Apprentice- LINEMAN"							
GROUNDMAN	8/31/2025	$33.51	$10.75	$1.01	$1.00	$0.00	$46.27
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$34.95	$11.00	$1.05	$1.00	$0.00	$48.00
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$36.34	$11.25	$1.09	$1.00	$0.00	$49.68
For apprentice rates see "Apprentice- LINEMAN"							
GROUNDMAN -Inexperienced (<2000 Hrs.)	8/31/2025	$27.41	$10.75	$0.82	$1.00	$0.00	$39.98
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$28.60	$11.00	$0.86	$1.00	$0.00	$41.46
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$29.74	$11.25	$0.89	$1.00	$0.00	$42.88
For apprentice rates see "Apprentice- LINEMAN"							
JOURNEYMAN LINEMAN	8/31/2025	$60.92	$10.75	$1.83	$18.00	$0.00	$91.50
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$63.55	$11.00	$1.91	$18.50	$0.00	$94.96
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$66.08	$11.25	$1.98	$19.00	$0.00	$98.31

Apprentice: JOURNEYMAN LINEMAN

Effective Date: 8/31/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Outside Electrical

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: JOURNEYMAN LINEMAN

Effective Date: 8/31/2025

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
2	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
3	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
4	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
5	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
6	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
7	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Apprentice: JOURNEYMAN LINEMAN

Effective Date: 8/30/2026

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
2	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
3	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
4	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
5	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
6	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
7	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Apprentice to Journeyworker Ratio: 1:2

TELEDATA CABLE SPLICER OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	2/4/2019	$30.73	$4.70	$0.92	$2.25	$0.00	$38.60
TELEDATA LINEMAN/EQUIPMENT OPERATOR OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	2/4/2019	$28.93	$4.70	$0.89	$2.25	$0.00	$36.77
TELEDATA WIREMAN/INSTALLER/TECHNICIAN OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	2/4/2019	$28.93	$4.70	$0.89	$2.25	$0.00	$36.77

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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STATE PREVAILING WAGE RATES

TOWN OF WAKEFIELD

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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:	Massachusetts Highway	**City/Town:**	WAKEFIELD
Contract Number:	133292		
Description of Work:	BURLINGTON-LYNNFIELD-WAKEFIELD-WOBURN – Bridge Preservation of 10 Bridges carrying I-95 (613196)		
Job Location:	BURLINGTON-LYNNFIELD-WAKEFIELD-WOBURN - I-95		

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 form 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 TEAMSTERS JOINT COUNCIL NO. 10 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 TEAMSTERS JOINT COUNCIL NO. 10 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 TEAMSTERS JOINT COUNCIL NO. 10 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 PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 1) For apprentice rates see "Apprentice- PILE DRIVER"	1/1/2024	$117.16	$10.08	$11.62	$12.67	$0.00	$151.53
AIR TRACK OPERATOR LABORERS LABORERS - ZONE 1	12/1/2025	$49.35	$10.15	$9.50	$9.65	$0.00	$78.65
	6/1/2026	$50.15	$10.15	$9.50	$9.65	$0.00	$79.45
	12/1/2026	$52.40	$10.15	$9.50	$9.65	$0.00	$81.70
	6/1/2027	$54.00	$10.15	$9.50	$9.65	$0.00	$83.30
	12/1/2027	$55.60	$10.15	$9.50	$9.65	$0.00	$84.90
	6/1/2028	$57.28	$10.15	$9.50	$9.65	$0.00	$86.58
	12/1/2028	$58.95	$10.15	$9.50	$9.65	$0.00	$88.25
For apprentice rates see "Apprentice- LABORER"							
AIR TRACK OPERATOR (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2025	$49.45	$10.15	$9.50	$9.65	$0.00	$78.75
	6/1/2026	$51.00	$10.15	$9.50	$9.65	$0.00	$80.30
	12/1/2026	$52.50	$10.15	$9.50	$9.65	$0.00	$81.80
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
ASBESTOS REMOVER - PIPE / MECH. EQUIPT. HEAT & FROST INSULATORS LOCAL 6 HEAT & FROST INSULATORS LOCAL 6 (BOSTON)	12/1/2025	$44.80	$14.50	$4.30	$6.75	$0.00	$70.35
ASPHALT RAKER LABORERS LABORERS - ZONE 1	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
ASPHALT RAKER (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2025	$48.95	$10.15	$9.50	$9.65	$0.00	$78.25
	6/1/2026	$50.50	$10.15	$9.50	$9.65	$0.00	$79.80
	12/1/2026	$52.00	$10.15	$9.50	$9.65	$0.00	$81.30

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
BACKHOE/FRONT-END LOADER	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
BARCO-TYPE JUMPING TAMPER	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
LABORERS	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
LABORERS - ZONE 1	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
BLOCK PAVER, RAMMER / CURB SETTER	12/1/2025	$49.35	$10.15	$9.50	$9.65	$0.00	$78.65
LABORERS	6/1/2026	$50.15	$10.15	$9.50	$9.65	$0.00	$79.45
LABORERS - ZONE 1	12/1/2026	$52.40	$10.15	$9.50	$9.65	$0.00	$81.70
	6/1/2027	$54.00	$10.15	$9.50	$9.65	$0.00	$83.30
	12/1/2027	$55.60	$10.15	$9.50	$9.65	$0.00	$84.90
	6/1/2028	$57.28	$10.15	$9.50	$9.65	$0.00	$86.58
	12/1/2028	$58.95	$10.15	$9.50	$9.65	$0.00	$88.25
For apprentice rates see "Apprentice- LABORER"							
BLOCK PAVER, RAMMER / CURB SETTER (HEAVY & HIGHWAY)	12/1/2025	$49.45	$10.15	$9.50	$9.65	$0.00	$78.75
LABORERS	6/1/2026	$51.00	$10.15	$9.50	$9.65	$0.00	$80.30
LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2026	$52.50	$10.15	$9.50	$9.65	$0.00	$81.80
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
BOILER MAKER	1/1/2024	$48.12	$7.07	$14.60	$6.00	$0.00	$75.79
BOILERMAKERS LOCAL 29							
BOILERMAKERS LOCAL 29							

Apprentice: BOILER MAKER

Effective Date: 1/1/2024

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	65.00	$31.28	$7.07	$9.32	$3.90	$0.00	$51.57
2	65.00	$31.28	$7.07	$9.32	$3.90	$0.00	$51.57
3	70.00	$33.68	$7.07	$10.03	$4.20	$0.00	$54.98
4	75.00	$36.09	$7.07	$10.74	$4.50	$0.00	$58.40
5	80.00	$38.50	$7.07	$11.45	$4.80	$0.00	$61.82
6	85.00	$40.90	$7.07	$12.18	$5.10	$0.00	$65.25

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: BOILER MAKER

Effective Date: 1/1/2024

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
7	90.00	$43.31	$7.07	$12.88	$5.40	$0.00	$68.66
8	95.00	$45.71	$7.07	$13.62	$5.70	$0.00	$72.10

Apprentice to Journeyworker Ratio: 1:4

BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING) BRICKLAYERS LOCAL 3 BRICKLAYERS LOCAL 3 (LYNN)	8/1/2025	$67.95	$11.49	$15.57	$8.02	$0.00	$103.03
	2/1/2026	$69.30	$11.49	$15.57	$8.02	$0.00	$104.38
	8/1/2026	$71.50	$11.49	$15.57	$8.02	$0.00	$106.58
	2/1/2027	$72.90	$11.49	$15.57	$8.02	$0.00	$107.98

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	$33.98	$11.49	$15.57	$8.02	$0.00	$69.06
2	60.00	$40.77	$11.49	$15.57	$8.02	$0.00	$75.85
3	70.00	$47.57	$11.49	$15.57	$8.02	$0.00	$82.65
4	80.00	$54.36	$11.49	$15.57	$8.02	$0.00	$89.44
5	90.00	$61.16	$11.49	$15.57	$8.02	$0.00	$96.24

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	$34.65	$11.49	$15.57	$8.02	$0.00	$69.73
2	60.00	$41.58	$11.49	$15.57	$8.02	$0.00	$76.66
3	70.00	$48.51	$11.49	$15.57	$8.02	$0.00	$83.59
4	80.00	$55.44	$11.49	$15.57	$8.02	$0.00	$90.52
5	90.00	$62.37	$11.49	$15.57	$8.02	$0.00	$97.45

Apprentice to Journeyworker Ratio: 1:5

BULLDOZER/GRADER/SCRAPER OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
CAISSON & UNDERPINNING BOTTOM MAN LABORERS LABORERS - FOUNDATION AND MARINE	12/1/2025	$49.85	$10.15	$9.50	$9.80	$0.00	$79.30
	6/1/2026	$51.40	$10.15	$9.50	$9.80	$0.00	$80.85
	12/1/2026	$52.90	$10.15	$9.50	$9.80	$0.00	$82.35
For apprentice rates see "Apprentice- LABORER"							
CAISSON & UNDERPINNING LABORER	12/1/2025	$48.70	$10.15	$9.50	$9.80	$0.00	$78.15

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS	6/1/2026	$50.25	$10.15	$9.50	$9.80	$0.00	$79.70
LABORERS - FOUNDATION AND MARINE	12/1/2026	$51.75	$10.15	$9.50	$9.80	$0.00	$81.20
For apprentice rates see "Apprentice- LABORER"							
CAISSON & UNDERPINNING TOP MAN	12/1/2025	$49.03	$10.15	$9.50	$9.80	$0.00	$78.48
LABORERS	6/1/2026	$50.58	$10.15	$9.50	$9.80	$0.00	$80.03
LABORERS - FOUNDATION AND MARINE	12/1/2026	$52.08	$10.15	$9.50	$9.80	$0.00	$81.53
For apprentice rates see "Apprentice- LABORER"							
CARBIDE CORE DRILL OPERATOR	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
LABORERS	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
LABORERS - ZONE 1	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
CARPENTER	9/1/2025	$50.35	$10.33	$11.47	$8.50	$0.00	$80.65
CARPENTERS	3/1/2026	$51.60	$10.33	$11.47	$8.50	$0.00	$81.90
CARPENTERS -ZONE 2 (Eastern Massachusetts)	9/1/2026	$52.85	$10.33	$11.47	$8.50	$0.00	$83.15
	3/1/2027	$54.10	$10.33	$11.47	$8.50	$0.00	$84.40

Apprentice: CARPENTER

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	$22.66	$10.33	$0.00	$1.73	$0.00	$34.72
2	45.00	$22.66	$10.33	$0.00	$1.73	$0.00	$34.72
3	55.00	$27.69	$10.33	$0.00	$3.40	$0.00	$41.42
4	55.00	$27.69	$10.33	$0.00	$3.40	$0.00	$41.42
5	70.00	$35.25	$10.33	$11.41	$5.10	$0.00	$62.09
6	70.00	$35.25	$10.33	$11.41	$5.10	$0.00	$62.09
7	80.00	$40.28	$10.33	$11.44	$6.80	$0.00	$68.85
8	80.00	$40.28	$10.33	$11.44	$6.80	$0.00	$68.85

Apprentice: CARPENTER

Effective Date: 3/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	$23.22	$10.33	$0.00	$1.73	$0.00	$35.28
2	45.00	$23.22	$10.33	$0.00	$1.73	$0.00	$35.28
3	55.00	$28.38	$10.33	$0.00	$3.40	$0.00	$42.11
4	55.00	$28.38	$10.33	$0.00	$3.40	$0.00	$42.11
5	70.00	$36.12	$10.33	$11.41	$5.10	$0.00	$62.96
6	70.00	$36.12	$10.33	$11.41	$5.10	$0.00	$62.96
7	80.00	$41.28	$10.33	$11.44	$6.80	$0.00	$69.85

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
CARPENTER WOOD FRAME	10/1/2025	$27.75	$7.02	$3.80	$1.00	$0.00	$39.57
CARPENTERS	10/1/2026	$28.85	$7.02	$3.80	$1.00	$0.00	$40.67
CARPENTERS-ZONE 3 (Wood Frame)							
All Aspects of New Wood Frame Work							

Apprentice: CARPENTER

Effective Date: 3/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
8	80.00	$41.28	$10.33	$11.44	$6.80	$0.00	$69.85

Apprentice to Journeyworker Ratio: 1:5

Apprentice: CARPENTER WOOD FRAME

Effective Date: 10/1/2025

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

Apprentice: CARPENTER WOOD FRAME

Effective Date: 10/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$17.31	$7.02	$0.00	$0.00	$0.00	$24.33
2	60.00	$17.31	$7.02	$0.00	$0.00	$0.00	$24.33
3	65.00	$18.75	$7.02	$0.00	$1.00	$0.00	$26.77
4	70.00	$20.20	$7.02	$0.00	$1.00	$0.00	$28.22
5	75.00	$21.64	$7.02	$3.80	$1.00	$0.00	$33.46
6	80.00	$23.08	$7.02	$3.80	$1.00	$0.00	$34.90
7	85.00	$24.52	$7.02	$3.80	$1.00	$0.00	$36.34
8	90.00	$25.97	$7.02	$3.80	$1.00	$0.00	$37.79

Apprentice to Journeyworker Ratio: 1:5

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
CEMENT MASONRY/PLASTERING	1/1/2026	$53.24	$13.35	$16.43	$7.78	$1.80	$92.60
PLASTERERS AND CEMENT MASONS LOCAL 534	7/1/2026	$54.49	$13.35	$16.43	$7.78	$1.80	$93.85
Plasterers and Cement Masons - Zone 1	1/1/2027	$55.94	$13.35	$16.43	$7.78	$1.80	$95.30
	7/1/2027	$57.29	$13.35	$16.43	$7.78	$1.80	$96.65
	1/1/2028	$58.64	$13.35	$16.43	$7.78	$1.80	$98.00

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: CEMENT MASONRY/PLASTERING

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$26.62	$13.35	$16.43	$0.00	$0.00	$56.40
2	60.00	$31.94	$13.35	$16.43	$7.78	$1.80	$71.30
3	65.00	$34.61	$13.35	$16.43	$7.78	$1.80	$73.97
4	70.00	$37.27	$13.35	$16.43	$7.78	$1.80	$76.63
5	75.00	$39.93	$13.35	$16.43	$7.78	$1.80	$79.29
6	80.00	$42.59	$13.35	$16.43	$7.78	$1.80	$81.95
7	90.00	$47.92	$13.35	$16.43	$0.00	$0.00	$77.70

Apprentice: CEMENT MASONRY/PLASTERING

Effective Date: 7/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$27.25	$13.35	$16.43	$0.00	$0.00	$57.03
2	60.00	$32.69	$13.35	$16.43	$7.78	$1.80	$72.05
3	65.00	$35.42	$13.35	$16.43	$7.78	$1.80	$74.78
4	70.00	$38.14	$13.35	$16.43	$7.78	$1.80	$77.50
5	75.00	$40.87	$13.35	$16.43	$7.78	$1.80	$80.23
6	80.00	$43.59	$13.35	$16.43	$7.78	$1.80	$82.95
7	90.00	$49.04	$13.35	$0.00	$7.78	$0.00	$70.17

Apprentice to Journeyworker Ratio: 1:5

CHAIN SAW OPERATOR LABORERS LABORERS - ZONE 1	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$60.48	$16.05	$13.25	$3.25	$0.00	$93.03
	6/1/2026	$61.81	$16.05	$13.25	$3.25	$0.00	$94.36
	12/1/2026	$63.29	$16.05	$13.25	$3.25	$0.00	$95.84
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
COMPRESSOR OPERATOR OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$37.97	$16.05	$13.25	$3.25	$0.00	$70.52
	6/1/2026	$38.83	$16.05	$13.25	$3.25	$0.00	$71.38
	12/1/2026	$39.78	$16.05	$13.25	$3.25	$0.00	$72.33
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
DELEADER (BRIDGE) PAINTERS LOCAL 35 PAINTERS LOCAL 35 - ZONE 2	1/1/2026	$59.56	$10.35	$12.00	$12.60	$0.00	$94.51

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: DELEADER (BRIDGE)

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$29.78	$10.35	$0.00	$0.00	$0.00	$40.13
2	55.00	$32.76	$10.35	$0.00	$6.93	$0.00	$50.04
3	60.00	$35.74	$10.35	$0.00	$7.56	$0.00	$53.65
4	65.00	$38.71	$10.35	$0.00	$8.19	$0.00	$57.25
5	70.00	$41.69	$10.35	$12.00	$8.82	$0.00	$72.86
6	75.00	$44.67	$10.35	$12.00	$9.45	$0.00	$76.47
7	80.00	$47.65	$10.35	$12.00	$10.08	$0.00	$80.08
8	90.00	$53.60	$10.35	$12.00	$11.34	$0.00	$87.29

Apprentice to Journeyworker Ratio: 1:1

DEMO: ADZEMAN LABORERS LABORERS - ZONE 1	12/1/2025	$48.75	$10.15	$9.50	$9.65	$0.00	$78.05
	6/1/2026	$50.30	$10.15	$9.50	$9.65	$0.00	$79.60
	12/7/2026	$51.80	$10.15	$9.50	$9.65	$0.00	$81.10
	6/7/2027	$53.40	$10.15	$9.50	$9.65	$0.00	$82.70
	12/6/2027	$55.00	$10.15	$9.50	$9.65	$0.00	$84.30
	6/5/2028	$56.68	$10.15	$9.50	$9.65	$0.00	$85.98
	12/4/2028	$58.35	$10.15	$9.50	$9.65	$0.00	$87.65
For apprentice rates see "Apprentice- LABORER"							
DEMO: BACKHOE/LOADER/HAMMER OPERATOR LABORERS LABORERS - ZONE 1	12/1/2025	$49.75	$10.15	$9.50	$9.65	$0.00	$79.05
	6/1/2026	$51.30	$10.15	$9.50	$9.65	$0.00	$80.60
	12/7/2026	$52.80	$10.15	$9.50	$9.65	$0.00	$82.10
	6/7/2027	$54.40	$10.15	$9.50	$9.65	$0.00	$83.70
	12/6/2027	$56.00	$10.15	$9.50	$9.65	$0.00	$85.30
	6/5/2028	$57.68	$10.15	$9.50	$9.65	$0.00	$86.98
	12/4/2028	$59.35	$10.15	$9.50	$9.65	$0.00	$88.65
For apprentice rates see "Apprentice- LABORER"							
DEMO: BURNERS LABORERS LABORERS - ZONE 1	12/1/2025	$49.50	$10.15	$9.50	$9.65	$0.00	$78.80
	6/1/2026	$51.05	$10.15	$9.50	$9.65	$0.00	$80.35
	12/7/2026	$52.55	$10.15	$9.50	$9.65	$0.00	$81.85
	6/7/2027	$54.15	$10.15	$9.50	$9.65	$0.00	$83.45
	12/6/2027	$55.75	$10.15	$9.50	$9.65	$0.00	$85.05
	6/5/2028	$57.43	$10.15	$9.50	$9.65	$0.00	$86.73
	12/4/2028	$59.10	$10.15	$9.50	$9.65	$0.00	$88.40
For apprentice rates see "Apprentice- LABORER"							
DEMO: CONCRETE CUTTER/SAWYER LABORERS LABORERS - ZONE 1	12/1/2025	$49.75	$10.15	$9.50	$9.65	$0.00	$79.05
	6/1/2026	$51.30	$10.15	$9.50	$9.65	$0.00	$80.60
	12/7/2026	$52.80	$10.15	$9.50	$9.65	$0.00	$82.10
	6/7/2027	$54.40	$10.15	$9.50	$9.65	$0.00	$83.70
	12/6/2027	$56.00	$10.15	$9.50	$9.65	$0.00	$85.30
	6/5/2028	$57.68	$10.15	$9.50	$9.65	$0.00	$86.98
	12/4/2028	$59.35	$10.15	$9.50	$9.65	$0.00	$88.65

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER"							
DEMO: JACKHAMMER OPERATOR	12/1/2025	$49.50	$10.15	$9.50	$9.65	$0.00	$78.80
LABORERS	6/1/2026	$51.05	$10.15	$9.50	$9.65	$0.00	$80.35
LABORERS - ZONE 1	12/7/2026	$52.55	$10.15	$9.50	$9.65	$0.00	$81.85
	6/7/2027	$54.15	$10.15	$9.50	$9.65	$0.00	$83.45
	12/6/2027	$55.75	$10.15	$9.50	$9.65	$0.00	$85.05
	6/5/2028	$57.43	$10.15	$9.50	$9.65	$0.00	$86.73
	12/4/2028	$59.10	$10.15	$9.50	$9.65	$0.00	$88.40
For apprentice rates see "Apprentice- LABORER"							
DEMO: WRECKING LABORER	12/1/2025	$48.75	$10.15	$9.50	$9.65	$0.00	$78.05
LABORERS	6/1/2026	$50.30	$10.15	$9.50	$9.65	$0.00	$79.60
LABORERS - ZONE 1	12/7/2026	$51.80	$10.15	$9.50	$9.65	$0.00	$81.10
	6/7/2027	$53.40	$10.15	$9.50	$9.65	$0.00	$82.70
	12/6/2027	$55.00	$10.15	$9.50	$9.65	$0.00	$84.30
	6/5/2028	$56.68	$10.15	$9.50	$9.65	$0.00	$85.98
	12/4/2028	$58.35	$10.15	$9.50	$9.65	$0.00	$87.65
For apprentice rates see "Apprentice- LABORER"							
DIRECTIONAL DRILL MACHINE OPERATOR	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
DIVER	8/1/2024	$78.11	$10.08	$11.62	$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	9/1/2025	$66.17	$13.00	$14.37	$8.72	$0.00	$102.26
ELECTRICIANS LOCAL 103	3/1/2026	$66.86	$13.00	$14.64	$9.00	$0.00	$103.50
ELECTRICIANS LOCAL 103	9/1/2026	$68.78	$13.00	$14.69	$9.00	$0.00	$105.47

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	3/1/2027	$69.97	$13.00	$14.73	$9.00	$0.00	$106.70
	9/1/2027	$71.88	$13.00	$14.79	$9.00	$0.00	$108.67
	3/1/2028	$73.08	$13.00	$14.82	$9.00	$0.00	$109.90

Apprentice: ELECTRICIAN

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	$26.47	$13.00	$0.79	$0.00	$0.00	$40.26
2	40.00	$26.47	$13.00	$0.79	$0.00	$0.00	$40.26
3	45.00	$29.78	$13.00	$13.27	$3.92	$0.00	$59.97
4	45.00	$29.78	$13.00	$13.27	$3.92	$0.00	$59.97
5	50.00	$33.09	$13.00	$13.37	$4.36	$0.00	$63.82
6	55.00	$36.39	$13.00	$13.47	$4.80	$0.00	$67.66
7	60.00	$39.70	$13.00	$13.57	$5.23	$0.00	$71.50
8	65.00	$43.01	$13.00	$13.67	$5.67	$0.00	$75.35
9	70.00	$46.32	$13.00	$13.77	$6.10	$0.00	$79.19
10	75.00	$49.63	$13.00	$13.87	$6.54	$0.00	$83.04

Apprentice: ELECTRICIAN

Effective Date: 3/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	$26.74	$13.00	$0.80	$0.00	$0.00	$40.54
2	40.00	$26.74	$13.00	$0.80	$0.00	$0.00	$40.54
3	45.00	$30.09	$13.00	$13.53	$4.05	$0.00	$60.67
4	45.00	$30.09	$13.00	$13.53	$4.05	$0.00	$60.67
5	50.00	$33.43	$13.00	$13.63	$4.50	$0.00	$64.56
6	55.00	$36.77	$13.00	$13.73	$4.95	$0.00	$68.45
7	60.00	$40.12	$13.00	$13.83	$5.40	$0.00	$72.35
8	65.00	$43.46	$13.00	$13.93	$5.85	$0.00	$76.24
9	70.00	$46.80	$13.00	$14.03	$6.30	$0.00	$80.13
10	75.00	$50.15	$13.00	$14.13	$6.75	$0.00	$84.03

Apprentice Notes

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Apprentice to Journeyworker Ratio: 2:3

ELEVATOR CONSTRUCTOR	1/1/2026	$77.26	$16.38	$11.06	$10.70	$0.00	$115.40
ELEVATOR CONSTRUCTORS LOCAL 4	1/1/2027	$80.55	$16.48	$11.16	$11.00	$0.00	$119.19
ELEVATOR CONSTRUCTORS LOCAL 4							

Apprentice: ELEVATOR CONSTRUCTOR

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: ELEVATOR CONSTRUCTOR

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$38.63	$0.00	$0.00	$0.00	$0.00	$38.63
2	55.00	$42.49	$16.38	$11.06	$10.70	$0.00	$80.63
3	65.00	$50.22	$16.38	$11.06	$10.70	$0.00	$88.36
4	70.00	$54.08	$16.38	$11.06	$10.70	$0.00	$92.22
5	80.00	$61.81	$16.38	$11.06	$10.70	$0.00	$99.95

Apprentice: ELEVATOR CONSTRUCTOR

Effective Date: 1/1/2027

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$40.28	$0.00	$0.00	$0.00	$0.00	$40.28
2	55.00	$44.30	$16.48	$11.16	$11.00	$0.00	$82.94
3	65.00	$52.36	$16.48	$11.16	$11.00	$0.00	$91.00
4	70.00	$56.39	$16.48	$11.16	$11.00	$0.00	$95.03
5	80.00	$64.44	$16.48	$11.16	$11.00	$0.00	$103.08

Apprentice to Journeyworker Ratio: 1:1

ELEVATOR CONSTRUCTOR HELPER	1/1/2026	$54.08	$16.38	$11.06	$10.07	$0.00	$91.59
ELEVATOR CONSTRUCTORS LOCAL 4	1/1/2027	$56.39	$16.48	$11.16	$11.00	$0.00	$95.03
ELEVATOR CONSTRUCTORS LOCAL 4							
For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"							
FENCE & GUARD RAIL ERECTOR (HEAVY & HIGHWAY)	12/1/2025	$48.95	$10.15	$9.50	$9.65	$0.00	$78.25
LABORERS	6/1/2026	$50.50	$10.15	$9.50	$9.65	$0.00	$79.80
LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2026	$52.00	$10.15	$9.50	$9.65	$0.00	$81.30
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
FIELD ENG.INST.PERSON-BLDG,SITE,HVY/HWY	11/1/2025	$53.56	$16.05	$13.25	$3.25	$0.00	$86.11
OPERATING ENGINEERS LOCAL 4	5/1/2026	$55.00	$16.05	$13.25	$3.25	$0.00	$87.55
OPERATING ENGINEERS LOCAL 4	11/1/2026	$56.29	$16.05	$13.25	$3.25	$0.00	$88.84
	5/1/2027	$57.72	$16.05	$13.25	$3.25	$0.00	$90.27
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY	11/1/2025	$55.17	$16.05	$13.25	$3.25	$0.00	$87.72
OPERATING ENGINEERS LOCAL 4	5/1/2026	$56.62	$16.05	$13.25	$3.25	$0.00	$89.17
OPERATING ENGINEERS LOCAL 4	11/1/2026	$57.92	$16.05	$13.25	$3.25	$0.00	$90.47
	5/1/2027	$59.37	$16.05	$13.25	$3.25	$0.00	$91.92
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIELD ENG.ROD PERSON-BLDG,SITE,HVY/HWY	11/1/2025	$26.03	$16.05	$13.25	$3.25	$0.00	$58.58
OPERATING ENGINEERS LOCAL 4	5/1/2026	$26.88	$16.05	$13.25	$3.25	$0.00	$59.43
OPERATING ENGINEERS LOCAL 4	11/1/2026	$27.64	$16.05	$13.25	$3.25	$0.00	$60.19
	5/1/2027	$28.49	$16.05	$13.25	$3.25	$0.00	$61.04

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIRE ALARM INSTALLER	9/1/2025	$66.17	$13.00	$14.37	$9.00	$0.00	$102.54
ELECTRICIANS LOCAL 103	3/1/2026	$66.86	$13.00	$14.64	$9.00	$0.00	$103.50
ELECTRICIANS LOCAL 103	9/1/2026	$68.78	$13.00	$14.69	$9.00	$0.00	$105.47
	3/1/2027	$69.97	$13.00	$14.73	$9.00	$0.00	$106.70
	9/1/2027	$71.88	$13.00	$14.79	$9.00	$0.00	$108.67
	3/1/2028	$73.08	$13.00	$14.82	$9.00	$0.00	$109.90
For apprentice rates see "Apprentice- ELECTRICIAN"							
FIRE ALARM REPAIR / MAINTENANCE	9/1/2025	$52.94	$13.00	$13.97	$6.98	$0.00	$86.89
/ COMMISSIONING	3/1/2026	$53.49	$13.00	$14.23	$7.20	$0.00	$87.92
ELECTRICIANS LOCAL 103	9/1/2026	$55.02	$13.00	$14.28	$7.20	$0.00	$89.50
ELECTRICIANS LOCAL 103	3/1/2027	$55.98	$13.00	$14.31	$7.20	$0.00	$90.49
	9/1/2027	$57.50	$13.00	$14.36	$7.20	$0.00	$92.06
	3/1/2028	$58.46	$13.00	$14.38	$7.20	$0.00	$93.04
For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"							
FIREMAN (ASST. ENGINEER)	12/1/2025	$47.69	$16.05	$13.25	$3.25	$0.00	$80.24
OPERATING ENGINEERS LOCAL 4	6/1/2026	$48.75	$16.05	$13.25	$3.25	$0.00	$81.30
OPERATING ENGINEERS LOCAL 4	12/1/2026	$49.93	$16.05	$13.25	$3.25	$0.00	$82.48
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FLAGGER & SIGNALER (HEAVY & HIGHWAY)	12/1/2025	$28.09	$10.15	$9.50	$9.65	$0.00	$57.39
LABORERS	6/1/2026	$29.21	$10.15	$9.50	$9.65	$0.00	$58.51
LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2026	$29.21	$10.15	$9.50	$9.65	$0.00	$58.51
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
FLOORCOVERER	9/1/2025	$57.74	$10.33	$11.47	$8.80	$0.00	$88.34
FLOORCOVERERS LOCAL 2168	3/1/2026	$59.24	$10.33	$11.47	$8.80	$0.00	$89.84
FLOORCOVERERS LOCAL 2168 ZONE I	9/1/2026	$60.74	$10.33	$11.47	$8.80	$0.00	$91.34
	3/1/2027	$62.24	$10.33	$11.47	$8.80	$0.00	$92.84

Apprentice: FLOORCOVERER

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	$25.98	$10.33	$0.00	$1.76	$0.00	$38.07
2	45.00	$25.98	$10.33	$0.00	$1.76	$0.00	$38.07
3	55.00	$31.76	$10.33	$0.00	$3.52	$0.00	$45.61
4	55.00	$31.76	$10.33	$0.00	$3.52	$0.00	$45.61
5	70.00	$40.42	$10.33	$11.47	$5.28	$0.00	$67.50
6	70.00	$40.42	$10.33	$11.47	$5.28	$0.00	$67.50
7	80.00	$46.19	$10.33	$11.47	$7.04	$0.00	$75.03
8	80.00	$46.19	$10.33	$11.47	$7.04	$0.00	$75.03

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
FORK LIFT/CHERRY PICKER	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58

Apprentice: FLOORCOVERER

Effective Date: 3/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	$26.66	$10.33	$0.00	$1.76	$0.00	$38.75
2	45.00	$26.66	$10.33	$0.00	$1.76	$0.00	$38.75
3	55.00	$32.58	$10.33	$0.00	$3.52	$0.00	$46.43
4	55.00	$32.58	$10.33	$0.00	$3.52	$0.00	$46.43
5	70.00	$41.47	$10.33	$11.47	$5.28	$0.00	$68.55
6	70.00	$41.47	$10.33	$11.47	$5.28	$0.00	$68.55
7	80.00	$47.39	$10.33	$11.47	$7.04	$0.00	$76.23
8	80.00	$47.39	$10.33	$11.47	$7.04	$0.00	$76.23

Apprentice Notes

Steps are 750 hrs.

Apprentice to Journeyworker Ratio: 1:1

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GENERATOR/LIGHTING PLANT/HEATERS	12/1/2025	$37.97	$16.05	$13.25	$3.25	$0.00	$70.52
OPERATING ENGINEERS LOCAL 4	6/1/2026	$38.83	$16.05	$13.25	$3.25	$0.00	$71.38
OPERATING ENGINEERS LOCAL 4	12/1/2026	$39.78	$16.05	$13.25	$3.25	$0.00	$72.33

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)	1/1/2026	$49.06	$10.35	$12.00	$12.60	$0.00	$84.01
GLAZIERS LOCAL 35							
GLAZIERS LOCAL 35 (ZONE 2)							

Apprentice: GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$24.53	$10.35	$0.00	$0.00	$0.00	$34.88
2	55.00	$26.98	$10.35	$0.00	$6.88	$0.00	$44.21
3	60.00	$29.44	$10.35	$0.00	$7.50	$0.00	$47.29
4	65.00	$31.89	$10.35	$0.00	$8.13	$0.00	$50.37
5	70.00	$34.34	$10.35	$12.00	$8.75	$0.00	$65.44
6	75.00	$36.80	$10.35	$12.00	$9.38	$0.00	$68.53
7	80.00	$39.25	$10.35	$12.00	$10.00	$0.00	$71.60
8	90.00	$44.15	$10.35	$12.00	$11.25	$0.00	$77.75

Apprentice to Journeyworker Ratio: 1:1

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
HOISTING ENGINEER/CRANES/GRADALLS	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58

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	$16.05	$13.25	$3.25	$0.00	$68.42
3	65.00	$38.86	$16.05	$13.25	$3.25	$0.00	$71.41
4	70.00	$41.85	$16.05	$13.25	$3.25	$0.00	$74.40
5	75.00	$44.84	$16.05	$13.25	$3.25	$0.00	$77.39
6	80.00	$47.82	$16.05	$13.25	$3.25	$0.00	$80.37
7	85.00	$50.81	$16.05	$13.25	$3.25	$0.00	$83.36
8	90.00	$53.80	$16.05	$13.25	$3.25	$0.00	$86.35

Apprentice: HOISTING ENGINEER/CRANES/GRADALLS

Effective Date: 6/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	$33.32	$0.00	$0.00	$0.00	$0.00	$33.32
2	60.00	$36.35	$16.05	$13.25	$3.25	$0.00	$68.90
3	65.00	$39.38	$16.05	$13.25	$3.25	$0.00	$71.93
4	70.00	$42.41	$16.50	$13.25	$3.25	$0.00	$75.41
5	75.00	$45.44	$16.50	$13.25	$3.25	$0.00	$78.44
6	80.00	$48.46	$16.50	$13.25	$3.25	$0.00	$81.46
7	85.00	$51.49	$16.50	$13.25	$3.25	$0.00	$84.49
8	90.00	$54.52	$16.50	$13.25	$3.25	$0.00	$87.52

Apprentice to Journeyworker Ratio: 1:6

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)	9/1/2025	$66.17	$13.00	$14.37	$8.72	$0.00	$102.26
ELECTRICIANS LOCAL 103	3/1/2026	$66.86	$13.00	$14.64	$9.00	$0.00	$103.50
ELECTRICIANS LOCAL 103	9/1/2026	$68.78	$13.00	$14.69	$9.00	$0.00	$105.47
	3/1/2027	$69.97	$13.00	$14.73	$9.00	$0.00	$106.70
	9/1/2027	$71.88	$13.00	$14.79	$9.00	$0.00	$108.67
	3/1/2028	$73.08	$13.00	$14.82	$9.00	$0.00	$109.90

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"

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
HVAC (TESTING AND BALANCING -WATER) PIPEFITTERS LOCAL 537 PIPEFITTERS LOCAL 537	9/1/2025	$69.08	$13.45	$13.75	$9.30	$0.00	$105.58
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							
HVAC MECHANIC PIPEFITTERS LOCAL 537 PIPEFITTERS LOCAL 537	9/1/2025	$69.08	$13.45	$13.75	$9.30	$0.00	$105.58
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							
HYDRAULIC DRILLS	12/1/2025	$49.35	$10.15	$9.50	$9.65	$0.00	$78.65
LABORERS LABORERS - ZONE 1	6/1/2026	$50.15	$10.15	$9.50	$9.65	$0.00	$79.45
	12/1/2026	$52.40	$10.15	$9.50	$9.65	$0.00	$81.70
	6/1/2027	$54.00	$10.15	$9.50	$9.65	$0.00	$83.30
	12/1/2027	$55.60	$10.15	$9.50	$9.65	$0.00	$84.90
	6/1/2028	$57.28	$10.15	$9.50	$9.65	$0.00	$86.58
	12/1/2028	$58.95	$10.15	$9.50	$9.65	$0.00	$88.25
For apprentice rates see "Apprentice- LABORER"							
HYDRAULIC DRILLS (HEAVY & HIGHWAY)	12/1/2025	$49.45	$10.15	$9.50	$9.65	$0.00	$78.75
LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	6/1/2026	$51.00	$10.15	$9.50	$9.65	$0.00	$80.30
	12/1/2026	$52.50	$10.15	$9.50	$9.65	$0.00	$81.80
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
INSULATOR (PIPES & TANKS)	9/1/2025	$60.34	$14.75	$9.52	$10.09	$0.00	$94.70
HEAT & FROST INSULATORS LOCAL 6 HEAT & FROST INSULATORS LOCAL 6 (BOSTON)	9/1/2026	$63.76	$14.75	$9.52	$10.09	$0.00	$98.12

Apprentice: INSULATOR (PIPES & TANKS)

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$30.17	$14.75	$9.27	$5.05	$0.00	$59.24
2	60.00	$36.20	$14.75	$9.32	$6.05	$0.00	$66.32
3	70.00	$42.24	$14.75	$9.37	$7.06	$0.00	$73.42
4	80.00	$48.27	$14.75	$9.42	$8.07	$0.00	$80.51

Apprentice: INSULATOR (PIPES & TANKS)

Effective Date: 9/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$31.88	$14.75	$9.27	$5.05	$0.00	$60.95
2	60.00	$38.26	$14.75	$9.32	$6.05	$0.00	$68.38
3	70.00	$44.63	$14.75	$9.37	$7.06	$0.00	$75.81
4	80.00	$51.01	$14.75	$9.42	$8.07	$0.00	$83.25

Apprentice to Journeyworker Ratio: 1:4

IRONWORKER/WELDER	9/16/2025	$57.87	$9.05	$12.75	$14.50	$0.00	$94.17

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
IRONWORKERS LOCAL 7 IRONWORKERS LOCAL 7 (BOSTON AREA)							

Apprentice: IRONWORKER/WELDER

Effective Date: 9/16/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$34.72	$9.05	$12.75	$4.50	$0.00	$61.02
2	75.00	$43.40	$9.05	$12.75	$4.50	$0.00	$69.70
3	85.00	$49.19	$9.05	$12.75	$4.50	$0.00	$75.49
4	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
5	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
6	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Apprentice to Journeyworker Ratio: 1:4

JACKHAMMER & PAVING BREAKER OPERATOR LABORERS LABORERS - ZONE 1	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75

For apprentice rates see "Apprentice- LABORER"

LABORER LABORERS LABORERS - ZONE 1	12/1/2025	$48.60	$10.15	$9.50	$9.65	$0.00	$77.90
	6/1/2026	$50.15	$10.15	$9.50	$9.65	$0.00	$79.45
	12/1/2026	$51.65	$10.15	$9.50	$9.65	$0.00	$80.95
	6/1/2027	$53.25	$10.15	$9.50	$9.65	$0.00	$82.55
	12/1/2027	$54.85	$10.15	$9.50	$9.65	$0.00	$84.15
	6/1/2028	$56.53	$10.15	$9.50	$9.65	$0.00	$85.83
	12/1/2028	$58.20	$10.15	$9.50	$9.65	$0.00	$87.50

Apprentice: LABORER

Effective Date: 12/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$29.16	$10.15	$9.50	$9.65	$0.00	$58.46
2	70.00	$34.02	$10.15	$9.50	$9.65	$0.00	$63.32
3	80.00	$38.88	$10.15	$9.50	$9.65	$0.00	$68.18
4	90.00	$43.74	$10.15	$9.50	$9.65	$0.00	$73.04

Apprentice: LABORER

Effective Date: 6/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$30.09	$10.15	$9.50	$9.65	$0.00	$59.39

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: LABORER							
Effective Date: 6/1/2026							
Step / Percent		**Apprentice Base Wage**					
2 / 70.00		$35.11	$10.15	$9.50	$9.65	$0.00	$64.41
3 / 80.00		$40.12	$10.15	$9.50	$9.65	$0.00	$69.42
4 / 90.00		$45.14	$10.15	$9.50	$9.65	$0.00	$74.44
Apprentice to Journeyworker Ratio: 1:5							
LABORER (HEAVY & HIGHWAY)	12/1/2025	$48.70	$10.15	$9.50	$9.65	$0.00	$78.00
LABORERS	6/1/2026	$50.25	$10.15	$9.50	$9.65	$0.00	$79.55
LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2026	$51.75	$10.15	$9.50	$9.65	$0.00	$81.05
Apprentice: LABORER (HEAVY & HIGHWAY)							
Effective Date: 12/1/2025							
Step / Percent		**Apprentice Base Wage**					
1 / 60.00		$29.22	$10.15	$9.50	$9.65	$0.00	$58.52
2 / 70.00		$34.09	$10.15	$9.50	$9.65	$0.00	$63.39
3 / 80.00		$38.96	$10.15	$9.50	$9.65	$0.00	$68.26
4 / 90.00		$43.83	$10.15	$9.50	$9.65	$0.00	$73.13
Apprentice: LABORER (HEAVY & HIGHWAY)							
Effective Date: 6/1/2026							
Step / Percent		**Apprentice Base Wage**					
1 / 60.00		$30.15	$10.15	$9.50	$9.65	$0.00	$59.45
2 / 70.00		$35.18	$10.15	$9.50	$9.65	$0.00	$64.48
3 / 80.00		$40.20	$10.15	$9.50	$9.65	$0.00	$69.50
4 / 90.00		$45.23	$10.15	$9.50	$9.65	$0.00	$74.53
Apprentice to Journeyworker Ratio: 1:5							
LABORER: CARPENTER TENDER	12/1/2025	$48.60	$10.15	$9.50	$9.65	$0.00	$77.90
LABORERS	6/1/2026	$50.15	$10.15	$9.50	$9.65	$0.00	$79.45
LABORERS - ZONE 1	12/1/2026	$51.65	$10.15	$9.50	$9.65	$0.00	$80.95
	6/1/2027	$53.25	$10.15	$9.50	$9.65	$0.00	$82.55
	12/1/2027	$54.85	$10.15	$9.50	$9.65	$0.00	$84.15
	6/1/2028	$56.53	$10.15	$9.50	$9.65	$0.00	$85.83
	12/1/2028	$58.20	$10.15	$9.50	$9.65	$0.00	$87.50
For apprentice rates see "Apprentice- LABORER"							
LABORER: CEMENT FINISHER TENDER	12/1/2025	$48.60	$10.15	$9.50	$9.65	$0.00	$77.90
LABORERS	6/1/2026	$50.15	$10.15	$9.50	$9.65	$0.00	$79.45
LABORERS - ZONE 1	12/1/2026	$51.65	$10.15	$9.50	$9.65	$0.00	$80.95
	6/1/2027	$53.25	$10.15	$9.50	$9.65	$0.00	$82.55

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	12/1/2027	$54.85	$10.15	$9.50	$9.65	$0.00	$84.15
	6/1/2028	$56.53	$10.15	$9.50	$9.65	$0.00	$85.83
	12/1/2028	$58.20	$10.15	$9.50	$9.65	$0.00	$87.50
For apprentice rates see "Apprentice- LABORER"							
LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER LABORERS LABORERS - ZONE 1	12/1/2025	$48.75	$10.15	$9.50	$9.65	$0.00	$78.05
	6/1/2026	$50.30	$10.15	$9.50	$9.65	$0.00	$79.60
	12/7/2026	$51.80	$10.15	$9.50	$9.65	$0.00	$81.10
	6/7/2027	$53.40	$10.15	$9.50	$9.65	$0.00	$82.70
	12/6/2027	$55.00	$10.15	$9.50	$9.65	$0.00	$84.30
	6/5/2028	$56.68	$10.15	$9.50	$9.65	$0.00	$85.98
	12/4/2028	$58.35	$10.15	$9.50	$9.65	$0.00	$87.65
For apprentice rates see "Apprentice- LABORER"							
LABORER: MASON TENDER LABORERS LABORERS - ZONE 1	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
LABORER: MASON TENDER (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2025	$48.95	$10.15	$9.50	$9.65	$0.00	$78.25
	6/1/2026	$50.50	$10.15	$9.50	$9.65	$0.00	$79.80
	12/1/2026	$52.00	$10.15	$9.50	$9.65	$0.00	$81.30
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
LABORER: MULTI-TRADE TENDER LABORERS LABORERS - ZONE 1	12/1/2025	$48.60	$10.15	$9.50	$9.65	$0.00	$77.90
	6/1/2026	$50.15	$10.15	$9.50	$9.65	$0.00	$79.45
	12/1/2026	$51.65	$10.15	$9.50	$9.65	$0.00	$80.95
	6/1/2027	$53.25	$10.15	$9.50	$9.65	$0.00	$82.55
	12/1/2027	$54.85	$10.15	$9.50	$9.65	$0.00	$84.15
	6/1/2028	$56.53	$10.15	$9.50	$9.65	$0.00	$85.83
	12/1/2028	$58.20	$10.15	$9.50	$9.65	$0.00	$87.50
For apprentice rates see "Apprentice- LABORER"							
LABORER: TREE REMOVER LABORERS LABORERS - ZONE 1	12/1/2025	$48.60	$10.15	$9.50	$9.65	$0.00	$77.90
	6/1/2026	$50.15	$10.15	$9.50	$9.65	$0.00	$79.45
	12/1/2026	$51.65	$10.15	$9.50	$9.65	$0.00	$80.95
	6/1/2027	$53.25	$10.15	$9.50	$9.65	$0.00	$82.55
	12/1/2027	$54.85	$10.15	$9.50	$9.65	$0.00	$84.15
	6/1/2028	$56.53	$10.15	$9.50	$9.65	$0.00	$85.83
	12/1/2028	$58.20	$10.15	$9.50	$9.65	$0.00	$87.50
This classification applies to the removal of standing trees, and the trimming and removal of branches and limbs when related to public works construction or site clearance incidental to construction . For apprentice rates see "Apprentice- LABORER"							
LASER BEAM OPERATOR LABORERS LABORERS - ZONE 1	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
LASER BEAM OPERATOR (HEAVY & HIGHWAY)	12/1/2025	$48.95	$10.15	$9.50	$9.65	$0.00	$78.25
LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	6/1/2026	$50.50	$10.15	$9.50	$9.65	$0.00	$79.80
	12/1/2026	$52.00	$10.15	$9.50	$9.65	$0.00	$81.30
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 BRICKLAYERS LOCAL 3 - MARBLE & TILE	2/1/2026	$53.16	$11.49	$15.57	$6.05	$0.00	$86.27
	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

Apprentice to Journeyworker Ratio: 1:5

MARBLE MASONS,TILELAYERS & TERRAZZO MECH	8/1/2025	$67.97	$11.49	$15.57	$7.99	$0.00	$103.02
BRICKLAYERS LOCAL 3 BRICKLAYERS LOCAL 3 - MARBLE & TILE	2/1/2026	$69.32	$11.49	$15.57	$7.99	$0.00	$104.37
	8/1/2026	$71.52	$11.49	$15.57	$7.99	$0.00	$106.57
	2/1/2027	$72.92	$11.49	$15.57	$7.99	$0.00	$107.97

Apprentice: MARBLE MASONS,TILELAYERS & TERRAZZO MECH

Effective Date: 8/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

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

Apprentice to Journeyworker Ratio: 1:5

MECH. SWEEPER OPERATOR (ON CONST. SITES) OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
MECHANICS MAINTENANCE OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
MILLWRIGHT (Zone 1) MILLWRIGHTS LOCAL 1121 MILLWRIGHTS LOCAL 1121 - Zone 1	1/5/2026	$52.97	$10.08	$11.47	$10.25	$0.00	$84.77

Apprentice: MILLWRIGHT (Zone 1)

Effective Date: 1/5/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	$29.13	$10.08	$0.00	$5.64	$0.00	$44.85
2	65.00	$34.43	$10.08	$0.00	$6.66	$0.00	$51.17
3	75.00	$39.73	$10.08	$11.47	$7.69	$0.00	$68.97
4	85.00	$45.02	$10.08	$11.47	$8.71	$0.00	$75.28

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice Notes							
Step 1&2 Appr. indentured after 1/6/2020 receive no pension,							
Apprentice to Journeyworker Ratio: 1:4							
MORTAR MIXER	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
LABORERS	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
LABORERS - ZONE 1	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
OILER (OTHER THAN TRUCK CRANES,GRADALLS)	12/1/2025	$25.68	$16.05	$13.25	$3.25	$0.00	$58.23
OPERATING ENGINEERS LOCAL 4	6/1/2026	$26.27	$16.05	$13.25	$3.25	$0.00	$58.82
OPERATING ENGINEERS LOCAL 4	12/1/2026	$26.94	$16.05	$13.25	$3.25	$0.00	$59.49
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
OILER (TRUCK CRANES, GRADALLS)	12/1/2025	$31.65	$16.05	$13.25	$3.25	$0.00	$64.20
OPERATING ENGINEERS LOCAL 4	6/1/2026	$32.37	$16.05	$13.25	$3.25	$0.00	$64.92
OPERATING ENGINEERS LOCAL 4	12/1/2026	$33.17	$16.05	$13.25	$3.25	$0.00	$65.72
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
OTHER POWER DRIVEN EQUIPMENT - CLASS II	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PAINTER (BRIDGES/TANKS)	1/1/2026	$59.56	$10.35	$12.00	$12.50	$0.00	$94.41
PAINTERS LOCAL 35							
PAINTERS LOCAL 35 - ZONE 2							

Apprentice: PAINTER (BRIDGES/TANKS)

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$29.78	$10.35	$0.00	$0.00	$0.00	$40.13
2	55.00	$32.76	$10.35	$0.00	$6.93	$0.00	$50.04
3	60.00	$35.74	$10.35	$0.00	$7.56	$0.00	$53.65
4	65.00	$38.71	$10.35	$0.00	$8.19	$0.00	$57.25
5	70.00	$41.69	$10.35	$12.00	$8.82	$0.00	$72.86
6	75.00	$44.67	$10.35	$12.00	$9.45	$0.00	$76.47
7	80.00	$47.65	$10.35	$12.00	$10.08	$0.00	$80.08
8	90.00	$53.60	$10.35	$12.00	$11.34	$0.00	$87.29

Apprentice to Journeyworker Ratio: 1:1							
PAINTER (SPRAY OR SANDBLAST, NEW) *	1/1/2026	$50.46	$10.35	$12.00	$12.60	$0.00	$85.41

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
* 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: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$25.23	$10.35	$0.00	$0.00	$0.00	$35.58
2	55.00	$27.75	$10.35	$0.00	$6.93	$0.00	$45.03
3	60.00	$30.28	$10.35	$0.00	$7.56	$0.00	$48.19
4	65.00	$32.80	$10.35	$0.00	$8.19	$0.00	$51.34
5	70.00	$35.32	$10.35	$12.00	$8.82	$0.00	$66.49
6	75.00	$37.85	$10.35	$12.00	$9.45	$0.00	$69.65
7	80.00	$40.37	$10.35	$12.00	$10.08	$0.00	$72.80
8	90.00	$45.41	$10.35	$12.00	$11.34	$0.00	$79.10

Apprentice to Journeyworker Ratio: 1:1

PAINTER (SPRAY OR SANDBLAST, REPAINT) PAINTERS LOCAL 35 PAINTERS LOCAL 35 - ZONE 2	1/1/2026	$48.52	$10.35	$12.00	$12.60	$0.00	$83.47

Apprentice: PAINTER (SPRAY OR SANDBLAST, REPAINT)

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$24.26	$10.35	$0.00	$0.00	$0.00	$34.61
2	55.00	$26.69	$10.35	$0.00	$6.93	$0.00	$43.97
3	60.00	$29.11	$10.35	$0.00	$7.56	$0.00	$47.02
4	65.00	$31.54	$10.35	$0.00	$8.19	$0.00	$50.08
5	70.00	$33.96	$10.35	$12.00	$8.82	$0.00	$65.13
6	75.00	$36.39	$10.35	$12.00	$9.45	$0.00	$68.19
7	80.00	$38.82	$10.35	$12.00	$10.08	$0.00	$71.25
8	90.00	$43.67	$10.35	$12.00	$11.34	$0.00	$77.36

Apprentice to Journeyworker Ratio: 1:1

PAINTER / TAPER (BRUSH, NEW) * * 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	1/1/2026	$49.06	$10.35	$12.00	$12.60	$0.00	$84.01

Apprentice: PAINTER / TAPER (BRUSH, NEW) *

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: PAINTER / TAPER (BRUSH, NEW) *							
Effective Date: 1/1/2026							
Step / Percent		**Apprentice Base Wage**					
1 / 50.00		$24.53	$10.35	$0.00	$0.00	$0.00	$34.88
2 / 55.00		$26.98	$10.35	$0.00	$6.93	$0.00	$44.26
3 / 60.00		$29.44	$10.35	$0.00	$7.56	$0.00	$47.35
4 / 65.00		$31.89	$10.35	$0.00	$8.19	$0.00	$50.43
5 / 70.00		$34.34	$10.35	$12.00	$8.82	$0.00	$65.51
6 / 75.00		$36.80	$10.35	$12.00	$9.45	$0.00	$68.60
7 / 80.00		$39.25	$10.35	$12.00	$10.08	$0.00	$71.68
8 / 90.00		$44.15	$10.35	$12.00	$11.34	$0.00	$77.84
Apprentice to Journeyworker Ratio: 1:1							
PAINTER / TAPER (BRUSH, REPAINT)	1/1/2026	$47.12	$10.35	$12.00	$12.60	$0.00	$82.07
PAINTERS LOCAL 35							
PAINTERS LOCAL 35 - ZONE 2							
Apprentice: PAINTER / TAPER (BRUSH, REPAINT)							
Effective Date: 1/1/2026							
Step / Percent		**Apprentice Base Wage**					
1 / 50.00		$23.56	$10.35	$0.00	$0.00	$0.00	$33.91
2 / 55.00		$25.92	$10.35	$0.00	$6.93	$0.00	$43.20
3 / 60.00		$28.27	$10.35	$0.00	$7.56	$0.00	$46.18
4 / 65.00		$30.63	$10.35	$0.00	$8.19	$0.00	$49.17
5 / 70.00		$32.98	$10.35	$12.00	$8.82	$0.00	$64.15
6 / 75.00		$35.34	$10.35	$12.00	$9.45	$0.00	$67.14
7 / 80.00		$37.70	$10.35	$12.00	$10.08	$0.00	$70.13
8 / 90.00		$42.41	$10.35	$12.00	$11.34	$0.00	$76.10
Apprentice to Journeyworker Ratio: 1:1							
PAINTER TRAFFIC MARKINGS (HEAVY/HIGHWAY)	12/1/2025	$48.70	$10.15	$9.50	$9.65	$0.00	$78.00
LABORERS	6/1/2026	$50.25	$10.15	$9.50	$9.65	$0.00	$79.55
LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2026	$51.75	$10.15	$9.50	$9.65	$0.00	$81.05
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
PANEL & PICKUP TRUCKS DRIVER	1/1/2026	$40.78	$16.17	$21.78	$0.00	$0.00	$78.73
TEAMSTERS JOINT COUNCIL NO. 10	6/1/2026	$41.78	$16.17	$21.78	$0.00	$0.00	$79.73
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/1/2026	$41.78	$16.17	$23.52	$0.00	$0.00	$81.47
	1/1/2027	$41.78	$16.77	$23.52	$0.00	$0.00	$82.07
PIER AND DOCK CONSTRUCTOR (UNDERPINNING AND DECK)	8/1/2024	$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"							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
PILE DRIVER PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 1)	8/1/2024	$55.79	$10.08	$11.62	$12.67	$0.00	$90.16

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

Apprentice to Journeyworker Ratio: 1:5

PIPEFITTER & STEAMFITTER PIPEFITTERS LOCAL 537 PIPEFITTERS LOCAL 537	9/1/2025	$69.08	$13.45	$13.75	$9.30	$0.00	$105.58

Apprentice: PIPEFITTER & STEAMFITTER

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	$27.63	$13.45	$13.75	$9.30	$0.00	$64.13
2	45.00	$31.09	$13.45	$13.75	$9.30	$0.00	$67.59
3	60.00	$41.45	$13.45	$13.75	$9.30	$0.00	$77.95
4	70.00	$48.36	$13.45	$13.75	$9.30	$0.00	$84.86
5	80.00	$55.26	$13.45	$13.75	$9.30	$0.00	$91.76

Apprentice to Journeyworker Ratio: 1:3

PIPELAYER LABORERS LABORERS - ZONE 1	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75

For apprentice rates see "Apprentice- LABORER"

PIPELAYER (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2025	$48.95	$10.15	$9.50	$9.65	$0.00	$78.25
	6/1/2026	$50.50	$10.15	$9.50	$9.65	$0.00	$79.80
	12/1/2026	$52.00	$10.15	$9.50	$9.65	$0.00	$81.30

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

PLUMBERS & GASFITTERS PLUMBERS & GASFITTERS LOCAL 12 PLUMBERS & GASFITTERS LOCAL 12	9/1/2025	$71.74	$14.32	$12.61	$8.00	$0.00	$106.67
	3/2/2026	$73.89	$14.32	$12.61	$8.00	$0.00	$108.82
	8/31/2026	$76.04	$14.32	$12.61	$8.00	$0.00	$110.97
	3/1/2027	$78.19	$14.32	$12.61	$8.00	$0.00	$113.12

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	8/30/2027	$80.34	$14.32	$12.61	$8.00	$0.00	$115.27
	2/28/2028	$82.54	$14.32	$12.61	$8.00	$0.00	$117.47
	9/4/2028	$84.74	$14.32	$12.61	$8.00	$0.00	$119.67
	3/5/2029	$86.94	$14.32	$12.61	$8.00	$0.00	$121.87
	9/3/2029	$89.14	$14.32	$12.61	$8.00	$0.00	$124.07
	3/4/2030	$91.09	$14.32	$12.61	$8.00	$0.00	$126.02

Apprentice: PLUMBERS & GASFITTERS

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	35.00	$25.11	$14.32	$4.61	$2.80	$0.00	$46.84
2	40.00	$28.70	$14.32	$5.22	$3.20	$0.00	$51.44
3	55.00	$39.46	$14.32	$7.07	$4.40	$0.00	$65.25
4	65.00	$46.63	$14.32	$8.30	$5.20	$0.00	$74.45
5	75.00	$53.81	$14.32	$9.53	$6.00	$0.00	$83.66

Apprentice: PLUMBERS & GASFITTERS

Effective Date: 3/2/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	35.00	$25.86	$14.32	$4.61	$2.80	$0.00	$47.59
2	40.00	$29.56	$14.32	$5.22	$3.20	$0.00	$52.30
3	55.00	$40.64	$14.32	$7.07	$4.40	$0.00	$66.43
4	65.00	$48.03	$14.32	$8.30	$5.20	$0.00	$75.85
5	75.00	$55.42	$14.32	$9.53	$6.00	$0.00	$85.27

Apprentice to Journeyworker Ratio: 1:2

PNEUMATIC CONTROLS (TEMP.) PIPEFITTERS LOCAL 537 PIPEFITTERS LOCAL 537	9/1/2025	$69.08	$13.45	$13.75	$9.30	$0.00	$105.58
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							
PNEUMATIC DRILL/TOOL OPERATOR LABORERS LABORERS - ZONE 1	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
PNEUMATIC DRILL/TOOL OPERATOR (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2025	$48.95	$10.15	$9.50	$9.65	$0.00	$78.25
	6/1/2026	$50.50	$10.15	$9.50	$9.65	$0.00	$79.80
	12/1/2026	$52.00	$10.15	$9.50	$9.65	$0.00	$81.30
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
POWDERMAN & BLASTER	12/1/2025	$49.60	$10.15	$9.50	$9.65	$0.00	$78.90

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS LABORERS - ZONE 1	6/1/2026	$51.15	$10.15	$9.50	$9.65	$0.00	$80.45
	12/1/2026	$52.65	$10.15	$9.50	$9.65	$0.00	$81.95
	6/1/2027	$54.25	$10.15	$9.50	$9.65	$0.00	$83.55
	12/1/2027	$55.85	$10.15	$9.50	$9.65	$0.00	$85.15
	6/1/2028	$57.53	$10.15	$9.50	$9.65	$0.00	$86.83
	12/1/2028	$59.20	$10.15	$9.50	$9.65	$0.00	$88.50
For apprentice rates see "Apprentice- LABORER"							
POWDERMAN & BLASTER (HEAVY & HIGHWAY)	12/1/2025	$49.70	$10.15	$9.50	$9.65	$0.00	$79.00
LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	6/1/2026	$51.25	$10.15	$9.50	$9.65	$0.00	$80.55
	12/1/2026	$52.75	$10.15	$9.50	$9.65	$0.00	$82.05
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
POWER SHOVEL/DERRICK/TRENCHING MACHINE OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PUMP OPERATOR (CONCRETE) OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PUMP OPERATOR (DEWATERING, OTHER) OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$37.97	$16.05	$13.25	$3.25	$0.00	$70.52
	6/1/2026	$38.83	$16.05	$13.25	$3.25	$0.00	$71.38
	12/1/2026	$39.78	$16.05	$13.25	$3.25	$0.00	$72.33
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
READY-MIX CONCRETE DRIVER TEAMSTERS 42 - J.G. MacLeallan (Wakefield) TEAMSTERS 42 - J.G. MacLeallan (Wakefield)	5/1/2025	$30.00	$12.00	$7.00	$0.00	$0.00	$49.00
	5/1/2026	$30.50	$12.00	$7.00	$0.00	$0.00	$49.50
RECLAIMERS OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
RIDE-ON MOTORIZED BUGGY OPERATOR LABORERS LABORERS - ZONE 1	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
ROLLER/SPREADER/MULCHING MACHINE OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
ROOFER (Inc.Roofer Waterproofng &Roofer Damproofg) ROOFERS LOCAL 33 ROOFERS LOCAL 33	8/1/2025	$53.53	$13.28	$12.67	$9.03	$0.00	$88.51
	2/1/2026	$54.78	$13.28	$12.67	$9.03	$0.00	$89.76

Apprentice: ROOFER (Inc.Roofer Waterproofng &Roofer 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.Roofer Waterproofng &Roofer 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

Apprentice Notes

** 1:5, 2:6-10, the 1:10; Reroofing: 1:4, then 1:1

Apprentice to Journeyworker Ratio: 1:5

ROOFER SLATE / TILE / PRECAST CONCRETE ROOFERS LOCAL 33 ROOFERS LOCAL 33	8/1/2025	$53.78	$13.28	$12.67	$9.03	$0.00	$88.76
	2/1/2026	$55.03	$13.28	$12.67	$9.03	$0.00	$90.01

For apprentice rates see "Apprentice- ROOFER"

SHEETMETAL WORKER SHEETMETAL WORKERS LOCAL 17 SHEETMETAL WORKERS LOCAL 17 - A	8/1/2025	$60.98	$14.91	$18.74	$9.53	$2.98	$107.14
	2/1/2026	$62.93	$14.91	$18.74	$9.53	$2.98	$109.09

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

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: SHEETMETAL WORKER

Effective Date: 8/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
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

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

Apprentice to Journeyworker Ratio: 1:4

SPECIALIZED EARTH MOVING EQUIP < 35 TONS TEAMSTERS JOINT COUNCIL NO. 10 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 TEAMSTERS JOINT COUNCIL NO. 10 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 SPRINKLER FITTERS LOCAL 550 SPRINKLER FITTERS LOCAL 550 - (Section A) Zone 1	1/1/2026	$72.05	$13.45	$7.45	$18.25	$0.00	$111.20

Apprentice: SPRINKLER FITTER

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	35.00	$25.22	$13.45	$13.84	$0.00	$0.00	$52.51
2	40.00	$28.82	$13.45	$14.75	$0.00	$0.00	$57.02

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: SPRINKLER FITTER							
Effective Date: 1/1/2026							
Step / Percent		**Apprentice Base Wage**	**Health**	**Pension**	**Annuity**	**Supplemental Unemployment**	**Total Rate**
3 / 45.00		$32.42	$13.45	$15.67	$0.00	$0.00	$61.54
4 / 50.00		$36.03	$13.45	$16.57	$0.00	$0.00	$66.05
5 / 55.00		$39.63	$13.45	$17.49	$0.00	$0.00	$70.57
6 / 60.00		$43.23	$13.45	$18.40	$0.00	$0.00	$75.08
7 / 65.00		$46.83	$13.45	$19.32	$0.00	$0.00	$79.60
8 / 70.00		$50.44	$13.45	$20.22	$0.00	$0.00	$84.11
9 / 75.00		$54.04	$13.45	$21.15	$0.00	$0.00	$88.64
10 / 80.00		$57.64	$13.45	$22.05	$0.00	$0.00	$93.14
Apprentice Notes							
Apprentice entered prior 9/30/10:							
Apprentice to Journeyworker Ratio: 1:3							
STEAM BOILER OPERATOR	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
TAMPERS, SELF-PROPELLED OR TRACTOR DRAWN	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
TELECOMMUNICATION TECHNICIAN	9/1/2025	$52.94	$13.00	$13.97	$6.98	$0.00	$86.89
TELECOMMUNICATION TECHNICIAN	3/1/2026	$53.49	$13.00	$14.23	$7.20	$0.00	$87.92
ELECTRICIANS LOCAL 103	9/1/2026	$55.02	$13.00	$14.28	$7.20	$0.00	$89.50
ELECTRICIANS LOCAL 103	3/1/2027	$55.98	$13.00	$14.31	$7.20	$0.00	$90.49
	9/1/2027	$57.50	$13.00	$14.36	$7.20	$0.00	$92.06
	3/1/2028	$58.46	$13.00	$14.38	$7.20	$0.00	$93.04
For apprentice rates and ratios see "Apprentice- ELECTRICIAN"							
Apprentice: TELECOMMUNICATION TECHNICIAN							
Effective Date: 9/1/2025							
Step / Percent		**Apprentice Base Wage**	**Health**	**Pension**	**Annuity**	**Supplemental Unemployment**	**Total Rate**
1 / 45.00		$23.82	$13.00	$0.71	$0.00	$0.00	$37.53
2 / 45.00		$23.82	$13.00	$0.71	$0.00	$0.00	$37.53
3 / 50.00		$26.47	$13.00	$13.17	$3.49	$0.00	$56.13
4 / 50.00		$26.47	$13.00	$13.17	$3.49	$0.00	$56.13
5 / 55.00		$29.12	$13.00	$13.25	$3.84	$0.00	$59.21
6 / 60.00		$31.76	$13.00	$13.33	$4.19	$0.00	$62.28
7 / 65.00		$34.41	$13.00	$13.41	$4.54	$0.00	$65.36

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: TELECOMMUNICATION TECHNICIAN

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
8	70.00	$37.06	$13.00	$13.49	$4.89	$0.00	$68.44
9	75.00	$39.71	$13.00	$13.57	$5.24	$0.00	$71.52
10	80.00	$42.35	$13.00	$13.65	$5.58	$0.00	$74.58

Apprentice: TELECOMMUNICATION TECHNICIAN

Effective Date: 3/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	$24.07	$13.00	$0.72	$0.00	$0.00	$37.79
2	45.00	$24.07	$13.00	$0.72	$0.00	$0.00	$37.79
3	50.00	$26.75	$13.00	$13.43	$3.60	$0.00	$56.78
4	50.00	$26.75	$13.00	$13.43	$3.60	$0.00	$56.78
5	55.00	$29.42	$13.00	$13.51	$3.96	$0.00	$59.89
6	60.00	$32.09	$13.00	$13.59	$4.32	$0.00	$63.00
7	65.00	$34.77	$13.00	$13.67	$4.68	$0.00	$66.12
8	70.00	$37.44	$13.00	$13.75	$5.04	$0.00	$69.23
9	75.00	$40.12	$13.00	$13.83	$5.40	$0.00	$72.35
10	80.00	$42.79	$13.00	$13.91	$5.76	$0.00	$75.46

Apprentice to Journeyworker Ratio: 1:1

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

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: TERRAZZO FINISHERS							
Effective Date: 2/1/2026							
Step / Percent		**Apprentice Base Wage**	**Health**	**Pension**	**Annuity**	**Supplemental Unemployment**	**Total Rate**
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
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
Apprentice to Journeyworker Ratio: 1:5							
TEST BORING DRILLER	12/1/2025	$52.70	$10.15	$9.50	$9.80	$0.00	$82.15
LABORERS	6/1/2026	$54.25	$10.15	$9.50	$9.80	$0.00	$83.70
LABORERS - FOUNDATION AND MARINE	12/1/2026	$55.75	$10.15	$9.50	$9.80	$0.00	$85.20
For apprentice rates see "Apprentice- LABORER"							
TEST BORING DRILLER HELPER	12/1/2025	$48.82	$10.15	$9.50	$9.80	$0.00	$78.27
LABORERS	6/1/2026	$50.37	$10.15	$9.50	$9.80	$0.00	$79.82
LABORERS - FOUNDATION AND MARINE	12/1/2026	$51.87	$10.15	$9.50	$9.80	$0.00	$81.32
For apprentice rates see "Apprentice- LABORER"							
TEST BORING LABORER	12/1/2025	$48.70	$10.15	$9.50	$9.80	$0.00	$78.15
LABORERS	6/1/2026	$50.25	$10.15	$9.50	$9.80	$0.00	$79.70
LABORERS - FOUNDATION AND MARINE	12/1/2026	$51.75	$10.15	$9.50	$9.80	$0.00	$81.20
For apprentice rates see "Apprentice- LABORER"							
TRACTORS/PORTABLE STEAM GENERATORS	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
TRAILERS FOR EARTH MOVING EQUIPMENT	1/1/2026	$41.82	$16.17	$21.78	$0.00	$0.00	$79.77
TEAMSTERS JOINT COUNCIL NO. 10	6/1/2026	$42.82	$16.17	$21.78	$0.00	$0.00	$80.77
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	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	12/1/2025	$60.93	$10.15	$9.50	$10.25	$0.00	$90.83
LABORERS	6/1/2026	$62.48	$10.15	$9.50	$10.25	$0.00	$92.38
LABORERS (COMPRESSED AIR)	12/1/2026	$63.98	$10.15	$9.50	$10.25	$0.00	$93.88
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE)	12/1/2025	$62.93	$10.15	$9.50	$10.25	$0.00	$92.83
LABORERS	6/1/2026	$64.48	$10.15	$9.50	$10.25	$0.00	$94.38
LABORERS (COMPRESSED AIR)	12/1/2026	$65.98	$10.15	$9.50	$10.25	$0.00	$95.88
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - FREE AIR	12/1/2025	$53.00	$10.15	$9.50	$10.25	$0.00	$82.90
LABORERS	6/1/2026	$54.55	$10.15	$9.50	$10.25	$0.00	$84.45
LABORERS (FREE AIR TUNNEL)	12/1/2026	$56.05	$10.15	$9.50	$10.25	$0.00	$85.95

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - FREE AIR (HAZ. WASTE)	12/1/2025	$55.00	$10.15	$9.50	$10.25	$0.00	$84.90
LABORERS	6/1/2026	$56.55	$10.15	$9.50	$10.25	$0.00	$86.45
LABORERS (FREE AIR TUNNEL)	12/1/2026	$58.05	$10.15	$9.50	$10.25	$0.00	$87.95
For apprentice rates see "Apprentice- LABORER"							
VAC-HAUL	1/1/2026	$41.24	$16.17	$21.78	$0.00	$0.00	$79.19
TEAMSTERS JOINT COUNCIL NO. 10	6/1/2026	$42.24	$16.17	$21.78	$0.00	$0.00	$80.19
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/1/2026	$42.24	$16.17	$23.52	$0.00	$0.00	$81.93
	1/1/2027	$42.24	$16.77	$23.52	$0.00	$0.00	$82.53
WAGON DRILL OPERATOR	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
LABORERS	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
LABORERS - ZONE 1	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
WAGON DRILL OPERATOR (HEAVY & HIGHWAY)	12/1/2025	$48.95	$10.15	$9.50	$9.65	$0.00	$78.25
LABORERS	6/1/2026	$50.50	$10.15	$9.50	$9.65	$0.00	$79.80
LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2026	$52.00	$10.15	$9.50	$9.65	$0.00	$81.30
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
WASTE WATER PUMP OPERATOR	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
WATER METER INSTALLER	9/1/2025	$71.74	$14.32	$12.61	$8.00	$0.00	$106.67
PLUMBERS & GASFITTERS LOCAL 12	3/2/2026	$73.89	$14.32	$12.61	$8.00	$0.00	$108.82
PLUMBERS & GASFITTERS LOCAL 12	8/31/2026	$76.04	$14.32	$12.61	$8.00	$0.00	$110.97
	3/1/2027	$78.19	$14.32	$12.61	$8.00	$0.00	$113.12
	8/30/2027	$80.34	$14.32	$12.61	$8.00	$0.00	$115.27
	2/2/2028	$82.54	$14.32	$12.61	$8.00	$0.00	$117.47
	9/4/2028	$84.74	$14.32	$12.61	$8.00	$0.00	$119.67
	3/5/2029	$86.94	$14.32	$12.61	$8.00	$0.00	$121.87
	9/3/2029	$89.14	$14.32	$12.61	$8.00	$0.00	$124.07
	3/4/2030	$91.09	$14.32	$12.61	$8.00	$0.00	$126.02
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GASFITTER"							

Outside Electrical

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
CABLE TECHNICIAN (Power Zone)	8/31/2025	$36.55	$10.75	$1.10	$1.00	$0.00	$49.40
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$38.13	$11.00	$1.14	$1.00	$0.00	$51.27
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$39.65	$11.25	$1.19	$1.00	$0.00	$53.09
For apprentice rates see "Apprentice- LINEMAN"							
CABLEMAN (Underground Ducts & Cables)	8/31/2025	$51.78	$10.75	$1.55	$10.71	$0.00	$74.79
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$54.02	$11.00	$1.62	$11.14	$0.00	$77.78
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$56.17	$11.25	$1.69	$11.57	$0.00	$80.68
For apprentice rates see "Apprentice- LINEMAN"							
DRIVER / GROUNDMAN CDL	8/31/2025	$42.64	$10.75	$1.28	$10.45	$0.00	$65.12
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$44.49	$11.00	$1.33	$10.80	$0.00	$67.62
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$46.26	$11.25	$1.39	$11.15	$0.00	$70.05
For apprentice rates see "Apprentice- LINEMAN"							
DRIVER / GROUNDMAN -Inexperienced (<2000 Hrs)	8/31/2025	$33.51	$10.75	$1.01	$1.00	$0.00	$46.27
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$34.95	$11.00	$1.05	$1.00	$0.00	$48.00
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$36.64	$11.25	$1.09	$1.00	$0.00	$49.98
For apprentice rates see "Apprentice- LINEMAN"							
EQUIPMENT OPERATOR (Class A CDL)	8/31/2025	$51.78	$10.75	$1.55	$14.79	$0.00	$78.87
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$54.02	$11.00	$1.62	$15.22	$0.00	$81.86
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$56.17	$11.25	$1.69	$15.65	$0.00	$84.76
For apprentice rates see "Apprentice- LINEMAN"							
EQUIPMENT OPERATOR (Class B CDL)	8/31/2025	$45.69	$10.75	$1.37	$11.27	$0.00	$69.08
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$47.66	$11.00	$1.43	$11.65	$0.00	$71.74
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$49.56	$11.25	$1.49	$12.03	$0.00	$74.33
For apprentice rates see "Apprentice- LINEMAN"							
GROUNDMAN	8/31/2025	$33.51	$10.75	$1.01	$1.00	$0.00	$46.27
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$34.95	$11.00	$1.05	$1.00	$0.00	$48.00
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$36.34	$11.25	$1.09	$1.00	$0.00	$49.68
For apprentice rates see "Apprentice- LINEMAN"							
GROUNDMAN -Inexperienced (<2000 Hrs.)	8/31/2025	$27.41	$10.75	$0.82	$1.00	$0.00	$39.98
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$28.60	$11.00	$0.86	$1.00	$0.00	$41.46
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$29.74	$11.25	$0.89	$1.00	$0.00	$42.88
For apprentice rates see "Apprentice- LINEMAN"							
JOURNEYMAN LINEMAN	8/31/2025	$60.92	$10.75	$1.83	$18.00	$0.00	$91.50
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$63.55	$11.00	$1.91	$18.50	$0.00	$94.96
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$66.08	$11.25	$1.98	$19.00	$0.00	$98.31

Apprentice: JOURNEYMAN LINEMAN

Effective Date: 8/31/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Outside Electrical

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: JOURNEYMAN LINEMAN

Effective Date: 8/31/2025

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
2	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
3	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
4	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
5	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
6	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
7	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Apprentice: JOURNEYMAN LINEMAN

Effective Date: 8/30/2026

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
2	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
3	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
4	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
5	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
6	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
7	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Apprentice to Journeyworker Ratio: 1:2

TELEDATA CABLE SPLICER OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	2/4/2019	$30.73	$4.70	$0.92	$2.25	$0.00	$38.60
TELEDATA LINEMAN/EQUIPMENT OPERATOR OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	2/4/2019	$28.93	$4.70	$0.89	$2.25	$0.00	$36.77
TELEDATA WIREMAN/INSTALLER/TECHNICIAN OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	2/4/2019	$28.93	$4.70	$0.89	$2.25	$0.00	$36.77

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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STATE PREVAILING WAGE RATES

CITY OF WOBURN

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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:	Massachusetts Highway	**City/Town:**	WOBURN
Contract Number:	133292		
Description of Work:	BURLINGTON-LYNNFIELD-WAKEFIELD-WOBURN – Bridge Preservation of 10 Bridges carrying I-95 (613196)		
Job Location:	BURLINGTON-LYNNFIELD-WAKEFIELD-WOBURN - I-95		

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 form 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 TEAMSTERS JOINT COUNCIL NO. 10 TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/1/2025	$42.05	$15.41	$21.78	$0.00	$0.00	$79.24
	6/1/2026	$43.05	$15.41	$21.78	$0.00	$0.00	$80.24
	8/1/2026	$43.05	$15.91	$21.78	$0.00	$0.00	$80.74
	12/1/2026	$43.05	$15.91	$23.52	$0.00	$0.00	$82.48
(3 AXLE) DRIVER - EQUIPMENT TEAMSTERS JOINT COUNCIL NO. 10 TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/1/2025	$41.12	$15.41	$21.78	$0.00	$0.00	$78.31
	6/1/2026	$43.12	$15.41	$21.78	$0.00	$0.00	$80.31
	8/1/2026	$43.12	$15.91	$21.78	$0.00	$0.00	$80.81
	12/1/2026	$43.12	$15.91	$23.52	$0.00	$0.00	$82.55
(4 & 5 AXLE) DRIVER - EQUIPMENT TEAMSTERS JOINT COUNCIL NO. 10 TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/1/2025	$42.24	$15.41	$21.78	$0.00	$0.00	$79.43
	6/1/2026	$43.24	$15.41	$21.78	$0.00	$0.00	$80.43
	8/1/2026	$43.24	$15.91	$21.78	$0.00	$0.00	$80.93
	12/1/2026	$43.24	$15.91	$23.52	$0.00	$0.00	$82.67
ADS/SUBMERSIBLE PILOT PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 1) For apprentice rates see "Apprentice- PILE DRIVER"	1/1/2024	$117.16	$10.08	$11.62	$12.67	$0.00	$151.53
AIR TRACK OPERATOR LABORERS LABORERS - ZONE 1 For apprentice rates see "Apprentice- LABORER"	12/1/2025	$49.35	$10.15	$9.50	$9.65	$0.00	$78.65
	6/1/2026	$50.15	$10.15	$9.50	$9.65	$0.00	$79.45
	12/1/2026	$52.40	$10.15	$9.50	$9.65	$0.00	$81.70
	6/1/2027	$54.00	$10.15	$9.50	$9.65	$0.00	$83.30
	12/1/2027	$55.60	$10.15	$9.50	$9.65	$0.00	$84.90
	6/1/2028	$57.28	$10.15	$9.50	$9.65	$0.00	$86.58
	12/1/2028	$58.95	$10.15	$9.50	$9.65	$0.00	$88.25
AIR TRACK OPERATOR (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY) For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"	12/1/2025	$49.45	$10.15	$9.50	$9.65	$0.00	$78.75
	6/1/2026	$51.00	$10.15	$9.50	$9.65	$0.00	$80.30
	12/1/2026	$52.50	$10.15	$9.50	$9.65	$0.00	$81.80
ASBESTOS REMOVER - PIPE / MECH. EQUIPT. HEAT & FROST INSULATORS LOCAL 6 HEAT & FROST INSULATORS LOCAL 6 (BOSTON)	12/1/2025	$44.80	$14.50	$4.30	$6.75	$0.00	$70.35
ASPHALT RAKER LABORERS LABORERS - ZONE 1 For apprentice rates see "Apprentice- LABORER"	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
ASPHALT RAKER (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2025	$48.95	$10.15	$9.50	$9.65	$0.00	$78.25
	6/1/2026	$50.50	$10.15	$9.50	$9.65	$0.00	$79.80
	12/1/2026	$52.00	$10.15	$9.50	$9.65	$0.00	$81.30

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
BACKHOE/FRONT-END LOADER	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
BARCO-TYPE JUMPING TAMPER	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
LABORERS	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
LABORERS - ZONE 1	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
BLOCK PAVER, RAMMER / CURB SETTER	12/1/2025	$49.35	$10.15	$9.50	$9.65	$0.00	$78.65
LABORERS	6/1/2026	$50.15	$10.15	$9.50	$9.65	$0.00	$79.45
LABORERS - ZONE 1	12/1/2026	$52.40	$10.15	$9.50	$9.65	$0.00	$81.70
	6/1/2027	$54.00	$10.15	$9.50	$9.65	$0.00	$83.30
	12/1/2027	$55.60	$10.15	$9.50	$9.65	$0.00	$84.90
	6/1/2028	$57.28	$10.15	$9.50	$9.65	$0.00	$86.58
	12/1/2028	$58.95	$10.15	$9.50	$9.65	$0.00	$88.25
For apprentice rates see "Apprentice- LABORER"							
BLOCK PAVER, RAMMER / CURB SETTER (HEAVY & HIGHWAY)	12/1/2025	$49.45	$10.15	$9.50	$9.65	$0.00	$78.75
LABORERS	6/1/2026	$51.00	$10.15	$9.50	$9.65	$0.00	$80.30
LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2026	$52.50	$10.15	$9.50	$9.65	$0.00	$81.80
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
BOILER MAKER	1/1/2024	$48.12	$7.07	$14.60	$6.00	$0.00	$75.79
BOILERMAKERS LOCAL 29							
BOILERMAKERS LOCAL 29							

Apprentice: BOILER MAKER

Effective Date: 1/1/2024

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	65.00	$31.28	$7.07	$9.32	$3.90	$0.00	$51.57
2	65.00	$31.28	$7.07	$9.32	$3.90	$0.00	$51.57
3	70.00	$33.68	$7.07	$10.03	$4.20	$0.00	$54.98
4	75.00	$36.09	$7.07	$10.74	$4.50	$0.00	$58.40
5	80.00	$38.50	$7.07	$11.45	$4.80	$0.00	$61.82
6	85.00	$40.90	$7.07	$12.18	$5.10	$0.00	$65.25

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: BOILER MAKER

Effective Date: 1/1/2024

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
7	90.00	$43.31	$7.07	$12.88	$5.40	$0.00	$68.66
8	95.00	$45.71	$7.07	$13.62	$5.70	$0.00	$72.10

Apprentice to Journeyworker Ratio: 1:4

BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING) BRICKLAYERS LOCAL 3 BRICKLAYERS LOCAL 3 (WALTHAM)	8/1/2025	$67.95	$11.49	$15.57	$8.02	$0.00	$103.03
	2/1/2026	$69.30	$11.49	$15.57	$8.02	$0.00	$104.38
	8/1/2026	$71.50	$11.49	$15.57	$8.02	$0.00	$106.58
	2/1/2027	$72.90	$11.49	$15.57	$8.02	$0.00	$107.98

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	$33.98	$11.49	$15.57	$8.02	$0.00	$69.06
2	60.00	$40.77	$11.49	$15.57	$8.02	$0.00	$75.85
3	70.00	$47.57	$11.49	$15.57	$8.02	$0.00	$82.65
4	80.00	$54.36	$11.49	$15.57	$8.02	$0.00	$89.44
5	90.00	$61.16	$11.49	$15.57	$8.02	$0.00	$96.24

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	$34.65	$11.49	$15.57	$8.02	$0.00	$69.73
2	60.00	$41.58	$11.49	$15.57	$8.02	$0.00	$76.66
3	70.00	$48.51	$11.49	$15.57	$8.02	$0.00	$83.59
4	80.00	$55.44	$11.49	$15.57	$8.02	$0.00	$90.52
5	90.00	$62.37	$11.49	$15.57	$8.02	$0.00	$97.45

Apprentice to Journeyworker Ratio: 1:5

BULLDOZER/GRADER/SCRAPER OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
CAISSON & UNDERPINNING BOTTOM MAN LABORERS LABORERS - FOUNDATION AND MARINE	12/1/2025	$49.85	$10.15	$9.50	$9.80	$0.00	$79.30
	6/1/2026	$51.40	$10.15	$9.50	$9.80	$0.00	$80.85
	12/1/2026	$52.90	$10.15	$9.50	$9.80	$0.00	$82.35
For apprentice rates see "Apprentice- LABORER"							
CAISSON & UNDERPINNING LABORER	12/1/2025	$48.70	$10.15	$9.50	$9.80	$0.00	$78.15

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS	6/1/2026	$50.25	$10.15	$9.50	$9.80	$0.00	$79.70
LABORERS - FOUNDATION AND MARINE	12/1/2026	$51.75	$10.15	$9.50	$9.80	$0.00	$81.20
For apprentice rates see "Apprentice- LABORER"							
CAISSON & UNDERPINNING TOP MAN	12/1/2025	$49.03	$10.15	$9.50	$9.80	$0.00	$78.48
LABORERS	6/1/2026	$50.58	$10.15	$9.50	$9.80	$0.00	$80.03
LABORERS - FOUNDATION AND MARINE	12/1/2026	$52.08	$10.15	$9.50	$9.80	$0.00	$81.53
For apprentice rates see "Apprentice- LABORER"							
CARBIDE CORE DRILL OPERATOR	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
LABORERS	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
LABORERS - ZONE 1	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
CARPENTER	9/1/2025	$50.35	$10.33	$11.47	$8.50	$0.00	$80.65
CARPENTERS	3/1/2026	$51.60	$10.33	$11.47	$8.50	$0.00	$81.90
CARPENTERS -ZONE 2 (Eastern Massachusetts)	9/1/2026	$52.85	$10.33	$11.47	$8.50	$0.00	$83.15
	3/1/2027	$54.10	$10.33	$11.47	$8.50	$0.00	$84.40

Apprentice: CARPENTER

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	$22.66	$10.33	$0.00	$1.73	$0.00	$34.72
2	45.00	$22.66	$10.33	$0.00	$1.73	$0.00	$34.72
3	55.00	$27.69	$10.33	$0.00	$3.40	$0.00	$41.42
4	55.00	$27.69	$10.33	$0.00	$3.40	$0.00	$41.42
5	70.00	$35.25	$10.33	$11.41	$5.10	$0.00	$62.09
6	70.00	$35.25	$10.33	$11.41	$5.10	$0.00	$62.09
7	80.00	$40.28	$10.33	$11.44	$6.80	$0.00	$68.85
8	80.00	$40.28	$10.33	$11.44	$6.80	$0.00	$68.85

Apprentice: CARPENTER

Effective Date: 3/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	$23.22	$10.33	$0.00	$1.73	$0.00	$35.28
2	45.00	$23.22	$10.33	$0.00	$1.73	$0.00	$35.28
3	55.00	$28.38	$10.33	$0.00	$3.40	$0.00	$42.11
4	55.00	$28.38	$10.33	$0.00	$3.40	$0.00	$42.11
5	70.00	$36.12	$10.33	$11.41	$5.10	$0.00	$62.96
6	70.00	$36.12	$10.33	$11.41	$5.10	$0.00	$62.96
7	80.00	$41.28	$10.33	$11.44	$6.80	$0.00	$69.85

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: CARPENTER							
Effective Date: 3/1/2026							
Step / Percent / Apprentice Base Wage							
8 / 80.00		$41.28	$10.33	$11.44	$6.80	$0.00	$69.85
Apprentice to Journeyworker Ratio: 1:5							
CARPENTER WOOD FRAME CARPENTERS CARPENTERS-ZONE 3 (Wood Frame)	10/1/2025	$27.75	$7.02	$3.80	$1.00	$0.00	$39.57
	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: 10/1/2025

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

Apprentice: CARPENTER WOOD FRAME

Effective Date: 10/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$17.31	$7.02	$0.00	$0.00	$0.00	$24.33
2	60.00	$17.31	$7.02	$0.00	$0.00	$0.00	$24.33
3	65.00	$18.75	$7.02	$0.00	$1.00	$0.00	$26.77
4	70.00	$20.20	$7.02	$0.00	$1.00	$0.00	$28.22
5	75.00	$21.64	$7.02	$3.80	$1.00	$0.00	$33.46
6	80.00	$23.08	$7.02	$3.80	$1.00	$0.00	$34.90
7	85.00	$24.52	$7.02	$3.80	$1.00	$0.00	$36.34
8	90.00	$25.97	$7.02	$3.80	$1.00	$0.00	$37.79

Apprentice to Journeyworker Ratio: 1:5

CEMENT MASONRY/PLASTERING PLASTERERS AND CEMENT MASONS LOCAL 534 Plasterers and Cement Masons - Zone 1	1/1/2026	$53.24	$13.35	$16.43	$7.78	$1.80	$92.60
	7/1/2026	$54.49	$13.35	$16.43	$7.78	$1.80	$93.85
	1/1/2027	$55.94	$13.35	$16.43	$7.78	$1.80	$95.30
	7/1/2027	$57.29	$13.35	$16.43	$7.78	$1.80	$96.65
	1/1/2028	$58.64	$13.35	$16.43	$7.78	$1.80	$98.00

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: CEMENT MASONRY/PLASTERING

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$26.62	$13.35	$16.43	$0.00	$0.00	$56.40
2	60.00	$31.94	$13.35	$16.43	$7.78	$1.80	$71.30
3	65.00	$34.61	$13.35	$16.43	$7.78	$1.80	$73.97
4	70.00	$37.27	$13.35	$16.43	$7.78	$1.80	$76.63
5	75.00	$39.93	$13.35	$16.43	$7.78	$1.80	$79.29
6	80.00	$42.59	$13.35	$16.43	$7.78	$1.80	$81.95
7	90.00	$47.92	$13.35	$16.43	$0.00	$0.00	$77.70

Apprentice: CEMENT MASONRY/PLASTERING

Effective Date: 7/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$27.25	$13.35	$16.43	$0.00	$0.00	$57.03
2	60.00	$32.69	$13.35	$16.43	$7.78	$1.80	$72.05
3	65.00	$35.42	$13.35	$16.43	$7.78	$1.80	$74.78
4	70.00	$38.14	$13.35	$16.43	$7.78	$1.80	$77.50
5	75.00	$40.87	$13.35	$16.43	$7.78	$1.80	$80.23
6	80.00	$43.59	$13.35	$16.43	$7.78	$1.80	$82.95
7	90.00	$49.04	$13.35	$0.00	$7.78	$0.00	$70.17

Apprentice to Journeyworker Ratio: 1:5

CHAIN SAW OPERATOR LABORERS LABORERS - ZONE 1	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$60.48	$16.05	$13.25	$3.25	$0.00	$93.03
	6/1/2026	$61.81	$16.05	$13.25	$3.25	$0.00	$94.36
	12/1/2026	$63.29	$16.05	$13.25	$3.25	$0.00	$95.84
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
COMPRESSOR OPERATOR OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$37.97	$16.05	$13.25	$3.25	$0.00	$70.52
	6/1/2026	$38.83	$16.05	$13.25	$3.25	$0.00	$71.38
	12/1/2026	$39.78	$16.05	$13.25	$3.25	$0.00	$72.33
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
DELEADER (BRIDGE) PAINTERS LOCAL 35 PAINTERS LOCAL 35 - ZONE 2	1/1/2026	$59.56	$10.35	$12.00	$12.60	$0.00	$94.51

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: DELEADER (BRIDGE)

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$29.78	$10.35	$0.00	$0.00	$0.00	$40.13
2	55.00	$32.76	$10.35	$0.00	$6.93	$0.00	$50.04
3	60.00	$35.74	$10.35	$0.00	$7.56	$0.00	$53.65
4	65.00	$38.71	$10.35	$0.00	$8.19	$0.00	$57.25
5	70.00	$41.69	$10.35	$12.00	$8.82	$0.00	$72.86
6	75.00	$44.67	$10.35	$12.00	$9.45	$0.00	$76.47
7	80.00	$47.65	$10.35	$12.00	$10.08	$0.00	$80.08
8	90.00	$53.60	$10.35	$12.00	$11.34	$0.00	$87.29

Apprentice to Journeyworker Ratio: 1:1

DEMO: ADZEMAN LABORERS LABORERS - ZONE 1	12/1/2025	$48.75	$10.15	$9.50	$9.65	$0.00	$78.05
	6/1/2026	$50.30	$10.15	$9.50	$9.65	$0.00	$79.60
	12/7/2026	$51.80	$10.15	$9.50	$9.65	$0.00	$81.10
	6/7/2027	$53.40	$10.15	$9.50	$9.65	$0.00	$82.70
	12/6/2027	$55.00	$10.15	$9.50	$9.65	$0.00	$84.30
	6/5/2028	$56.68	$10.15	$9.50	$9.65	$0.00	$85.98
	12/4/2028	$58.35	$10.15	$9.50	$9.65	$0.00	$87.65
For apprentice rates see "Apprentice- LABORER"							
DEMO: BACKHOE/LOADER/HAMMER OPERATOR LABORERS LABORERS - ZONE 1	12/1/2025	$49.75	$10.15	$9.50	$9.65	$0.00	$79.05
	6/1/2026	$51.30	$10.15	$9.50	$9.65	$0.00	$80.60
	12/7/2026	$52.80	$10.15	$9.50	$9.65	$0.00	$82.10
	6/7/2027	$54.40	$10.15	$9.50	$9.65	$0.00	$83.70
	12/6/2027	$56.00	$10.15	$9.50	$9.65	$0.00	$85.30
	6/5/2028	$57.68	$10.15	$9.50	$9.65	$0.00	$86.98
	12/4/2028	$59.35	$10.15	$9.50	$9.65	$0.00	$88.65
For apprentice rates see "Apprentice- LABORER"							
DEMO: BURNERS LABORERS LABORERS - ZONE 1	12/1/2025	$49.50	$10.15	$9.50	$9.65	$0.00	$78.80
	6/1/2026	$51.05	$10.15	$9.50	$9.65	$0.00	$80.35
	12/7/2026	$52.55	$10.15	$9.50	$9.65	$0.00	$81.85
	6/7/2027	$54.15	$10.15	$9.50	$9.65	$0.00	$83.45
	12/6/2027	$55.75	$10.15	$9.50	$9.65	$0.00	$85.05
	6/5/2028	$57.43	$10.15	$9.50	$9.65	$0.00	$86.73
	12/4/2028	$59.10	$10.15	$9.50	$9.65	$0.00	$88.40
For apprentice rates see "Apprentice- LABORER"							
DEMO: CONCRETE CUTTER/SAWYER LABORERS LABORERS - ZONE 1	12/1/2025	$49.75	$10.15	$9.50	$9.65	$0.00	$79.05
	6/1/2026	$51.30	$10.15	$9.50	$9.65	$0.00	$80.60
	12/7/2026	$52.80	$10.15	$9.50	$9.65	$0.00	$82.10
	6/7/2027	$54.40	$10.15	$9.50	$9.65	$0.00	$83.70
	12/6/2027	$56.00	$10.15	$9.50	$9.65	$0.00	$85.30
	6/5/2028	$57.68	$10.15	$9.50	$9.65	$0.00	$86.98
	12/4/2028	$59.35	$10.15	$9.50	$9.65	$0.00	$88.65

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER"							
DEMO: JACKHAMMER OPERATOR	12/1/2025	$49.50	$10.15	$9.50	$9.65	$0.00	$78.80
LABORERS	6/1/2026	$51.05	$10.15	$9.50	$9.65	$0.00	$80.35
LABORERS - ZONE 1	12/7/2026	$52.55	$10.15	$9.50	$9.65	$0.00	$81.85
	6/7/2027	$54.15	$10.15	$9.50	$9.65	$0.00	$83.45
	12/6/2027	$55.75	$10.15	$9.50	$9.65	$0.00	$85.05
	6/5/2028	$57.43	$10.15	$9.50	$9.65	$0.00	$86.73
	12/4/2028	$59.10	$10.15	$9.50	$9.65	$0.00	$88.40
For apprentice rates see "Apprentice- LABORER"							
DEMO: WRECKING LABORER	12/1/2025	$48.75	$10.15	$9.50	$9.65	$0.00	$78.05
LABORERS	6/1/2026	$50.30	$10.15	$9.50	$9.65	$0.00	$79.60
LABORERS - ZONE 1	12/7/2026	$51.80	$10.15	$9.50	$9.65	$0.00	$81.10
	6/7/2027	$53.40	$10.15	$9.50	$9.65	$0.00	$82.70
	12/6/2027	$55.00	$10.15	$9.50	$9.65	$0.00	$84.30
	6/5/2028	$56.68	$10.15	$9.50	$9.65	$0.00	$85.98
	12/4/2028	$58.35	$10.15	$9.50	$9.65	$0.00	$87.65
For apprentice rates see "Apprentice- LABORER"							
DIRECTIONAL DRILL MACHINE OPERATOR	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
DIVER	8/1/2024	$78.11	$10.08	$11.62	$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	9/1/2025	$66.17	$13.00	$14.37	$8.72	$0.00	$102.26
ELECTRICIANS LOCAL 103	3/1/2026	$66.86	$13.00	$14.64	$9.00	$0.00	$103.50
ELECTRICIANS LOCAL 103	9/1/2026	$68.78	$13.00	$14.69	$9.00	$0.00	$105.47

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	3/1/2027	$69.97	$13.00	$14.73	$9.00	$0.00	$106.70
	9/1/2027	$71.88	$13.00	$14.79	$9.00	$0.00	$108.67
	3/1/2028	$73.08	$13.00	$14.82	$9.00	$0.00	$109.90

Apprentice: ELECTRICIAN

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	$26.47	$13.00	$0.79	$0.00	$0.00	$40.26
2	40.00	$26.47	$13.00	$0.79	$0.00	$0.00	$40.26
3	45.00	$29.78	$13.00	$13.27	$3.92	$0.00	$59.97
4	45.00	$29.78	$13.00	$13.27	$3.92	$0.00	$59.97
5	50.00	$33.09	$13.00	$13.37	$4.36	$0.00	$63.82
6	55.00	$36.39	$13.00	$13.47	$4.80	$0.00	$67.66
7	60.00	$39.70	$13.00	$13.57	$5.23	$0.00	$71.50
8	65.00	$43.01	$13.00	$13.67	$5.67	$0.00	$75.35
9	70.00	$46.32	$13.00	$13.77	$6.10	$0.00	$79.19
10	75.00	$49.63	$13.00	$13.87	$6.54	$0.00	$83.04

Apprentice: ELECTRICIAN

Effective Date: 3/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	$26.74	$13.00	$0.80	$0.00	$0.00	$40.54
2	40.00	$26.74	$13.00	$0.80	$0.00	$0.00	$40.54
3	45.00	$30.09	$13.00	$13.53	$4.05	$0.00	$60.67
4	45.00	$30.09	$13.00	$13.53	$4.05	$0.00	$60.67
5	50.00	$33.43	$13.00	$13.63	$4.50	$0.00	$64.56
6	55.00	$36.77	$13.00	$13.73	$4.95	$0.00	$68.45
7	60.00	$40.12	$13.00	$13.83	$5.40	$0.00	$72.35
8	65.00	$43.46	$13.00	$13.93	$5.85	$0.00	$76.24
9	70.00	$46.80	$13.00	$14.03	$6.30	$0.00	$80.13
10	75.00	$50.15	$13.00	$14.13	$6.75	$0.00	$84.03

Apprentice Notes

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Apprentice to Journeyworker Ratio: 2:3

ELEVATOR CONSTRUCTOR	1/1/2026	$77.26	$16.38	$11.06	$10.70	$0.00	$115.40
ELEVATOR CONSTRUCTORS LOCAL 4	1/1/2027	$80.55	$16.48	$11.16	$11.00	$0.00	$119.19
ELEVATOR CONSTRUCTORS LOCAL 4							

Apprentice: ELEVATOR CONSTRUCTOR

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: ELEVATOR CONSTRUCTOR

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$38.63	$0.00	$0.00	$0.00	$0.00	$38.63
2	55.00	$42.49	$16.38	$11.06	$10.70	$0.00	$80.63
3	65.00	$50.22	$16.38	$11.06	$10.70	$0.00	$88.36
4	70.00	$54.08	$16.38	$11.06	$10.70	$0.00	$92.22
5	80.00	$61.81	$16.38	$11.06	$10.70	$0.00	$99.95

Apprentice: ELEVATOR CONSTRUCTOR

Effective Date: 1/1/2027

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$40.28	$0.00	$0.00	$0.00	$0.00	$40.28
2	55.00	$44.30	$16.48	$11.16	$11.00	$0.00	$82.94
3	65.00	$52.36	$16.48	$11.16	$11.00	$0.00	$91.00
4	70.00	$56.39	$16.48	$11.16	$11.00	$0.00	$95.03
5	80.00	$64.44	$16.48	$11.16	$11.00	$0.00	$103.08

Apprentice to Journeyworker Ratio: 1:1

ELEVATOR CONSTRUCTOR HELPER	1/1/2026	$54.08	$16.38	$11.06	$10.07	$0.00	$91.59
ELEVATOR CONSTRUCTORS LOCAL 4	1/1/2027	$56.39	$16.48	$11.16	$11.00	$0.00	$95.03
ELEVATOR CONSTRUCTORS LOCAL 4							
For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"							
FENCE & GUARD RAIL ERECTOR (HEAVY & HIGHWAY)	12/1/2025	$48.95	$10.15	$9.50	$9.65	$0.00	$78.25
LABORERS	6/1/2026	$50.50	$10.15	$9.50	$9.65	$0.00	$79.80
LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2026	$52.00	$10.15	$9.50	$9.65	$0.00	$81.30
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
FIELD ENG.INST.PERSON-BLDG,SITE,HVY/HWY	11/1/2025	$53.56	$16.05	$13.25	$3.25	$0.00	$86.11
OPERATING ENGINEERS LOCAL 4	5/1/2026	$55.00	$16.05	$13.25	$3.25	$0.00	$87.55
OPERATING ENGINEERS LOCAL 4	11/1/2026	$56.29	$16.05	$13.25	$3.25	$0.00	$88.84
	5/1/2027	$57.72	$16.05	$13.25	$3.25	$0.00	$90.27
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY	11/1/2025	$55.17	$16.05	$13.25	$3.25	$0.00	$87.72
OPERATING ENGINEERS LOCAL 4	5/1/2026	$56.62	$16.05	$13.25	$3.25	$0.00	$89.17
OPERATING ENGINEERS LOCAL 4	11/1/2026	$57.92	$16.05	$13.25	$3.25	$0.00	$90.47
	5/1/2027	$59.37	$16.05	$13.25	$3.25	$0.00	$91.92
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIELD ENG.ROD PERSON-BLDG,SITE,HVY/HWY	11/1/2025	$26.03	$16.05	$13.25	$3.25	$0.00	$58.58
OPERATING ENGINEERS LOCAL 4	5/1/2026	$26.88	$16.05	$13.25	$3.25	$0.00	$59.43
OPERATING ENGINEERS LOCAL 4	11/1/2026	$27.64	$16.05	$13.25	$3.25	$0.00	$60.19
	5/1/2027	$28.49	$16.05	$13.25	$3.25	$0.00	$61.04

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIRE ALARM INSTALLER	9/1/2025	$66.17	$13.00	$14.37	$9.00	$0.00	$102.54
ELECTRICIANS LOCAL 103	3/1/2026	$66.86	$13.00	$14.64	$9.00	$0.00	$103.50
ELECTRICIANS LOCAL 103	9/1/2026	$68.78	$13.00	$14.69	$9.00	$0.00	$105.47
	3/1/2027	$69.97	$13.00	$14.73	$9.00	$0.00	$106.70
	9/1/2027	$71.88	$13.00	$14.79	$9.00	$0.00	$108.67
	3/1/2028	$73.08	$13.00	$14.82	$9.00	$0.00	$109.90
For apprentice rates see "Apprentice- ELECTRICIAN"							
FIRE ALARM REPAIR / MAINTENANCE	9/1/2025	$52.94	$13.00	$13.97	$6.98	$0.00	$86.89
/ COMMISSIONING	3/1/2026	$53.49	$13.00	$14.23	$7.20	$0.00	$87.92
ELECTRICIANS LOCAL 103	9/1/2026	$55.02	$13.00	$14.28	$7.20	$0.00	$89.50
ELECTRICIANS LOCAL 103	3/1/2027	$55.98	$13.00	$14.31	$7.20	$0.00	$90.49
	9/1/2027	$57.50	$13.00	$14.36	$7.20	$0.00	$92.06
	3/1/2028	$58.46	$13.00	$14.38	$7.20	$0.00	$93.04
For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"							
FIREMAN (ASST. ENGINEER)	12/1/2025	$47.69	$16.05	$13.25	$3.25	$0.00	$80.24
OPERATING ENGINEERS LOCAL 4	6/1/2026	$48.75	$16.05	$13.25	$3.25	$0.00	$81.30
OPERATING ENGINEERS LOCAL 4	12/1/2026	$49.93	$16.05	$13.25	$3.25	$0.00	$82.48
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FLAGGER & SIGNALER (HEAVY & HIGHWAY)	12/1/2025	$28.09	$10.15	$9.50	$9.65	$0.00	$57.39
LABORERS	6/1/2026	$29.21	$10.15	$9.50	$9.65	$0.00	$58.51
LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2026	$29.21	$10.15	$9.50	$9.65	$0.00	$58.51
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
FLOORCOVERER	9/1/2025	$57.74	$10.33	$11.47	$8.80	$0.00	$88.34
FLOORCOVERERS LOCAL 2168	3/1/2026	$59.24	$10.33	$11.47	$8.80	$0.00	$89.84
FLOORCOVERERS LOCAL 2168 ZONE I	9/1/2026	$60.74	$10.33	$11.47	$8.80	$0.00	$91.34
	3/1/2027	$62.24	$10.33	$11.47	$8.80	$0.00	$92.84

Apprentice: FLOORCOVERER

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	$25.98	$10.33	$0.00	$1.76	$0.00	$38.07
2	45.00	$25.98	$10.33	$0.00	$1.76	$0.00	$38.07
3	55.00	$31.76	$10.33	$0.00	$3.52	$0.00	$45.61
4	55.00	$31.76	$10.33	$0.00	$3.52	$0.00	$45.61
5	70.00	$40.42	$10.33	$11.47	$5.28	$0.00	$67.50
6	70.00	$40.42	$10.33	$11.47	$5.28	$0.00	$67.50
7	80.00	$46.19	$10.33	$11.47	$7.04	$0.00	$75.03
8	80.00	$46.19	$10.33	$11.47	$7.04	$0.00	$75.03

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
FORK LIFT/CHERRY PICKER	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58

Apprentice: FLOORCOVERER

Effective Date: 3/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	$26.66	$10.33	$0.00	$1.76	$0.00	$38.75
2	45.00	$26.66	$10.33	$0.00	$1.76	$0.00	$38.75
3	55.00	$32.58	$10.33	$0.00	$3.52	$0.00	$46.43
4	55.00	$32.58	$10.33	$0.00	$3.52	$0.00	$46.43
5	70.00	$41.47	$10.33	$11.47	$5.28	$0.00	$68.55
6	70.00	$41.47	$10.33	$11.47	$5.28	$0.00	$68.55
7	80.00	$47.39	$10.33	$11.47	$7.04	$0.00	$76.23
8	80.00	$47.39	$10.33	$11.47	$7.04	$0.00	$76.23

Apprentice Notes

Steps are 750 hrs.

Apprentice to Journeyworker Ratio: 1:1

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GENERATOR/LIGHTING PLANT/HEATERS	12/1/2025	$37.97	$16.05	$13.25	$3.25	$0.00	$70.52
OPERATING ENGINEERS LOCAL 4	6/1/2026	$38.83	$16.05	$13.25	$3.25	$0.00	$71.38
OPERATING ENGINEERS LOCAL 4	12/1/2026	$39.78	$16.05	$13.25	$3.25	$0.00	$72.33

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)	1/1/2026	$49.06	$10.35	$12.00	$12.60	$0.00	$84.01
GLAZIERS LOCAL 35							
GLAZIERS LOCAL 35 (ZONE 2)							

Apprentice: GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$24.53	$10.35	$0.00	$0.00	$0.00	$34.88
2	55.00	$26.98	$10.35	$0.00	$6.88	$0.00	$44.21
3	60.00	$29.44	$10.35	$0.00	$7.50	$0.00	$47.29
4	65.00	$31.89	$10.35	$0.00	$8.13	$0.00	$50.37
5	70.00	$34.34	$10.35	$12.00	$8.75	$0.00	$65.44
6	75.00	$36.80	$10.35	$12.00	$9.38	$0.00	$68.53
7	80.00	$39.25	$10.35	$12.00	$10.00	$0.00	$71.60
8	90.00	$44.15	$10.35	$12.00	$11.25	$0.00	$77.75

Apprentice to Journeyworker Ratio: 1:1

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
HOISTING ENGINEER/CRANES/GRADALLS	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58

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	$16.05	$13.25	$3.25	$0.00	$68.42
3	65.00	$38.86	$16.05	$13.25	$3.25	$0.00	$71.41
4	70.00	$41.85	$16.05	$13.25	$3.25	$0.00	$74.40
5	75.00	$44.84	$16.05	$13.25	$3.25	$0.00	$77.39
6	80.00	$47.82	$16.05	$13.25	$3.25	$0.00	$80.37
7	85.00	$50.81	$16.05	$13.25	$3.25	$0.00	$83.36
8	90.00	$53.80	$16.05	$13.25	$3.25	$0.00	$86.35

Apprentice: HOISTING ENGINEER/CRANES/GRADALLS

Effective Date: 6/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	$33.32	$0.00	$0.00	$0.00	$0.00	$33.32
2	60.00	$36.35	$16.05	$13.25	$3.25	$0.00	$68.90
3	65.00	$39.38	$16.05	$13.25	$3.25	$0.00	$71.93
4	70.00	$42.41	$16.50	$13.25	$3.25	$0.00	$75.41
5	75.00	$45.44	$16.50	$13.25	$3.25	$0.00	$78.44
6	80.00	$48.46	$16.50	$13.25	$3.25	$0.00	$81.46
7	85.00	$51.49	$16.50	$13.25	$3.25	$0.00	$84.49
8	90.00	$54.52	$16.50	$13.25	$3.25	$0.00	$87.52

Apprentice to Journeyworker Ratio: 1:6

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)	9/1/2025	$66.17	$13.00	$14.37	$8.72	$0.00	$102.26
ELECTRICIANS LOCAL 103	3/1/2026	$66.86	$13.00	$14.64	$9.00	$0.00	$103.50
ELECTRICIANS LOCAL 103	9/1/2026	$68.78	$13.00	$14.69	$9.00	$0.00	$105.47
	3/1/2027	$69.97	$13.00	$14.73	$9.00	$0.00	$106.70
	9/1/2027	$71.88	$13.00	$14.79	$9.00	$0.00	$108.67
	3/1/2028	$73.08	$13.00	$14.82	$9.00	$0.00	$109.90

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"

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
HVAC (TESTING AND BALANCING -WATER) PIPEFITTERS LOCAL 537 PIPEFITTERS LOCAL 537	9/1/2025	$69.08	$13.45	$13.75	$9.30	$0.00	$105.58
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							
HVAC MECHANIC PIPEFITTERS LOCAL 537 PIPEFITTERS LOCAL 537	9/1/2025	$69.08	$13.45	$13.75	$9.30	$0.00	$105.58
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							
HYDRAULIC DRILLS	12/1/2025	$49.35	$10.15	$9.50	$9.65	$0.00	$78.65
LABORERS LABORERS - ZONE 1	6/1/2026	$50.15	$10.15	$9.50	$9.65	$0.00	$79.45
	12/1/2026	$52.40	$10.15	$9.50	$9.65	$0.00	$81.70
	6/1/2027	$54.00	$10.15	$9.50	$9.65	$0.00	$83.30
	12/1/2027	$55.60	$10.15	$9.50	$9.65	$0.00	$84.90
	6/1/2028	$57.28	$10.15	$9.50	$9.65	$0.00	$86.58
	12/1/2028	$58.95	$10.15	$9.50	$9.65	$0.00	$88.25
For apprentice rates see "Apprentice- LABORER"							
HYDRAULIC DRILLS (HEAVY & HIGHWAY)	12/1/2025	$49.45	$10.15	$9.50	$9.65	$0.00	$78.75
LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	6/1/2026	$51.00	$10.15	$9.50	$9.65	$0.00	$80.30
	12/1/2026	$52.50	$10.15	$9.50	$9.65	$0.00	$81.80
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
INSULATOR (PIPES & TANKS)	9/1/2025	$60.34	$14.75	$9.52	$10.09	$0.00	$94.70
HEAT & FROST INSULATORS LOCAL 6 HEAT & FROST INSULATORS LOCAL 6 (BOSTON)	9/1/2026	$63.76	$14.75	$9.52	$10.09	$0.00	$98.12

Apprentice: INSULATOR (PIPES & TANKS)

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$30.17	$14.75	$9.27	$5.05	$0.00	$59.24
2	60.00	$36.20	$14.75	$9.32	$6.05	$0.00	$66.32
3	70.00	$42.24	$14.75	$9.37	$7.06	$0.00	$73.42
4	80.00	$48.27	$14.75	$9.42	$8.07	$0.00	$80.51

Apprentice: INSULATOR (PIPES & TANKS)

Effective Date: 9/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$31.88	$14.75	$9.27	$5.05	$0.00	$60.95
2	60.00	$38.26	$14.75	$9.32	$6.05	$0.00	$68.38
3	70.00	$44.63	$14.75	$9.37	$7.06	$0.00	$75.81
4	80.00	$51.01	$14.75	$9.42	$8.07	$0.00	$83.25

Apprentice to Journeyworker Ratio: 1:4

IRONWORKER/WELDER	9/16/2025	$57.87	$9.05	$12.75	$14.50	$0.00	$94.17

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
IRONWORKERS LOCAL 7 IRONWORKERS LOCAL 7 (BOSTON AREA)							

Apprentice: IRONWORKER/WELDER

Effective Date: 9/16/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$34.72	$9.05	$12.75	$4.50	$0.00	$61.02
2	75.00	$43.40	$9.05	$12.75	$4.50	$0.00	$69.70
3	85.00	$49.19	$9.05	$12.75	$4.50	$0.00	$75.49
4	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
5	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
6	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Apprentice to Journeyworker Ratio: 1:4

JACKHAMMER & PAVING BREAKER OPERATOR LABORERS LABORERS - ZONE 1	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75

For apprentice rates see "Apprentice- LABORER"

LABORER LABORERS LABORERS - ZONE 1	12/1/2025	$48.60	$10.15	$9.50	$9.65	$0.00	$77.90
	6/1/2026	$50.15	$10.15	$9.50	$9.65	$0.00	$79.45
	12/1/2026	$51.65	$10.15	$9.50	$9.65	$0.00	$80.95
	6/1/2027	$53.25	$10.15	$9.50	$9.65	$0.00	$82.55
	12/1/2027	$54.85	$10.15	$9.50	$9.65	$0.00	$84.15
	6/1/2028	$56.53	$10.15	$9.50	$9.65	$0.00	$85.83
	12/1/2028	$58.20	$10.15	$9.50	$9.65	$0.00	$87.50

Apprentice: LABORER

Effective Date: 12/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$29.16	$10.15	$9.50	$9.65	$0.00	$58.46
2	70.00	$34.02	$10.15	$9.50	$9.65	$0.00	$63.32
3	80.00	$38.88	$10.15	$9.50	$9.65	$0.00	$68.18
4	90.00	$43.74	$10.15	$9.50	$9.65	$0.00	$73.04

Apprentice: LABORER

Effective Date: 6/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$30.09	$10.15	$9.50	$9.65	$0.00	$59.39

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: LABORER

Effective Date: 6/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
2	70.00	$35.11	$10.15	$9.50	$9.65	$0.00	$64.41
3	80.00	$40.12	$10.15	$9.50	$9.65	$0.00	$69.42
4	90.00	$45.14	$10.15	$9.50	$9.65	$0.00	$74.44

Apprentice to Journeyworker Ratio: 1:5

LABORER (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2025	$48.70	$10.15	$9.50	$9.65	$0.00	$78.00
	6/1/2026	$50.25	$10.15	$9.50	$9.65	$0.00	$79.55
	12/1/2026	$51.75	$10.15	$9.50	$9.65	$0.00	$81.05

Apprentice: LABORER (HEAVY & HIGHWAY)

Effective Date: 12/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$29.22	$10.15	$9.50	$9.65	$0.00	$58.52
2	70.00	$34.09	$10.15	$9.50	$9.65	$0.00	$63.39
3	80.00	$38.96	$10.15	$9.50	$9.65	$0.00	$68.26
4	90.00	$43.83	$10.15	$9.50	$9.65	$0.00	$73.13

Apprentice: LABORER (HEAVY & HIGHWAY)

Effective Date: 6/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$30.15	$10.15	$9.50	$9.65	$0.00	$59.45
2	70.00	$35.18	$10.15	$9.50	$9.65	$0.00	$64.48
3	80.00	$40.20	$10.15	$9.50	$9.65	$0.00	$69.50
4	90.00	$45.23	$10.15	$9.50	$9.65	$0.00	$74.53

Apprentice to Journeyworker Ratio: 1:5

LABORER: CARPENTER TENDER LABORERS LABORERS - ZONE 1	12/1/2025	$48.60	$10.15	$9.50	$9.65	$0.00	$77.90
	6/1/2026	$50.15	$10.15	$9.50	$9.65	$0.00	$79.45
	12/1/2026	$51.65	$10.15	$9.50	$9.65	$0.00	$80.95
	6/1/2027	$53.25	$10.15	$9.50	$9.65	$0.00	$82.55
	12/1/2027	$54.85	$10.15	$9.50	$9.65	$0.00	$84.15
	6/1/2028	$56.53	$10.15	$9.50	$9.65	$0.00	$85.83
	12/1/2028	$58.20	$10.15	$9.50	$9.65	$0.00	$87.50

For apprentice rates see "Apprentice- LABORER"

LABORER: CEMENT FINISHER TENDER LABORERS LABORERS - ZONE 1	12/1/2025	$48.60	$10.15	$9.50	$9.65	$0.00	$77.90
	6/1/2026	$50.15	$10.15	$9.50	$9.65	$0.00	$79.45
	12/1/2026	$51.65	$10.15	$9.50	$9.65	$0.00	$80.95
	6/1/2027	$53.25	$10.15	$9.50	$9.65	$0.00	$82.55

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	12/1/2027	$54.85	$10.15	$9.50	$9.65	$0.00	$84.15
	6/1/2028	$56.53	$10.15	$9.50	$9.65	$0.00	$85.83
	12/1/2028	$58.20	$10.15	$9.50	$9.65	$0.00	$87.50
For apprentice rates see "Apprentice- LABORER"							
LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER LABORERS LABORERS - ZONE 1	12/1/2025	$48.75	$10.15	$9.50	$9.65	$0.00	$78.05
	6/1/2026	$50.30	$10.15	$9.50	$9.65	$0.00	$79.60
	12/7/2026	$51.80	$10.15	$9.50	$9.65	$0.00	$81.10
	6/7/2027	$53.40	$10.15	$9.50	$9.65	$0.00	$82.70
	12/6/2027	$55.00	$10.15	$9.50	$9.65	$0.00	$84.30
	6/5/2028	$56.68	$10.15	$9.50	$9.65	$0.00	$85.98
	12/4/2028	$58.35	$10.15	$9.50	$9.65	$0.00	$87.65
For apprentice rates see "Apprentice- LABORER"							
LABORER: MASON TENDER LABORERS LABORERS - ZONE 1	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
LABORER: MASON TENDER (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2025	$48.95	$10.15	$9.50	$9.65	$0.00	$78.25
	6/1/2026	$50.50	$10.15	$9.50	$9.65	$0.00	$79.80
	12/1/2026	$52.00	$10.15	$9.50	$9.65	$0.00	$81.30
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
LABORER: MULTI-TRADE TENDER LABORERS LABORERS - ZONE 1	12/1/2025	$48.60	$10.15	$9.50	$9.65	$0.00	$77.90
	6/1/2026	$50.15	$10.15	$9.50	$9.65	$0.00	$79.45
	12/1/2026	$51.65	$10.15	$9.50	$9.65	$0.00	$80.95
	6/1/2027	$53.25	$10.15	$9.50	$9.65	$0.00	$82.55
	12/1/2027	$54.85	$10.15	$9.50	$9.65	$0.00	$84.15
	6/1/2028	$56.53	$10.15	$9.50	$9.65	$0.00	$85.83
	12/1/2028	$58.20	$10.15	$9.50	$9.65	$0.00	$87.50
For apprentice rates see "Apprentice- LABORER"							
LABORER: TREE REMOVER LABORERS LABORERS - ZONE 1	12/1/2025	$48.60	$10.15	$9.50	$9.65	$0.00	$77.90
	6/1/2026	$50.15	$10.15	$9.50	$9.65	$0.00	$79.45
	12/1/2026	$51.65	$10.15	$9.50	$9.65	$0.00	$80.95
	6/1/2027	$53.25	$10.15	$9.50	$9.65	$0.00	$82.55
	12/1/2027	$54.85	$10.15	$9.50	$9.65	$0.00	$84.15
	6/1/2028	$56.53	$10.15	$9.50	$9.65	$0.00	$85.83
	12/1/2028	$58.20	$10.15	$9.50	$9.65	$0.00	$87.50
This classification applies to the removal of standing trees, and the trimming and removal of branches and limbs when related to public works construction or site clearance incidental to construction . For apprentice rates see "Apprentice- LABORER"							
LASER BEAM OPERATOR LABORERS LABORERS - ZONE 1	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
LASER BEAM OPERATOR (HEAVY & HIGHWAY)	12/1/2025	$48.95	$10.15	$9.50	$9.65	$0.00	$78.25
LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	6/1/2026	$50.50	$10.15	$9.50	$9.65	$0.00	$79.80
	12/1/2026	$52.00	$10.15	$9.50	$9.65	$0.00	$81.30
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 BRICKLAYERS LOCAL 3 - MARBLE & TILE	2/1/2026	$53.16	$11.49	$15.57	$6.05	$0.00	$86.27
	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

Apprentice to Journeyworker Ratio: 1:5

MARBLE MASONS,TILELAYERS & TERRAZZO MECH	8/1/2025	$67.97	$11.49	$15.57	$7.99	$0.00	$103.02
BRICKLAYERS LOCAL 3 BRICKLAYERS LOCAL 3 - MARBLE & TILE	2/1/2026	$69.32	$11.49	$15.57	$7.99	$0.00	$104.37
	8/1/2026	$71.52	$11.49	$15.57	$7.99	$0.00	$106.57
	2/1/2027	$72.92	$11.49	$15.57	$7.99	$0.00	$107.97

Apprentice: MARBLE MASONS,TILELAYERS & TERRAZZO MECH

Effective Date: 8/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

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

Apprentice to Journeyworker Ratio: 1:5

MECH. SWEEPER OPERATOR (ON CONST. SITES) OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
MECHANICS MAINTENANCE OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
MILLWRIGHT (Zone 1) MILLWRIGHTS LOCAL 1121 MILLWRIGHTS LOCAL 1121 - Zone 1	1/5/2026	$52.97	$10.08	$11.47	$10.25	$0.00	$84.77

Apprentice: MILLWRIGHT (Zone 1)

Effective Date: 1/5/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	$29.13	$10.08	$0.00	$5.64	$0.00	$44.85
2	65.00	$34.43	$10.08	$0.00	$6.66	$0.00	$51.17
3	75.00	$39.73	$10.08	$11.47	$7.69	$0.00	$68.97
4	85.00	$45.02	$10.08	$11.47	$8.71	$0.00	$75.28

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice Notes							
Step 1&2 Appr. indentured after 1/6/2020 receive no pension,							
Apprentice to Journeyworker Ratio: 1:4							
MORTAR MIXER	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
LABORERS	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
LABORERS - ZONE 1	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
OILER (OTHER THAN TRUCK CRANES,GRADALLS)	12/1/2025	$25.68	$16.05	$13.25	$3.25	$0.00	$58.23
OPERATING ENGINEERS LOCAL 4	6/1/2026	$26.27	$16.05	$13.25	$3.25	$0.00	$58.82
OPERATING ENGINEERS LOCAL 4	12/1/2026	$26.94	$16.05	$13.25	$3.25	$0.00	$59.49
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
OILER (TRUCK CRANES, GRADALLS)	12/1/2025	$31.65	$16.05	$13.25	$3.25	$0.00	$64.20
OPERATING ENGINEERS LOCAL 4	6/1/2026	$32.37	$16.05	$13.25	$3.25	$0.00	$64.92
OPERATING ENGINEERS LOCAL 4	12/1/2026	$33.17	$16.05	$13.25	$3.25	$0.00	$65.72
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
OTHER POWER DRIVEN EQUIPMENT - CLASS II	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PAINTER (BRIDGES/TANKS)	1/1/2026	$59.56	$10.35	$12.00	$12.50	$0.00	$94.41
PAINTERS LOCAL 35							
PAINTERS LOCAL 35 - ZONE 2							

Apprentice: PAINTER (BRIDGES/TANKS)

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$29.78	$10.35	$0.00	$0.00	$0.00	$40.13
2	55.00	$32.76	$10.35	$0.00	$6.93	$0.00	$50.04
3	60.00	$35.74	$10.35	$0.00	$7.56	$0.00	$53.65
4	65.00	$38.71	$10.35	$0.00	$8.19	$0.00	$57.25
5	70.00	$41.69	$10.35	$12.00	$8.82	$0.00	$72.86
6	75.00	$44.67	$10.35	$12.00	$9.45	$0.00	$76.47
7	80.00	$47.65	$10.35	$12.00	$10.08	$0.00	$80.08
8	90.00	$53.60	$10.35	$12.00	$11.34	$0.00	$87.29

Apprentice to Journeyworker Ratio: 1:1							
PAINTER (SPRAY OR SANDBLAST, NEW) *	1/1/2026	$50.46	$10.35	$12.00	$12.60	$0.00	$85.41

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
* 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: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$25.23	$10.35	$0.00	$0.00	$0.00	$35.58
2	55.00	$27.75	$10.35	$0.00	$6.93	$0.00	$45.03
3	60.00	$30.28	$10.35	$0.00	$7.56	$0.00	$48.19
4	65.00	$32.80	$10.35	$0.00	$8.19	$0.00	$51.34
5	70.00	$35.32	$10.35	$12.00	$8.82	$0.00	$66.49
6	75.00	$37.85	$10.35	$12.00	$9.45	$0.00	$69.65
7	80.00	$40.37	$10.35	$12.00	$10.08	$0.00	$72.80
8	90.00	$45.41	$10.35	$12.00	$11.34	$0.00	$79.10

Apprentice to Journeyworker Ratio: 1:1

PAINTER (SPRAY OR SANDBLAST, REPAINT) PAINTERS LOCAL 35 PAINTERS LOCAL 35 - ZONE 2	1/1/2026	$48.52	$10.35	$12.00	$12.60	$0.00	$83.47

Apprentice: PAINTER (SPRAY OR SANDBLAST, REPAINT)

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$24.26	$10.35	$0.00	$0.00	$0.00	$34.61
2	55.00	$26.69	$10.35	$0.00	$6.93	$0.00	$43.97
3	60.00	$29.11	$10.35	$0.00	$7.56	$0.00	$47.02
4	65.00	$31.54	$10.35	$0.00	$8.19	$0.00	$50.08
5	70.00	$33.96	$10.35	$12.00	$8.82	$0.00	$65.13
6	75.00	$36.39	$10.35	$12.00	$9.45	$0.00	$68.19
7	80.00	$38.82	$10.35	$12.00	$10.08	$0.00	$71.25
8	90.00	$43.67	$10.35	$12.00	$11.34	$0.00	$77.36

Apprentice to Journeyworker Ratio: 1:1

PAINTER / TAPER (BRUSH, NEW) * * 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	1/1/2026	$49.06	$10.35	$12.00	$12.60	$0.00	$84.01

Apprentice: PAINTER / TAPER (BRUSH, NEW) *

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
PAINTER / TAPER (BRUSH, REPAINT) PAINTERS LOCAL 35 PAINTERS LOCAL 35 - ZONE 2	1/1/2026	$47.12	$10.35	$12.00	$12.60	$0.00	$82.07
PAINTER TRAFFIC MARKINGS (HEAVY/HIGHWAY) LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2025	$48.70	$10.15	$9.50	$9.65	$0.00	$78.00
	6/1/2026	$50.25	$10.15	$9.50	$9.65	$0.00	$79.55
	12/1/2026	$51.75	$10.15	$9.50	$9.65	$0.00	$81.05
PANEL & PICKUP TRUCKS DRIVER TEAMSTERS JOINT COUNCIL NO. 10 TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/1/2025	$41.88	$15.41	$21.78	$0.00	$0.00	$79.07
	6/1/2026	$42.88	$15.41	$21.78	$0.00	$0.00	$80.07
	8/1/2026	$42.88	$15.91	$21.78	$0.00	$0.00	$80.57
	12/1/2026	$42.88	$15.91	$23.52	$0.00	$0.00	$82.31
PIER AND DOCK CONSTRUCTOR (UNDERPINNING AND DECK) PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 1)	8/1/2024	$55.79	$10.08	$11.62	$12.67	$0.00	$90.16

Apprentice: PAINTER / TAPER (BRUSH, NEW) *

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$24.53	$10.35	$0.00	$0.00	$0.00	$34.88
2	55.00	$26.98	$10.35	$0.00	$6.93	$0.00	$44.26
3	60.00	$29.44	$10.35	$0.00	$7.56	$0.00	$47.35
4	65.00	$31.89	$10.35	$0.00	$8.19	$0.00	$50.43
5	70.00	$34.34	$10.35	$12.00	$8.82	$0.00	$65.51
6	75.00	$36.80	$10.35	$12.00	$9.45	$0.00	$68.60
7	80.00	$39.25	$10.35	$12.00	$10.08	$0.00	$71.68
8	90.00	$44.15	$10.35	$12.00	$11.34	$0.00	$77.84

Apprentice to Journeyworker Ratio: 1:1

Apprentice: PAINTER / TAPER (BRUSH, REPAINT)

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$23.56	$10.35	$0.00	$0.00	$0.00	$33.91
2	55.00	$25.92	$10.35	$0.00	$6.93	$0.00	$43.20
3	60.00	$28.27	$10.35	$0.00	$7.56	$0.00	$46.18
4	65.00	$30.63	$10.35	$0.00	$8.19	$0.00	$49.17
5	70.00	$32.98	$10.35	$12.00	$8.82	$0.00	$64.15
6	75.00	$35.34	$10.35	$12.00	$9.45	$0.00	$67.14
7	80.00	$37.70	$10.35	$12.00	$10.08	$0.00	$70.13
8	90.00	$42.41	$10.35	$12.00	$11.34	$0.00	$76.10

Apprentice to Journeyworker Ratio: 1:1

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

For apprentice rates see "Apprentice- PILE DRIVER"

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
PILE DRIVER PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 1)	8/1/2024	$55.79	$10.08	$11.62	$12.67	$0.00	$90.16

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

Apprentice to Journeyworker Ratio: 1:5

PIPEFITTER & STEAMFITTER PIPEFITTERS LOCAL 537 PIPEFITTERS LOCAL 537	9/1/2025	$69.08	$13.45	$13.75	$9.30	$0.00	$105.58

Apprentice: PIPEFITTER & STEAMFITTER

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	$27.63	$13.45	$13.75	$9.30	$0.00	$64.13
2	45.00	$31.09	$13.45	$13.75	$9.30	$0.00	$67.59
3	60.00	$41.45	$13.45	$13.75	$9.30	$0.00	$77.95
4	70.00	$48.36	$13.45	$13.75	$9.30	$0.00	$84.86
5	80.00	$55.26	$13.45	$13.75	$9.30	$0.00	$91.76

Apprentice to Journeyworker Ratio: 1:3

PIPELAYER LABORERS LABORERS - ZONE 1	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75

For apprentice rates see "Apprentice- LABORER"

PIPELAYER (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2025	$48.95	$10.15	$9.50	$9.65	$0.00	$78.25
	6/1/2026	$50.50	$10.15	$9.50	$9.65	$0.00	$79.80
	12/1/2026	$52.00	$10.15	$9.50	$9.65	$0.00	$81.30

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

PLUMBERS & GASFITTERS PLUMBERS & GASFITTERS LOCAL 12 PLUMBERS & GASFITTERS LOCAL 12	9/1/2025	$71.74	$14.32	$12.61	$8.00	$0.00	$106.67
	3/2/2026	$73.89	$14.32	$12.61	$8.00	$0.00	$108.82
	8/31/2026	$76.04	$14.32	$12.61	$8.00	$0.00	$110.97
	3/1/2027	$78.19	$14.32	$12.61	$8.00	$0.00	$113.12

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	8/30/2027	$80.34	$14.32	$12.61	$8.00	$0.00	$115.27
	2/28/2028	$82.54	$14.32	$12.61	$8.00	$0.00	$117.47
	9/4/2028	$84.74	$14.32	$12.61	$8.00	$0.00	$119.67
	3/5/2029	$86.94	$14.32	$12.61	$8.00	$0.00	$121.87
	9/3/2029	$89.14	$14.32	$12.61	$8.00	$0.00	$124.07
	3/4/2030	$91.09	$14.32	$12.61	$8.00	$0.00	$126.02

Apprentice: PLUMBERS & GASFITTERS

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	35.00	$25.11	$14.32	$4.61	$2.80	$0.00	$46.84
2	40.00	$28.70	$14.32	$5.22	$3.20	$0.00	$51.44
3	55.00	$39.46	$14.32	$7.07	$4.40	$0.00	$65.25
4	65.00	$46.63	$14.32	$8.30	$5.20	$0.00	$74.45
5	75.00	$53.81	$14.32	$9.53	$6.00	$0.00	$83.66

Apprentice: PLUMBERS & GASFITTERS

Effective Date: 3/2/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	35.00	$25.86	$14.32	$4.61	$2.80	$0.00	$47.59
2	40.00	$29.56	$14.32	$5.22	$3.20	$0.00	$52.30
3	55.00	$40.64	$14.32	$7.07	$4.40	$0.00	$66.43
4	65.00	$48.03	$14.32	$8.30	$5.20	$0.00	$75.85
5	75.00	$55.42	$14.32	$9.53	$6.00	$0.00	$85.27

Apprentice to Journeyworker Ratio: 1:2

PNEUMATIC CONTROLS (TEMP.) PIPEFITTERS LOCAL 537 PIPEFITTERS LOCAL 537	9/1/2025	$69.08	$13.45	$13.75	$9.30	$0.00	$105.58
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							
PNEUMATIC DRILL/TOOL OPERATOR LABORERS LABORERS - ZONE 1	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
PNEUMATIC DRILL/TOOL OPERATOR (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2025	$48.95	$10.15	$9.50	$9.65	$0.00	$78.25
	6/1/2026	$50.50	$10.15	$9.50	$9.65	$0.00	$79.80
	12/1/2026	$52.00	$10.15	$9.50	$9.65	$0.00	$81.30
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
POWDERMAN & BLASTER	12/1/2025	$49.60	$10.15	$9.50	$9.65	$0.00	$78.90

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS LABORERS - ZONE 1	6/1/2026	$51.15	$10.15	$9.50	$9.65	$0.00	$80.45
	12/1/2026	$52.65	$10.15	$9.50	$9.65	$0.00	$81.95
	6/1/2027	$54.25	$10.15	$9.50	$9.65	$0.00	$83.55
	12/1/2027	$55.85	$10.15	$9.50	$9.65	$0.00	$85.15
	6/1/2028	$57.53	$10.15	$9.50	$9.65	$0.00	$86.83
	12/1/2028	$59.20	$10.15	$9.50	$9.65	$0.00	$88.50
For apprentice rates see "Apprentice- LABORER"							
POWDERMAN & BLASTER (HEAVY & HIGHWAY)	12/1/2025	$49.70	$10.15	$9.50	$9.65	$0.00	$79.00
LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	6/1/2026	$51.25	$10.15	$9.50	$9.65	$0.00	$80.55
	12/1/2026	$52.75	$10.15	$9.50	$9.65	$0.00	$82.05
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
POWER SHOVEL/DERRICK/TRENCHING MACHINE OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PUMP OPERATOR (CONCRETE) OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PUMP OPERATOR (DEWATERING, OTHER) OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$37.97	$16.05	$13.25	$3.25	$0.00	$70.52
	6/1/2026	$38.83	$16.05	$13.25	$3.25	$0.00	$71.38
	12/1/2026	$39.78	$16.05	$13.25	$3.25	$0.00	$72.33
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
READY-MIX CONCRETE DRIVER TEAMSTERS 42 - J.G. MacLeallan (Wakefield) TEAMSTERS 42 - J.G. MacLeallan (Wakefield)	5/1/2025	$30.00	$12.00	$7.00	$0.00	$0.00	$49.00
	5/1/2026	$30.50	$12.00	$7.00	$0.00	$0.00	$49.50
RECLAIMERS OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
RIDE-ON MOTORIZED BUGGY OPERATOR LABORERS LABORERS - ZONE 1	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
ROLLER/SPREADER/MULCHING MACHINE OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
ROOFER (Inc.Roofer Waterproofng &Roofer Damproofg) ROOFERS LOCAL 33 ROOFERS LOCAL 33	8/1/2025	$53.53	$13.28	$12.67	$9.03	$0.00	$88.51
	2/1/2026	$54.78	$13.28	$12.67	$9.03	$0.00	$89.76

Apprentice: ROOFER (Inc.Roofer Waterproofng &Roofer 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.Roofer Waterproofng &Roofer 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

Apprentice Notes

** 1:5, 2:6-10, the 1:10; Reroofing: 1:4, then 1:1

Apprentice to Journeyworker Ratio: 1:5

ROOFER SLATE / TILE / PRECAST CONCRETE ROOFERS LOCAL 33 ROOFERS LOCAL 33	8/1/2025	$53.78	$13.28	$12.67	$9.03	$0.00	$88.76
	2/1/2026	$55.03	$13.28	$12.67	$9.03	$0.00	$90.01

For apprentice rates see "Apprentice- ROOFER"

SHEETMETAL WORKER SHEETMETAL WORKERS LOCAL 17 SHEETMETAL WORKERS LOCAL 17 - A	8/1/2025	$60.98	$14.91	$18.74	$9.53	$2.98	$107.14
	2/1/2026	$62.93	$14.91	$18.74	$9.53	$2.98	$109.09

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

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: SHEETMETAL WORKER

Effective Date: 8/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
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

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

Apprentice to Journeyworker Ratio: 1:4

SPECIALIZED EARTH MOVING EQUIP < 35 TONS TEAMSTERS JOINT COUNCIL NO. 10 TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/1/2025	$42.34	$15.41	$21.78	$0.00	$0.00	$79.53
	6/1/2026	$43.34	$15.41	$21.78	$0.00	$0.00	$80.53
	8/1/2026	$43.34	$15.91	$21.78	$0.00	$0.00	$81.03
	12/1/2026	$43.34	$15.91	$23.52	$0.00	$0.00	$82.77
SPECIALIZED EARTH MOVING EQUIP > 35 TONS TEAMSTERS JOINT COUNCIL NO. 10 TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/1/2025	$42.63	$15.41	$21.78	$0.00	$0.00	$79.82
	6/1/2026	$43.63	$15.41	$21.78	$0.00	$0.00	$80.82
	8/1/2026	$43.63	$15.91	$21.78	$0.00	$0.00	$81.32
	12/1/2026	$43.63	$15.91	$23.52	$0.00	$0.00	$83.06
SPRINKLER FITTER SPRINKLER FITTERS LOCAL 550 SPRINKLER FITTERS LOCAL 550 - (Section A) Zone 1	1/1/2026	$72.05	$13.45	$7.45	$18.25	$0.00	$111.20

Apprentice: SPRINKLER FITTER

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	35.00	$25.22	$13.45	$13.84	$0.00	$0.00	$52.51
2	40.00	$28.82	$13.45	$14.75	$0.00	$0.00	$57.02

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: SPRINKLER FITTER							
Effective Date: 1/1/2026							
Step / Percent		**Apprentice Base Wage**					
3 / 45.00		$32.42	$13.45	$15.67	$0.00	$0.00	$61.54
4 / 50.00		$36.03	$13.45	$16.57	$0.00	$0.00	$66.05
5 / 55.00		$39.63	$13.45	$17.49	$0.00	$0.00	$70.57
6 / 60.00		$43.23	$13.45	$18.40	$0.00	$0.00	$75.08
7 / 65.00		$46.83	$13.45	$19.32	$0.00	$0.00	$79.60
8 / 70.00		$50.44	$13.45	$20.22	$0.00	$0.00	$84.11
9 / 75.00		$54.04	$13.45	$21.15	$0.00	$0.00	$88.64
10 / 80.00		$57.64	$13.45	$22.05	$0.00	$0.00	$93.14
Apprentice Notes							
Apprentice entered prior 9/30/10:							
Apprentice to Journeyworker Ratio: 1:3							
STEAM BOILER OPERATOR	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
TAMPERS, SELF-PROPELLED OR TRACTOR DRAWN	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
TELECOMMUNICATION TECHNICIAN	9/1/2025	$52.94	$13.00	$13.97	$6.98	$0.00	$86.89
TELECOMMUNICATION TECHNICIAN	3/1/2026	$53.49	$13.00	$14.23	$7.20	$0.00	$87.92
ELECTRICIANS LOCAL 103	9/1/2026	$55.02	$13.00	$14.28	$7.20	$0.00	$89.50
ELECTRICIANS LOCAL 103	3/1/2027	$55.98	$13.00	$14.31	$7.20	$0.00	$90.49
	9/1/2027	$57.50	$13.00	$14.36	$7.20	$0.00	$92.06
	3/1/2028	$58.46	$13.00	$14.38	$7.20	$0.00	$93.04
For apprentice rates and ratios see "Apprentice- ELECTRICIAN"							
Apprentice: TELECOMMUNICATION TECHNICIAN							
Effective Date: 9/1/2025							
Step / Percent		**Apprentice Base Wage**					
1 / 45.00		$23.82	$13.00	$0.71	$0.00	$0.00	$37.53
2 / 45.00		$23.82	$13.00	$0.71	$0.00	$0.00	$37.53
3 / 50.00		$26.47	$13.00	$13.17	$3.49	$0.00	$56.13
4 / 50.00		$26.47	$13.00	$13.17	$3.49	$0.00	$56.13
5 / 55.00		$29.12	$13.00	$13.25	$3.84	$0.00	$59.21
6 / 60.00		$31.76	$13.00	$13.33	$4.19	$0.00	$62.28
7 / 65.00		$34.41	$13.00	$13.41	$4.54	$0.00	$65.36

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: TELECOMMUNICATION TECHNICIAN

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
8	70.00	$37.06	$13.00	$13.49	$4.89	$0.00	$68.44
9	75.00	$39.71	$13.00	$13.57	$5.24	$0.00	$71.52
10	80.00	$42.35	$13.00	$13.65	$5.58	$0.00	$74.58

Apprentice: TELECOMMUNICATION TECHNICIAN

Effective Date: 3/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	$24.07	$13.00	$0.72	$0.00	$0.00	$37.79
2	45.00	$24.07	$13.00	$0.72	$0.00	$0.00	$37.79
3	50.00	$26.75	$13.00	$13.43	$3.60	$0.00	$56.78
4	50.00	$26.75	$13.00	$13.43	$3.60	$0.00	$56.78
5	55.00	$29.42	$13.00	$13.51	$3.96	$0.00	$59.89
6	60.00	$32.09	$13.00	$13.59	$4.32	$0.00	$63.00
7	65.00	$34.77	$13.00	$13.67	$4.68	$0.00	$66.12
8	70.00	$37.44	$13.00	$13.75	$5.04	$0.00	$69.23
9	75.00	$40.12	$13.00	$13.83	$5.40	$0.00	$72.35
10	80.00	$42.79	$13.00	$13.91	$5.76	$0.00	$75.46

Apprentice to Journeyworker Ratio: 1:1

TERRAZZO FINISHERS BRICKLAYERS LOCAL 3 BRICKLAYERS LOCAL 3 - MARBLE & TILE	8/1/2025	$66.89	$11.49	$15.57	$8.02	$0.00	$101.97
	2/1/2026	$68.24	$11.49	$15.57	$8.02	$0.00	$103.32
	8/1/2026	$70.44	$11.49	$15.57	$8.02	$0.00	$105.52
	2/1/2027	$71.84	$11.49	$15.57	$8.02	$0.00	$106.92

Apprentice: TERRAZZO FINISHERS

Effective Date: 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

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: TERRAZZO FINISHERS							
Effective Date: 2/1/2026							
Step / Percent		**Apprentice Base Wage**	**Health**	**Pension**	**Annuity**	**Supplemental Unemployment**	**Total Rate**
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
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
Apprentice to Journeyworker Ratio: 1:5							
TEST BORING DRILLER	12/1/2025	$52.70	$10.15	$9.50	$9.80	$0.00	$82.15
LABORERS	6/1/2026	$54.25	$10.15	$9.50	$9.80	$0.00	$83.70
LABORERS - FOUNDATION AND MARINE	12/1/2026	$55.75	$10.15	$9.50	$9.80	$0.00	$85.20
For apprentice rates see "Apprentice- LABORER"							
TEST BORING DRILLER HELPER	12/1/2025	$48.82	$10.15	$9.50	$9.80	$0.00	$78.27
LABORERS	6/1/2026	$50.37	$10.15	$9.50	$9.80	$0.00	$79.82
LABORERS - FOUNDATION AND MARINE	12/1/2026	$51.87	$10.15	$9.50	$9.80	$0.00	$81.32
For apprentice rates see "Apprentice- LABORER"							
TEST BORING LABORER	12/1/2025	$48.70	$10.15	$9.50	$9.80	$0.00	$78.15
LABORERS	6/1/2026	$50.25	$10.15	$9.50	$9.80	$0.00	$79.70
LABORERS - FOUNDATION AND MARINE	12/1/2026	$51.75	$10.15	$9.50	$9.80	$0.00	$81.20
For apprentice rates see "Apprentice- LABORER"							
TRACTORS/PORTABLE STEAM GENERATORS	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
TRAILERS FOR EARTH MOVING EQUIPMENT	12/1/2025	$42.92	$15.41	$21.78	$0.00	$0.00	$80.11
TEAMSTERS JOINT COUNCIL NO. 10	6/1/2026	$43.92	$15.41	$21.78	$0.00	$0.00	$81.11
TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	8/1/2026	$43.92	$15.91	$21.78	$0.00	$0.00	$81.61
	12/1/2026	$43.92	$15.91	$23.52	$0.00	$0.00	$83.35
TUNNEL WORK - COMPRESSED AIR	12/1/2025	$60.93	$10.15	$9.50	$10.25	$0.00	$90.83
LABORERS	6/1/2026	$62.48	$10.15	$9.50	$10.25	$0.00	$92.38
LABORERS (COMPRESSED AIR)	12/1/2026	$63.98	$10.15	$9.50	$10.25	$0.00	$93.88
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE)	12/1/2025	$62.93	$10.15	$9.50	$10.25	$0.00	$92.83
LABORERS	6/1/2026	$64.48	$10.15	$9.50	$10.25	$0.00	$94.38
LABORERS (COMPRESSED AIR)	12/1/2026	$65.98	$10.15	$9.50	$10.25	$0.00	$95.88
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - FREE AIR	12/1/2025	$53.00	$10.15	$9.50	$10.25	$0.00	$82.90
LABORERS	6/1/2026	$54.55	$10.15	$9.50	$10.25	$0.00	$84.45
LABORERS (FREE AIR TUNNEL)	12/1/2026	$56.05	$10.15	$9.50	$10.25	$0.00	$85.95

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - FREE AIR (HAZ. WASTE)	12/1/2025	$55.00	$10.15	$9.50	$10.25	$0.00	$84.90
LABORERS	6/1/2026	$56.55	$10.15	$9.50	$10.25	$0.00	$86.45
LABORERS (FREE AIR TUNNEL)	12/1/2026	$58.05	$10.15	$9.50	$10.25	$0.00	$87.95
For apprentice rates see "Apprentice- LABORER"							
VAC-HAUL	12/1/2025	$42.34	$15.41	$21.78	$0.00	$0.00	$79.53
TEAMSTERS JOINT COUNCIL NO. 10	6/1/2026	$43.34	$15.41	$21.78	$0.00	$0.00	$80.53
TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	8/1/2026	$43.34	$15.91	$21.78	$0.00	$0.00	$81.03
	12/1/2026	$43.34	$15.91	$23.52	$0.00	$0.00	$82.77
WAGON DRILL OPERATOR	12/1/2025	$48.85	$10.15	$9.50	$9.65	$0.00	$78.15
LABORERS	6/1/2026	$50.40	$10.15	$9.50	$9.65	$0.00	$79.70
LABORERS - ZONE 1	12/1/2026	$51.90	$10.15	$9.50	$9.65	$0.00	$81.20
	6/1/2027	$53.50	$10.15	$9.50	$9.65	$0.00	$82.80
	12/1/2027	$55.10	$10.15	$9.50	$9.65	$0.00	$84.40
	6/1/2028	$56.78	$10.15	$9.50	$9.65	$0.00	$86.08
	12/1/2028	$58.45	$10.15	$9.50	$9.65	$0.00	$87.75
For apprentice rates see "Apprentice- LABORER"							
WAGON DRILL OPERATOR (HEAVY & HIGHWAY)	12/1/2025	$48.95	$10.15	$9.50	$9.65	$0.00	$78.25
LABORERS	6/1/2026	$50.50	$10.15	$9.50	$9.65	$0.00	$79.80
LABORERS - ZONE 1 (HEAVY & HIGHWAY)	12/1/2026	$52.00	$10.15	$9.50	$9.65	$0.00	$81.30
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
WASTE WATER PUMP OPERATOR	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
WATER METER INSTALLER	9/1/2025	$71.74	$14.32	$12.61	$8.00	$0.00	$106.67
PLUMBERS & GASFITTERS LOCAL 12	3/2/2026	$73.89	$14.32	$12.61	$8.00	$0.00	$108.82
PLUMBERS & GASFITTERS LOCAL 12	8/31/2026	$76.04	$14.32	$12.61	$8.00	$0.00	$110.97
	3/1/2027	$78.19	$14.32	$12.61	$8.00	$0.00	$113.12
	8/30/2027	$80.34	$14.32	$12.61	$8.00	$0.00	$115.27
	2/2/2028	$82.54	$14.32	$12.61	$8.00	$0.00	$117.47
	9/4/2028	$84.74	$14.32	$12.61	$8.00	$0.00	$119.67
	3/5/2029	$86.94	$14.32	$12.61	$8.00	$0.00	$121.87
	9/3/2029	$89.14	$14.32	$12.61	$8.00	$0.00	$124.07
	3/4/2030	$91.09	$14.32	$12.61	$8.00	$0.00	$126.02
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GASFITTER"							

Outside Electrical

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
CABLE TECHNICIAN (Power Zone)	8/31/2025	$36.55	$10.75	$1.10	$1.00	$0.00	$49.40
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$38.13	$11.00	$1.14	$1.00	$0.00	$51.27
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$39.65	$11.25	$1.19	$1.00	$0.00	$53.09
For apprentice rates see "Apprentice- LINEMAN"							
CABLEMAN (Underground Ducts & Cables)	8/31/2025	$51.78	$10.75	$1.55	$10.71	$0.00	$74.79
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$54.02	$11.00	$1.62	$11.14	$0.00	$77.78
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$56.17	$11.25	$1.69	$11.57	$0.00	$80.68
For apprentice rates see "Apprentice- LINEMAN"							
DRIVER / GROUNDMAN CDL	8/31/2025	$42.64	$10.75	$1.28	$10.45	$0.00	$65.12
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$44.49	$11.00	$1.33	$10.80	$0.00	$67.62
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$46.26	$11.25	$1.39	$11.15	$0.00	$70.05
For apprentice rates see "Apprentice- LINEMAN"							
DRIVER / GROUNDMAN -Inexperienced (<2000 Hrs)	8/31/2025	$33.51	$10.75	$1.01	$1.00	$0.00	$46.27
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$34.95	$11.00	$1.05	$1.00	$0.00	$48.00
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$36.64	$11.25	$1.09	$1.00	$0.00	$49.98
For apprentice rates see "Apprentice- LINEMAN"							
EQUIPMENT OPERATOR (Class A CDL)	8/31/2025	$51.78	$10.75	$1.55	$14.79	$0.00	$78.87
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$54.02	$11.00	$1.62	$15.22	$0.00	$81.86
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$56.17	$11.25	$1.69	$15.65	$0.00	$84.76
For apprentice rates see "Apprentice- LINEMAN"							
EQUIPMENT OPERATOR (Class B CDL)	8/31/2025	$45.69	$10.75	$1.37	$11.27	$0.00	$69.08
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$47.66	$11.00	$1.43	$11.65	$0.00	$71.74
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$49.56	$11.25	$1.49	$12.03	$0.00	$74.33
For apprentice rates see "Apprentice- LINEMAN"							
GROUNDMAN	8/31/2025	$33.51	$10.75	$1.01	$1.00	$0.00	$46.27
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$34.95	$11.00	$1.05	$1.00	$0.00	$48.00
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$36.34	$11.25	$1.09	$1.00	$0.00	$49.68
For apprentice rates see "Apprentice- LINEMAN"							
GROUNDMAN -Inexperienced (<2000 Hrs.)	8/31/2025	$27.41	$10.75	$0.82	$1.00	$0.00	$39.98
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$28.60	$11.00	$0.86	$1.00	$0.00	$41.46
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$29.74	$11.25	$0.89	$1.00	$0.00	$42.88
For apprentice rates see "Apprentice- LINEMAN"							
JOURNEYMAN LINEMAN	8/31/2025	$60.92	$10.75	$1.83	$18.00	$0.00	$91.50
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2026	$63.55	$11.00	$1.91	$18.50	$0.00	$94.96
OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/29/2027	$66.08	$11.25	$1.98	$19.00	$0.00	$98.31

Apprentice: JOURNEYMAN LINEMAN

Effective Date: 8/31/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Outside Electrical

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: JOURNEYMAN LINEMAN

Effective Date: 8/31/2025

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
2	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
3	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
4	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
5	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
6	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
7	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Apprentice: JOURNEYMAN LINEMAN

Effective Date: 8/30/2026

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
2	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
3	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
4	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
5	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
6	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
7	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Apprentice to Journeyworker Ratio: 1:2

TELEDATA CABLE SPLICER OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	2/4/2019	$30.73	$4.70	$0.92	$2.25	$0.00	$38.60
TELEDATA LINEMAN/EQUIPMENT OPERATOR OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	2/4/2019	$28.93	$4.70	$0.89	$2.25	$0.00	$36.77
TELEDATA WIREMAN/INSTALLER/TECHNICIAN OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	2/4/2019	$28.93	$4.70	$0.89	$2.25	$0.00	$36.77

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

BURLINGTON-LYNNFIELD-WAKEFIELD-WOBURN
Bridge Preservation of 10 Bridges carrying I-95

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.

Bridge preservation at ten bridge BINs including railing and concrete repairs along I-95 in District 4. The bridges are as follows:

- Bridge No. B-29-011 (2EW) carrying I-95 Northbound over Winn Street in the Town of Burlington.
- Bridge No. B-29-011 (2EX) carrying I-95 Southbound over Winn Street in the Town of Burlington.
- Bridge No. W-43-031 (2F6) carrying I-95 Northbound over State Road 38 Westbound/Main Street in the City of Woburn.
- Bridge No. W-43-031 (2F7) carrying I-95 Southbound over State Road 38 Westbound/Main St in the City of Woburn.
- Bridge No. L-19-011 (2FD) carrying I-95 over Main Street in the Town of Lynnfield.
- Bridge No. L-19-004 (2W4) carrying I-95 Northbound over Walnut Street in the Town of Lynnfield.
- Bridge No. L-19-004 (2W5) carrying I-95 Southbound over Walnut Street in the Town of Lynnfield.
- Bridge No. L-19-007 (2W6) carrying I-95 Northbound over Summer Street in the Town of Lynnfield.
- Bridge No. L-19-007 (2W7) carrying I-95 Southbound over Summer Street in the Town of Lynnfield.
- Bridge No. W-01-008 (2FJ) carrying I-95 over Pleasure Island Road in the Town of Wakefield.

SCOPE OF WORK (Continued)

The project limits are across six locations within a 9.7 mile stretch of I-95. Bridge No. 2EW and 2W6 are the limits on the Northbound roadway and 2EX and 2W7 are the limits on the Southbound roadway. The project limit at each bridge location will extend approximately to 50 feet on either side of each bridge.

The ten existing bridges are all single span rigid frame structures comprised of reinforced concrete. The four bridge pairs 2EW and 2EX; 2F6 and 2F7; 2W4 and 2W5; and 2W6 and 2W7, support steel beams and grating which form the medians of I-95.

Bridge No. 2F6 and 2F7 are square and have a span of 62.75 feet, the overall structure length is 72.21 feet. For Bridge No. 2F6 the superstructure is in Satisfactory (6) condition and substructure is in Satisfactory (6) condition.

For 2F7, the bridge superstructure is in Good (7) condition and substructure is in Good (7) condition. The remaining bridge numbers are all skewed, the square span of these is 50 feet and the skew varies depending upon location.

The span length of 2EW is 52 feet on a 17.36 degree skew. The overall structure length is 61.29 feet. The bridge superstructure is in Fair (5) condition and substructure is in Fair (5) condition. The span length of 2EX is 52 feet on a 17.36 degree skew. The overall structure length is 61.29 feet. The bridge superstructure is in Fair (5) condition and substructure is in Fair (5) condition.

The span length of 2FD is 54.88 feet on a 24.36 degree skew. The overall structure length is 63.67 feet. The bridge superstructure is in Satisfactory (6) condition and substructure is in Satisfactory (6) condition. The span length of 2FJ is 52 feet on a 15.75 degree skew. The overall structure length is 62.17 feet. The bridge superstructure is in Satisfactory (6) condition and substructure is in Satisfactory (6) condition.

The span length of 2W4 is 51.69 feet on a 14.71 degree skew. The overall structure length is 61.86 feet. The bridge superstructure is in Satisfactory (6) condition and substructure is in Satisfactory (6) condition. The span length of 2W5 is 51.69 feet on a 14.71 degree skew. The overall structure length is 61.86 feet. The bridge superstructure is in Satisfactory (6) condition and substructure is in Satisfactory (6) condition.

The span length of 2W6 is 53.09 feet on a 19.65 degree skew. The overall structure length is 63.53 feet. The bridge superstructure is in Fair (5) condition and substructure is in Satisfactory (6) condition. The span length of 2W7 is 53.09 feet on a 19.65 degree skew. The overall structure length is 63.53 feet. The bridge superstructure is in Satisfactory (6) condition and substructure is in Satisfactory (6) condition.

For each roadway the existing pavement width varies by location with a minimum 60 feet and maximum 70 feet, consisting of three travel lanes, hard shoulder, and at some locations accelerating or decelerating lanes.

SCOPE OF WORK (Continued)

At each bridge location, existing railings will be partially demolished and the remaining section will be modified with CF-MTL5 barriers. The railing will be modified to include a snow fence. The approximate limits of the railings will match the existing bridge railings. The existing median barriers will be replaced within the approximate limits of the existing median railings. This project will not reconstruct the roadway along I-95 other than locally in the shoulders at locations where barrier upgrades are designed.

Below the structures the roadway width varies, as well as the number of lanes and the number of sidewalks. The scope of this project does not include work to the roadway or sidewalks on the underside of any structures.

The scope also includes concrete repairs to the underside of each rigid frame. Repairs will consist of removal of deteriorated concrete, cleaning of existing rebar, supplemental rebar installation (if required) and patching.

All work shall be performed within, and accessed by, 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

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

7.05.B: Public Liability Insurance 1. and
7.05.B: Public Liability Insurance 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.

For specific locations, allowable work hours will be determined by the District Highway Director or designated representative. On high volume and/or high-speed roadways, work is restricted to non-peak hours or night work as directed by the Engineer to avoid peak traffic volumes and to maintain safety and productivity. For this project, it is anticipated that all work occurs on high speed and/or high-volume roadways and therefore night work is required. No road work may occur during peak hours (6:00 AM - 9:00 AM and 3:00 PM - 6:00 PM).

Weekend work shifts are not anticipated. Any weekend work shifts require approval of the Engineer.

Night Time Work
All work locations requiring night hours, as approved by the Engineer, are restricted as follows:

Single Lane Closures – high volume and high speed roadways (I-95):
Sunday: 9:00 PM to 5:00 AM Monday
Monday: 9:00 PM to 5:00 AM Tuesday
Tuesday: 9:00 PM to 5:00 AM Wednesday
Wednesday: 9:00 PM to 5:00 AM Thursday
Thursday: 9:00 PM to 5:00 AM Friday

Double Lane Closures – high volume and high speed roadways (I-95):
Sunday: 12:00 AM to 5:00 AM Monday
Monday: 12:00 AM to 5:00 AM Tuesday
Tuesday: 12:00 AM to 5:00 AM Wednesday
Wednesday: 12:00 AM to 5:00 AM Thursday
Thursday: 12:00 AM to 5:00 AM Friday

One Lane Alternating Roadway Closures – local roads only:
Sunday: 9:00 PM to 5:00 AM Monday
Monday: 9:00 PM to 5:00 AM Tuesday
Tuesday: 9:00 PM to 5:00 AM Wednesday
Wednesday: 9:00 PM to 5:00 AM Thursday
Thursday: 9:00 PM to 5:00 AM Friday

Full Roadway Closures – local roads only:
Sunday: 11:00 PM to 5:00 AM Monday
Monday: 11:00 PM to 5:00 AM Tuesday
Tuesday: 11:00 PM to 5:00 AM Wednesday
Wednesday: 11:00 PM to 5:00 AM Thursday
Thursday: 11:00 PM to 5:00 AM Friday

Work may not proceed beyond the normal 8-hour day unless prior approval is obtained from the Engineer for that day. 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.

SCHEDULE OF WORK (Continued)

The Contractor may only schedule night shifts longer than 8-hours with prior approval by the Engineer. No additional compensation will be made for work scheduled during nighttime or longer work hours.

No entrance or exit ramp shall be closed to traffic except between the hours of 9:00 PM and 5:00 AM the following day or as directed. The Contractor shall be required to schedule the work activities such that not more than one ramp shall be closed during any given work period.

These time periods include the "set-up" and "breakdown" of the traffic pattern employed. No operations, personnel, or equipment will be allowed on the roadways except during working hours.

The work hour restrictions do not apply to emergency conditions, as determined by the Engineer.

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

The Project involves bridge preservation at multiple locations. Concurrent traffic control shall be restricted to only two locations at one time. The Contractor's work is limited and shall only expose two (2) bridge decks per barrel at one time. Traffic control within a barrel shall be coordinated to minimize adverse impacts to the traveling public. The work shall be sequenced and prioritized based on the condition of the bridges and shall be subject to approval by the Engineer.

Once a deck is exposed the Contractor shall work at the exposed bridge deck until the deck repairs are completed. Decks shall be exposed for the minimum time possible. The waterproofing membrane (as required) and deck protective course and waterproofing membrane (if required) shall be installed no earlier than fourteen (14) days and no later than thirty (30) days after the deck repairs have been completed. The fourteen (14) day minimum is to provide adequate time for the concrete cure. The thirty (30) day maximum is to ensure deck exposure to traffic is minimized. The deck surface course shall be installed concurrent with the other paving on the adjacent roadway.

The Contractor shall have the option to perform barrier replacement outside of proposed periods of roadway closure with approval by the Engineer. Work performed outside of proposed periods of roadway closure shall be done in temporary lane closures during normal working hours.

The Contractor shall coordinate work with paving project 613318 – Burlington–Woburn – Interstate Pavement Preservation and Related Work on I-95.

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.

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.

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.

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 **10 Million** 18-kip (80-kn) ESALs.

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.

ENVIRONMENTAL COMPLIANCE

The Contractor shall comply with all rules, regulations, laws, permits and ordinances of all authorities having jurisdiction including, but not limited to, Massachusetts Department of Environmental Protection, the U.S. Environmental Protection Agency, Federal Department of Transportation (DOT), Massachusetts Water Resources Authority (MWRA), the Commonwealth of Massachusetts and other applicable local, state, and federal agencies governing environmental compliance.

The Contractor shall protect all drains to prevent debris, cleaners, and wash water from entering the storm sewer system. All materials must be collected, removed from the site, and disposed of legally.

Whenever there is a conflict or overlap within the regulations, the most stringent provisions are applicable. The Contractor shall reimburse MassDOT for all costs it incurs, including penalties and/or for fines, as a result of the Contractor's failure to adhere to the regulations, specifications, recognized standard practices, etc., that relate to contaminated material handling, transportation and disposal. In the event of an environmental incident or violation the Contractor shall, document the issue, perform emergency remediation, and notify the Engineer and await further direction prior to continuing work.

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.

2026 FIFA WORLD CUP – BOSTON, MASSACHUSETTS

The 2026 FIFA World Cup will be held at Gillette Stadium in Foxborough, related events, and significant tourist events such as Sail Boston and the 250th Anniversary of the United States will be held throughout the region. Matches and Fan Fest and other possible 250th Celebration activities are scheduled through June, July and August 2026. The District will be imposing work and/or traffic restrictions as necessary to minimize impacts during these periods when, as determined by MassDOT, the Contractor's operations could impact vehicular traffic, particularly on interstate highways and major arterials throughout the region and local roads near event sites. No additional compensation will be allowed for work restrictions except as determined under Subsection 8.10. nor will the Contractor have any claim for related costs, direct or indirect. The Contract time determinations have accounted for potential work restriction during this period and Contractor's should plan accordingly. Any necessary or emergency work required during this time will require District approval.

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.

SUBSECTION 8.14 (Continued)

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.

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 Contactor 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.

SUBSECTION 8.14 (Continued)

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.

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.

SUBSECTION 8.14 (Continued)

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

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

COMPLIANCE WITH THE NATIONAL DEFENSE AUTHORIZATION ACT

(Supplementing Subsection 7.01)

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

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

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

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

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

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.

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.

HOLIDAY WORK RESTRICTIONS (Continued)

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.

VALUE ENGINEERING CHANGE PROPOSAL

This Subsection defines the conditions and requirements which apply to Value Engineering Change Proposals ("VECPs"). The purpose of this provision is to encourage the Contractor to propose changes in certain project requirements that will maintain the project's functional requirements at a savings in contract time, contract price, or both. The net savings obtained by using a VECP that meets the conditions and requirements set forth here will be shared by the Contractor and MassDOT.

VECP's under this provison are to be initiated, developed and submitted to MassDOT by the Contractor. The VECP must show the contemplated changes to the Drawings, Specifications and other requirements in the Contract. When a VECP submitted pursuant to this section is fully accepted by MassDOT, the VECP will be implemented by the Contractor and paid using the current cost and resource loaded schedule. Contractor shall demonstrate that the VECP is equal to, or better than, the original design or material; that there is an interest in public safety within the VECP; that there is a life-cycle cost benefit; and/or that end users will benefit from the shortened schedule. VECPs shall be consistent with the MassHighway/MassDOT Standard Specifications for Highways and Bridges and other applicable reference documents and directives. Any proposed deviation from these documents will need to be clearly identified in the VECP Proposal Documents, and must be approved by MassDOT's Chief Engineer before accepting this VECP.

VALUE ENGINEERING CHANGE PROPOSAL (Continued)

A. In order to be considered for MassDOT review each VECP shall:

1. Be clearly labeled pursuant to this Subsection;

2. Yield a net savings at least two hundred and fifty thousand (250,000.00) Dollars and/or a net saving of contract completion duration of at least three (3) months;

3. The proposed changes to contract Items must:

   a. maintain the specified Items' required functions (service life, reliability);

   b. meet applicable safety regulations and codes;

   c. material substitutions must be in accordance with DOT prequalified/preapproved products and must be tested in accordance with standard material specs/testing methods (and considering all relevant environmental, load, and other relevant factors);

   d. show economy of operation, ease of maintenance, ease of construction, and necessary standardized features and appearance; and

4. Shall not require an extension of Contract Time or Contract Milestones, with the exception of cases when there are anticipated significant cost saving.

The thresholds above are considered to be a general guideline. MassDOT will consider VECPs outside of these thresholds if a significant benefit is demonstrated. Additionally, notwithstanding this VECP process, MassDOT will consider minor revisions in the form of a Contract Modification.

Further, any VECP submitted shall be in sufficient detail to clearly define the proposed change. The Contractor's failure to provide information of the type, detail and in a format to facilitate the MassDOT's review, may be grounds for rejection of the VECP. Additionally, the Contractor will not be entitled to any equitable adjustment or increased Time, due to any aspect of any of the proposed VECP including permitting, right of way, utility coordination or delayed responses by MassDOT. If, after the progression of the work associated with the executed Contract Modification for the VECP, any additional costs are realized by the Contractor or any of the sub- consultants, sub-Contractors, or suppliers, the Contractor shall be obligated to pay for any and all costs.

B. The following initial Items shall be provided by the Contractor for MassDOT's review. *Items 1-6 need to be submitted prior to the start of MassDOT's review of the VECP and Item 7 is an important consideration for the pricing of the VECP and the timeline of the proposed VECP schedule.*

1. ***VECP Description***: A description of the difference between the existing and the proposed Contract requirements, and the comparative advantages and disadvantages of each;

VALUE ENGINEERING CHANGE PROPOSAL (Continued)

2. ***VECP Change Listing***: A listing of the Contract requirements that will need to be changed, modified, or reviewed as well as the proposed Contract document changes in the Instructions to Bidders, Contract, Standard Specifications, General Requirements and Special Provisions required by the VECP.

3. ***Construction Schedule Update*****:** Any changes in the Contract Time(s) or Contract Milestone(s), that will result from acceptance of the VECP, shall be accompanied by a contemporaneous schedule analysis *(i.e, the Contractor's baseline schedule submission, all past/required monthly schedule updates, a detailed assessment of all past delays, and a resource loaded Crticial Path Method schedule as specified in Section 8.0 / Subsection 8.02 of this Contract)* of the projected Work that remains including the proposed VECP related schedule changes *(inclusive of the timeline to review accept the VECP and the timeline for implementing the design changes)* in the remaining work. This shall be submitted in the form of a Proposal Schedule until the VECP has been formally accepted. Note: All of this information is to be updated, recertified, and formally accepted by MassDOT before final acceptance of this this VECP is issued.

4. ***Date for MassDOT's Acceptance***: A statement that clearly justifies the date by which the VECP must be accepted to obtain the maximum price reduction, noting any effect upon the Contract Time(s) and/or Contract Milestone(s). This statement must include a narrative that demonstrates the most recent construction schedule has been utilized to justify that proposed acceptance date *(e.g. "in order to start to fabricate critical materials, authorization must be provided to work on the shop drawings by no later than [date]").* The Contractor should allow for at least sixty (60) to ninety (90) days for acceptance by MassDOT once all of the VECP documentation has been provided. Acceptance shall mean that MassDOT has received a finalized and executed contract modification. However, this is a proposed Contract change.

   The Contractor is fully obligated to progress the Work of the original Contract and MassDOT is not liable for any delays or costs that may occur in the review phase of any VECP proposal.

5. ***Cost and Savings Estimates***: A detailed estimate of the anticipated net savings, calculated as follows:

   a. ***Original Scope:*** Isolate the cost of performing the <u>original contract construction activities</u>, in accordance with the original Contract Documents, as originally bid by the Contractor, that are anticipated to be superseded by the VECP. *This cost is to include any original contract scope that is anticipated to be altered or eliminated by the VECP such as, shop drawing preparation, inspection work, testing, maintenance of traffic, or any other original contract costs, that have yet to have been performed at the time of this VECP submission.*

   b. ***New VECP Scope:*** Calculate the cost of performing the <u>comparable construction activities</u> associated with the VECP.

VALUE ENGINEERING CHANGE PROPOSAL (Continued)

c. ***Contractor's Engineer & Inspection***: Calculate the cost of Engineering, inspection, and design work by the Contractor's Engineer/Designer. This should be a realistic estimate of the costs of any required Engineering, design and review work by the Contractor's Engineer.

d. ***MassDOT's Costs:*** MassDOT's estimate of costs to perform Engineering/design reviews, cost estimate reviews, schedule reviews, and any other administrative costs to review and recommend implementation of the proposed VECP. *(including all anticipated increased costs to MassDOT on other Contracts and all anticipated follow-on increased costs to MassDOT, if any)* as provided by MassDOT. MassDOT's estimated costs must be included the VECP calculation and will be provided by MassDOT in support of the VECP evaluation process.

e. ***Other Costs:*** Estimated costs associated with any revisions to other project related costs, such as Environmental Permits or Right of Way acquisitions, including other agency or municipality costs, as provided by MassDOT.

Net Savings:
The net savings to be split between MassDOT and the Contractor shall be calculated using the Items above as follows: a - (b+c+d+e) = net savings

6. *The Contractor shall also provide:*

a. A proposed Change Order, which explains and justifies any required Equitable Adjustment in the Contract Price.

b. The Contractor's actual costs expended for developing the VECP as of the date of the VECP submission;

***7. Design Changes and Drawings*:** The costs that are outlined above should be inclusive of the following design and Engineering responsibilities.

a. Design changes shall be prepared and stamped by the Contractor's professional designer and/or Engineer. In addition, in the development of the VECP; the Contractor is responsible for anticipating and managing all aspects associated with any VECP design work that must be performed by a licensed Engineer.

b. The Contractor's Engineer must analyze and stamp all components of any aspect of the project that has been redesigned, changed, or altered as a result of this VECP.

c. The Contractor's Engineer shall provide all calculations and supporting design/Engineering documentation that was utilized to develop the changes and stamped drawings. These will be used by MassDOT's Designer-of-Record to review the VECP changes. The Contractor is limited to selecting only those Engineer's that have been pre-qualified by MassDOT's A&E Board.

VALUE ENGINEERING CHANGE PROPOSAL (Continued)

d. MassDOT's Designer-of-Record will review and respond to all completed design submissions related to this VECP within thirty (30) calendar days, unless determined to be a non-critical path Item.

e. MassDOT will be responsible for estimating and managing MassDOT's Designer-of-Record during the VECP review and implementation. Should any significant conflicts arise, between the Contractor's Engineer and MassDOT's Designer-of-Record, the DOT and the Contractor will work expeditiously to resolve the conflict. Should this type of conflict continue for greater than five (5) days, the Contractor is to bear all financial and time related impacts of such delay and must seek to resolve the design conflict, in an acceptable manner to MassDOT. The resolution of this conflict will be funded at the Contractor's expense – exclusive of the net saving that was agreed to at the execution of the contract modification for this VECP.

f. The Contractor's Engineer may also be required to inspect the construction work. The Contractor is to include such anticipated inspection costs in the initial VECP.

g. MassDOT's Designer of Record will remain the Designer-of-Record for the entire Project. Any costs incurred in the use of MassDOT's Designer-of-Record by MassDOT or Contractor associated with the review of a VECP are to be included in the calculated net savings.

C. Approval of the VECP shall not occur until a Contract Modification, incorporating the VECP, is issued by MassDOT and properly executed by the Contractor. MassDOT may accept or reject part or all of any VECP at any time prior to an executed Contract Modification for the applicable VECP. The decision of MassDOT, concerning acceptance or rejection of any VECP, shall be final and shall not be subject to dispute resolution.

It is expected that several weeks may go by before the final VECP documentation has been executed with a Contract Modification. Therefore, MassDOT intends to make certain that the initial cost estimate information has not changed before entering into a Contract Modification. As the VECP evaluation process is finalized, and prior to the signed Contract Modification for the VECP, the Contractor and MassDOT must re-certify the current status of the originally proposed cost and/or schedule savings.

Until a contract modification is issued and schedule and cost/savings re-certification is complete and accepted by MassDOT, the Contractor shall remain obligated to perform the Work in accordance with the terms and conditions of the original Contract Documents.

Upon completion of the work associated with the VECP, MassDOT may require verification that the VECP savings has been achieved.

VALUE ENGINEERING CHANGE PROPOSAL (Continued)

D. VECPs will be processed (distributed, reviewed, commented upon, accepted or rejected) expeditiously (pursuant to M.G.L. c. 30, § 39R); however, as this is an elective modification to the contract, MassDOT shall not be liable for any delay or cost in the review and acceptance of the VECP. During the review of the VECP, the Contractor remains obligated to progress the original Contract scope, and schedule, as planned; until a Contract Modification, accepting the Contractor re-certified VECP, has been executed by MassDOT.

The Contractor has the right to withdraw part, or all of any VECP, prior to acceptance by MassDOT. Such withdrawal shall be made in writing to the Engineer. The Contractor shall state the period of time, from the date of the initial VECP submittal, that the VECP shall remain valid and feasible. Revision of this validity and feasibility period shall be allowed only by mutual agreement of the Contractor and the Engineer in writing.

If the Contractor desires to withdraw the proposal prior to the expiration of this period for non-technical reason, MassDOT reserves the right to recover all actual costs that have been incurred to MassDOT.

If the Contractor withdraws the VEC Proposal, MassDOT reserves the right to proceed with the VECP or any portion of the VECP as a normal change and the Contractor waives any right it may have had to share in net savings thereunder.

For purposes of this provision, expiration of the time established by the Contractor for approval shall be considered as withdrawal by the Contractor if MassDOT requests an extension of that time and the Contractor does not provide a written extension.

E. With regard to unknown conditions or sub-surface work, in general, the expectation is that the Contractor and MassDOT will strive to gain enough knowledge about the risks in order to provide a forward-priced Change Proposal. Therefore, any costs to fully evaluate the proposal, such as additional borings and/or test pits, must be considered in the cost evaluation of whether the VECP is worth pursuing. However, if it is impractical to gather conclusive exploratory information, before the VECP is executed, MassDOT may consider provisions in the VECP that clearly identifies the risk sharing (cost and time) related specifically to the unknown/sub-surface conditions. If these VECP provisions are acceptable to MassDOT they are to include supplemental language to provide a determination of the final savings/cost, and time impacts, no later than 45 days after the sub-surface work is completed. All other aspects of the VECP, unrelated to these Provisions, will be binding upon execution of the VECP.

NOTICE TO OWNERS OF UTILITIES

(Supplementing Subsection 7.13)

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

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

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 4

Select the City or Town and then locate the utility.

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

Notification Of Public Officials

Town officials are shown at website https://www.mass.gov/lists/massachusetts-cities-and-towns and select the required City/Town 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.

NATIONAL GRID EMERGENCY TELEPHONE NUMBERS

GAS:
Emergency: 1-800-233-5325
New Service: 1- 877-696-4743
Customer Support: 1-800-732-3400

ELECTRIC:
Outage/ Emergency: 1-800-465-1212
New Service: 1-800-375-7405
Customer Support: 1-800-322-3223

EVERSOURCE EMERGENCY TELEPHONE NUMBERS

GAS:
Outage/ Emergency: 800-592-2000
New Service: 866-678-2744
Customer Support: 800-592-2000

ELECTRIC:
Outage/ Emergency: 800-592-2000 or 844-726-7562
New Service: 1-888-633-3797 (1-888-need pwr)
Customer Support: 1-800-340-9822

WAKEFIELD MUNICIPAL GAS AND LIGHT

Dave Polson
781-812-8128
dpolson@wmgld.com

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.**

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

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.

- Ensure tree removal is limited to that specified in project drawings 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.

    a. **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.**

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

- **Bridge AMM 2 - Colony or Assuming Presence of Bats**

    a. 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:

        i. 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).

        ii. 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**

    a. 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:

        i. 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).

        ii. 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).

        iii. 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.

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 30µg/m3.

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.

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 102.11 SELECTIVE CLEARING AND THINNING AT BRIDGES SQUARE YARD

The Work under this Item shall conform to the relevant provisions of Subsection 100 of the Standard Specifications and the following:

The work includes the removal and disposal of any vegetation, trees, or other debris as noted in the project drawings or as designated by the Engineer.

SUBMITTALS

No submittals are required for this Item.

METHOD OF MEASUREMENT

Item 102.11 will be measured for payment by the SQUARE YARD of vegetation, trees or other debris removed.

BASIS OF PAYMENT

Item 102.11 will be paid at the contract unit price per SQUARE YARD, which price shall be considered full compensation for all labor, tools, equipment, materials, loading, transportation, and incidentals required to complete the work.

ITEM 114.01	**DEMOLITION OF MEDIAN SUPERSTRUCTURE OF BRIDGE NO. B-29-011**	**LUMP SUM**
ITEM 114.02	**DEMOLITION OF MEDIAN SUPERSTRUCTURE OF BRIDGE NO. L-19-004**	**LUMP SUM**
ITEM 114.03	**DEMOLITION OF MEDIAN SUPERSTRUCTURE OF BRIDGE NO. L-19-007**	**LUMP SUM**
ITEM 114.04	**DEMOLITION OF MEDIAN SUPERSTRUCTURE OF BRIDGE NO. W-43-031**	**LUMP SUM**

The Work under these Items shall conform to the relevant provisions of Subsection 112 of the Standard Specifications, the General Requirements for Demolition and Work Involving Painted Steel (included in this document) and the following:

The work under these Items includes the removal and disposal of all existing median superstructures, as designated on the project Drawings, or as directed by the Engineer.

The work to determine the exact limits and locations of all areas to be removed shall be under the direction and to the satisfaction of the Engineer. Approximate areas are marked on the Contract Drawings.

Only two bridge locations may be under active repair at any time during the duration of the Contract.

CONSTRUCTION METHODS (REMOVAL)

Limits of Work

Removal of the existing median superstructure will encompass the entire existing median structure, including grating, purlins, and bearings, as shown on the project drawings or as directed by the Engineer. Anchor bolts at bearings and other locations shall be cut and ground flush to the concrete surface to remain.

Removal of the existing barriers and/or guardrails at the medians shall be paid for under separate Items as shown on the Contract Drawings.

Removal Procedure

During the prosecution of the work under this Item, the Engineer may reject the use of any method or equipment that causes undue vibration or possible damage to adjacent structures.

The Contractor shall perform all removal in such a manner as to maintain the safety of traffic operating in the vicinity.

Requirements for removal methods can be found in the General Requirements for Demolition and Work Involving Painted Steel (included in this document)

ITEMS 114.01, 114.02, 114.03, & 114.04 (Continued)

Environmental Compliance

The Contractor shall comply with all rules, regulations, laws, permits and ordinances of all authorities having jurisdiction including, but not limited to, Massachusetts Department of Environmental Protection, the U.S. Environmental Protection Agency, Federal Department of Transportation (DOT), Massachusetts Water Resources Authority (MWRA), the Commonwealth of Massachusetts and other applicable local, state, and federal agencies governing environmental compliance.

The Contractor shall take all necessary precautions to prevent debris from demolition related activities from entering storm sewer system. All materials must be collected, removed from the site, and disposed of legally.

Whenever there is a conflict or overlap within the regulations, the most stringent provisions are applicable. The Contractor shall reimburse MassDOT for all costs it incurs, including penalties and/or for fines, because of the Contractor's failure to adhere to the regulations, specifications, recognized standard practices, etc., that relate to contaminated material handling, transportation, and disposal. In the event of an environmental incident or violation the Contractor shall document the issue, perform emergency remediation, notify the Engineer, and await further direction prior to continuing work.

SUBMITTALS

The Contractor shall submit, for approval by the Engineer, demolition procedures that specify traffic management, equipment, temporary shielding, and scaffolding to be used at each median location.

Submittals shall include any necessary temporary shielding around utilities at the various locations. No utility relocation is anticipated as part of this project. Utilities to be protected by Contractor are shown on the Contract Drawings.

BASIS OF PAYMENT

Items 114.01, 114.02, 114.03 & 114.04 will be paid at the contract LUMP SUM price, which price shall be considered full compensation for cleaning, materials, labor, lighting, temporary shielding, equipment, tools, scaffolding, and all other incidentals required to complete the work.

This price shall also include the cost of demolition and disposal of all associated median superstructure elements.

Any required temporary shielding or protection of existing utilities shall be incidental to this Item.

ITEM 127.1 REINFORCED CONCRETE EXCAVATION CUBIC YARD

The work under this Item shall conform to the relevant provisions of Subsections 120 and 482 of the Standard Specifications and the following:

The work includes the removal and satisfactory disposal of all delaminated, loose, deteriorated or otherwise unsatisfactory concrete of the following bridge elements, as designated on the Contract Drawings, or as directed by the Engineer:

1. Reinforced concrete rigid frames.
2. Areas as designated by the Engineer.

The work shall include an existing concrete conditions survey, e.g., hammer sounding, that shall be undertaken by the Contractor of all vertical and horizontal faces of the legs and frame of the reinforced concrete rigid frames to be repaired, under the direction and to the satisfaction of the Engineer, to determine the exact limits and locations of all areas to be removed and repaired. Approximate areas are marked on the Contract Drawings.

Where deteriorated areas are identified by the Contractor and are acknowledged by the Engineer as requiring a repair, the Engineer shall provide the Contractor with all the necessary repair details.

CONSTRUCTION METHODS (REMOVAL)

The Contractor shall perform their own evaluations of existing concrete conditions and shall mark out areas of unsound concrete. Methods for evaluation shall include non-destructive methods such as visual observations and acoustic impact methods. The Contractor is referred to ACI Report 201.1R-92 "Guide for Making a Condition Survey of Concrete in Service" and ACI Report 364.1R-94 "Guide for Evaluation of Concrete Structures Prior to Rehabilitation" regarding evaluation methods.

Before any existing concrete is removed, the Contractor shall provide the Engineer clear access to the areas designated for repair. The Engineer will perform an inspection of the areas and will approve and/or designate the areas where concrete removal and repair will be required. It shall be the Contractor’s responsibility to inform the Engineer, in writing, of the date when the structure will be available for inspection. Notification shall be given to the Engineer at least seven (7) days prior to the date the structure will be ready for inspection.

The Contractor will not be allowed to commence any repair work until all inspection operations have been performed, unless given permission by the Engineer. The costs for all inspection access shall be considered incidental to this Item.

ITEM 127.1 (Continued)

Equipment

Concrete removal equipment shall be of the following types:

Concrete Removal (including underside of frame, copings, etc.)

Pneumatic and Power-Driven Chipping Hammers: In no event shall any pneumatic or power hammer weighing in excess of twenty-five (25) pounds be used for the removal of concrete.

Pneumatic or power hammers heavier than the nominal fifteen (15) pound class shall not be used for removing concrete from below any reinforcing steel.

The Engineer may reject the use of any methods or equipment that causes undue vibration or possible damage to the structure or any part of the structure during the work.

Deteriorated Concrete Removal

The lateral limits of each area to be repaired will be marked by the Contractor and subsequently approved by the Engineer. Where several areas to be excavated are very close together (less than 12" between repair areas) the Contractor shall combine these individual repair areas into a single larger area. The Engineer may designate additional repair areas to be combined during inspection.

The outlines of each repair area shall first be sawcut to a depth of 3/4" with an approved power-saw capable of making straight cuts prior to chipping and excavating. In the event that reinforcing steel is encountered within the outer 3/4" depth during sawing operations, the depth of sawcut shall immediately be adjusted to a shallower depth so as not to damage the steel bars. If so, directed by the Engineer, sawcutting shall again be carried down to the 3/4" depth at other locations of repair provided reinforcing steel is not again encountered. Where over-breakage occurs resulting in a featheredge, the featheredge shall be squared up to a vertical edge in an approved manner. Where sawing is impractical, the area shall be outlined by chisel or other approved means.

Delaminated concrete as well as loose and deteriorated concrete within spalled and scaled areas shall be chipped away back to sound concrete as directed by the Engineer. If no reinforcement is present, deteriorated concrete shall be removed to sound concrete. Where one-half or more of the bar diameter is exposed, the concrete shall be removed to a minimum of one (1) inch behind the innermost layer of exposed reinforcing steel.

Minimum depth of excavation to sound concrete shall be one inch (1") beyond the inner most layer of reinforcing steel. The Contractor shall stop excavating deteriorated concrete when the depth of excavation reaches four inches (4") and shall notify the Engineer immediately.

The Contractor shall take all measures necessary to protect vehicular and/or pedestrian traffic from construction operations. No debris, tools, or incidental equipment of any kind will be permitted to fall into or occupy areas where vehicular and/or pedestrian traffic exists.

ITEM 127.1 (Continued)

The Contractor shall take all precautions necessary so as not to damage those portions of the structures that are to remain. Exposed reinforcing shall remain in place except where specifically indicated for removal by direction of the Engineer. Extreme care shall be taken where reinforcing steel is uncovered not to damage the steel or its bond in the surrounding concrete. Pneumatic tools shall not be placed in direct contact with reinforcing steel to remain. Any existing reinforcing steel to remain that is damaged as a result of the Contractor's operations shall be repaired to the satisfaction of the Engineer and at no additional cost to the Department. Any damage to adjacent sound concrete incurred outside the repair area through negligence by the Contractor and not acknowledged by the Engineer as being an extension of the repair area, shall be repaired by the Contractor at no cost to MassDOT.

After the designated portions of the existing unsound concrete have been removed, the exposed concrete surface shall be cleaned of all loose particles and loose rust by abrasive blasting, or other approved means, prior to placing the proposed repair materials. Surface preparation should be in accordance with the requirements of the patch material being installed, refer to concrete repair Items.

The Contractor shall have the approval of the Engineer certifying that all spalled and deteriorated concrete has been removed prior to commencing repairs.

The Contractor shall not allow for any grit or dust to escape the work area in a visible cloud or plume. All debris, dust, and grit shall be contained by draping the work area or other approved means and shall be collected and removed from the work area.

SUBMITTALS

The Contractor shall submit, for approval by the Engineer, reinforced concrete excavation procedures that specify traffic management, equipment, temporary shielding, and scaffolding to be used at each repair location.

METHOD OF MEASUREMENT

Item 127.1, Reinforced Concrete Excavation will be measured for payment by the CUBIC YARD of excavated reinforced concrete.

Locations where Reinforced Concrete Excavation shall be applicable are along the underside of each rigid frame, the legs (abutments) of each rigid frame, and any miscellaneous areas designated by the Engineer, including areas beyond the limits shown on the Contract drawings at the existing bridge railing locations paid for under Items 140.11 through 140.20.

ITEM 127.1 (Continued)

BASIS OF PAYMENT

A. Reinforced Concrete Excavation will be paid at the contract unit price per CUBIC YARD, which price shall be considered full compensation for all concrete removal from site and proper disposal, cleaning, materials, labor, lighting, temporary shielding, equipment, tools, scaffolding, drawings, submittals and all incidentals required to complete the repair work, as specified in the project drawings and in these Special Provisions.

   The edges of all areas where concrete is removed under this Item shall be sawcut to a minimum depth of 3/4" prior to chipping and excavation and all costs in connection with such work shall be incidental to these Items.

   Inspection access shall be considered incidental to this Item.

B. All areas of concrete excavation outside the limits shown on the Contract drawings at the existing bridge railing locations paid for under Items 140.11 through 140.20 shall be paid under this Item.

   Excavation within the contract limits of Items 140.11 through 140.20 shall not be paid under this Item.

ITEM 140.11	**BRIDGE EXCAVATION ALONG RAILING BRIDGE NO. B-29-011 (BIN 2EW)**	**LUMP SUM**
ITEM 140.12	**BRIDGE EXCAVATION ALONG RAILING BRIDGE NO. B-29-011 (BIN 2EX)**	**LUMP SUM**
ITEM 140.13	**BRIDGE EXCAVATION ALONG RAILING BRIDGE NO. L-19-004 (BIN 2W4)**	**LUMP SUM**
ITEM 140.14	**BRIDGE EXCAVATION ALONG RAILING BRIDGE NO. L-19-004 (BIN 2W5)**	**LUMP SUM**
ITEM 140.15	**BRIDGE EXCAVATION ALONG RAILING BRIDGE NO. L-19-007 (BIN 2W6)**	**LUMP SUM**
ITEM 140.16	**BRIDGE EXCAVATION ALONG RAILING BRIDGE NO. L-19-007 (BIN 2W7)**	**LUMP SUM**
ITEM 140.17	**BRIDGE EXCAVATION ALONG RAILING BRIDGE NO. L-19-011 (BIN 2FD)**	**LUMP SUM**
ITEM 140.18	**BRIDGE EXCAVATION ALONG RAILING BRIDGE NO. W-01-008 (BIN 2FJ)**	**LUMP SUM**
ITEM 140.19	**BRIDGE EXCAVATION ALONG RAILING BRIDGE NO. W-43-031 (BIN 2F6)**	**LUMP SUM**
ITEM 140.20	**BRIDGE EXCAVATION ALONG RAILING BRIDGE NO. W-43-031 (BIN 2F7)**	**LUMP SUM**

The work under these Items shall conform to the relevant provisions of Subsections 120, 482, and 901 of the Standard Specifications and the removal or excavation of the following bridge elements:

1. Metal bridge railings or Highway Guardrail.
2. Reinforced concrete copings and barriers.
3. Bridge pavement.
4. Bridge subbase or fill.

The work includes the removal and satisfactory disposal of all delaminated, loose, deteriorated or otherwise unsatisfactory concrete of the reinforced concrete copings and barriers, as designated on the Contract Drawings, or as directed by the Engineer.

Metal Bridge Railings or Highway Guardrail to be Removed

The work shall consist of the removal and disposal of all existing metal bridge railing or highway guardrail as designated on the Contract Drawings, or as directed by the Engineer.

The work to determine the exact limits and locations of all areas to be removed shall be under the direction and to the satisfaction of the Engineer. Approximate areas are marked on the Contract Drawings. The metal bridge railings extend the full length of the fascia at each bridge.

ITEMS 140.11 thru 140.20 (Continued)

Construction Methods - Removal Procedure

During the prosecution of the work under this Item, the Engineer may reject the use of any method or equipment that causes undue vibration or possible damage to adjacent structures.

The Contractor shall perform all removal in such a manner as to maintain the safety of traffic operating in the vicinity.

Anchor bolts at existing railing or guardrail post bases and other locations along the railings shall be ground flush to the concrete surface to remain and shall not be removed unless directed by the Engineer.

Construction Methods - Environmental Compliance

The Contractor shall comply with all rules, regulations, laws, permits and ordinances of all authorities having jurisdiction including, but not limited to, Massachusetts Department of Environmental Protection, the U.S. Environmental Protection Agency, Federal Department of Transportation (DOT), Massachusetts Water Resources Authority (MWRA), the Commonwealth of Massachusetts and other applicable local, state, and federal agencies governing environmental compliance.

The Contractor shall take all necessary precautions to prevent debris from demolition related activities from entering storm sewer system. All materials must be collected, removed from the site, and disposed of legally.

Whenever there is a conflict or overlap within the regulations, the most stringent provisions are applicable. The Contractor shall reimburse MassDOT for all costs it incurs, including penalties and/or for fines, because of the Contractor's failure to adhere to the regulations, specifications, recognized standard practices, etc., that relate to contaminated material handling, transportation, and disposal. In the event of an environmental incident or violation the Contractor shall document the issue, perform emergency remediation, notify the Engineer, and await further direction prior to continuing work.

Reinforced Concrete Barriers and Copings to be Removed

The work shall consist of the removal and disposal of all existing reinforced concrete barriers and copings as designated on the Contract Drawings, or as directed by the Engineer.

Equipment for Concrete Removal

Concrete removal equipment shall be of the following types:

Pneumatic and Power-Driven Chipping Hammers: In no event shall any pneumatic or power hammer weighing in excess of twenty-five (25) pounds be used for the removal of concrete.

ITEMS 140.11 thru 140.20 (Continued)

Pneumatic or power hammers heavier than the nominal fifteen (15) pound class shall not be used for removing concrete from below any reinforcing steel.

The Engineer may reject the use of any methods or equipment that causes undue vibration or possible damage to the structure or any part of the structure during the work.

Concrete Removal

The majority of concrete removal is to existing cold joints in the reinforced concrete barriers and copings, therefore limits of removal shall be to existing cold joints unless otherwise shown on the Construction Drawings or directed by the Engineer.

At locations where existing concrete is to remain, the outlines of each removal area shall first be sawcut to a depth of 3/4" with an approved power-saw capable of making straight cuts prior to chipping and excavating. In the event that reinforcing steel is encountered within the outer 3/4" depth during sawing operations, the depth of sawcut shall immediately be adjusted to a shallower depth so as not to damage the steel bars. If so, directed by the Engineer, sawcutting shall again be carried down to the 3/4" depth at other locations of repair provided reinforcing steel is not again encountered. Where over-breakage occurs resulting in a featheredge, the featheredge shall be squared up to a vertical edge in an approved manner. Where sawing is impractical, the area shall be outlined by chisel or other approved means.

Demolition within the limits shown on the contract drawings will be paid under this Item.

Demolition beyond the limits shown on the contract drawings will be paid under Item 127.1 and measured per cubic yard removed. Item 127.1 provides information regarding procedures for delaminated concrete or exposed rebar encountered beyond the limits of concrete removal shown on the project drawings.

The Contractor shall take all measures necessary to protect vehicular and/or pedestrian traffic from construction operations. No debris, tools, or incidental equipment of any kind will be permitted to fall into or occupy areas where vehicular and/or pedestrian traffic exists.

Existing Dowels

At locations of removal of existing barriers and copings, existing bridge dowels are to remain for reuse in retrofit barrier repairs. Contractor shall excavate reinforced concrete around existing dowels to the limits shown on the Contract Drawings. Any dowels that are damaged during removal shall be replaced with mechanical splicers at no additional cost to the Department.

Existing Steel Curbing

Removal of all existing steel bent plate curbing along the existing reinforced concrete sidewalks, barriers and other traffic safety features designated for removal shall be incidental to these Items.

ITEMS 140.11 thru 140.20 (Continued)

Bridge Pavement to be Removed

The work shall include the removal of the hot mix asphalt along the existing bridge railings and medians in accordance with the details shown on the Contract Drawings, as specified herein and as directed by the Engineer.

Construction Methods - Limits of Removal

The existing bituminous concrete will be removed from the areas adjacent to existing bridge railings and medians as indicated in the Contract Drawings and as required to facilitate the concrete excavation and proposed construction.

Construction Methods - Removal Procedure

During the prosecution of the work under this Item, the Engineer may reject the use of any method or equipment that causes undue vibration or possible damage to adjacent structures.

Hot mix asphalt will be removed from along the existing bridge railings and medians to the extent shown on the Contract Drawings or as directed by the Engineer. The Contractor shall perform all removal in such a manner as to maintain the safety of traffic operating in the vicinity.

The edges of all areas where existing asphalt is removed under this Item shall be sawcut to a depth of 1 inch. The Contractor shall submit to the Engineer for approval the type of machine that will be used. Concrete rigid frame damaged by the Contractor's operations shall be repaired at the Contractor's own expense.

Existing Subbase or Fill to be Removed

The work shall include the removal of the existing subbase and/or fill in place below the bridge pavement located along the existing bridge railings and medians in accordance with the details shown on the Contract Drawings, as specified herein and as directed by the Engineer.

Construction Methods - Limits of Removal

The existing subbase or fill will be removed from the areas adjacent to existing bridge railings and medians as indicated in the Contract Drawings and as required to facilitate the concrete excavation and proposed construction.

ITEMS 140.11 thru 140.20 (Continued)

Construction Methods - Removal Procedure

During the prosecution of the work under this Item, the Engineer may reject the use of any method or equipment that causes undue vibration or possible damage to adjacent structures.

Existing subbase and/or fill shall be removed in conjunction with the removal of all hot mix asphalt to be removed from along the existing bridge railings and medians to the extent shown on the Contract Drawings or as directed by the Engineer. The Contractor shall perform all removal in such a manner as to maintain the safety of traffic operating in the vicinity.

SUBMITTALS

The Contractor shall submit, for approval by the Engineer, demolition procedures that specify traffic management, equipment, temporary shielding, and scaffolding to be used at each repair location.

BASIS OF PAYMENT

Items 140.11 thru 140.20 will be paid at the contract LUMP SUM price at each BIN of completed excavation along the existing bridge barrier or railing (on bridge and wingwalls), including all Reinforced Concrete Excavation, Bridge Pavement Excavation, Bridge Excavation, Metal Bridge Railing Removal, and/or Highway Guardrail Removal.

Payment for these Items of work shall constitute full compensation for all concrete removal from site and proper disposal, cleaning, materials, labor, lighting, temporary shielding, equipment, tools, earth support, sawcutting, submittals and all incidentals required to complete the repair work, as specified on the project drawings and in these Special Provisions.

For areas of reinforced concrete removed beyond the limits shown on the project drawings, removal shall be paid for under Item 127.1.

ITEM 184.1 DISPOSAL OF TREATED WOOD PRODUCTS TON

Work under this Item shall include the transportation and disposal of all treated existing wood product as directed by the Engineer. The timber components of the existing structure, including the existing guardrail posts, are suspected to be treated with creosote, pentachlorophenol and/or CCA.

This Item shall include all costs for sampling, laboratory testing, loading, transportation and disposal of the treated wood.

CONSTRUCTION METHODS

Limits of Removal

Treated wood products including guardrail posts and associated timber bridge elements will be removed from the areas adjacent to existing bridge railings and medians as indicated in the Contract Drawings.

Removal Procedure

During the prosecution of the work under this Item, the Engineer may reject the use of any method or equipment that causes undue vibration or possible damage to adjacent structures.

The Contractor is required to submit disposal manifests to the Engineer prior to the completion of the project. All aspects of this Item are to be completed in accordance with state and federal regulations.

Removal of all treated wood is covered under Items 140.11 to 140.20.

METHOD OF MEASUREMENT

Item 184.1 will be measured for payment by the weight, in TONs, of treated timber transported and accepted at a licensed facility, as indicated by manifest sheets submitted.

BASIS OF PAYMENT

Item 184.1 will be paid for at the contract unit price per TON, which price shall be considered full compensation for all labor, tools, equipment, materials, testing, loading, transportation, approvals, and permits necessary for the completion of the work.

Removal of all treated wood will be paid for under respective Items 140.11 through 140.20.

ITEM 697.1 SILT SACK EACH

The 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 at each bridge location within the project limits and as required by the Resident Engineer.

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

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:

Three (3) computer systems and a 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 able to perform 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 (RADF)
- 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 (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.

BASIS OF PAYMENT

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 765.411 SHORT GRASSLAND SEED MIX SQUARE YARD

Work under this Item shall consist of furnishing and seeding the mix specified below in the required quantity at each bridge location and as shown on the project drawings.

SUBMITTALS

1) Pre-Verification of Seed Availability. Within 30 days after the Notice to Proceed, the Contractor shall submit to the Engineer the supplier's verification of availability of seed species in the required quantities and for the anticipated date of seeding. Verification shall be on the supplier's letterhead and notarized by the supplier's notary. Species not expected to be available should be noted and substitutions recommended.

2) Final Verification of Seed Availability. No earlier than 21 days prior to ordering, the Contractor shall submit to the Engineer the supplier's verification of availability of seed species and in the required quantities. Verification shall be on the supplier's letterhead and notarized by the supplier's notary. A copy of this submittal shall be forwarded to the MassDOT Landscape Design Section. Substitutions or changes in the mix at this time must be approved by MassDOT Landscape Design Section.

3) Seed Worksheet provided herein shall be submitted to the Engineer prior to ordering seed to determine the number of pounds of Pure Live Seed required.

4) Seed Tags. The Contractor shall submit original seed tags from each bag of seed used on the project or ensure that each tag is photo documented by the Engineer while on the unopened bag.

   Number of tags submitted must correspond to number of bags delivered.

   Species listed on the seed tag shall match the Final Verification of Seed Availability (Submittal #2) unless approved otherwise. Tag must include: variety and species name; lot number; purity; percentage of inert matter; percentage of weeds, noxious seeds, and other crop seeds; germination, dormant or hard seed; total viability; origin of seed; germination test date, net weight, and name and address of seller. The origin of seed must be listed on the seed tag for all species in the mix to provide verification of original (generation 0) seed source. The smallest known geographic area (township, county, ecotype region, etc.) shall be listed. Ecotypes and cultivars shall be as close to Massachusetts as possible and appropriate to the site conditions.

   A copy of this submittal shall be forwarded to the MassDOT Landscape Design Section.

5) Verification of Seed Delivery. Prior to payment, the Contractor shall submit the Seed Delivery Verification form contained within the contract or the Supplier's Verification on company letterhead or a bill of lading. Supplier verification must include all information requested on the Verification form within this contract. The bill of lading must include variety and species name, lot number, net weight shipped, date of sale, invoice, project or seeding location, and name and address of Supplier. All information must be filled in and complete for acceptance. Information must match the seed tags and quantity of seed used on the job. A copy of this submittal shall be forwarded to the MassDOT Landscape Design Section.

ITEM 765.411 (Continued)

6) Seed Sample. If requested or if seed is from a previously opened bag, the Contractor may be asked to submit to the Engineer a sample of seed from the seed bag (1-2 cups) at the time of seeding.

SEEDING SEASON

The appropriate seeding seasons are:

Spring: April 1 - May 15

Fall: October 1 - December 1 for dormant seeding

PERMANENT SEED MIX(ES)

Calculating Pure Live Seed (PLS)

Quantities specified are PURE LIVE SEED. Greater quantities of ordered seed may be required to achieve actual specified seeding rates.

Pure Live Seed (PLS) is defined as a percentage calculated by multiplying the percent of pure seed by the percent of viable seed (total germination, hard seed, and dormant seed).

For example:

If a seed label indicates 90% purity, 78% germination, 10% hard seed, and 2% dormancy, it is calculated to be 90% x [78 + 10 + 2]% = 81% PLS.

Therefore, each pound of PLS would need 1 pound / 0.81 = 1.2 pounds of seed with a 90% purity and 90% total germination

Seed Mix(es) shall be as specified below. Ecotypes and cultivars shall be as close to Massachusetts as possible and appropriate to the site conditions.

ITEM 765.411 (Continued)

765.411 Short Grassland Mix

	Botanical Name	Common Name	% PLS by Weight
Grass			
	Schizachyrium scoparium 'Albany Pine'	Little Bluestem 'Albany Pine'	57.00%
	Elymus virginicus	Virginia Wild Rye	27.00%
	Festuca rubra	Creeping Red Fescue	9.00%
	Agrostis perennans	Upland Bentgrass	1.20%
	Dichanthelium clandestinum 'Tioga'	Deertongue grass 'Tioga'	1.00%
	Eragrostis spectabilis 'RI Ecotype'	Purple Lovegrass 'RI Ecotype'	1.00%
			96.20%
Herb/Forb			
	Chamaecrista fasciculata	Partridge Pea	2.30%
	Penstemon digitalis	Beard-tongue	0.50%
	Solidago nemoralis	Grey Goldenrod	0.30%
	Aster pilosus	Heath Aster	0.10%
	Pycnanthemum tenuifolium	Slender Mountain Mint	0.10%
	Oenothera fruticosa var. fruticosa	Sundrops	0.10%
	Achillea millefolium	Common Yarrow	0.10%
	Aster lateriflorus	Calico Aster	0.10%
	Solidago bicolor	White Goldenrod	0.10%
	Aster laevis NY Ecotype	Smooth Aster NY Ecotype	0.10%
			3.80%
			100.00%
	Seeding Rate: 15.0 lbs PLS/Acre		

In addition, apply 30 pounds of cover crop (grain oats or grain rye) as appropriate to the season.

Any species substitutions shall be with a species having similar characteristics and function.

Substitutions must be approved by MassDOT Landscape Design Section per the documentation submittal process.

METHOD OF MEASUREMENT

Item 765.411, Short Grassland Mix will be measured for payment by the area actually seeded in SQUARE YARDs at each bridge location.

BASIS OF PAYMENT

Item 765.411, Short Grassland Mix will be paid at the contract unit price per SQUARE YARD, which price shall be considered full compensation for all labor, materials, maintenance, tools, equipment and incidentals necessary for a satisfactory installation, inspection, maintenance, periodic cleaning and disposal of sediments, and final removal and disposal at the completion of the project.

ITEM 765.411 (Continued)

NATIVE SEED WORKSHEET

Project Description: _____ Project No: _____

Contractor: _____ Contract No: _____

Seed Mix Number & Description: _____

Contractor: Complete Prior To Ordering

Pounds of Seed Required Per Contract:

_____lbs./acre for _____Acre(s) OR _____ SY

Additional 50% increase if required (out of season or seeding over compost blanket):

_____**lbs. Total Seed Required**

Calculated Quantity for **P**ure **L**ive **S**eed (PLS[1]):

_____ **Total Pounds PLS**

Engineer: Verification at Time of Application

Number pounds delivered to site[2]: _____ Date(s): _____

Actual Seed Bag Tag/s Received or photo documented by Engineer: _____

[1] PLS=% pure seed x % viable seed (total germination, hard seed, and dormant seed).
*[2]Quantity delivered should match pounds **Total Pounds PLS** and **Verification of Seed Delivery**. Pounds should be shown on each Seed Tag.*

ITEM 765.411 (Continued)

SUPPLIER VERIFICATION OF SEED DELIVERY FOR MASSDOT PROJECTS

Date_____

We hereby certify that (*Seed Supplier*):_____

Furnished to (*Contractor*): _____

For use on: (*Project Description*) _____

Project #: _____ Contract #: _____

Pounds of Pure Live Seed: _____

Of Mix (*Description*): _____

Lot Number _____

The material was delivered on (*Date*)_____.

The labels and contents meet all State and Federal regulations. The mixture consists of the following species, including cultivars (as applicable) and ecotype region, and at the following percentages (may be attached separately):

Name (print): _____ Title: _____

Supplier: _____

Signature and Seal: _____

ITEM 852.11 TEMPORARY PEDESTRIAN BARRICADE FOOT
ITEM 852.12 TEMPORARY PEDESTRIAN CURB RAMP 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 & 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 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 project drawings 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:
   a. TPRS shall be placed perpendicular to the direction of travel, centered in the lane.
   b. Three (3) individual strips are required for a single array.
   c. Refer to the Temporary Traffic Control Plan for the location of the array respective to the lane closure.

ITEM 854.6 (Continued)

d. The spacing of the individual strips shall be 15’ apart.

e. 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 price shall include full compensation for furnishing, deploying, repositioning, and removing the array of three (3) individual strips as directed by the Engineer.

ITEM 859.1 REFLECTORIZED DRUMS WITH SEQUENTIAL FLASHING WARNING LIGHTS DAY

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

Work under this Item consists of furnishing, installing, maintaining in proper operating conditions, and removing reflectorized drums, and any necessary ballast, equipped with sequential flashing warning lights.

MATERIALS

Reflectorized drums shall be listed on the MassDOT Qualified Traffic Control Equipment List.

Reflective sheeting on drums shall meet or exceed ASTM D4956 Type VIII. All drums shall be maintained in a satisfactory manner including the removal of oils, dirt, and debris that may cause reduced retroreflectivity.

The Contractor shall use one of the following sequential flashing warning light systems unless otherwise approved by the Engineer:

1. Empco-Lite LWCSD.
2. pi-Lit® Sequential Barricade-Style Lamp; or
3. Unipart Dorman SynchroGUIDE.
4.

Sequential flashing warning lights shall be secured to reflectorized drums per the light manufacturer's specifications.

CONSTRUCTION METHODS

The first ten (10) drums in any merging or shifting taper as designated in the Temporary Traffic Control Plan shall be equipped with sequential flashing warning lights. These lights shall be operating, at a minimum, between dusk and dawn when the taper is deployed.

The successive flashing of the sequential warning lights shall occur from the upstream end of the merging or shifting taper to the downstream end of the taper in order to identify the desired vehicle path. Each warning light in the sequence shall be flashed at a rate of not less than 55, nor more than 75 times per minute.

Warning lights shall be powered off when drums are not deployed in a taper.

ITEM 859.1 (Continued)

METHOD OF MEASUREMENT

A group of ten (10) reflectorized drums with sequential flashing warning lights 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 that the drums are positioned, repositioned, removed, or returned to service.

BASIS OF PAYMENT

Reflectorized Drums with Sequential Flashing Warning Lights will be paid for at the contract unit price per DAY, which price shall be considered full compensation for furnishing, positioning, repositioning, and removing the group of ten (10) drums as directed by the Engineer.

ITEM 905.001 REPAIRS TO UNDERSIDE OF REINFORCED CONCRETE RIGID FRAMES SQUARE FOOT

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

The Contractor shall establish limits of various repairs through visual inspection and sounding. The location and extent of all concrete repairs are to be verified and approved by the Engineer after the Contractor has sounded and marked out the proposed locations as part of Item 127.1. The proposed repair areas should reasonably follow the outlines of the deterioration and square corners are preferred.

The work shall consist of forming and placing single component, shrinkage-compensated mortar repair material that is pre-extended, polymer modified and contains an integral corrosion inhibiting admixture. It shall be used for overhead and vertical surface repairs as directed by the Engineer.

The Contractor shall be experienced in this type of work and present proof of such experience by providing written documentation listing several projects on which single component shrinkage compensated micro concrete was satisfactorily placed under his supervision. The mortar shall be applied by workmen who, in the judgment of the Engineer, are sufficiently experienced and skilled in this class of work.

Material

The repair mortar shall consist of pre-blended components that shall only require the addition of a prescribed quantity of potable water prior to mixing and placement in the forms. The repair mortar shall provide the following physical properties based on Independent Test Results performed within the last three (3) years.

PROPERTY	RESULTS	TEST METHODS
Fresh Wet Unit Weight	137 to 144 PCF	ASTM C 138
1 Day Compressive strength (2” Cubes)	2200 PSI	ASTM C 109
7 Day Compressive strength (2” Cubes)	5000 PSI	ASTM C 109
28 Day Compressive strength (2” Cubes)	6000 PSI	ASTM C 109
28 Day Compressive strength (3” x 6” Cylinders)	5000 PSI	ASTM C 39
Flexural Strength at 28 Days	1100 PSI	ASTM C 348
Slant Shear Bond Strength at 7 Days Slant Shear Bond Strength at 28 Days	1750 PSI 2400 PSI	ASTM C882 (modified[1])
Splitting Tensile Strength at 28 Days	500 PSI	ASTM C496
Drying Shrinkage at 28 Days	700 Micro Strain	ASTM C157 (modified)
Freeze/Thaw Resistance % RDM[2]	95	ASTM C 666
Rapid Chloride Permeability at 28 Days	Less Than 1000 Coulombs	ASTM C 1202

[1] No Bonding Agent
[2] Relative Dynamic Modulus

ITEM 905.001 (Continued)

The repair mortar shall conform to EPA/USPHS Standards for surface contact with potable water, shall not produce a vapor barrier, and shall be thermally compatible with concrete.

The Contractor shall furnish notarized certification that all materials conform to the above requirements.

Mixing

Thorough mixing of the repair mortar is required. A forced-action mixer is essential. Mixing in a suitably sized container using an appropriate paddle with a slow speed (400-500 rpm) heavy-duty drill is acceptable. Free-fall mixers must not be used. Only full bags shall be mixed and used. It is essential that machine mixing capacity and the crew size is adequate to enable the placing operation to be carried out continuously. Mechanically mix in appropriate sized mortar mixer or with electric drill and paddle.

Temperature Restrictions

The mixing shall be carried out in accordance with the manufacturer's specifications. The repair mortar shall not be mixed and placed when air or substrate temperatures are below 45°F. Cold weather protection shall be provided in accordance with Subsection 901.64 C of the Standards. Hot weather protection shall be provided in accordance with Subsection 901.64 A of the Standards.

Preparation of Substrate Surfaces

The edges of the areas to be repaired shall be saw cut to a minimum depth of 3/4" to avoid feather edging and to provide a squared edge. All deteriorated, scaling, loose or unsound concrete shall be removed by mechanical or hand chipping. The remaining surface shall be free of oil, grease, paint, corrosion deposits, dust, laitance or other surface contamination. The effectiveness of the cleaning shall be verified with a pull-off test. No method of surface preparation shall be used that could damage sound concrete.

All reinforcing steel shall be abrasively blast cleaned in accordance with the ICRI Technical Guideline No. 03730 "Guide for Surface Preparation for the Repair of Deteriorated Concrete Resulting from Reinforcing Steel Corrosion"

The Contractor shall have the approval of the Engineer certifying that all spalled and deteriorated concrete has been removed prior to repairing the deteriorated areas; all reinforcing steel is satisfactorily cleaned.

ITEM 905.001 (Continued)

Forming and Placement of Repair Mortar

1. All formwork shall be rigid and tight to prevent loss of material. All forming shall be designed by a Professional Engineer that is registered in Massachusetts. All elements of the formwork and anchorages shall be designed for a pressure of 12 PSI. All submittals shall be reviewed and approved by the District Bridge Engineer.
2. The forms shall be watertight with perimeters lined with foam gasket material.
3. Form ports for pumping the mortar shall be placed no greater than 4 feet on center. Venting ports shall be placed no more than 2 feet on center.
4. The formwork shall include drainage outlets for presoaking of the substrate.
5. Form detailing shall allow for a minimum of 1-1/2" cover over all steel.
6. A suitable form release agent shall be used to facilitate the removal of forms from the cast material.
7. The forms shall be filled with clean water 24 hours prior to the mortar placement.
8. Immediately before placing, the water shall be drained and the drainage outlets sealed, leaving the substrate saturated surface dry (SSD) with no ponded water remaining.
9. In jobsite circumstances where the formwork cannot be filled with water, spray the substrate with clean water to achieve a saturated surface dry (SSD) condition immediately before placing the mortar.
10. The pump shall be capable of continuous even flow of mortar into the repair cavity without having any line surge. Line surge will result in possible air voids and segregation.
11. Prior to pumping mortar, all hoses must be pre-wetted with clean water to ensure that initial flow properties are maintained.
12. The pumping distance must be kept to a minimum. The pumping hoses shall be a minimum diameter of 3 times to size of the largest aggregate and the minimum size permitted shall be 1" diameter.
13. The pump pressure shall be limited to the minimum necessary to completely fill the cavity with repair mortar.
14. Immediately after mixing, pump the repair mortar into the formed area.
15. District personnel shall cast (6) 2-inch by 2-inch cubes to determine that 1 and 7 day compressive strength results meet the requirements of the performance criteria.

Curing

1. Formwork shall remain in place until a minimum compressive strength of 2500 psi is reached, or 5 days, whichever is greater.
2. If the repair area is not to receive a protective coating, an approved curing compound shall be applied to the repair area upon form removal.
3. If the repair area is to receive a protective coating, polyethylene sheeting shall be applied to the repair area and the sheeting perimeter shall be taped down until the completion of a 7 day curing period.

ITEM 905.001 (Continued)

Manufacturer's Field Representative

1. The Contractor shall arrange with the mortar manufacturer to have the services of a competent field representative at the work site prior to any mixing of components to instruct the work crews in the proper mixing and application procedures. The field representative shall remain at the job site after work commences to instruct until she/he and the 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 Engineer.
2. The Manufacturer's Field Representative must be fully qualified to perform the work and shall be subject to the approval of the Engineer.
3. The Contractor shall be completely responsible for the expense of the services of the required field representative and the bid contract price shall be full compensation for all costs in connection therewith.

METHOD OF MEASUREMENT

Item 905.001, Repairs to Underside of Reinforced Concrete Rigid Frames will be measured for payment by the SQUARE FOOT of repair area, completed in place.

Forming of the repair areas and pre-wetting of the substrate shall be considered incidental to the work and shall not be measured for payment.

BASIS OF PAYMENT

Item 905.001, Repairs to Underside of Reinforced Concrete Rigid Frames will be paid for at the Contract Unit Price per SQUARE FOOT.

All excavation shall be paid for under Item 127.1.

Any temporary support or protection of utilities shall be considered incidental to Items 114.01, 114.02, 114.03, and 114.04. No further payment shall be made under this Item for protection of existing utilities.

ITEM 992.11	**ALTERATION TO BRIDGE NO. B-29-011 (BIN 2EW)**	**LUMP SUM**
ITEM 992.12	**ALTERATION TO BRIDGE NO. B-29-011 (BIN 2EX)**	**LUMP SUM**
ITEM 992.13	**ALTERATION TO BRIDGE NO. L-19-004 (BIN 2W4)**	**LUMP SUM**
ITEM 992.14	**ALTERATION TO BRIDGE NO. L-19-004 (BIN 2W5)**	**LUMP SUM**
ITEM 992.15	**ALTERATION TO BRIDGE NO. L-19-007 (BIN 2W6)**	**LUMP SUM**
ITEM 992.16	**ALTERATION TO BRIDGE NO. L-19-007 (BIN 2W7)**	**LUMP SUM**
ITEM 992.17	**ALTERATION TO BRIDGE NO. L-19-011 (BIN 2FD)**	**LUMP SUM**
ITEM 992.18	**ALTERATION TO BRIDGE NO. W-01-008 (BIN 2FJ)**	**LUMP SUM**
ITEM 992.19	**ALTERATION TO BRIDGE NO. W-43-031 (BIN 2F6)**	**LUMP SUM**
ITEM 992.20	**ALTERATION TO BRIDGE NO. W-43-031 (BIN 2F7)**	**LUMP SUM**

The work under these Items shall conform to the relevant provisions of Subsections 629, 975, and 995 of the Standard Specifications and the specific requirements stipulated below for component parts of the subject Item. For those component parts where no specific requirement is stipulated, the Standard Specifications shall apply except for payment.

The work does not include any Items listed separately in the special provisions. Payment for materials shown on the project drawings as being part of the bridge structure or which may be incidental to its construction and are not specifically included for payment under another Item shall be considered incidental to the work performed under this Item and shall be included in the unit price of the component of which they are a part.

Cast-in-Place Barrier – 5000 PSI HP Concrete

The work to be done under this heading shall conform to the relevant provisions of Subsection 629 of the Standard Specifications and the following:

Cast-in-Place Barrier – 5000 PSI HP Concrete shall be used for the proposed barriers at the fascias and medians. The materials shown on the construction drawings to complete the construction of the barrier shall be considered incidental to the cost of the barrier and not measured separately for payment.

No barriers shall be placed until the Engineer approves all aspects of the proposed placement. Modifications must be submitted in writing to the Engineer for approval.

ITEMS 992.11 thru 992.20 (Continued)

Highway Guardrail Transition Base – 5000 PSI HP Concrete

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

Highway Guardrail Transition Base – 5000 PSI HP Concrete shall be used for the proposed highway guardrail transition bases. The materials shown on the project drawings to complete the construction of the highway guardrail transition bases shall be considered incidental to the cost of the highway guardrail transitions and not measured separately for payment.

No highway guardrail transition bases shall be placed until the Engineer approves all aspects of the proposed placement. Modifications must be submitted in writing to the Engineer for approval.

Epoxy Coated Reinforcement

The work to be done under this heading shall conform to the relevant provisions of Subsections 900 and 901 of the Standard Specifications and the following:

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

Temporary Support of Excavation

The work under these Items shall conform to the applicable provisions of Subsections 940, 950 and 955 of the Standard Specifications and the following:

The work shall consist of the design, procurement, installation, and removal of excavation support systems required for excavation. The limits of the excavation support systems shall be designed by the Contractor and submitted for approval by the Engineer.

All permanent and temporary support of excavation that protrudes into the soil that supports the bridge or retaining wall structures shall be left in place. Supporting soil shall be defined as all soil directly below the footing contained within a series of planes that originate at the perimeter of the bottom of the footing and project down and away from the footing at an angle of 45 degrees from the horizontal.

Drilled and Grouted Dowels

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

The work shall consist of drilling holes, furnishing, installing, and grouting of steel dowel reinforcement at the locations shown on the drawings or as required by the Engineer. The work to be done under this Item shall consist of coring and grouting holes for steel reinforcing dowels as shown on the project drawings, or as directed by the Engineer. The dowel embedment must be adequate to fully develop 125% of the yield strength of the bar. The embedment length, the method and equipment used to core the holes, and the diameter of the core hole shall at a minimum conform to the recommendations of the manufacturer and be submitted to the Engineer for approval.

ITEMS 992.11 thru 992.20 (Continued)

Existing Bridge Dimensions

The Contractor shall perform survey at each bridge location to confirm all existing dimensions. No survey was performed as part of this rehabilitation task and all dimensions are based on record drawings. All dimensions for proposed work, including but not limited to wingwall lengths, railing lengths, post spacings, etc., shall be confirmed through survey.

MATERIALS

Grouting material which has been tested, approved and is on the Qualified Construction Materials List shall be used. The QCML can be found at the following link: https://www.mass.gov/info-details/grouts

Reinforcing steel dowels shall meet the requirements of AASHTO M31 Grade 60. All reinforcing steel dowels shall be epoxy coated in accordance with ASTM A775. Reinforcing steel dowels shall be incidental to the work under these Items.

CONSTRUCTION METHODS

All dowel holes shall be drilled with diamond core. 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 dowel hole's inner surfaces shall be subject to the approval of the Engineer. The holes shall be blown clear of any debris with oil-free compressed air and shall have the approval of the Engineer prior to the placement of any grout material.

The drilling operation shall be performed without damage to any portion of the existing structure that is to remain in place and the Contractor shall take all precautions necessary so as not to damage those portions of the structures that are to remain. Exposed reinforcing shall remain in place except where specifically indicated for removal by direction of the Engineer. Extreme care shall be taken where reinforcing steel is uncovered not to damage the steel or its bond in the surrounding concrete. Pneumatic tools shall not be placed in direct contact with reinforcing steel to remain. Any existing reinforcing steel to remain that is damaged as a result of the Contractor's operations shall be repaired to the satisfaction of the Engineer and at no additional cost to the Department. Any damage to adjacent sound concrete incurred outside the repair area through negligence by the Contractor and not acknowledged by the Engineer as being an extension of the repair area, shall be repaired by the Contractor at no cost to MassDOT.

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.

ITEMS 992.11 thru 992.20 (Continued)

Any excessive grout around the hole after placement of the dowel shall be struck off smooth while the grout is still fresh.

The Contractor shall arrange with the materials manufacturer or distributor to have the services of a competent field representative at the work site prior to any coring 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 the 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.

The Contractor shall be completely responsible for the expense of the services of the required field representative and the Contract Unit Price shall be considered as full compensation for all costs in connections therewith.

The Contractor shall have no claim for any variation in the diameter of the hole, the method of coring the hole, or the type of grout used in anchoring the proposed dowels.

TESTING

The Contractor shall perform on site a minimum of one (1) test of the dowels for each barrier location (fascia barrier, median barrier, and one wingwall location for each bridge) for capacity in tension in each location or component. 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. 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.

Snow Fence – 3 Feet High

The work to be done under this heading shall conform to the relevant provisions of Subsection 975 of the Standard Specifications, the attached drawings, and the following:

Snow Fence - 3 Feet High is intended to be located at the proposed median and fascia cast-in-place barriers. The Contractor will be responsible for laying out the Snow Fence in the field for approval of the Engineer prior to installation.

Shop drawings shall be produced and submitted for the Engineer's approval prior to commencement of fabrication and erection of the fence. Modifications must be submitted in writing to the Engineer for approval.

The labor, materials, tools, and equipment shall be considered incidental to the cost of the barrier and not be measured separately for payment.

ITEMS 992.11 thru 992.20 (Continued)

SCHEDULE OF BASIS FOR PARTIAL PAYMENT

Within ten (10) days after the receipt of a Notice to Proceed, the Contractor shall submit on his/her proposal form a schedule of unit prices for the major component Sub-Items that make up Items 992.11 through 992.20 as well as his/her total bridge structure Lump Sum cost for Alteration to Bridge Structure Nos. B-29-011, L-19-004, L-19-007, L-19-011, W-01-008, and W-43-031. The bridge structure Lump Sum breakdown quantities provided in the proposal form are estimated and not guaranteed. The total of all partial payments to the Contractor shall equal the Lump Sum contract price regardless of the accuracy of the quantities furnished by the Engineer of the individual bridge components. The cost of labor and materials for any Item not listed but required to complete the work shall be considered incidental to Items 992.11-992.20 and no further compensation will be allowed.

The schedule on the proposal form applies only to Bridge Structure Nos. B-29-011, L-19-004, L-19-007, L-19-011, W-01-008, and W-43-031. Payment for similar materials and construction at locations other than at this bridge structure shall not be included under this Item. Sub-Item numbering is presented for information only in coordination with MassDOT Standard Nomenclature.

ALTERATION TO BRIDGE STRUCTURE NOS. B-29-011, L-19-004, L-19-007, L-19-011, W-01-008, AND W-43-031

SUB-ITEM	DESCRIPTION	QUANTITY	UNIT	PRICE	TOTAL
904.3	5000 PSI, 3/4 INCH, 685 HP CEMENT CONCRETE	835	CY		
912.5	DRILLED AND GROUTED #5 DOWELS	5583	EA		
966.	MEMBRANE WATERPROOFING FOR BRIDGE DECK REPAIRS	1370	SF		
910.1	STEEL REINFORCEMENT FOR STRUCTURES – EPOXY COATED	157300	LB		
975.6	SNOW FENCE 3 FEET HIGH	2083	FT		
				Item Total:	

*** END OF SECTION ***

DOCUMENT A00802

DRAWINGS – BURLINGTON
BRIDGE NO. B-29-011 (2EW) & (2EX)

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MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

REPAIR PLANS AND DETAILS FOR

I-95/ROUTE 128

(BRIDGE NO. B-29-011)

IN THE TOWN OF

BURLINGTON

MIDDLESEX COUNTY

FEDERAL AID PROJECT NO. NFA

PS&E RESUBMISSION

BURLINGTON
I-95/ROUTE 128

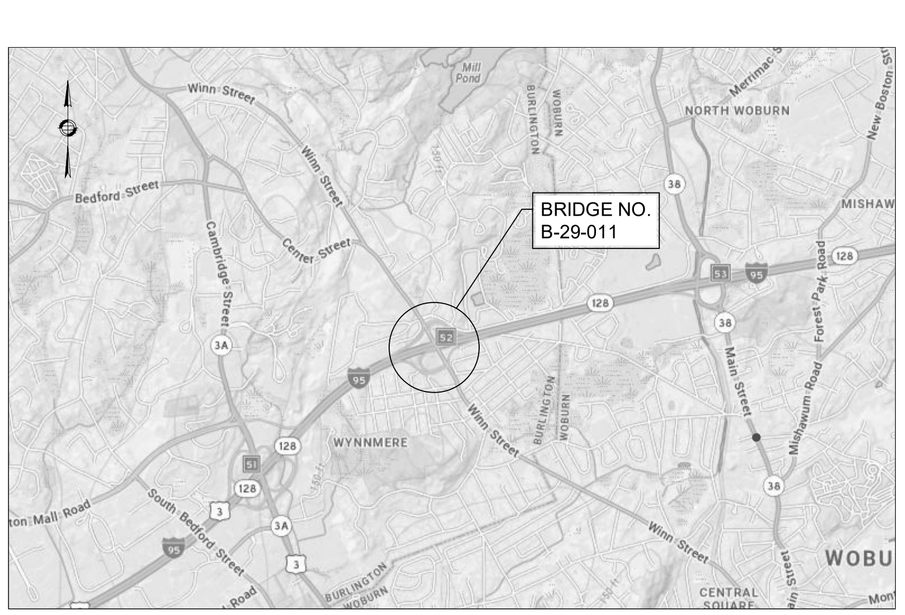
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	1	24
PROJECT FILE NO.	613196		

TITLE SHEET & INDEX

THESE PLANS ARE SUPPLEMENTED BY THE OCTOBER 2025 CONSTRUCTION STANDARD DETAILS, THE 2015 OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS, THE 1990 STANDARD DRAWINGS FOR SIGN AND SUPPORTS, THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK.

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET & INDEX
2-17	BRIDGE SHEETS
18-24	TEMPORARY TRAFFIC CONTROL PLANS



LOCUS MAP

APPROXIMATE SCALE: 1" = 2000'

DESIGN DESIGNATION (B-29-011)

DESIGN SPEED	65 MPH
ADT (PRESENT)	172,400
ADT (2043)	190,500
K	10%
D	54% NB
T (PEAK HOUR)	9.6%
T (AVERAGE DAY)	6.5%
DHV	12,600
DDHV	7,200
FUNCTIONAL CLASSIFICATION	URBAN MINOR ARTERIAL

DATE	DESCRIPTION	REV #

24-October-2025

PS&E Resubmission

massDOT
Massachusetts Department of Transportation
Highway Division

Jacobs.
120 ST. JAMES AVENUE, 5TH FLOOR
BOSTON, MA 02116

00 - COVER_SHEET.DWG Plotted on 22-Oct-2025 9:41 AM

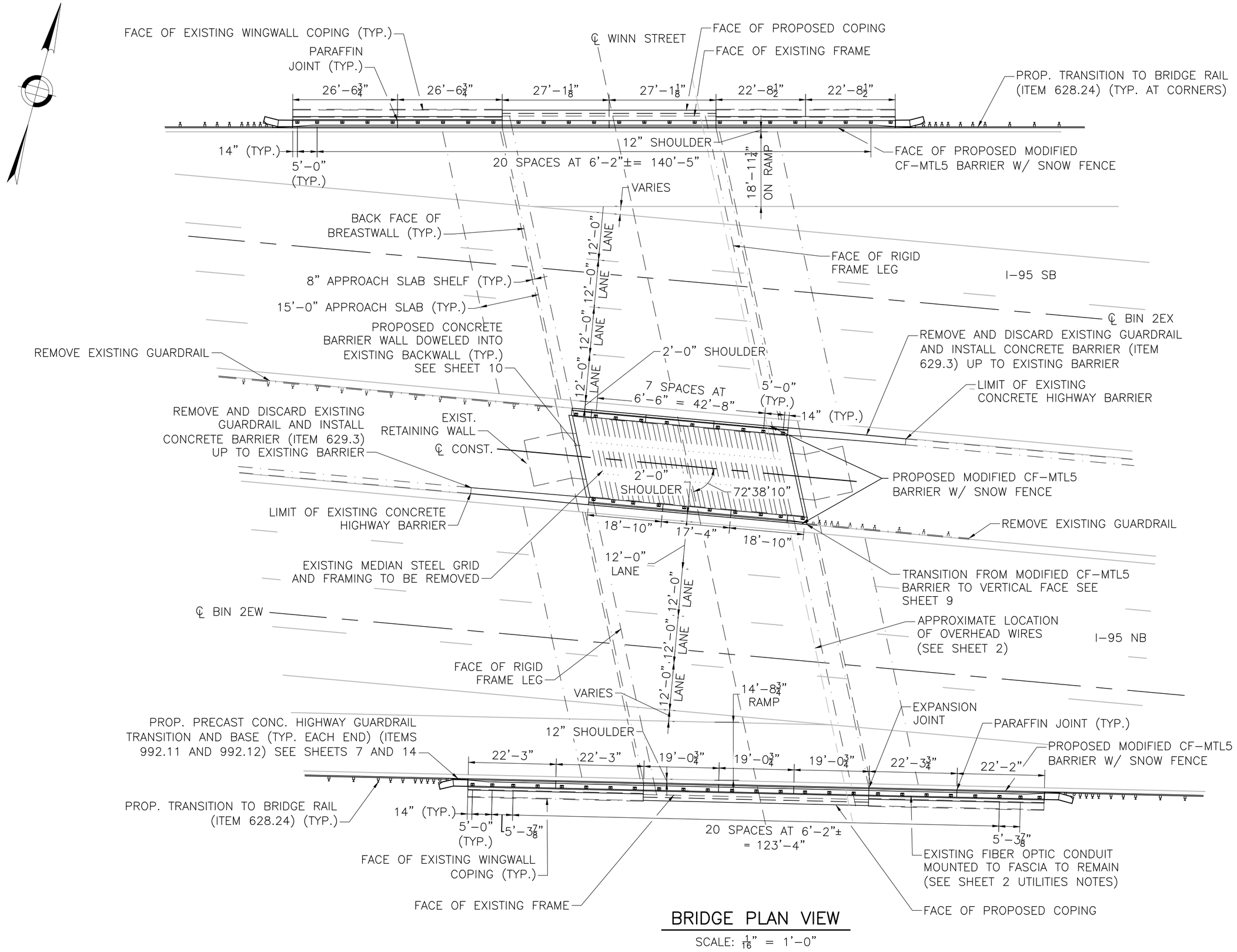
Proposal No. 613196-133292

A00802 - 3

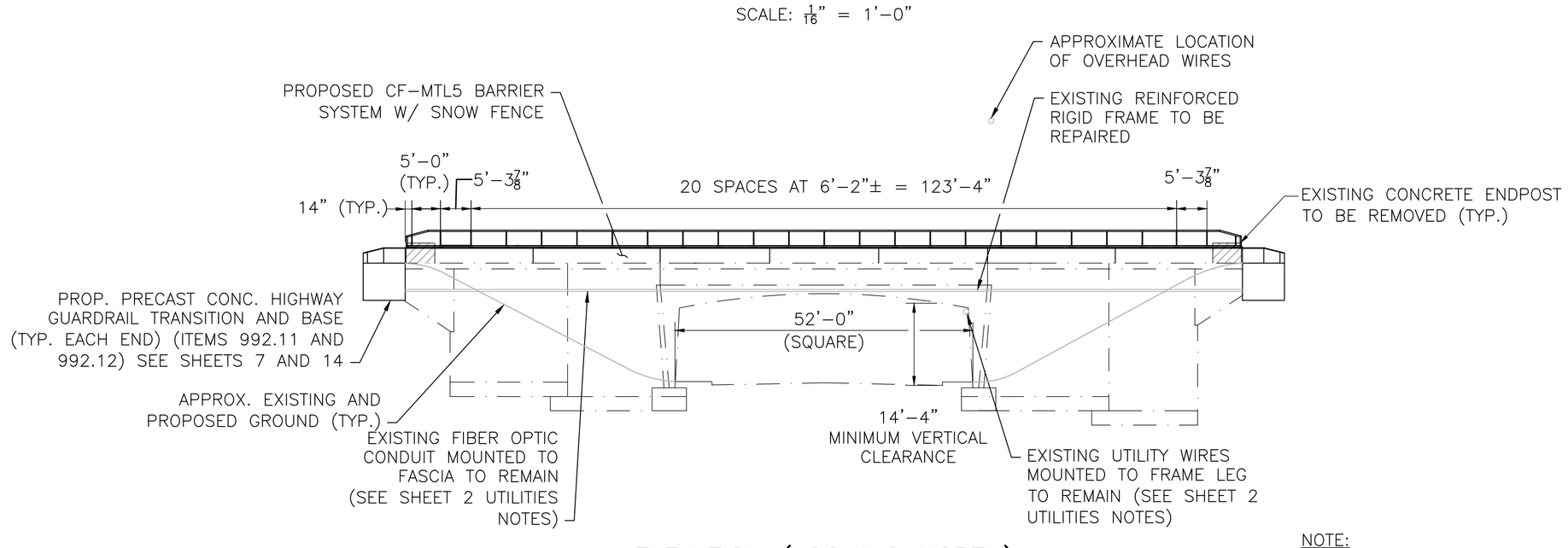
BURLINGTON
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	2	24
	PROJECT FILE NO. 613196		

PLAN AND ELEVATION



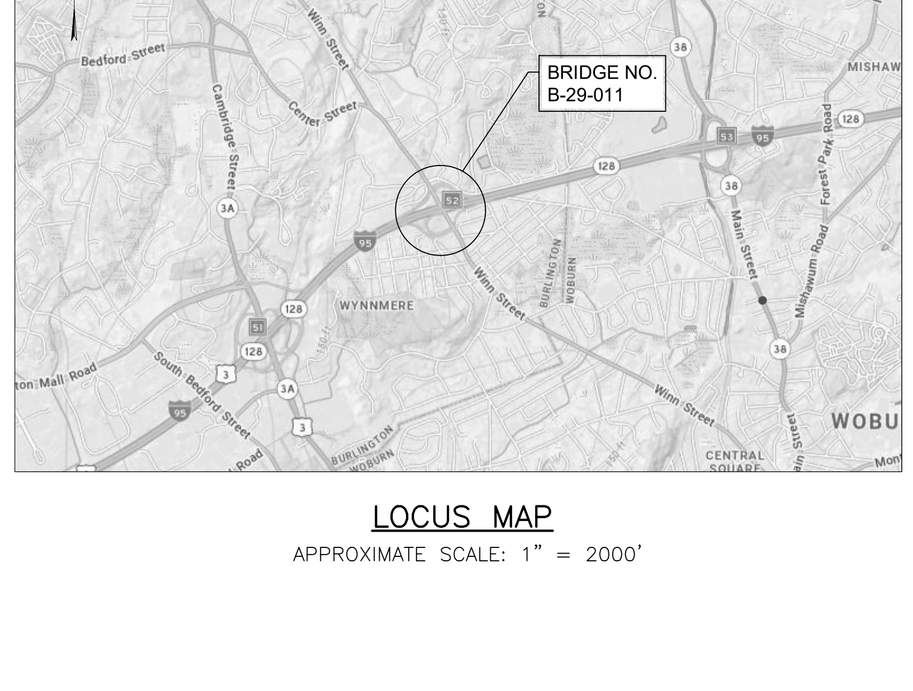
BRIDGE PLAN VIEW
SCALE: 1/16" = 1'-0"



ELEVATION (LOOKING NORTH)
SCALE: 1/16" = 1'-0"

LIMITS OF DEMOLITION

NOTE:
SOUTH ELEVATION SHOWN, NORTH ELEVATION SIMILAR DIMENSIONS UNLESS OTHERWISE NOTED.



LOCUS MAP
APPROXIMATE SCALE: 1" = 2000'

INDEX

SHEET NO.	DESCRIPTION
1	PLAN AND ELEVATION
2	GENERAL NOTES
3-4	DEMOLITION CROSS SECTIONS
5	PROPOSED CROSS SECTION
6-7	MODIFICATION DETAILS
8-10	REINFORCEMENT DETAILS
11-13	CONCRETE REPAIRS
14	GUARDRAIL TRANSITION DETAILS
15	SNOW FENCE DETAILS
16	GUARDRAIL DETAILS

*
2EW
2EX

MONTH DD, YYYY | ISSUED FOR CONSTRUCTION

MassDOT Highway Division

BRIDGE PRESERVATION

BURLINGTON

I-95/ROUTE 128
OVER WINN STREET

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION
10 PARK PLAZA BOSTON, MASS

Jacobs
120 ST. JAMES AVENUE, 5TH FLOOR
BOSTON, MA 02116

1-TITLE SHEET.DWG Plotted on 24-Oct-2025 11:06 AM
Proposal No. 613196-133292
P&E Resubmission 24-October-2025

GENERAL NOTES:

1. DIMENSIONS SHOWN ARE TAKEN FROM ORIGINAL DESIGN DRAWINGS AND ARE NOT GUARANTEED. THE CONTRACTOR SHALL ESTABLISH THEIR 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. NO SURVEY WAS PERFORMED AS PART OF THIS PRESERVATION PROJECT.

2. THE CONTRACTOR SHALL SUBMIT SURVEY OF ROADWAY TO THE ENGINEER TO ESTABLISH THE ACTUAL ROADWAY PROFILE. THE SURVEY SHALL INCLUDE EXISTING ROADWAY ELEVATIONS ALONG EACH EDGE OF PAVEMENT AND CROWN LINE AT 25 FOOT INTERVALS, AT ENDS OF THE BRIDGE AND AT ENDS OF THE WINGWALLS. THE LIMITS OF SURVEY SHALL EXTEND 250 FEET EACH SIDE OF THE LIMITS OF WORK.

3. REMOVE EXISTING PAVEMENT MARKINGS AND REPLACE WITH NEW SLOTTED PAVEMENT MARKINGS AT LOCATIONS DISTURBED BY APPROACH ROADWAY PAVING.

4. DURING SURVEY, CONTRACTOR SHALL MEASURE THE LENGTH OF EACH EXISTING WINGWALL PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES BETWEEN THE LENGTHS SHOWN ON RECORD DRAWINGS OR THESE PLANS SHALL BE REPORTED TO THE ENGINEER PRIOR TO FABRICATION OF THE SNOW FENCE.

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:
SEE TRAFFIC DRAWINGS FOR TRAFFIC MANAGEMENT PLANS.

SCALES:
SCALES NOTED ON THE PLANS ARE NOT APPLICABLE TO REDUCED SIZE PRINTS. DIVIDE SCALES BY 2 FOR HALF-SIZE PRINTS (A3).

ANCHOR BOLTS:
ALL ANCHOR BOLTS SHALL BE SET BY TEMPLATE BEFORE THE CONCRETE IS PLACED.

CONCRETE:
5000 PSI, $\frac{3}{8}$ INCH, 710 HP CEMENT CONCRETE TO BE USED FOR BARRIER RECONSTRUCTION WORK.

4000 PSI, $\frac{3}{8}$ INCH, 660 CEMENT CONCRETE TO BE USED FOR PATCHING OF FRAMES AND FRAME WALLS.

REINFORCEMENT:
REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M31 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"	19"	23"
2. 12" OF CONCRETE BELOW BAR	20"	25"	30"
3. EPOXY COATED BARS, COVER < $3d_b$, OR CLEAR SPACING <$6d_b$	23"	29"	34"
4. COATED BARS, ALL OTHER CASES	18"	23"	27"
5. CONDITION 2. AND 3.	26"	32"	39"
6. CONDITION 2. AND 4.	24"	30"	36"

ALL OTHER BARS SHALL BE LAPPED AS SHOWN ON THE CONSTRUCTION DRAWINGS.

DATE:
TO BE PLACED ON THE INSIDE FACE OF THE SOUTHWEST AND NORTHEAST HIGHWAY GUARDRAIL TRANSITIONS. A SHEET SHOWING SIZE AND CHARACTER OF NUMERALS WILL BE FURNISHED. THE DATE USED SHALL BE SHOWN AS 1961 (THE YEAR THE BRIDGE WAS REBUILT).

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

UTILITIES:
THE CONTRACTOR SHALL LOCATE AND PROTECT EXISTING UTILITIES FROM ALL DAMAGE. OVERHEAD WIRES OVER BRIDGE OVER THE NORTH ABUTMENT (OVER I-95) SHALL REMAIN IN PLACE AND BE PROTECTED DURING CONSTRUCTION.

UTILITY CONDUITS MOUNTED TO FRAME LEG ALONG WINN STREET SHALL REMAIN IN PLACE AND BE PROTECTED DURING CONSTRUCTION. UTILITY PROTECTION TO BE DESIGNED BY CONTRACTOR. SEE ITEMS 140.11 AND 140.12 FOR ADDITIONAL INFORMATION.

FIBER OPTIC LINE MOUNTED TO FACE OF FRAME SHALL BE TEMPORARILY SUPPORTED AND PROTECTED DURING CONSTRUCTION. UTILITY PROTECTION TO BE DESIGNED BY CONTRACTOR.

ESTIMATED QUANTITIES
(NOT GUARANTEED)

SELECTIVE CLEARING AND THINNING AT BRIDGES	184 SY
EARTH EXCAVATION	55 CY
REINFORCED CONCRETE RIGID FRAME EXCAVATION (PARTIAL DEPTH)	9 CY
BRIDGE EXCAVATION ALONG RIGID FRAME RAILING BRIDGE NO. W-01-008 (BIN 2EW)	1 LS
BRIDGE EXCAVATION ALONG RIGID FRAME RAILING BRIDGE NO. W-01-008 (BIN 2EX)	1 LS
GRAVEL BORROW FOR BACKFILLING STRUCTURES AND PIPES	7.6 CY
CONTROLLED LOW-STRENGTH MATERIAL (>300 PSI)	25 CY
DISPOSAL OF TREATED WOOD PRODUCTS	3394 LBS
HMA FOR PATCHING	17.8 TONS
TRANSITION TO BRIDGE RAIL	6 EA
SILT SACK	4 EA
SEEDING	3880 SF
PAVEMENT MILLING MULCH UNDER GUARDRAIL	150 FT
DELINEATION FOR GUARD RAIL TERMINI	4 EA
4000 PSI, 3/8 INCH, 660 CEMENT CONCRETE	164 CF
REPAIRS TO UNDERSIDE OF REINFORCED CONCRETE RIGID FRAMES	944 SF
ALTERATION TO BRIDGE NO. B-29-011 (BIN 2EW)	1 LS
ALTERATION TO BRIDGE NO. B-29-011 (BIN 2EX)	1 LS

BURLINGTON
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	3	24
PROJECT FILE NO.	613196		

GENERAL NOTES

TRAFFIC DATA

	ROADWAY OVER	ROADWAY UNDER
DESIGN YEAR	2043	2043
AVERAGE DAILY TRAFFIC - PRESENT	172400	24000
AVERAGE DAILY TRAFFIC - DESIGN YEAR	190500	26500
DESIGN HOURLY VOLUME	12600	2090
DIRECTIONAL DISTRIBUTION	54% SB	52% SB
TRUCK PERCENTAGE - AVERAGE DAY	6.5%	1.9%
TRUCK PERCENTAGE - PEAK HOUR	9.6%	2.9%
DESIGN SPEED	65	40
DIRECTIONAL DESIGN HOURLY VOLUME	7200	2090

PROJECT INFORMATION

PROJECT FILE NO.: 613196
PROJECT DESCRIPTION: 10 BRIDGE BUNDLE
BRIDGE DESIGN LOADING: HS-20-44
SURVEY: N/A

*
2EW
2EX

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

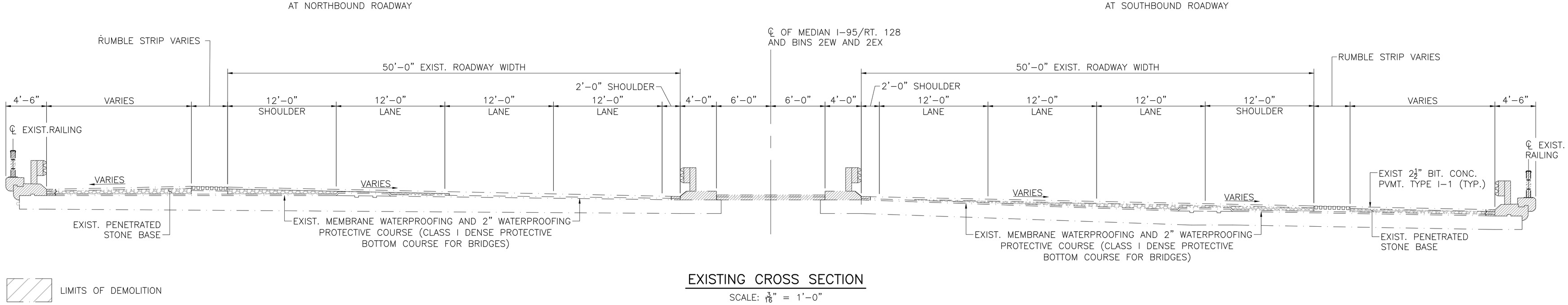
PS&E Resubmission 24-October-2025

2-GENERAL NOTES.DWG Plotted on 24-Oct-2025 11:39 AM
Proposal No. 613196-133292
A00802 - 5

BURLINGTON
I-95/ROUTE 128

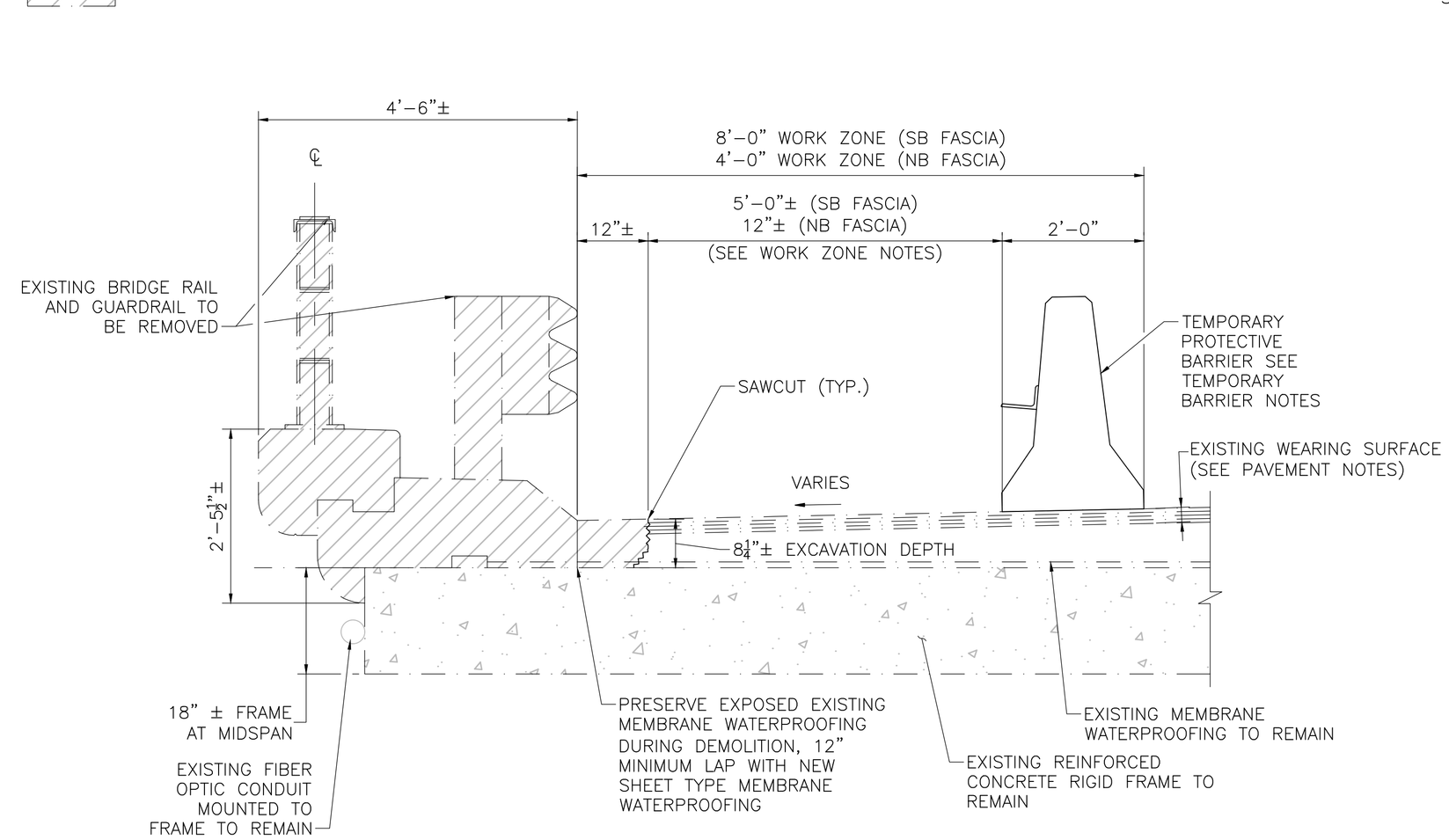
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	4	24
	PROJECT FILE NO. 613196		

DEMOLITION CROSS SECTIONS 1 OF 2



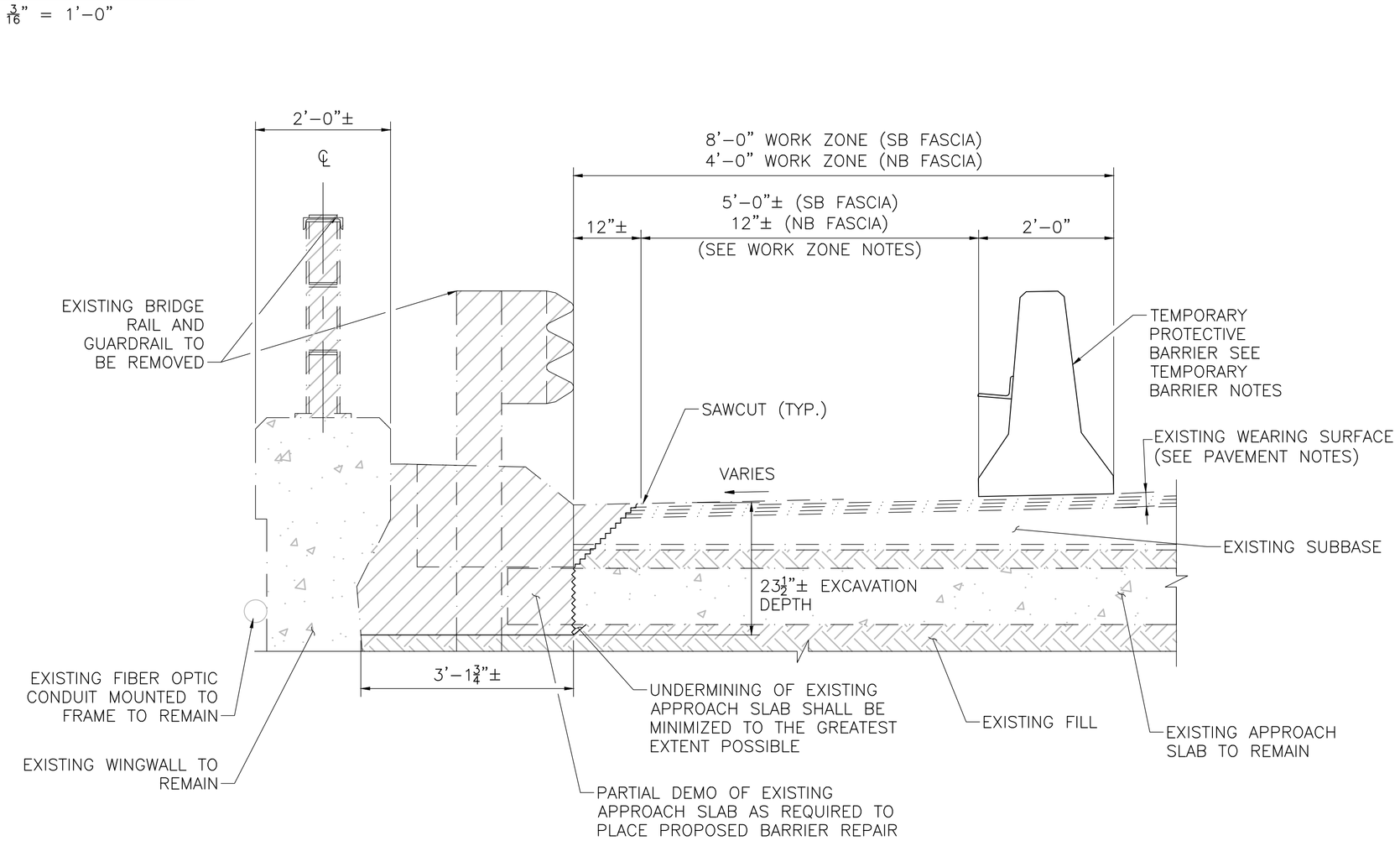
EXISTING CROSS SECTION

SCALE: $\frac{3}{16}$" = 1'-0"



LIMITS OF DEMOLITION (SB FASCIA SHOWN, NB FASCIA SIMILAR)

SCALE: $\frac{3}{4}$" = 1'-0"



LIMITS OF DEMOLITION (AT WINGWALLS)

SCALE: $\frac{3}{4}$" = 1'-0"

NOTES:

ALL EXISTING LANE LINES SHOWN FROM RECORD DRAWINGS ARE APPROXIMATE. NO SURVEY WAS PERFORMED AS PART OF THIS BRIDGE PRESERVATION TASK. CONTRACTOR TO CONFIRM LANE LINE MARKINGS PRIOR TO START OF WORK.

WORK ZONE NOTES:

WORK ZONE REQUIRES TEMPORARY LANE SHIFTS OR REDUCTION OF TRAVEL LANES TO 11' ALONG RAMP LANES. CONTRACTOR TO COORDINATE WITH DISTRICT TRAFFIC.

PAVEMENT NOTES:

1. EXISTING PAVEMENT THICKNESS IS BASED OFF EXISTING RECORD DRAWINGS, CONTRACTOR SHALL CONFIRM EXISTING THICKNESS PRIOR TO CONSTRUCTION.
2. PROPOSED PAVEMENT SHALL BE PLACED IN MAXIMUM 3" LIFTS AND MATCH EXISTING THICKNESS.
3. TO BE PAID UNDER ITEM 451. HMA FOR PATCHING. ASPHALT EMULSION FOR TACK COAT AND HMA JOINT SEALANT ARE INCIDENTAL TO ITEM 451. AND SHALL BE USED IN ACCORDANCE WITH MASSDOT STANDARD SPECIFICATIONS SECTION 450, PAVEMENT MIX SPC-B-12.5.

CONCRETE REMOVAL NOTES:

1. IF CONCRETE IS DETERMINED TO BE UNSOUND PAST THE LIMITS OF CONCRETE REMOVAL, THEN THE LIMITS MAY BE INCREASED AS DIRECTED BE THE RESIDENT ENGINEER. SEE SPECIAL PROVISIONS.
2. EXISTING BRIDGE RAILING ANCHOR BOLTS SHALL BE CUT DOWN ¾" DEEP INTO EXISTING COPING AND HOLES TO BE FILLED WITH SEALANT.

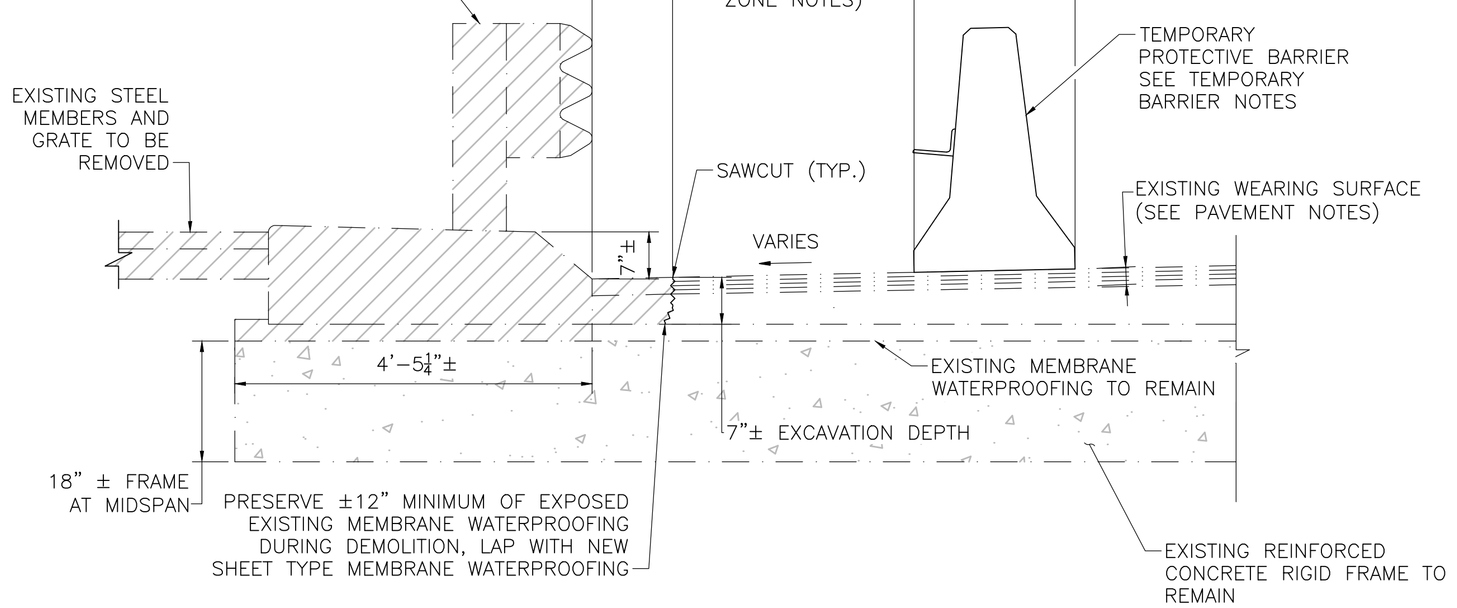
TEMPORARY BARRIER NOTES:

TEMPORARY CONCRETE BARRIER SHALL BE RETROFITTED TO MASH TL-3 STANDARDS IN ACCORDANCE WITH DRAWING NUMBERS 853.23.1 AND 853.23.2 OF THE MASSDOT CONSTRUCTION STANDARDS ISSUED JUNE OF 2025.

*
2EW
2EX

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

3-4-DEMO CROSS SECTIONS.DWG Plotted on 21-Oct-2025 5:09 PM
PS&E Resubmission 24-October-2025
Proposal No. 613196-133292
A00802 - 6



LIMITS OF DEMOLITION (NB MEDIAN SHOWN, SB MEDIAN SIMILAR)

SCALE: ¾" = 1'–0"

WORK ZONE NOTES:

SEE SHEET 3 FOR WORK ZONE NOTES.

PAVEMENT NOTES:

SEE SHEET 3 FOR PAVEMENT NOTES.

CONCRETE REMOVAL NOTES:

SEE SHEET 3 FOR CONCRETE REMOVAL NOTES.

TEMPORARY BARRIER NOTES:

SEE SHEET 3 FOR TEMPORARY BARRIER NOTES.

*
2EW
2EX

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

3-4-DEMO CROSS SECTIONS.DWG Plotted on 21-Oct-2025 5:10 PM
Proposal No. 613196-133292
24-October-2025
PS&E Resubmission
A00802 - 7

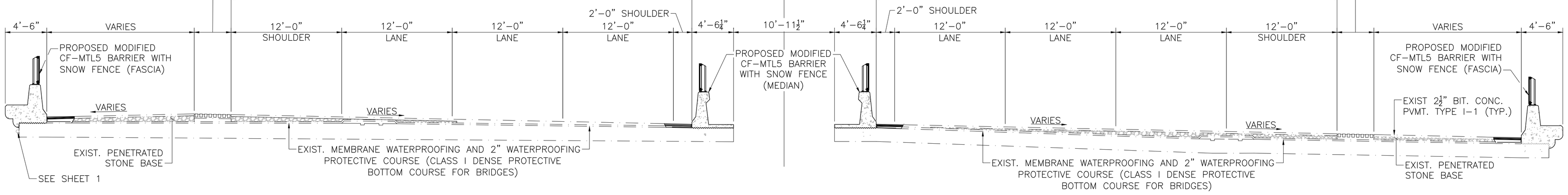
BURLINGTON
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	6	24
	PROJECT FILE NO. 613196		

PROPOSED CROSS SECTION

NOTES:

1. ALL EXISTING LANE LINES SHOWN FROM RECORD DRAWINGS ARE APPROXIMATE. NO SURVEY WAS PERFORMED AS PART OF THIS BRIDGE PRESERVATION TASK. CONTRACTOR TO CONFIRM LANE LINE MARKINGS PRIOR TO START OF WORK.



PROPOSED CROSS SECTION

SCALE: $\frac{3}{16}$" = 1'-0"

*
2EW
2EX

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

SHEET 5 OF 16 SHEETS BRIDGE NO. B-29-011 (*)

24-October-2025
FS&E Resubmission

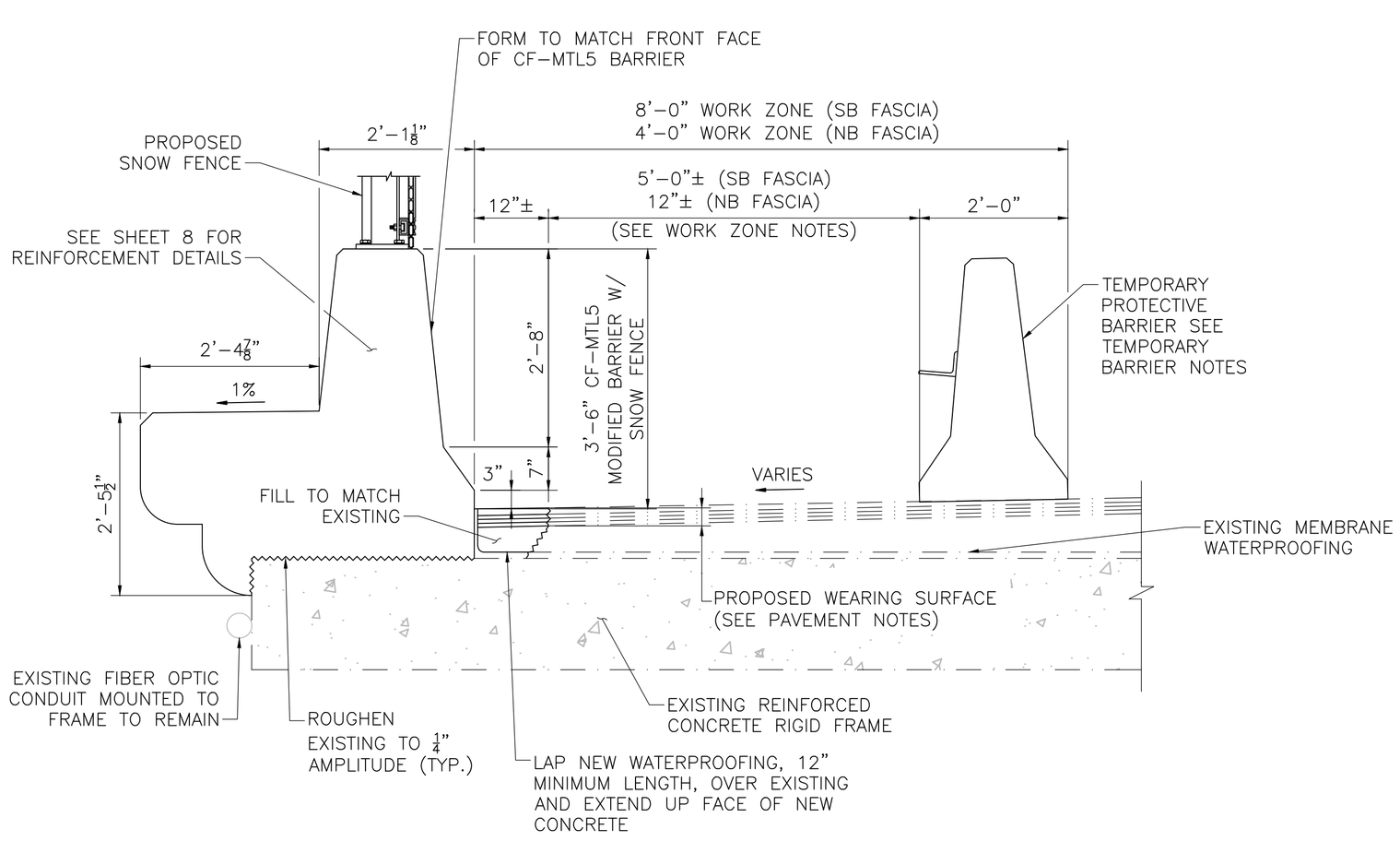
5-PROPOSED CROSS SECTION.DWG Plotted on 22-Oct-2025 7:45 AM

Proposal No. 613196-133292

A00802 - 8

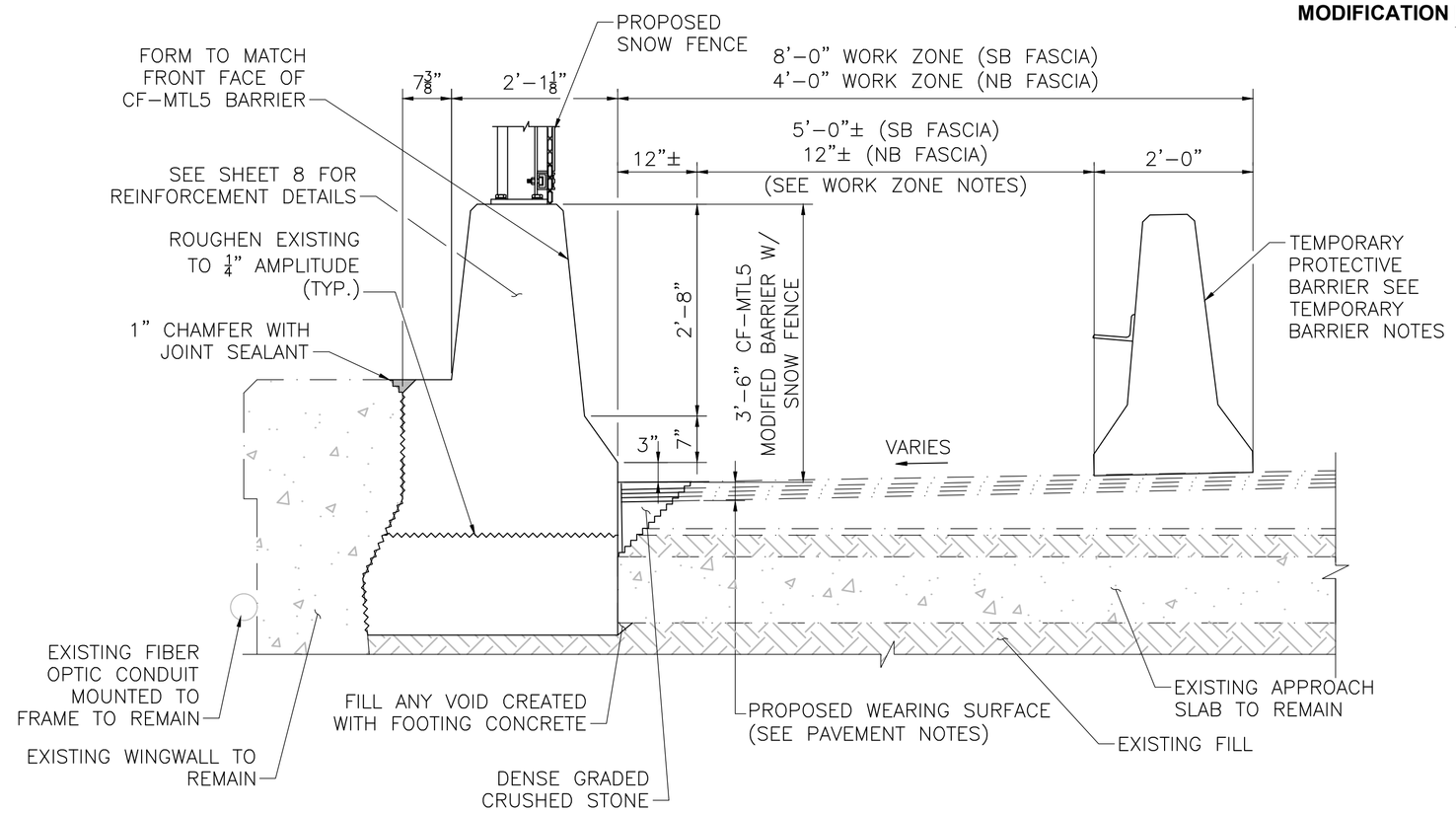
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	7	24
PROJECT FILE NO.	613196		

MODIFICATION DETAILS 1 OF 2



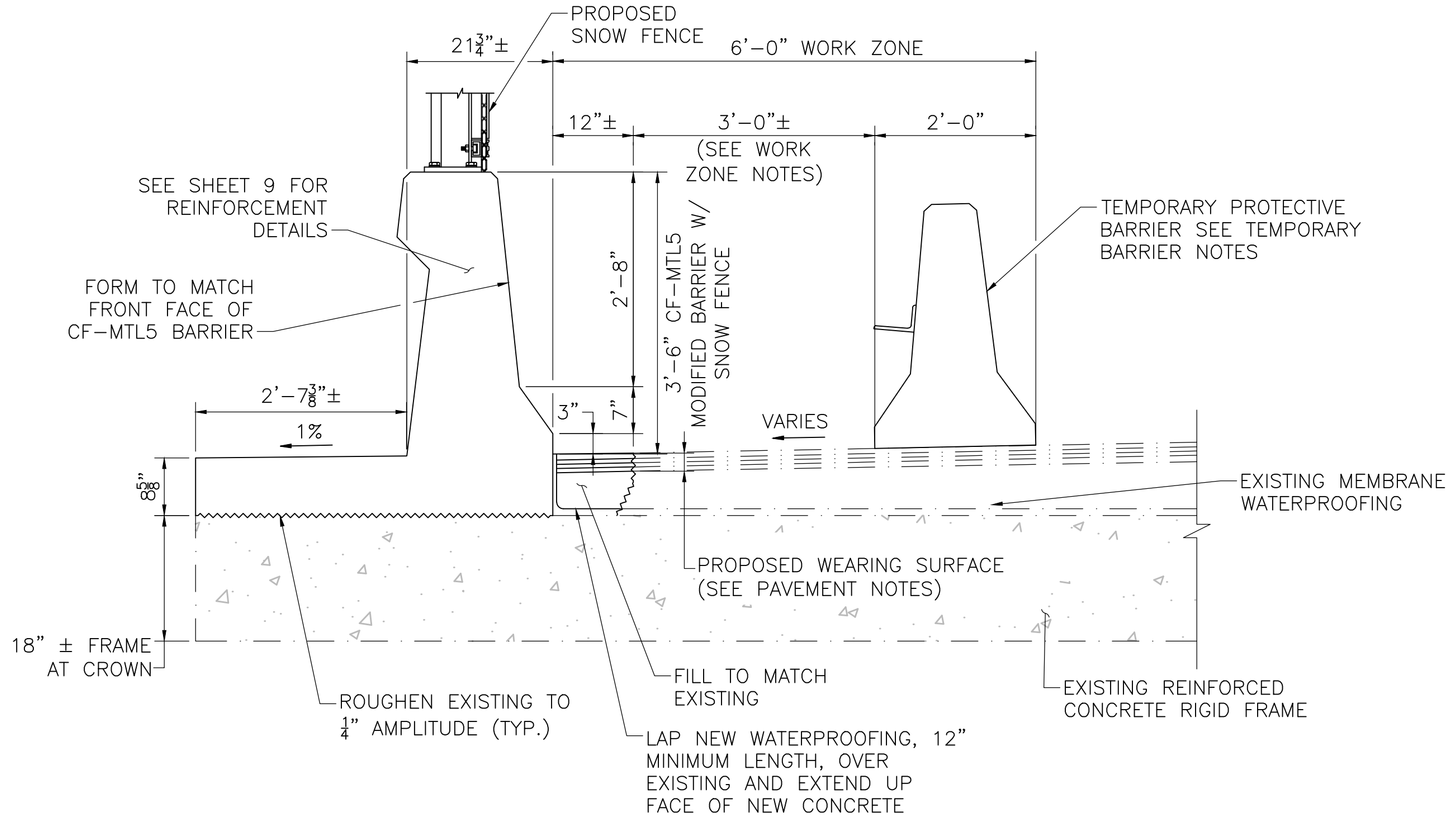
PROPOSED MODIFIED CF–MTL5 BARRIER (SB FASCIA SHOWN, NB FASCIA SIMILAR)

SCALE: ¾" = 1'–0"



PROPOSED MODIFIED CF–MTL5 BARRIER (AT WINGWALLS)

SCALE: ¾" = 1'–0"



EXISTING CONDITIONS (NB MEDIAN SHOWN, SB MEDIAN SIMILAR)

SCALE: ¾" = 1'–0"

WORK ZONE NOTES:

SEE SHEET 3 FOR WORK ZONE NOTES.

PAVEMENT NOTES:

SEE SHEET 3 FOR PAVEMENT NOTES.

CONCRETE REMOVAL NOTES:

SEE SHEET 3 FOR CONCRETE REMOVAL NOTES.

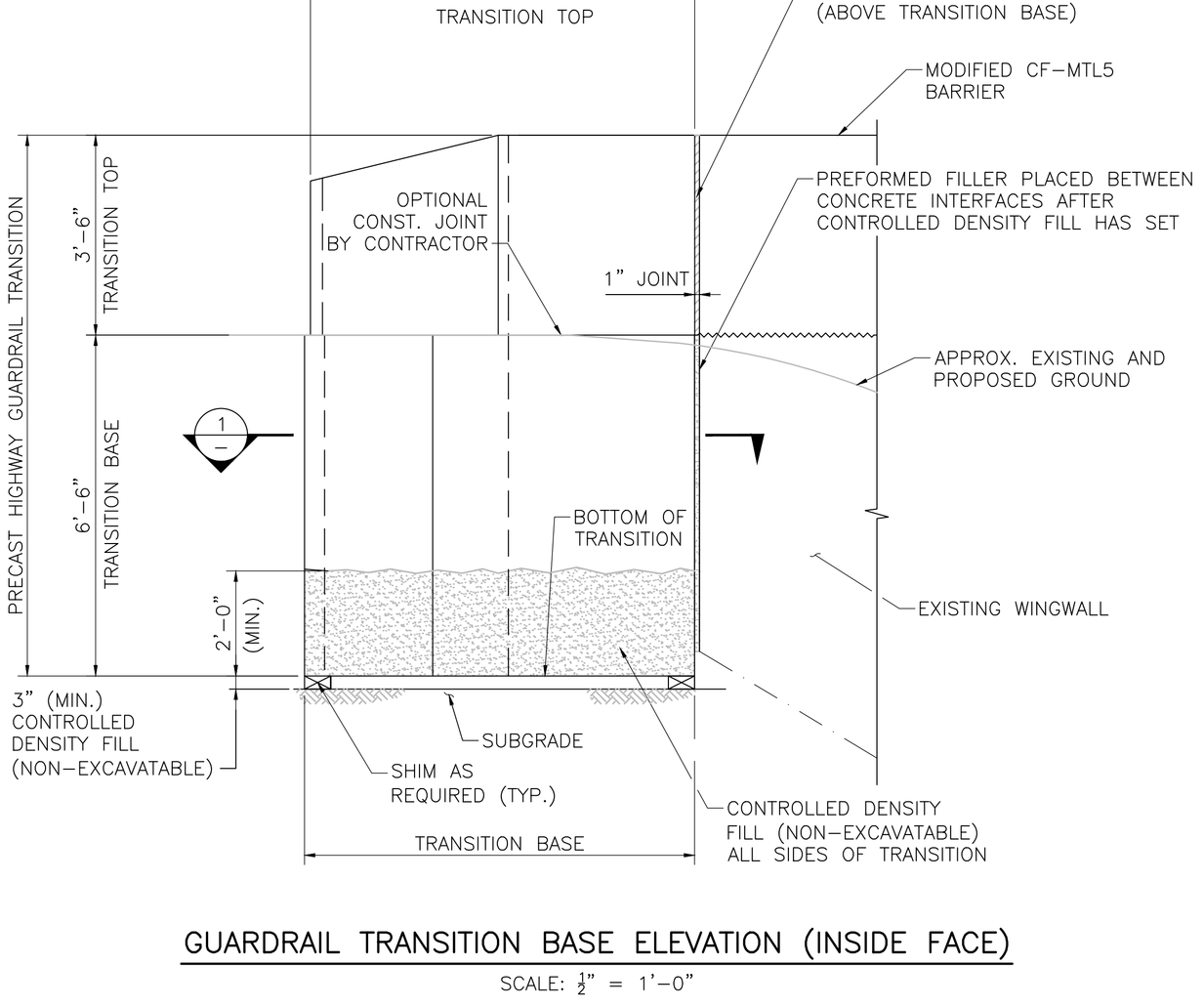
TEMPORARY BARRIER NOTES:

SEE SHEET 3 FOR TEMPORARY BARRIER NOTES.

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

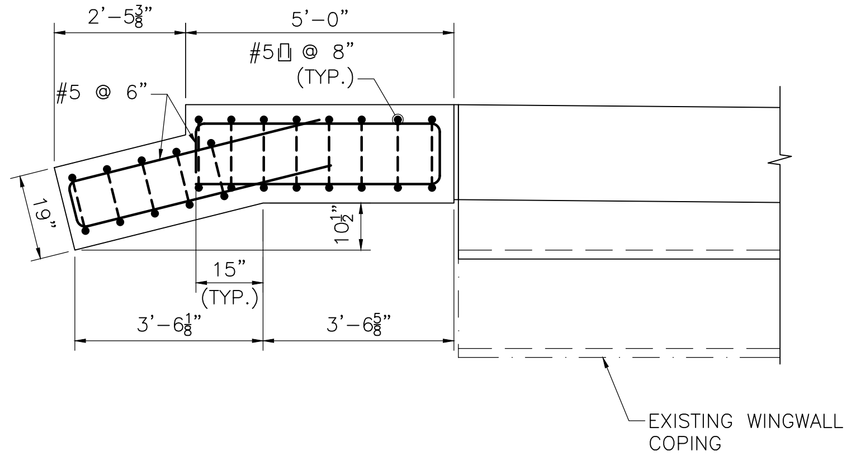
*
2EW
2EX

6-7-MODIFICATION DETAILS.DWG Plotted on 22-Oct-2025 8:00 AM
Proposal No. 613196-133292
PS&E Resubmission 24-October-2025
A00802 - 9



GUARDRAIL TRANSITION BASE ELEVATION (INSIDE FACE)

SCALE: $\frac{1}{2}$" = 1'–0"



SECTION 1/–

SCALE: $\frac{1}{2}$" = 1'–0"

TRANSITION BASE NOTES:

1. PRECAST HIGHWAY GUARDRAIL TRANSITION (HGT) SHALL BE 5000 PSI, ¾ IN, 685 HP CEMENT CONCRETE.
2. PRECAST GUARDRAIL TRANSITION BASE UNITS TO BE INSTALLED PRIOR TO CONSTRUCTING THE BASE OF WINGWALL BARRIERS.
3. GRAVEL BORROW SHALL BE PLACED AND THOROUGHLY COMPACTED TO THE GRADE OF 3" (MIN.) BELOW THE INTENDED BOTTOM OF THE PRECAST GUARDRAIL TRANSITION BASE AND TO A HEIGHT OF 2'–0" (MIN.) ON ALL SIDES OF THE TRANSITION BASE TO FORM A TRENCH IN WHICH TO SET THE TRANSITION. WHERE NO GRAVEL BORROW IS REQUIRED BELOW THE BASE, IT SHALL BE PLACED ON UNDISTURBED SOIL.
4. CONTRACTOR SHALL SET THE PRECAST GUARDRAIL TRANSITION TO THE REQUIRED ELEVATION AND ALIGNMENT, AND BACKFILL PRECAST GUARDRAIL TRANSITION WITH CONTROLLED DENSITY FILL (NON–EXCAVATABLE) TO THE ELEVATION SHOWN.
5. CONTRACTOR TO PROVIDE METHOD OF INSTALLATION OF HGT WITHIN THE CLEAR ZONE LIMITS BEHIND THE BARRIERS AT ALL CORNERS.
6. SEE ITEMS 992.11 AND 992.12 FOR MEASUREMENT AND PAYMENT.

PAVEMENT NOTES:

SEE SHEET 3 FOR PAVEMENT DETAILS.

CONCRETE REMOVAL NOTES:

SEE SHEET 3 FOR REMOVAL DETAILS.

TEMPORARY BARRIER NOTES:

SEE SHEET 3 FOR BARRIER DETAILS.

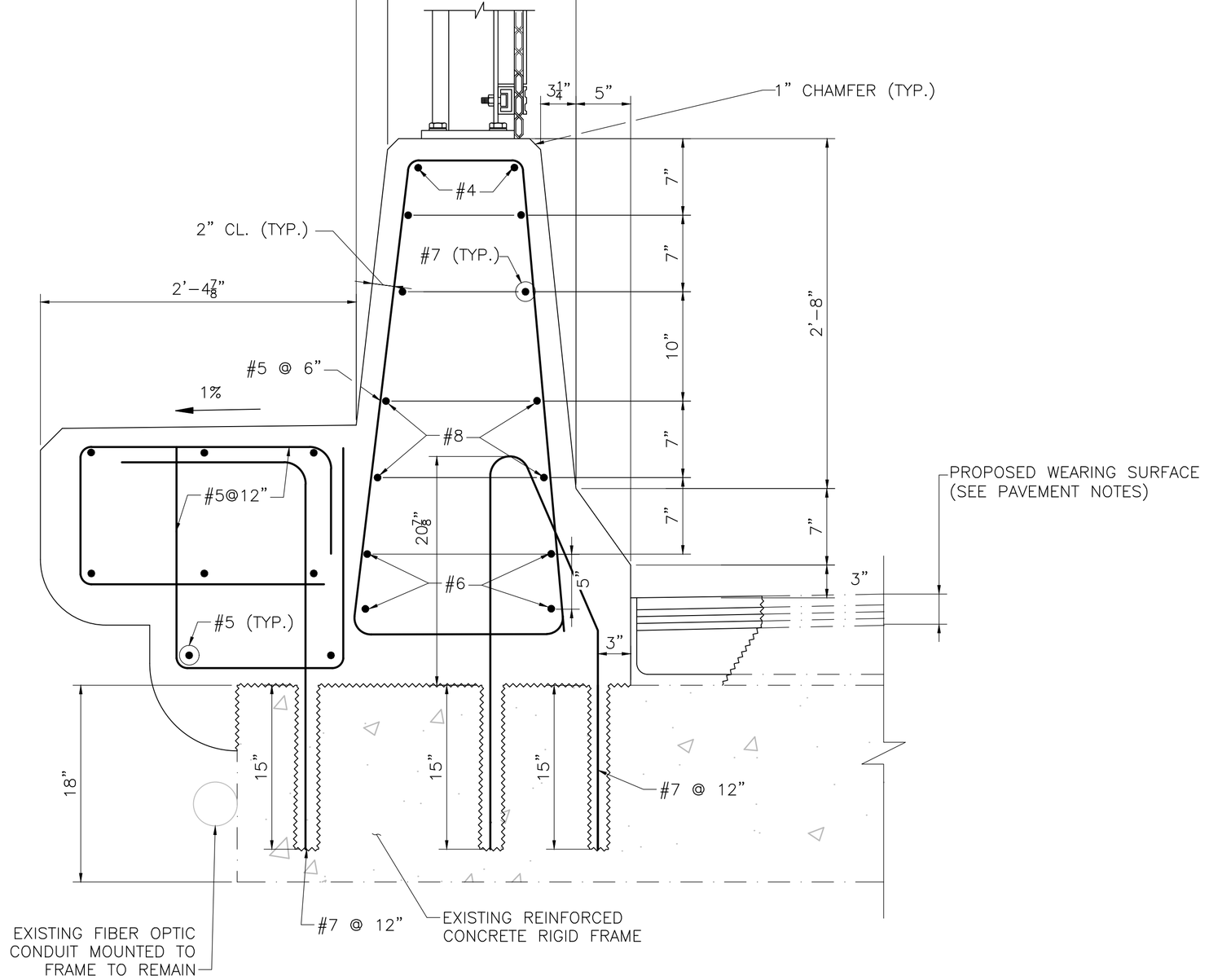
WORK ZONE NOTES:

SEE SHEET 3 FOR WORK ZONE NOTES.

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

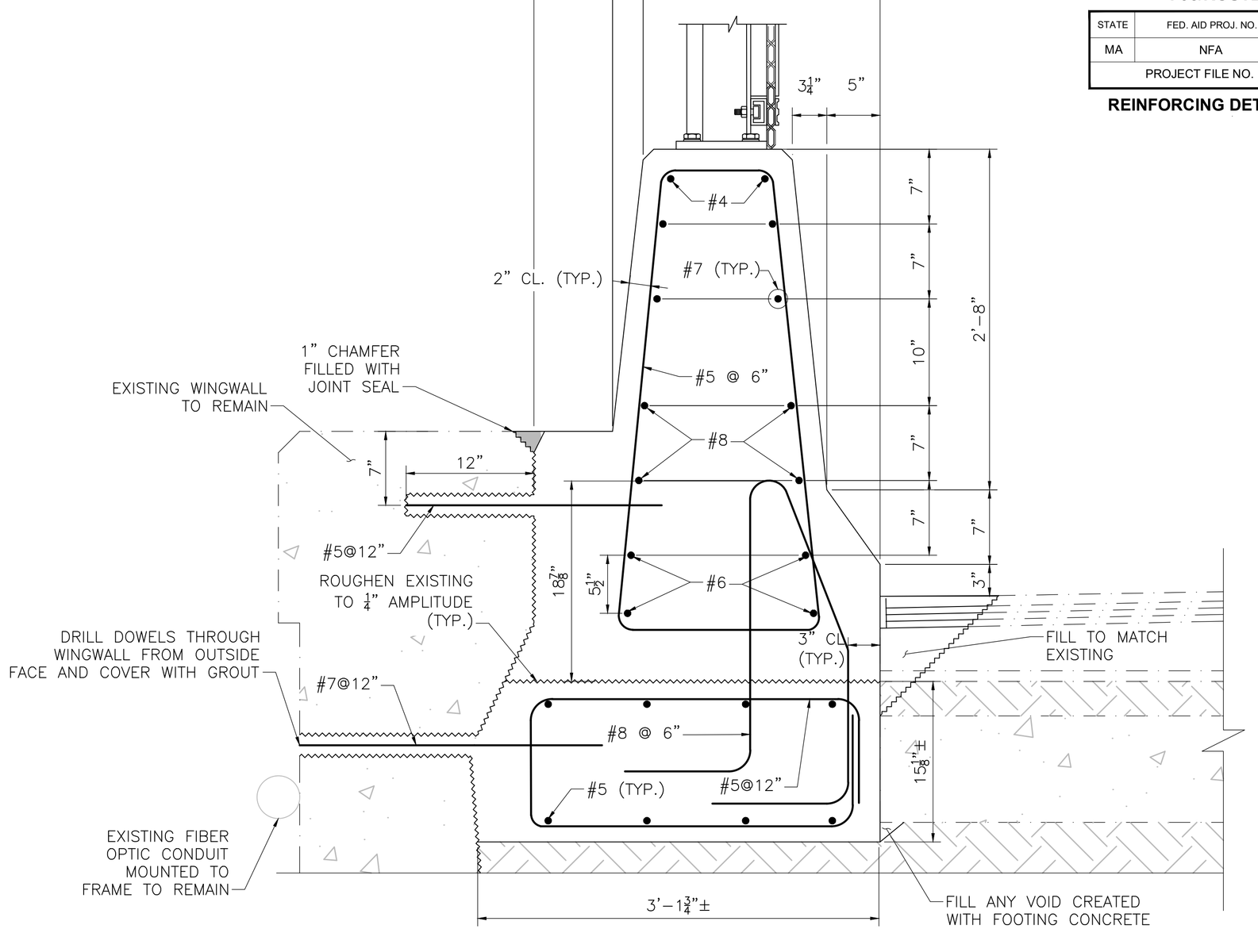
*
2EW
2EX

6-7-MODIFICATION DETAILS.DWG Plotted on 21-Oct-2025 5:13 PM
Proposal No. 613196-133292
PS&E Resubmission 24-October-2025
A00802 - 10



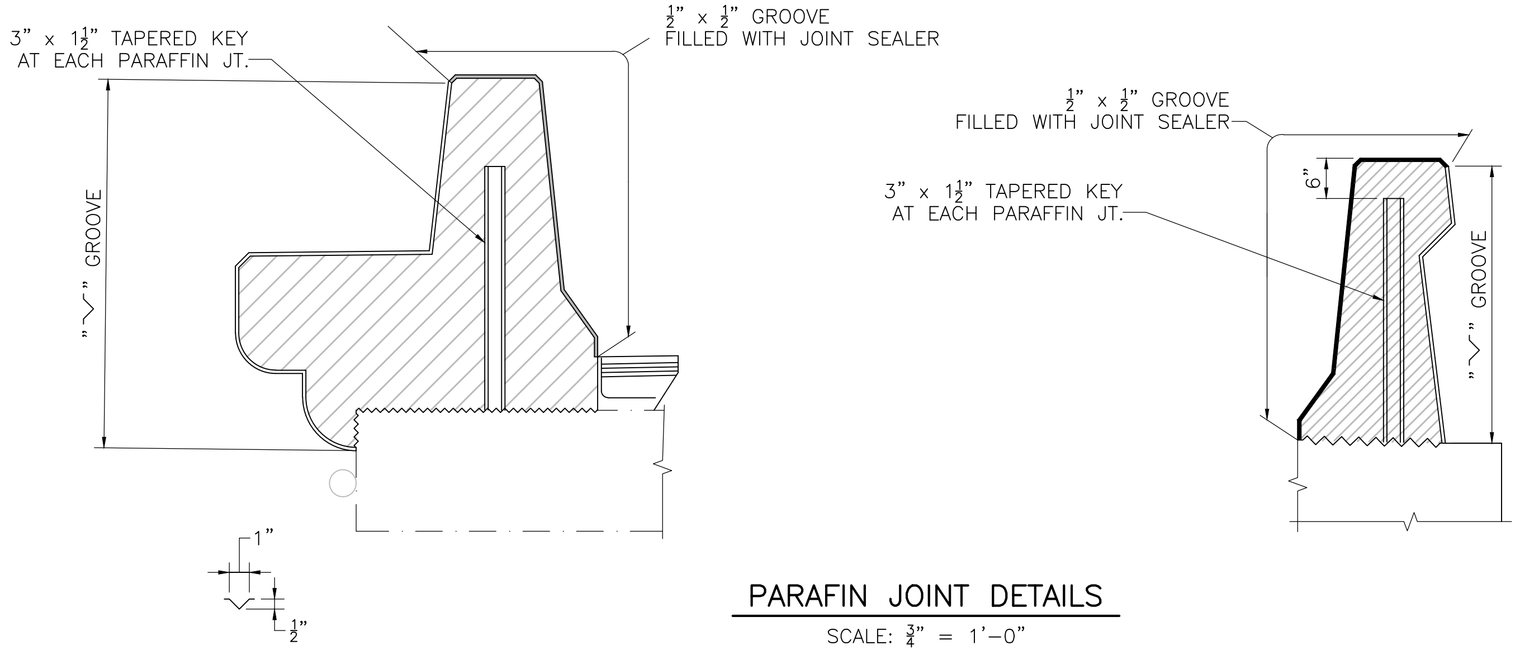
PROPOSED CF–MTL5 BARRIER REINFORCING DETAIL (SB FASCIA SHOWN, NB FASCIA SIMILAR)

SCALE: 1½" = 1'–0"



PROPOSED CF–MTL5 BARRIER REINFORCING DETAIL AT WINGWALLS (NB FASCIA SHOWN, SB FASCIA SIMILAR)

SCALE: 1½" = 1'–0"



PARAFIN JOINT DETAILS

SCALE: ¾" = 1'–0"

NOTES:

1. ALL CONCRETE ABOVE RIGID FRAME SHALL BE POURED IN ALTERNATING SECTIONS WITH NOT LESS THAN 3 DAYS BETWEEN POURS.
2. DO NOT CARRY LONGITUDINAL BARS THROUGH THE PARAFFIN END THE REINFORCEMENT 2" CLEAR OF JOINT.
3. JOINT SHALL BE SQUARE TO FACE OF CURB OR COPING.

DRILL & GROUT NOTES:

1. LOCATIONS FOR DRILLING AND GROUTING SHALL BE CAREFULLY SELECTED TO AVOID EXISTING REINFORCING.
2. GROUT SHALL BE CHOSEN FROM MASSDOT QUALIFIED CONSTRUCTION MATERIALS LIST (QCML).

BARRIER INSTALLATION NOTES:

1. CONTRACTOR SHALL REMOVE EXISTING RAILING AND CONCRETE BASE TO LIMITS DETERMINED BY THE ENGINEER.
2. DRILL AND GROUT DOWELS PRIOR TO POURING OF REPAIRED CONCRETE AREA AND BARRIER.
3. BARRIER AND REPAIRED AREA SHALL BE POURED SEPARATE WITH A CONSTRUCTION JOINT BETWEEN THE REPAIRED AREA AND THE BASE OF THE BARRIER.

BURLINGTON
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	9	24
	PROJECT FILE NO. 613196		

REINFORCING DETAILS 1 OF 3

*
2EW
2EX

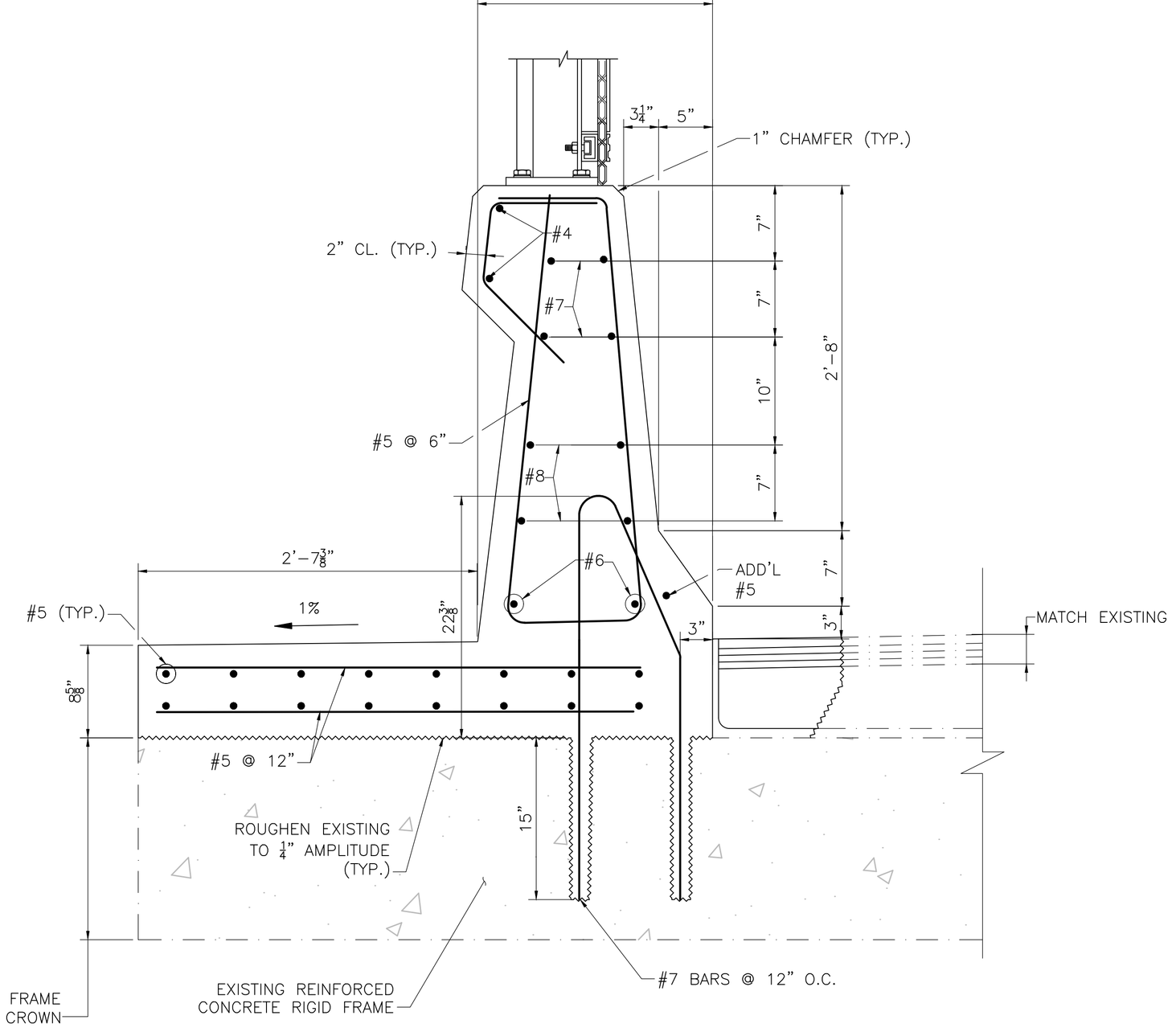
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

PS&E Resubmission 24-October-2025

8-10-REINFORCING DETAILS.DWG Plotted on 22-Oct-2025 8:24 AM

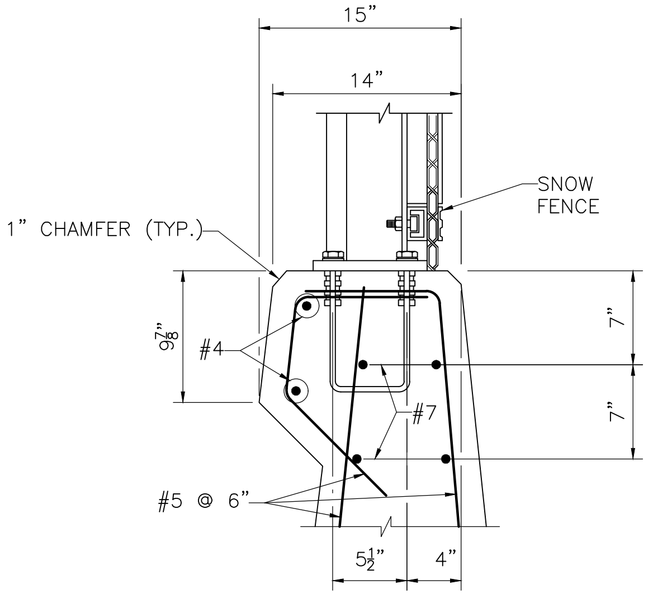
Proposal No. 613196-133292

A00802 - 11



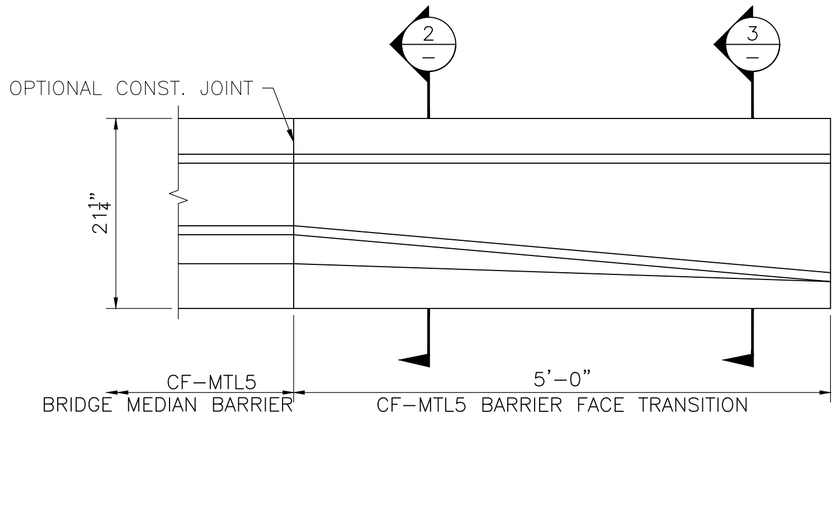
PROPOSED CF–MTL5 BARRIER REINFORCING DETAIL (NB MEDIAN SHOWN, SB MEDIAN SIMILAR)

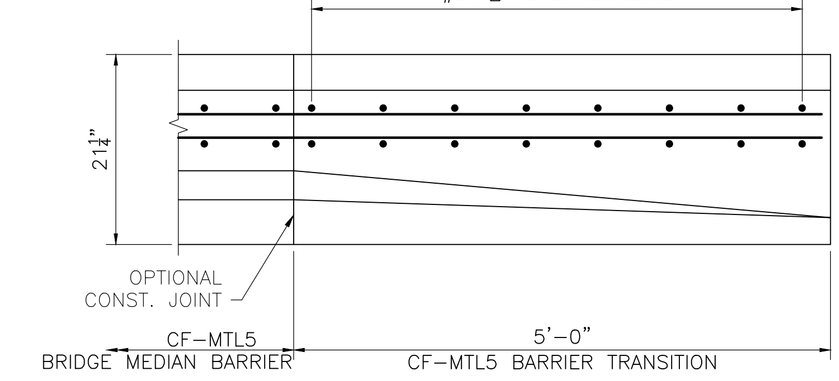
SCALE: 1½" = 1'–0"



SECTION THRU MODIFIED BARRIER

SCALE: 1½" = 1'–0"

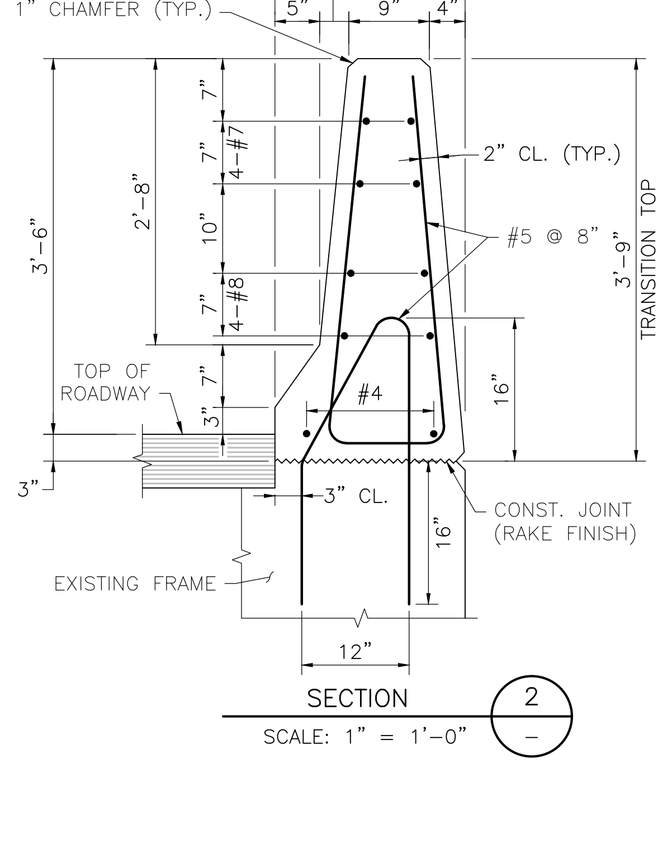




SECTION 4

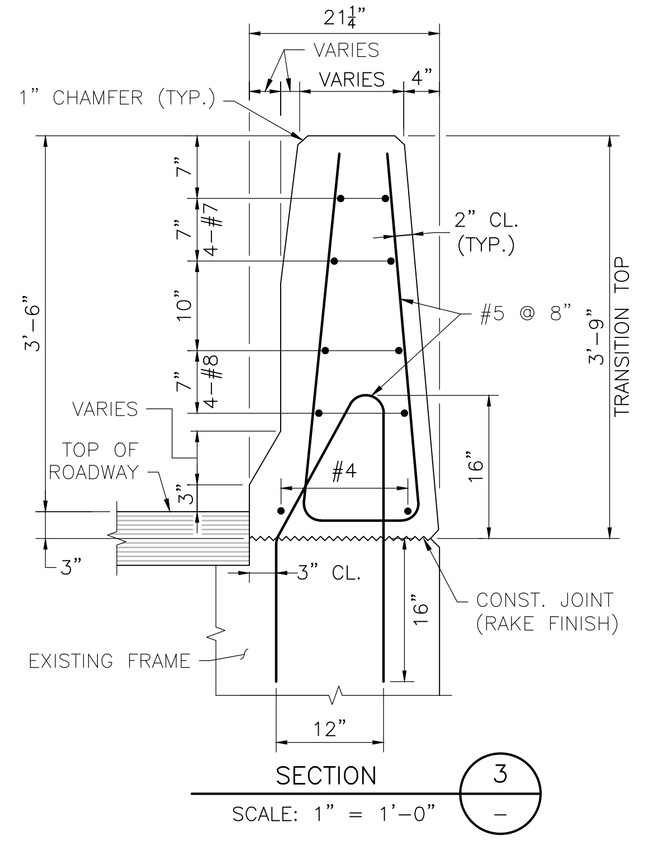
SCALE: 1" = 1'–0"

PROPOSED MEDIAN BARRIER TRANSITION TO VERTICAL FACE



SECTION 2

SCALE: 1" = 1'–0"



SECTION 3

SCALE: 1" = 1'–0"

DRILL & GROUT NOTES:

1. SEE SHEET 8 FOR DRILL & GROUT NOTES.

BARRIER INSTALLATION NOTES:

1. SEE SHEET 8 FOR BARRIER INSTALLATION NOTES.

BURLINGTON
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	10	24
	PROJECT FILE NO. 613196		

REINFORCING DETAILS 2 OF 3

*
2EW
2EX

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
	USE ONLY PRINTS OF LATEST DATE

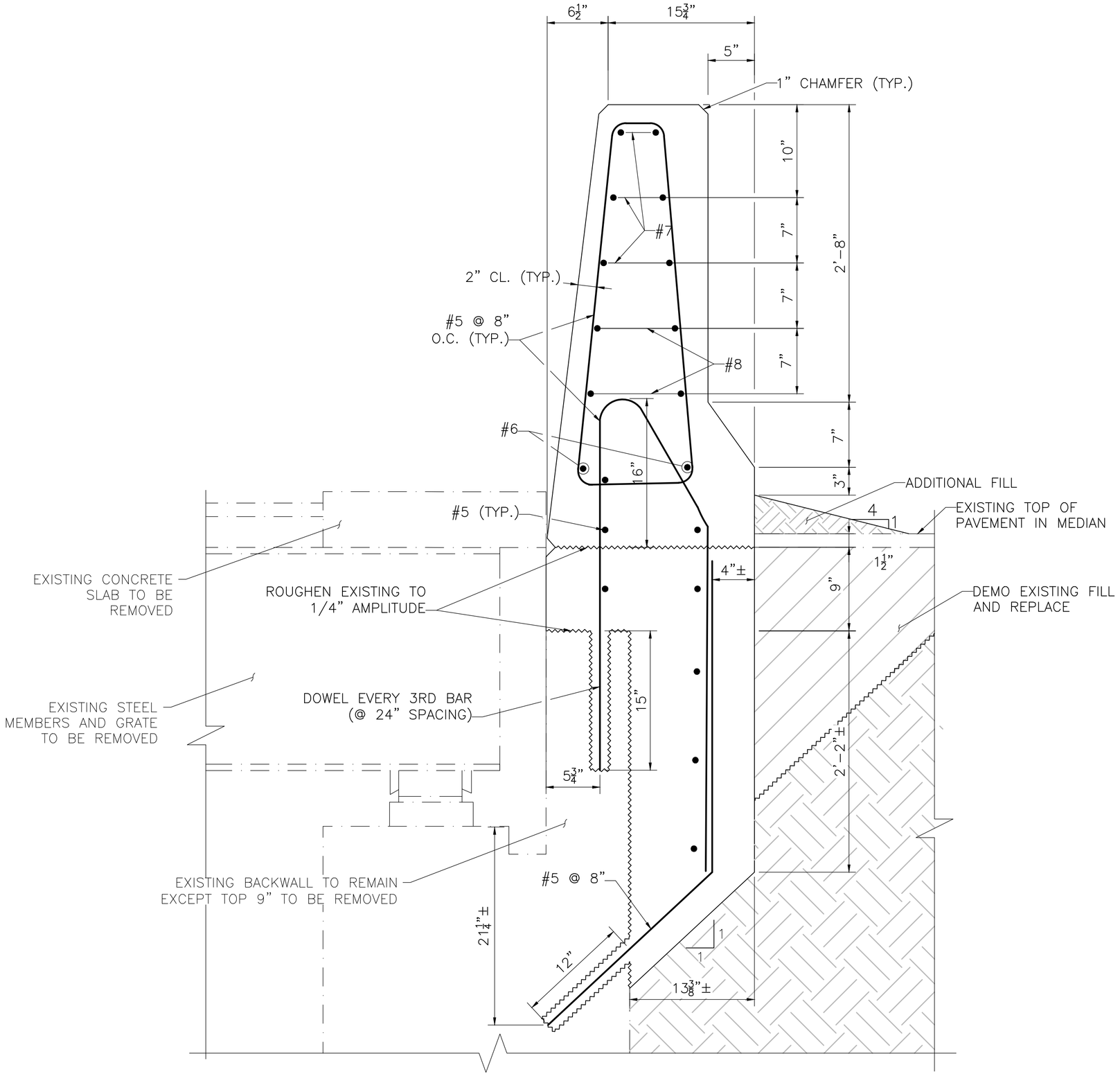
SHEET 9 OF 16 SHEETS BRIDGE NO. B–29–011 (*)

8-10-REINFORCING DETAILS.DWG Plotted on 22-Oct-2025 8:25 AM

PS&E Resubmission 24-October-2025

Proposal No. 613196-133292

A00802 - 12



PROPOSED CF-MTL5 BARRIER AT ABUTMENT BACKWALL

SCALE: 1½" = 1'-0"

DRILL & GROUT NOTES:

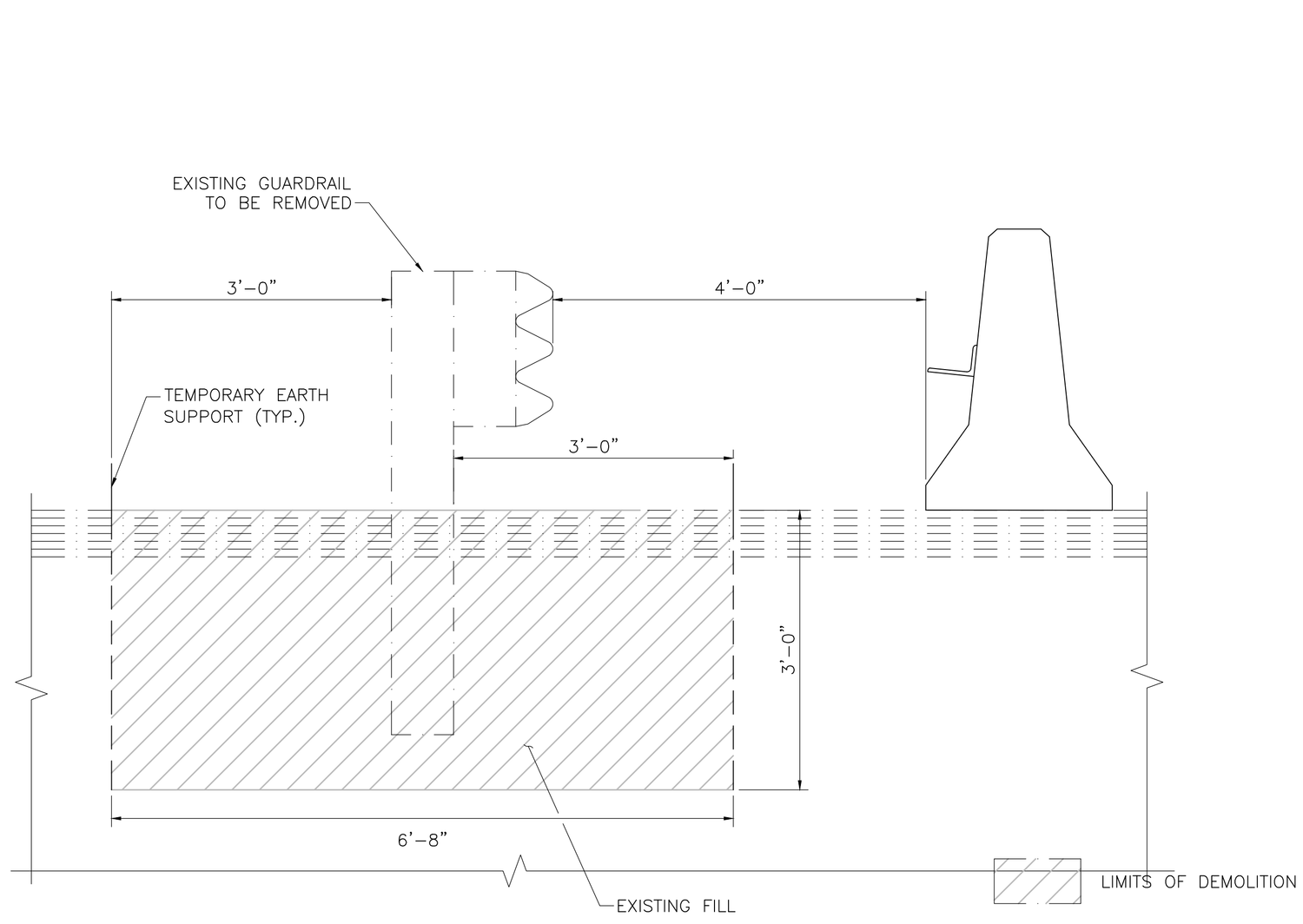
1. SEE SHEET 8 FOR DRILL & GROUT NOTES.

BARRIER INSTALLATION NOTES:

1. SEE SHEET 8 FOR BARRIER INSTALLATION NOTES.

GUARDRAIL TRANSITION AT MEDIAN NOTES:

1. CONTRACTOR TO DESIGN TEMPORARY EARTH SUPPORT AT LOCATIONS AS REQUIRED. SHALL BE INCIDENTAL TO THE INSTALLATION OF THIS ITEM.



EXISTING GUARDRAIL HIGHWAY TRANSITION AT MEDIAN

SCALE: 1" = 1'-0"

NOTE:

CONTRACTOR TO DEMOLISH EXISTING FILL AND REPLACE TO MATCH EXISTING GRADE. SUBSURFACE CONDITIONS BASED ON EXISTING RECORD DRAWINGS AND SHOULD BE CONFIRMED BEFORE EXCAVATION.

*
2EW
2EX

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

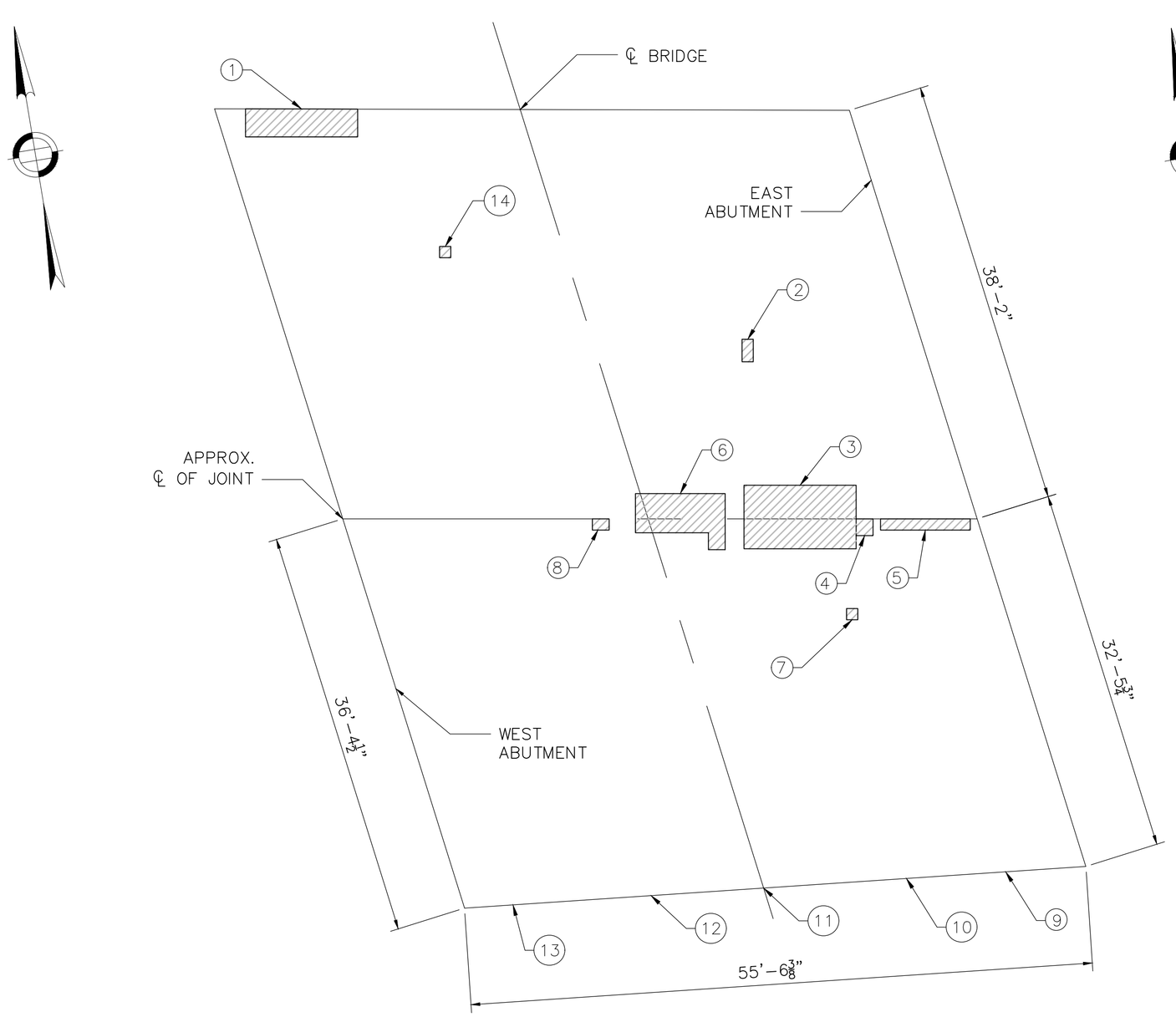
8-10-REINFORCING DETAILS.DWG Plotted on 24-Oct-2025 11:49 AM
PS&E Resubmission 24-October-2025
Proposal No. 613196-133292
A00802 - 13

BURLINGTON
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	12	24
PROJECT FILE NO.	613196		

CONCRETE REPAIRS 1 OF 3

11-13-CONCRETE REPAIRS.DWG Plotted on 22-Oct-2025 8:09 AM



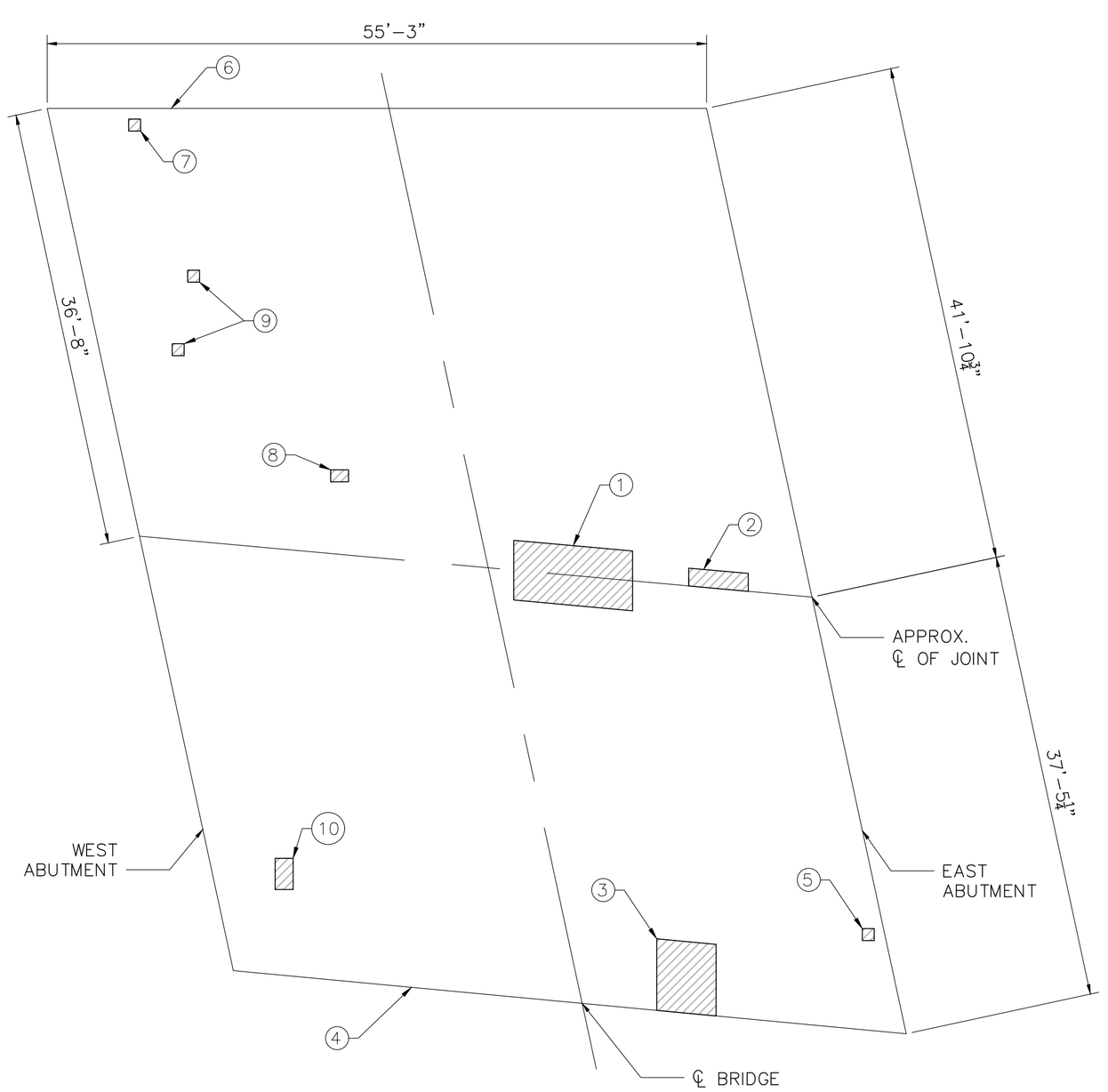
UNDERSIDE OF DECK PLAN (2EW/I-95 NB)

SCALE: ⅛" = 1'-0"

LEGEND:

SPALLED/DELAMINATED CONCRETE AREAS TO BE REPAIRED

REPAIR AREA #	LENGTH	WIDTH	DEPTH	DEFICIENCY
1	10'-0"	2'-6"	6"	SPALL WITH EXPOSED REBAR
2	10"	2'-0"	2"	SPALL WITH EXPOSED REBAR
3	10'-0"	5'-8"	6"	SPALL WITH EXPOSED REBAR
4	18" DIA.	N/A	4"	SPALL WITH EXPOSED REBAR
5	8'-0"	6"	4"	SPALL WITH EXPOSED REBAR
6	8'-0"	5'-0"	6"	SPALL WITH EXPOSED REBAR
7	4" DIA.	N/A	2-1/2"	SPALL WITH EXPOSED REBAR
8	18"	10"	N/A	DELAMINATION
9	9'-0"	N/A	2-1/2"	SPALL/DELAMINATION WITH EXPOSED REBAR (COPING)
10	5'-0"	N/A	N/A	DELAMINATION (COPING)
11	3'-6"	N/A	1-1/2"	SPALL/DELAMINATION WITH EXPOSED REBAR (COPING)
12	7'-6"	N/A	1"	SPALL/DELAMINATION WITH EXPOSED REBAR (COPING)
13	16'-0"	12"	2"	SPALL/DELAMINATION WITH EXPOSED REBAR (COPING)
14	12" DIA.	N/A	3"	SPALL



UNDERSIDE OF DECK PLAN (2EX/I-95 SB)

SCALE: ⅛" = 1'-0"

LEGEND:

SPALLED/DELAMINATED CONCRETE AREAS TO BE REPAIRED

REPAIR AREA #	LENGTH	WIDTH	DEPTH	DEFICIENCY
1	10'-0"	5'-0"	6"	SPALL WITH EXPOSED REBAR
2	5'-0"	18"	6-1/2"	SPALL WITH EXPOSED REBAR
3	5'-0"	6'-0"	6"	SPALL WITH EXPOSED REBAR
4	12"	N/A	3"	SPALL WITH EXPOSED REBAR (PARAPET SLAB)
5	12"	1/2"	1/2"	SPALL WITH EXPOSED REBAR
6	10'-0"	N/A	2"	SEVERAL SPALLS/DELAMINATIONS WITH EXPOSED REBAR (COPING)
7	4" DIA.	N/A	1/2"	SPALL WITH EXPOSED REBAR
8	18"	7"	1/2"	(2) SPALLS/DELAMINATION WITH EXPOSED REBAR
9	3" DIA.	N/A	1/2"	(2) SPALL WITH EXPOSED REBAR
10	12"	2"	1/2"	SPALL WITH EXPOSED REBAR

CONCRETE REPAIR NOTES:

1. SEE SHEET 13 FOR CONCRETE REPAIR NOTES.

*
2EW
2EX

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

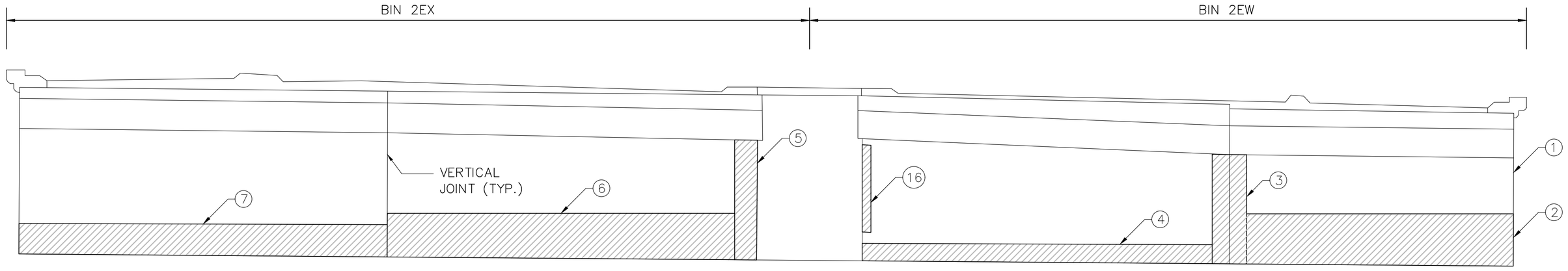
PS&E Resubmission 24-October-2025

Proposal No. 613196-133292

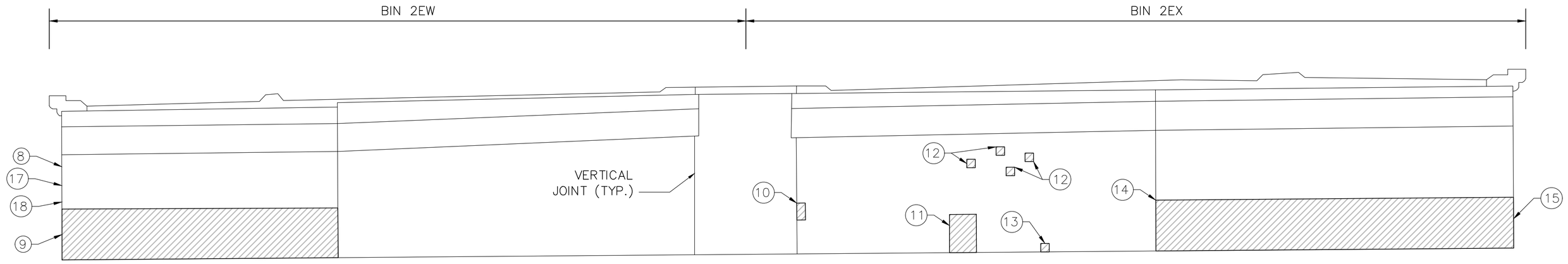
BURLINGTON
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	13	24
PROJECT FILE NO.	613196		

CONCRETE REPAIRS 2 OF 3



EAST ABUTMENT
SCALE: $\frac{1}{8}$" = 1'–0"



WEST ABUTMENT
SCALE: $\frac{1}{8}$" = 1'–0"

LEGEND:

SPALLED/DELAMINATED CONCRETE AREAS TO BE REPAIRED

CONCRETE REPAIR NOTES:

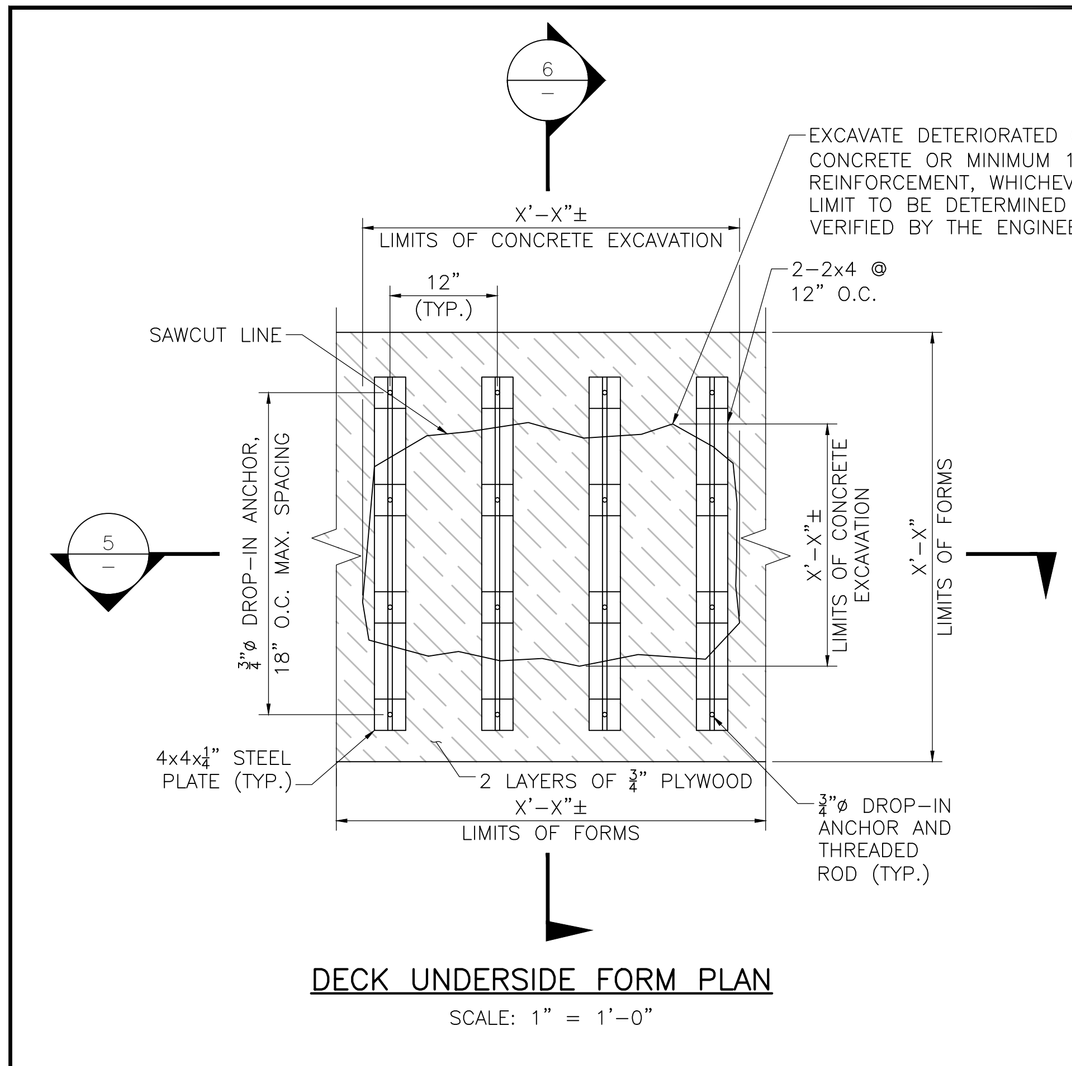
1. SEE SHEET 13 FOR CONCRETE REPAIR NOTES.

REPAIR AREA #	HEIGHT	WIDTH	DEPTH	DEFICIENCY
1	12" DIA.	N/A	1"	SPALL WITH EXPOSED REBAR
2	6'–0"	33'–0"	2"	DELAMINATION/SPALL WITH EXPOSED REBAR
3	FULL HEIGHT	4'–0"	4"	DELAMINATION/SPALL WITH EXPOSED REBAR
4	2'–0"	39'–0"	N/A	DELAMINATION
5	FULL HEIGHT	2'–6"	6"	DELAMINATION/SPALL WITH EXPOSED REBAR
6	5'–0"	49'–0"	N/A	DELAMINATION
7	3'–6"	42'–0"	N/A	DELAMINATION
8	12"	2'–0"	2"	SPALL WITH EXPOSED REBAR
9	6'–0"	37'–0"	UP TO 3"	DELAMINATION/SPALL WITH EXPOSED REBAR
10	2'–0"	3"	3"	SPALL
11	4'–6"	3'–2"	UP TO 1"	DELAMINATION/SPALL
12	UP TO 3"	UP TO 2"	UP TO 1"	FOUR(4) SPALLS WITH EXPOSED REBAR
13	8"	12"	N/A	DELAMINATION
14	6'–0"	37'–0"	N/A	DELAMINATION
15	4"	UP TO 12"	1"	(6) SPALLS WITH EXPOSED REBAR
16	10'–0"	12"	N/A	DELAMINATION
17	13"	18"	2"	SPALL WITH EXPOSED REBAR
18	8" DIA.	N/A	1"	SPALL WITH EXPOSED REBAR

*
2EW
2EX

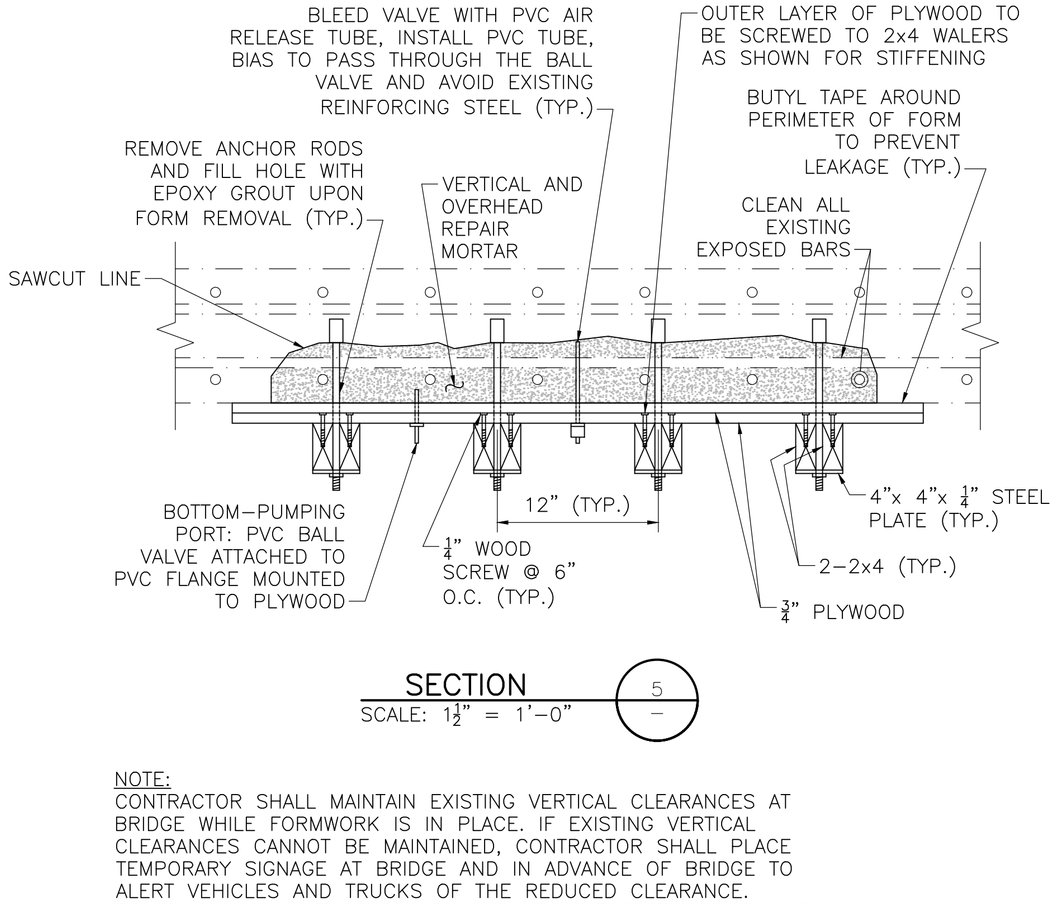
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

A00802 - 15
11-13-CONCRETE REPAIRS.DWG Plotted on 22-Oct-2025 8:10 AM
Proposal No. 613196-133292
PS&E Resubmission 24-October-2025



DECK UNDERSIDE FORM PLAN

SCALE: 1" = 1'-0"

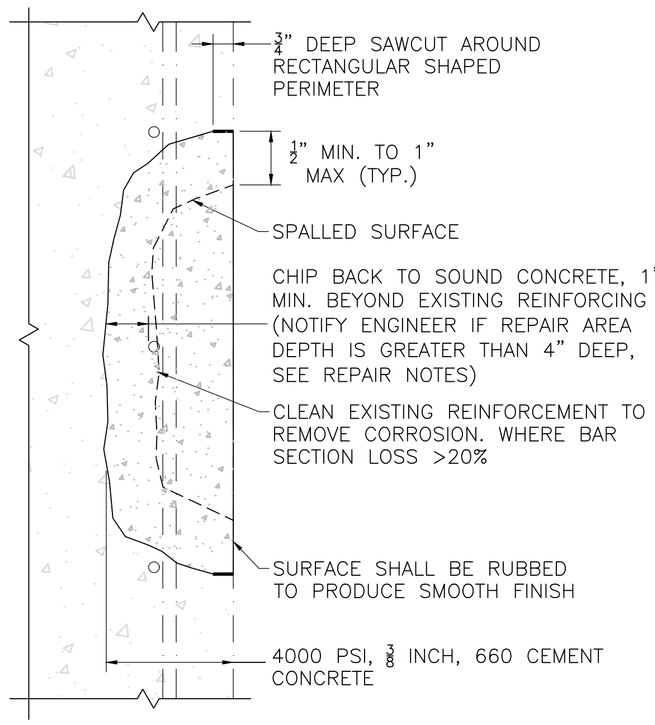


SECTION

SCALE: 1½" = 1'-0"

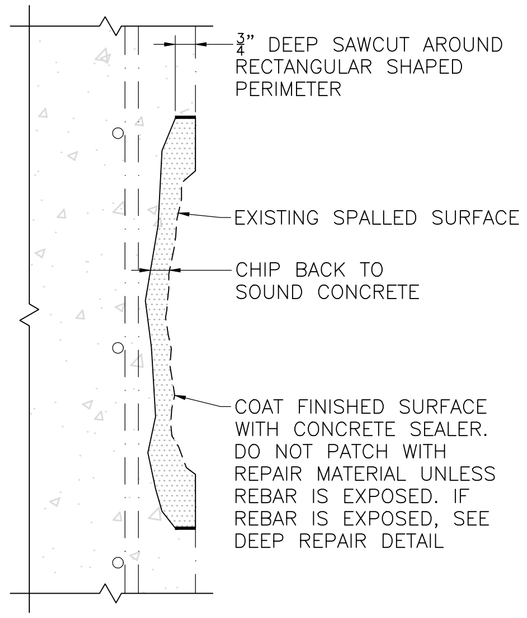
5

NOTE:
CONTRACTOR SHALL MAINTAIN EXISTING VERTICAL CLEARANCES AT BRIDGE WHILE FORMWORK IS IN PLACE. IF EXISTING VERTICAL CLEARANCES CANNOT BE MAINTAINED, CONTRACTOR SHALL PLACE TEMPORARY SIGNAGE AT BRIDGE AND IN ADVANCE OF BRIDGE TO ALERT VEHICLES AND TRUCKS OF THE REDUCED CLEARANCE. FORMWORK MAY NOT BE PLACED SUCH THAT THE TEMPORARY VERTICAL CLEARANCE IS REDUCED TO LESS THAN 13'-9". ENGINEER SHOULD APPROVE AFTER FORM IS SET.



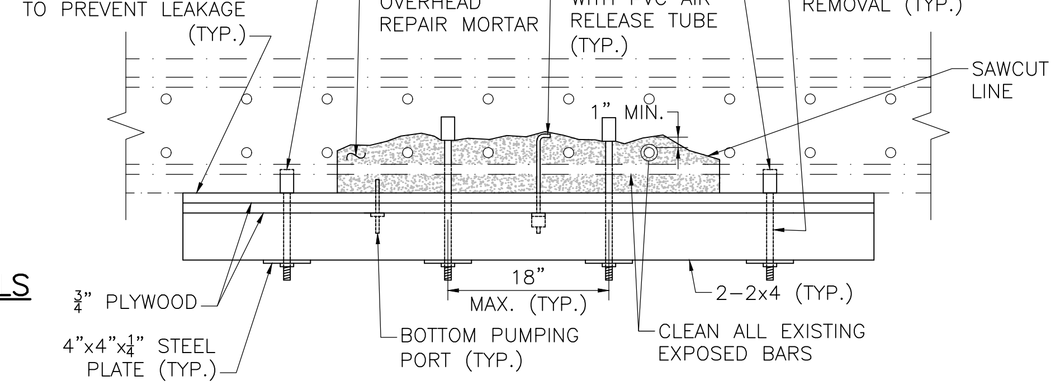
DEEP REPAIR WITH EXPOSED REBAR ALONG FRAME LEGS

(AVERAGE DEPTH OF SPALL IS GREATER THAN 2" OR SPALL WITH EXPOSED REBAR)



CONCRETE REMOVAL OF SHALLOW SPALLS

(AVERAGE DEPTH OF SPALL IS LESS THAN 2" AND NO EXPOSED REBAR)



SECTION

SCALE: 1½" = 1'-0"

6

NOTE:
CONTRACTOR SHALL MAINTAIN EXISTING VERTICAL CLEARANCES AT BRIDGE WHILE FORMWORK IS IN PLACE. IF EXISTING VERTICAL CLEARANCES CANNOT BE MAINTAINED, CONTRACTOR SHALL PLACE TEMPORARY SIGNAGE AT BRIDGE AND IN ADVANCE OF BRIDGE TO ALERT VEHICLES AND TRUCKS OF THE REDUCED CLEARANCE. FORMWORK MAY NOT BE PLACED SUCH THAT THE TEMPORARY VERTICAL CLEARANCE IS REDUCED TO LESS THAN 13'-9". ENGINEER SHOULD APPROVE AFTER FORM IS SET.

CURING
1. LEAVE THE FORM WORK IN PLACE UNTIL THE COMPRESSIVE STRENGTH OF THE VERTICAL AND OVERHEAD REPAIR MORTAR REACHES 2,500 PSI.
2. IF HAND PATCHING IS REQUIRED TO FILL THE PORT AREA, DRY-PACK WITH A NON-SAG MORTAR.
3. THE FORMS SHALL BE LEFT IN PLACE FOR A MINIMUM OF 5 DAYS. ONCE THE FORMS ARE STRIPPED CURING COMPOUND SHALL BE APPLIED TO THE REPAIR IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

CONCRETE SEALER
1. AT SHALLOW REPAIRS, NO REPAIR MORTAR OR REPAIR CONCRETE SHALL BE APPLIED. REMOVE LOOSE CONCRETE.

CONCRETE REPAIR NOTES:

1. THE CONTRACTOR SHALL EXERCISE CARE WHEN REMOVING CONCRETE AROUND REINFORCEMENT TO ONLY REMOVE DETERIORATED CONCRETE AND TO LIMIT THE SOUND CONCRETE REMOVED TO THE MINIMUM NECESSARY TO PRODUCE A GOOD REPAIR.
2. THE CONTRACTOR SHALL ESTABLISH LIMITS OF VARIOUS REPAIRS AS SHOWN ON THE PLANS AND AT THE DIRECTION OF THE ENGINEER. THE LOCATIONS SHOWN ON THE PLANS ARE BASED UPON RECORDS OF BRIDGE INSPECTIONS AND OBSERVATIONS FROM THE GROUND ARE ARE NOT GUARANTEED. THE LOCATION AND EXTENT OF ALL CONCRETE REPAIRS ARE TO BE FIELD VERIFIED AND APPROVED BE THE ENGINEER AFTER THE CONTRACTOR HAS SOUNDED AND MARKED OUT THE REPAIR AREAS. REASONABLY FOLLOW OUTLINES OF DETERIORATION PREFERABLY WITH SQUARE CORNERS.
3. THE LIMITS OF THE REPAIRS SHALL BE SAWCUT ALONG NEAT LINES TO A DEPTH OF ¾" TO PRODUCE A CLEAN EDGE.
4. REMOVE DETERIORATED AND UNSOUND CONCRETE AS WELL AS SOUND CONCRETE WHERE NECESSARY TO A MINIMUM OF 1" BEYOND SURFACE REINFORCEMENT.
5. EXPOSED REINFORCEMENT TO BE CLEANED BY MECHANICAL CLEANING AND HIGH PRESSURE WASHING WITH WATER THAT CONTAINS NO DETERGENTS OF BOND INHIBITING CHEMICALS. WHERE ACTIVE CORROSION HAS OCCURRED (THAT WHICH WOULD INHIBIT BONDING) SANDBLAST STEEL TO WHITE METAL FINISH.
6. A NEW REINFORCEMENT BAR SHALL BE PLACED TO SUPPLEMENT AN EXISTING REINFORCEMENT BAR WHEN AN EXISTING BAR HAS A SECTION LOSS OF 20% OF MORE OF THE ORIGINAL CROSS SECTION, AS DETERMINED BY THE ENGINEER, OR THE EXISTING REINFORCEMENT IS BROKEN. IN LIEU OF SUPPLEMENTING A BAR ADJACENT TO A DETERIORATED BAR, THE CONTRACTOR MAY CUT OUT THE DETERIORATED BAR AND MECHANICALLY SPLICE THE NEW BAR TO EXISTING REINFORCEMENT.
7. AFTER REMOVAL AND EDGE PREPARATION ARE COMPLETE, REMOVE BOND INHIBITING MATERIALS (DIRT, GREASE, LOOSELY BONDED AGGREGATE) BY ABRASION BLASTING OR HIGH PRESSURE WATER BLASTING WITH WATER THAT CONTAINS NO DETERGENTS OR BOND INHIBITING CHEMICALS. CHECK THE CONCRETE SURFACES AFTER CLEANING TO INSURE THAT THE SURFACE IS FREE FROM ADDITIONAL LOOSE AGGREGATE OR THAT ADDITIONAL DELAMINATIONS ARE NOT PRESENT.
8. AT THE TIME THE REPAIR CONCRETE/MORTAR IS APPLIED, THE EXISTING CONCRETE SUBSTRATE SHOULD BE SATURATED SURFACE DRY.
9. WHERE CONCRETE REMOVAL AND REPLACEMENT NECESSITATES ADJACENT SEPARATE CONCRETE PLACEMENTS, CONCRETE REMOVAL SHALL NOT BE ALLOWED WITHIN 1 FOOT OF ADJACENT REPAIR AREAS. ADJACENT AREAS WHERE THIS 1 FOOT BUFFER IS NOT ATTAINABLE SHALL BE COMBINED INTO A SINGLE REPAIR AREA.
10. IN SEQUENCING WORK, THE CONTRACTOR SHALL NOT BEGIN CONCRETE REMOVAL AT A LOCATION ADJACENT TO A COMPLETED REPAIR UNTIL A MINIMUM OF 7 CURING DAYS HAVE PASSED.
11. ALL HORIZONTAL AND VERTICAL CONCRETE SURFACES IN CONTACT WITH REPAIR MATERIAL SHALL BE FREE OF OIL, GREASE, LAITANCE, AND OTHER CONTAMINANTS.
12. ALL HORIZONTAL AND VERTICAL CONCRETE SURFACES MUST BE CLEAN, SOUND AND ROUGH TO ENSURE A GOOD BOND.
13. THE CONTRACTOR SHALL MAINTAIN UNDERDECK LIGHTING AND COMMUNICATION CABLES. REMOVAL AND REATTACHMENT OF FIXTURES HOLDING COMMUNICATION LINES AND STREET LIGHTING SHALL BE INCIDENTAL TO CONCRETE REPAIRS.
14. REPAIR CONCRETE SHALL MEET THE REQUIREMENTS OF ITEM 905.001.

FORMWORK
1. FORMS DESIGNED FOR 12 PSI PRESSURE.
2. INSTALL FORMS ON THE FACE OF EACH REPAIR AREA. GROUT PORTS TO BE PLACED AT 4'-0" MAX. ON CENTER EACH WAY MAX. VENT TUBES TO BE PLACED AT 2'-0" MAX. ON CENTER EACH WAY.
3. FORMS ARE TO BE WATERTIGHT. PREFORMED FOAM GASKETS OR CAST IN PLACE FOAM SHALL BE USED TO MATCH SURFACES.
4. AT REPAIRS ADJACENT TO THE JOINTS IN THE RIGID FRAME, MAINTAIN THE EXISTING JOINT OPENING OF 1-1/2".

MIXING AND PUMPING
1. SATURATE HOST CONCRETE SUBSTRATE USING A WATER HOSE THROUGH FORM PORTS PRIOR TO PLACING GROUT. AT TIME OF GROUT PLACEMENT, SUBSTRATE SHALL BE SATURATED SURFACE DRY WITH NO STANDING WATER.
2. VERTICAL AND OVERHEAD REPAIR MORTAR SHALL BE USED TO MAKE THE REPAIRS AND SHALL BE MIXED ACCORDING TO THE MANUFACTURER SPECIFICATIONS AND IN ACCORDANCE WITH THE MASSDOT QCML.
3. THE PUMP MUST BE CAPABLE OF CONTINUOUS EVEN FLOW OF MATERIALS TO THE REPAIR AREA WITHOUT HAVING ANY LINE SURGE. LIVE SURGE WILL RESULT IN AIR VOIDS AND POSSIBLE AGGREGATE SEGREGATION.
4. PRIOR TO PUMPING MATERIALS, ALL HOSES MUST BE WET OUT WITH CLEAN WATER TO ENSURE INITIAL FLOW PROPERTIES ARE MAINTAINED.
5. THE PUMPING DISTANCE MUST BE KEPT TO A MINIMUM. THE PUMPING HOSE SHALL BE A MINIMUM 3 TIMES THE SIZE OF THE LARGEST AGGREGATE ON THE VERTICAL AND OVERHEAD REPAIR MORTAR (⅜"X3).
6. ADDITIONAL WATER BEYOND THE RECOMMENDED LEVEL WILL NOT INCREASE THE FLOW CHARACTERISTICS OF THE VERTICAL AND OVERHEAD REPAIR MORTAR. KEEP PUMPING PRESSURE TO A MINIMUM NECESSARY TO FILL CAVITY.

BURLINGTON
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	14	24
	PROJECT FILE NO. 613196		

CONCRETE REPAIRS 3 OF 3

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
	USE ONLY PRINTS OF LATEST DATE

*
2EW
2EX

SHEET 13 OF 16 SHEETS BRIDGE NO. B-29-011 (*)

PS&E Resubmission 24-October-2025

11-13-CONCRETE REPAIRS.DWG Plotted on 22-Oct-2025 8:11 AM

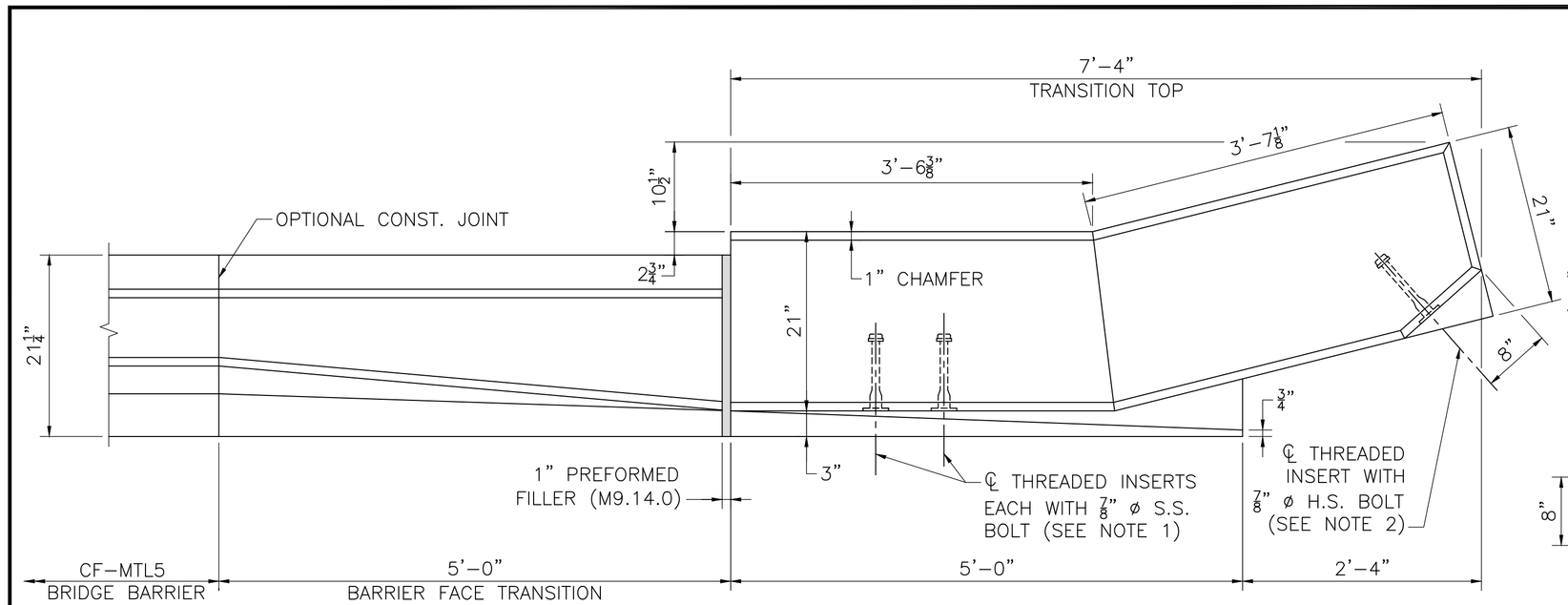
Proposal No. 613196-133292

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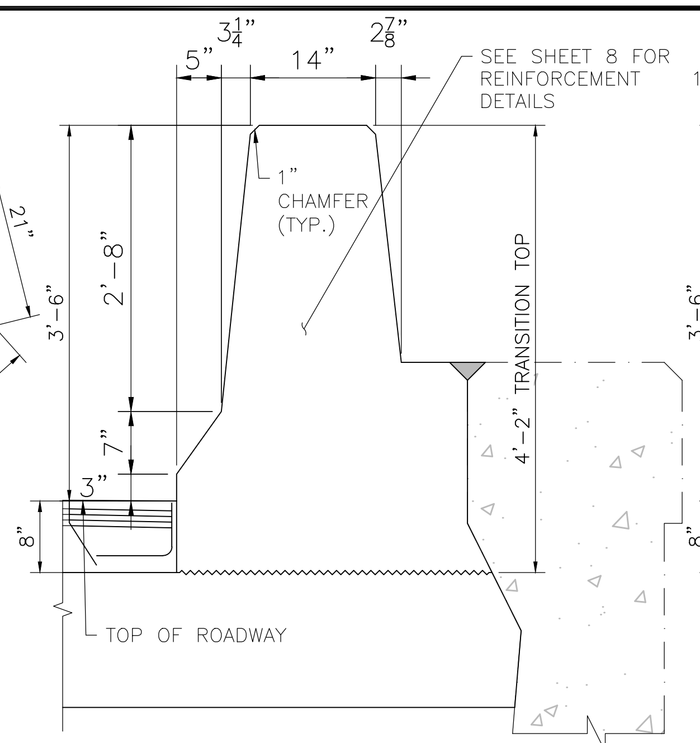
BURLINGTON
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	15	24
	PROJECT FILE NO. 613196		

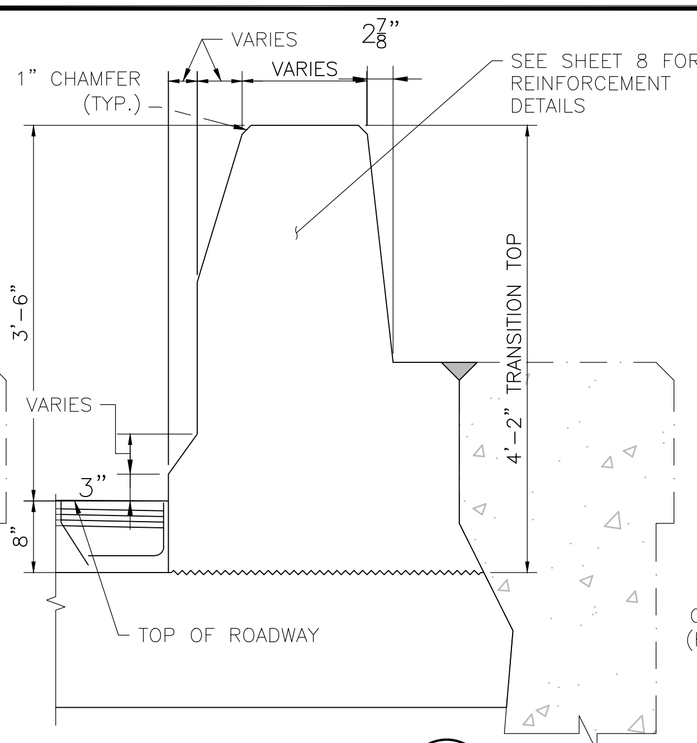
GUARDRAIL TRANSITION DETAILS



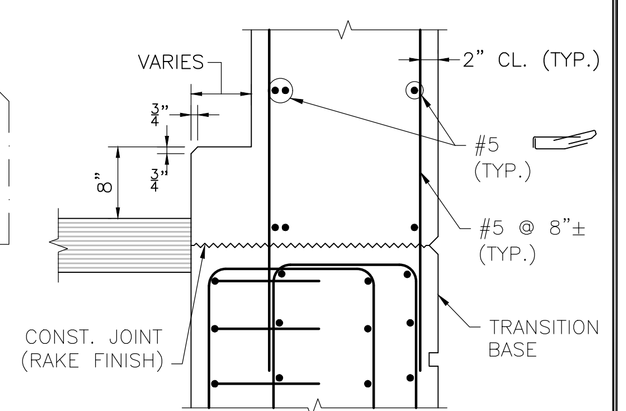
PLAN
SCALE: 1" = 1'-0"



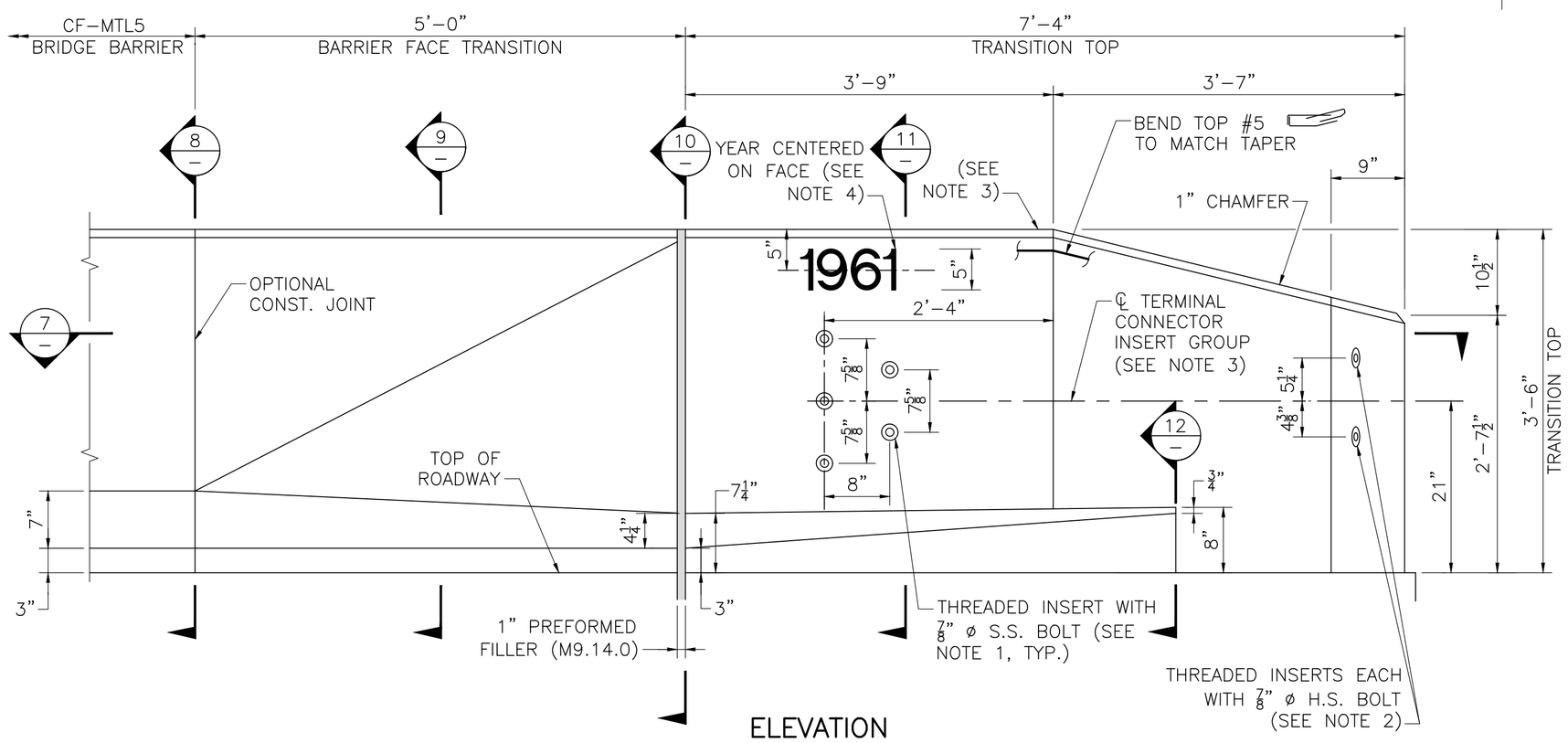
TYPICAL SECTION
SECTION 8
SCALE: 1" = 1'-0"



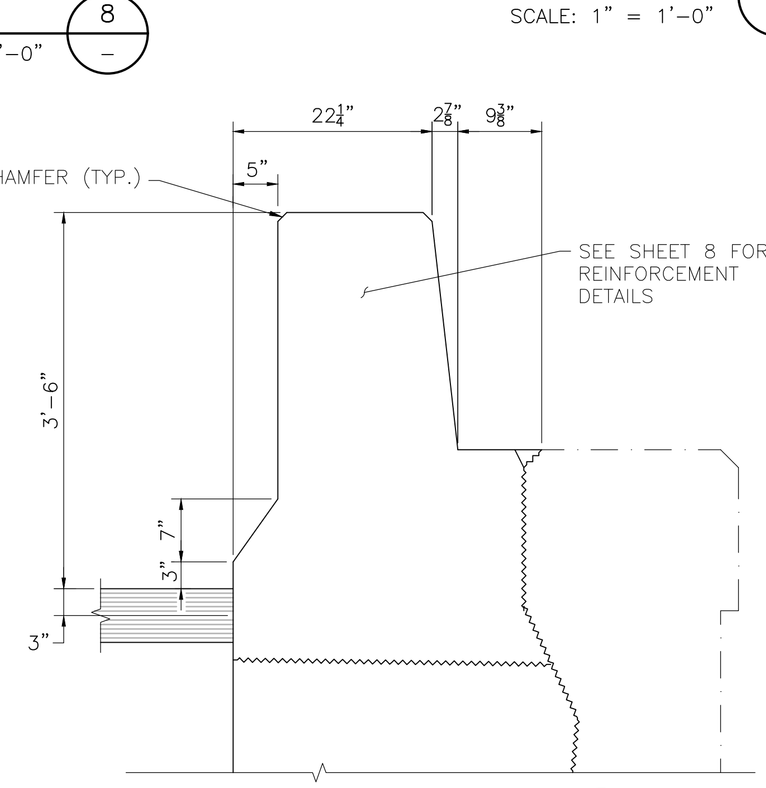
SECTION 9
SCALE: 1" = 1'-0"



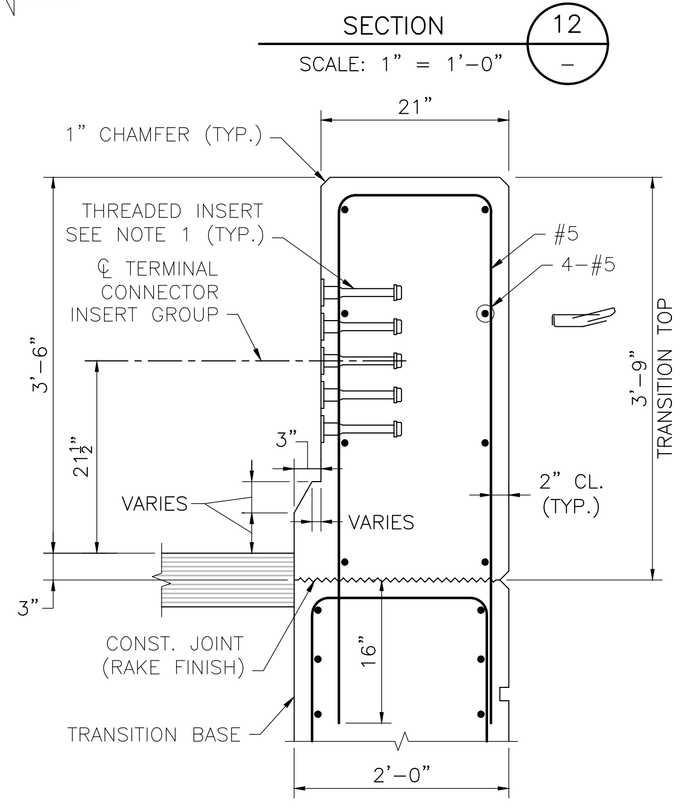
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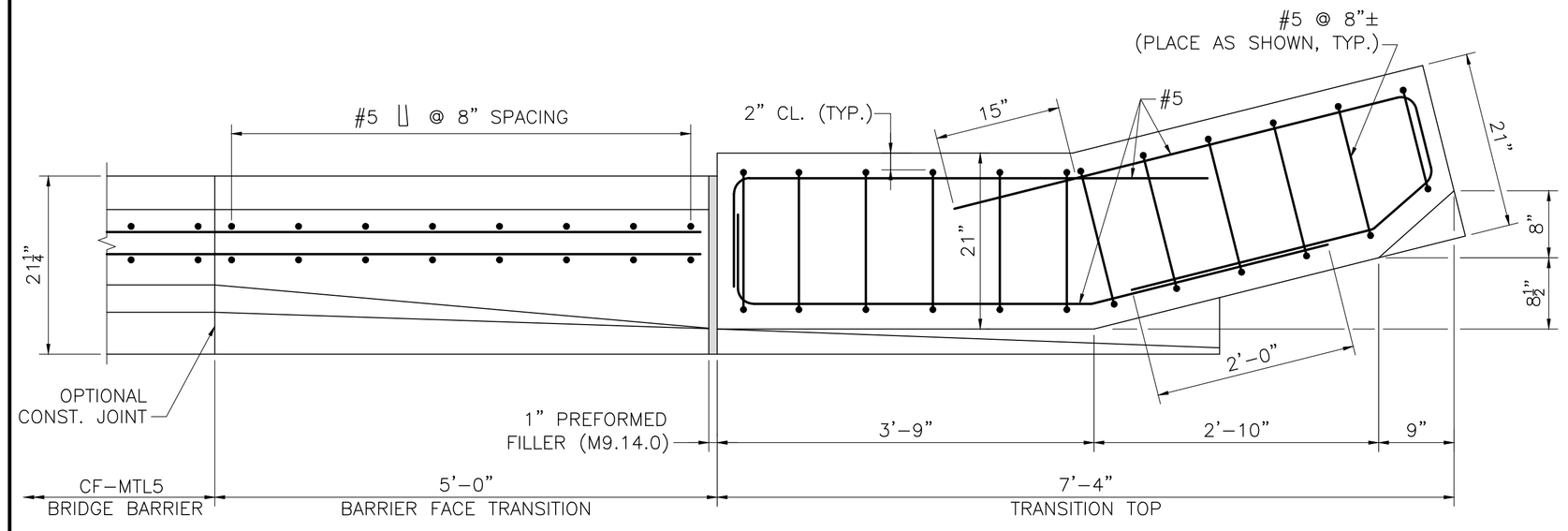
ELEVATION
SCALE: 1" = 1'-0"



SECTION 10
SCALE: 1" = 1'-0"



SECTION 11
SCALE: 1" = 1'-0"



SECTION 7
SCALE: 1" = 1'-0"

NOTES:

1. THREADED INSERTS SHALL BE PREQUALIFIED BY THE MANUFACTURER AS BEING CAPABLE OF DEVELOPING A NOMINAL SHEAR RESISTANCE OF 20 KIPS PER 7/8" ø S.S. (STAINLESS STEEL) BOLT. S.S. BOLTS SHALL BE 7/8" ø x 1½" LONG FULLY THREADED CONFORMING TO ASTM F593D WITH AISI TYPE 304N S.S. WASHERS. INSERTS FOR 7/8" S.S. BOLTS SHALL BE GALVANIZED AND CAST INTO THE TRANSITION.
2. 7/8" ø HIGH STRENGTH BOLTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F3125 GRADE 325 TYPE 1 GALVANIZED. USE ADDITIONAL WASHERS AS REQUIRED TO PROPERLY ENGAGE THE BOLTS.
3. FOR AN APPROACH GRADE IN EXCESS OF 3%, THE TRANSITION TOP AND THE TOP OF THE BRIDGE BARRIERS SHALL FOLLOW THE APPROACH GRADE. THE HEIGHT OF THE TRANSITION TOP SHALL VARY PROVIDED THAT THE MINIMUM DIMENSIONS SHOWN ON THE CONSTRUCTION DRAWINGS ARE MET. THE BOTTOM OF THE TRANSITION BASE SHALL BE SET LEVEL WITH THE MINIMUM EMBEDMENT DEPTH SHOWN. THE TERMINAL CONNECTOR INSERT GROUP SHALL BE SLOPED TO FOLLOW THE APPROACH GRADE.TO PROPERLY ENGAGE THE BOLTS.

   FOR AN APPROACH GRADE UP TO 3%, THE TRANSITION MAY BE CAST SQUARE AND SET PLUMB WITH THE MINIMUM EMBEDMENT DEPTH SHOWN. THE TERMINAL CONNECTOR INSERT GROUP SHALL BE SQUARE TO THE POST.
4. USE THE YEAR 1960 (YEAR BRIDGE WAS REBUILT) WHEN THE FIRST GUARDRAIL TRANSITION IS CAST. USE THIS YEAR FOR THE SOUTHWEST GUARDRAIL TRANSITION.
5. ALL CONCRETE FOR THE PRECAST HIGHWAY GUARDRAIL TRANSITION SHALL BE 5000 PSI, ¾", 685 HP CEMENT CONCRETE (ITEMS 992.11 AND 992.12).
6. LIFTING DEVICES (NOT SHOWN), INCLUDING THEIR NUMBER AND LOCATION, SHALL BE DESIGNED AND DETAILED BY THE PRECASTER. THEY SHALL BE GALVANIZED AND SHALL BE PLACED AND RECESSED IN POCKETS TO PROVIDE 1½" CLEAR COVER TO THE FACE OF THE TRANSITION CONCRETE. THESE DEVICES SHALL BE CLEARLY SHOWN ON THE SHOP DRAWINGS ALONG WITH ALL SUPPORTING CALCULATIONS AND/OR CATALOG CUTS. ONCE THE PRECAST TRANSITION IS SET IN PLACE, THE LIFTING DEVICE POCKETS SHALL BE FILLED WITH A NON-SHRINK GROUT THAT MATCHES THE COLOR OF THE TRANSITION CONCRETE WHEN CURED AND THE FILLED POCKETS SHALL BE RUBBED WITH A CORUNDUM STONE TO BLEND OUT THE JOINTS.

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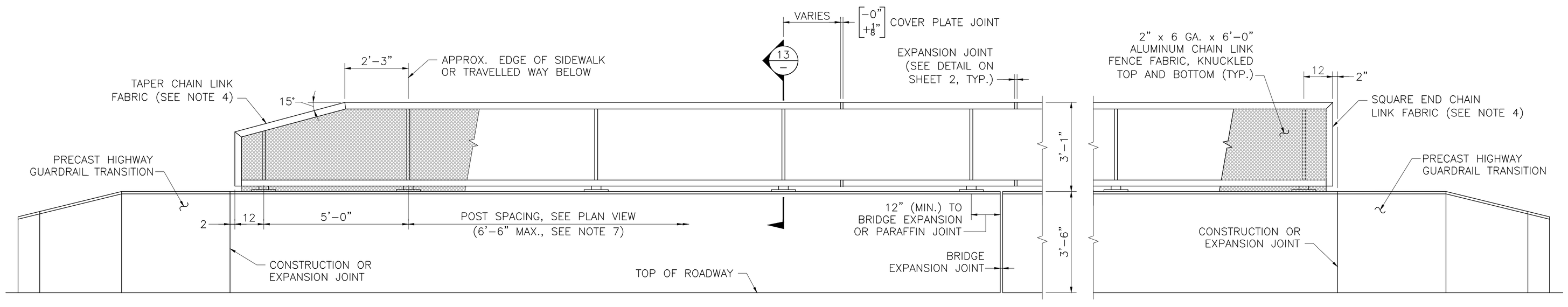
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

14-GUARDRAIL TRANSITION DETAILS.DWG Plotted on 22-Oct-2025 8:14 AM
PS&E Resubmission 24-October-2025
Proposal No. 613196-133292

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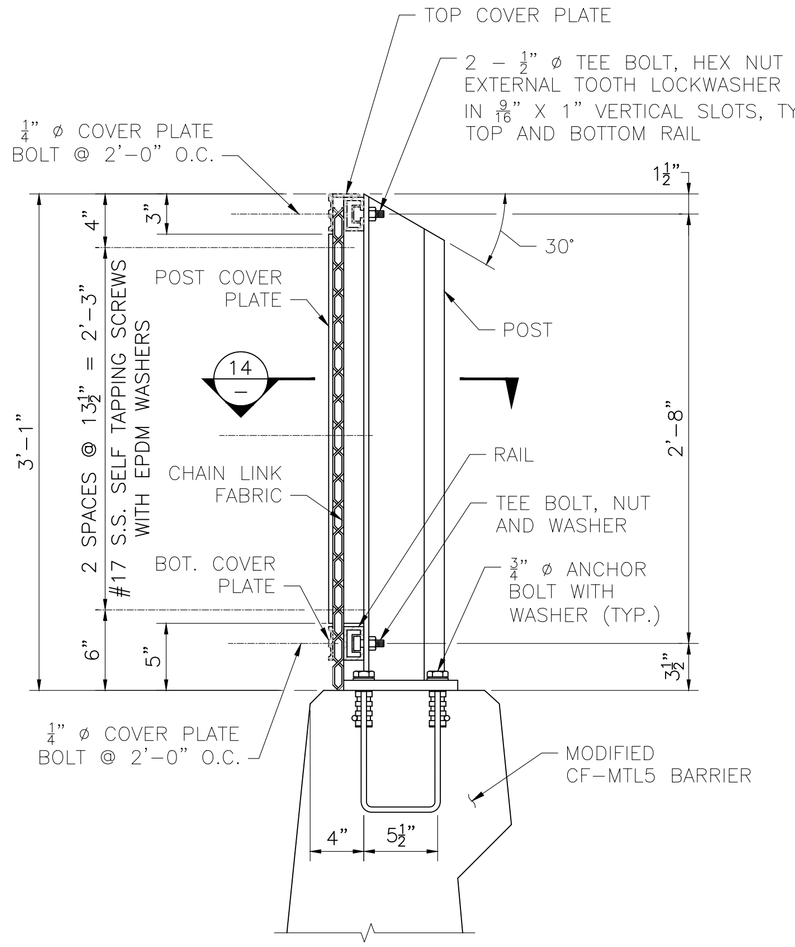
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	16	24
	PROJECT FILE NO. 613196		

SNOW FENCE DETAILS 1 OF 2

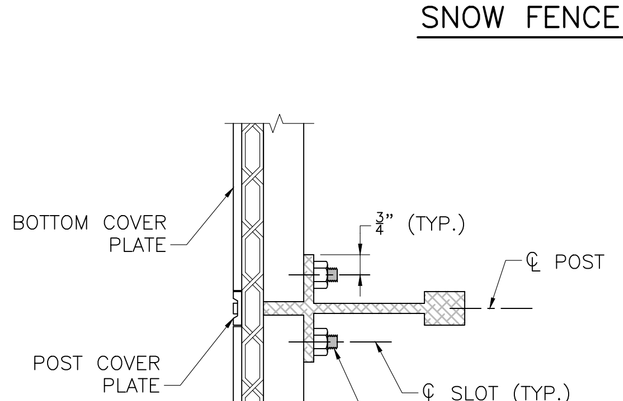


SNOW FENCE ELEVATION FOR CF−MTL5 BARRIERS

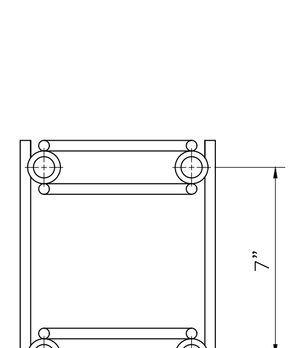
SCALE: 1/2" = 1'−0"



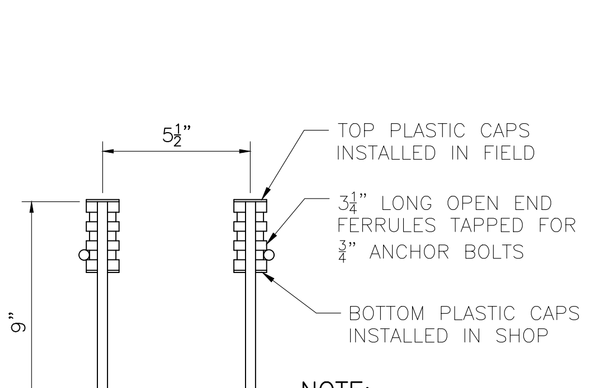
SECTION 14 / 13 — SCALE: 3" = 1'−0"



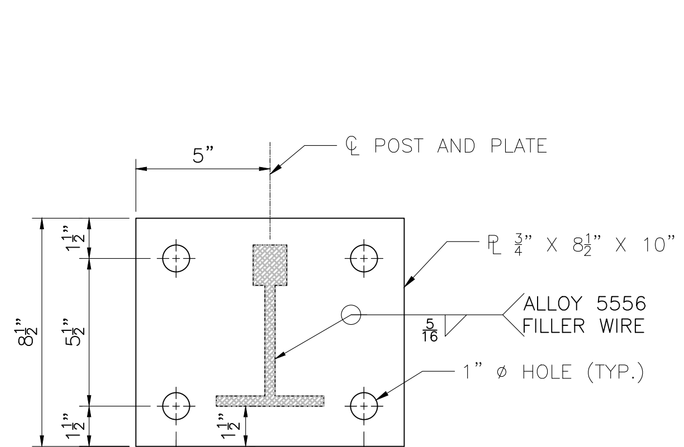
SECTION 14 / − — SCALE: 3" = 1'−0"



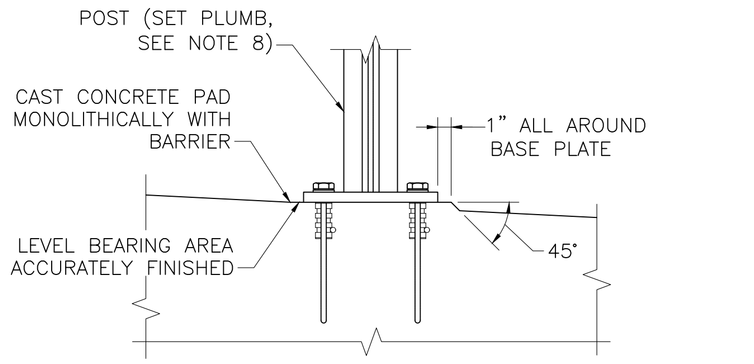
ANCHOR CAGE — SCALE: 3" = 1'−0"



NOTE:
GALVANIZED OR ELECTROPLATE FINISH.



BASE PLATE DETAIL — SCALE: 3" = 1'−0"



PROFILE GRADE OVER 3%

SETTING OF POSTS

SCALE: 1 1/2" = 1'−0"

FINISHES:

1. POSTS, RAILS, COVER PLATES AND SPLICE PLATES SHALL RECEIVE A DARK BRONZE ANODIZED FINISH.
2. CHAIN LINK FABRIC SHALL RECEIVE A 4±1 MIL POLYESTER POWDER COAT FINISH. THE COLOR SHALL BE DARK BRONZE TO MATCH COLOR OF ANODIZED ALUMINUM FRAMEWORK.
3. #17 SELF TAPPING SCREWS AND 1/4" ø COVER PLATE BOLTS TO BE COLORED TO MATCH THE ANODIZED EXTRUSIONS.

MATERIALS:

EXTRUSIONS & PLATES	ASTM B 221, ALLOY 6061−T6
CHAIN LINK FABRIC	AASHTO M 181 TYPE III (ALLOY 6061−T89 OR T94)
SELF TAPPING SCREWS	TYPE 304 STAINLESS STEEL WITH 1/4" THICK EPDM (ETHYLENE PROPYLENE DIENE MONOMER) WASHERS
ANCHOR BOLTS	ASTM F3125 GRADE 325 TYPE 1 GALVANIZED (ROTATION CAPACITY TEST NOT REQUIRED)
TEE BOLTS	ASTM A 307 GALVANIZED OR TYPE 304 STAINLESS STEEL
COVER PLATE BOLTS	TYPE 304 STAINLESS STEEL WITH OVERSIZED STAINLESS WASHER AND STAINLESS NUT WITH NYLON INSERT

NOTES:

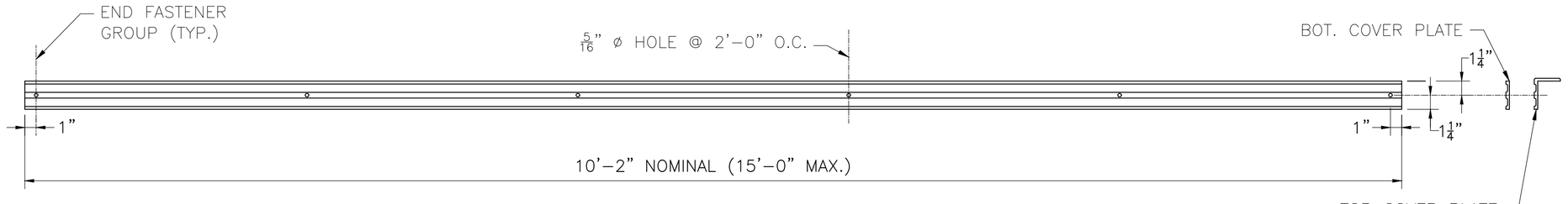
1. RAILS SHALL BE CONTINUOUS OVER A MINIMUM OF FOUR POSTS, IF POSSIBLE.
2. RAILS SHALL HAVE AN EXPANSION JOINT IN THE PANEL OVER A BRIDGE EXPANSION JOINT, IF ANY, AND AT 30 FOOT MAXIMUM SPACING ELSEWHERE.
3. BOTTOM OF POST BASE PLATE TO BE SET ON A 1/8" MOLDED FABRIC BEARING PAD (M9.16.2). THE THICKNESS OF THE PAD SHALL BE IGNORED BY THE DETAILER.
4. THE CHAIN LINK FABRIC SHALL BE SECURED BY KNUCKLING TOGETHER THE CUT ENDS OF THE FABRIC WIRE IN A MANNER SIMILAR TO THE ORIGINALLY MANUFACTURED END.
5. WHERE THE R.O.W. FENCE MUST MEET THE SCREEN, USE THE SQUARE END TO HIGHWAY GUARDRAIL TRANSITION DETAIL.
6. ALL SCREEN ENDS SHALL BE TAPERED.
7. POST SPACING SHALL BE UNIFORM BETWEEN TAPERED ENDS.
8. SET POSTS PERPENDICULAR TO GRADE FOR GRADES UP TO 3%. SET POSTS PLUMB FOR GRADES GREATER THAN 3%.

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MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

15-16-SNOW FENCE DETAILS.DWG Plotted on 22-Oct-2025 9:17 AM
Proposal No. 613196-133292
PS&E Resubmission 24-October-2025
A00802 - 18

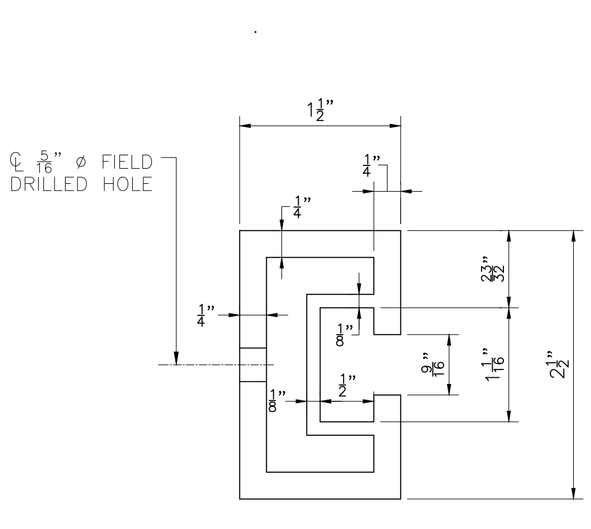
15-16-SNOW FENCE DETAILS.DWG Plotted on 22-Oct-2025 9:17 AM



TOP AND BOTTOM COVER PLATE
SCALE: 1½" = 1'-0"

COVER PLATE NOTES:

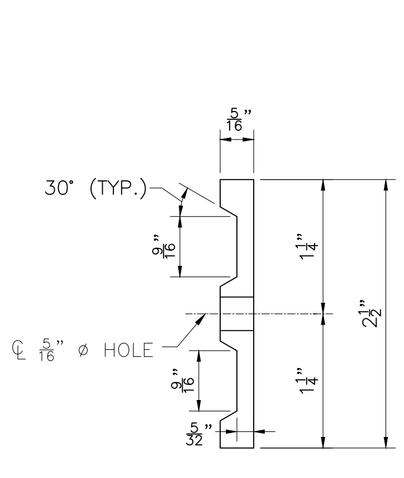
1. COVER PLATES MAY BE CONTINUOUS OVER A RAIL EXPANSION JOINT SPLICE. COVER PLATES SHALL BE FIELD CUT AS REQUIRED TO CLEAR THE EXPANSION JOINT. SEE DETAIL AT EXPANSION JOINT.
2. FIELD DRILL 5/16" ø HOLE 1" FROM THE FIELD CUT END OF A COVER PLATE, UNLESS THERE IS AN EXISTING HOLE WITHIN 6" FROM THE COVER PLATE END.
3. FIELD PAINT THE FIELD CUT ENDS OF THE COVER PLATES TO MATCH THE ANODIZED COLOR.



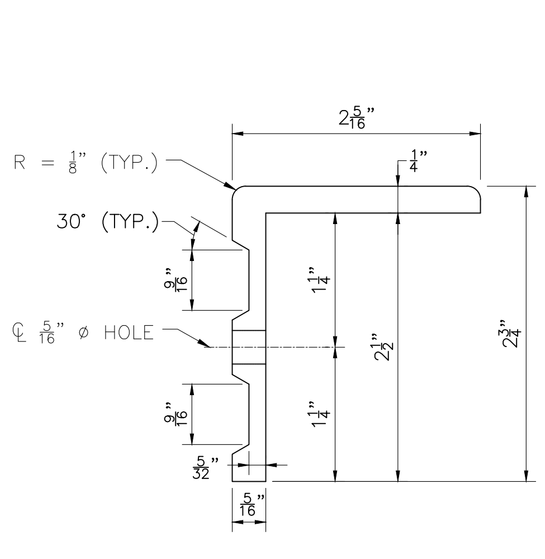
NOTE:

OTHER CONFIGURATIONS OF THE INTERNAL WALLS OF THE RAIL EXTRUSION MAY BE SUBMITTED FOR APPROVAL.

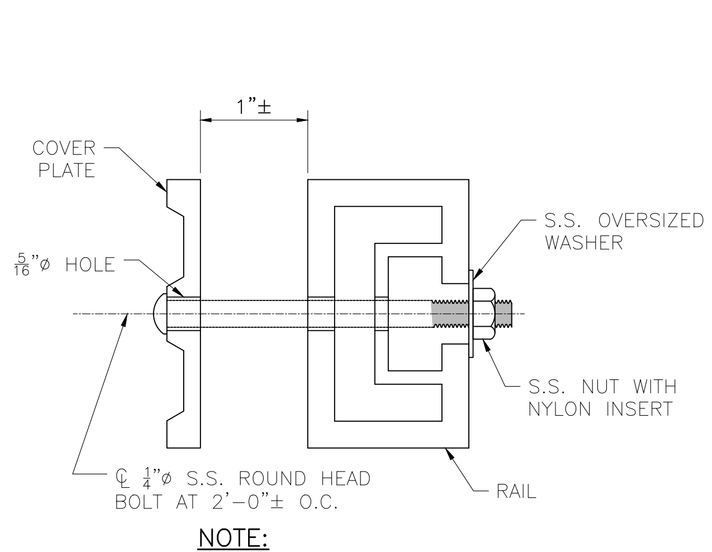
RAIL EXTRUSION
FULL SIZE



BOTTOM COVER PLATE EXTRUSION
FULL SIZE



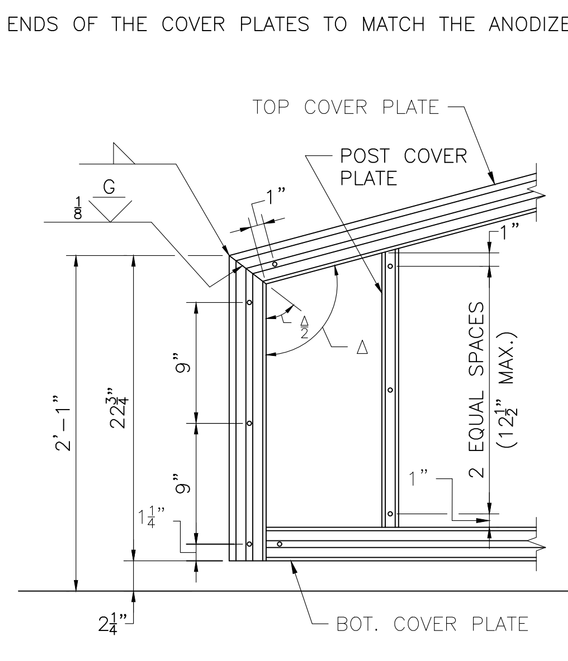
TOP COVER PLATE EXTRUSION
FULL SIZE



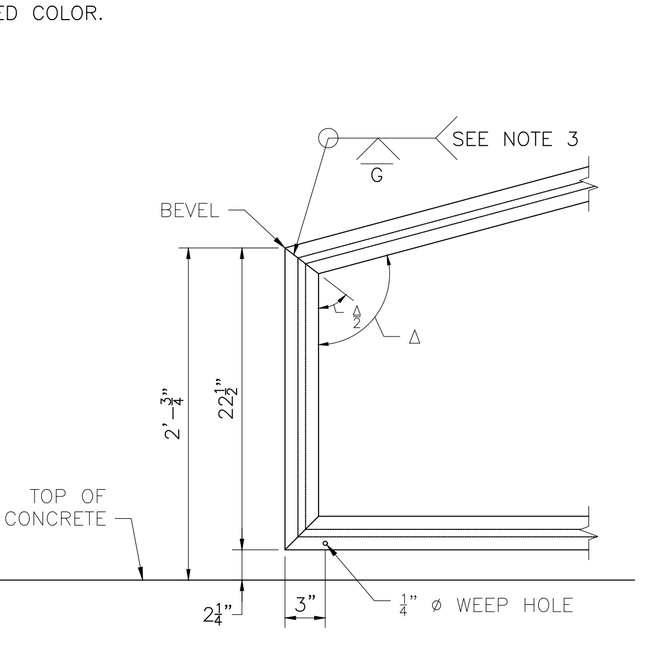
NOTE:

BOLTS SHALL BE TYPE 304 WITH A DRIVE HEAD TO BE COLORED TO MATCH ANODIZING.

RAIL & COVER PLATE DETAIL
FULL SIZE



COVER PLATE DETAILS

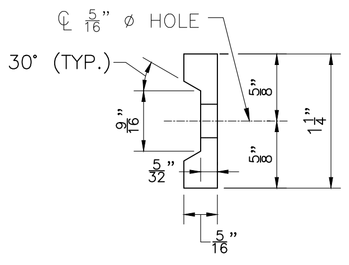


RAIL DETAILS

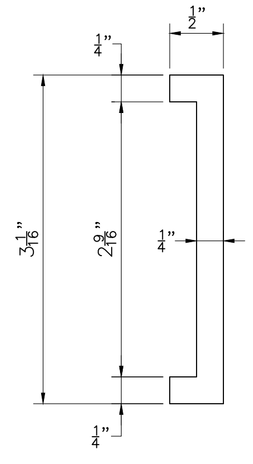
NOTES:

1. WELDING OF TOP COVER PLATE AND RAILS OF NON-TAPERED END IS SIMILAR.
2. WELDS AND MITERING TYPICAL FOR ALL ANGLED CORNERS.
3. WELD TYPICAL FOR TOP AND BOTTOM END CORNERS OF RAIL. INTERRUPT WELD AT SLOT IN BACK OF RAIL.

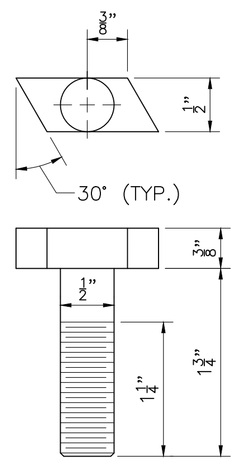
TAPERED END DETAILS
SCALE: 1½" = 1'-0"



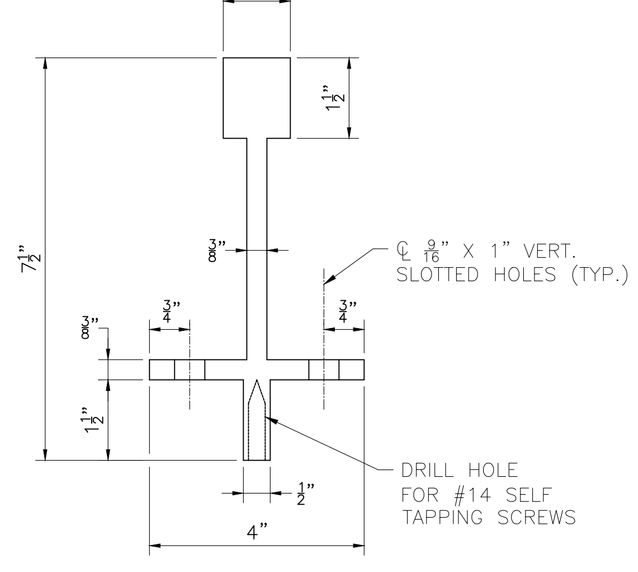
POST COVER PLATE EXTRUSION
FULL SIZE



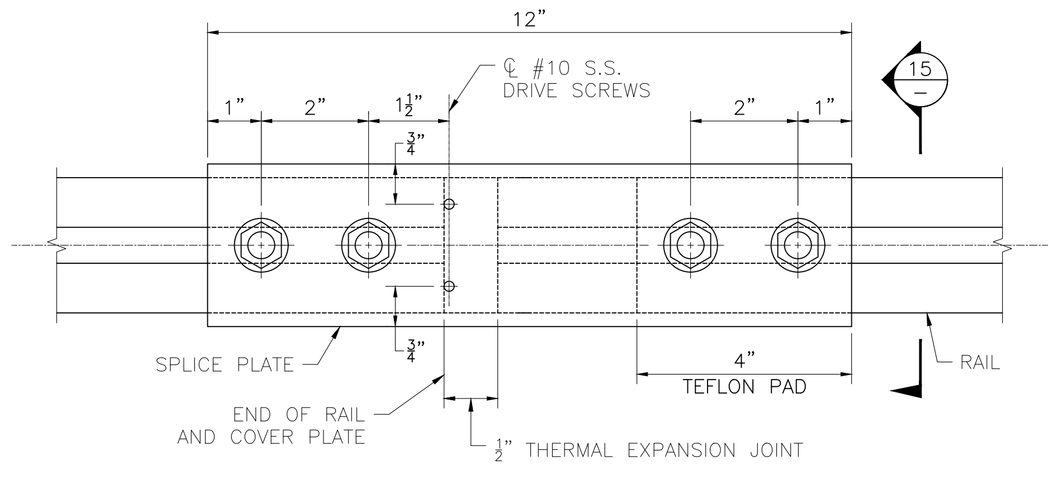
SPLICE PLATE EXTRUSION
FULL SIZE



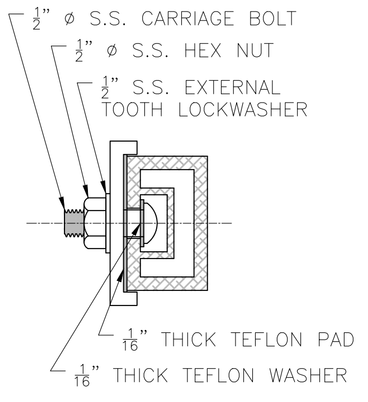
TEE BOLT
FULL SIZE



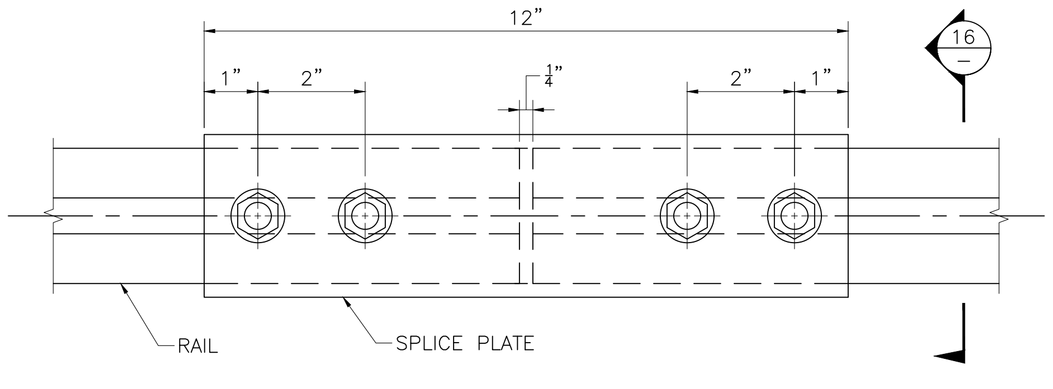
POST EXTRUSION
SCALE: 6" = 1'-0"



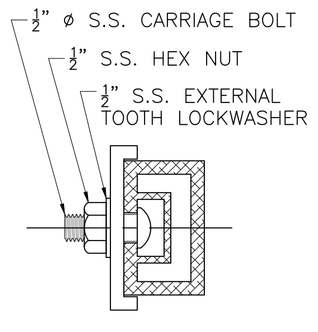
DETAIL AT RAIL EXPANSION JOINT SPLICE
SCALE: 6" = 1'-0"



SECTION 15 / –
SCALE: 6" = 1'-0"



DETAIL AT RAIL SPLICE JOINT
SCALE: 6" = 1'-0"



SECTION 16 / –
SCALE: 6" = 1'-0"

*
2EW
2EX

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
	USE ONLY PRINTS OF LATEST DATE

A00802 - 19
Proposal No. 613196-133292
PS&E Resubmission 24-October-2025

NOTES:

1. ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND THE MASSACHUSETTS AMENDMENTS TO THE MUTCD.
2. TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
3. 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.
4. SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, CHANNELIZING DEVICES, BARRIERS, AND CRASH ATTENUATORS MUST PASS THE CRITERIA SET FORTH IN NCHRP REPORT 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES" AND/OR "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH).
5. CONTRACTORS SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT, AND SIMILAR OPERATIONS.
6. THE FIRST 10 REFLECTORIZED DRUMS OF A TAPER SHALL BE MOUNTED WITH SEQUENTIALLY FLASHING LIGHTS WHEN USED FOR NIGHT WORK BETWEEN DUSK AND DAWN.
7. DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
8. MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
9. MINIMUM LANE WIDTH IS TO BE 11 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF DRUMS OR MEDIAN BARRIER.
10. ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.
11. ANY WORK REQUIRING A SINGLE LANE CLOSURE ON INTERSTATE 95 SHALL BE LIMITED TO NIGHT WORK BETWEEN 9:00PM–5:00AM, PER THE SCHEDULE OF WORK DEFINED IN THE CONTRACT SPECIAL PROVISIONS.
12. ANY WORK REQUIRING CLOSURE OF MULTIPLE LANES ON INTERSTATE 95 SHALL BE LIMITED TO NIGHT WORK BETWEEN 12:00AM–5:00AM, PER THE SCHEDULE OF WORK DEFINED IN THE CONTRACT SPECIAL PROVISIONS.
13. ANY WORK REQUIRING A FULL ROAD CLOSURE OF WINN STREET SHALL BE LIMITED TO NIGHT WORK BETWEEN 11:00PM–5:00AM, PER THE SCHEDULE OF WORK DEFINED IN THE CONTRACT SPECIAL PROVISIONS.
14. ANY WORK REQUIRING ONE–LANE ALTERNATING TRAFFIC CONTROL SET UPS ON WINN STREET SHALL BE LIMITED TO NIGHT WORK BETWEEN 9:00PM–5:00AM, PER THE SCHEDULE OF WORK DEFINED IN THE CONTRACT SPECIAL PROVISIONS.

LEGEND:

- REFLECTORIZED PLASTIC DRUM OR 36" CONE
- P/F POLICE/FLAGGER DETAIL
- TYPE III BARRICADE
- CHANGEABLE MESSAGE SIGN
- ARROW BOARD
- WORK ZONE
- DIRECTION OF TRAFFIC
- IMPACT ATTENUATOR
- MEDIAN BARRIER
- MEDIAN BARRIER WITH WARNING LIGHTS
- WORK VEHICLE
- TRUCK MOUNTED ATTENUATOR
- TRAFFIC OR PEDESTRIAN SIGNAL
- SIGN
- TEMPORARY PORTABLE RUMBLE STRIP ARRAY

THE IDEAL CAPACITY OF A MAJOR HIGHWAY IS GENERALLY CONSIDERED TO BE 1900 PASSENGER CARS PER HOUR PER LANE (PCPHPL). IN WORK ZONES ON A MULTI–LANE DIVIDED HIGHWAY, THE FOLLOWING VOLUME GUIDELINES HAVE BEEN SUGGESTED:

MEASURED AVERAGE WORK ZONE CAPACITIES

NUMBER OF LANES		NUMBER OF STUDIES	AVERAGE CAPACITY	
NORMAL (EXISTING)	OPEN (TO TRAFFIC)		VPH	VPHPL
3	1	7	1,170	1,170
2	1	8	1,340	1,340
5	2	8	2,740	1,370
4	2	4	2,960	1,480
3	2	9	2,980	1,490
4	3	4	4,560	1,520

Source: Dudek, C., Notes on Work Zone Capacity and Level of Service. Texas Transportation Institute, Texas A&M University, College Station, Texas (1984)

BY OBTAINING HOURLY TRAFFIC COUNTS FOR A PARTICULAR ROADWAY (WITH A MINIMUM OF A 48–HOUR AUTOMATIC TRAFFIC RECORDER (ATR) COUNT), THIS WILL HELP TO DETERMINE AT WHAT TIMES OF THE DAY OR NIGHT A CERTAIN NUMBER OF LANES MAY BE CLOSED.

SUGGESTED WORK ZONE WARNING SIGN SPACING

ROAD TYPE*	DISTANCE BETWEEN SIGNS **			
	A	B	C	D
URBAN (30 MPH OR LESS)	100	100	100	100
URBAN (35 MPH OR GREATER)	350	350	350	350
RURAL	500	500	500	500
EXPRESSWAY/FREEWAY	1,000	1,500	2,640	500

* ROAD TYPE TO BE DETERMINED BY MASSDOT OFFICE OF TRANSPORTATION PLANNING.

** DISTANCES ARE SHOWN IN FEET. THE COLUMN HEADINGS A, B, AND C ARE THE DIMENSIONS SHOWN IN THE DETAIL/ TYPICAL SETUP FIGURES. THE A DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN. THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS. THE C DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE "THIRD" SIGN IS THE FIRST ONE TYPICALLY ENCOUNTERED BY A DRIVER APPROACHING A TEMPORARY TRAFFIC CONTROL (TTC) ZONE.)

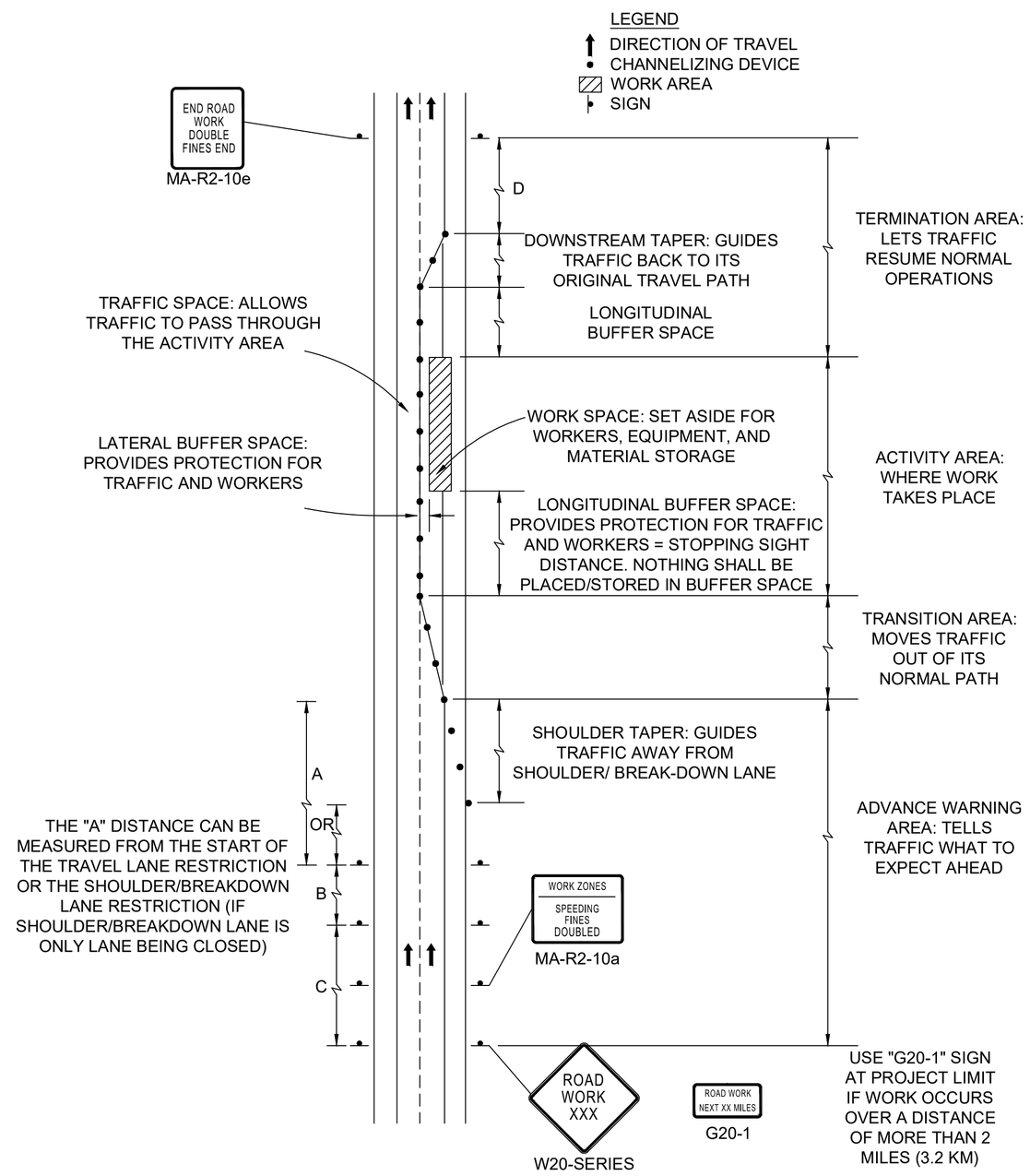
THE "THIRD" SIGN ABOVE IS TYPICALLY REFERRED TO AS AN "ADVANCE WARNING" SIGN ON THE TTCP SETUPS. THESE ADVANCE WARNING SIGNS ARE LOCATED PRIOR TO THE PROJECT LIMITS ON ALL APPROACHES (i.e. THE W20–1 SERIES (ROAD WORK XX FT) SIGNS), AND USUALLY REMAIN FOR THE DURATION OF THE PROJECT. ADDITIONAL SIGNS (i.e. "RIGHT LANE CLOSED 1 MILE" AND "LEFT LANE CLOSED 1 MILE") HAVE BEEN SHOWN IN SOME FIGURES AS EXAMPLES OF REINFORCEMENT SIGN PLACEMENT BUT ARE USED IN RARE OCCASIONS.

THE FIRST AND SECOND WARNING SIGNS ABOVE ARE REFERRED TO AS THE OPERATIONAL (DAY–TO–DAY) WORK ZONE SIGNS AND MAY BE MOVED DEPENDING ON WHERE THE SPECIFIC ROADWAY WORK FOR THAT DAY IS LOCATED.

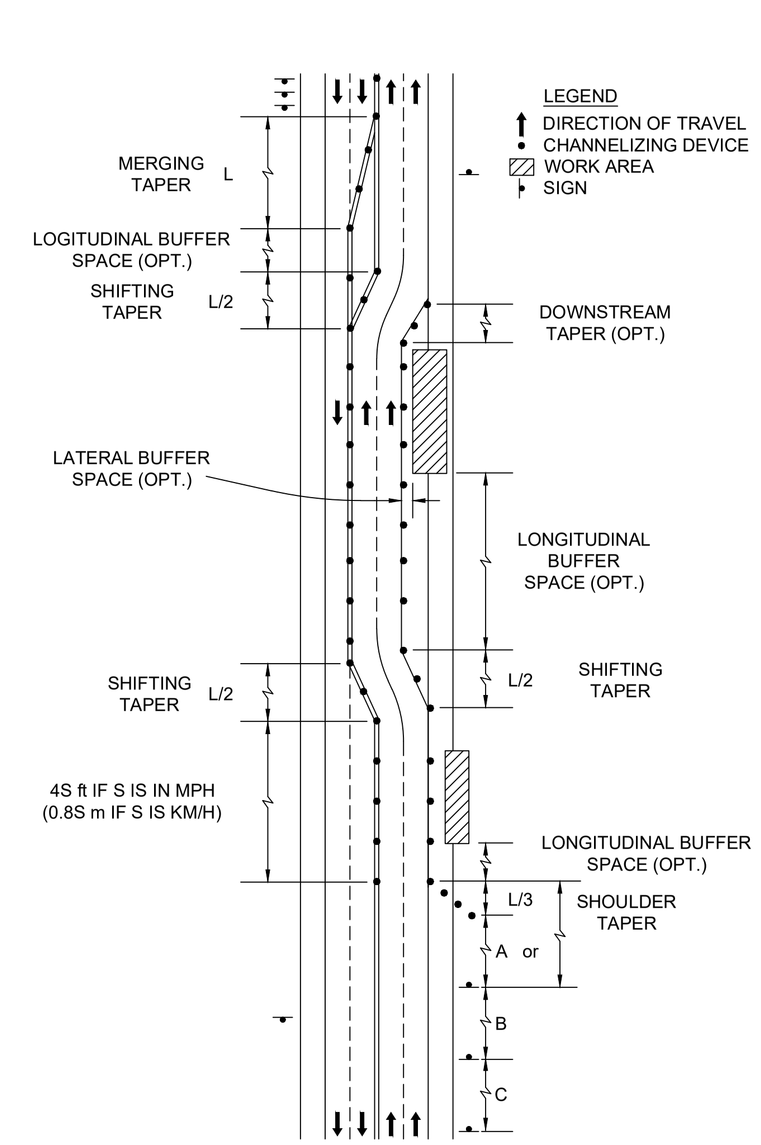
MA R2–10a SIGNS SHALL BE PLACED BETWEEN THE SECOND AND THIRD SIGNS AS DESCRIBED ABOVE.

MA R2–10a, MA R2–10e, AND W20–1 SERIES SIGNS ARE TO BE INCLUDED ON ALL DETAILS/TYPICAL SETUPS.

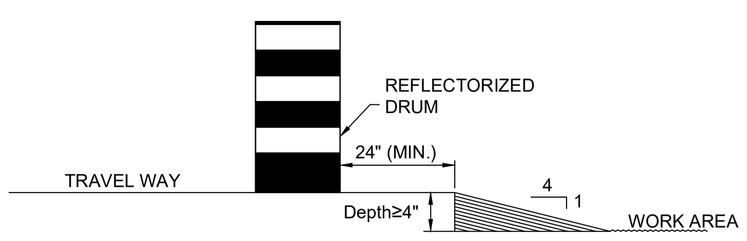
Based on: Table 6C–1 MUTCD LATEST EDITION



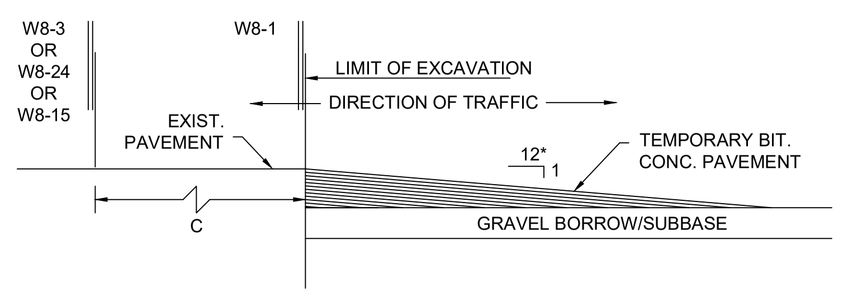
COMPONENT PARTS OF A TEMPORARY TRAFFIC CONTROL (TTC) ZONE
NOT TO SCALE



TAPER AND BUFFER DETAILS
NOT TO SCALE



LATERAL DROP-OFF DETAIL
NOT TO SCALE



LONGITUDINAL DROP-OFF DETAIL
NOT TO SCALE
* - INCREASE SLOPE RATIO FOR HIGHER SPEEDS (50:1)

BURLINGTON
I-95/ROUTE 128 OVER WINN STREET

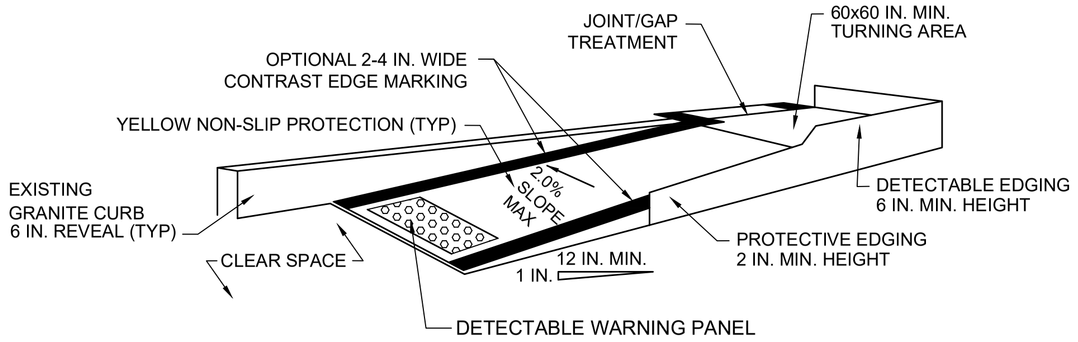
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	18	24
PROJECT FILE NO.	613196		

TEMPORARY TRAFFIC CONTROL PLANS - SHEET 1

MASSDOT 10 BRIDGES_TTCP_WINN ST.DWG Plotted on 16-Dec-2025 4:02 PM

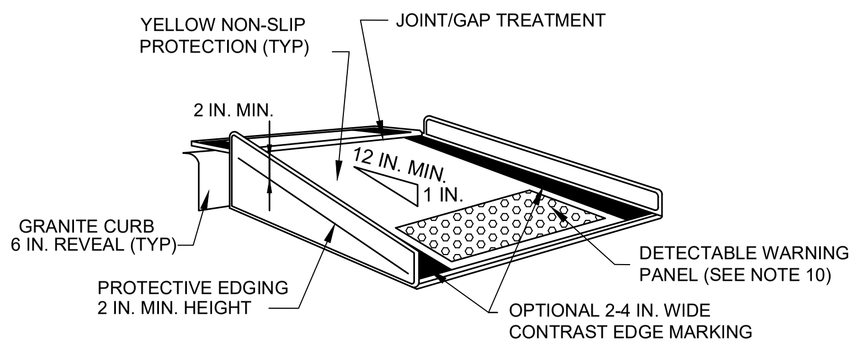
Proposal No. 613196-133292

A00802 - 20



TEMPORARY CURB RAMP-PARALLEL TO CURB

NOT TO SCALE



TEMPORARY CURB RAMP-PERPENDICULAR TO CURB

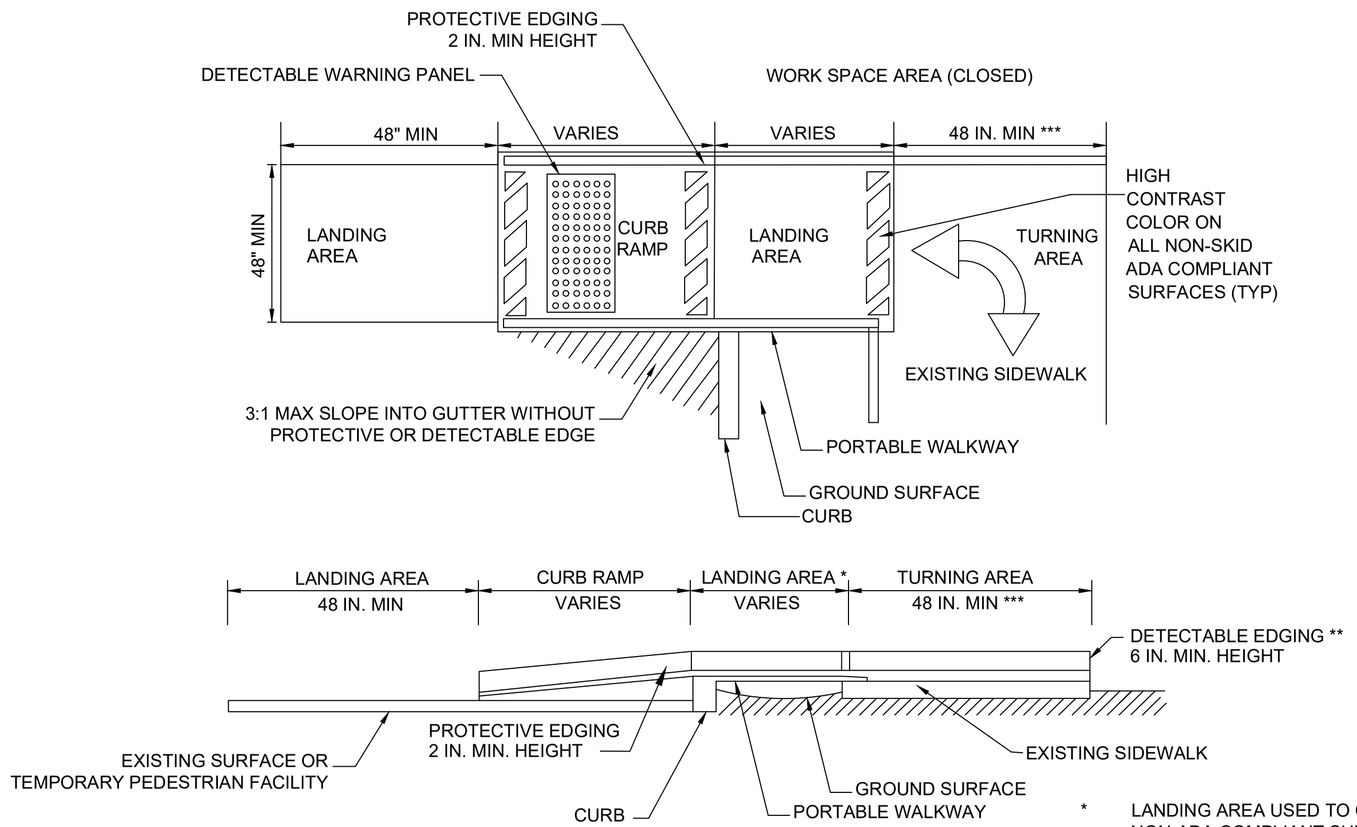
NOT TO SCALE

NOTES:

1. CURB RAMPS SHALL BE 60 IN. MINIMUM WIDTH WITH A FIRM, STABLE AND NON-SLIP SURFACE.
2. 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 SLOP 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.
3. DETECTABLE EDGING WITH 6 IN. MINIMUM HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
4. THE CURB RAMP WALKWAY AND LANDING AREA SURFACE SHALL BE OF A SOLID CONTINUOUS CONTRASTING COLOR ABUTTING UP TO THE EXISTING SIDEWALK.
5. CURB RAMPS AND LANDINGS SHOULD HAVE A 1:50 (2%) MAX CROSS-SLOPE.
6. CLEAR SPACE OF 48x48 IN. MINIMUM SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
7. WATER FLOW IN THE GUTTER SYSTEM SHALL HAVE MINIMAL RESTRICTION.
8. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 0.5 IN. WIDTH.
9. 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.
10. 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 DETECTABLE WARNING PANEL SHALL NOT BE INSTALLED ON THE RAMP.

850.1.1 - TEMPORARY CURB RAMP (1 OF 2)

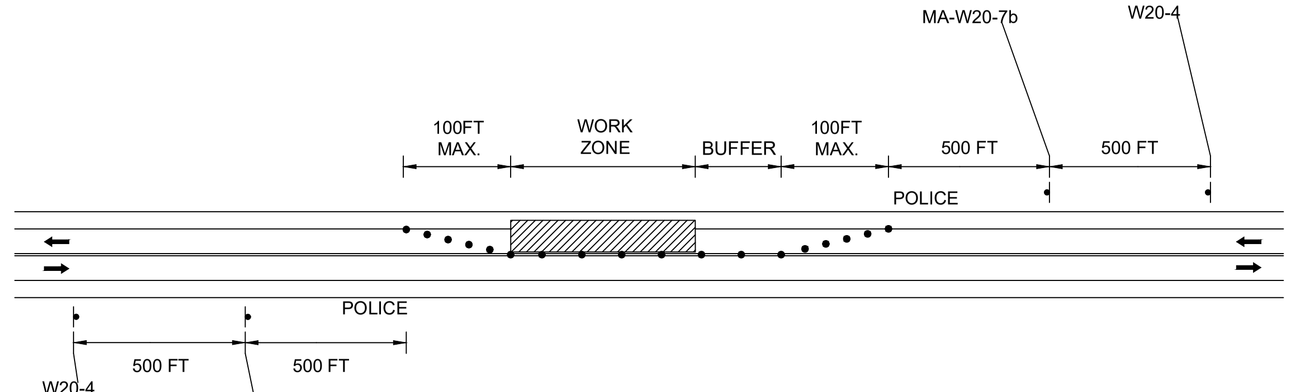
NOT TO SCALE



* LANDING AREA USED TO OVERLAP NON-ADA COMPLIANT SURFACES.
** DETECTABLE EDGING REMOVED IF A CONTINUOUS SIDEWALK.
*** 60 IN. MINIMUM IF AN OBSTRUCTION IS AT BACK OF SIDEWALK.

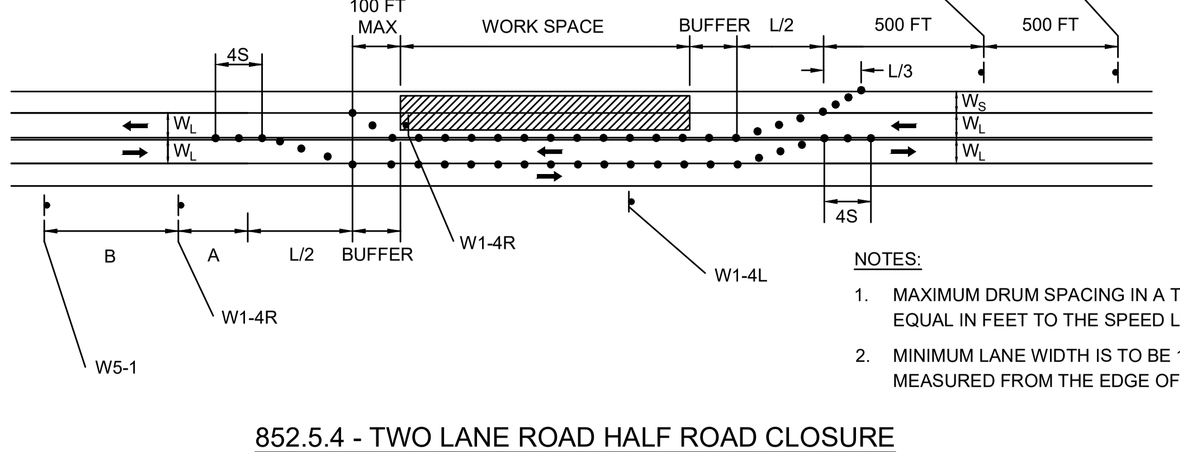
850.1.2 - TEMPORARY CURB RAMP (2 OF 2)

NOT TO SCALE



852.4.4 ALTERNATING ONE WAY (TRAFFIC OFFICER)

NOT TO SCALE

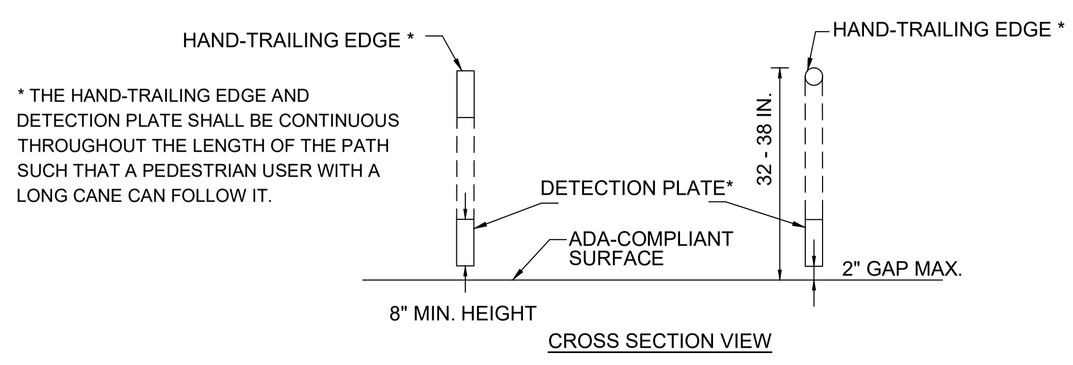


NOTES:

1. MAXIMUM DRUM SPACING IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
2. MINIMUM LANE WIDTH IS TO BE 11 FEET MEASURED FROM THE EDGE OF DRUMS.

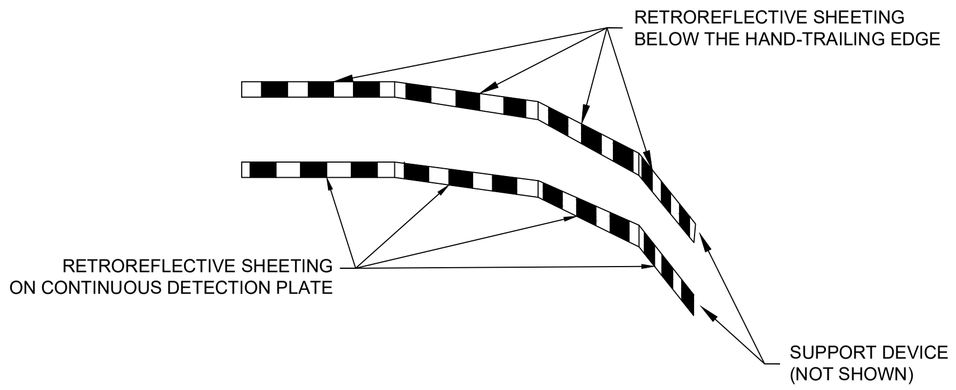
852.5.4 - TWO LANE ROAD HALF ROAD CLOSURE

NOT TO SCALE



CROSS SECTION VIEW

STANDARD RETROREFLECTIVE LAYOUT FOR PEDESTRIAN CHANNELIZING DEVICES



851.3.1 - PEDESTRIAN CHANNELIZING DEVICE

NOT TO SCALE

BURLINGTON
I-95/ROUTE 128 OVER WINN STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	19	24
PROJECT FILE NO.	613196		

TEMPORARY TRAFFIC CONTROL PLANS - SHEET 2

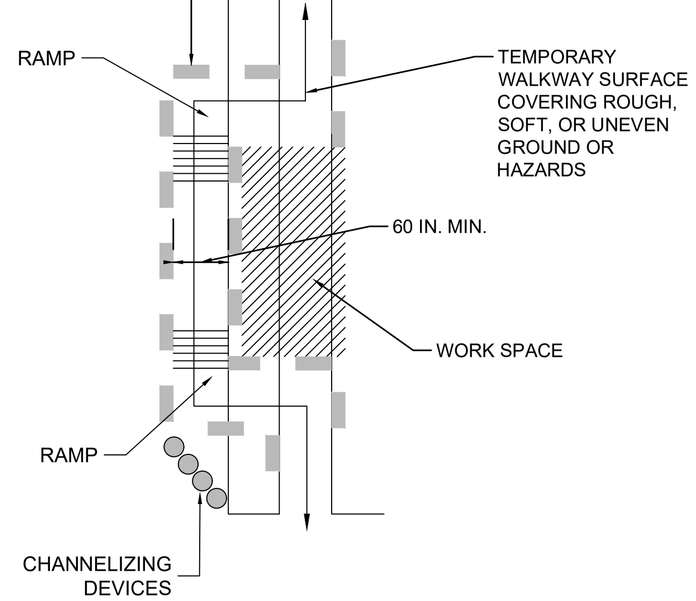
MINIMUM LENGTH OF LONGITUDINAL BUFFER IS EQUAL TO THE STOPPING SIGHT DISTANCE AT THE POSTED SPEED AND CAN BE DETERMINED FROM THE FOLLOWING TABLE

STOPPING SIGHT DISTANCE	
SPEED (MPH)	DISTANCE (FT)
25	155
30	200
35	250
40	305

852.5.4 - TYPICAL TAPER LENGTHS (L) IN FEET

SPEED LIMIT (S) IN MPH	WIDTH OF OFFSET (W_L OR W_S) IN FEET		
	10	11	12
25	104	115	125
30	150	165	180
35	204	225	245
40	267	293	320

NOTE: FOR OFFSET WIDTHS NOT LISTED IN TABLE, USE $L=WS^2/60$.



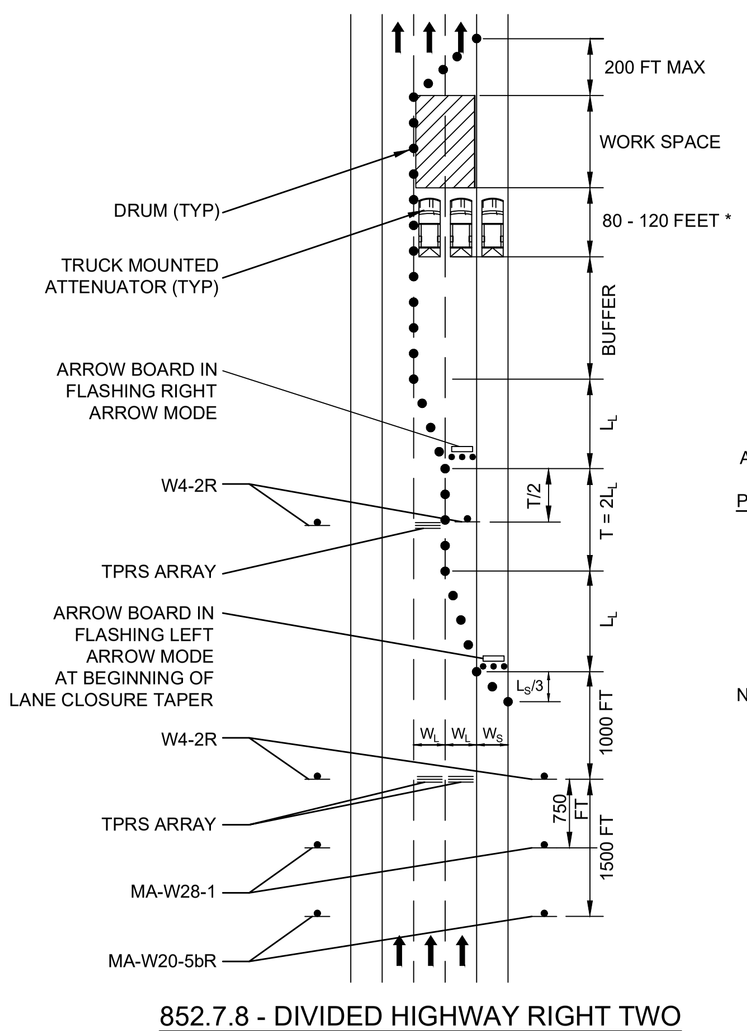
852.1.2 - SIDEWALK DIVERSION

NOT TO SCALE

NOTES:

1. A MAXIMUM 2-INCH GAP BETWEEN THE BOTTOM OF THE CONTINUOUS DETECTION PLATE AND THE WALKWAY SURFACE MAY BE USED TO PROVIDE DRAINAGE.
2. HAND-TRAILING EDGE AND DETECTION PLATE ARE OPTIONAL FOR CONTINUOUS WALLS.
3. SUPPORT DEVICE FOR CONTINUOUS DETECTION PLATE AND CONTINUOUS HAND-TRAILING EDGE NOT SHOWN ON THE PLAN.
4. STRIPING ON SHEETING PANELS MAY BE EITHER VERTICAL OR AT A 45-DEGREE ANGLE.
5. RETROREFLECTIVE AREAS CAN BE DISTRIBUTED IN A MANNER THAT ENSURES VISIBILITY AND DETECTION WITHOUT NECESSITATING A SINGLE CONTINUOUS APPLICATION.

MASSDOT 10 BRIDGES_TTCP_WINN ST.DWG Plotted on 24-Oct-2025 12:34 PM
Proposal No. 613196-133292
A00802 - 21



852.7.8 - DIVIDED HIGHWAY RIGHT TWO LANES CLOSURE (SHORT TERM)
NOT TO SCALE

TEMPORARY PORTABLE RUMBLE STRIP (TPRS)

A TPRS ARRAY SHALL HAVE THEE RUMBLE STRIPS. SPACING SHALL BE AS FOLLOWS:

POSTED REGULATORY OR WORK ZONE SPEED

60 MPH AND ABOVE — 20'

40 MPH TO 55 MPH — 15'

NOTE: TPRS SHALL BE DEPLOYED ONLY FOR SETUPS OF 12 HOURS OR LESS

TYPICAL TAPER LENGTHS (L_L,L_R,L_S) IN FEET

SPEED LIMIT (S) IN MPH	WIDTH OF OFFSET (W_L, W_S OR W_R) IN FEET		
	10	11	12
40	400	440	480
45	450	495	540
50	500	550	600
55	550	605	660
60	600	660	720
65	650	715	780

NOTE: FOR OFFSET WIDTHS NOT LISTED IN TABLE, USE L=WS.

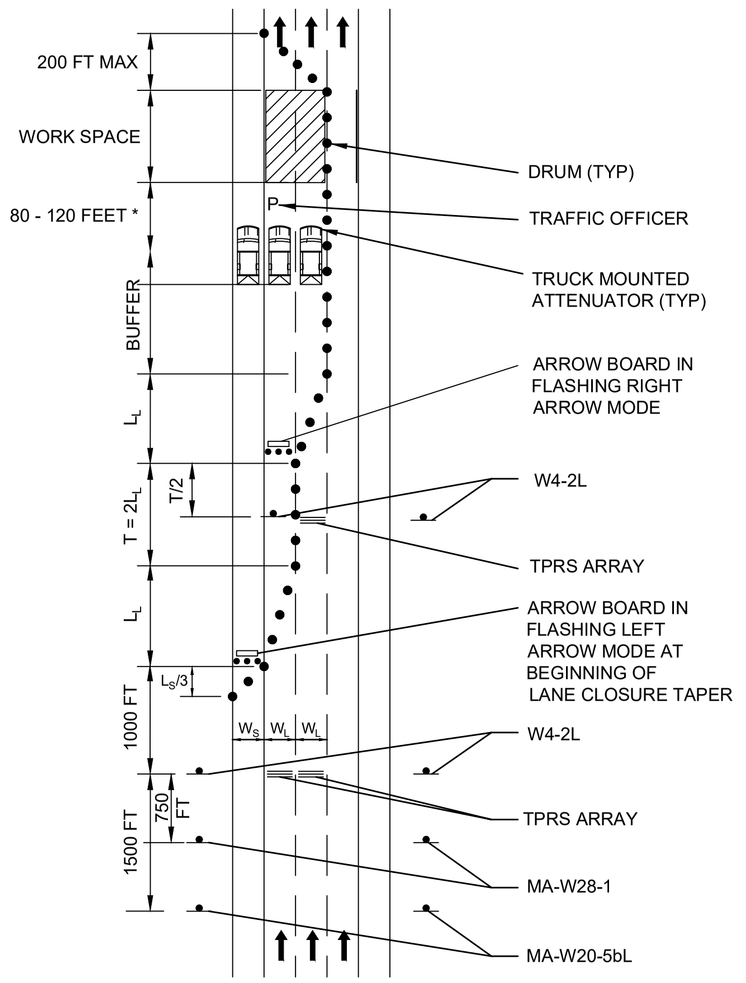
STOPPING SIGHT DISTANCE	
SPEED (MPH)	DISTANCE (FT)
35	250
40	305
45	360
50	425
55	495
60	570
65	645

MINIMUM LENGTH OF LONGITUDINAL BUFFER IS EQUAL TO THE STOPPING SIGHT DISTANCE AT THE POSTED SPEED AND CAN DETERMINED FROM THE FOLLOWING TABLE

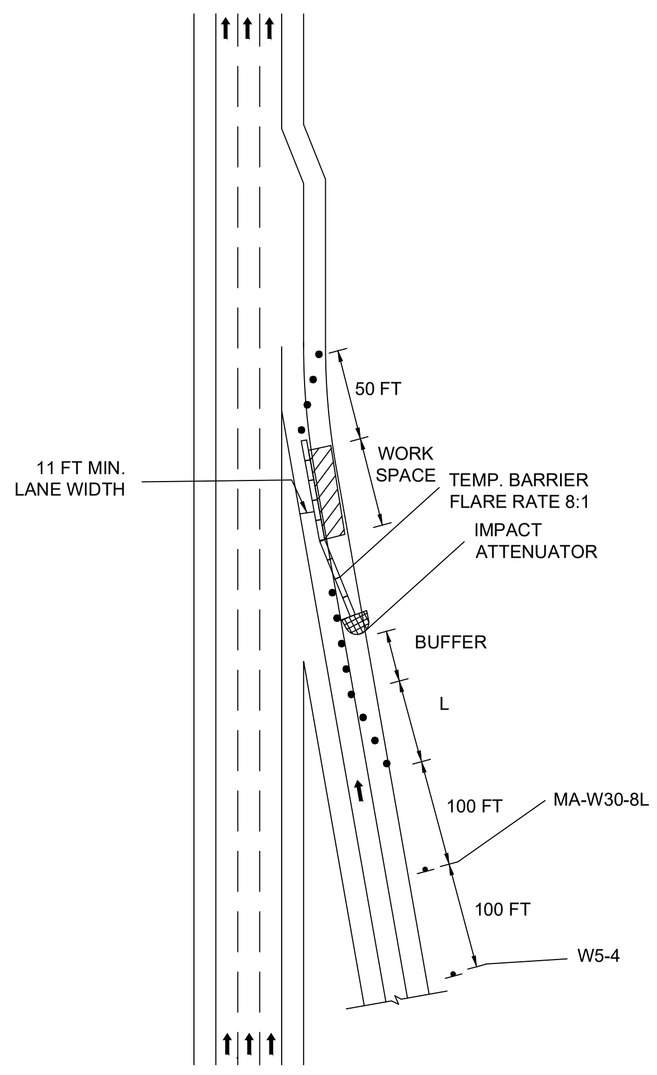
NOTES:

1. THE FIRST TEN DRUMS OF EACH LANE CLOSURE TAPER SHALL BE MOUNTED WITH SEQUENTIALLY FLASHING LIGHTS IF DEPLOYED BETWEEN DUSK AND DAWN.
2. MAXIMUM DRUM SPACING IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH. IN TANGENT SECTIONS, MAXIMUM SPACING IN FEET IS EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH.
3. THIS SETUP ALSO APPLIES TO 3 OR 4 LANE SECTIONS.

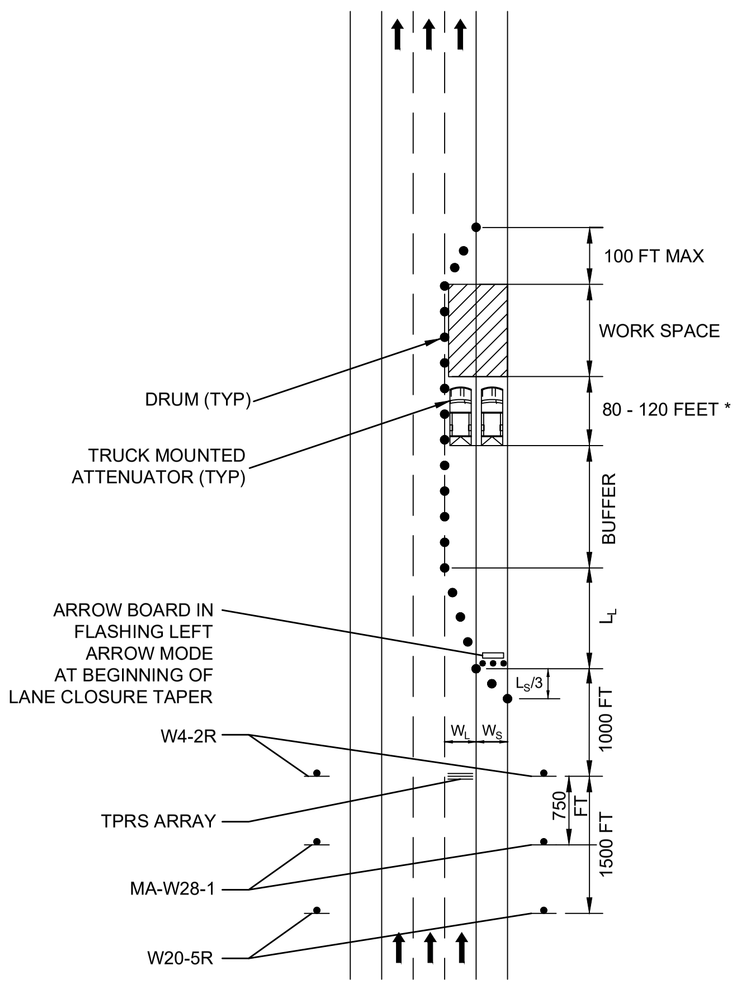
* DISTANCE MAY BE INCREASED IF ADDITIONAL ROLL-AHEAD ALLOWANCE IS NEEDED. REFER TO MANUFACTURER'S SPECIFICATIONS.



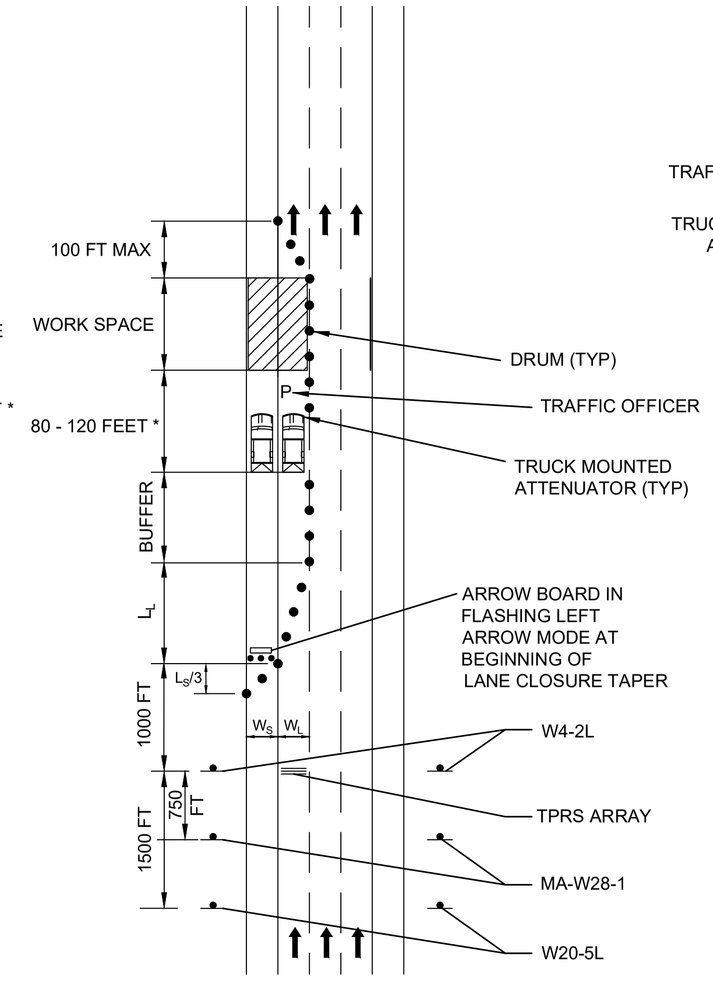
852.7.9 - DIVIDED HIGHWAY LEFT TWO LANES CLOSURE (SHORT TERM)
NOT TO SCALE



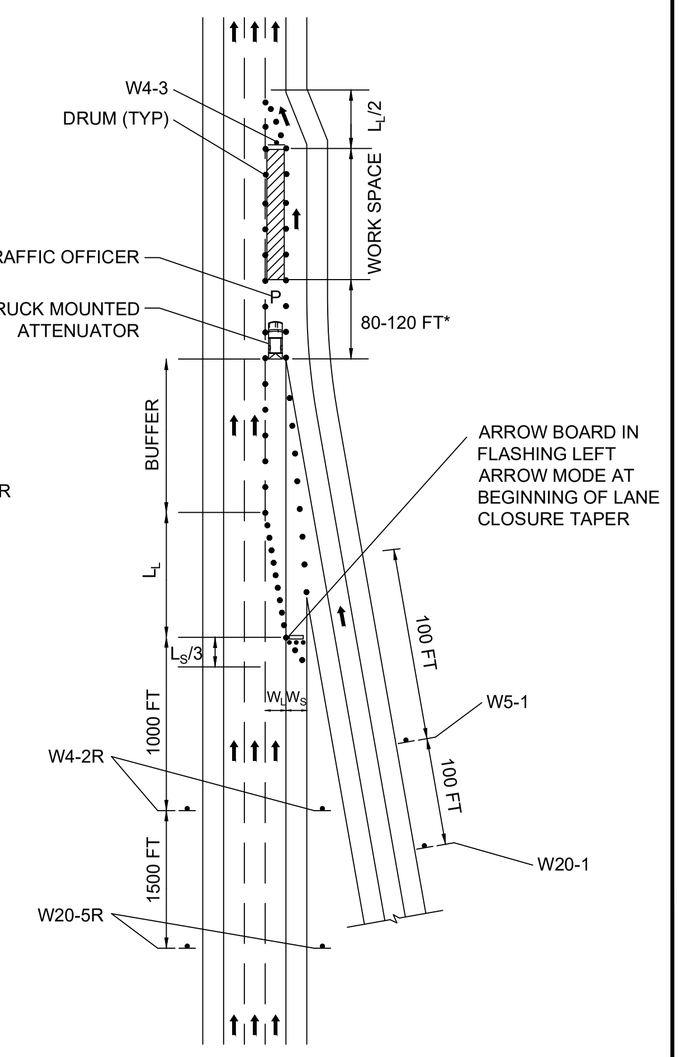
PARTIAL ENTRANCE RAMP CLOSURE (LONG TERM)
NOT TO SCALE



852.7.3 - DIVIDED HIGHWAY RIGHT LANE CLOSURE (SHORT TERM)
NOT TO SCALE



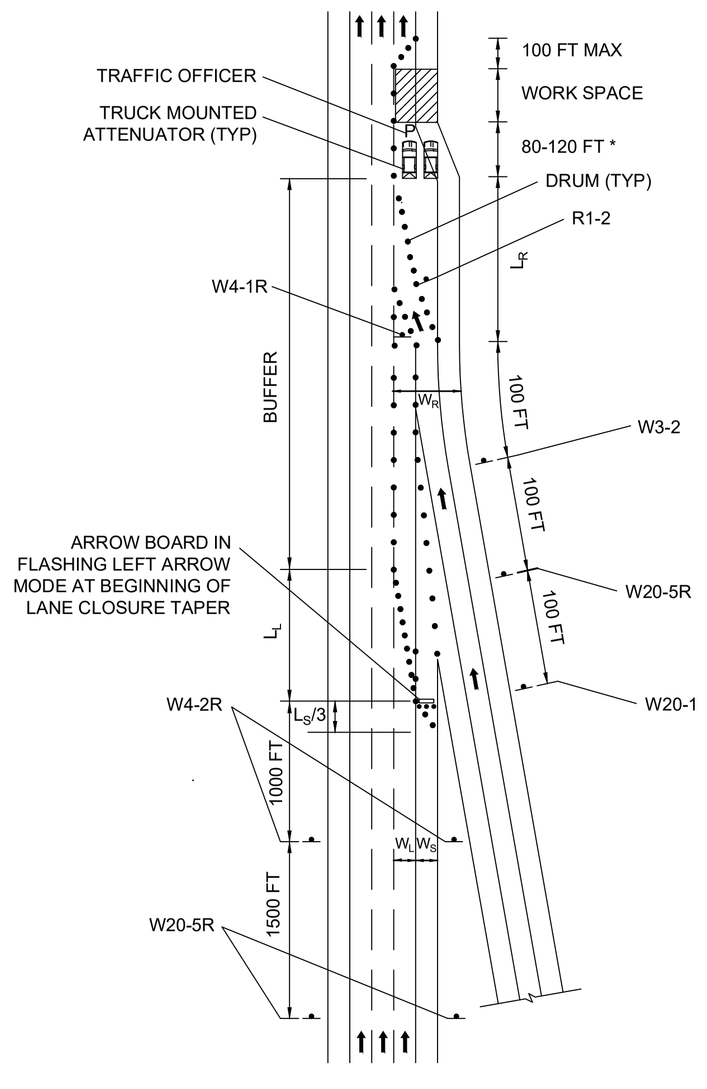
852.7.4 - DIVIDED HIGHWAY LEFT LANE CLOSURE (SHORT TERM)
NOT TO SCALE



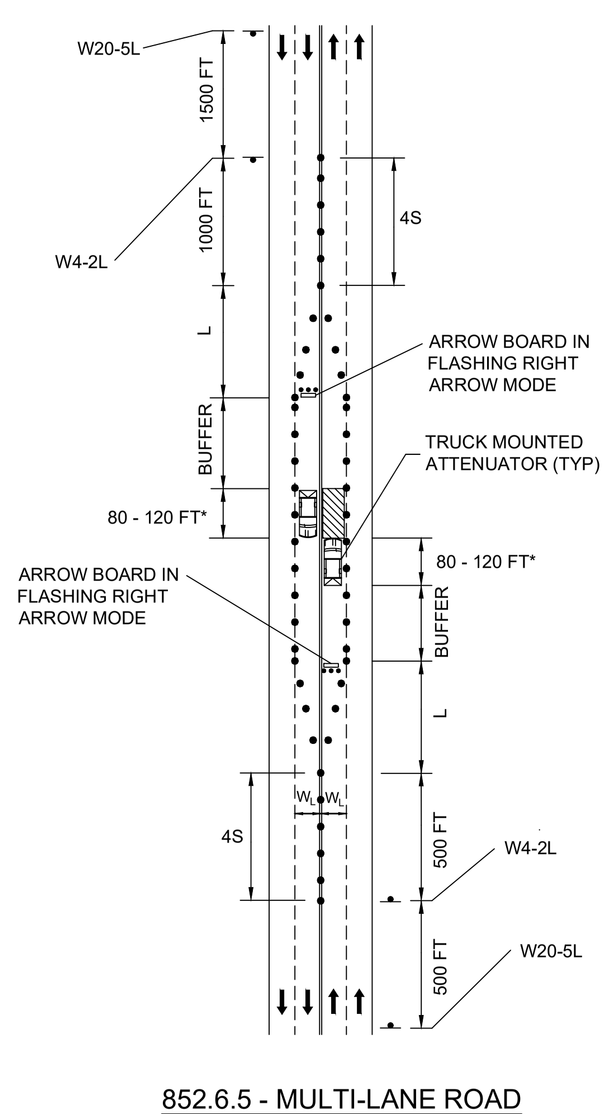
852.9.2 - ENTRANCE RAMP WORK WITHIN VICINITY OF RAMP
NOT TO SCALE

MASSDOT 10 BRIDGES_TTCP_WINN ST.DWG Plotted on 24-Oct-2025 12:34 PM
Proposal No. 613196-133292
A00802 - 22

MASSDOT 10 BRIDGES_TTCP_WINN ST.DWG Plotted on 24-Oct-2025 12:34 PM
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852.9.3 - ENTRANCE RAMP WORK DOWNSTREAM
NOT TO SCALE



852.6.5 - MULTI-LANE ROAD INTERIOR LANES CLOSURE
NOT TO SCALE

TYPICAL TAPER LENGTHS (L, L_L, L_R, L_S) IN FEET			
SPEED LIMIT (S) IN MPH	WIDTH OF OFFSET (W_L, W_S OR W_R) IN FEET		
	10	11	12
40	400	440	480
45	450	495	540
50	500	550	600
55	550	605	660
60	600	660	720
65	650	715	780

NOTE: FOR OFFSET WIDTHS NOT LISTED IN TABLE, USE L=WS.

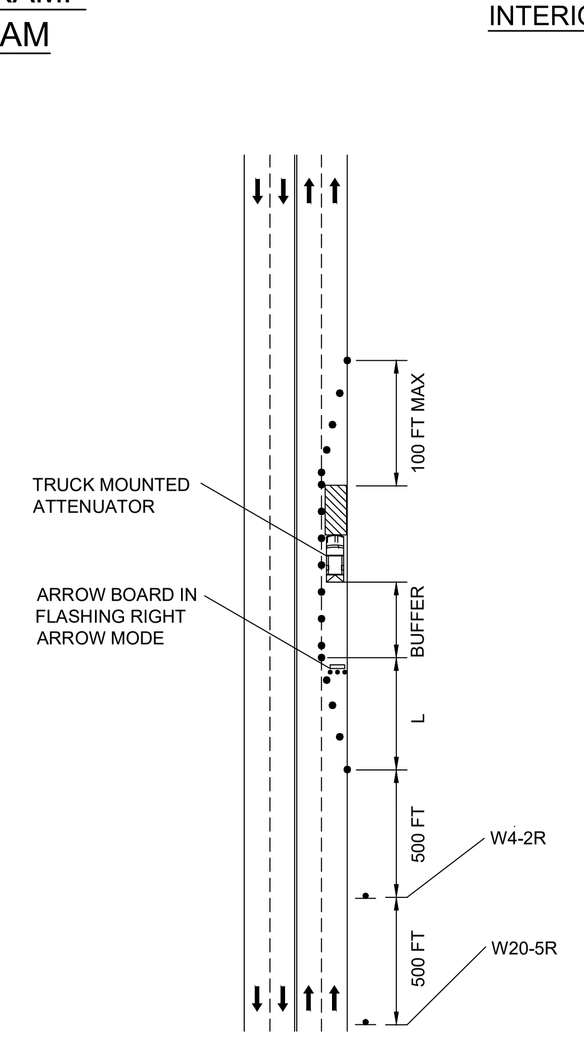
STOPPING SIGHT DISTANCE	
SPEED (MPH)	DISTANCE (FT)
35	250
40	305
45	360
50	425
55	495
60	570
65	645

MINIMUM LENGTH OF LONGITUDINAL BUFFER IS EQUAL TO THE STOPPING SIGHT DISTANCE AT THE POSTED SPEED AND CAN DETERMINED FROM THE FOLLOWING TABLE

NOTES:

1. THE FIRST TEN DRUMS OF EACH LANE CLOSURE TAPER SHALL BE MOUNTED WITH SEQUENTIALLY FLASHING LIGHTS IF DEPLOYED BETWEEN DUSK AND DAWN.
2. MAXIMUM DRUM SPACING IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH. IN TANGENT SECTIONS, MAXIMUM SPACING IN FEET IS EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH.
3. THIS SETUP ALSO APPLIES TO 3 OR 4 LANE SECTIONS.

* DISTANCE MAY BE INCREASED IF ADDITIONAL ROLL-AHEAD ALLOWANCE IS NEEDED. REFER TO MANUFACTURER'S SPECIFICATIONS.



852.6.1 - MULTI-LANE ROAD RIGHT LANE CLOSURE
NOT TO SCALE

DIVIDED HIGHWAY - MULTIPLE LANE SHIFT WITH BARRIER
NOT TO SCALE

* CONTRACTOR SHALL FOG SEAL THE NEW PAVEMENT AND REPLACE EXISTING PERMANENT PAVEMENT MARKINGS IN KIND AFTER THE TRAFFIC CONTROL SET UP IS TAKEN DOWN.

DIVIDED HIGHWAY - LEFT SHOULDER CLOSURE (LONG TERM)
NOT TO SCALE

PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

IF USED, PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) AS AMENDED AND SHOULD BE PLACED ON THE SHOULDER OF THE ROADWAY OR IF PRACTICAL SET WELL AWAY FROM THE TRAVEL LANE. MESSAGE SIGNS SHOULD BE PROTECTED WITH RETROREFLECTIVE TEMPORARY TRAFFIC CONTROL DEVICES WHEN PLACED WITHIN THE AVAILABLE CLEAR ZONE OR ELSE SHIELDED WITH A BARRIER OR CRASH CUSHION. THE FINAL LOCATION AND USE OF THE PCMS SHALL BE DETERMINED BY THE ENGINEER.

*ALTERNATIVE MESSAGES MAY BE DETERMINED BY THE ENGINEER IN THE FIELD.

*EXACT LOCATION OF PCMS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

TWO (2) WEEKS PRIOR TO ROAD CLOSURE, PCMS 1 & 2, SHALL BE INSTALLED WITH THE SUGGESTED MESSAGES.

MESSAGE 1A:

WINN ST
CLOSED

MESSAGE 1B:

MMM/DD
TO
MMM/DD

WHILE ROAD CLOSURE IS IN EFFECT, PCMS 1 & 2, WILL DISPLAY THE FOLLOWING SUGGESTED MESSAGE UNTIL BRIDGE IS AGAIN OPEN FOR TRAFFIC:

MESSAGE 2A:

WINN ST
CLOSED
11PM - 5AM

MESSAGE 2B:

FOLLOW
DETOUR

NOTE:
ALL LANE AND ROAD CLOSURES WILL HAVE POLICE DETAILS PRESENT TO MANAGE TRAFFIC AND OVERRIDE SIGNALS AS NECESSARY TO ENSURE SAFETY AND PROPER OPERATIONS.

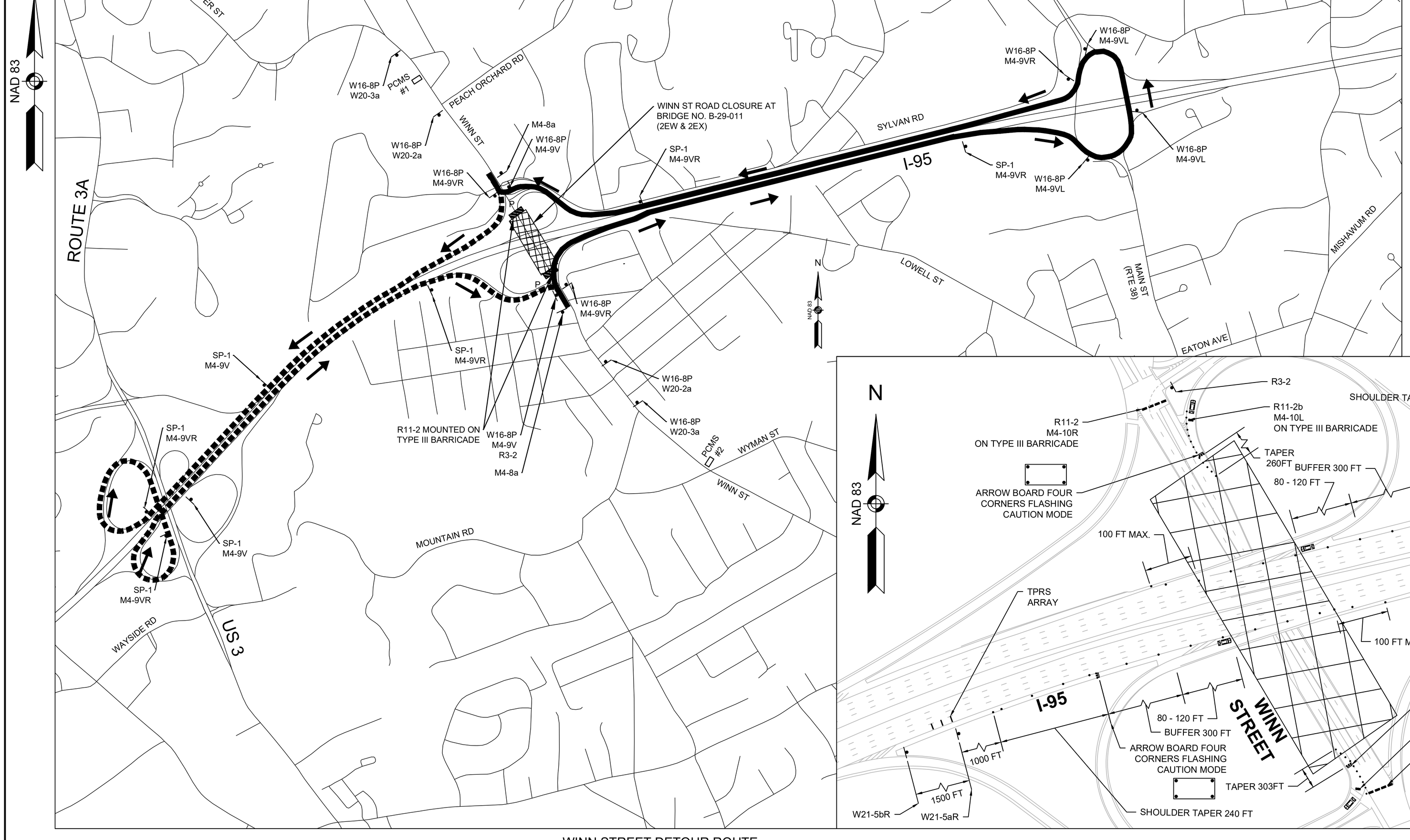
TRAFFIC DEVICE LEGEND:

- CONSTRUCTION AREA
- TEMPORARY ROADSIDE SIGN
- WINN ST NB DETOUR ROUTE
- WINN ST SB DETOUR ROUTE
- DIRECTIONAL TRAFFIC FLOW
- TYPE III BARRICADE
- P POLICE DETAIL
- REFLECTORIZED DRUM
- ARROW BOARD
- TRUCK MOUNTED ATTENUATOR
- TEMPORARY PORTATBLE RUMBLE STRIP (TPRS)

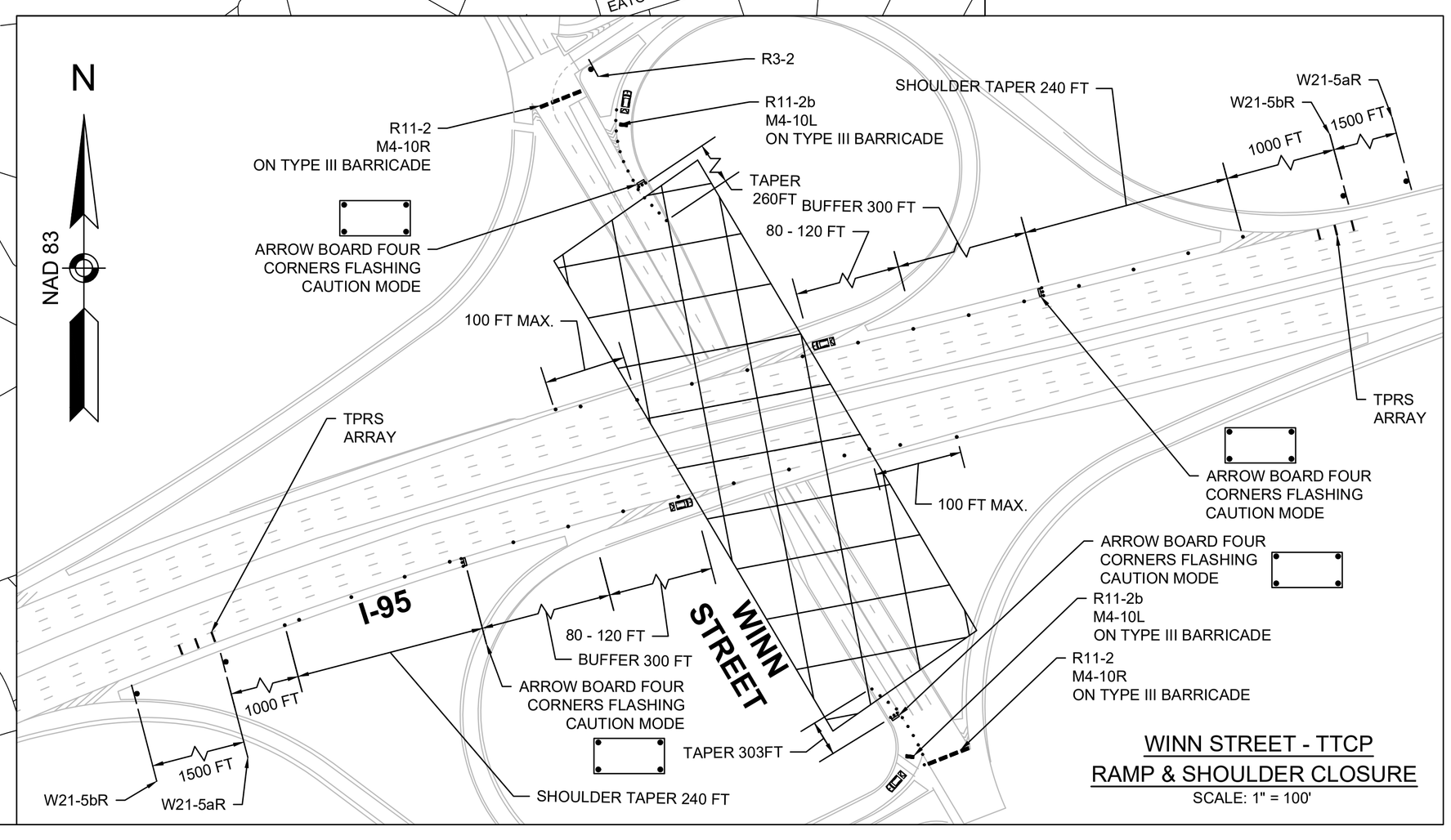
BURLINGTON
I-95/ROUTE 128 OVER WINN STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	22	24
PROJECT FILE NO.	613196		

DETOUR PLAN & TTCP - WINN STREET



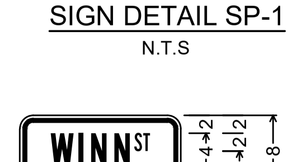
WINN STREET DETOUR ROUTE
SCALE: 1" = 500'



WINN STREET - TTCP
RAMP & SHOULDER CLOSURE
SCALE: 1" = 100'



SIGN DETAIL SP-1
N.T.S



W16-8P;
1.5" Radius, 0.4" Border, 0.4" Indent;
Black on Orange;
"WINNST", B 2K;

SIGN DETAIL W16-8P
N.T.S

MASSDOT 10 BRIDGES_DET_2.DWG Plotted on 22-Dec-2025 2:45 PM
Proposal No. 613196-133292
A00802 - 24

CONSTRUCTION SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE WIDTH (IN)	SIZE HEIGHT (IN)	TEXT	DIMENSIONS (IN) LETTER HEIGHT	DIMENSIONS (IN) VERTICAL SPACING	DIMENSIONS (IN) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACK-GROUND	COLOR LEGEND	COLOR BORDER	UNIT AREA (S.F.)	TOTAL AREA (S.F.)
M4-8a	24"	18"	END DETOUR	(1)	(1)	(1)	2	FLUOR. ORANGE	BLACK	BLACK	3.00	6.00
M4-9V	48"	36"	DETOUR ↑				4	FLUOR. ORANGE	BLACK	BLACK	12.00	24.00
M4-9VL	48"	36"	DETOUR ↖				3	FLUOR. ORANGE	BLACK	BLACK	12.00	36.00
M4-9VR	48"	36"	DETOUR ↗				8	FLUOR. ORANGE	BLACK	BLACK	12.00	96.00
M4-10R	48"	18"	DETOUR →				2	FLUOR. ORANGE	BLACK	BLACK	6.00	12.00
MA-R2-10a	48"	36"	WORK ZONES / SPEEDING FINES DOUBLED	(2)	(2)	(2)	2	FLUOR. ORANGE & WHITE	BLACK	BLACK	12.00	24.00
	60"	48"					4				20.00	80.00
MA-R2-10e	36"	48"	END ROAD WORK DOUBLE FINES END				2	FLUOR. ORANGE & WHITE	BLACK	BLACK	12.00	24.00
	48"	60"					4				20.00	80.00
MA-W20-5bL	48"	48"	LEFT TWO LANES CLOSED XX FT				2	FLUOR. ORANGE & WHITE	BLACK	BLACK	16.00	32.00
MA-W20-5bR	48"	48"	RIGHT TWO LANES CLOSED XX FT				2	FLUOR. ORANGE & WHITE	BLACK	BLACK	16.00	32.00
MA-W20-7b	36"	36"	POLICE OFFICER AHEAD				2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
MA-W30-8L	48"	48"	SQUEEZE LEFT				1	FLUOR. ORANGE & WHITE	BLACK	BLACK	16.00	16.00
R1-2	48" x 48" x 48"		YIELD	(1)	(1)	(1)	1	WHITE	RED	RED	6.93	6.93
R3-2	36"	36"					1	WHITE	RED / BLACK	BLACK	9.00	9.00
R9-11aL	24"	12"	SIDEWALK CLOSED ← CROSS HERE				1	WHITE	BLACK	BLACK	2.00	2.00
R9-11aR	24"	12"	SIDEWALK CLOSED → CROSS HERE				1	WHITE	BLACK	BLACK	2.00	2.00

BURLINGTON
I-95/ROUTE 128 OVER WINN STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	23	24
PROJECT FILE NO.	613196		

TEMPORARY TRAFFIC SIGN SUMMARY - SHEET 1

NOTES:

1. RETROREFLECTIVE SHEETING FOR ALL GUIDE AND TRAFFIC SIGNS SHALL CONFORM TO MASSDOT STANDARD SPECIFICATION SECTION M9.30.0. FLUORESCENT SHEETING SHALL BE USED FOR ALL ORANGE BACKGROUND SIGNS.

(1) SEE THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND "STANDARD HIGHWAY SIGNS" BY FEDERAL HIGHWAY ADMINISTRATION (LATEST EDITIONS) FOR TEXT DIMENSIONS AND COLORS. SEE ALSO THE "MASSACHUSETTS MUTCD AMENDMENTS".

(2) SEE THE MASSDOT "STANDARD SIGNS" LATEST EDITION.

CONSTRUCTION SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE WIDTH (IN)	SIZE HEIGHT (IN)	TEXT	DIMENSIONS (IN) LETTER HEIGHT	DIMENSIONS (IN) VERTICAL SPACING	DIMENSIONS (IN) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACK-GROUND	COLOR LEGEND	COLOR BORDER	UNIT AREA (S.F.)	TOTAL AREA (S.F.)
R11-2b	48	30	BRIDGE CLOSED	(1)	(1)	(1)	2	WHITE	BLACK	BLACK	10.00	20.00

MASSDOT 10 BRIDGES_TTCP_WINN ST.DWG Plotted on 24-Oct-2025 12:35 PM
Proposal No. 613196-133292
A00802 - 25

CONSTRUCTION SIGN SUMMARY (CONTINUED)

IDENTIFICATION NUMBER	SIZE WIDTH (IN)	SIZE HEIGHT (IN)	TEXT	DIMENSIONS (IN) LETTER HEIGHT	DIMENSIONS (IN) VERTICAL SPACING	DIMENSIONS (IN) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACKGROUND	COLOR LEGEND	COLOR BORDER	UNIT AREA (S.F.)	TOTAL AREA (S.F.)
R11-2	48"	30"	ROAD CLOSED	(1)	(1)	(1)	4	WHITE	BLACK	BLACK	10.00	20.00
W1-4L	36"	36"					2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W1-4R	36"	36"					2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W1-4dL	48"	48"					4	FLUOR. ORANGE	BLACK	BLACK	16.00	64.00
W1-4dR	48"	48"					4	FLUOR. ORANGE	BLACK	BLACK	16.00	64.00
W3-2	48"	48"					1	FLUOR. ORANGE	BLACK	BLACK	16.00	16.00
W4-1	48"	48"					1	FLUOR. ORANGE	BLACK	BLACK	16.00	16.00
W4-2L	36"	36"					2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
	48"	48"					4				16.00	64.00
W4-2R	36"	36"					1	FLUOR. ORANGE	BLACK	BLACK	9.00	9.00
	48"	48"					4				16.00	64.00
W4-3	48"	48"					1	FLUOR. ORANGE	BLACK	BLACK	16.00	16.00
W5-1	36"	36"	ROAD NARROWS				3	FLUOR. ORANGE	BLACK	BLACK	9.00	27.00
W5-4	48"	48"	RAMP NARROWS				1	FLUOR. ORANGE	BLACK	BLACK	16.00	16.00
W8-25	48"	48"	SHOULDER ENDS				2	FLUOR. ORANGE	BLACK	BLACK	16.00	32.00
W11-2	36"	36"					4	FLUOR. YELLOW GREEN	BLACK	BLACK	9.00	36.00
W13-1p	24"	24"	XX MPH				2	FLUOR. ORANGE	BLACK	BLACK	4.00	8.00
	30"	30"					2				6.25	12.50

CONSTRUCTION SIGN SUMMARY (CONTINUED)

IDENTIFICATION NUMBER	SIZE WIDTH (IN)	SIZE HEIGHT (IN)	TEXT	DIMENSIONS (IN) LETTER HEIGHT	DIMENSIONS (IN) VERTICAL SPACING	DIMENSIONS (IN) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACKGROUND	COLOR LEGEND	COLOR BORDER	UNIT AREA (S.F.)	TOTAL AREA (S.F.)
W16-7pL	24"	12"		(1)	(1)	(1)	4	FLUOR. YELLOW GREEN	BLACK	BLACK	2.00	8.00
W16-8P	18"	8"	WINN ST	2.00 4.00	2.00	-	11	FLUOR. ORANGE	BLACK	BLACK	1.00	11.00
SP-1	54"	18"	WINN ST	8.00	5.00	-	7	FLUOR. ORANGE	BLACK	BLACK	6.75	47.25
W20-1	36"	36"	ROAD WORK AHEAD				2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
	48"	48"					5				16.00	80.00
W20-2a	36"	36"	DETOUR AHEAD				2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W20-3a	36"	36"	ROAD CLOSED AHEAD				2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W20-4	36"	36"	ONE LANE ROAD AHEAD				2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W20-5L	36"	36"	LEFT LANE CLOSED AHEAD				2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
	48"	48"					2				16.00	32.00
W20-5R	36"	36"	RIGHT LANE CLOSED AHEAD				1	FLUOR. ORANGE	BLACK	BLACK	9.00	9.00
	48"	48"					2				16.00	32.00
W21-5aL	48"	48"	LEFT SHOULDER CLOSED				4	FLUOR. ORANGE	BLACK	BLACK	16.00	64.00
W21-5bL	48"	48"	LEFT SHOULDER CLOSED AHEAD				4	FLUOR. ORANGE	BLACK	BLACK	16.00	64.00
W21-11	48"	48"	LANES SHIFT AHEAD				4	FLUOR. ORANGE	BLACK	BLACK	16.00	64.00

NOTES:

1. RETROREFLECTIVE SHEETING FOR ALL GUIDE AND TRAFFIC SIGNS SHALL CONFORM TO MASSDOT STANDARD SPECIFICATION SECTION M9.30.0. FLUORESCENT SHEETING SHALL BE USED FOR ALL ORANGE BACKGROUND SIGNS.

(1) SEE THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND "STANDARD HIGHWAY SIGNS" BY FEDERAL HIGHWAY ADMINISTRATION (LATEST EDITIONS) FOR TEXT DIMENSIONS AND COLORS. SEE ALSO THE "MASSACHUSETTS MUTCD AMENDMENTS".

(2) SEE THE MASSDOT "STANDARD SIGNS" LATEST EDITION.

Plotted on 24-Oct-2025 12:35 PM
MASSDOT 10 BRIDGES_TTCP_WINN ST.DWG
Proposal No. 613196-133292

DOCUMENT A00803

DRAWINGS – LYNNFIELD BRIDGE NO. L-19-004 (2W4) & (2W5)

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MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

LYNNFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	1	29
PROJECT FILE NO.	613196		

TITLE SHEET & INDEX

REPAIR PLANS AND DETAILS FOR

I-95/ROUTE 128

(BRIDGE NO. L-19-004)

IN THE TOWN OF

LYNNFIELD

ESSEX COUNTY

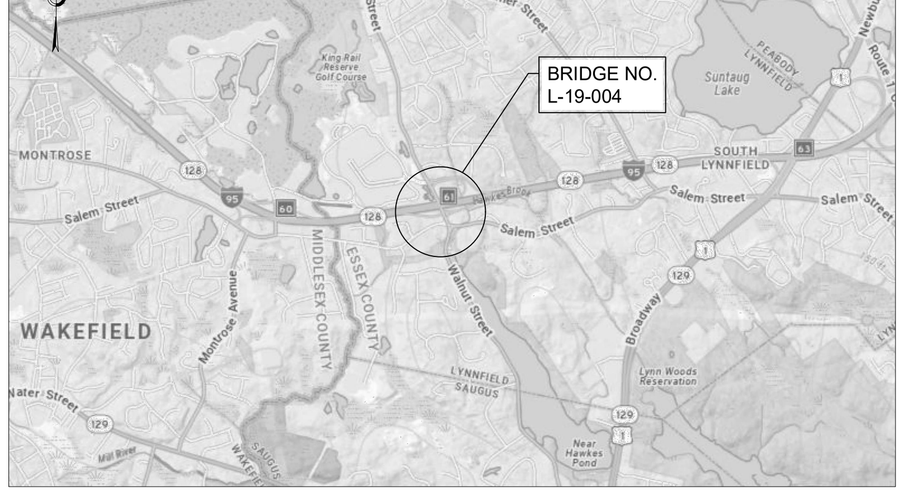
FEDERAL AID PROJECT NO. NFA

PS&E RESUBMISSION

THESE PLANS ARE SUPPLEMENTED BY THE OCTOBER 2025 CONSTRUCTION STANDARD DETAILS, THE 2015 OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS, THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK.

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET & INDEX
2-22	BRIDGE SHEETS
23-29	TEMPORARY TRAFFIC CONTROL PLANS



LOCUS MAP

APPROXIMATE SCALE: 1" = 2000'

DESIGN DESIGNATION (L-19-004)	
DESIGN SPEED	**65 MPH**
ADT (PRESENT)	139,550
ADT (2043)	154,200
K	13%
D	5.2% SB
T (PEAK HOUR)	7.8%
T (AVERAGE DAY)	6.1%
DHV	10,260
DDHV	5,150
FUNCTIONAL CLASSIFICATION	URBAN INTERSTATE

DATE	DESCRIPTION	REV #

24-October-2025

PS&E Resubmission

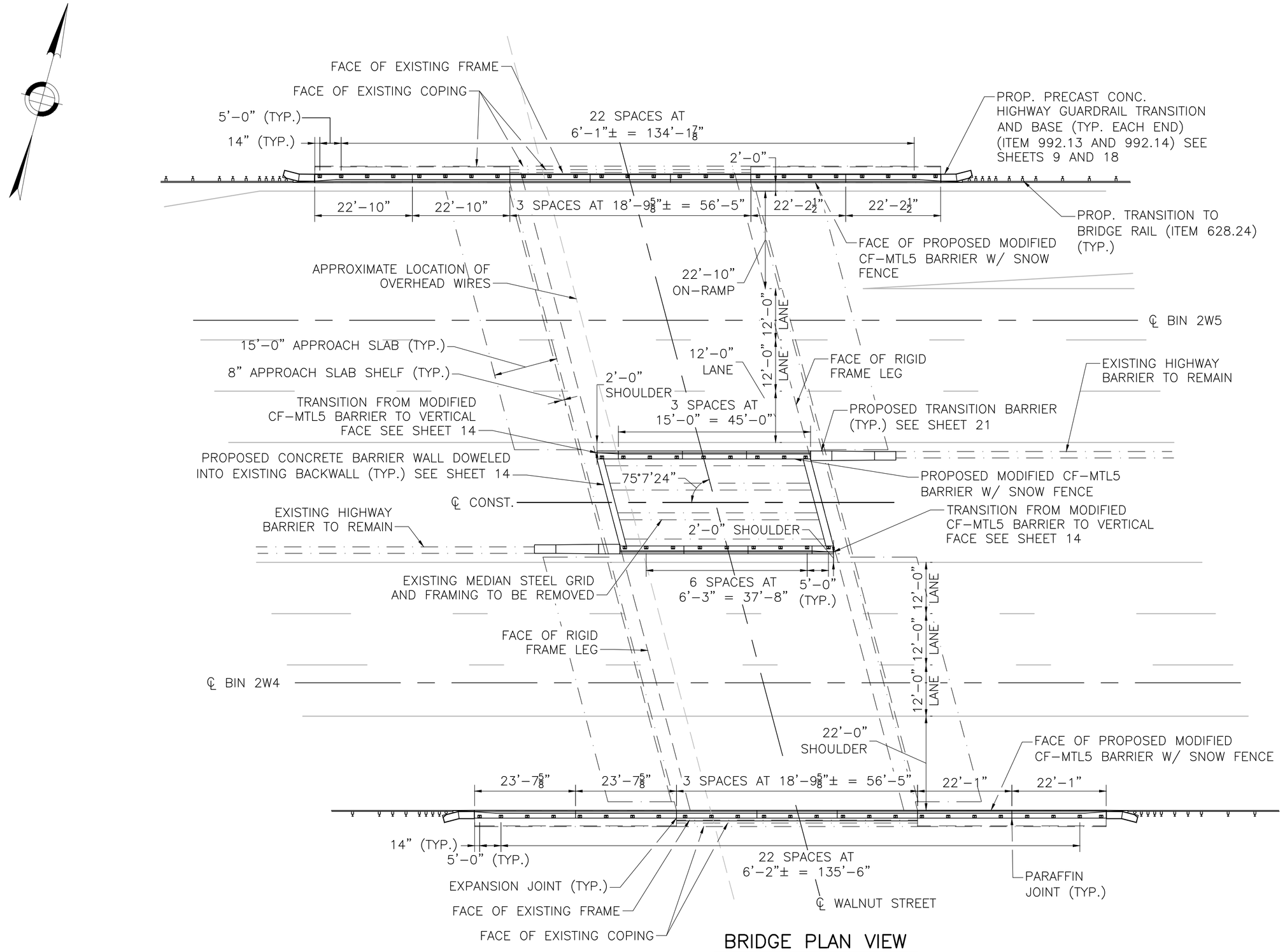
massDOT Massachusetts Department of Transportation Highway Division

Jacobs.
120 ST. JAMES AVENUE, 5TH FLOOR
BOSTON, MA 02116

00 - COVER_SHEET.DWG Plotted on 22-Oct-2025 9:44 AM

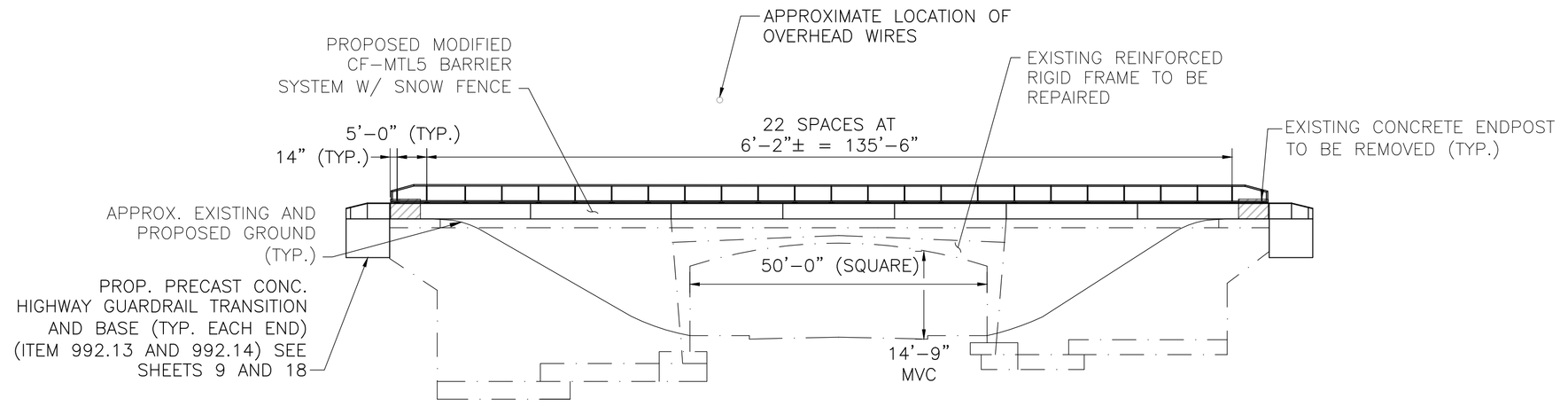
Proposal No. 613196-133292

A00803 - 3



BRIDGE PLAN VIEW

SCALE: 1/16" = 1'-0"



ELEVATION (LOOKING NORTH)

SCALE: 1/16" = 1'-0"

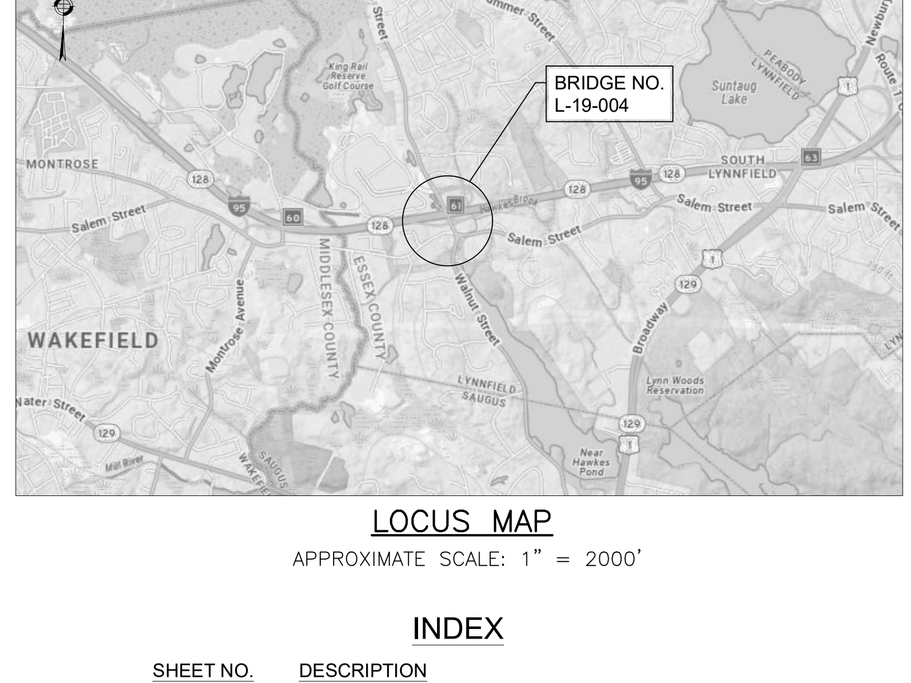
LIMITS OF DEMOLITION

NOTE:
SOUTH ELEVATION SHOWN, NORTH ELEVATION SIMILAR DIMENSIONS UNLESS OTHERWISE NOTED.

LYNNFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	2	29
	PROJECT FILE NO. 613196		

PLAN AND ELEVATION



LOCUS MAP

APPROXIMATE SCALE: 1" = 2000'

INDEX

SHEET NO.	DESCRIPTION
1	PLAN AND ELEVATION
2	GENERAL NOTES
3-5	DEMOLITION CROSS SECTIONS
6	PROPOSED CROSS SECTION
7-9	MODIFICATION DETAILS
10-14	REINFORCING DETAILS
16-17	CONCRETE REPAIRS
18	GUARDRAIL TRANSITION DETAILS
19	SNOW FENCE DETAILS
20	GUARDRAIL DETAILS
21	TAPERED BARRIER DETAILS

*
2W4
2W5

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION

MassDOT Massachusetts Department of Transportation Highway Division

BRIDGE PRESERVATION

LYNNFIELD

I-95/ROUTE 128
OVER WALNUT STREET

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION
10 PARK PLAZA BOSTON, MASS

Jacobs
120 ST. JAMES AVENUE, 5TH FLOOR
BOSTON, MA 02116

1 - TITLE SHEET.DWG Plotted on 24-Oct-2025 2:43 PM
Proposal No. 613196-133292
A00803 - 4
PS&E Resubmission 24-October-2025

GENERAL NOTES:

1. DIMENSIONS SHOWN ARE TAKEN FROM ORIGINAL DESIGN DRAWINGS AND ARE NOT GUARANTEED. THE CONTRACTOR SHALL ESTABLISH THEIR 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. NO SURVEY WAS PERFORMED AS PART OF THIS PRESERVATION PROJECT.

2. THE CONTRACTOR SHALL SUBMIT SURVEY OF ROADWAY TO THE ENGINEER TO ESTABLISH THE ACTUAL ROADWAY PROFILE. THE SURVEY SHALL INCLUDE EXISTING ROADWAY ELEVATIONS ALONG EACH EDGE OF PAVEMENT AND CROWN LINE AT 25 FOOT INTERVALS, AT ENDS OF THE BRIDGE AND AT ENDS OF THE WINGWALLS. THE LIMITS OF SURVEY SHALL EXTEND 250 FEET EACH SIDE OF THE LIMITS OF WORK.

3. REMOVE EXISTING PAVEMENT MARKINGS AND REPLACE WITH NEW SLOTTED PAVEMENT MARKINGS AT LOCATIONS DISTURBED BY APPROACH ROADWAY PAVING.

4. DURING SURVEY, CONTRACTOR SHALL MEASURE THE LENGTH OF EACH EXISTING WINGWALL PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES BETWEEN THE LENGTHS SHOWN ON RECORD DRAWINGS OR THESE PLANS SHALL BE REPORTED TO THE ENGINEER PRIOR TO FABRICATION OF THE SNOW FENCE.

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:
SEE TRAFFIC DRAWINGS FOR TRAFFIC MANAGEMENT PLANS.

SCALES:
SCALES NOTED ON THE PLANS ARE NOT APPLICABLE TO REDUCED SIZE PRINTS. DIVIDE SCALES BY 2 FOR HALF-SIZE PRINTS (A3).

ANCHOR BOLTS:
ALL ANCHOR BOLTS SHALL BE SET BY TEMPLATE BEFORE THE CONCRETE IS PLACED.

CONCRETE:
5000 PSI, $\frac{3}{8}$ INCH, 710 HP CEMENT CONCRETE TO BE USED FOR BARRIER RECONSTRUCTION WORK.

4000 PSI, $\frac{3}{8}$ INCH, 660 CEMENT CONCRETE TO BE USED FOR PATCHING OF FRAMES AND FRAME WALLS.

REINFORCEMENT:
REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M31 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"	19"	23"
2. 12" OF CONCRETE BELOW BAR	20"	25"	30"
3. EPOXY COATED BARS, COVER < $3d_b$, OR CLEAR SPACING <$6d_b$	23"	29"	34"
4. COATED BARS, ALL OTHER CASES	18"	23"	27"
5. CONDITION 2. AND 3.	26"	32"	39"
6. CONDITION 2. AND 4.	24"	30"	36"

ALL OTHER BARS SHALL BE LAPPED AS SHOWN ON THE CONSTRUCTION DRAWINGS.

DATE:
TO BE PLACED ON THE INSIDE FACE OF THE SOUTHWEST AND NORTHEAST HIGHWAY GUARDRAIL TRANSITIONS. A SHEET SHOWING SIZE AND CHARACTER OF NUMERALS WILL BE FURNISHED. THE DATE USED SHALL BE SHOWN AS 1961 (THE YEAR THE BRIDGE WAS REBUILT).

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

UTILITIES:
THE CONTRACTOR SHALL LOCATE AND PROTECT EXISTING UTILITIES FROM ALL DAMAGE. OVERHEAD WIRES OVER BRIDGE OVER THE SOUTH ABUTMENT (OVER I-95) SHALL REMAIN IN PLACE AND BE PROTECTED DURING CONSTRUCTION.

ESTIMATED QUANTITIES
(NOT GUARANTEED)

SELECTIVE CLEARING AND THINNING AT BRIDGES	167	SY
EARTH EXCAVATION	73	CY
REINFORCED CONCRETE RIGID FRAME EXCAVATION (PARTIAL DEPTH)	0.44	CY
BRIDGE EXCAVATION ALONG RIGID FRAME RAILING BRIDGE NO. L-19-004 (BIN 2W4)	1	LS
BRIDGE EXCAVATION ALONG RIGID FRAME RAILING BRIDGE NO. L-19-004 (BIN 2W5)	1	LS
GRAVEL BORROW FOR BACKFILLING STRUCTURES AND PIPES	70	CY
CONTROLLED DENSITY FILL - EXCAVATABLE	11	CY
DISPOSAL OF TREATED WOOD PRODUCTS	4178	LBS
HMA FOR PATCHING	68.7	TONS
TRANSITION TO BRIDGE RAIL	4	EA
SILT SACK	4	EA
SEEDING	3740	SF
PAVEMENT MILLING MULCH UNDER GUARDRAIL	150	FT
DELINEATION FOR GUARD RAIL TERMINI	4	EA
4000 PSI, 3/8 INCH, 660 CEMENT CONCRETE	2	CF
REPAIRS TO UNDERSIDE OF REINFORCED CONCRETE RIGID FRAMES	113	SF
ALTERATION TO BRIDGE NO. L-19-004 (BIN 2W4)	1	LS
ALTERATION TO BRIDGE NO. L-19-004 (BIN 2W5)	1	LS

LYNNFIELD
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STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	3	29
PROJECT FILE NO.	613196		

GENERAL NOTES

TRAFFIC DATA	ROADWAY OVER	ROADWAY UNDER
DESIGN YEAR	2043	2043
AVERAGE DAILY TRAFFIC - PRESENT	139550	19520
AVERAGE DAILY TRAFFIC - DESIGN YEAR	154200	21570
DESIGN HOURLY VOLUME	10260	880
DIRECTIONAL DISTRIBUTION	5.2% SB	56% NB
TRUCK PERCENTAGE - AVERAGE DAY	6.1%	2%
TRUCK PERCENTAGE - PEAK HOUR	7.8%	3.4%
DESIGN SPEED	65	40
DIRECTIONAL DESIGN HOURLY VOLUME	5150	880

PROJECT INFORMATION
PROJECT FILE NO.: 613196
PROJECT DESCRIPTION: 10 BRIDGE BUNDLE
BRIDGE DESIGN LOADING: H-20
SURVEY: N/A

*
2W4
2W5

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

PS&E Resubmission 24-October-2025

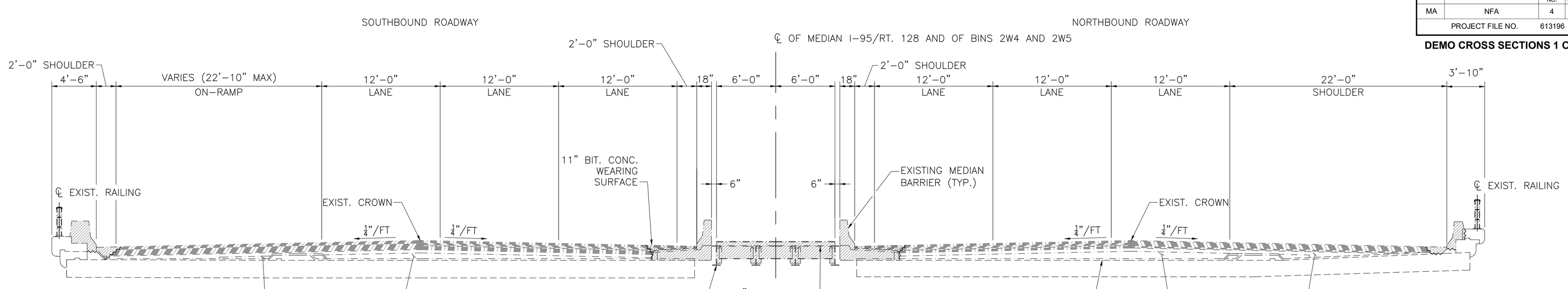
2 - GENERAL NOTES.DWG Plotted on 24-Oct-2025 2:50 PM
Proposal No. 613196-133292
A00803 - 5

LYNNFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	4	29
	PROJECT FILE NO. 613196		

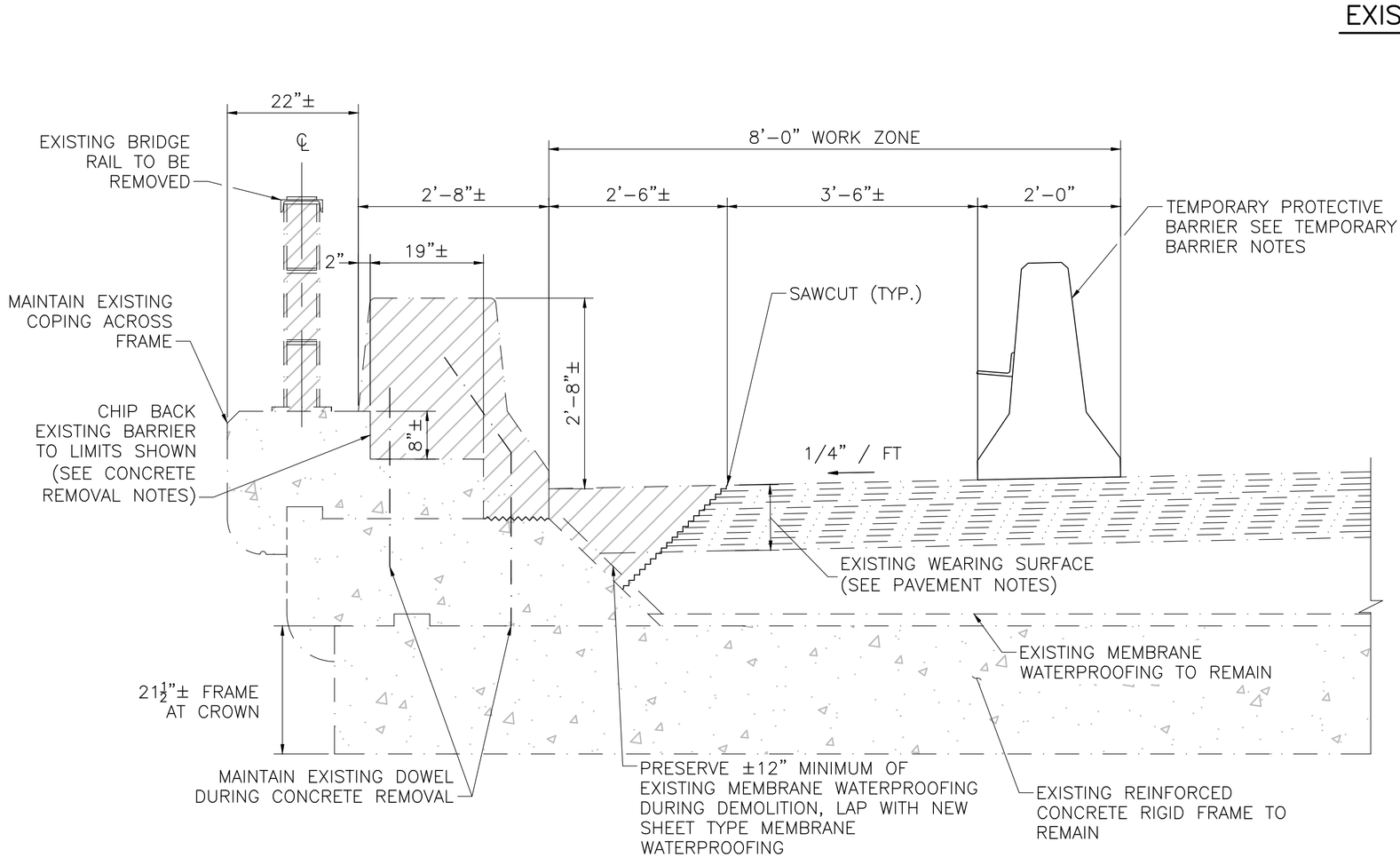
DEMO CROSS SECTIONS 1 OF 3

3-5 - DEMO CROSS SECTIONS.DWG Plotted on 22-Oct-2025 8:12 AM



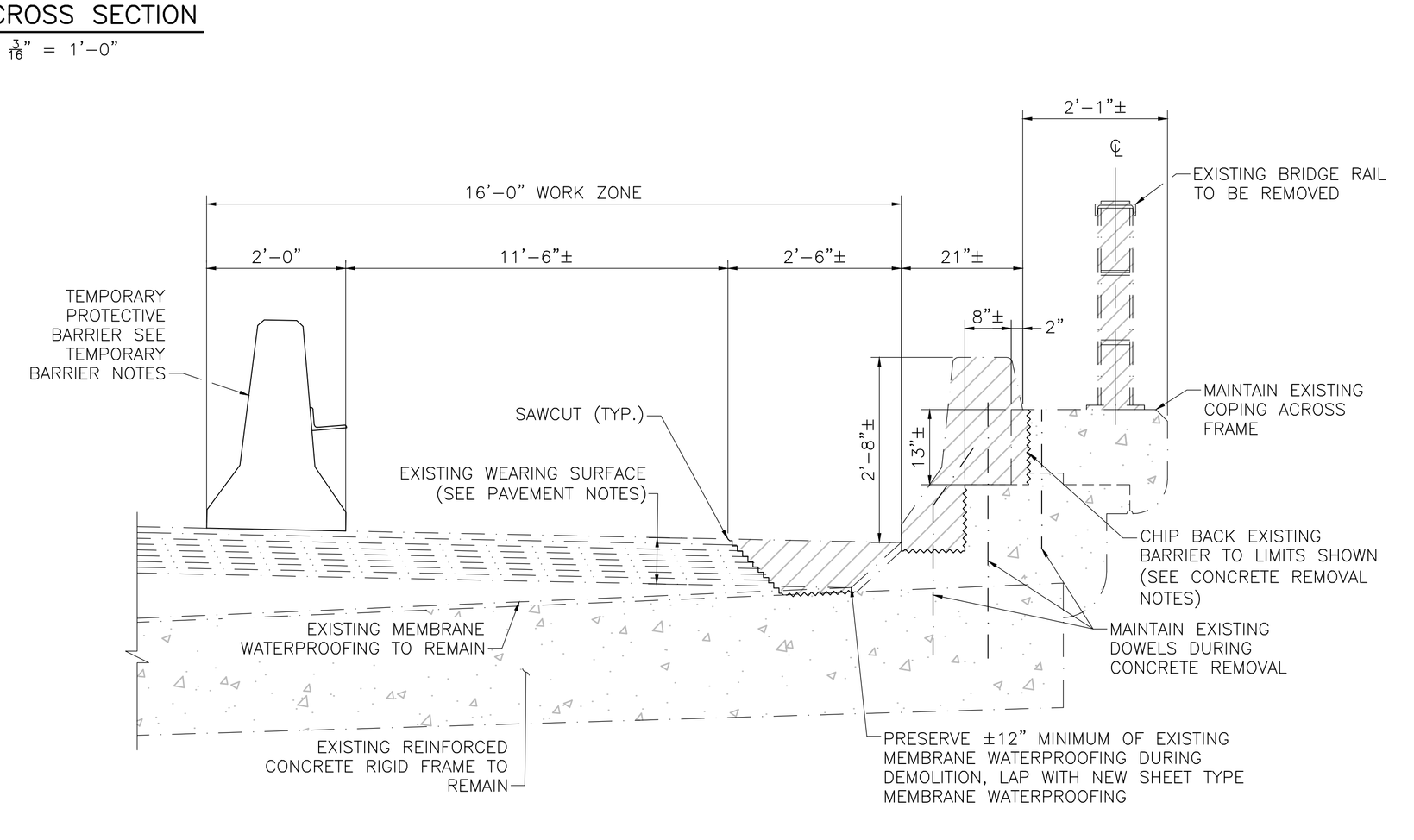
EXISTING CROSS SECTION

SCALE: $\frac{3}{16}$" = 1'-0"



LIMITS OF DEMOLITION AT SOUTHBOUND ROADWAY AT MIDSPAN (NORTH FASCIA)

SCALE: $\frac{3}{4}$" = 1'-0"



LIMITS OF DEMOLITION AT NORTHBOUND ROADWAY AT MIDSPAN (SOUTH FASCIA)

NOT TO SCALE

NOTES:

ALL EXISTING LANE LINES SHOWN FROM RECORD DRAWINGS AND ARE APPROXIMATE. NO SURVEY WAS PERFORMED AS PART OF THIS BRIDGE PRESERVATION TASK. CONTRACTOR TO CONFIRM LANE LINE MARKINGS PRIOR TO START OF WORK.

WORK ZONE NOTES:

WORK ZONE REQUIRES TEMPORARY LANE SHIFTS OR REDUCTION OF TRAVEL LANES TO 11' ALONG RAMP LANES. CONTRACTOR TO COORDINATE WITH DISTRICT TRAFFIC.

PAVEMENT NOTES:

1. EXISTING PAVEMENT THICKNESS IS BASED OFF EXISTING RECORD DRAWINGS, CONTRACTOR SHALL CONFIRM EXISTING THICKNESS PRIOR TO CONSTRUCTION.
2. PROPOSED PAVEMENT SHALL BE PLACED IN MAXIMUM 3" LIFTS AND MATCH EXISTING THICKNESS.
3. TO BE PAID UNDER ITEM 451. HMA FOR PATCHING. ASPHALT EMULSION FOR TACK COAT AND HMA JOINT SEALANT ARE INCIDENTAL TO ITEM 451. AND SHALL BE USED IN ACCORDANCE WITH MASSDOT STANDARD SPECIFICATIONS SECTION 450. PAVEMENT MIX SPC-B-12.5.

CONCRETE REMOVAL NOTES:

1. EXISTING BARRIER CONCRETE SHALL BE CHIPPED BACK TO COLD JOINT OF PREVIOUS BARRIER MODIFICATIONS.
2. IF CONCRETE IS DETERMINED TO BE UNSOUND PAST THE LIMITS OF CONCRETE REMOVAL, THEN THE LIMITS MAY BE INCREASED AS DIRECTED BE THE RESIDENT ENGINEER. SEE SPECIAL PROVISIONS.
3. EXISTING BRIDGE RAIL ANCHOR BOLTS SHALL BE CUT DOWN ¾" DEEP INTO EXISTING COPING AND HOLES TO BE FILLED WITH SEALANT.

TEMPORARY BARRIER NOTES:

TEMPORARY CONCRETE BARRIER SHALL BE RETROFITTED TO MASH TL-3 STANDARDS IN ACCORDANCE WITH DRAWING NUMBERS 853.23.1 AND 853.23.2 OF THE MASSDOT CONSTRUCTION STANDARDS ISSUED JUNE OF 2025.

TEMPORARY COPING SUPPORT:

1. TEMPORARY COPING SUPPORT SHALL REMAIN IN PLACE UNTIL CONCRETE HAS CURED FOR 28 DAYS.
2. SUPPORT SHALL NOT REDUCE EXISTING BRIDGE MINIMUM VERTICAL CLEARANCE.

*
2W4
2W5

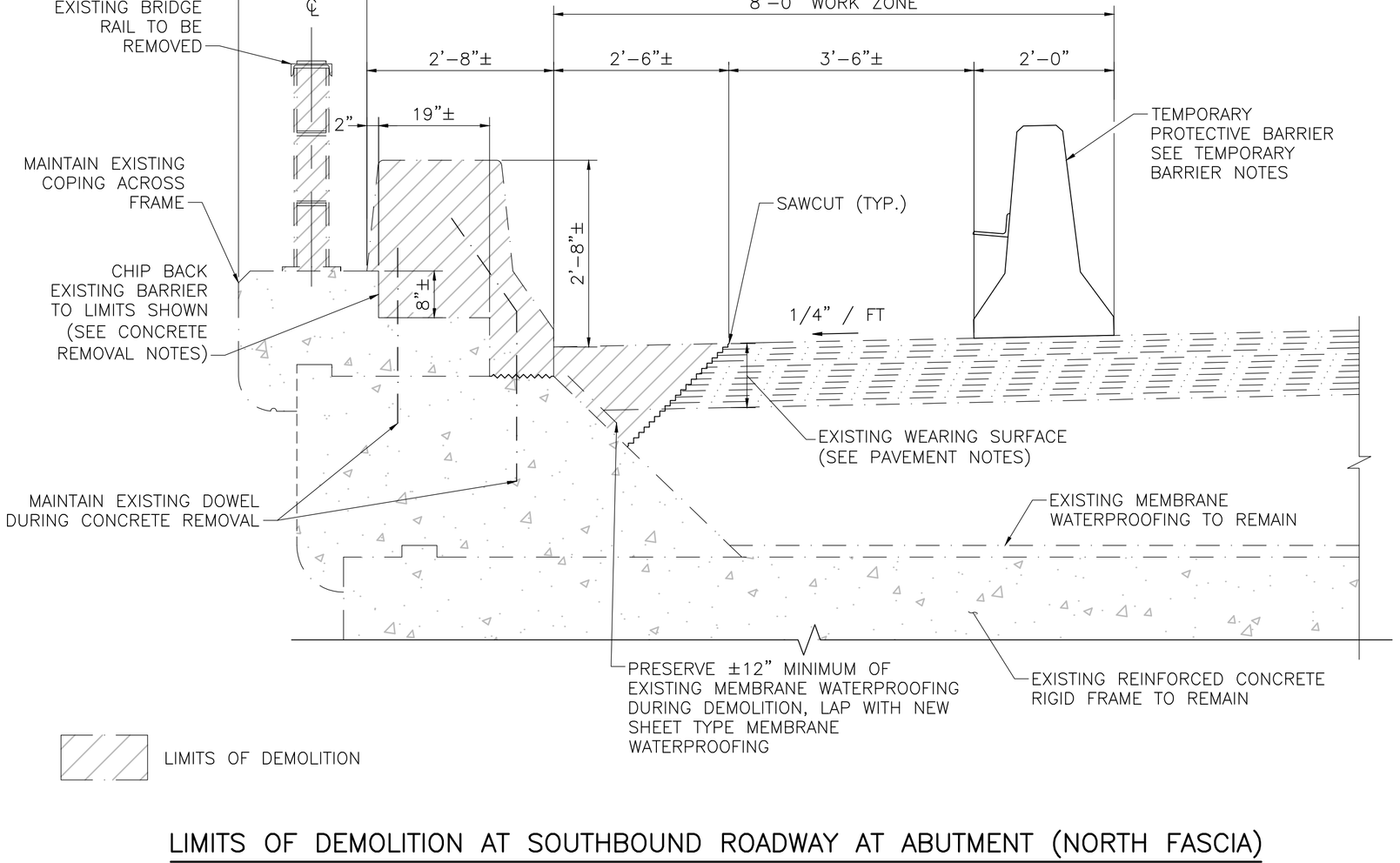
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

24-October-2025 PS&E Resubmission

LYNNFIELD
I-95/ROUTE 128

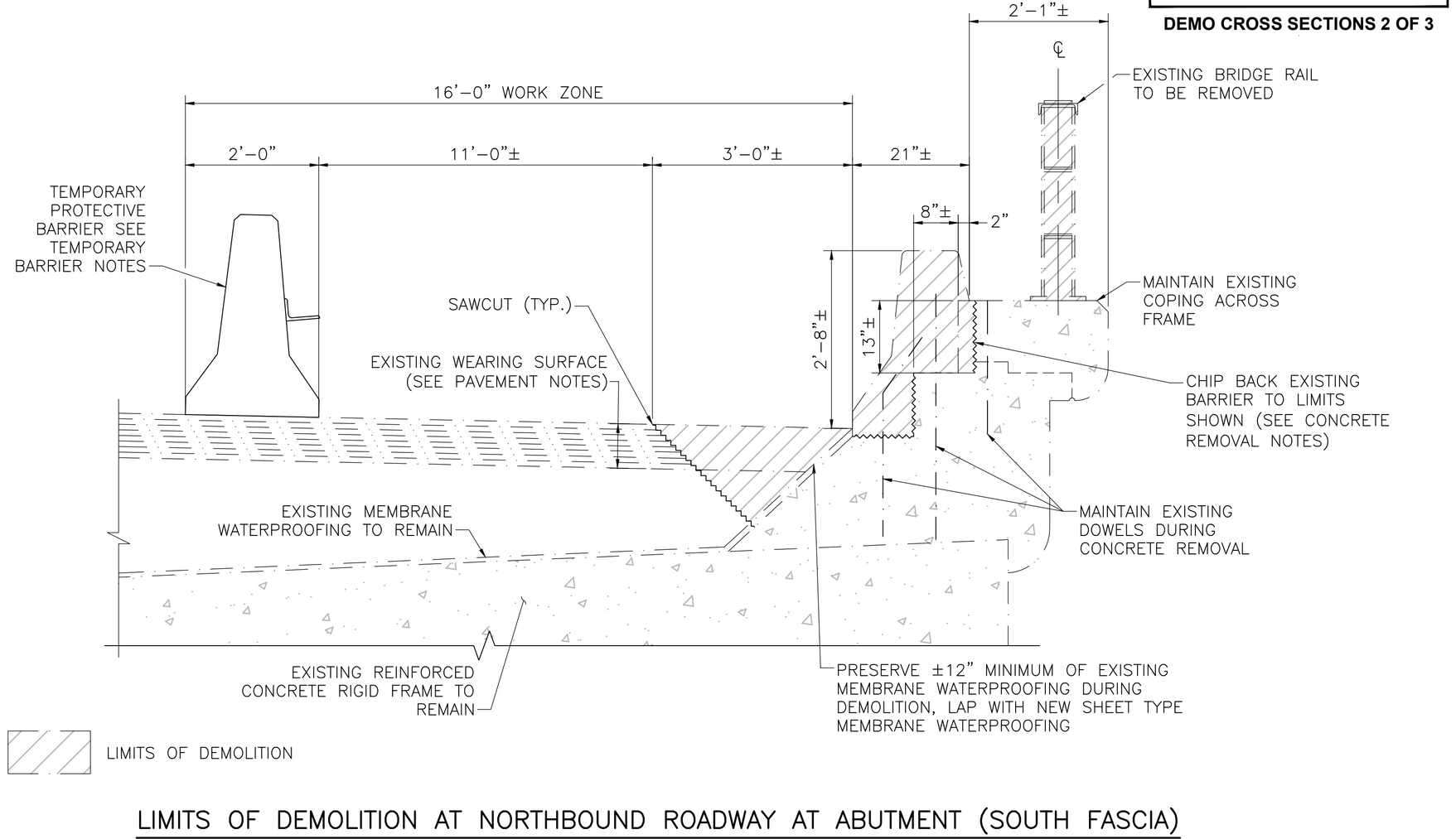
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	5	29
	PROJECT FILE NO. 613196		

DEMO CROSS SECTIONS 2 OF 3



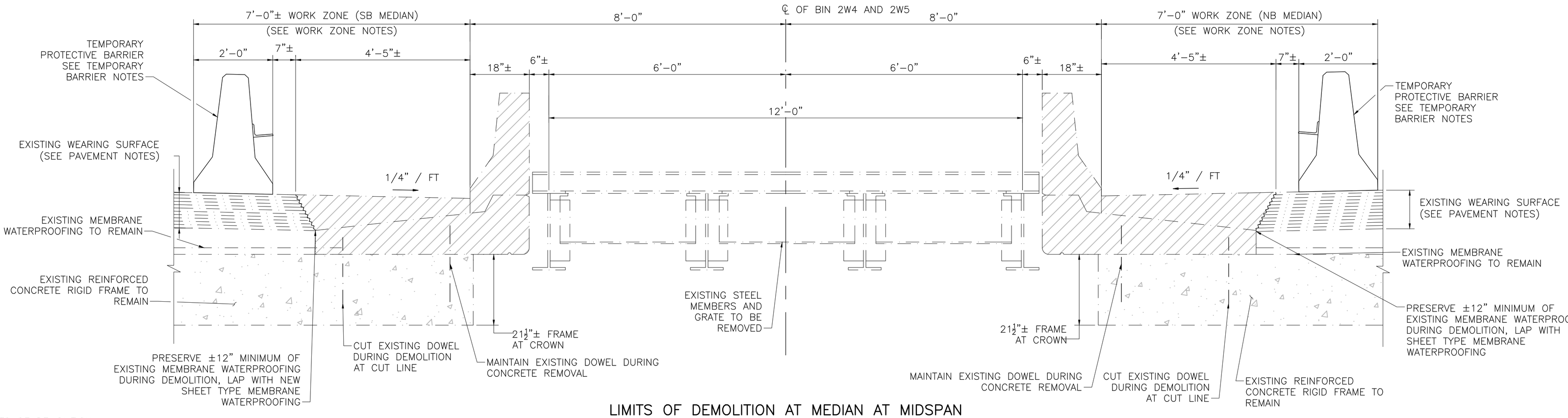
LIMITS OF DEMOLITION AT SOUTHBOUND ROADWAY AT ABUTMENT (NORTH FASCIA)

SCALE: ¾" = 1'–0"



LIMITS OF DEMOLITION AT NORTHBOUND ROADWAY AT ABUTMENT (SOUTH FASCIA)

NOT TO SCALE



LIMITS OF DEMOLITION AT MEDIAN AT MIDSPAN

SCALE: ¾" = 1'–0"

WORK ZONE NOTES:
SEE SHEET 3 FOR WORK ZONE DETAILS.

PAVEMENT NOTES:
SEE SHEET 3 FOR PAVEMENT DETAILS.

CONCRETE REMOVAL NOTES:
SEE SHEET 3 FOR REMOVAL NOTES

TEMPORARY BARRIER NOTES:
SEE SHEET 3 FOR BARRIER NOTES

TEMPORARY COPING SUPPORT:
SEE SHEET 3 FOR COPING SUPPORT NOTES

*
2W4
2W5

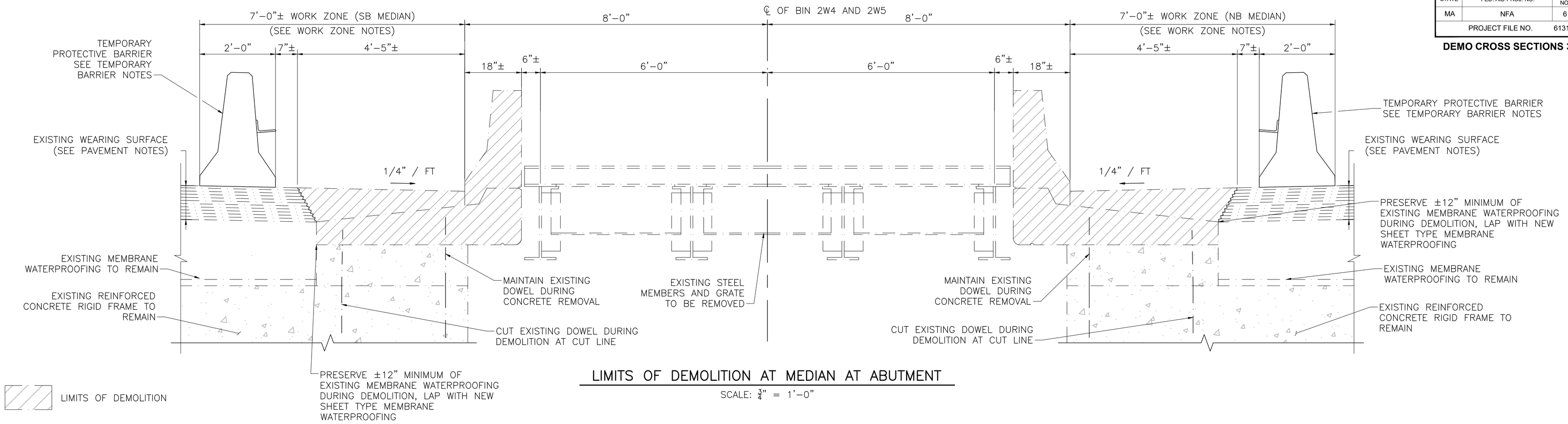
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

3-5 - DEMO CROSS SECTIONS.DWG Plotted on 24-Oct-2025 2:13 PM
Proposal No. 613196-133292
A00803 - 7
PS&E Resubmission 24-October-2025

LYNNFIELD
I-95/ROUTE 128

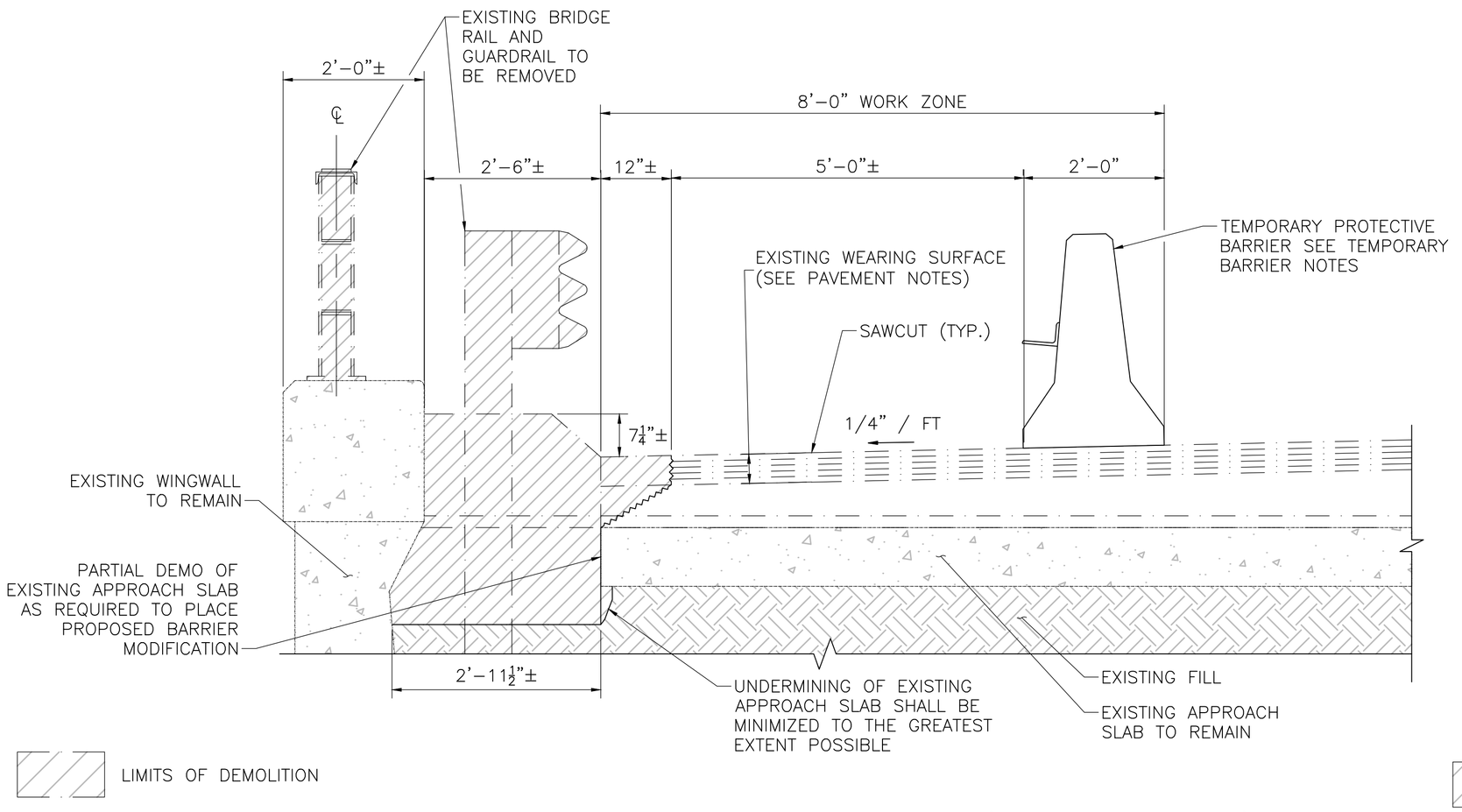
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	6	29
	PROJECT FILE NO. 613196		

DEMO CROSS SECTIONS 3 OF 3



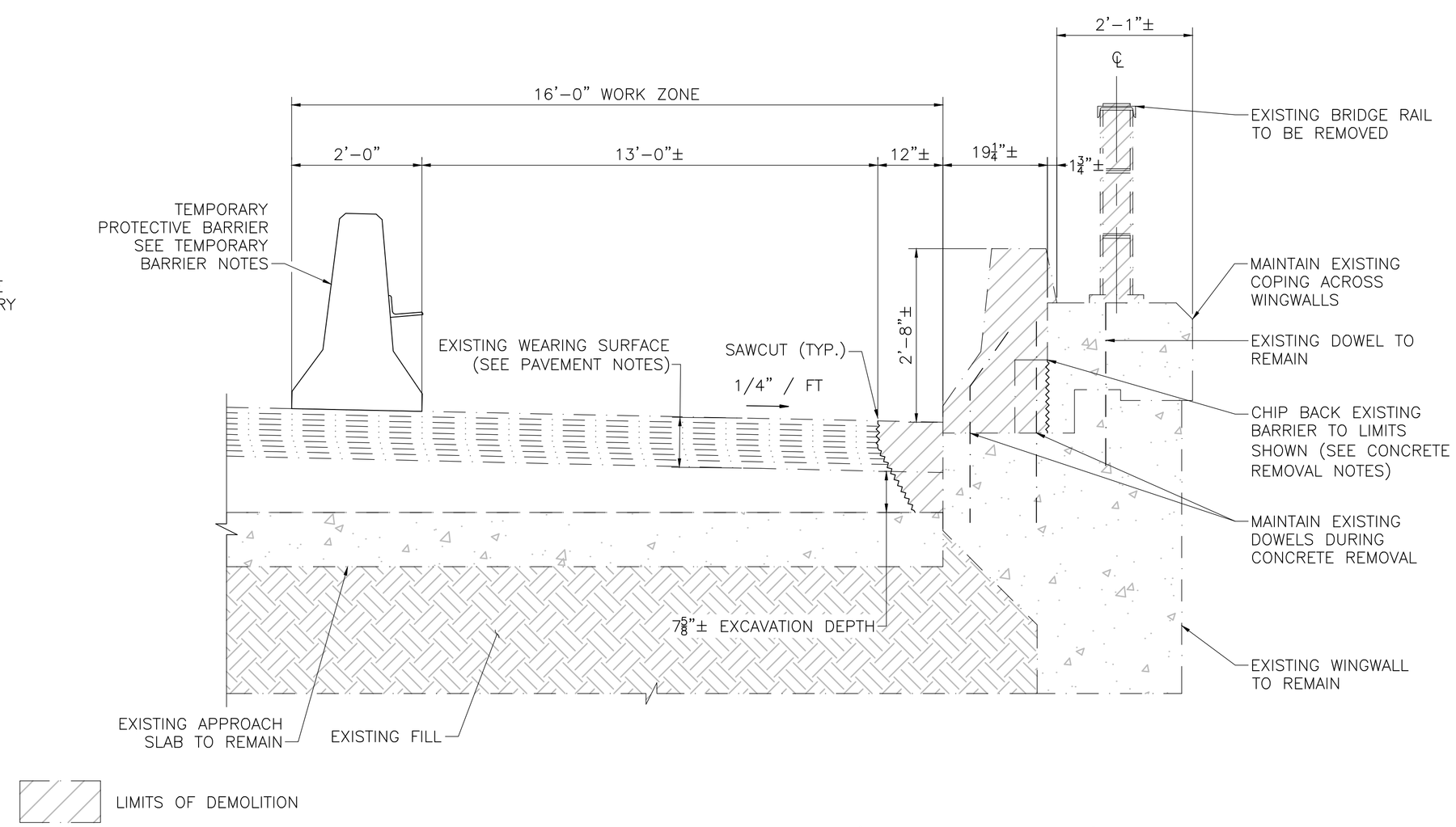
LIMITS OF DEMOLITION AT MEDIAN AT ABUTMENT

SCALE: $\frac{3}{4}$" = 1'–0"



LIMITS OF DEMOLITION AT SOUTHBOUND ROADWAY (NORTH WINGWALLS)

SCALE: $\frac{3}{4}$" = 1'–0"



LIMITS OF DEMOLITION AT NORTHBOUND ROADWAY (SOUTH WINGWALLS)

NOT TO SCALE

WORK ZONE NOTES:
SEE SHEET 3 FOR WORK ZONE DETAILS.

PAVEMENT NOTES:
SEE SHEET 3 FOR PAVEMENT DETAILS.

CONCRETE REMOVAL NOTES:
SEE SHEET 3 FOR REMOVAL NOTES

TEMPORARY BARRIER NOTES:
SEE SHEET 3 FOR BARRIER NOTES

TEMPORARY COPING SUPPORT:
SEE SHEET 3 FOR COPING SUPPORT NOTES

*
2W4
2W5

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
	USE ONLY PRINTS OF LATEST DATE

3-5 - DEMO CROSS SECTIONS.DWG Plotted on 24-Oct-2025 2:17 PM
Proposal No. 613196-133292
A00803 - 8
PS&E Resubmission 24-October-2025

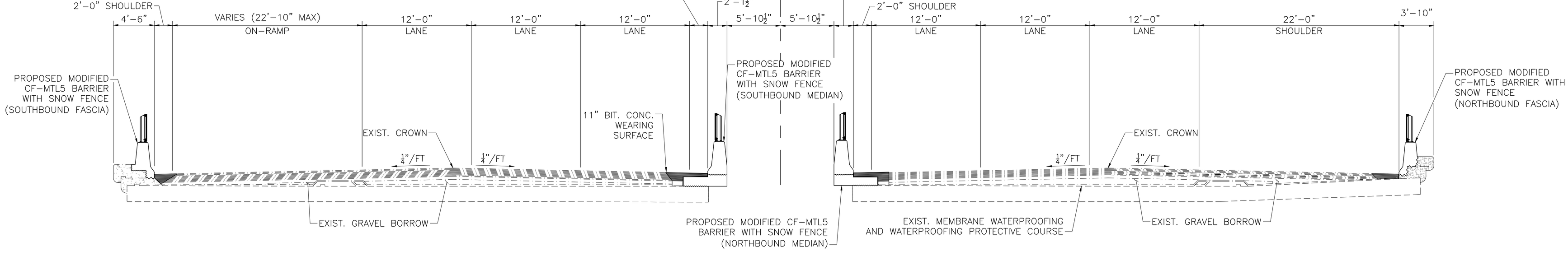
LYNNFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	7	29
	PROJECT FILE NO. 613196		

PROPOSED CROSS SECTION

NOTES:

1. ALL EXISTING LANE LINES SHOWN FROM RECORD DRAWINGS AND ARE APPROXIMATE. NO SURVEY WAS PERFORMED AS PART OF THIS BRIDGE PRESERVATION TASK. CONTRACTOR TO CONFIRM LAN LINE MARKINGS PRIOR TO START OF WORK.



PROPOSED CROSS SECTION

SCALE: $\frac{3}{16}$" = 1'-0"

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

*
2W4
2W5

SHEET 6 OF 21 SHEETS BRIDGE NO. L-19-004 (*)

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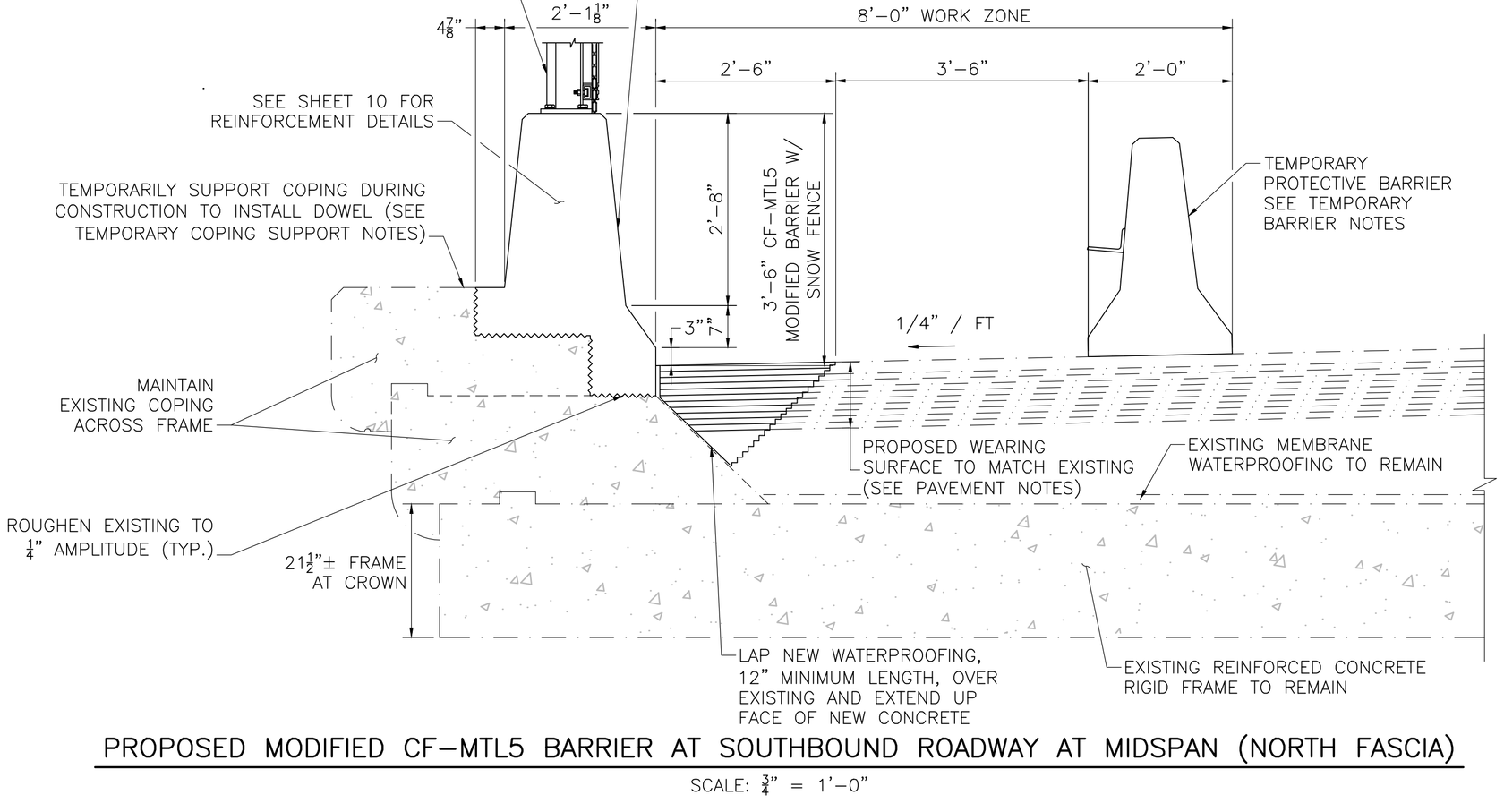
6 - PROPOSED CROSS SECTION.DWG Plotted on 24-Oct-2025 2:55 PM

Proposal No. 613196-133292

A00803 - 9

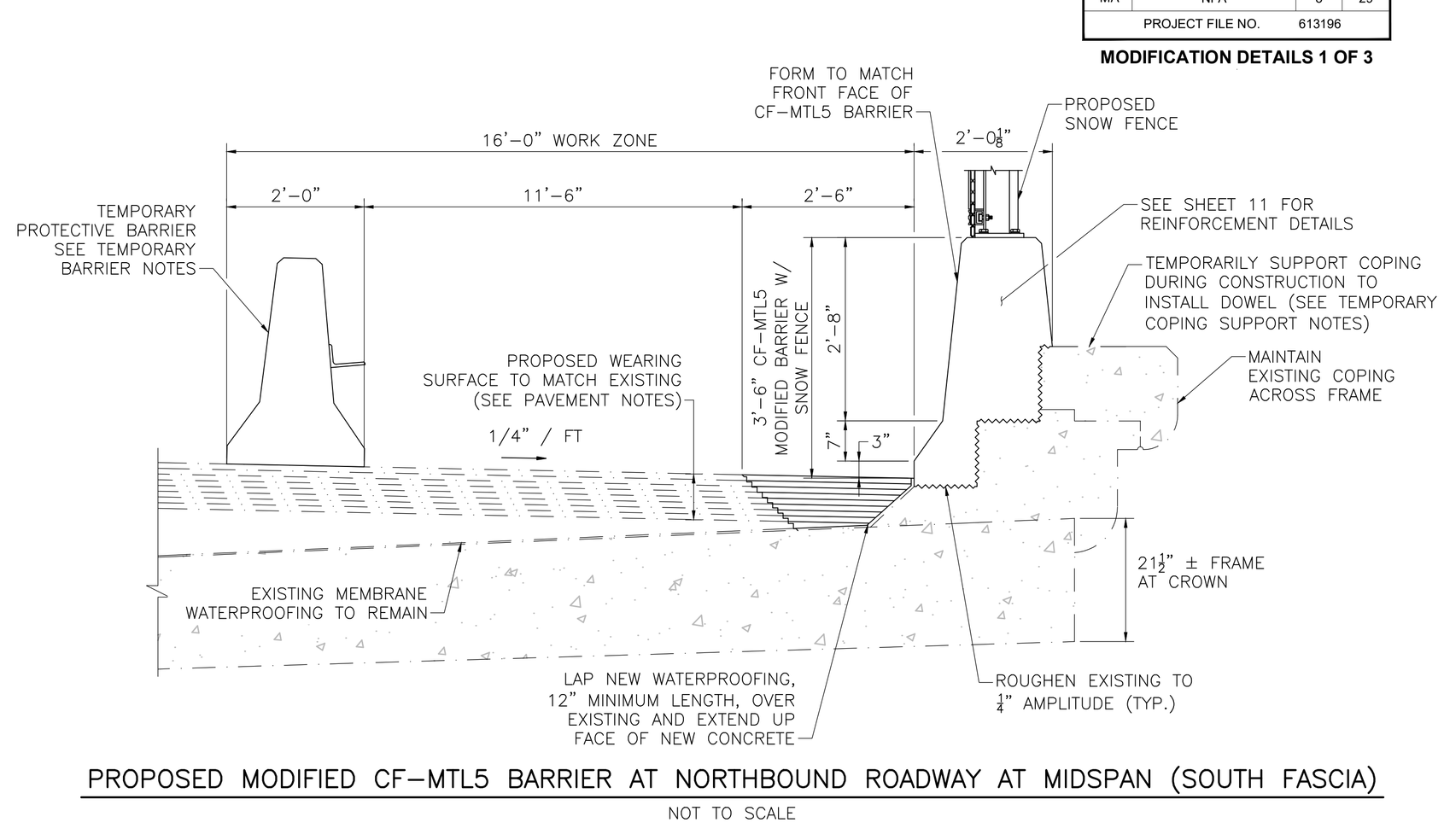
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	8	29
PROJECT FILE NO.	613196		

MODIFICATION DETAILS 1 OF 3



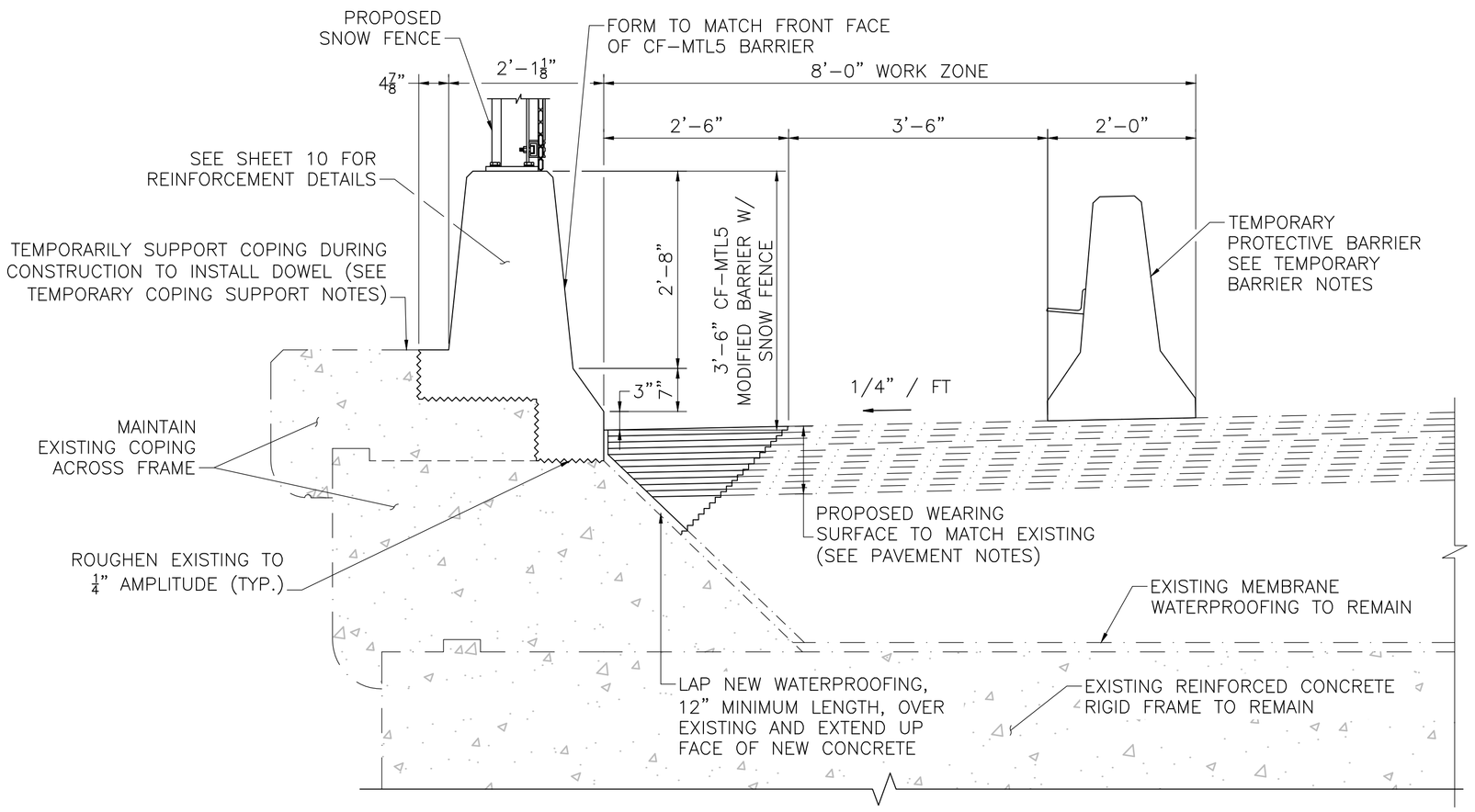
PROPOSED MODIFIED CF–MTL5 BARRIER AT SOUTHBOUND ROADWAY AT MIDSPAN (NORTH FASCIA)

SCALE: 3/4" = 1'–0"



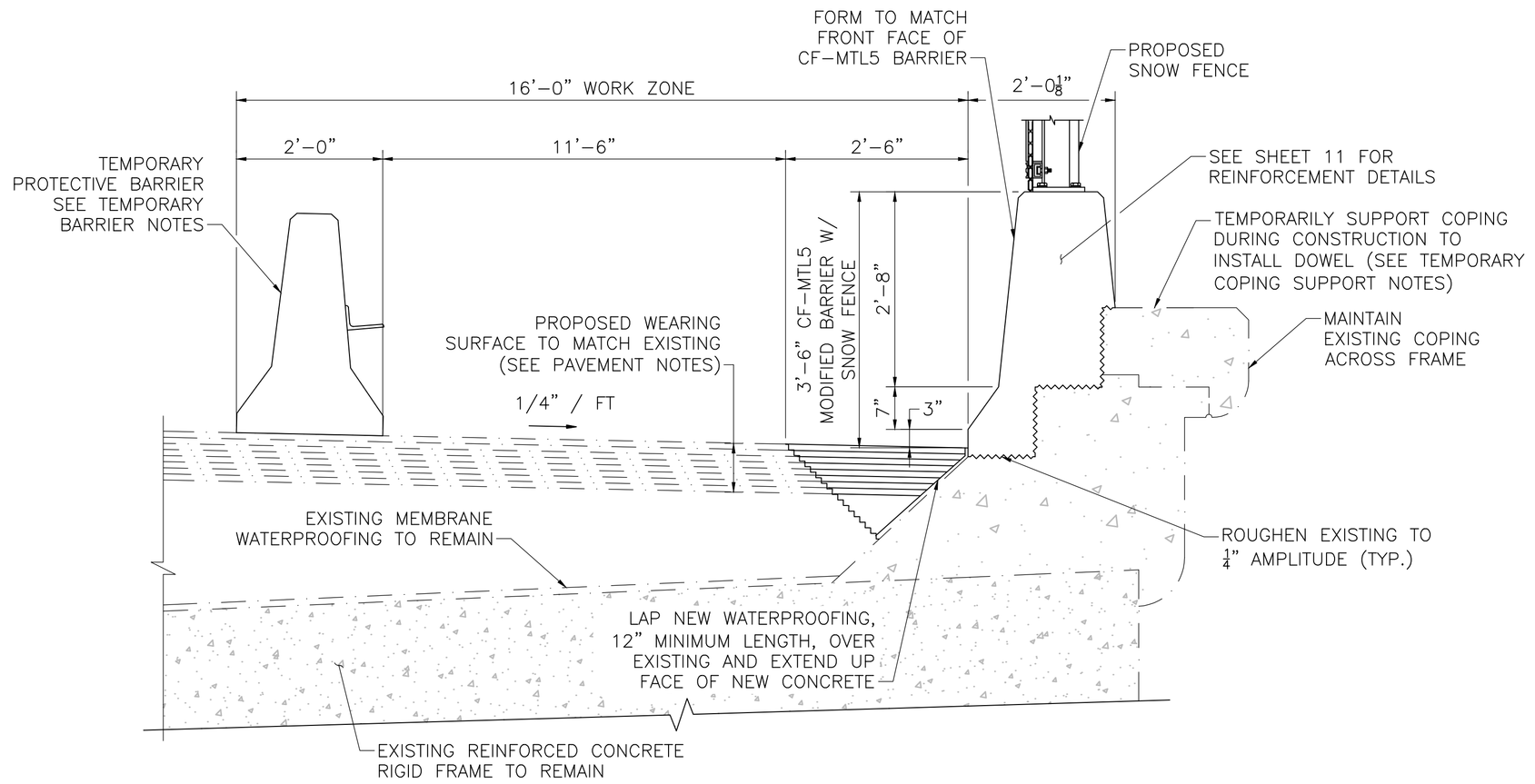
PROPOSED MODIFIED CF–MTL5 BARRIER AT NORTHBOUND ROADWAY AT MIDSPAN (SOUTH FASCIA)

NOT TO SCALE



PROPOSED MODIFIED CF–MTL5 BARRIER AT SOUTHBOUND ROADWAY AT ABUTMENT (NORTH FASCIA)

SCALE: 3/4" = 1'–0"



PROPOSED MODIFIED CF–MTL5 BARRIER AT NORTHBOUND ROADWAY AT ABUTMENT (SOUTH FASCIA)

NOT TO SCALE

PAVEMENT NOTES:

SEE SHEET 3 FOR PAVEMENT NOTES.

CONCRETE REMOVAL NOTES:

SEE SHEET 3 FOR CONCRETE REMOVAL NOTES

TEMPORARY BARRIER NOTES:

SEE SHEET 3 FOR TEMPORARY BARRIER NOTES

TEMPORARY COPING SUPPORT:

SEE SHEET 3 FOR COPING SUPPORT NOTES

*
2W4
2W5

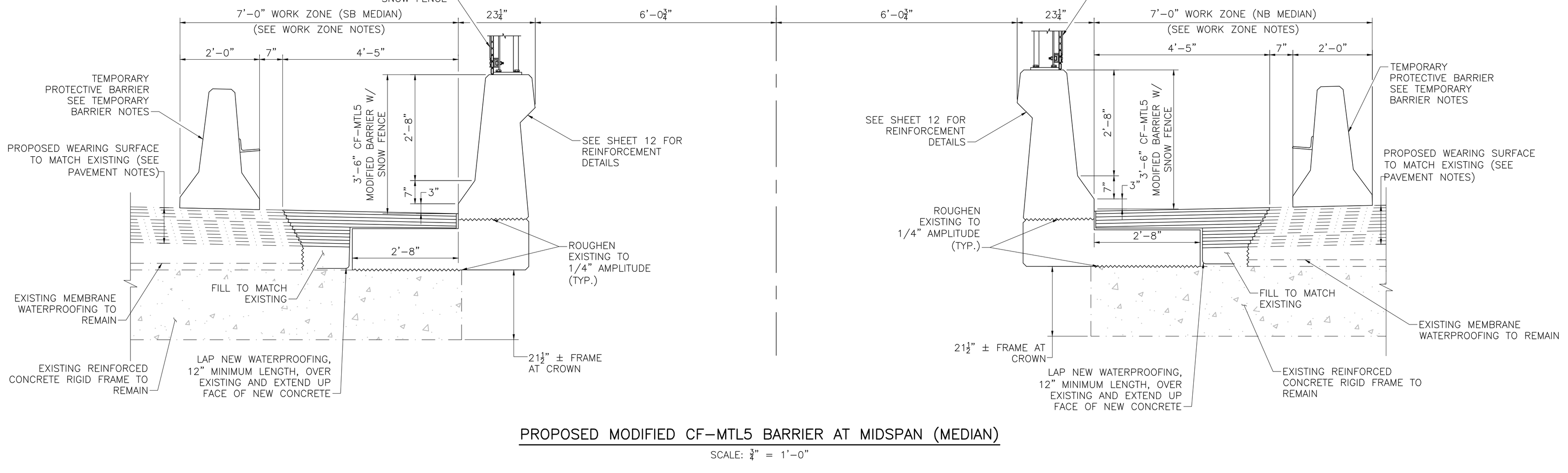
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

A00803 - 10
7-9 - MODIFICATION DETAILS.DWG Plotted on 24-Oct-2025 3:09 PM
Proposal No. 613196-133292
PS&E Resubmission 24-October-2025

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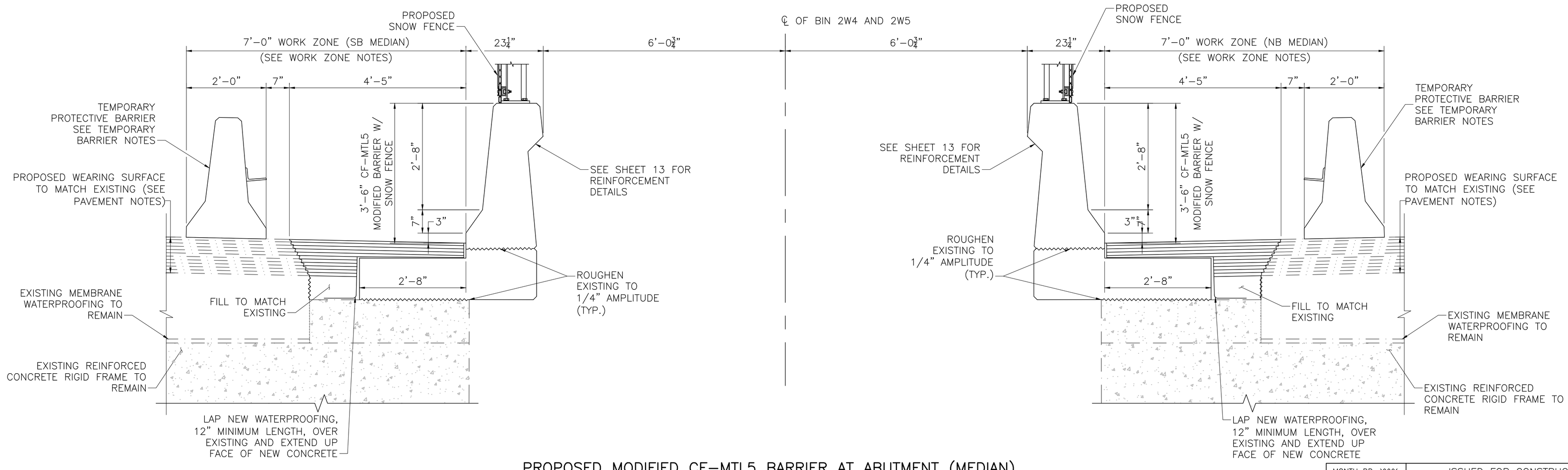
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	9	29
	PROJECT FILE NO. 613196		

MODIFICATION DETAILS 2 OF 3



PROPOSED MODIFIED CF–MTL5 BARRIER AT MIDSPAN (MEDIAN)

SCALE: ¾" = 1'–0"



PROPOSED MODIFIED CF–MTL5 BARRIER AT ABUTMENT (MEDIAN)

SCALE: ¾" = 1'–0"

PAVEMENT NOTES:

SEE SHEET 3 FOR PAVEMENT NOTES.

CONCRETE REMOVAL NOTES:

SEE SHEET 3 FOR CONCRETE REMOVAL NOTES

TEMPORARY BARRIER NOTES:

SEE SHEET 3 FOR TEMPORARY BARRIER NOTES

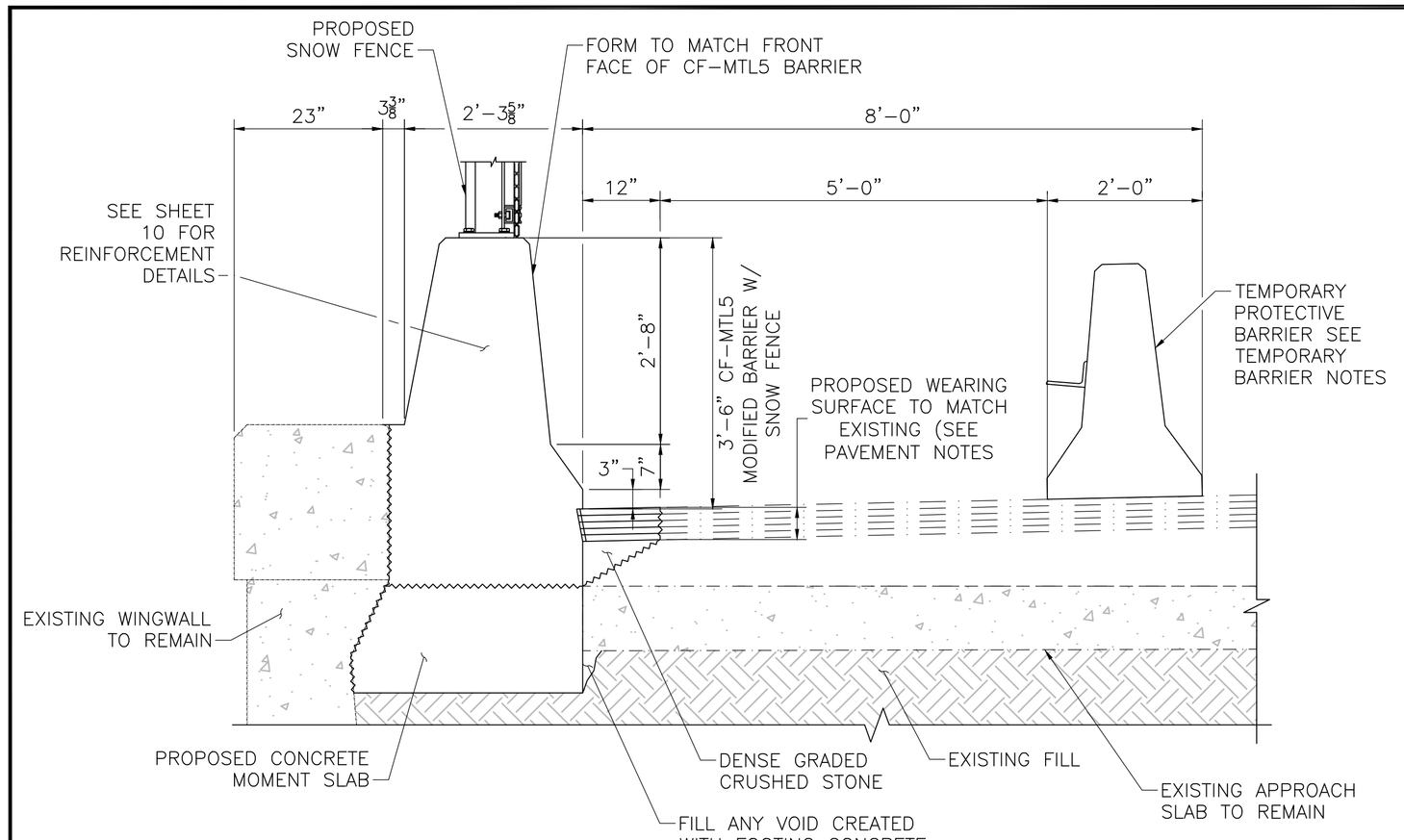
TEMPORARY COPING SUPPORT:

SEE SHEET 3 FOR COPING SUPPORT NOTES

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2W4
2W5

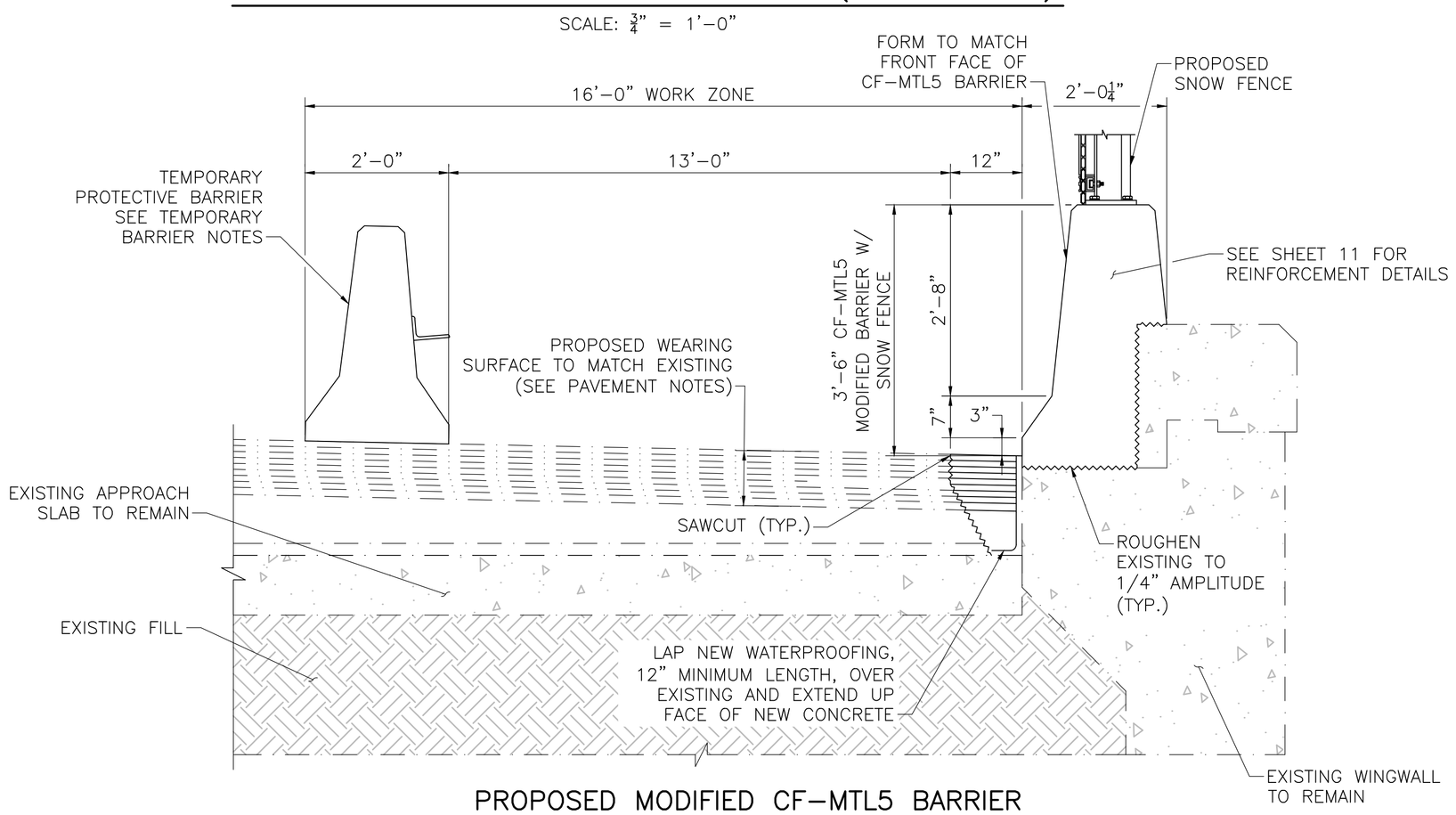
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
	USE ONLY PRINTS OF LATEST DATE

7-9 - MODIFICATION DETAILS.DWG Plotted on 24-Oct-2025 3:08 PM
Proposal No. 613196-133292
A00803 - 11
PS&E Resubmission 24-October-2025



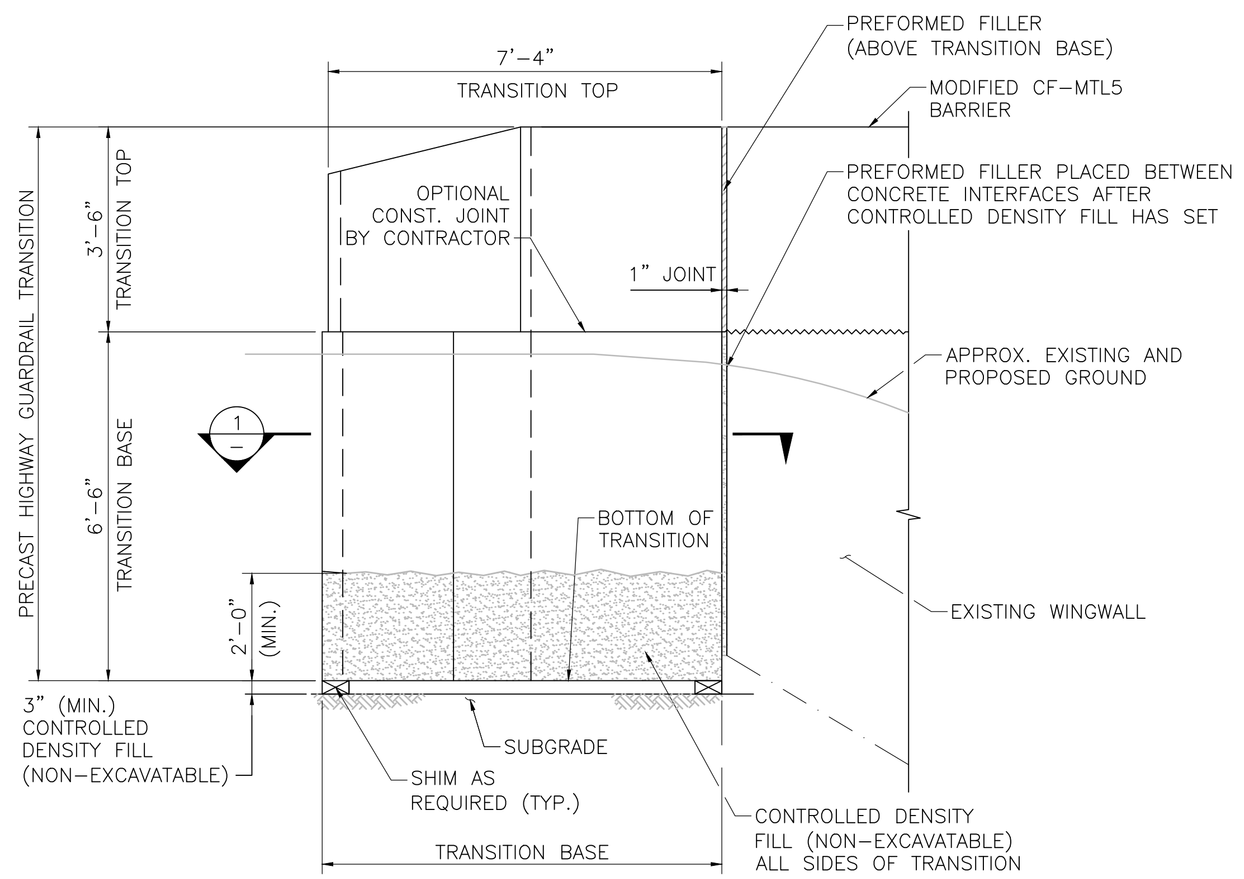
PROPOSED MODIFIED CF-MTL5 BARRIER AT SOUTHBOUND ROADWAY AT WINGWALLS (NORTH FASCIA)

SCALE: $\frac{3}{4}$" = 1'-0"



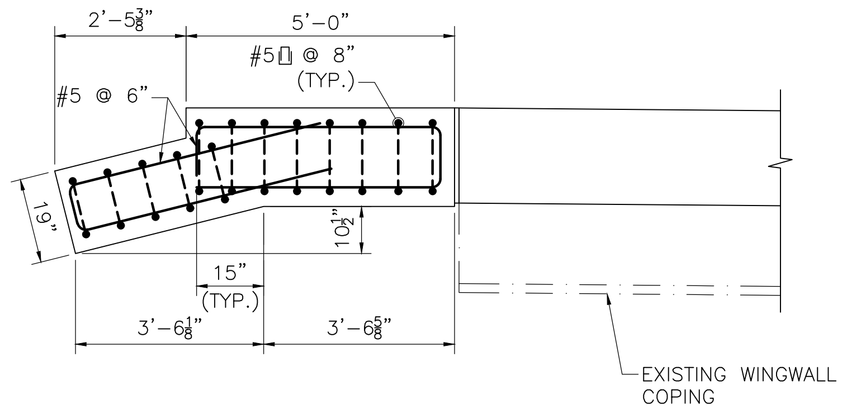
PROPOSED MODIFIED CF-MTL5 BARRIER AT NORTHBOUND ROADWAY AT WINGWALLS (SOUTH FASCIA)

SCALE: $\frac{3}{4}$" = 1'-0"



GUARDRAIL TRANSITION BASE ELEVATION (INSIDE FACE)

SCALE: $\frac{1}{2}$" = 1'-0"



SECTION 1 –

SCALE: $\frac{1}{2}$" = 1'-0"

PAVEMENT NOTES:

SEE SHEET 3 FOR PAVEMENT NOTES.

CONCRETE REMOVAL NOTES:

SEE SHEET 3 FOR CONCRETE REMOVAL NOTES

TEMPORARY BARRIER NOTES:

SEE SHEET 3 FOR TEMPORARY BARRIER NOTES

TEMPORARY COPING SUPPORT:

SEE SHEET 3 FOR COPING SUPPORT NOTES

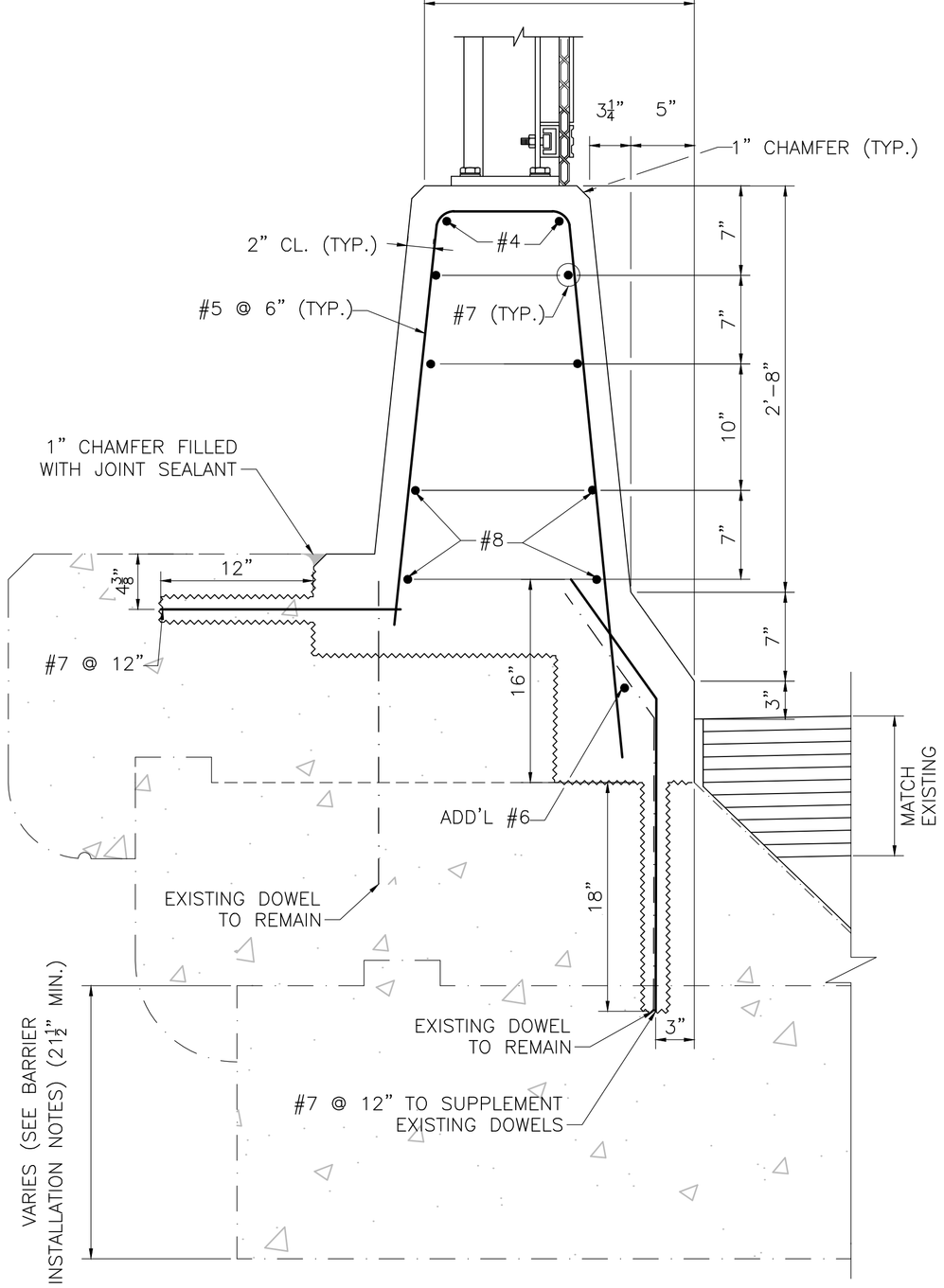
TRANSITION BASE NOTES:

1. PRECAST HIGHWAY GUARDRAIL TRANSITION (HGT) SHALL BE 5000 PSI, $\frac{3}{4}$ IN, 685 HP CEMENT CONCRETE.
2. PRECAST GUARDRAIL TRANSITION BASE UNITS TO BE INSTALLED PRIOR TO CONSTRUCTING THE BASE OF THE WINGWALL BARRIERS.
3. GRAVEL BORROW SHALL BE PLACED AND THOROUGHLY COMPACTED TO THE GRADE OF 3" (MIN.) BELOW THE INTENDED BOTTOM OF THE PRECAST GUARDRAIL TRANSITION BASE AND TO A HEIGHT OF 2'-0" (MIN.) ON ALL SIDES OF THE TRANSITION BASE TO FORM A TRENCH IN WHICH TO SET THE TRANSITION. WHERE NO GRAVEL BORROW IS REQUIRED BELOW THE BASE, IT SHALL BE PLACED ON UNDISTURBED SOIL.
4. CONTRACTOR SHALL SET THE PRECAST GUARDRAIL TRANSITION TO THE REQUIRED ELEVATION AND ALIGNMENT, AND BACKFILL PRECAST GUARDRAIL TRANSITION WITH CONTROLLED DENSITY FILL (NON-EXCAVATABLE) TO THE ELEVATION SHOWN.
5. CONTRACTOR TO PROVIDE METHOD OF INSTALLATION OF HGT WITHIN THE CLEAR ZONE LIMITS BEHIND THE BARRIERS AT ALL CORNERS.
6. SEE ITEM 992.13 AND 992.14 FOR MEASUREMENT AND PAYMENT.

*
2W4
2W5

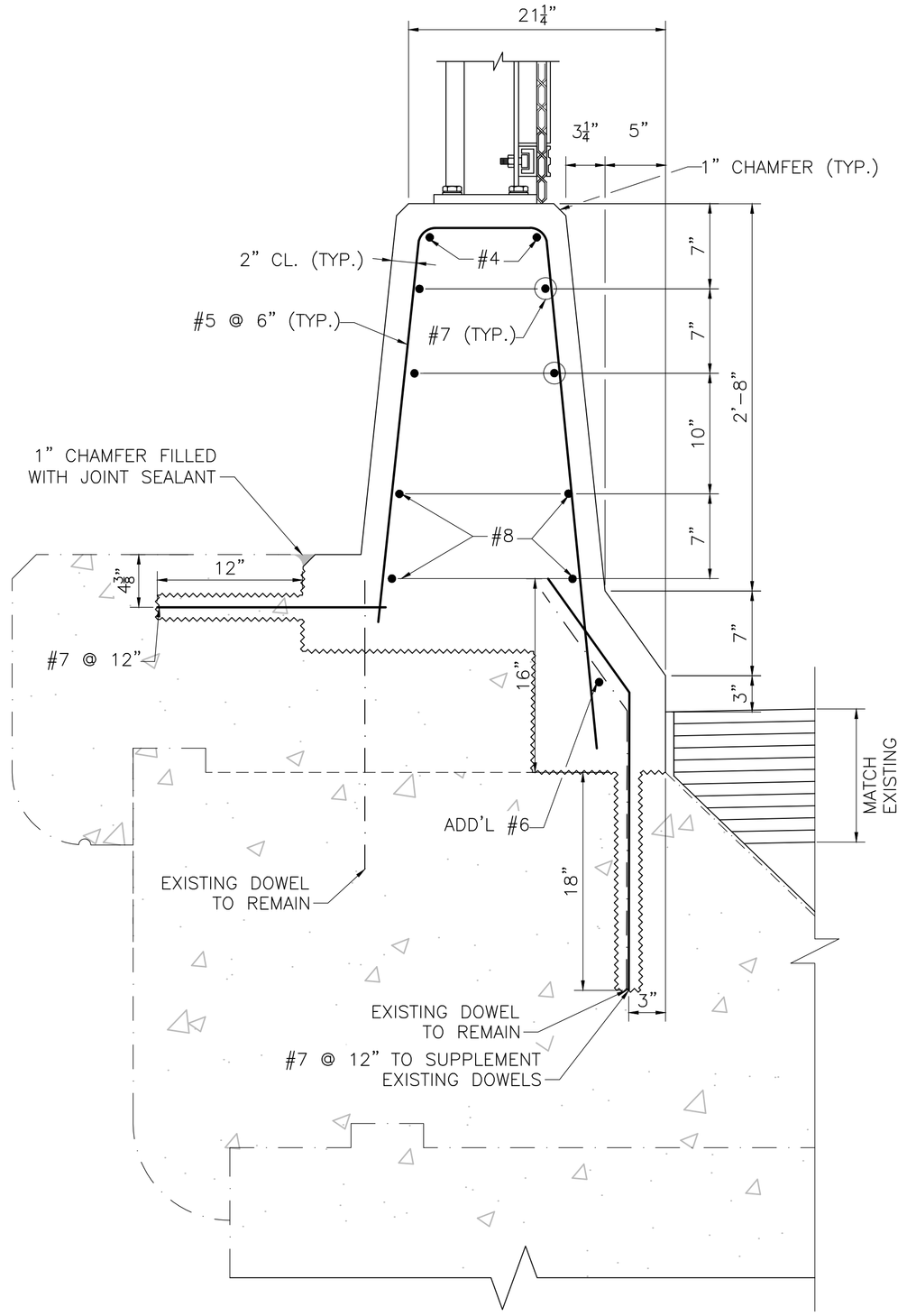
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

A00803 - 12
7-9 - MODIFICATION DETAILS.DWG Plotted on 24-Oct-2025 3:02 PM
Proposal No. 613196-133292
PS&E Resubmission 24-October-2025



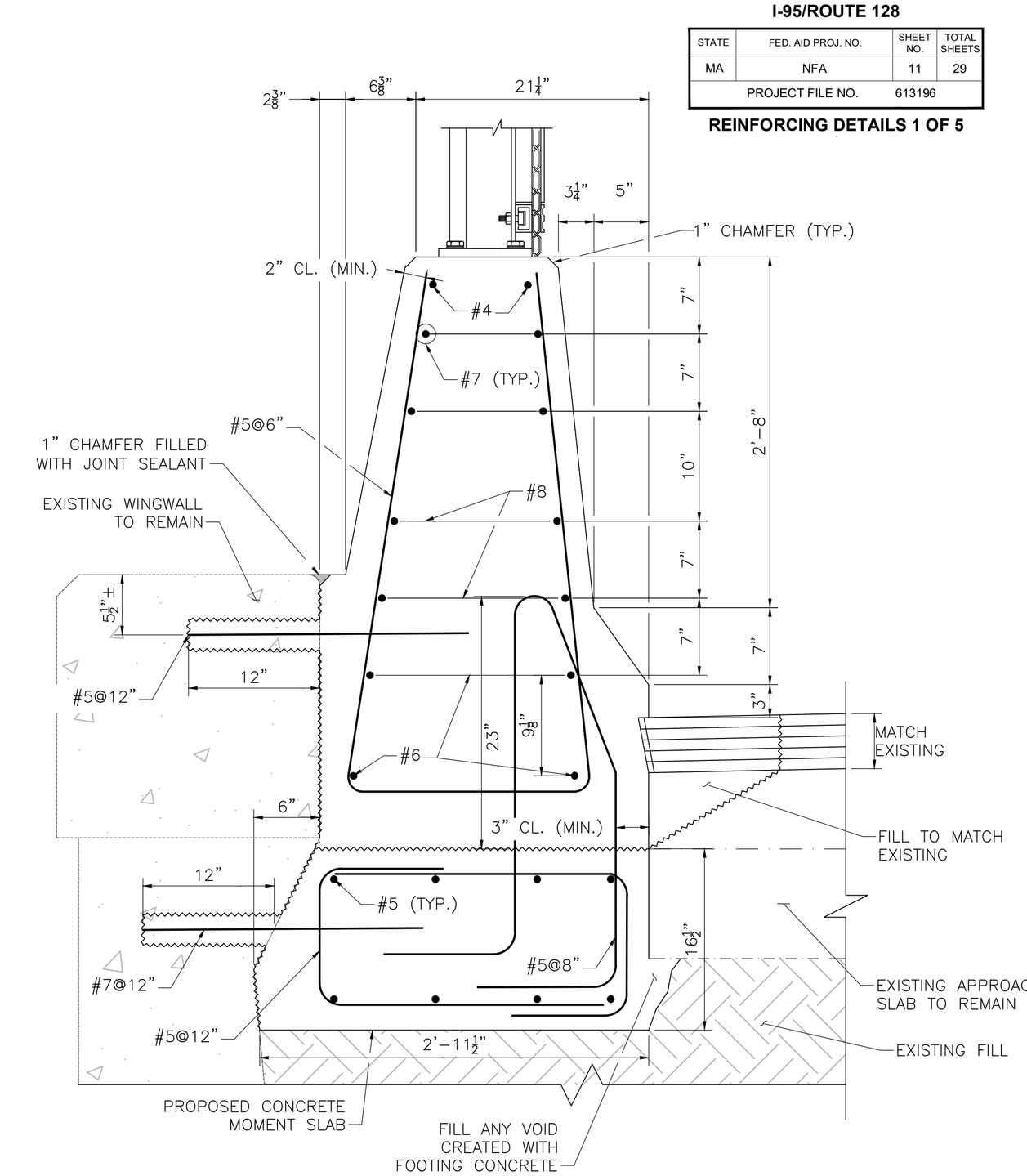
PROPOSED CF–MTL5 BARRIER REINFORCING
DETAIL AT MIDSPAN (SOUTHBOUND FASCIA)

SCALE: 1½" = 1'–0"



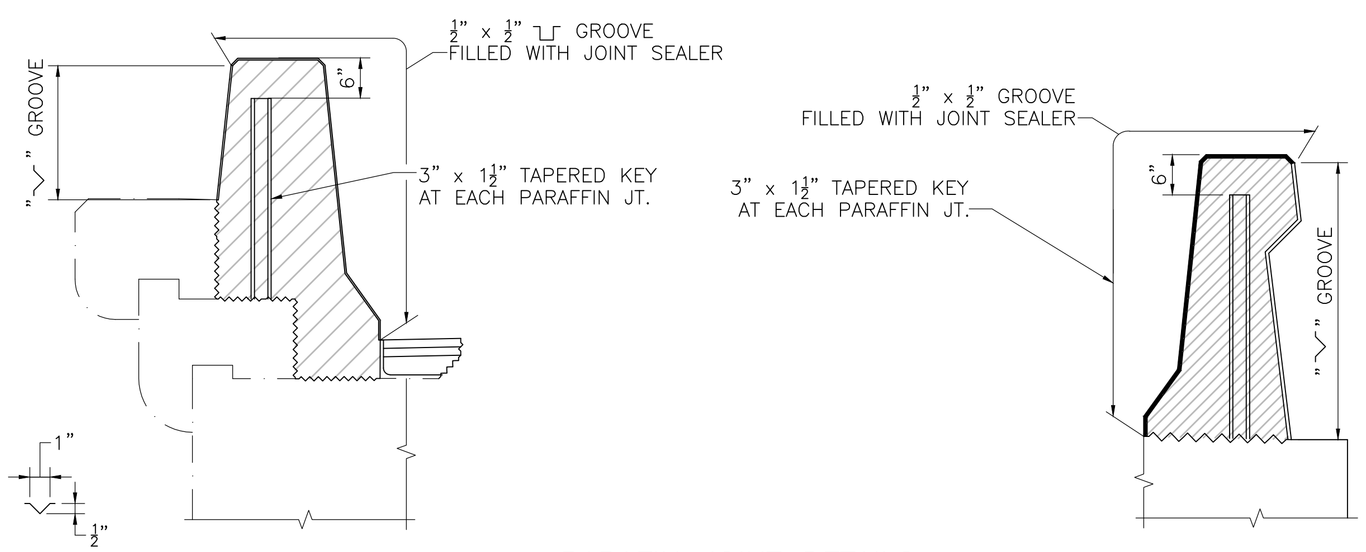
PROPOSED CF–MTL5 BARRIER REINFORCING
DETAIL AT ABUTMENT (SOUTHBOUND FASCIA)

SCALE: 1½" = 1'–0"



PROPOSED CF–MTL5 BARRIER REINFORCING
DETAIL AT WINGWALLS (SOUTHBOUND FASCIA)

SCALE: 1½" = 1'–0"



PARAFIN JOINT DETAILS

SCALE: ¾" = 1'–0"

NOTES:

1. ALL CONCRETE ABOVE RIGID FRAME SHALL BE POURED IN ALTERNATING SECTIONS WITH NOT LESS THAN 3 DAYS BETWEEN POURS.
2. DO NOT CARRY LONGITUDINAL BARS THROUGH THE PARAFFIN END THE REINFORCEMENT 2" CLEAR OF JOINT.
3. JOINT SHALL BE SQUARE TO FACE OF CURB OR COPING.

DRILL & GROUT NOTES:

1. LOCATIONS FOR DRILLING AND GROUTING SHALL BE CAREFULLY SELECTED TO AVOID EXISTING REINFORCING.
2. GROUT SHALL BE CHOSEN FROM MASSDOT QUALIFIED CONSTRUCTION MATERIALS LIST (QCML).

BARRIER INSTALLATION NOTES:

1. CONTRACTOR SHALL REMOVE EXISTING RAILING AND CONCRETE BASE TO LIMITS DETERMINED BY THE ENGINEER. SEE NOTES ON SHEET 3 FOR CONCRETE REMOVAL.
2. DRILL AND GROUT DOWELS PRIOR TO POURING OF REPAIRED CONCRETE AREA AND BARRIER.
3. BARRIER AND REPAIRED AREA SHALL BE POURED SEPARATE WITH A CONSTRUCTION JOINT BETWEEN THE REPAIRED AREA AND THE BASE OF THE BARRIER.

*
2W4
2W5

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

LYNNFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	11	29
PROJECT FILE NO.	613196		

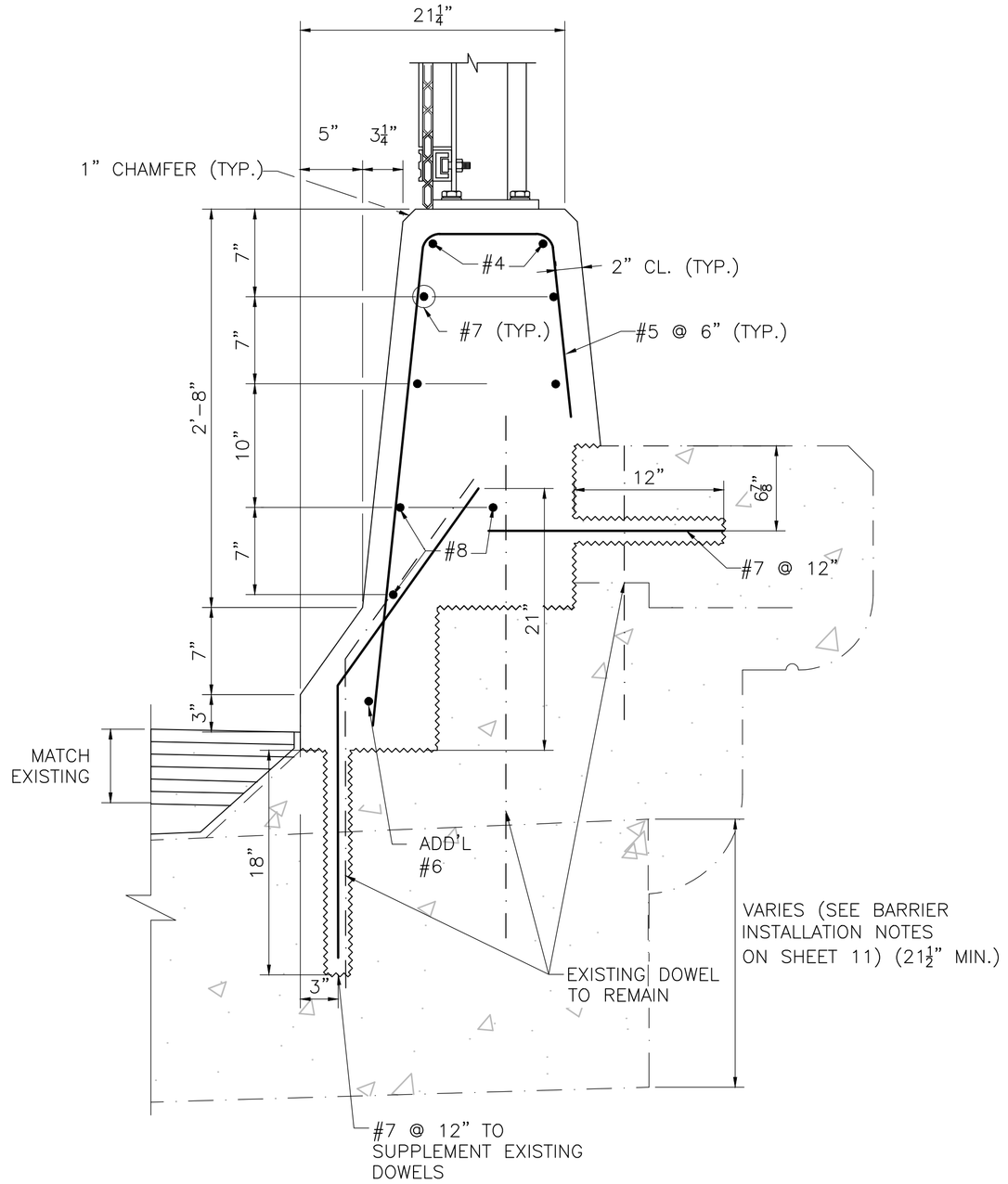
REINFORCING DETAILS 1 OF 5

10-14 - REINFORCING DETAILS.DWG Plotted on 24-Oct-2025 9:59 AM
24-October-2025
PS&E Resubmission
Proposal No. 613196-133292
A00803 - 13

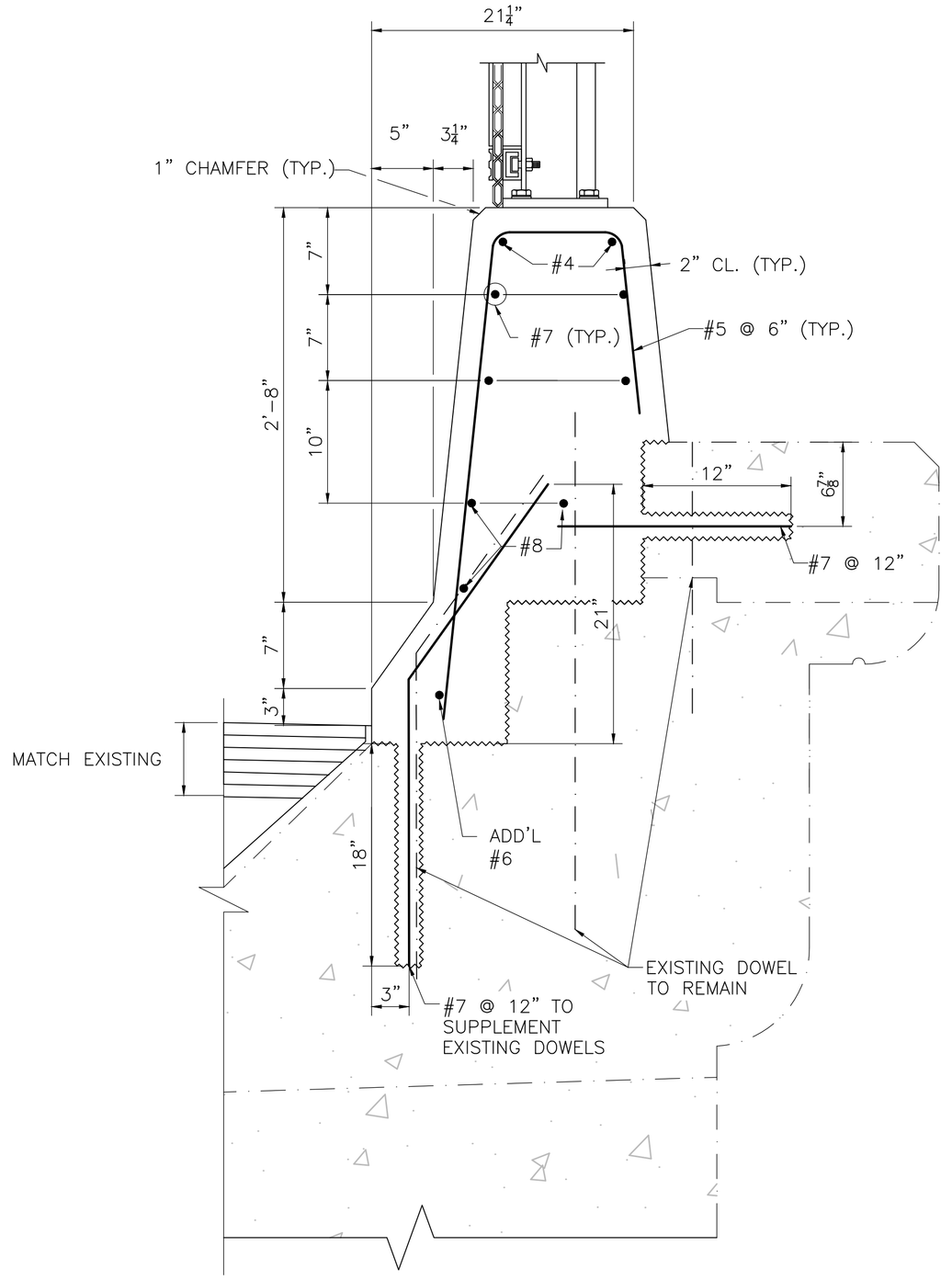
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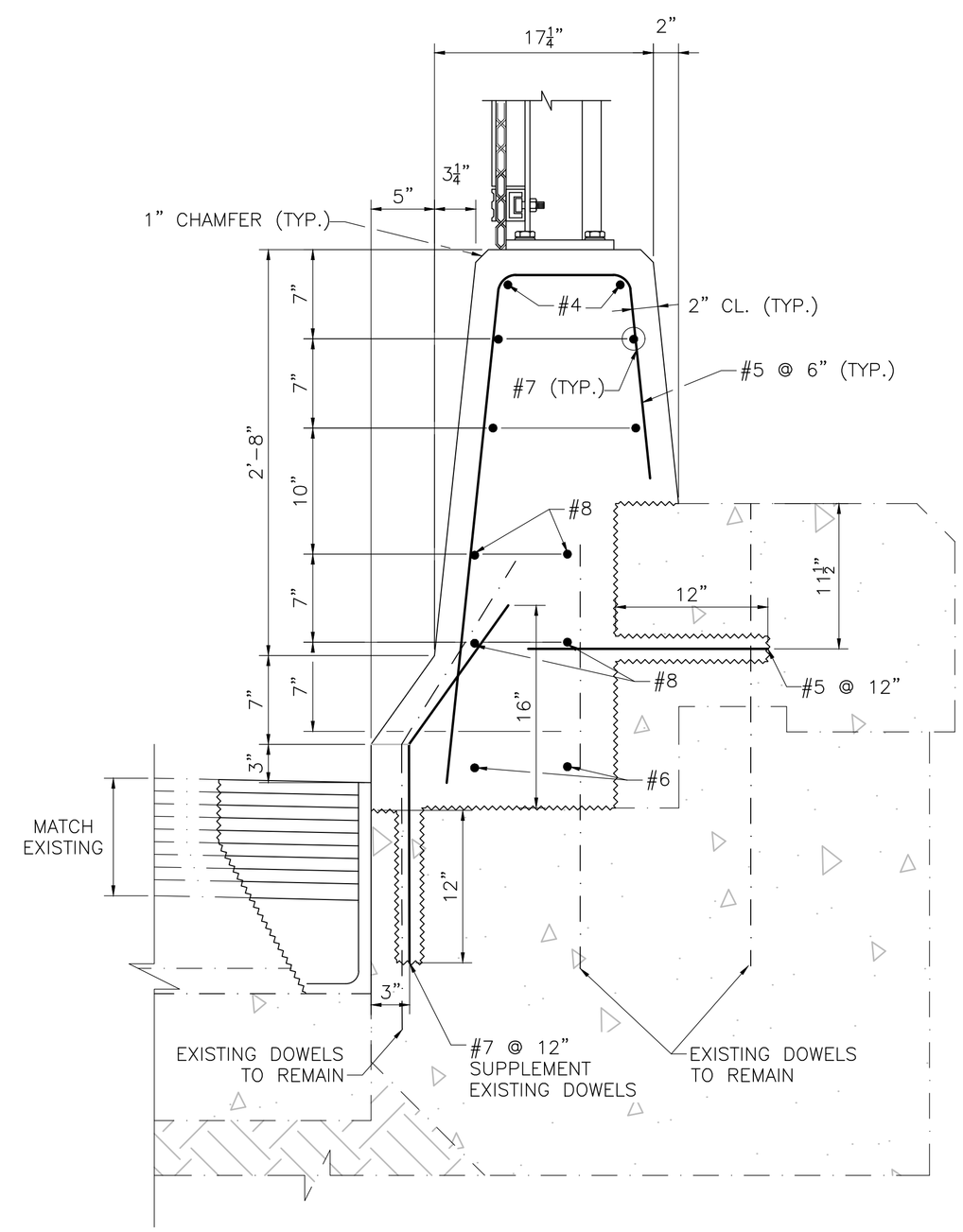
5(,1)25&,1* '(7$,/6 2) ˇ



PROPOSED CF–MTL5 BARRIER REINFORCING
DETAIL AT MIDSPAN (NORTHBOUND FASCIA)
SCALE: 1½" = 1'–0"



PROPOSED CF–MTL5 BARRIER REINFORCING
DETAIL AT ABUTMENT (NORTHBOUND FASCIA)
SCALE: 1½" = 1'–0"



PROPOSED CF–MTL5 BARRIER REINFORCING
DETAIL AT WINGWALLS (NORTHBOUND FASCIA)
SCALE: 1½" = 1'–0"

DRILL & GROUT NOTES:

1. SEE SHEET 10 FOR DRILL & GROUT NOTES.

BARRIER INSTALLATION NOTES:

1. SEE SHEET 10 FOR BARRIER INSTALLATION NOTES.

*
2W4
2W5

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

A00803 - 14
Proposal No. 613196-133292
5(.1)25&.1* '(7$,/6 '3ORWWHG FRQ 30
36 (5HVXEPLVVLRQ&RPSOHWH

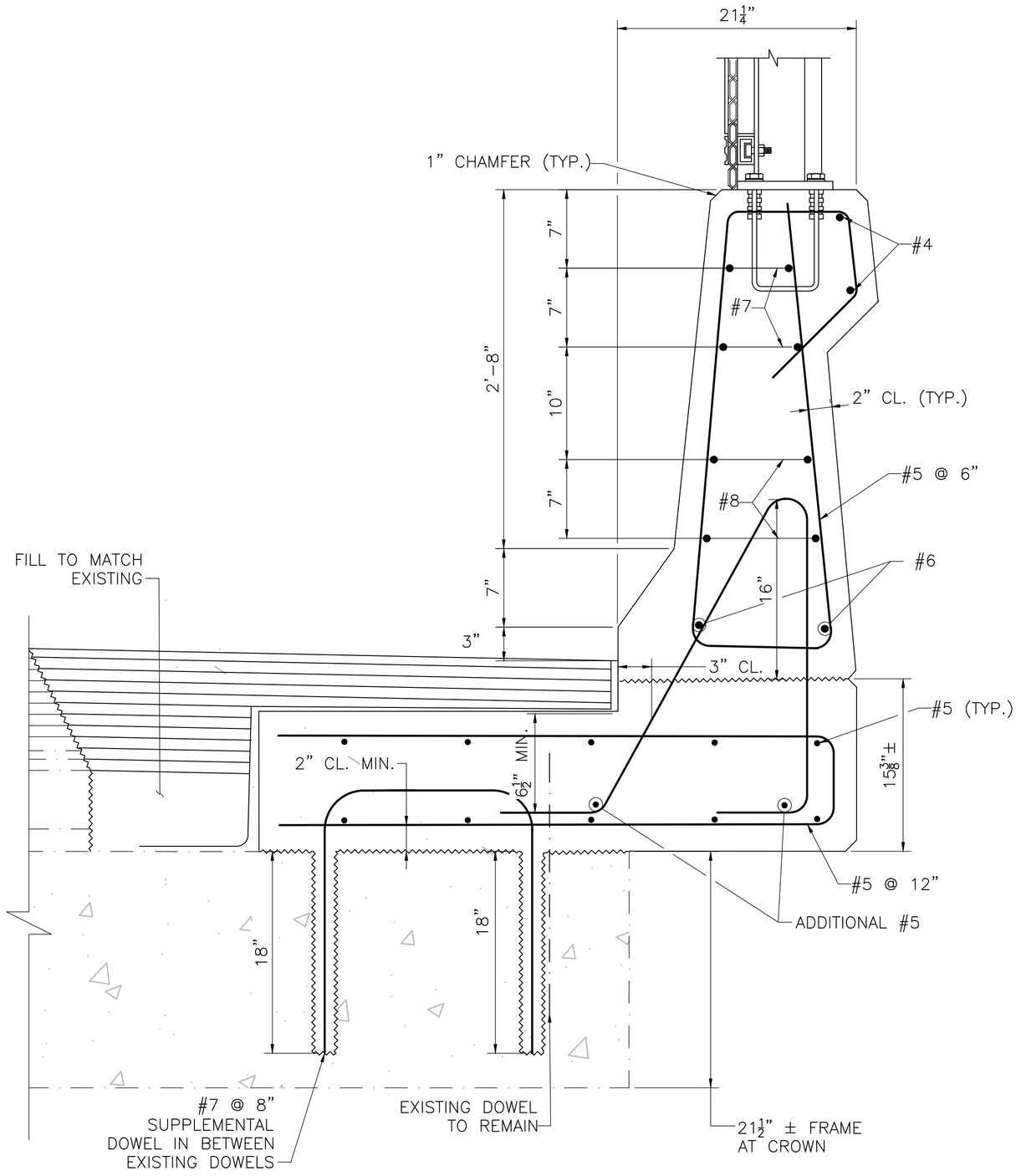
LYNNFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	13	29
	PROJECT FILE NO. 613196		

REINFORCING DETAILS 3 OF 5

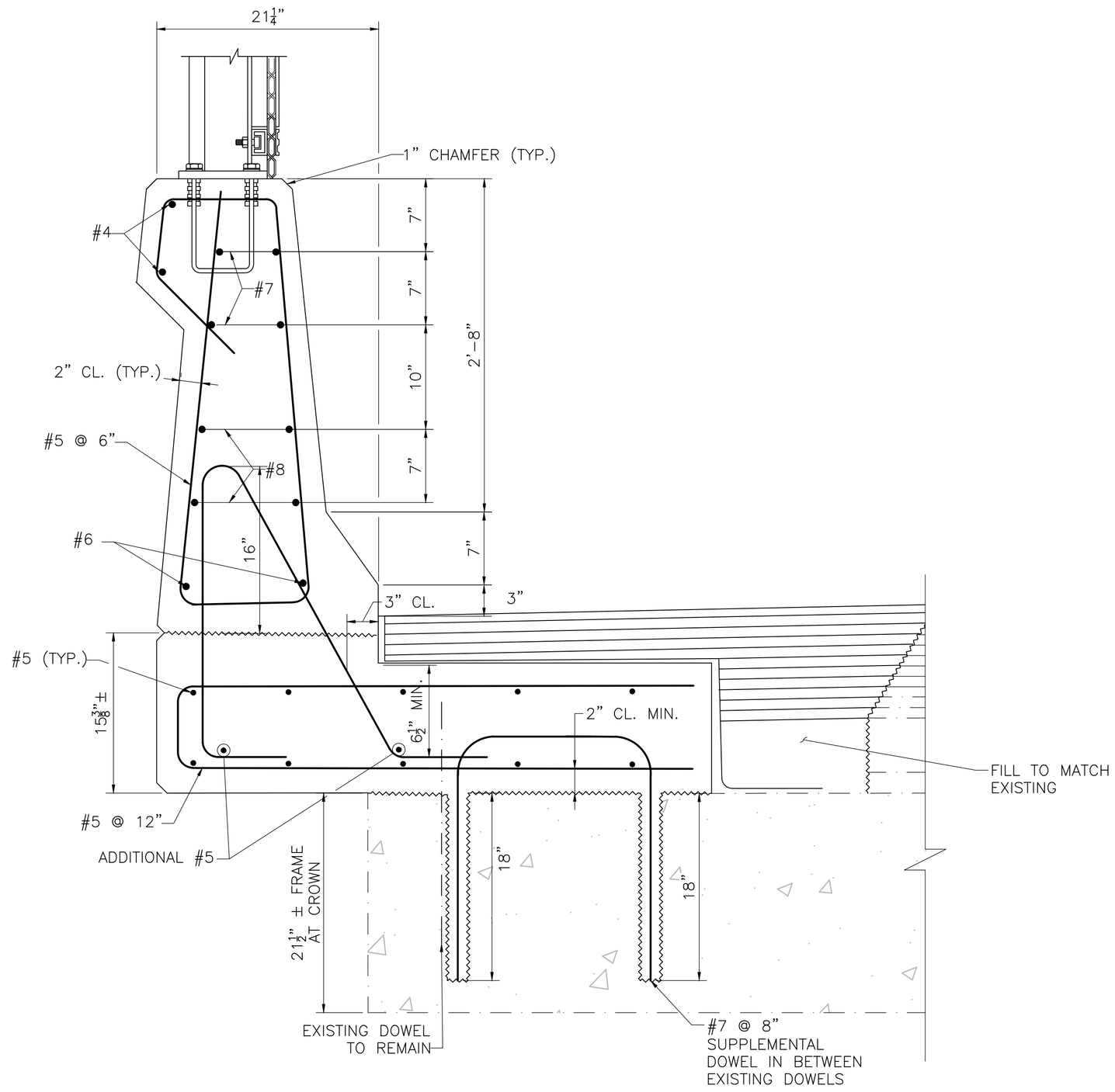
10-14 - REINFORCING DETAILS.DWG Plotted on 24-Oct-2025 2:23 PM

Proposal No. 613196-133292



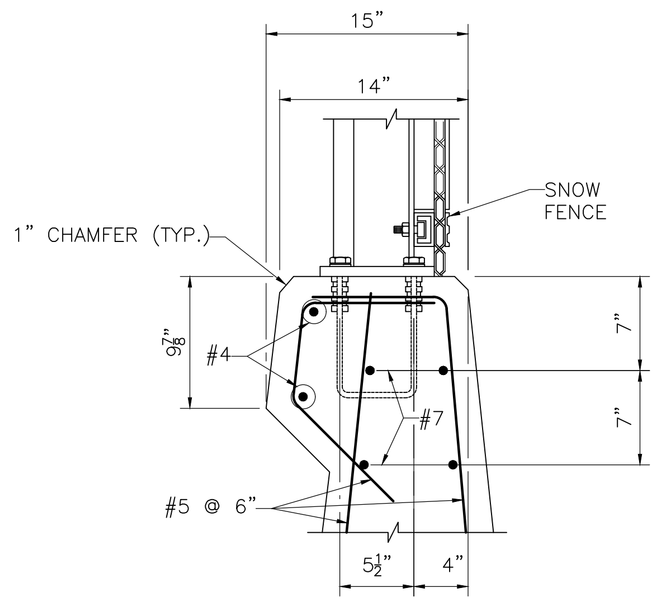
PROPOSED CF–MTL5 BARRIER REINFORCING DETAIL AT MIDSPAN (SOUTHBOUND MEDIAN)

SCALE: 1½" = 1'–0"



PROPOSED CF–MTL5 BARRIER REINFORCING DETAIL AT MIDSPAN (NORTHBOUND MEDIAN)

SCALE: 1½" = 1'–0"



SECTION THRU MODIFIED BARRIER

SCALE: 1½" = 1'–0"

DRILL & GROUT NOTES:

1. SEE SHEET 10 FOR DRILL & GROUT NOTES.

BARRIER INSTALLATION NOTES:

1. SEE SHEET 10 FOR BARRIER INSTALLATION NOTES.

*
2W4
2W5

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

PS&E Resubmission 24-October-2025

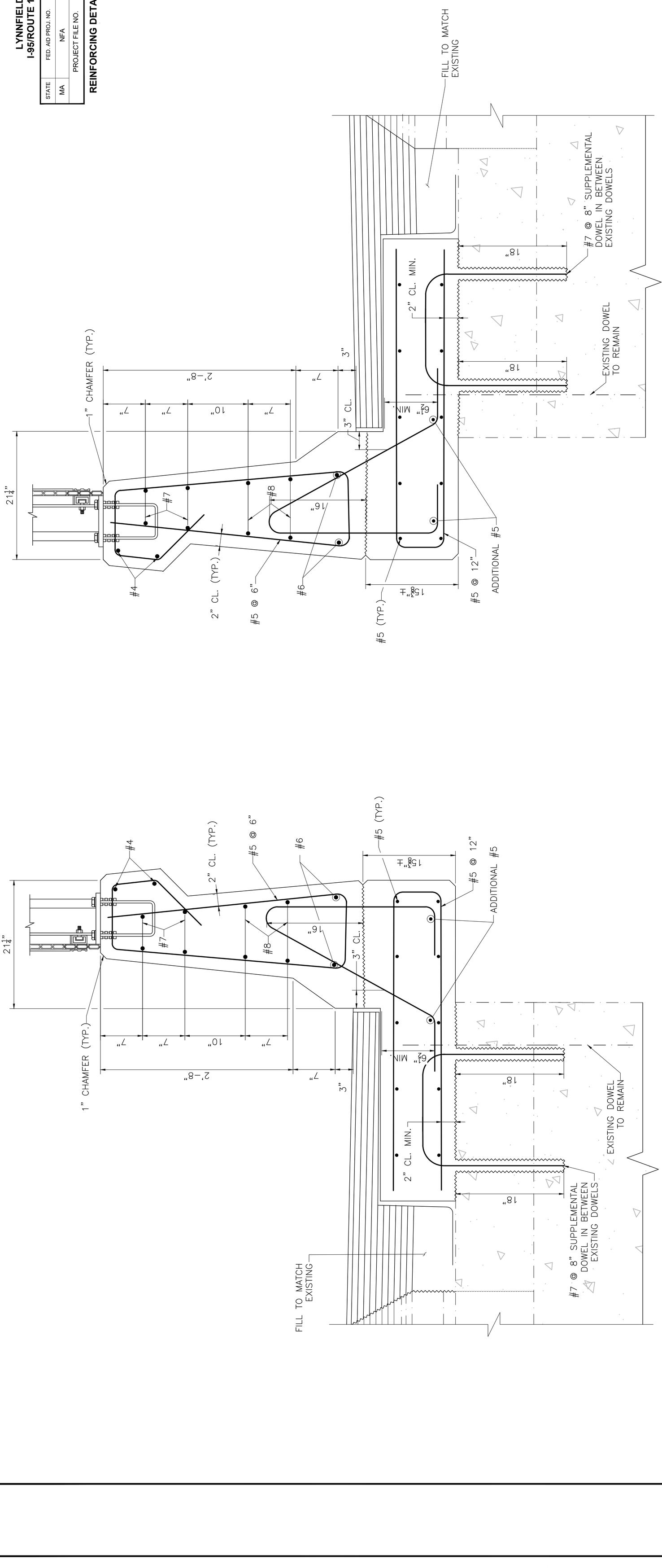
10-14 - REINFORCING DETAILS.DWG Plotted on 24-Oct-2025 2:27 PM

PS&E Resubmission 24-October-2025

LYNNFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	14	29
	PROJECT FILE NO. 613196		

REINFORCING DETAILS 4 OF 5



PROPOSED CF-MTL5 BARRIER REINFORCING DETAIL AT ABUTMENT (NORTHBOUND MEDIAN)

SCALE: 1½" = 1'-0"

PROPOSED CF-MTL5 BARRIER REINFORCING DETAIL AT ABUTMENT (SOUTHBOUND MEDIAN)

SCALE: 1½" = 1'-0"

DRILL & GROUT NOTES:

1. SEE SHEET 10 FOR DRILL & GROUT NOTES.

BARRIER INSTALLATION NOTES:

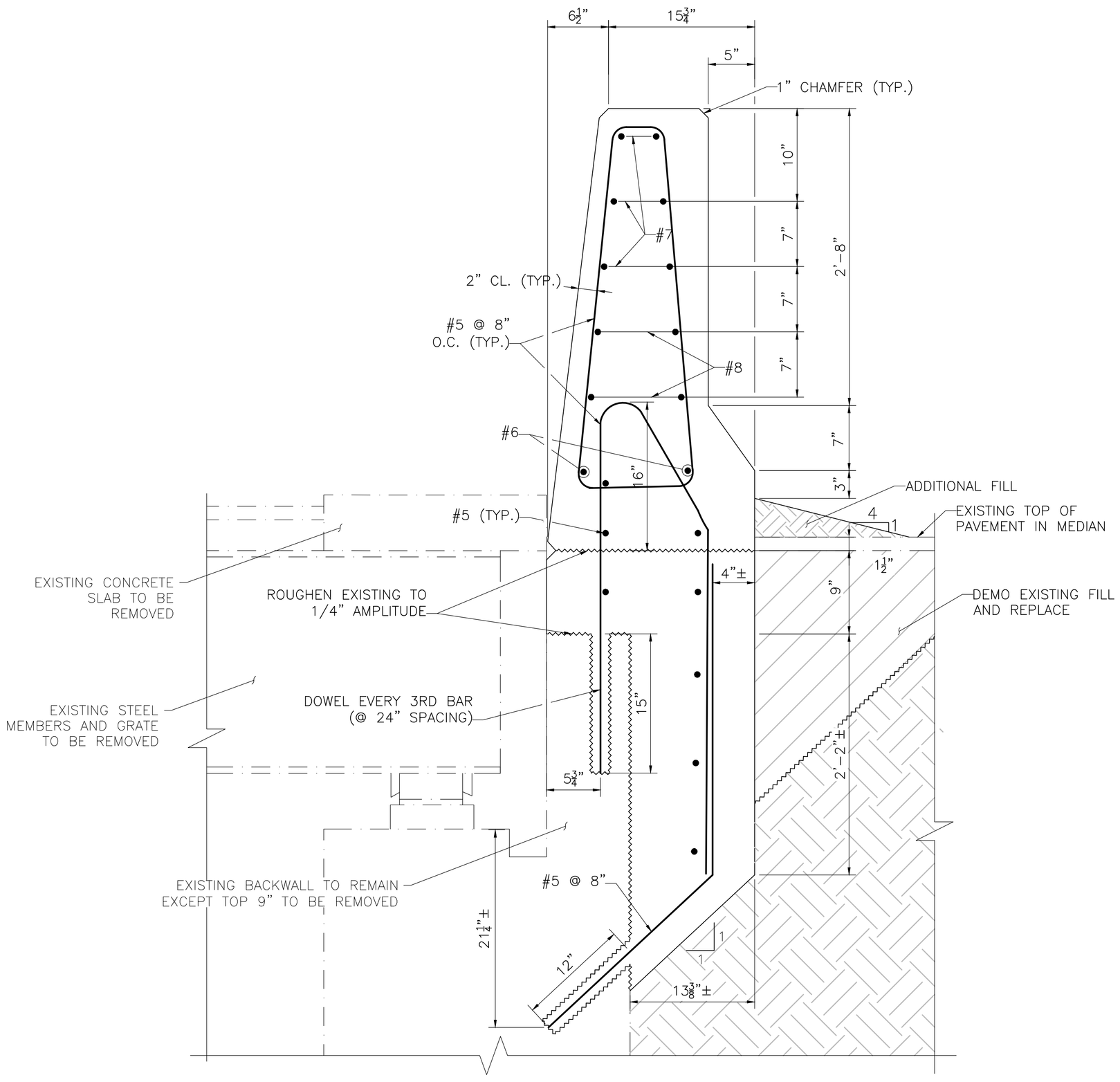
1. SEE SHEET 10 FOR BARRIER INSTALLATION NOTES.

*
2W4
2W5

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION

USE ONLY PRINTS OF LATEST DATE

SHEET 13 OF 21 SHEETS BRIDGE NO. L-19-004 (*)

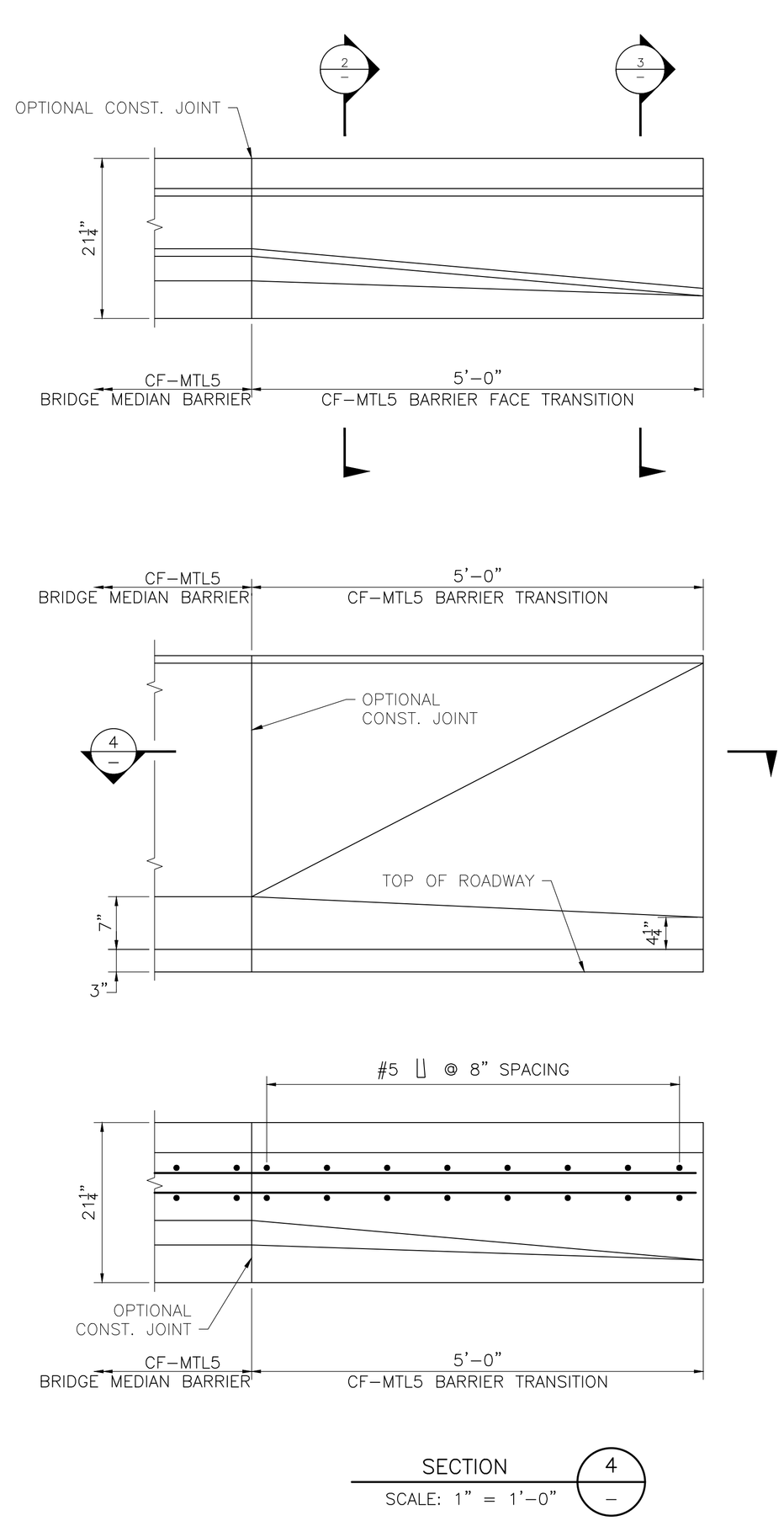


PROPOSED CF-MTL5 BARRIER AT ABUTMENT BACKWALL

SCALE: 1½" = 1'-0"

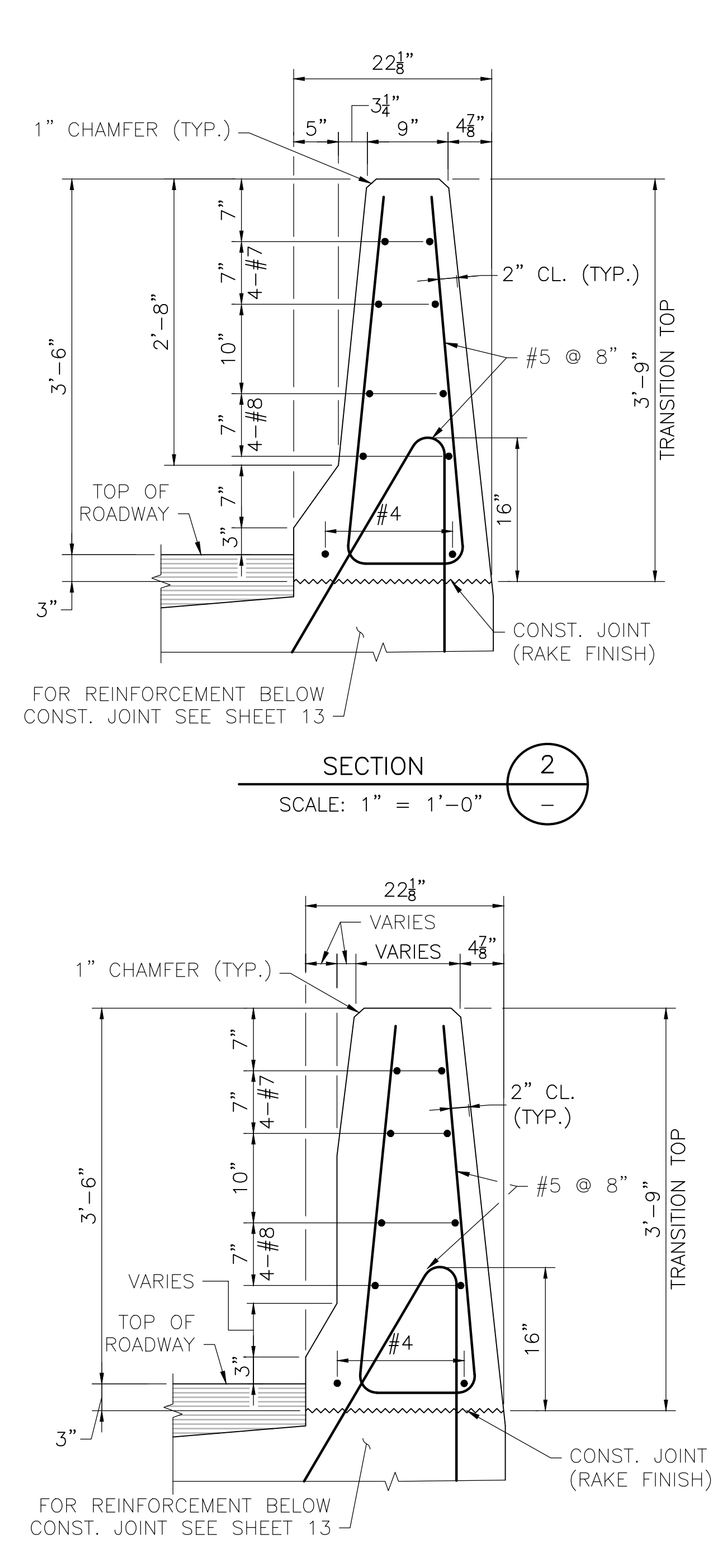
NOTE:

CONTRACTOR TO DEMOLISH EXISTING FILL AND REPLACE TO MATCH EXISTING GRADE. SUBSURFACE CONDITIONS BASED ON EXISTING RECORD DRAWINGS AND SHOULD BE CONFIRMED BEFORE EXCAVATION.



SECTION 4 / – SCALE: 1" = 1'-0"

PROPOSED MEDIAN BARRIER TRANSITION TO VERTICAL FACE



SECTION 2 / – SCALE: 1" = 1'-0"

SECTION 3 / – SCALE: 1" = 1'-0"

DRILL & GROUT NOTES:

1. SEE SHEET 10 FOR DRILL & GROUT NOTES.

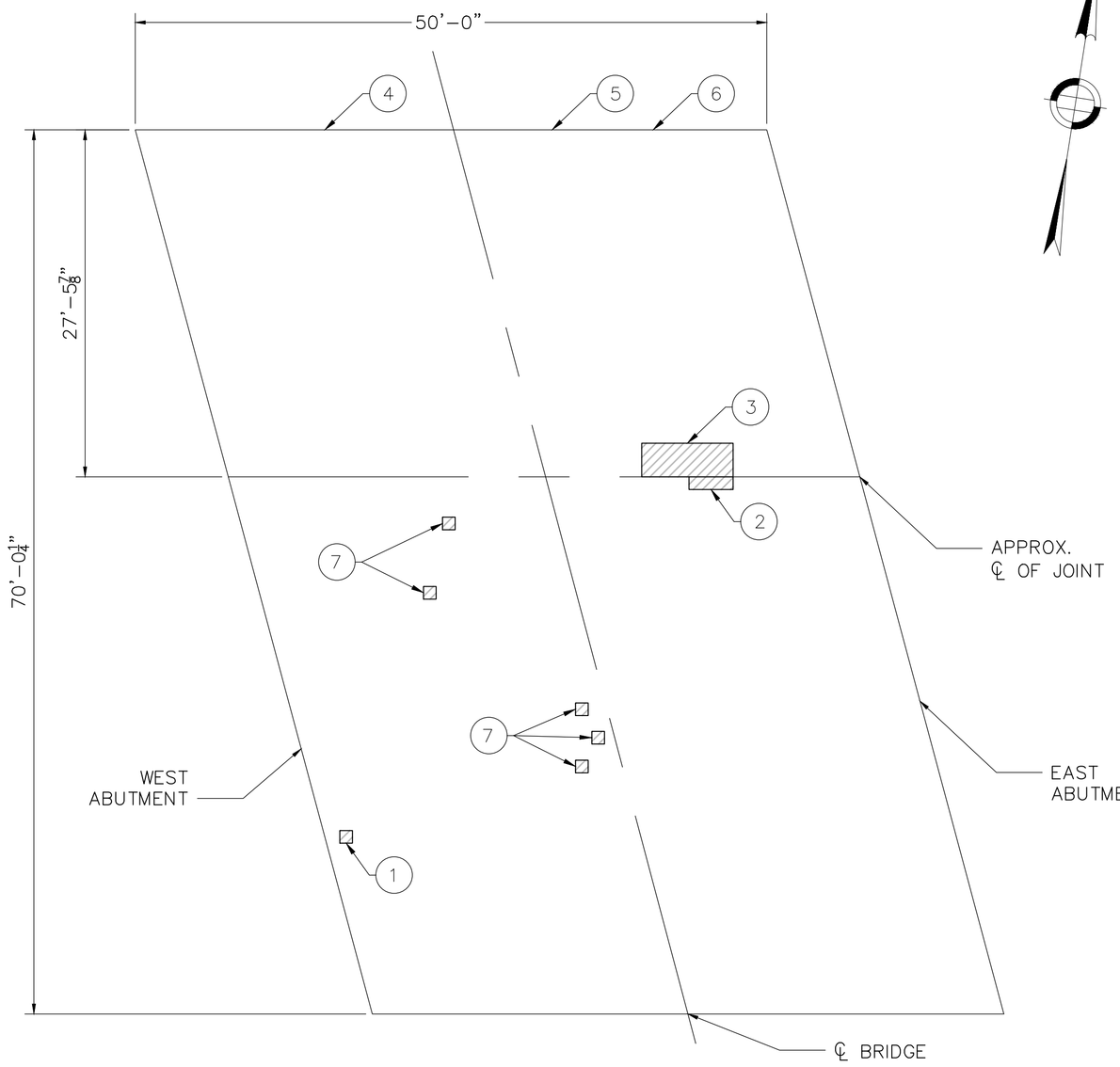
BARRIER INSTALLATION NOTES:

1. SEE SHEET 10 FOR BARRIER INSTALLATION NOTES.

*
2W4
2W5

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

10-14 - REINFORCING DETAILS.DWG Plotted on 24-Oct-2025 2:32 PM
Proposal No. 613196-133292
A00803 - 17
24-October-2025
PS&E Resubmission



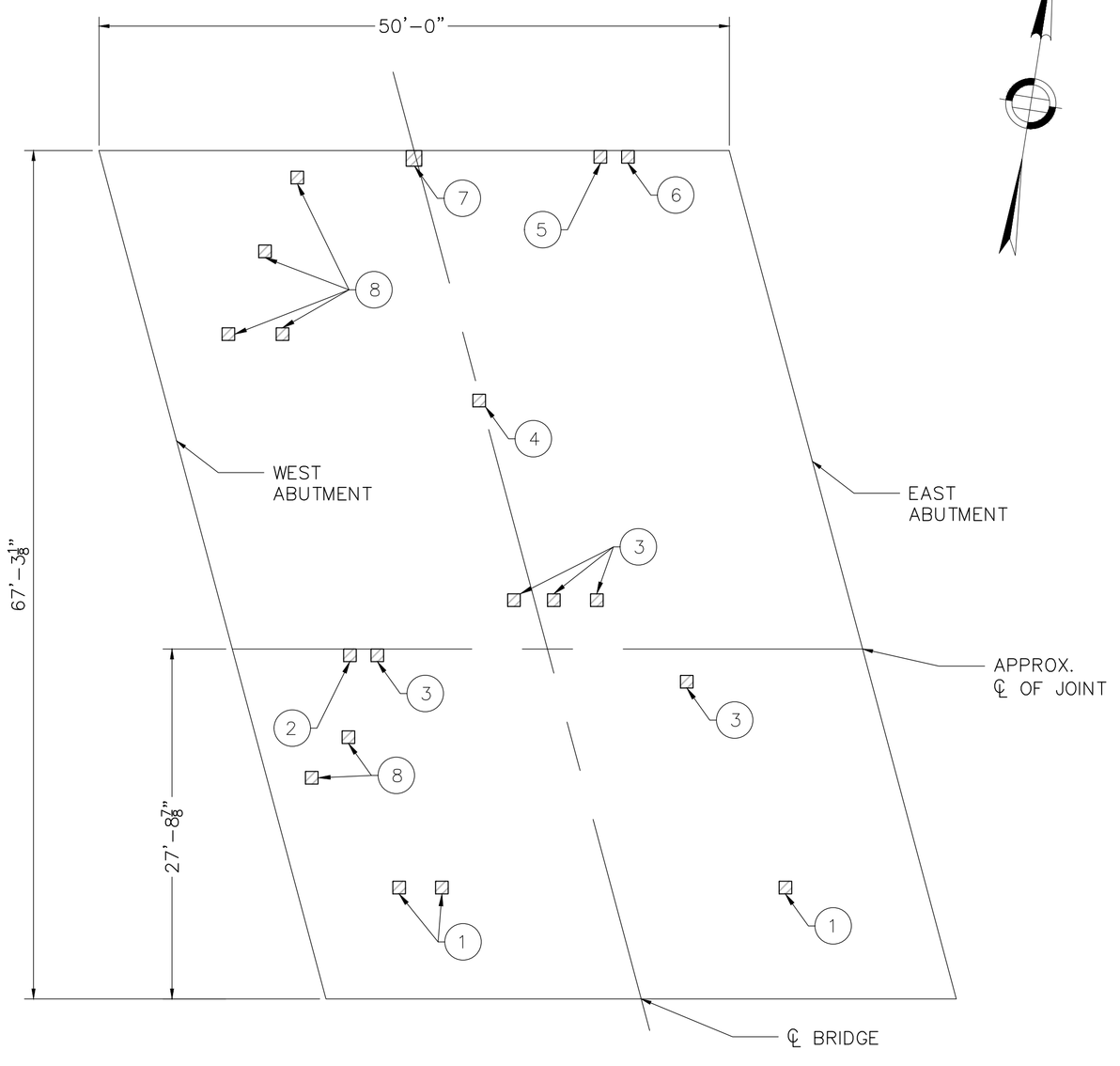
UNDERSIDE OF DECK PLAN (2W5/I-95 SB)

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

LEGEND:

SPALLED/DELAMINATED CONCRETE AREAS TO BE REPAIRED

REPAIR AREA #	LENGTH	WIDTH	DEPTH	DEFICIENCY
1	3" DIA.	N/A	1/4"	SPALL WITH EXPOSED REBAR
2	3'-6"	9"	1-1/2"	SPALL/DELAMINATION
3	7'-3"	2'-8"	3/4"	SPALL/DELAMINATION
4	UP TO 14" DIA.	N/A	UP TO 1-1/4"	FIVE (5) SPALLS (SPANDREL WALL)
5	6" DIA.	N/A	1-1/2"	SPALL (SPANDREL WALL)
6	UP TO 3" DIA.	N/A	UP TO 1/2"	TWO (2) SPALLS (SPANDREL WALL)
7	UP TO 2" DIA.	N/A	1/4"	POPOUTS/SPALLS



UNDERSIDE OF DECK PLAN (2W4/I-95 NB)

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

LEGEND:

SPALLED/DELAMINATED CONCRETE AREAS TO BE REPAIRED

REPAIR AREA #	LENGTH	WIDTH	DEPTH	DEFICIENCY
1	1"	4"	1/4"	SPALLS WITH EXPOSED REBAR
2	3" DIA.	N/A	1/4"	SPALL WITH EXPOSED REBAR
3	3" DIA.	N/A	1/4"	SPALLS WITH EXPOSED REBAR
4	5"	10"	2"	SPALL WITH EXPOSED REBAR
5	4" DIA.	N/A	1/2"	SPALL WITH EXPOSED REBAR
6	4" DIA.	N/A	1/2"	SPALL
7	12" DIA.	N/A	3"	SPALL
8	UP TO 2" DIA.	N/A	1/4"	POPOUTS/SPALLS

CONCRETE REPAIR NOTES:

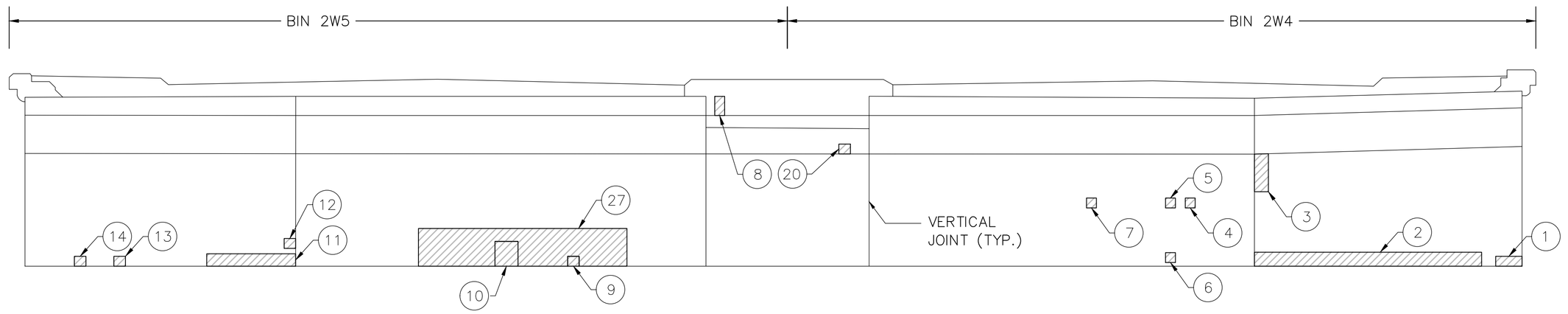
1. SEE SHEET 17 FOR CONCRETE REPAIR NOTES.

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2W4
2W5

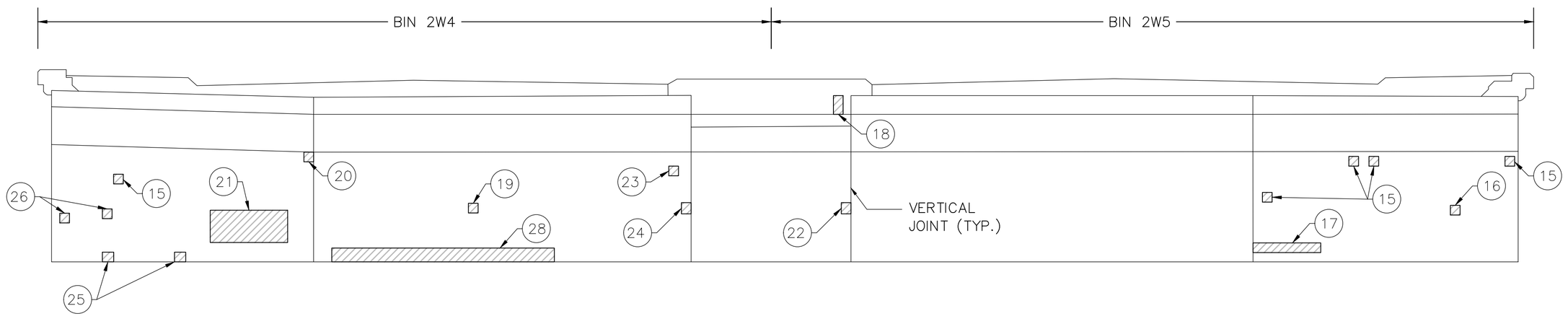
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

PS&E Resubmission 24-October-2025

15-17 - CONCRETE REPAIRS.DWG Plotted on 24-Oct-2025 2:37 PM
Proposal No. 613196-133292
A00803 - 18



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



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

LEGEND:

SPALLED/DELAMINATED CONCRETE AREAS TO BE REPAIRED

REPAIR AREA #	HEIGHT	WIDTH	DEPTH	DEFICIENCY
1	10"	2'-10"	1"	DELAMINATION/SPALL WITH EXPOSED REBAR
2	15"	23'-0"	1"	SPALL/DELAMINATION
3	3'-10"	17"	N/A	DELAMINATION
4	3" DIA.	N/A	1-1/2"	CORE HOLE WITH EXPOSED REBAR
5	3" DIA.	N/A	1-1/2"	CORE HOLE WITH EXPOSED REBAR
6	3" DIA.	N/A	1"	CORE HOLE WITH EXPOSED REBAR
7	3" DIA.	N/A	1-1/2"	CORE HOLE WITH EXPOSED REBAR
8	FULL HEIGHT	6"	1"	SPALL
9	12"	14"	N/A	DELAMINATION
10	2'-6"	2'-4"	N/A	DELAMINATION
11	15"	9'-0"	1/4"	SPALL/DELAMINATION
12	8" DIA.	N/A	1/2"	SPALL WITH EXPOSED REBAR
13	6" DIA.	N/A	1-1/2"	SPALL/DELAMINATION
14	4"	8"	3/4"	SPALL/DELAMINATION
15	3"	2"	1/2"	SPALL WITH EXPOSED REBAR
16	9"	2"	1-1/2"	SPALL WITH EXPOSED REBAR
17	10"	7'-0"	1"	DELAMINATION/SPALL WITH EXPOSED REBAR
18	FULL HEIGHT	6"	N/A	DELAMINATION
19	4" DIA.	N/A	1-1/2"	CORE HOLE WITH EXPOSED REBAR
20	4" DIA.	N/A	1/2"	SPALL
21	3'-0"	8'-0"	3/4"	SPALL/DELAMINATION
22	5"	3"	2"	SPALL
23	3" DIA.	N/A	3"	CORE HOLE
24	12"	4"	1-1/2"	SPALL
25	4"	12"	1"	SPALL
26	8" DIA	N/A	1/2"	SPALL
27	12'-0"	N/A	N/A"	HONEYCOMBING
28	3" DIA	N/A	3"	(15) CORE HOLES

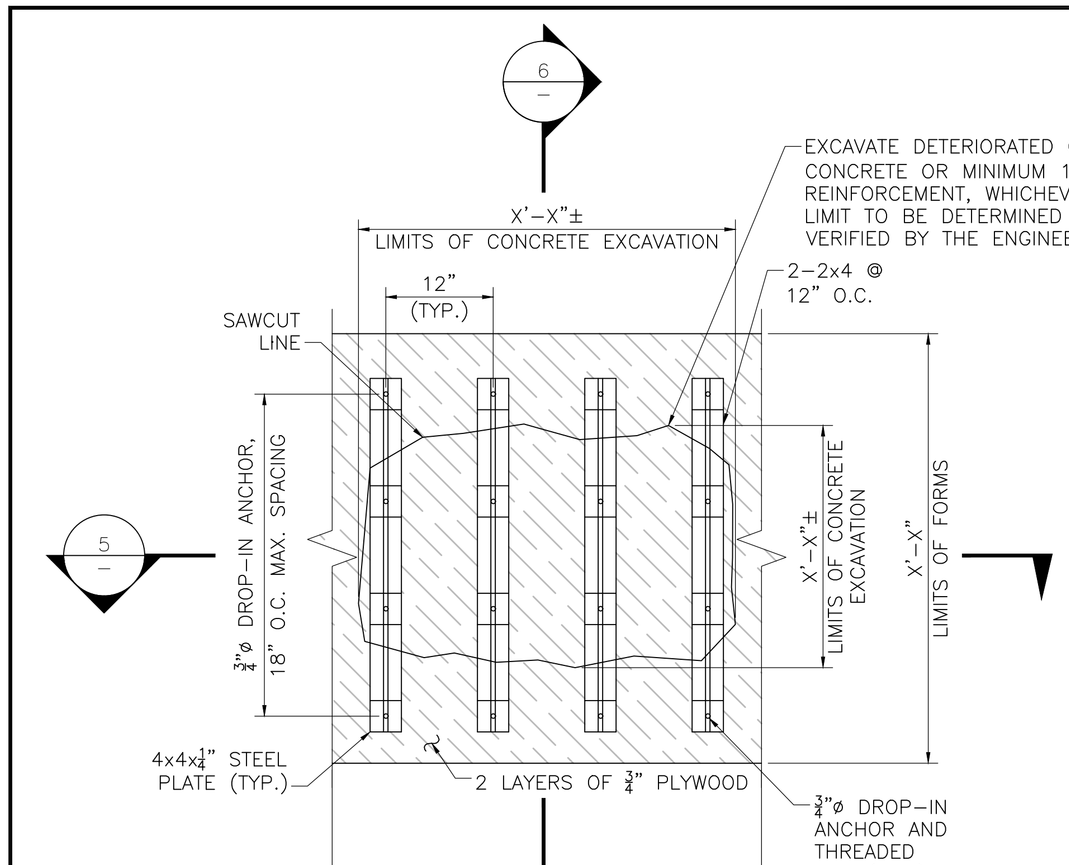
CONCRETE REPAIR NOTES:

1. SEE SHEET 17 FOR CONCRETE REPAIR NOTES.

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2W4
2W5

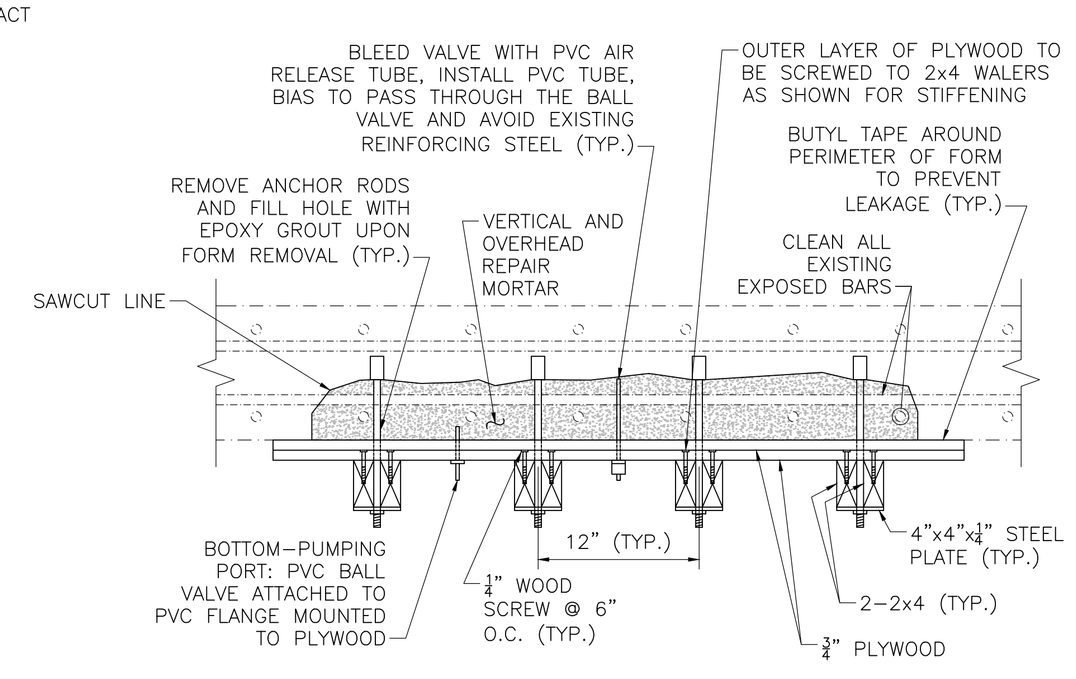
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

15-17 - CONCRETE REPAIRS.DWG Plotted on 24-Oct-2025 2:36 PM
Proposal No. 613196-133292
PS&E Resubmission 24-October-2025
A00803 - 19



DECK UNDERSIDE FORM PLAN

SCALE: 1" = 1'-0"

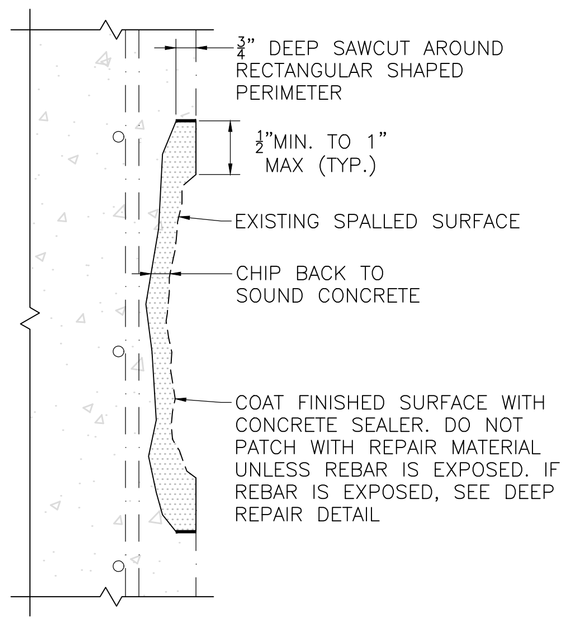


SECTION

SCALE: 1½" = 1'-0"

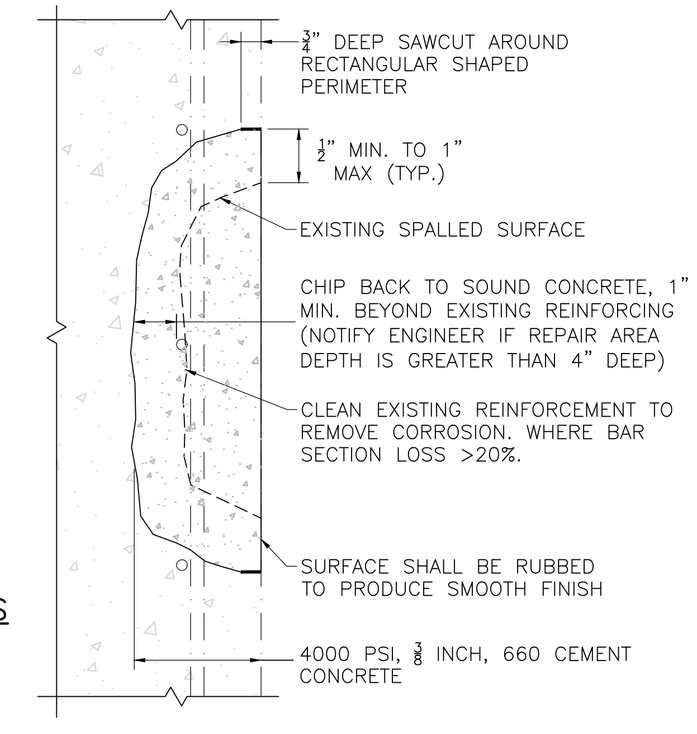
5

NOTE:
CONTRACTOR SHALL MAINTAIN EXISTING VERTICAL CLEARANCES AT BRIDGE WHILE FORMWORK IS IN PLACE. IF EXISTING VERTICAL CLEARANCES CANNOT BE MAINTAINED, CONTRACTOR SHALL PLACE TEMPORARY SIGNAGE AT BRIDGE AND IN ADVANCE OF BRIDGE TO ALERT VEHICLES AND TRUCKS OF THE REDUCED CLEARANCE. FORMWORK MAY NOT BE PLACED SUCH THAT THE TEMPORARY VERTICAL CLEARANCE IS REDUCED TO LESS THAN 13'-9". ENGINEER SHALL APPROVE AFTER FORM IS SET.



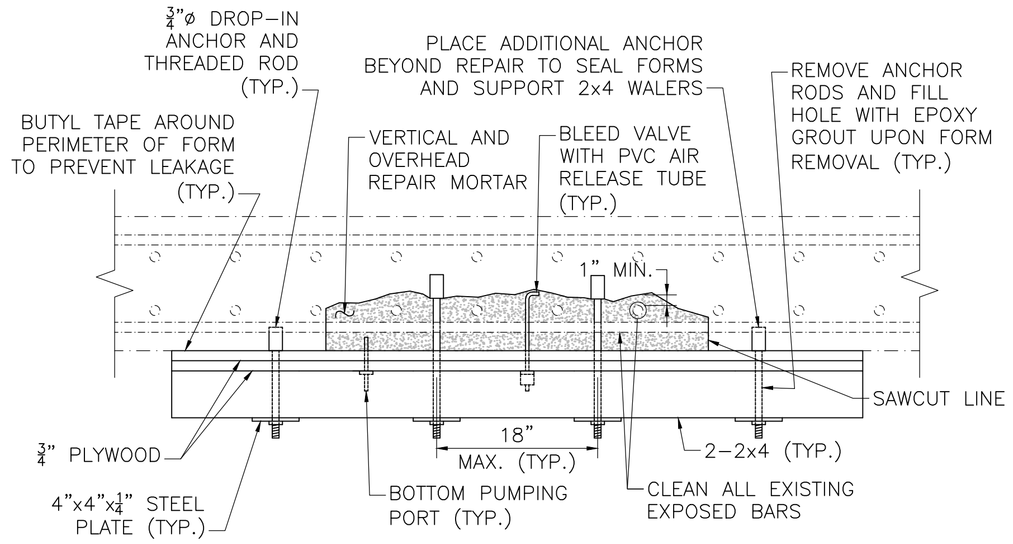
CONCRETE REMOVAL OF SHALLOW SPALLS

(AVERAGE DEPTH OF SPALL IS LESS THAN 2" AND NO EXPOSED REBAR.)



DEEP REPAIR WITH EXPOSED REBAR ALONG FRAME LEGS (N.T.S.)

(AVERAGE DEPTH OF SPALL IS GREATER THAN 2" OR SPALL WITH EXPOSED REBAR.)



SECTION

SCALE: 1½" = 1'-0"

6

NOTE:
CONTRACTOR SHALL MAINTAIN EXISTING VERTICAL CLEARANCES AT BRIDGE WHILE FORMWORK IS IN PLACE. IF EXISTING VERTICAL CLEARANCES CANNOT BE MAINTAINED, CONTRACTOR SHALL PLACE TEMPORARY SIGNAGE AT BRIDGE AND IN ADVANCE OF BRIDGE TO ALERT VEHICLES AND TRUCKS OF THE REDUCED CLEARANCE. FORMWORK MAY NOT BE PLACED SUCH THAT THE TEMPORARY VERTICAL CLEARANCE IS REDUCED TO LESS THAN 13'-9". ENGINEER SHALL APPROVE AFTER FORM IS SET.

CONCRETE REPAIR NOTES:

1. THE CONTRACTOR SHALL EXERCISE CARE WHEN REMOVING CONCRETE AROUND REINFORCEMENT TO ONLY REMOVE DETERIORATED CONCRETE AND TO LIMIT THE SOUND CONCRETE REMOVED TO THE MINIMUM NECESSARY TO PRODUCE A GOOD REPAIR.
2. THE CONTRACTOR SHALL ESTABLISH LIMITS OF VARIOUS REPAIRS AS SHOWN ON THE PLANS AND AT THE DIRECTION OF THE ENGINEER. THE LOCATIONS SHOWN ON THE PLANS ARE BASED UPON RECORDS OF BRIDGE INSPECTIONS AND OBSERVATIONS FROM THE GROUND ARE ARE NOT GUARANTEED. THE LOCATION AND EXTENT OF ALL CONCRETE REPAIRS ARE TO BE FIELD VERIFIED AND APPROVED BE THE ENGINEER AFTER THE CONTRACTOR HAS SOUNDED AND MARKED OUT THE REPAIR AREAS. REASONABLY FOLLOW OUTLINES OF DETERIORATION PREFERABLY WITH SQUARE CORNERS.
3. THE LIMITS OF THE REPAIRS SHALL BE SAWCUT ALONG NEAT LINES TO A DEPTH OF ¾" TO PRODUCE A CLEAN EDGE.
4. REMOVE DETERIORATED AND UNSOUND CONCRETE AS WELL AS SOUND CONCRETE WHERE NECESSARY TO A MINIMUM OF 1" BEYOND SURFACE REINFORCEMENT.
5. EXPOSED REINFORCEMENT TO BE CLEANED BY MECHANICAL CLEANING AND HIGH PRESSURE WASHING WITH WATER THAT CONTAINS NO DETERGENTS OF BOND INHIBITING CHEMICALS. WHERE ACTIVE CORROSION HAS OCCURRED (THAT WHICH WOULD INHIBIT BONDING) SANDBLAST STEEL TO WHITE METAL FINISH.
6. A NEW REINFORCEMENT BAR SHALL BE PLACED TO SUPPLEMENT AN EXISTING REINFORCEMENT BAR WHEN AN EXISTING BAR HAS A SECTION LOSS OF 20% OF MORE OF THE ORIGINAL CROSS SECTION, AS DETERMINED BY THE ENGINEER, OR THE EXISTING REINFORCEMENT IS BROKEN. IN LIEU OF SUPPLEMENTING A BAR ADJACENT TO A DETERIORATED BAR, THE CONTRACTOR MAY CUT OUT THE DETERIORATED BAR AND MECHANICALLY SPLICE THE NEW BAR TO EXISTING REINFORCEMENT.
7. AFTER REMOVAL AND EDGE PREPARATION ARE COMPLETE, REMOVE BOND INHIBITING MATERIALS (DIRT, GREASE, LOOSELY BONDED AGGREGATE) BY ABRASION BLASTING OR HIGH PRESSURE WATER BLASTING WITH WATER THAT CONTAINS NO DETERGENTS OR BOND INHIBITING CHEMICALS. CHECK THE CONCRETE SURFACES AFTER CLEANING TO INSURE THAT THE SURFACE IS FREE FROM ADDITIONAL LOOSE AGGREGATE OR THAT ADDITIONAL DELAMINATIONS ARE NOT PRESENT.
8. AT THE TIME THE REPAIR CONCRETE/MORTAR IS APPLIED, THE EXISTING CONCRETE SUBSTRATE SHOULD BE SATURATED SURFACE DRY.
9. WHERE CONCRETE REMOVAL AND REPLACEMENT NECESSITATES ADJACENT SEPARATE CONCRETE PLACEMENTS, CONCRETE REMOVAL SHALL NOT BE ALLOWED WITHIN 1 FOOT OF ADJACENT REPAIR AREAS. ADJACENT AREAS WHERE THIS 1 FOOT BUFFER IS NOT ATTAINABLE SHALL BE COMBINED INTO A SINGLE REPAIR AREA.
10. IN SEQUENCING WORK, THE CONTRACTOR SHALL NOT BEGIN CONCRETE REMOVAL AT A LOCATION ADJACENT TO A COMPLETED REPAIR UNTIL A MINIMUM OF 7 CURING DAYS HAVE PASSED.
11. ALL HORIZONTAL AND VERTICAL CONCRETE SURFACES IN CONTACT WITH REPAIR MATERIAL SHALL BE FREE OF OIL, GREASE, LAITANCE, AND OTHER CONTAMINANTS.
12. ALL HORIZONTAL AND VERTICAL CONCRETE SURFACES MUST BE CLEAN, SOUND AND ROUGH TO ENSURE A GOOD BOND.
13. THE CONTRACTOR SHALL MAINTAIN UNDERDECK LIGHTING AND COMMUNICATION CABLES. REMOVAL AND REATTACHMENT OF FIXTURES HOLDING COMMUNICATION LINES AND STREET LIGHTING SHALL BE INCIDENTAL TO CONCRETE REPAIRS.
14. REPAIR CONCRETE SHALL MEET THE REQUIREMENTS OF ITEM 905.001.

FORMWORK
1. FORMS DESIGNED FOR 12 PSI PRESSURE.
2. INSTALL FORMS ON THE FACE OF EACH REPAIR AREA. GROUT PORTS TO BE PLACED AT 4'-0" MAX. ON CENTER EACH WAY MAX. VENT TUBES TO BE PLACED AT 2'-0" MAX. ON CENTER EACH WAY.
3. FORMS ARE TO BE WATERTIGHT. PREFORMED FOAM GASKETS OR CAST IN PLACE FOAM SHALL BE USED TO MATCH SURFACES.
4. AT REPAIRS ADJACENT TO THE JOINTS IN THE RIGID FRAME, MAINTAIN THE EXISTING JOINT OPENING OF 1-1/2".

MIXING AND PUMPING
1. SATURATE HOST CONCRETE SUBSTRATE USING A WATER HOSE THROUGH FORM PORTS PRIOR TO PLACING GROUT. AT TIME OF GROUT PLACEMENT, SUBSTRATE SHALL BE SATURATED SURFACE DRY WITH NO STANDING WATER.
2. VERTICAL AND OVERHEAD REPAIR MORTAR SHALL BE USED TO MAKE THE REPAIRS AND SHALL BE MIXED ACCORDING TO THE MANUFACTURER SPECIFICATIONS IN ACCORDANCE WITH THE MASSDOT QCML.
3. THE PUMP MUST BE CAPABLE OF CONTINUOUS EVEN FLOW OF MATERIALS TO THE REPAIR AREA WITHOUT HAVING ANY LINE SURGE. LIVE SURGE WILL RESULT IN AIR VOIDS AND POSSIBLE AGGREGATE SEGREGATION.
4. PRIOR TO PUMPING MATERIALS, ALL HOSES MUST BE WET OUT WITH CLEAN WATER TO ENSURE INITIAL FLOW PROPERTIES ARE MAINTAINED.
5. THE PUMPING DISTANCE MUST BE KEPT TO A MINIMUM. THE PUMPING HOSE SHALL BE A MINIMUM 3 TIMES THE SIZE OF THE LARGEST AGGREGATE ON THE VERTICAL AND OVERHEAD REPAIR MORTAR (⅜"X3).
6. ADDITIONAL WATER BEYOND THE RECOMMENDED LEVEL WILL NOT INCREASE THE FLOW CHARACTERISTICS OF THE VERTICAL AND OVERHEAD REPAIR MORTAR. KEEP PUMPING PRESSURE TO A MINIMUM NECESSARY TO FILL CAVITY.

CURING
1. LEAVE THE FORM WORK IN PLACE UNTIL THE COMPRESSIVE STRENGTH OF THE VERTICAL AND OVERHEAD REPAIR MORTAR REACHES 2,500 PSI.
2. IF HAND PATCHING IS REQUIRED TO FILL THE PORT AREA, DRY-PACK WITH A NON-SAG MORTAR.
3. THE FORMS SHALL BE LEFT IN PLACE FOR A MINIMUM OF 5 DAYS. ONCE THE FORMS ARE STRIPPED CURING COMPOUND SHALL BE APPLIED TO THE REPAIR IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

CONCRETE SEALER
1. AT SHALLOW REPAIRS, NO REPAIR MORTAR OR REPAIR CONCRETE SHALL BE APPLIED. REMOVE LOOSE CONCRETE AND COAT WITH CONCRETE SEALER CHOSEN FROM MASSDOT QCML.

LYNNFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	18	29
PROJECT FILE NO.	613196		

CONCRETE REPAIRS 3 OF 3

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

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2W4
2W5

SHEET 17 OF 21 SHEETS BRIDGE NO. L-19-004 (*)

24-October-2025
PS&E Resubmission

15-17 - CONCRETE REPAIRS.DWG Plotted on 24-Oct-2025 2:34 PM

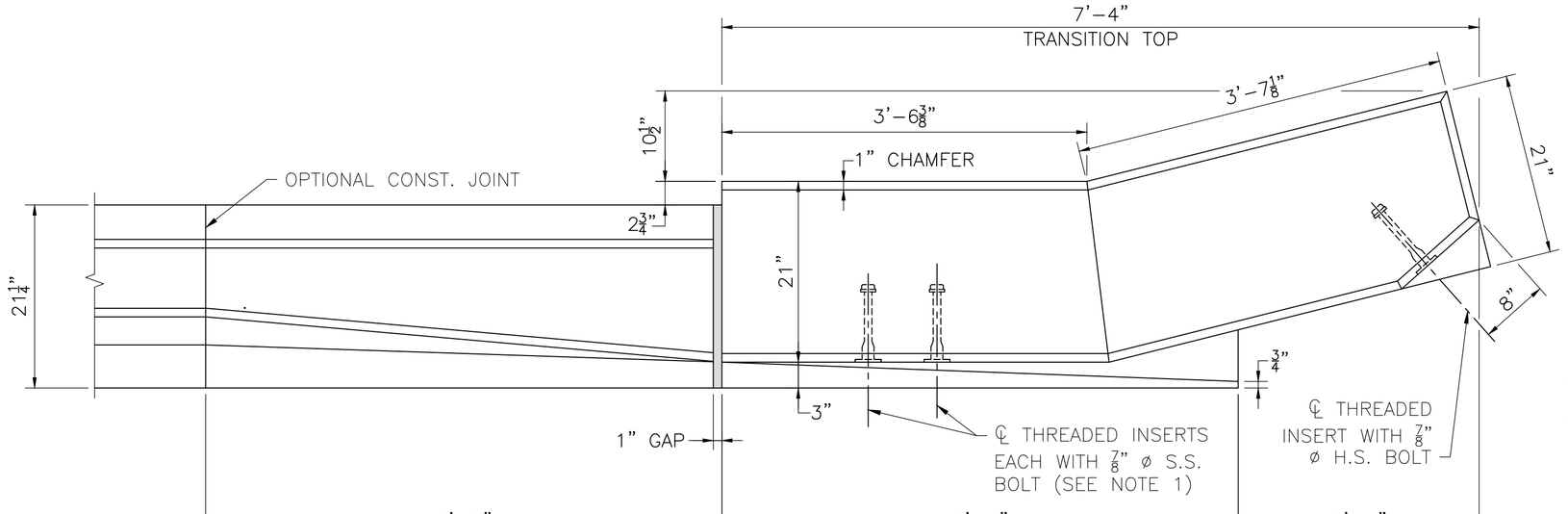
Proposal No. 613196-133292

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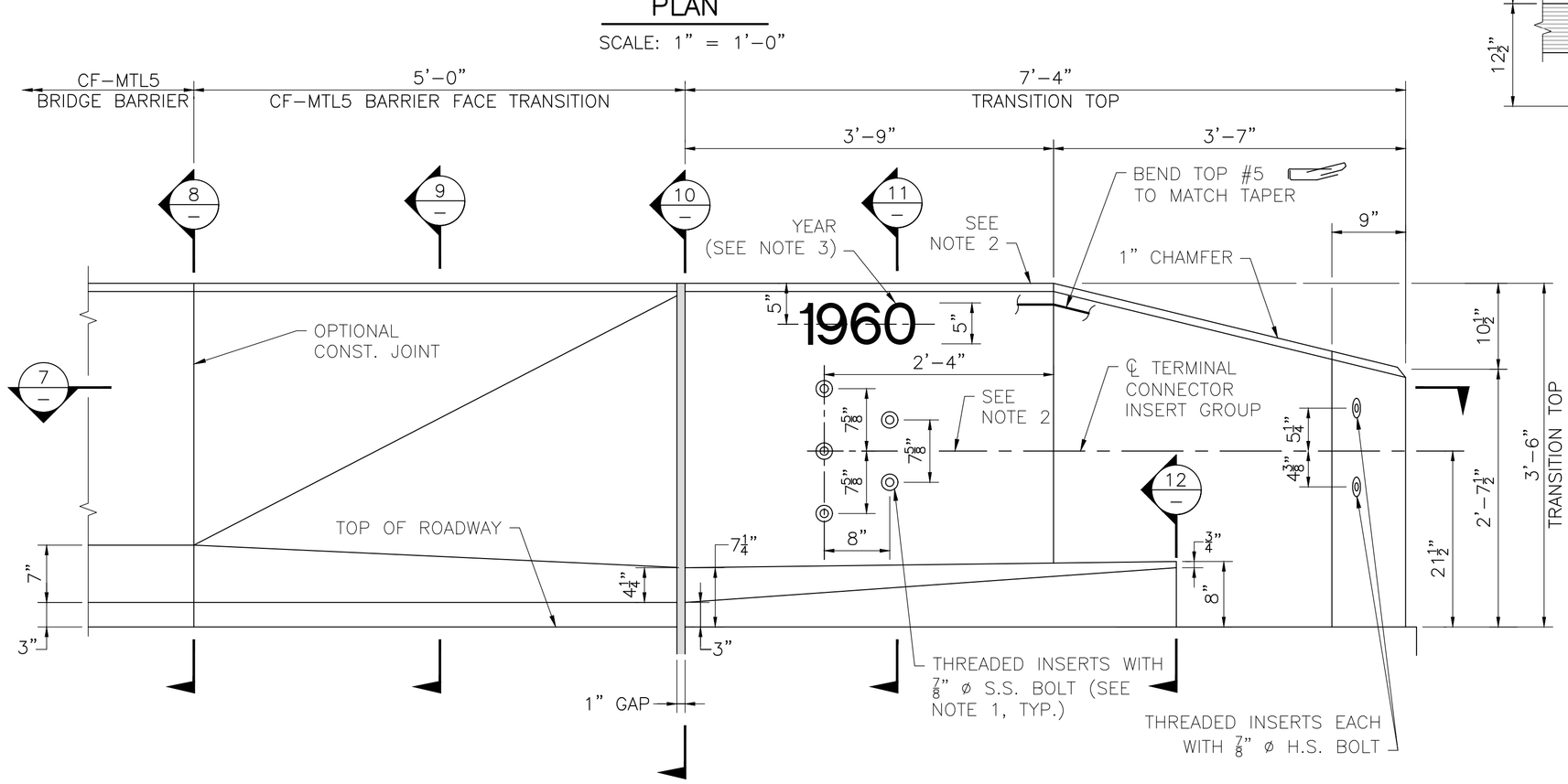
LYNNFIELD
I-95/ROUTE 128

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MA	NFA	19	29
	PROJECT FILE NO. 613196		

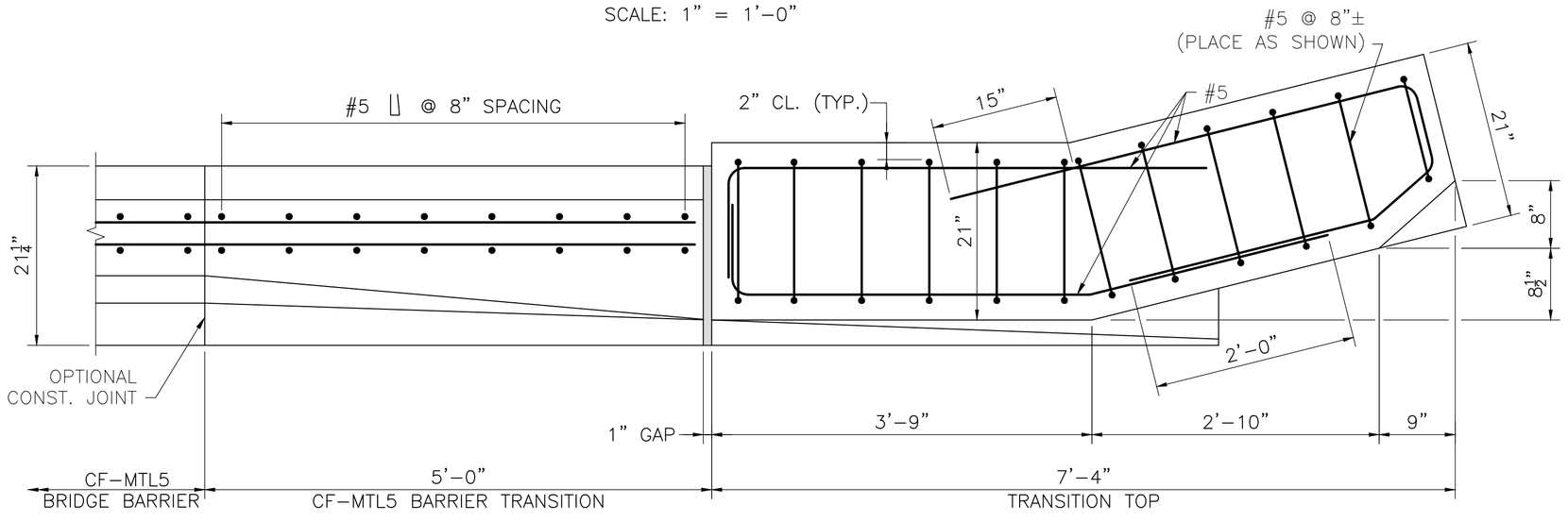
GUARDRAIL TRANSITION DETAILS



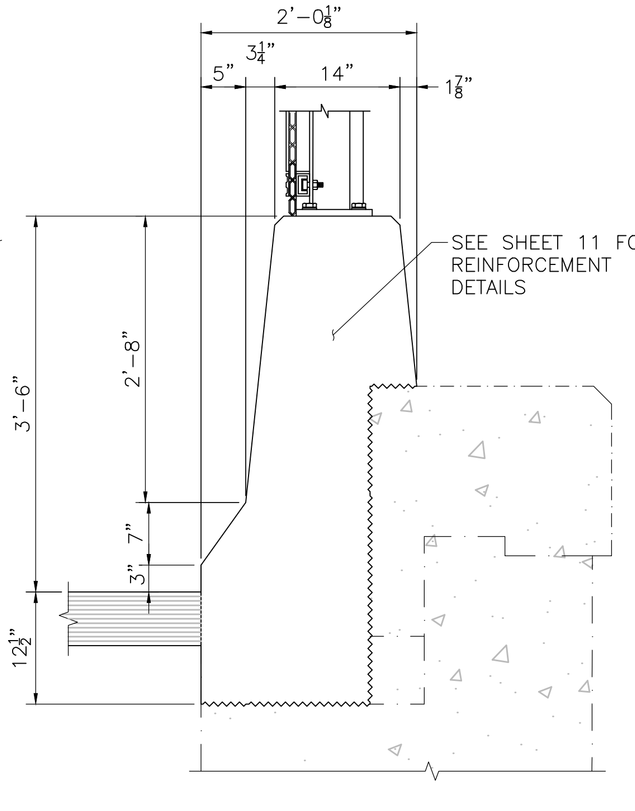
PLAN
SCALE: 1" = 1'-0"



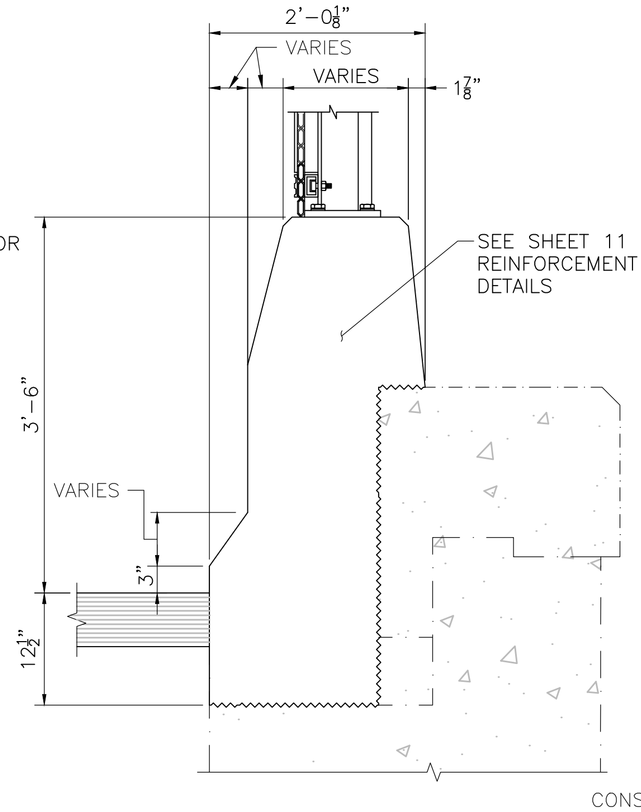
ELEVATION
SCALE: 1" = 1'-0"



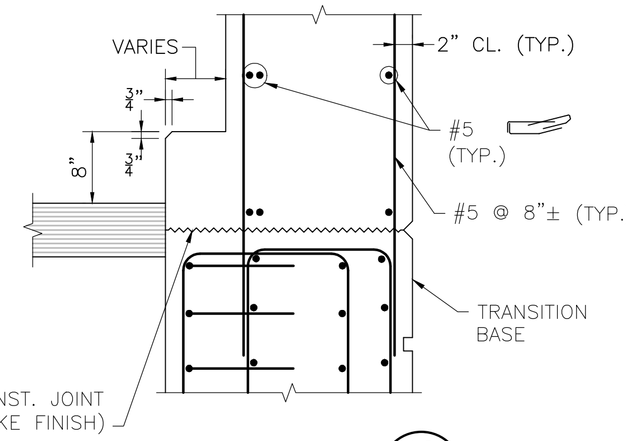
SECTION 7
SCALE: 1" = 1'-0"



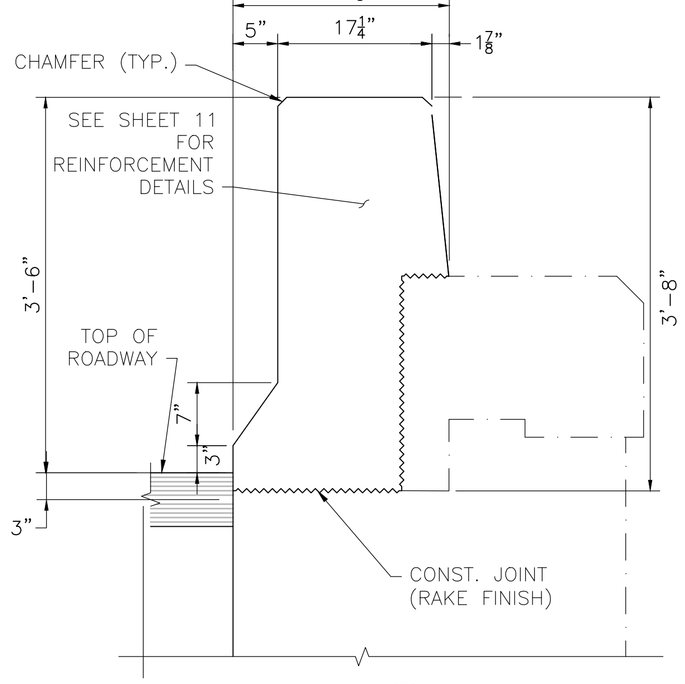
SECTION 8
SCALE: 1" = 1'-0"



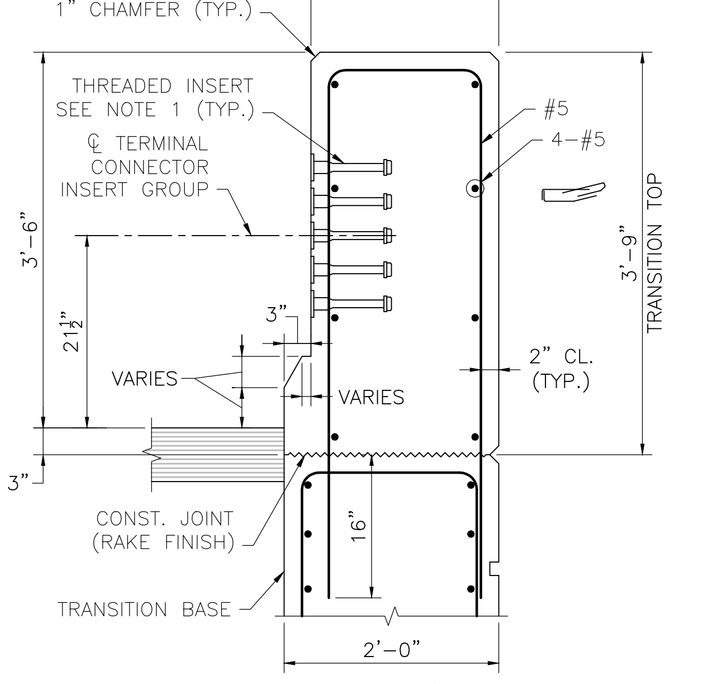
SECTION 9
SCALE: 1" = 1'-0"



SECTION 12
SCALE: 1" = 1'-0"



SECTION 10
SCALE: 1" = 1'-0"



SECTION 11
SCALE: 1" = 1'-0"

NOTES:

1. THREADED INSERTS SHALL BE PREQUALIFIED BY THE MANUFACTURER AS BEING CAPABLE OF DEVELOPING A NOMINAL SHEAR RESISTANCE OF 20 KIPS PER ⅞" ø S.S. BOLT. S.S. BOLTS SHALL BE ⅞" ø x 1¾" LONG FULLY THREADED AISI TYPE 304N STAINLESS STEEL. INSERTS FOR ⅞" S.S. BOLTS SHALL BE GALVANIZED AND CAST INTO THE TRANSITION.
2. FOR AN APPROACH GRADE UP TO 3%, THE TRANSITION MAY BE CAST SQUARE AND SET PLUMB WITH THE MINIMUM EMBEDMENT DEPTH SHOWN. THE TERMINAL CONNECTOR INSERT GROUP SHALL BE SQUARE TO THE POST.

   FOR AN APPROACH GRADE IN EXCESS OF 3%, THE TRANSITION TOP AND THE TOP OF THE BRIDGE BARRIERS SHALL FOLLOW THE APPROACH GRADE. THE HEIGHT OF THE TRANSITION TOP SHALL VARY PROVIDED THAT THE MINIMUM DIMENSIONS SHOWN ON THE CONSTRUCTION DRAWINGS ARE MET. THE BOTTOM OF THE TRANSITION BASE SHALL BE SET LEVEL WITH THE MINIMUM EMBEDMENT DEPTH SHOWN. THE TERMINAL CONNECTOR INSERT GROUP SHALL BE SLOPED TO FOLLOW THE APPROACH GRADE.
3. USE DATE 1960 (YEAR THE BRIDGE WAS REBUILT) WHEN THE FIRST GUARDRAIL TRANSITION IS CAST. USE THIS YEAR FOR THE SOUTHWEST AND NORTHEAST TRANSITIONS.
4. ALL CONCRETE FOR THE PRECAST HIGHWAY GUARDRAIL TRANSITION SHALL BE 5000 PSI, ¾", 685 HP CEMENT CONCRETE (ITEM 992.13 AND 992.14).
5. LIFTING DEVICES (NOT SHOWN), INCLUDING THEIR NUMBER AND LOCATION, SHALL BE DESIGNED AND DETAILED BY THE PRECASTER. THEY SHALL BE GALVANIZED AND SHALL BE PLACED AND RECESSED IN POCKETS TO PROVIDE 1½" CLEAR COVER TO THE FACE OF THE TRANSITION CONCRETE. THESE DEVICES SHALL BE CLEARLY SHOWN ON THE SHOP DRAWINGS ALONG WITH ALL SUPPORTING CALCULATIONS AND/OR CATALOG CUTS. ONCE THE PRECAST TRANSITION IS SET IN PLACE, THE LIFTING DEVICE POCKETS SHALL BE FILLED WITH A NON-SHRINK GROUT THAT MATCHES THE COLOR OF THE TRANSITION CONCRETE WHEN CURED AND THE FILLED POCKETS SHALL BE RUBBED WITH A CORUNDUM STONE TO BLEND OUT THE JOINTS.

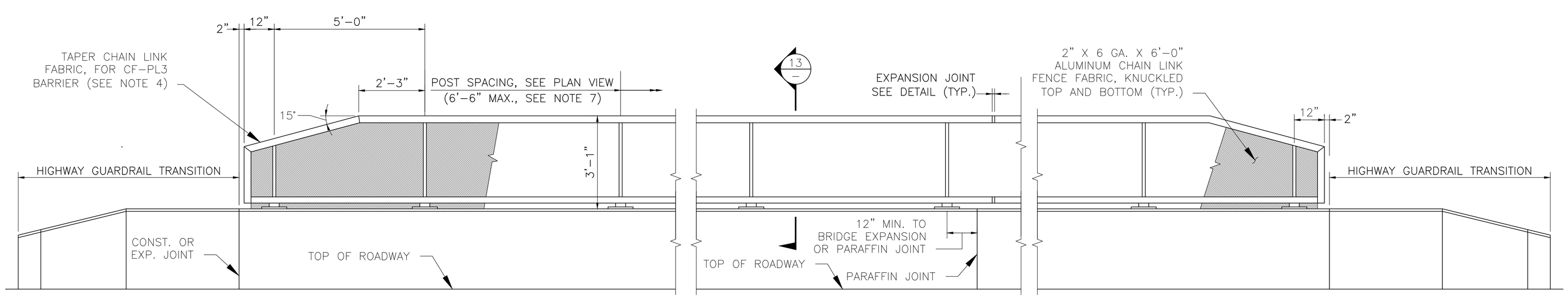
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MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
	USE ONLY PRINTS OF LATEST DATE

PS&E Resubmission 24-October-2025

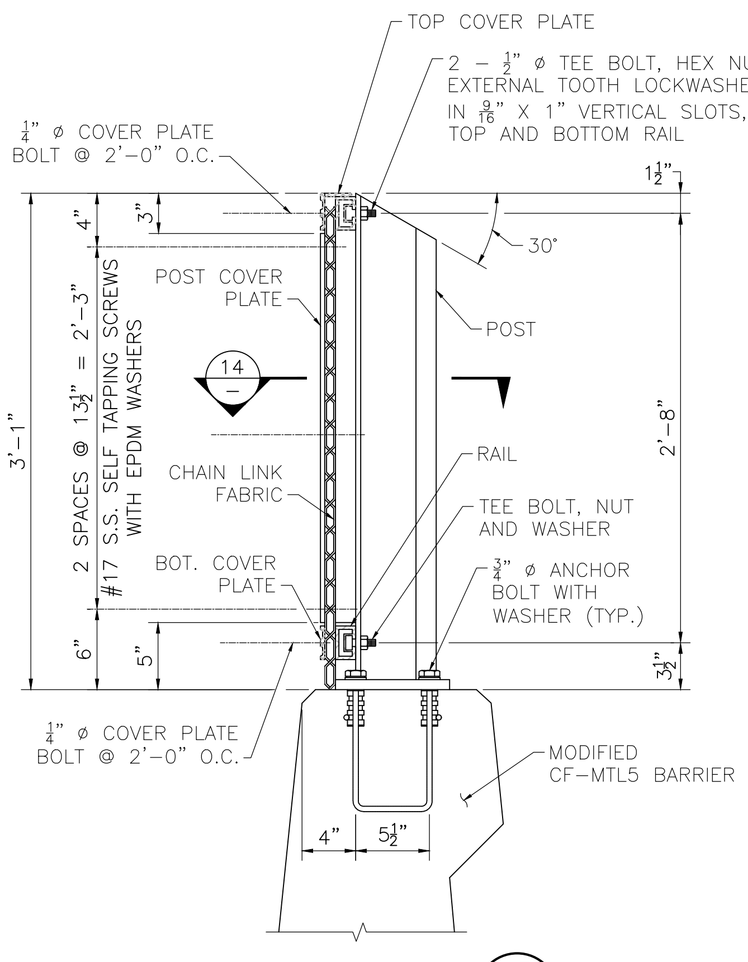
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	20	29
	PROJECT FILE NO. 613196		

SNOW FENCE DETAILS



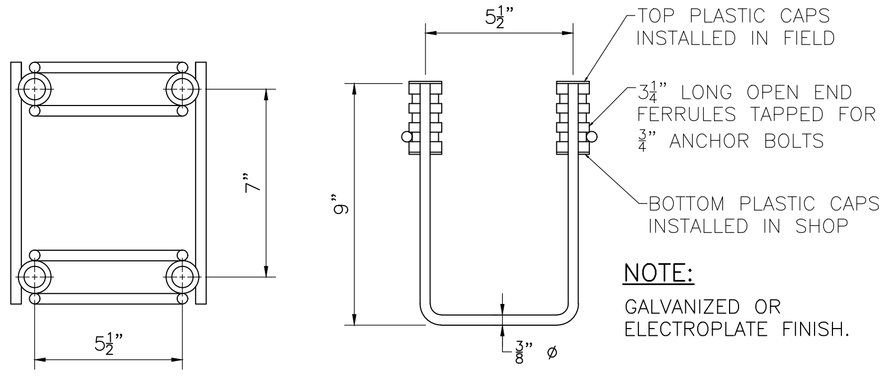
SNOW FENCE ELEVATION FOR CF–MTL5 BARRIERS

SCALE: $\frac{1}{2}$" = 1'–0"



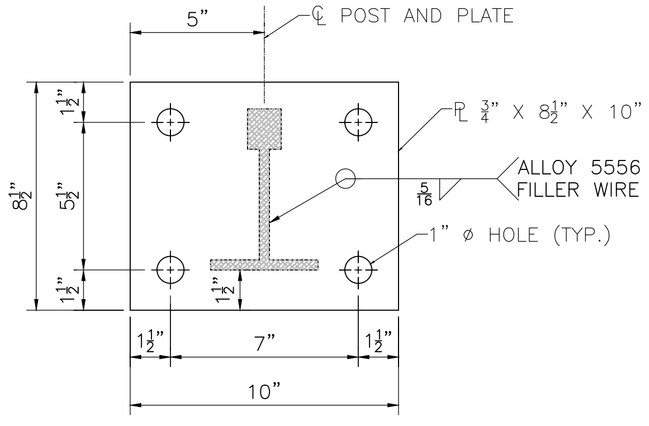
SECTION 13 (–)

SCALE: 1½" = 1'–0"



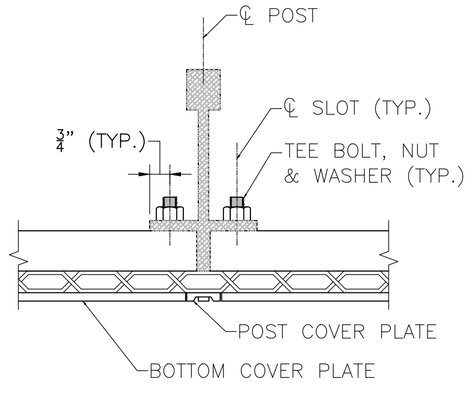
ANCHOR CAGE

SCALE: 3" = 1'–0"



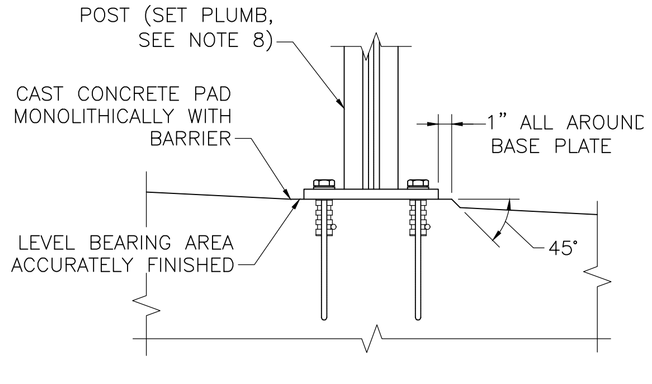
BASE PLATE DETAIL

SCALE: 3" = 1'–0"



SECTION 14 (–)

SCALE: 3" = 1'–0"



PROFILE GRADE OVER 3%

SETTING OF POSTS

SCALE: 1½" = 1'–0"

GENERAL NOTES:

1. RAILS SHALL BE CONTINUOUS OVER A MINIMUM OF FOUR POSTS.
2. RAILS SHALL HAVE AN EXPANSION JOINT IN THE PANEL OVER A BRIDGE EXPANSION JOINT, IF ANY, AND AT 30 FOOT MAXIMUM SPACING ELSEWHERE.
3. BOTTOM OF POST BASE PLATE TO BE SET ON A ⅛" MOLDED FABRIC BEARING PAD (M9.16.2). THE THICKNESS OF THE PAD SHALL BE IGNORED BY THE DETAILER.
4. THE CHAIN LINK FABRIC SHALL BE SECURED BY KNUCKLING TOGETHER THE CUT ENDS OF THE FABRIC WIRE IN A MANNER SIMILAR TO THE ORIGINALLY MANUFACTURED END.
5. ALL SCREEN ENDS SHALL BE TAPERED.
6. POST SPACING SHALL BE UNIFORM BETWEEN TAPERED ENDS.
7. SET POSTS PERPENDICULAR TO GRADE FOR GRADES UP TO 1.5%. SET POSTS PLUMB FOR GRADES GREATER THAN 1.5%.
8. SET POSTS PERPENDICULAR TO GRADE FOR GRADES UP TO 3%. SET POSTS PLUMB FOR GRADES GREATER THAN 3%.

FINISHES:

1. POSTS, RAILS, COVER PLATES AND SPLICE PLATES SHALL RECEIVE A DARK BRONZE ANODIZED FINISH.
2. CHAIN LINK FABRIC SHALL RECEIVE A 4±1 MIL POLYESTER POWDER COAT FINISH. THE COLOR SHALL BE DARK BRONZE TO MATCH COLOR OF ANODIZED ALUMINUM FRAMEWORK.
3. #17 SELF TAPPING SCREWS AND ¼" ø COVER PLATE BOLTS TO BE COLORED TO MATCH THE ANODIZED EXTRUSIONS.

MATERIALS:

EXTRUSIONS & PLATES — ASTM B 221, ALLOY 6061–T6

CHAIN LINK FABRIC — AASHTO M 181 TYPE III (ALLOY 6061–T89 OR T94)

SELF TAPPING SCREWS — TYPE 304 STAINLESS STEEL WITH ⅛" THICK EPDM (ETHYLENE PROPYLENE DIENE MONOMER) WASHERS

ANCHOR BOLTS — ASTM F3125 GRADE 325 TYPE 1 GALVANIZED (ROTATION CAPACITY TEST NOT REQUIRED)

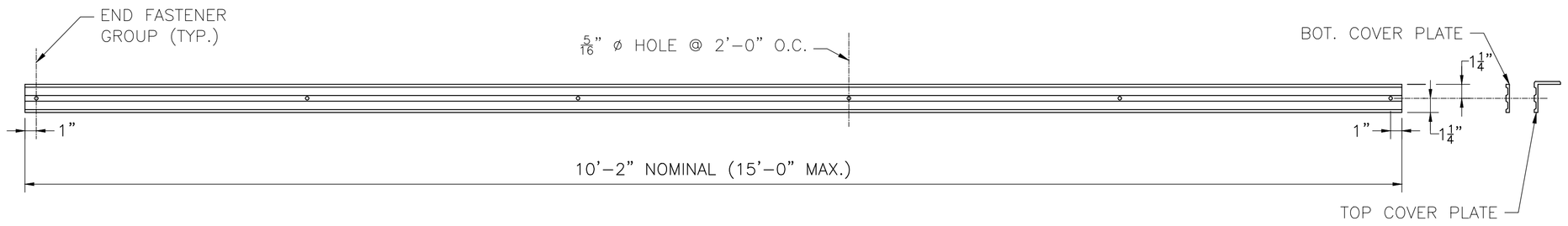
TEE BOLTS — ASTM A 307 GALVANIZED OR TYPE 304 STAINLESS STEEL

COVER PLATE BOLTS — TYPE 304 STAINLESS STEEL WITH OVERSIZED STAINLESS WASHER AND STAINLESS NUT WITH NYLON INSERT

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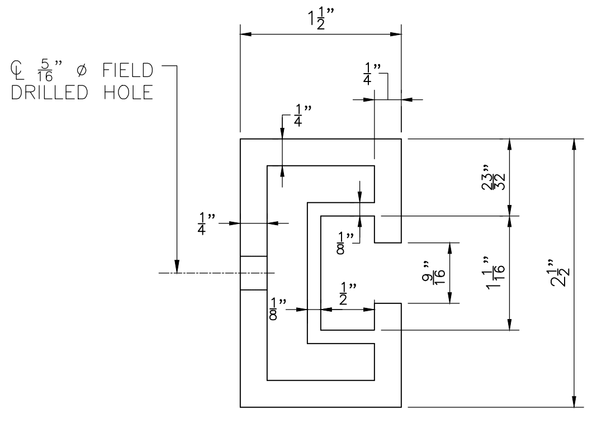
A00803 - 22
19 - SNOW FENCE DETAILS.DWG Plotted on 24-Oct-2025 2:45 PM
Proposal No. 613196-133292
PS&E Resubmission 24-October-2025



TOP AND BOTTOM COVER PLATE
SCALE: 1 1/2" = 1'-0"

COVER PLATE NOTES:

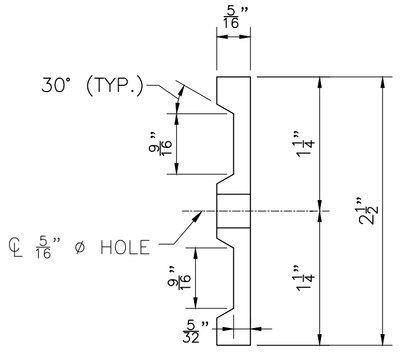
1. COVER PLATES MAY BE CONTINUOUS OVER A RAIL EXPANSION JOINT SPLICE. COVER PLATES SHALL BE FIELD CUT AS REQUIRED TO CLEAR THE EXPANSION JOINT. SEE DETAIL AT EXPANSION JOINT.
2. FIELD DRILL 5/16" ø HOLE 1" FROM THE FIELD CUT END OF A COVER PLATE, UNLESS THERE IS AN EXISTING HOLE WITHIN 6" FROM THE COVER PLATE END.
3. FIELD PAINT THE FIELD CUT ENDS OF THE COVER PLATES TO MATCH THE ANODIZED COLOR.



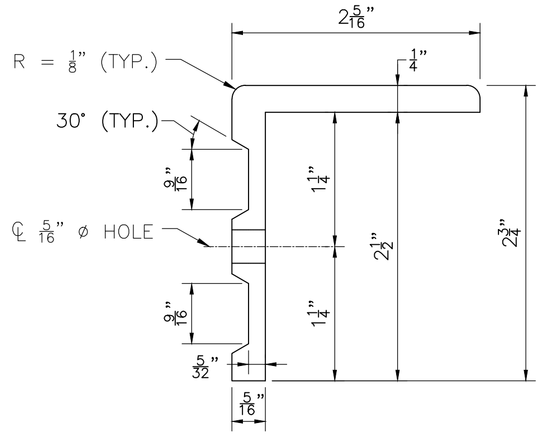
NOTE:

OTHER CONFIGURATIONS OF THE INTERNAL WALLS OF THE RAIL EXTRUSION MAY BE SUBMITTED FOR APPROVAL.

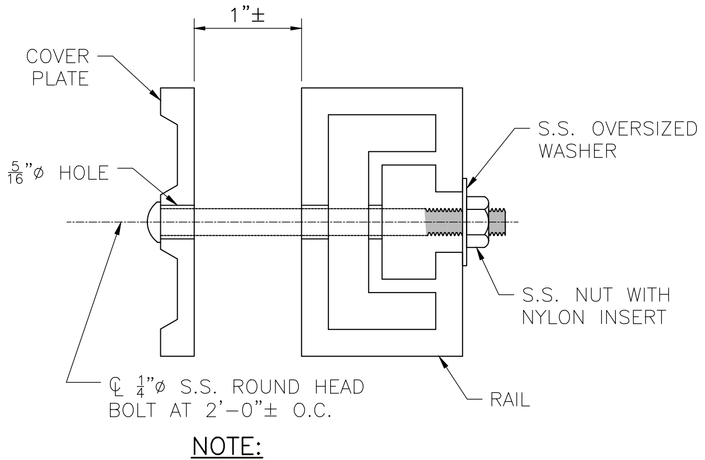
RAIL EXTRUSION
FULL SIZE



BOTTOM COVER PLATE EXTRUSION
FULL SIZE



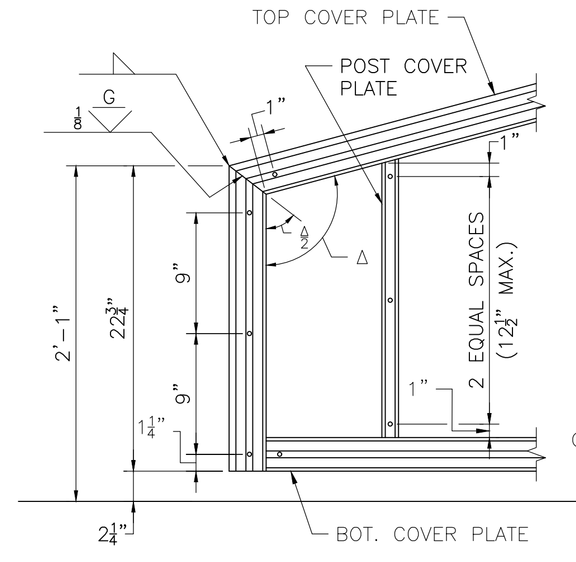
TOP COVER PLATE EXTRUSION
FULL SIZE



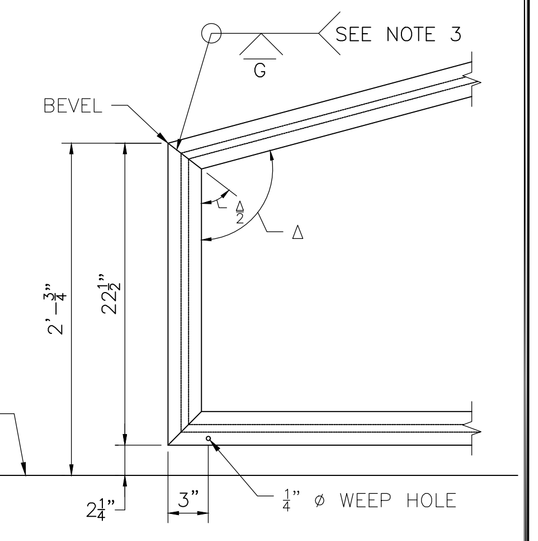
NOTE:

BOLTS SHALL BE TYPE 304 WITH A DRIVE HEAD TO BE COLORED TO MATCH ANODIZING.

RAIL & COVER PLATE DETAIL
FULL SIZE



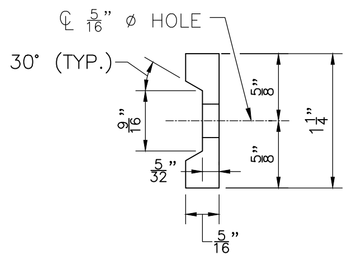
COVER PLATE DETAILS



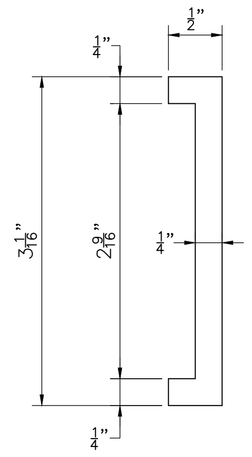
RAIL DETAILS

NOTES:

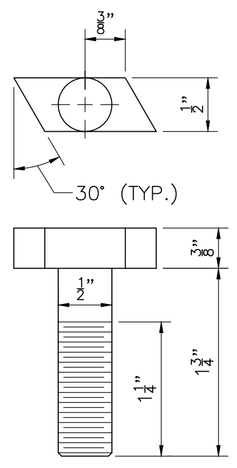
1. WELDING OF TOP COVER PLATE AND RAILS OF NON-TAPERED END IS SIMILAR.
2. WELDS AND MITERING TYPICAL FOR ALL ANGLED CORNERS.
3. WELD TYPICAL FOR TOP AND BOTTOM END CORNERS OF RAIL. INTERRUPT WELD AT SLOT IN BACK OF RAIL.



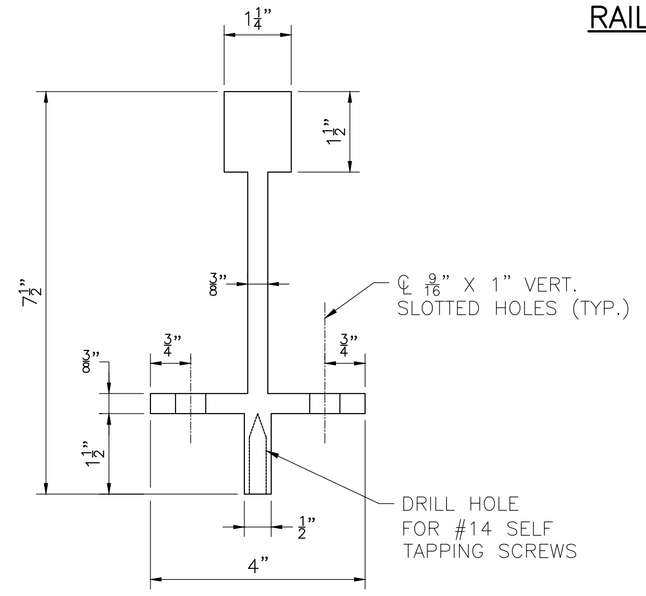
POST COVER PLATE EXTRUSION
FULL SIZE



SPLICE PLATE EXTRUSION
FULL SIZE

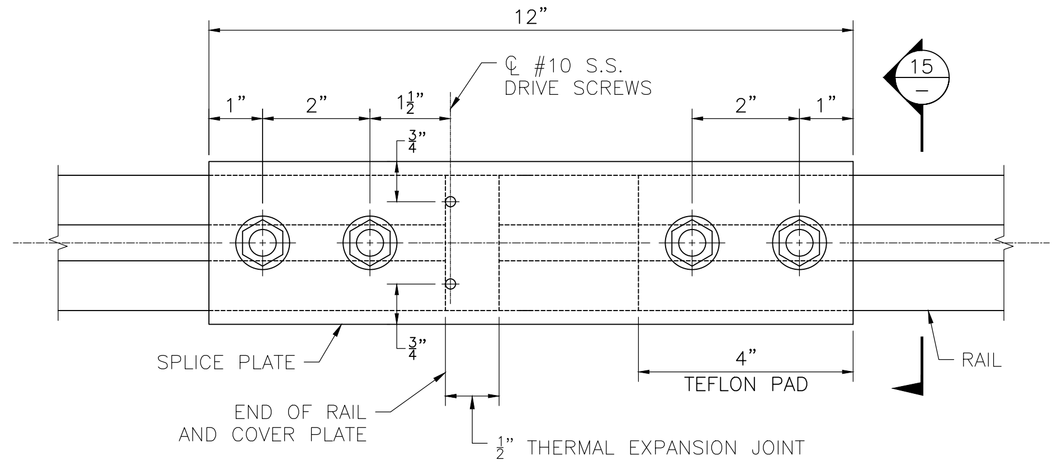


TEE BOLT
FULL SIZE

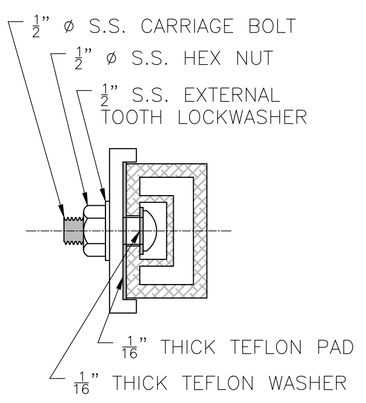


POST EXTRUSION
SCALE: 6" = 1'-0"

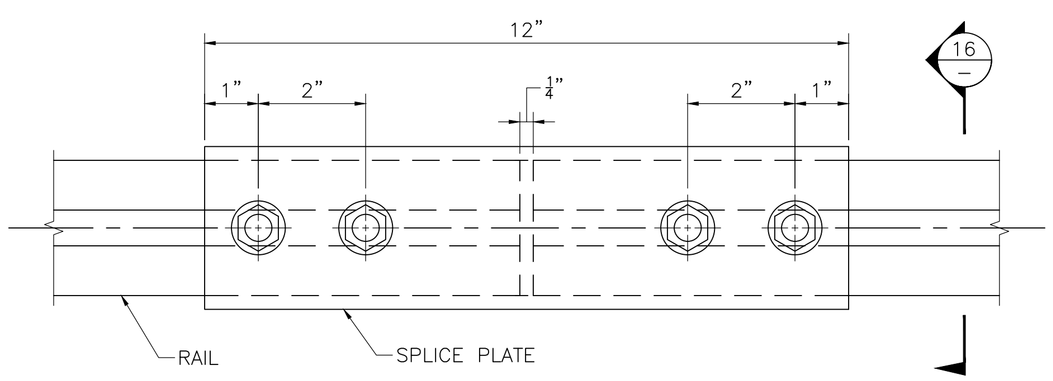
TAPERED END DETAILS
SCALE: 1 1/2" = 1'-0"



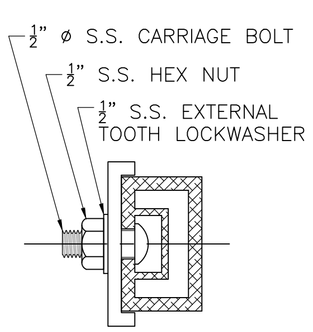
DETAIL AT RAIL EXPANSION JOINT SPLICE
SCALE: 6" = 1'-0"



SECTION 15 / SCALE: 6" = 1'-0"



DETAIL AT RAIL EXPANSION JOINT SPLICE
SCALE: 6" = 1'-0"



SECTION 16 / SCALE: 6" = 1'-0"

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DATE	DESCRIPTION
	USE ONLY PRINTS OF LATEST DATE

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2W4
2W5

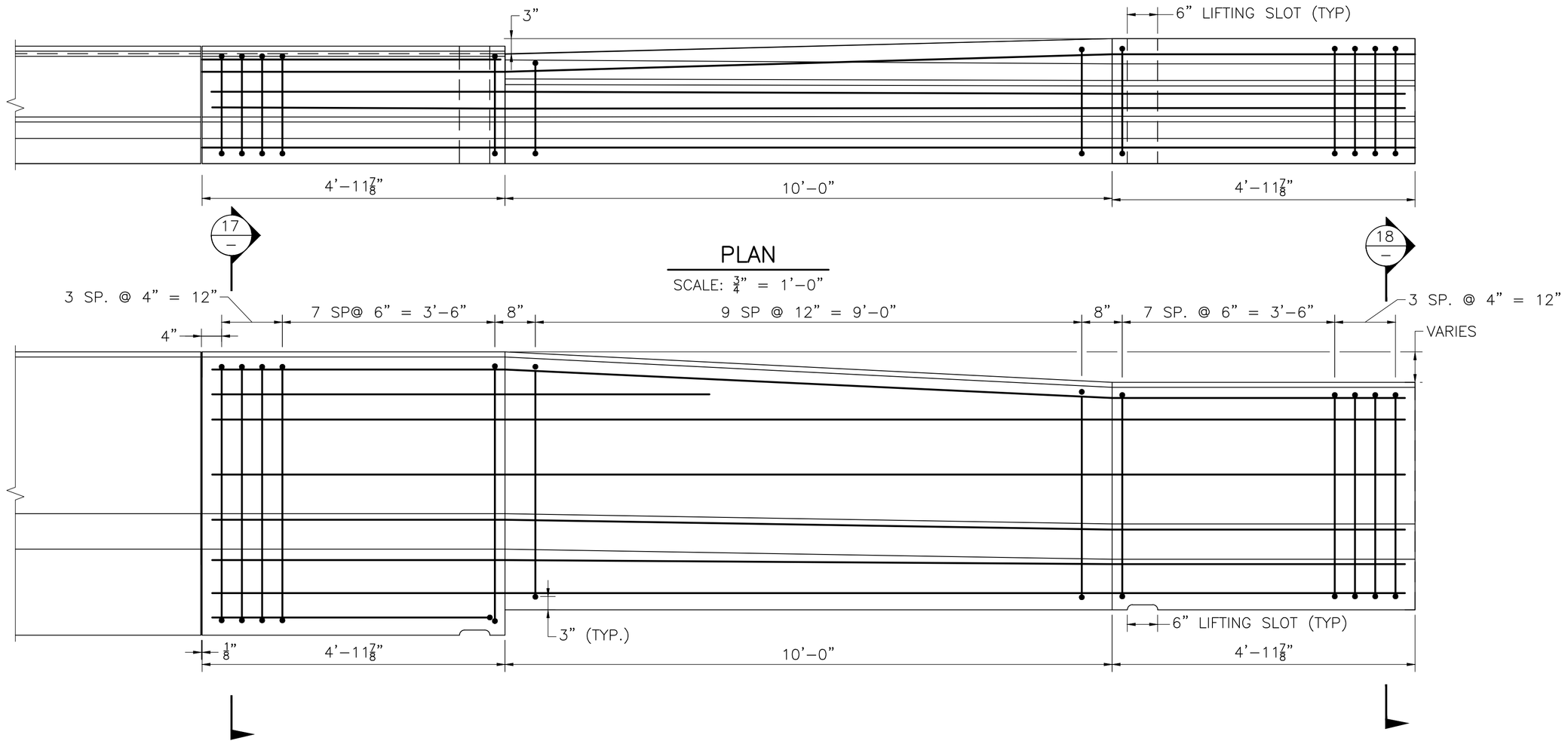
A00803 - 23
20 - GUARDRAIL DETAILS.DWG Plotted on 24-Oct-2025 2:49 PM
Proposal No. 613196-133292
PS&E Resubmission 24-October-2025

LYNNFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	22	29
	PROJECT FILE NO.	613196	

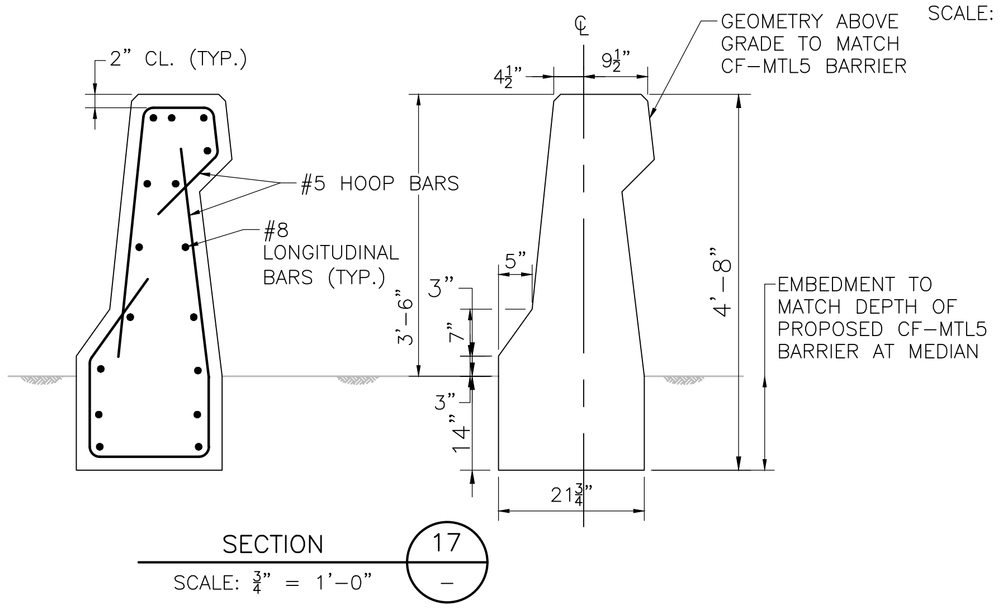
TAPERED BARRIER DETAILS

21-TAPERED BARRIER DETAILS.DWG Plotted on 24-Oct-2025 2:52 PM

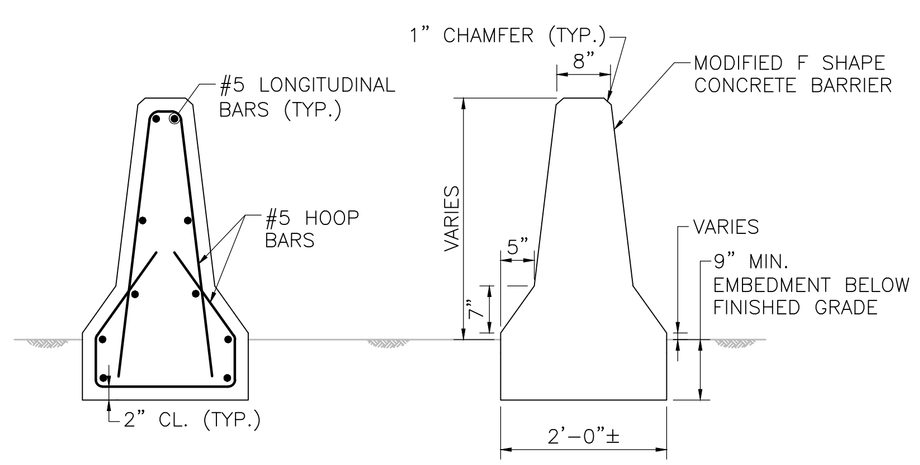


PLAN
SCALE: ¾" = 1'–0"

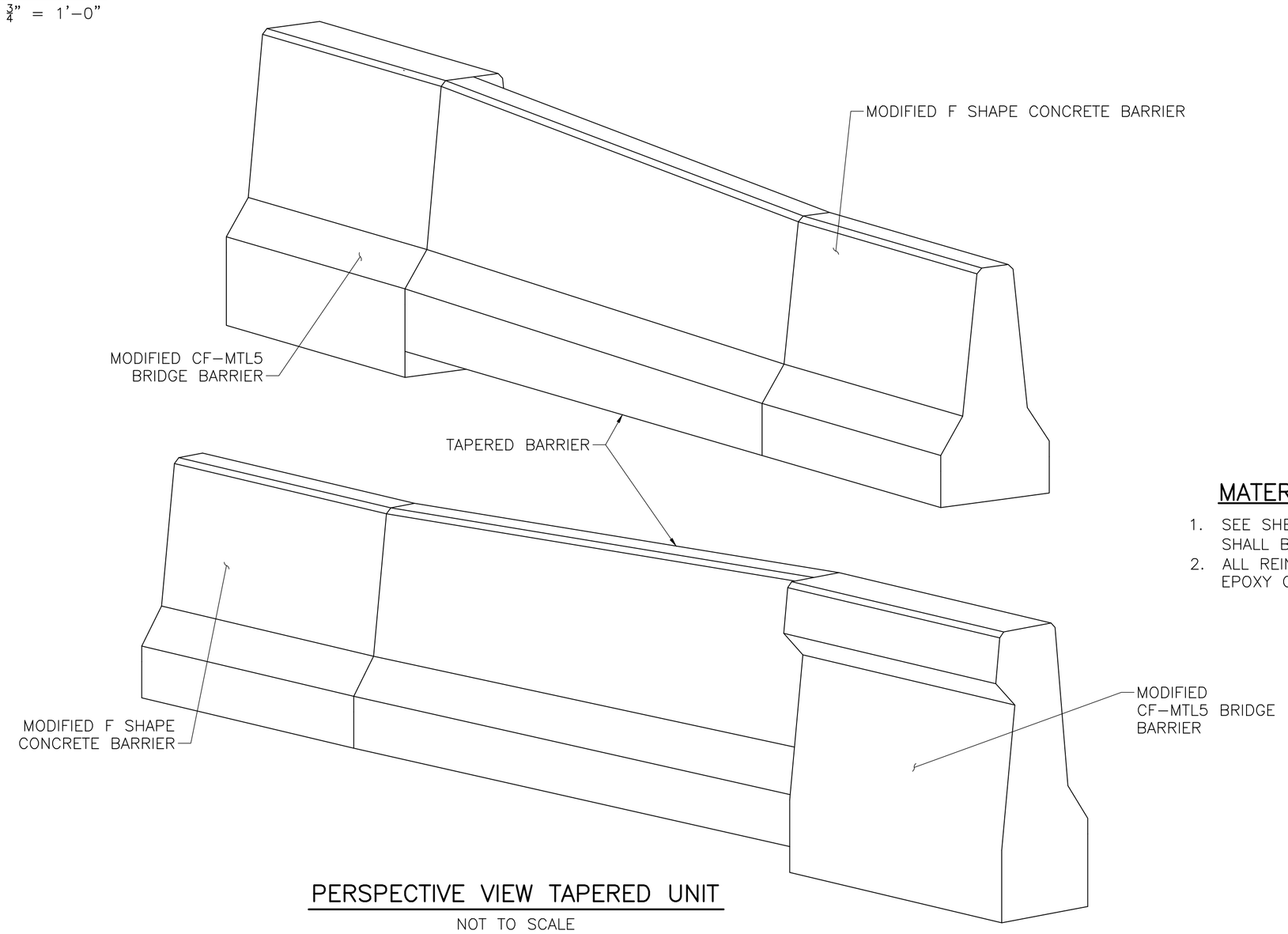
ELEVATION
SCALE: ¾" = 1'–0"



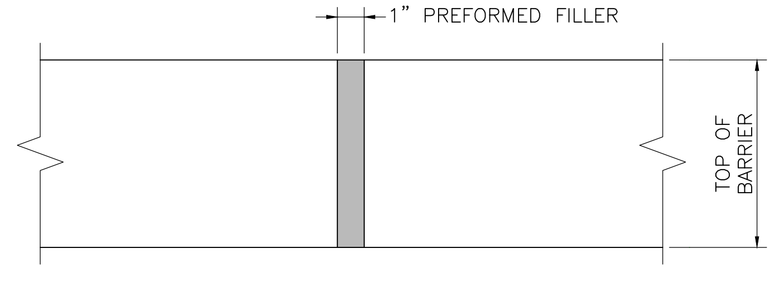
SECTION 17
SCALE: ¾" = 1'–0"



SECTION 18
SCALE: ¾" = 1'–0"



PERSPECTIVE VIEW TAPERED UNIT
NOT TO SCALE



JOINT DETAIL
SCALE: 3" = 1'–0"

MATERIAL NOTES:

1. SEE SHEET 2 FOR CONCRETE NOTES. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1", UNLESS NOTED OTHERWISE.
2. ALL REINFORCING STEEL SHALL BE AASHTO M31 (ASTM A615) GRADE 60, EPOXY COATED.

*
2W4
2W5

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
	USE ONLY PRINTS OF LATEST DATE

SHEET 21 OF 21 SHEETS BRIDGE NO. L–19–004 (*)

PS&E Resubmission 24-October-2025

Proposal No. 613196-133292

NOTES:

1. ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND THE MASSACHUSETTS AMENDMENTS TO THE MUTCD.
2. TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
3. 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.
4. SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, CHANNELIZING DEVICES, BARRIERS, AND CRASH ATTENUATORS MUST PASS THE CRITERIA SET FORTH IN NCHRP REPORT 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES" AND/OR "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH).
5. CONTRACTORS SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT, AND SIMILAR OPERATIONS.
6. THE FIRST 10 REFLECTORIZED DRUMS OF A TAPER SHALL BE MOUNTED WITH SEQUENTIALLY FLASHING LIGHTS WHEN USED FOR NIGHT WORK BETWEEN DUSK AND DAWN.
7. DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
8. MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
9. MINIMUM LANE WIDTH IS TO BE 11 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF DRUMS OR MEDIAN BARRIER.
10. ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.
11. ANY WORK REQUIRING A SINGLE LANE CLOSURE ON INTERSTATE 95 SHALL BE LIMITED TO NIGHT WORK BETWEEN 9:00PM–5:00AM, PER THE SCHEDULE OF WORK DEFINED IN THE CONTRACT SPECIAL PROVISIONS.
12. ANY WORK REQUIRING CLOSURE OF MULTIPLE LANES ON INTERSTATE 95 SHALL BE LIMITED TO NIGHT WORK BETWEEN 12:00AM–5:00AM, PER THE SCHEDULE OF WORK DEFINED IN THE CONTRACT SPECIAL PROVISIONS.
13. ANY WORK REQUIRING A FULL ROAD CLOSURE OF WALNUT STREET SHALL BE LIMITED TO NIGHT WORK BETWEEN 11:00PM–5:00AM, PER THE SCHEDULE OF WORK DEFINED IN THE CONTRACT SPECIAL PROVISIONS.
14. ANY WORK REQUIRING ONE–LANE ALTERNATING TRAFFIC CONTROL SET UPS ON WALNUT STREET SHALL BE LIMITED TO NIGHT WORK BETWEEN 9:00PM–5:00AM, PER THE SCHEDULE OF WORK DEFINED IN THE CONTRACT SPECIAL PROVISIONS.

LEGEND:

- REFLECTORIZED PLASTIC DRUM OR 36" CONE
- P/F POLICE/FLAGGER DETAIL
- TYPE III BARRICADE
- CHANGEABLE MESSAGE SIGN
- ARROW BOARD
- WORK ZONE
- DIRECTION OF TRAFFIC
- IMPACT ATTENUATOR
- MEDIAN BARRIER
- MEDIAN BARRIER WITH WARNING LIGHTS
- WORK VEHICLE
- TRUCK MOUNTED ATTENUATOR
- TRAFFIC OR PEDESTRIAN SIGNAL
- SIGN
- TEMPORARY PORTABLE RUMBLE STRIP ARRAY

THE IDEAL CAPACITY OF A MAJOR HIGHWAY IS GENERALLY CONSIDERED TO BE 1900 PASSENGER CARS PER HOUR PER LANE (PCPHPL). IN WORK ZONES ON A MULTI–LANE DIVIDED HIGHWAY, THE FOLLOWING VOLUME GUIDELINES HAVE BEEN SUGGESTED:

MEASURED AVERAGE WORK ZONE CAPACITIES

NUMBER OF LANES		NUMBER OF STUDIES	AVERAGE CAPACITY	
NORMAL (EXISTING)	OPEN (TO TRAFFIC)		VPH	VPHPL
3	1	7	1,170	1,170
2	1	8	1,340	1,340
5	2	8	2,740	1,370
4	2	4	2,960	1,480
3	2	9	2,980	1,490
4	3	4	4,560	1,520

Source: Dudek, C., Notes on Work Zone Capacity and Level of Service. Texas Transportation Institute, Texas A&M University, College Station, Texas (1984)

BY OBTAINING HOURLY TRAFFIC COUNTS FOR A PARTICULAR ROADWAY (WITH A MINIMUM OF A 48–HOUR AUTOMATIC TRAFFIC RECORDER (ATR) COUNT), THIS WILL HELP TO DETERMINE AT WHAT TIMES OF THE DAY OR NIGHT A CERTAIN NUMBER OF LANES MAY BE CLOSED.

SUGGESTED WORK ZONE WARNING SIGN SPACING

ROAD TYPE*	DISTANCE BETWEEN SIGNS **			
	A	B	C	D
URBAN (30 MPH OR LESS)	100	100	100	100
URBAN (35 MPH OR GREATER)	350	350	350	350
RURAL	500	500	500	500
EXPRESSWAY/FREEWAY	1,000	1,500	2,640	500

* ROAD TYPE TO BE DETERMINED BY MASSDOT OFFICE OF TRANSPORTATION PLANNING.

** DISTANCES ARE SHOWN IN FEET. THE COLUMN HEADINGS A, B, AND C ARE THE DIMENSIONS SHOWN IN THE DETAIL/ TYPICAL SETUP FIGURES. THE A DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN. THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS. THE C DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE "THIRD" SIGN IS THE FIRST ONE TYPICALLY ENCOUNTERED BY A DRIVER APPROACHING A TEMPORARY TRAFFIC CONTROL (TTC) ZONE.)

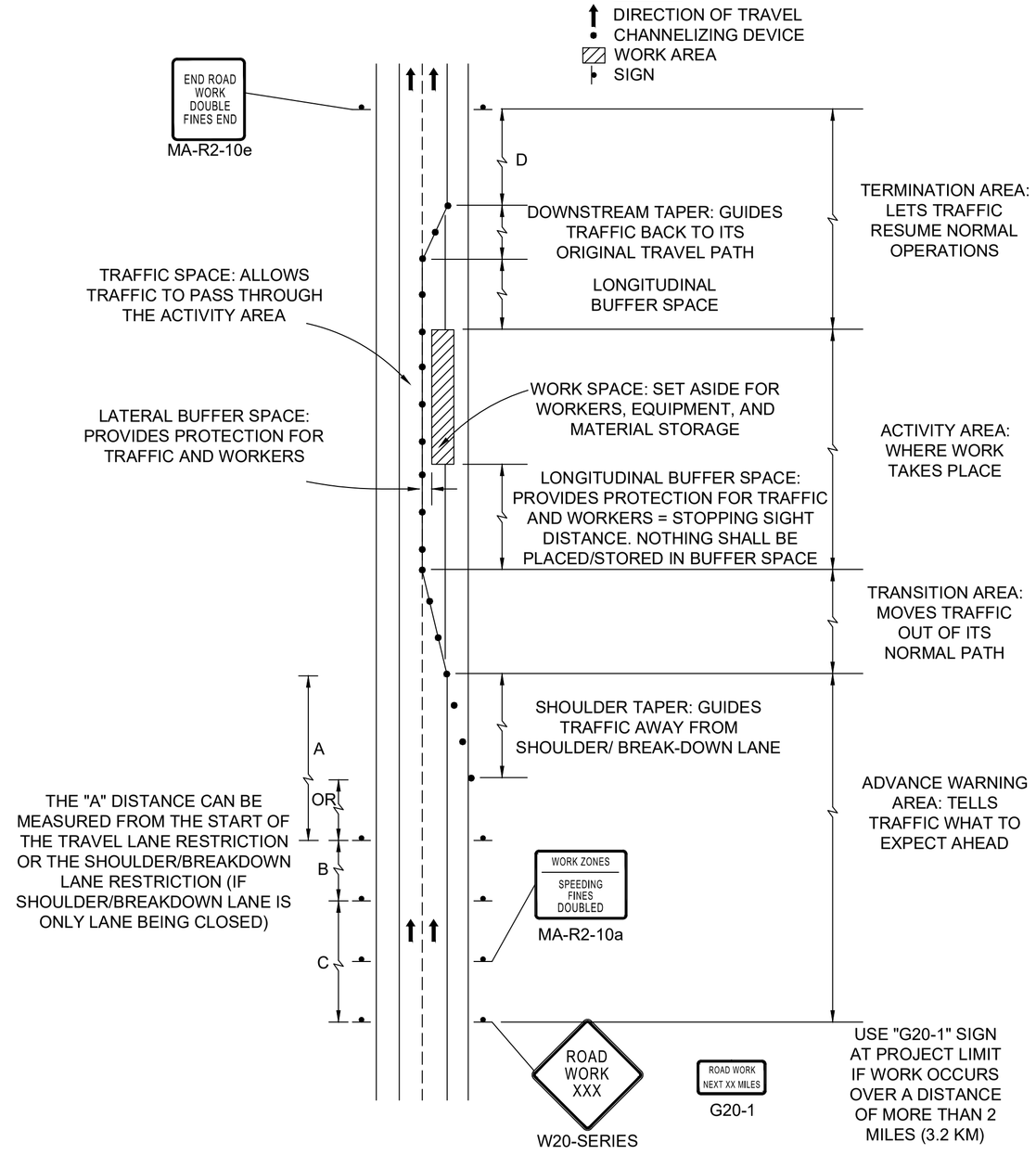
THE "THIRD" SIGN ABOVE IS TYPICALLY REFERRED TO AS AN "ADVANCE WARNING" SIGN ON THE TTCP SETUPS. THESE ADVANCE WARNING SIGNS ARE LOCATED PRIOR TO THE PROJECT LIMITS ON ALL APPROACHES (i.e. THE W20–1 SERIES (ROAD WORK XX FT) SIGNS), AND USUALLY REMAIN FOR THE DURATION OF THE PROJECT. ADDITIONAL SIGNS (i.e. "RIGHT LANE CLOSED 1 MILE" AND "LEFT LANE CLOSED 1 MILE") HAVE BEEN SHOWN IN SOME FIGURES AS EXAMPLES OF REINFORCEMENT SIGN PLACEMENT BUT ARE USED IN RARE OCCASIONS.

THE FIRST AND SECOND WARNING SIGNS ABOVE ARE REFERRED TO AS THE OPERATIONAL (DAY–TO–DAY) WORK ZONE SIGNS AND MAY BE MOVED DEPENDING ON WHERE THE SPECIFIC ROADWAY WORK FOR THAT DAY IS LOCATED.

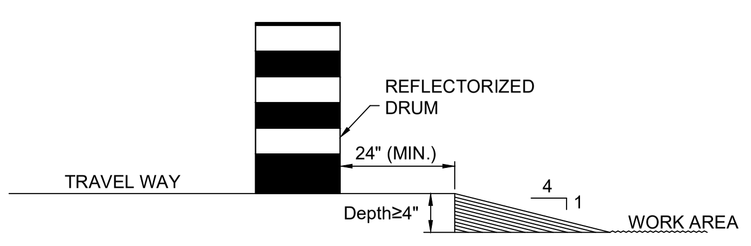
MA R2–10a SIGNS SHALL BE PLACED BETWEEN THE SECOND AND THIRD SIGNS AS DESCRIBED ABOVE.

MA R2–10a, MA R2–10e, AND W20–1 SERIES SIGNS ARE TO BE INCLUDED ON ALL DETAILS/TYPICAL SETUPS.

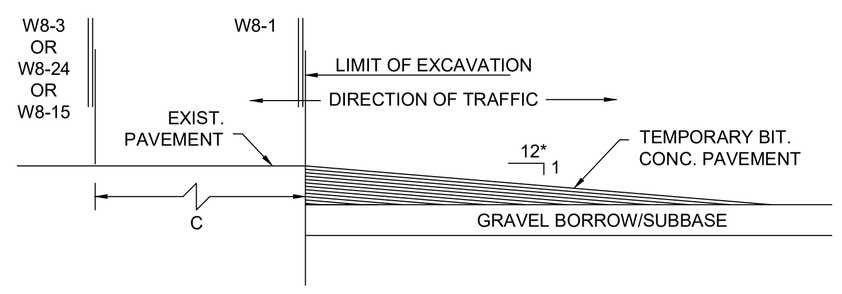
Based on: Table 6C–1 MUTCD LATEST EDITION



COMPONENT PARTS OF A TEMPORARY TRAFFIC CONTROL (TTC) ZONE
NOT TO SCALE



LATERAL DROP-OFF DETAIL
NOT TO SCALE

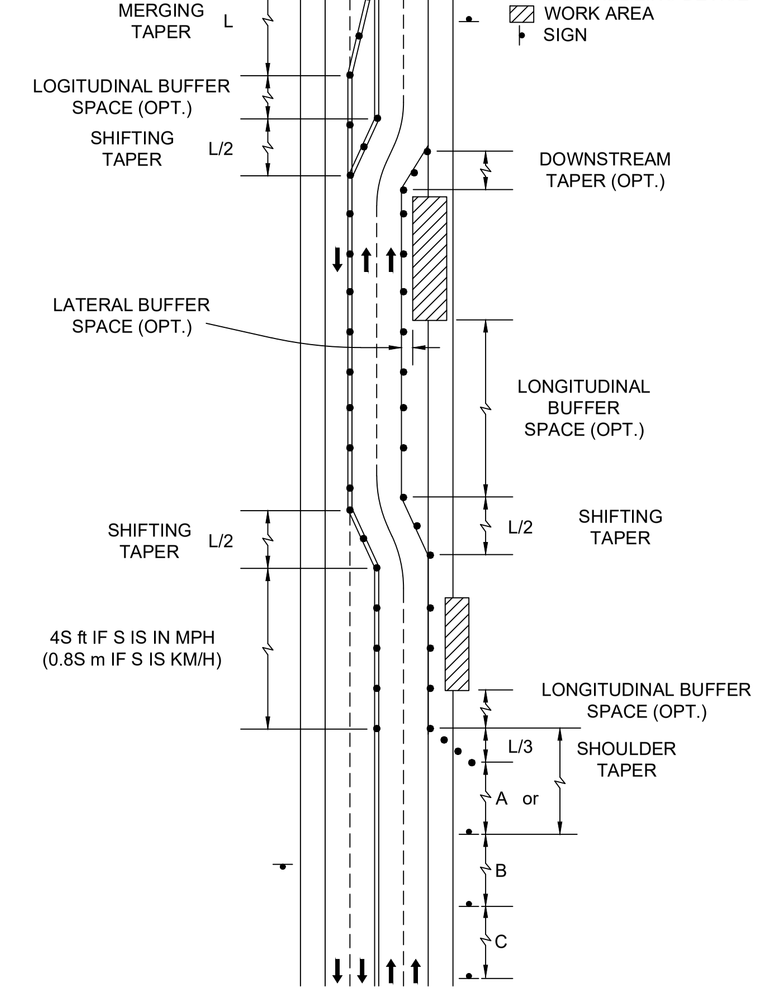


LONGITUDINAL DROP-OFF DETAIL
NOT TO SCALE
* - INCREASE SLOPE RATIO FOR HIGHER SPEEDS (50:1)

LYNNFIELD
I-95/ROUTE 128 OVER WALNUT STREET

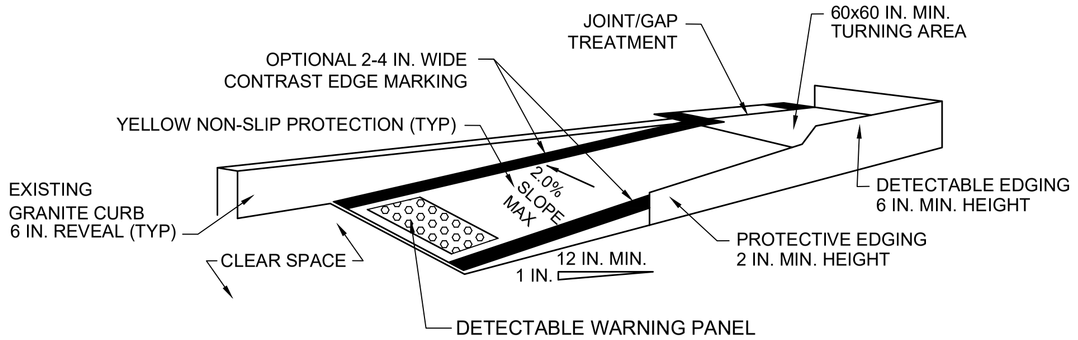
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	23	29
PROJECT FILE NO.	613196		

TEMPORARY TRAFFIC CONTROL PLANS - SHEET 1



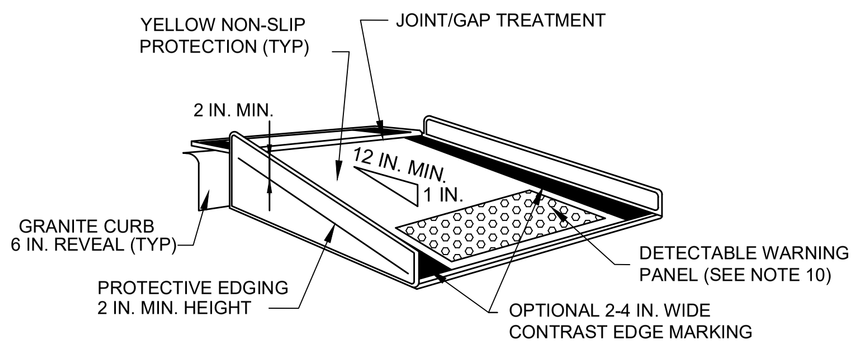
TAPER AND BUFFER DETAILS
NOT TO SCALE

MASSDOT 10 BRIDGES_TTCP_WALNUT ST.DWG Plotted on 16-Dec-2025 4:05 PM
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A00803 - 25



TEMPORARY CURB RAMP-PARALLEL TO CURB

NOT TO SCALE



TEMPORARY CURB RAMP-PERPENDICULAR TO CURB

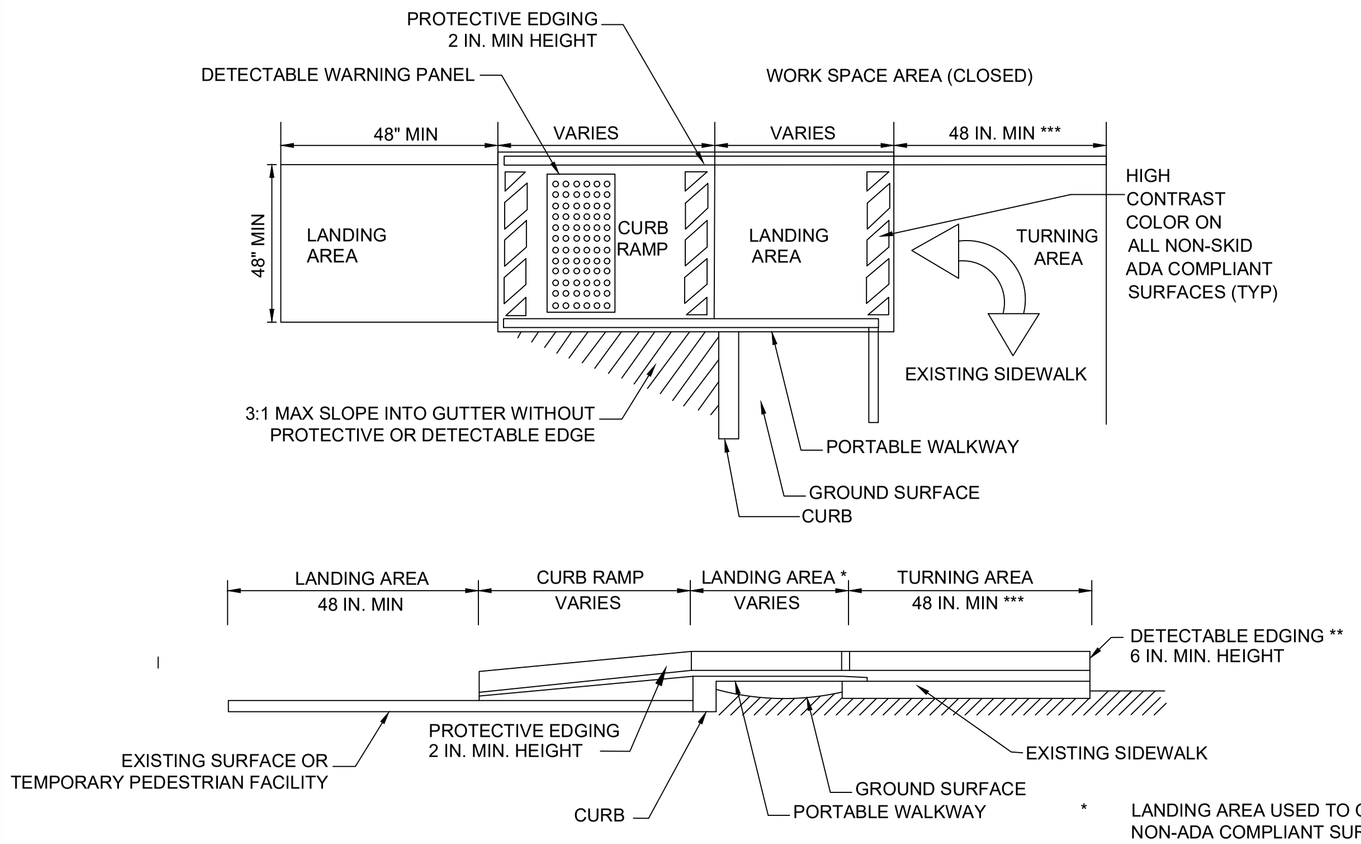
NOT TO SCALE

NOTES:

1. CURB RAMPS SHALL BE 60 IN. MINIMUM WIDTH WITH A FIRM, STABLE AND NON-SLIP SURFACE.
2. 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 SLOP 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.
3. DETECTABLE EDGING WITH 6 IN. MINIMUM HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
4. THE CURB RAMP WALKWAY AND LANDING AREA SURFACE SHALL BE OF A SOLID CONTINUOUS CONTRASTING COLOR ABUTTING UP TO THE EXISTING SIDEWALK.
5. CURB RAMPS AND LANDINGS SHOULD HAVE A 1:50 (2%) MAX CROSS-SLOPE.
6. CLEAR SPACE OF 48x48 IN. MINIMUM SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
7. WATER FLOW IN THE GUTTER SYSTEM SHALL HAVE MINIMAL RESTRICTION.
8. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 0.5 IN. WIDTH.
9. 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.
10. 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 DETECTABLE WARNING PANEL SHALL NOT BE INSTALLED ON THE RAMP.

850.1.1 - TEMPORARY CURB RAMP (1 OF 2)

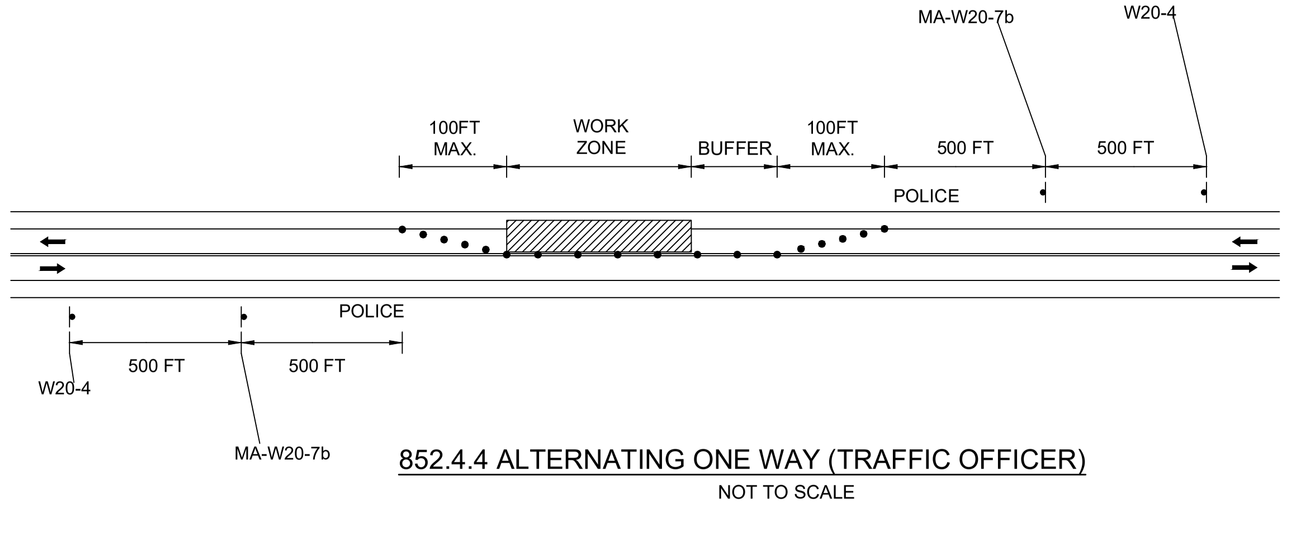
NOT TO SCALE



* LANDING AREA USED TO OVERLAP NON-ADA COMPLIANT SURFACES.
** DETECTABLE EDGING REMOVED IF A CONTINUOUS SIDEWALK.
*** 60 IN. MINIMUM IF AN OBSTRUCTION IS AT BACK OF SIDEWALK.

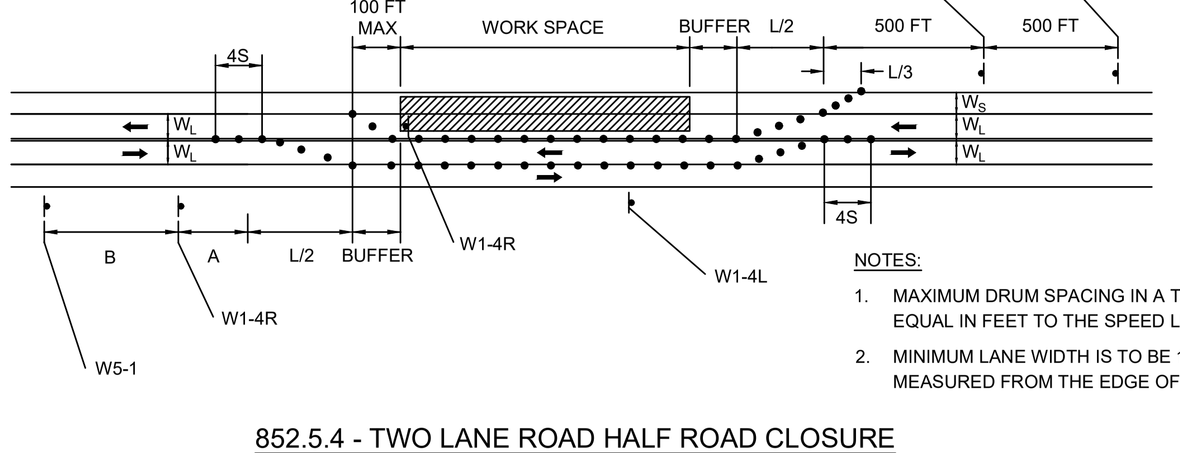
850.1.2 - TEMPORARY CURB RAMP (2 OF 2)

NOT TO SCALE



852.4.4 ALTERNATING ONE WAY (TRAFFIC OFFICER)

NOT TO SCALE

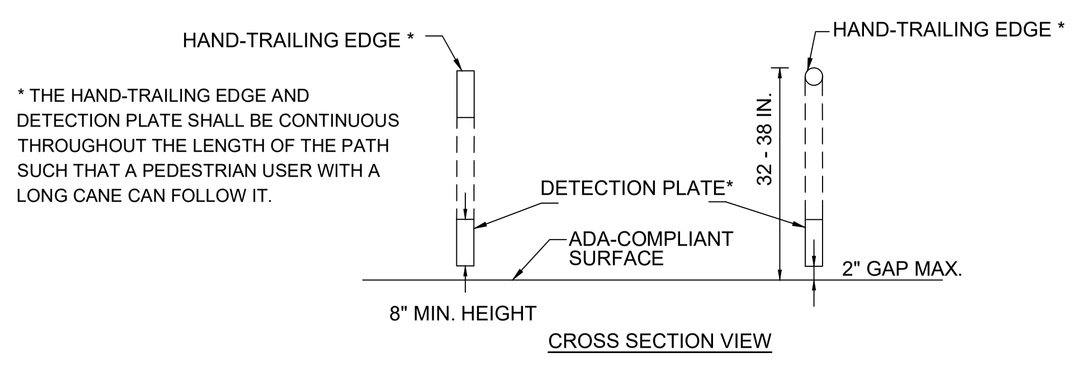


NOTES:

1. MAXIMUM DRUM SPACING IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
2. MINIMUM LANE WIDTH IS TO BE 11 FEET MEASURED FROM THE EDGE OF DRUMS.

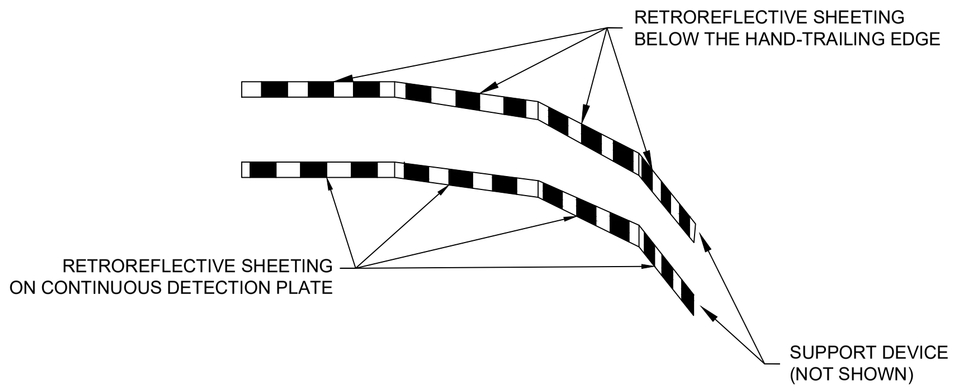
852.5.4 - TWO LANE ROAD HALF ROAD CLOSURE

NOT TO SCALE



CROSS SECTION VIEW

STANDARD RETROREFLECTIVE LAYOUT FOR PEDESTRIAN CHANNELIZING DEVICES



851.3.1 - PEDESTRIAN CHANNELIZING DEVICE

NOT TO SCALE

LYNNFIELD
I-95/ROUTE 128 OVER WALNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	24	29
PROJECT FILE NO.	613196		

TEMPORARY TRAFFIC CONTROL PLANS - SHEET 2

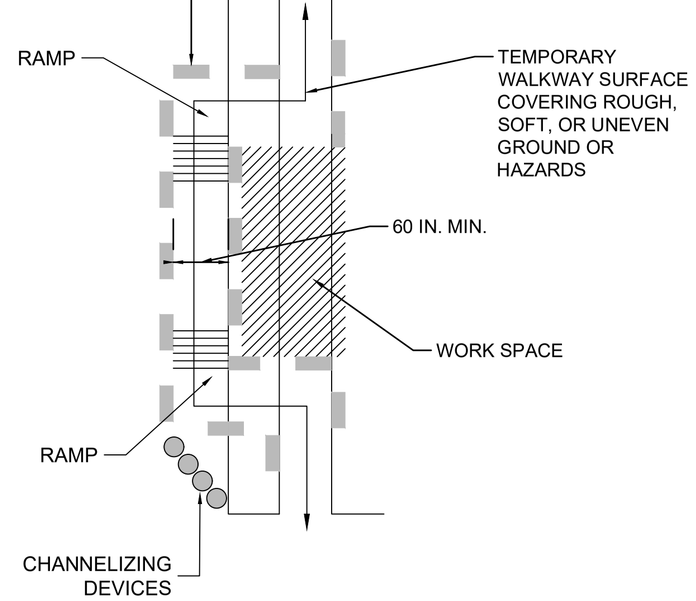
MINIMUM LENGTH OF LONGITUDINAL BUFFER IS EQUAL TO THE STOPPING SIGHT DISTANCE AT THE POSTED SPEED AND CAN BE DETERMINED FROM THE FOLLOWING TABLE

STOPPING SIGHT DISTANCE	
SPEED (MPH)	DISTANCE (FT)
25	155
30	200
35	250
40	305

852.5.4 - TYPICAL TAPER LENGTHS (L) IN FEET

SPEED LIMIT (S) IN MPH	WIDTH OF OFFSET (W_L OR W_S) IN FEET		
	10	11	12
25	104	115	125
30	150	165	180
35	204	225	245
40	267	293	320

NOTE: FOR OFFSET WIDTHS NOT LISTED IN TABLE, USE $L=WS^2/60$.



852.1.2 - SIDEWALK DIVERSION

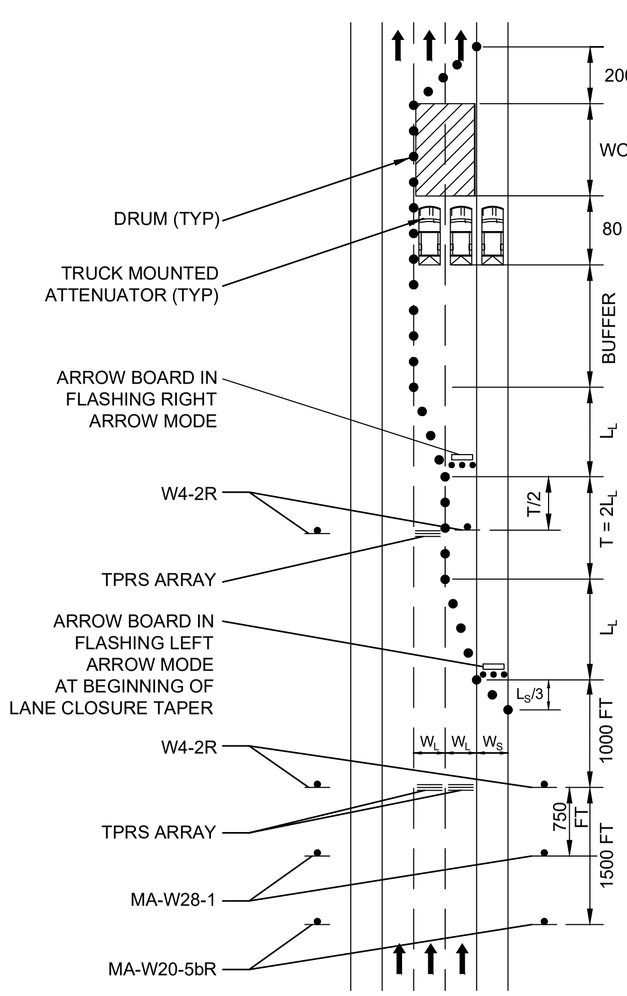
NOT TO SCALE

NOTES:

1. A MAXIMUM 2-INCH GAP BETWEEN THE BOTTOM OF THE CONTINUOUS DETECTION PLATE AND THE WALKWAY SURFACE MAY BE USED TO PROVIDE DRAINAGE.
2. HAND-TRAILING EDGE AND DETECTION PLATE ARE OPTIONAL FOR CONTINUOUS WALLS.
3. SUPPORT DEVICE FOR CONTINUOUS DETECTION PLATE AND CONTINUOUS HAND-TRAILING EDGE NOT SHOWN ON THE PLAN.
4. STRIPING ON SHEETING PANELS MAY BE EITHER VERTICAL OR AT A 45-DEGREE ANGLE.
5. RETROREFLECTIVE AREAS CAN BE DISTRIBUTED IN A MANNER THAT ENSURES VISIBILITY AND DETECTION WITHOUT NECESSITATING A SINGLE CONTINUOUS APPLICATION.

MASSDOT 10 BRIDGES_TTCP_WALNUT ST.DWG Plotted on 16-Dec-2025 4:05 PM

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852.7.8 - DIVIDED HIGHWAY RIGHT TWO LANES CLOSURE (SHORT TERM)
NOT TO SCALE

TEMPORARY PORTABLE RUMBLE STRIP (TPRS)
A TPRS ARRAY SHALL HAVE THEE RUMBLE STRIPS. SPACING SHALL BE AS FOLLOWS:

POSTED REGULATORY OR WORK ZONE SPEED

60 MPH AND ABOVE — 20'

40 MPH TO 55 MPH — 15'

NOTE: TPRS SHALL BE DEPLOYED ONLY FOR SETUPS OF 12 HOURS OR LESS

TYPICAL TAPER LENGTHS (L_L,L_R,L_S) IN FEET			
SPEED LIMIT (S) IN MPH	WIDTH OF OFFSET (W_L, W_S OR W_R) IN FEET		
	10	11	12
40	400	440	480
45	450	495	540
50	500	550	600
55	550	605	660
60	600	660	720
65	650	715	780

NOTE: FOR OFFSET WIDTHS NOT LISTED IN TABLE, USE L=WS.

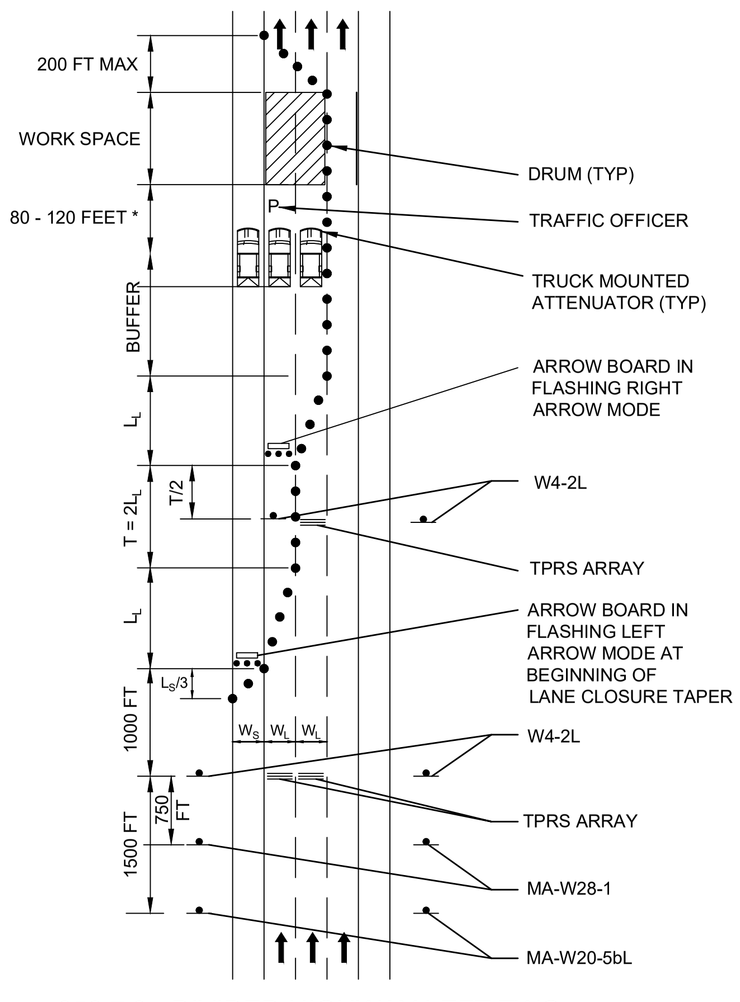
STOPPING SIGHT DISTANCE	
SPEED (MPH)	DISTANCE (FT)
35	250
40	305
45	360
50	425
55	495
60	570
65	645

MINIMUM LENGTH OF LONGITUDINAL BUFFER IS EQUAL TO THE STOPPING SIGHT DISTANCE AT THE POSTED SPEED AND CAN DETERMINED FROM THE FOLLOWING TABLE

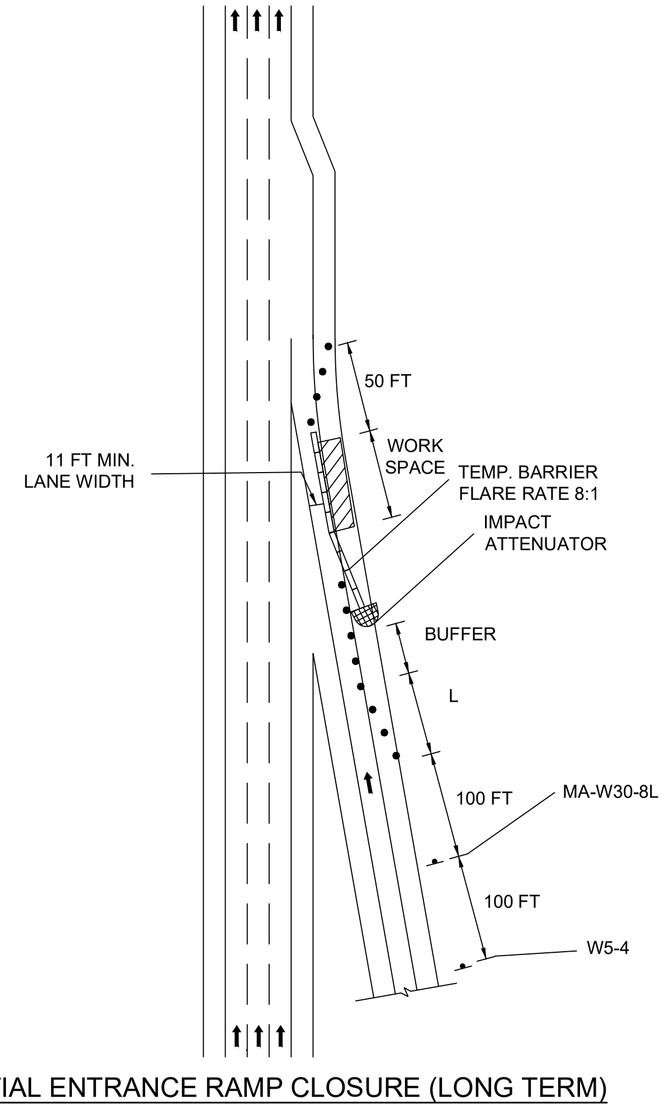
NOTES:

1. THE FIRST TEN DRUMS OF EACH LANE CLOSURE TAPER SHALL BE MOUNTED WITH SEQUENTIALLY FLASHING LIGHTS IF DEPLOYED BETWEEN DUSK AND DAWN.
2. MAXIMUM DRUM SPACING IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH. IN TANGENT SECTIONS, MAXIMUM SPACING IN FEET IS EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH.
3. THIS SETUP ALSO APPLIES TO 3 OR 4 LANE SECTIONS.

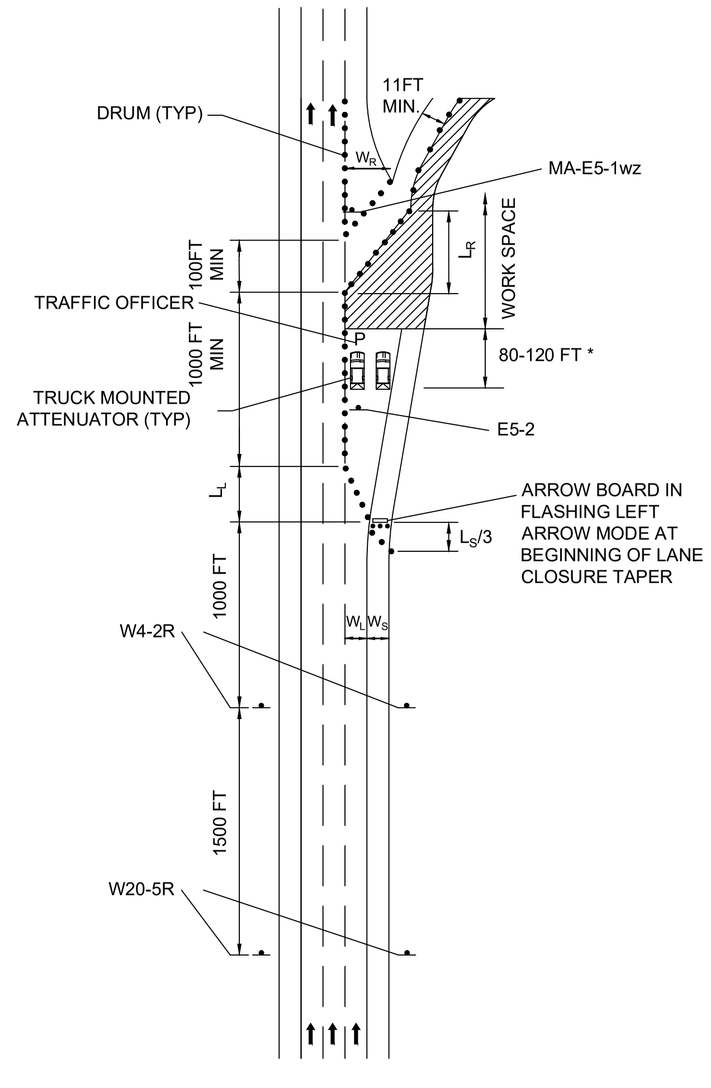
* DISTANCE MAY BE INCREASED IF ADDITIONAL ROLL-AHEAD ALLOWANCE IS NEEDED. REFER TO MANUFACTURER'S SPECIFICATIONS.



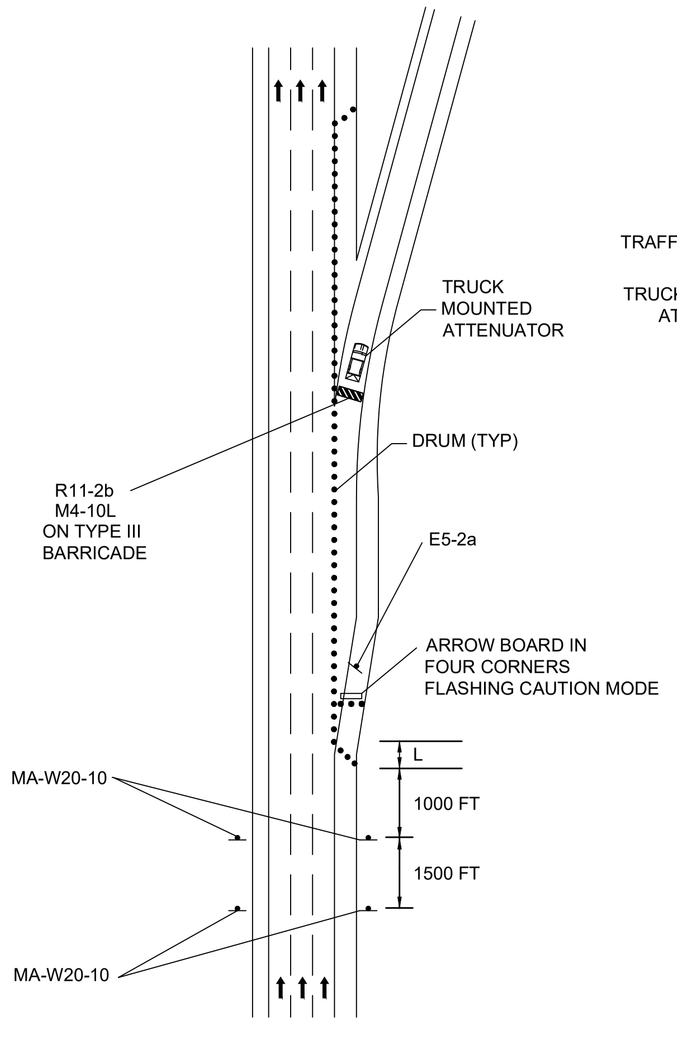
852.7.9 - DIVIDED HIGHWAY LEFT TWO LANES CLOSURE (SHORT TERM)
NOT TO SCALE



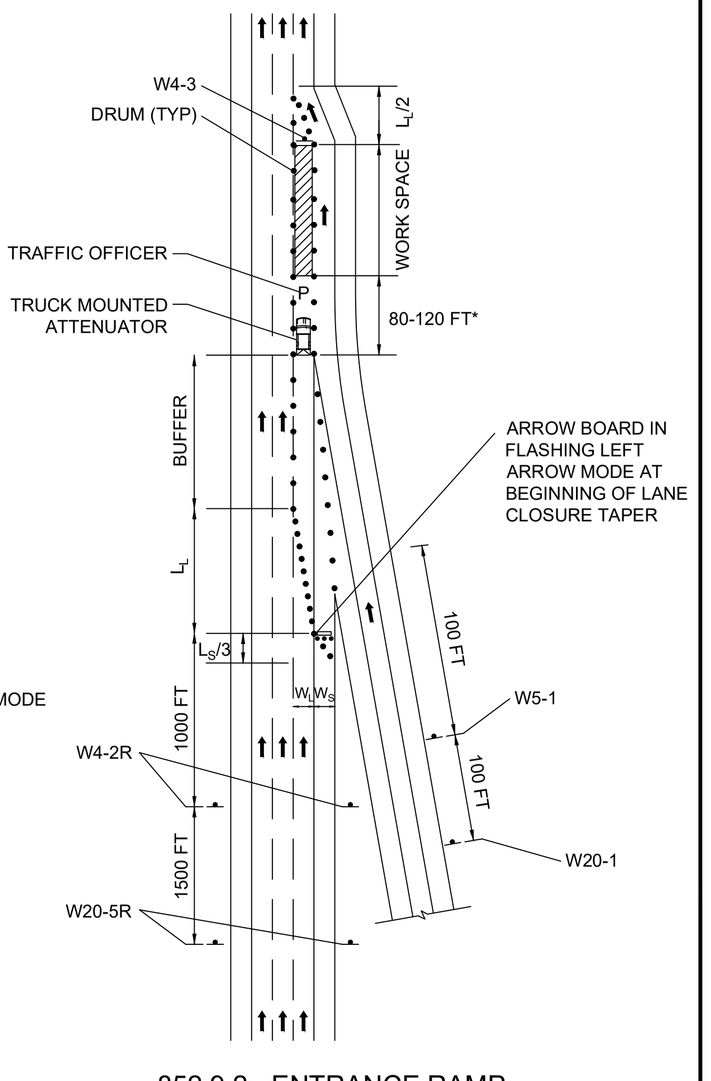
PARTIAL ENTRANCE RAMP CLOSURE (LONG TERM)
NOT TO SCALE



852.8.6 - EXIT RAMP WORK WITHIN VICINITY OF RAMP (APPROACH SIDE)
NOT TO SCALE



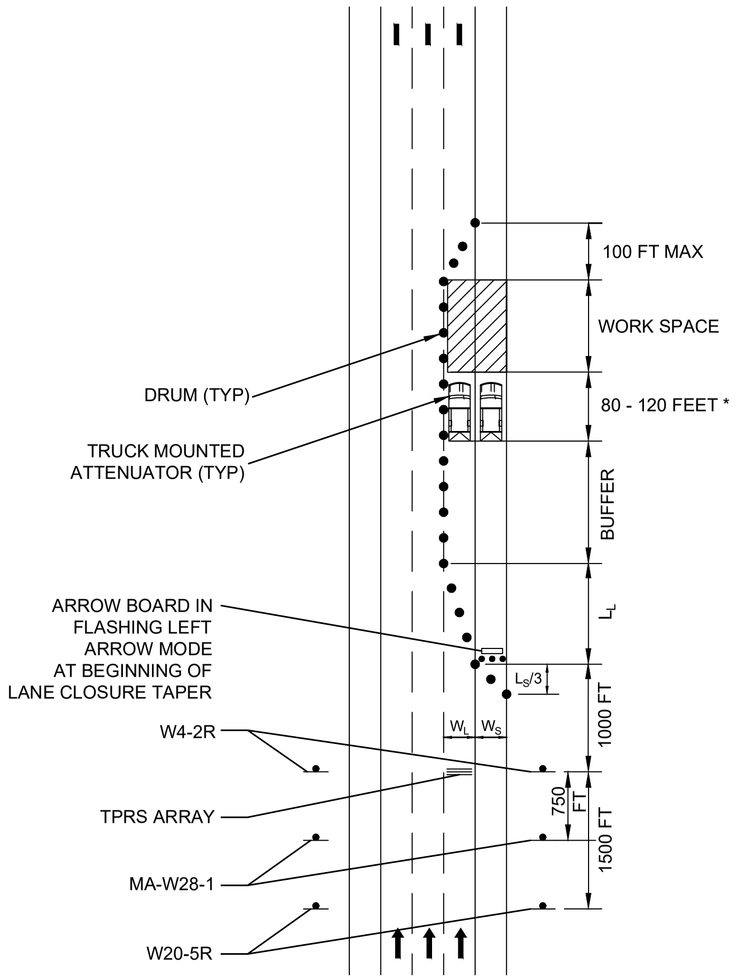
852.8.3 - EXIT RAMP TYPICAL CLOSURE
NOT TO SCALE



852.9.2 - ENTRANCE RAMP WORK WITHIN VICINITY OF RAMP
NOT TO SCALE

A00803 - 27
Proposal No. 613196-133292
MASSDOT 10 BRIDGES_TTCP_WALNUT ST.DWG Plotted on 16-Dec-2025 4:05 PM

MASSDOT 10 BRIDGES_TTCP_WALNUT ST.DWG Plotted on 16-Dec-2025 4:05 PM
Proposal No. 613196-133292
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852.7.3 - DIVIDED HIGHWAY RIGHT LANE CLOSURE (SHORT TERM)
NOT TO SCALE

TEMPORARY PORTABLE RUMBLE STRIP (TPRS)
A TPRS ARRAY SHALL HAVE THEE RUMBLE STRIPS. SPACING SHALL BE AS FOLLOWS:

POSTED REGULATORY OR WORK ZONE SPEED

60 MPH AND ABOVE — 20'

40 MPH TO 55 MPH — 15'

NOTE: TPRS SHALL BE DEPLOYED ONLY FOR SETUPS OF 12 HOURS OR LESS

TYPICAL TAPER LENGTHS (L, L_L, L_S) IN FEET			
SPEED LIMIT (S) IN MPH	WIDTH OF OFFSET (W_L OR W_S) IN FEET		
	10	11	12
50	500	550	600
55	550	605	660
60	600	660	720
65	650	715	780

NOTE: FOR OFFSET WIDTHS NOT LISTED IN TABLE, USE L=WS.

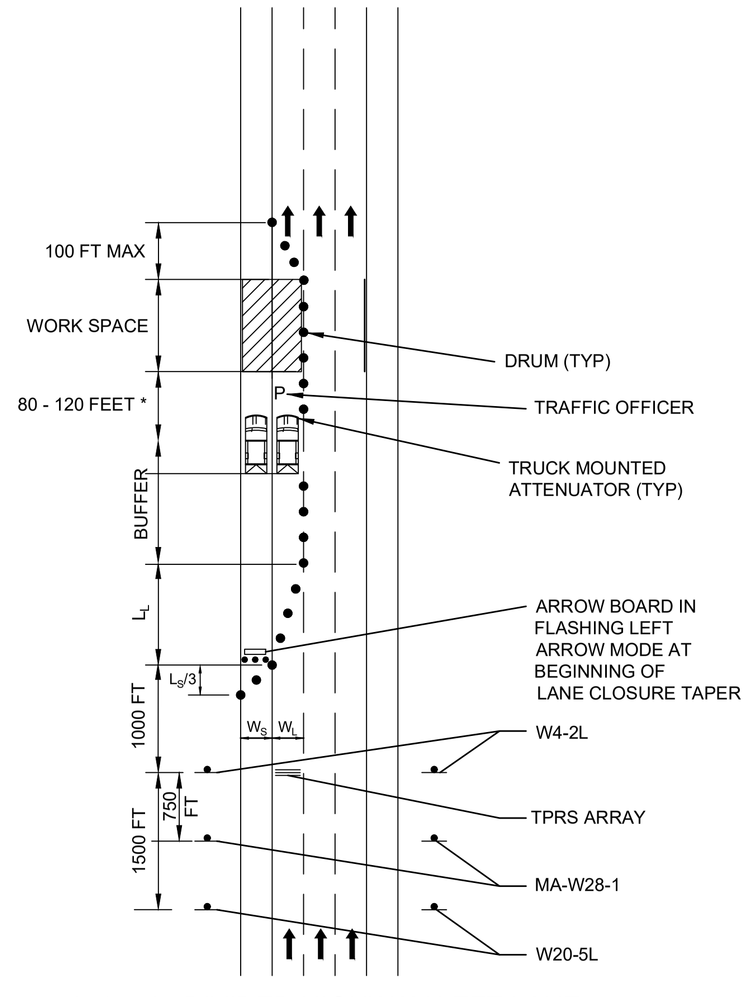
STOPPING SIGHT DISTANCE	
SPEED (MPH)	DISTANCE (FT)
35	250
40	305
45	360
50	425
55	495
60	570
65	645

MINIMUM LENGTH OF LONGITUDINAL BUFFER IS EQUAL TO THE STOPPING SIGHT DISTANCE AT THE POSTED SPEED AND CAN DETERMINED FROM THE FOLLOWING TABLE

NOTES:

1. THE FIRST TEN DRUMS OF EACH LANE CLOSURE TAPER SHALL BE MOUNTED WITH SEQUENTIALLY FLASHING LIGHTS IF DEPLOYED BETWEEN DUSK AND DAWN.
2. MAXIMUM DRUM SPACING IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH. IN TANGENT SECTIONS, MAXIMUM SPACING IN FEET IS EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH.
3. THIS SETUP ALSO APPLIES TO 3 OR 4 LANE SECTIONS.

* DISTANCE MAY BE INCREASED IF ADDITIONAL ROLL-AHEAD ALLOWANCE IS NEEDED. REFER TO MANUFACTURER'S SPECIFICATIONS.



852.7.4 - DIVIDED HIGHWAY LEFT LANE CLOSURE (SHORT TERM)
NOT TO SCALE

DIVIDED HIGHWAY - LEFT SHOULDER CLOSURE (LONG TERM)
NOT TO SCALE

852.9.3 - ENTRANCE RAMP WORK DOWNSTREAM
NOT TO SCALE

DIVIDED HIGHWAY - MULTIPLE LANE SHIFT WITH BARRIER
NOT TO SCALE

* CONTRACTOR SHALL FOG SEAL THE NEW PAVEMENT AND REPLACE EXISTING PERMANENT PAVEMENT MARKINGS IN KIND AFTER THE TRAFFIC CONTROL SET UP IS TAKEN DOWN.

TRAFFIC DEVICE LEGEND:

- CONSTRUCTION AREA
- REFLECTORIZED DRUM
- TEMPORARY ROADSIDE SIGN
- P — POLICE DETAIL
- WALNUT ST NB DETOUR ROUTE
- ARROW BOARD
- WALNUT ST SB DETOUR ROUTE
- TRUCK MOUNTED ATTENUATOR
- DIRECTIONAL TRAFFIC FLOW
- TYPE III BARRICADE
- TEMPORARY PORTATBLE RUMBLE STRIP (TPRS)

PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

IF USED, PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) AS AMENDED AND SHOULD BE PLACED ON THE SHOULDER OF THE ROADWAY OR IF PRACTICAL SET WELL AWAY FROM THE TRAVEL LANE. MESSAGE SIGNS SHOULD BE PROTECTED WITH RETROREFLECTIVE TEMPORARY TRAFFIC CONTROL DEVICES WHEN PLACED WITHIN THE AVAILABLE CLEAR ZONE OR ELSE SHIELDED WITH A BARRIER OR CRASH CUSHION. THE FINAL LOCATION AND USE OF THE PCMS SHALL BE DETERMINED BY THE ENGINEER.

*ALTERNATIVE MESSAGES MAY BE DETERMINED BY THE ENGINEER IN THE FIELD.

*EXACT LOCATION OF PCMS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

TWO (2) WEEKS PRIOR TO ROAD CLOSURE, PCMS 1 & 2, SHALL BE INSTALLED WITH THE FOLLOWING SUGGESTED MESSAGE:

MESSAGE 1A:

W A L N U T
S T R E E T
C L O S E D

MESSAGE 1B:

M M M / D D
T O
M M M / D D

WHILE ROAD CLOSURE IS IN EFFECT, PCMS 1 & 2, WILL DISPLAY THE FOLLOWING SUGGESTED MESSAGE UNTIL BRIDGE IS AGAIN OPEN FOR TRAFFIC:

MESSAGE 2A:

W A L N U T
S T R E E T
C L O S E D

MESSAGE 2B:

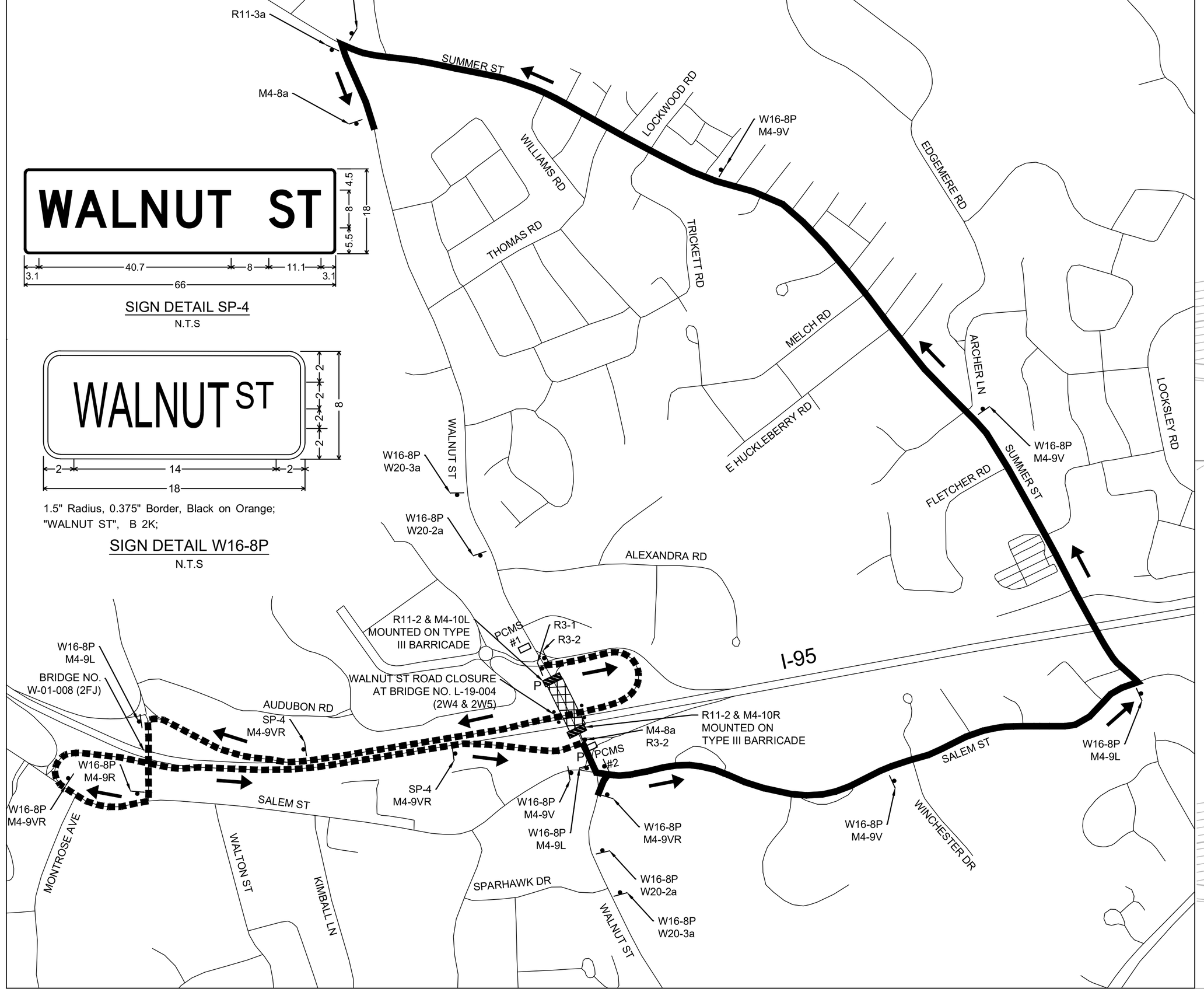
F O L L O W
D E T O U R
1 1 P M - 5 A M

NOTE:
ALL LANE AND ROAD CLOSURES WILL HAVE POLICE DETAILS PRESENT TO MANAGE TRAFFIC AND OVERRIDE SIGNALS AS NECESSARY TO ENSURE SAFETY AND PROPER OPERATIONS.

LYNNFIELD
I-95/ROUTE 128 OVER WALNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	27	29
PROJECT FILE NO.	613196		

DETOUR PLAN &TTCP

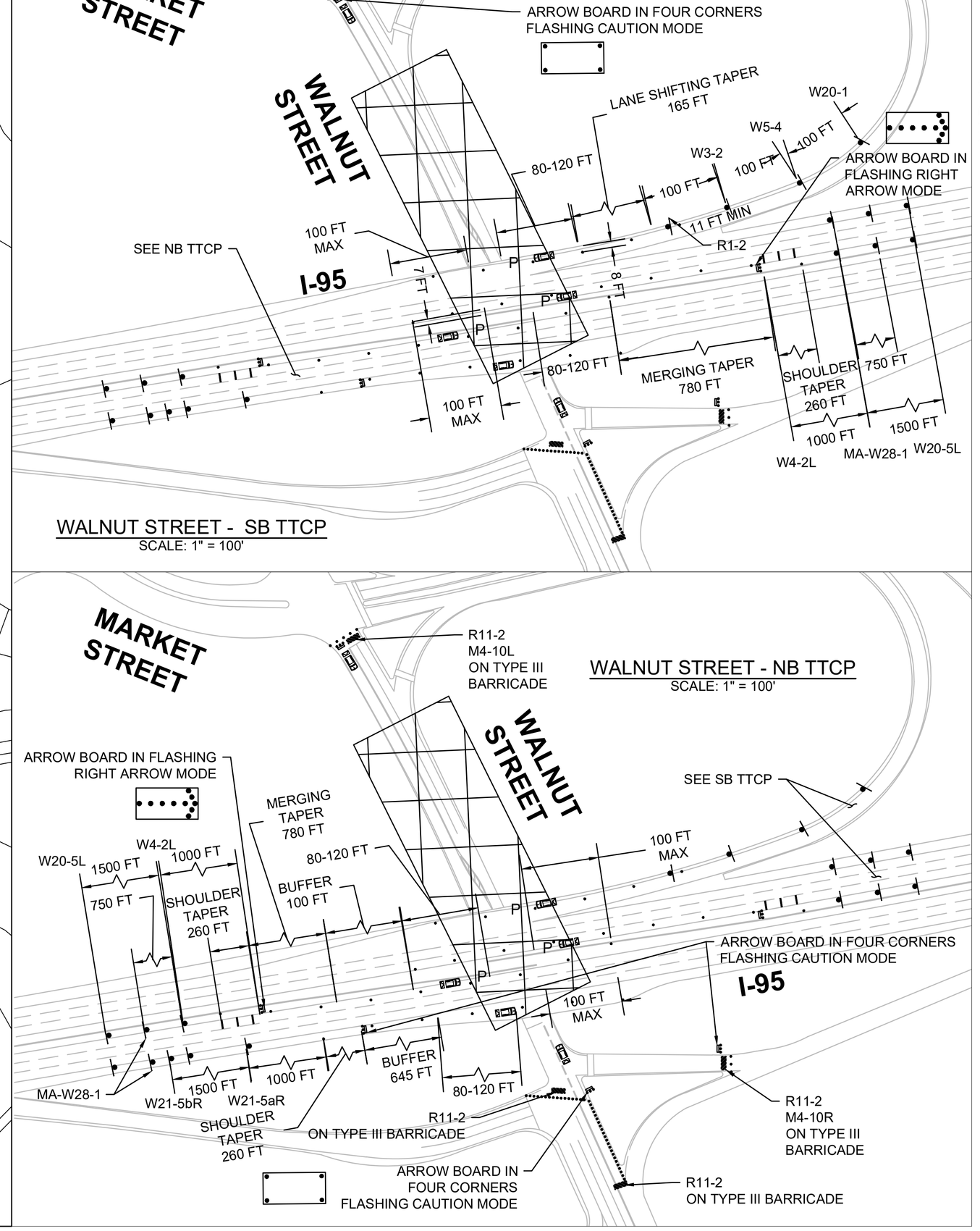


WALNUT STREET DETOUR ROUTE
SCALE: 1" = 500'

SIGN DETAIL SP-4
N.T.S

1.5" Radius, 0.375" Border, Black on Orange;
"WALNUT ST", B 2K;

SIGN DETAIL W16-8P
N.T.S



MASSDOT 10 BRIDGES_DET.DWG Plotted on 23-Dec-2025 10:51 AM
Proposal No. 613196-133292
A00803 - 29

LYNNFIELD
I-95/ROUTE 128 OVER WALNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	28	29
PROJECT FILE NO.	613196		

TEMPORARY TRAFFIC SIGN SUMMARY - SHEET 1

CONSTRUCTION SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE WIDTH (IN)	SIZE HEIGHT (IN)	TEXT	DIMENSIONS (IN) LETTER HEIGHT	DIMENSIONS (IN) VERTICAL SPACING	DIMENSIONS (IN) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACKGROUND	COLOR LEGEND	COLOR BORDER	UNIT AREA (S.F.)	TOTAL AREA (S.F.)
M4-8a	24"	18"	END DETOUR	(1)	(1)	(1)	2	FLUOR. ORANGE	BLACK	BLACK	3.00	6.00
M4-9L	48"	36"	DETOUR ←				4	FLUOR. ORANGE	BLACK	BLACK	12.00	36.00
M4-9R	48"	36"	DETOUR →				1	FLUOR. ORANGE	BLACK	BLACK	12.00	12.00
M4-9V	48"	36"	DETOUR ↑				4	FLUOR. ORANGE	BLACK	BLACK	12.00	36.00
M4-9VR	48"	36"	DETOUR ↗				4	FLUOR. ORANGE	BLACK	BLACK	12.00	48.00
M4-10L	48"	18"	← DETOUR				1	FLUOR. ORANGE	BLACK	BLACK	6.00	6.00
M4-10R	48"	18"	DETOUR →				1	FLUOR. ORANGE	BLACK	BLACK	6.00	6.00
MA-R2-10a	48"	36"	WORK ZONES / SPEEDING FINES DOUBLED	(2)	(2)	(2)	4	FLUOR. ORANGE & WHITE	BLACK	BLACK	12.00	48.00
	60"	48"					4				20.00	80.00
MA-R2-10e	36"	48"	END ROAD WORK DOUBLE FINES END				4	FLUOR. ORANGE & WHITE	BLACK	BLACK	12.00	48.00
	48"	60"					4				20.00	80.00
MA-W20-5bL	48"	48"	LEFT TWO LANES CLOSED XX FT				2	FLUOR. ORANGE & WHITE	BLACK	BLACK	16.00	32.00
MA-W20-5bR	48"	48"	RIGHT TWO LANES CLOSED XX FT				2	FLUOR. ORANGE & WHITE	BLACK	BLACK	16.00	32.00
MA-W20-7b	36"	36"	POLICE OFFICER AHEAD				4	FLUOR. ORANGE	BLACK	BLACK	9.00	36.00
MA-W28-1	36"	36"	RUMBLE STRIPS AHEAD				2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
R1-2	48" x 48" x 48"		YIELD	(1)	(1)	(1)	1	WHITE	RED	RED	6.93	6.93
R3-1	36"	36"					1	WHITE	RED / BLACK	BLACK	9.00	9.00
R3-2	36"	36"					2	WHITE	RED / BLACK	BLACK	9.00	18.00

CONSTRUCTION SIGN SUMMARY (CONTINUED)

IDENTIFICATION NUMBER	SIZE WIDTH (IN)	SIZE HEIGHT (IN)	TEXT	DIMENSIONS (IN) LETTER HEIGHT	DIMENSIONS (IN) VERTICAL SPACING	DIMENSIONS (IN) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACKGROUND	COLOR LEGEND	COLOR BORDER	UNIT AREA (S.F.)	TOTAL AREA (S.F.)
R9-11aL	24"	12"	SIDEWALK CLOSED ← CROSS HERE	(1)	(1)	(1)	1	WHITE	BLACK	BLACK	2.00	2.00
R9-11aR	24"	12"	SIDEWALK CLOSED → CROSS HERE				1	WHITE	BLACK	BLACK	2.00	2.00
R11-2	48"	30"	ROAD CLOSED				4	WHITE	BLACK	BLACK	10.00	20.00
R11-3a	60"	30"	ROAD CLOSED AHEAD / LOCAL TRAFFIC ONLY				1	WHITE	BLACK	BLACK	12.50	12.50
SP-4	66"	18"	WALNUT ST	8.00	5.00	-	2	FLUOR. ORANGE	BLACK	BLACK	8.25	16.50
W1-4L	36"	36"		(1)	(1)	(1)	2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W1-4R	36"	36"					2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W3-2	48"	48"					1	FLUOR. ORANGE	BLACK	BLACK	16.00	16.00
W4-1	48"	48"					1	FLUOR. ORANGE	BLACK	BLACK	16.00	16.00
W4-2L	36"	36"					2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
	48"	48"					4				16.00	64.00
W4-2R	36"	36"					1	FLUOR. ORANGE	BLACK	BLACK	9.00	9.00
	48"	48"					4				16.00	64.00
W4-3	48"	48"					1	FLUOR. ORANGE	BLACK	BLACK	16.00	16.00
W5-1	36"	36"	ROAD NARROWS				2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00

NOTES:

1. RETROREFLECTIVE SHEETING FOR ALL GUIDE AND TRAFFIC SIGNS SHALL CONFORM TO MASSDOT STANDARD SPECIFICATION SECTION M9.30.0. FLUORESCENT SHEETING SHALL BE USED FOR ALL ORANGE BACKGROUND SIGNS.

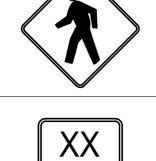
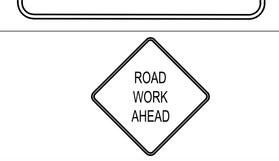
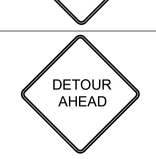
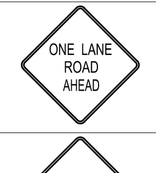
(1) SEE THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND "STANDARD HIGHWAY SIGNS" BY FEDERAL HIGHWAY ADMINISTRATION (LATEST EDITIONS) FOR TEXT DIMENSIONS AND COLORS. SEE ALSO THE "MASSACHUSETTS MUTCD AMENDMENTS".

(2) SEE THE MASSDOT "STANDARD SIGNS" LATEST EDITION.

MASSDOT 10 BRIDGES_TTCP_WALNUT ST.DWG Plotted on 16-Dec-2025 4:05 PM

Proposal No. 613196-133292

CONSTRUCTION SIGN SUMMARY (CONTINUED)

IDENTIFICATION NUMBER	SIZE WIDTH (IN)	SIZE HEIGHT (IN)	TEXT	DIMENSIONS (IN) LETTER HEIGHT	DIMENSIONS (IN) VERTICAL SPACING	DIMENSIONS (IN) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACK-GROUND	COLOR LEGEND	COLOR BORDER	UNIT AREA (S.F.)	TOTAL AREA (S.F.)
W11-2	36"	36"		(1)	(1)	(1)	4	FLUOR. YELLOW GREEN	BLACK	BLACK	9.00	36.00
W13-1p	24"	24"					2	FLUOR. ORANGE	BLACK	BLACK	4.00	8.00
	30"	30"					4				6.25	25.00
W16-7pL	24"	12"					4	FLUOR. YELLOW GREEN	BLACK	BLACK	2.00	8.00
W16-8P	18"	8"		2.00	2.00	-	15	FLUOR. ORANGE	BLACK	BLACK	1.00	13.00
				4.00								
W20-1	36"	36"		(1)	(1)	(1)	4	FLUOR. ORANGE	BLACK	BLACK	9.00	36.00
	48"	48"					5				16.00	80.00
W20-2a	36"	36"					2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W20-3a	36"	36"					2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W20-4	36"	36"					2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W20-5L	36"	36"					2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
	48"	48"					2				16.00	32.00
W20-5R	36"	36"					1	FLUOR. ORANGE	BLACK	BLACK	9.00	9.00
	48"	48"					2				16.00	32.00

NOTES:

1. RETROREFLECTIVE SHEETING FOR ALL GUIDE AND TRAFFIC SIGNS SHALL CONFORM TO MASSDOT STANDARD SPECIFICATION SECTION M9.30.0. FLUORESCENT SHEETING SHALL BE USED FOR ALL ORANGE BACKGROUND SIGNS.

(1) SEE THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND "STANDARD HIGHWAY SIGNS" BY FEDERAL HIGHWAY ADMINISTRATION (LATEST EDITIONS) FOR TEXT DIMENSIONS AND COLORS. SEE ALSO THE "MASSACHUSETTS MUTCD AMENDMENTS".

(2) SEE THE MASSDOT "STANDARD SIGNS" LATEST EDITION.

LYNNFIELD
I-95/ROUTE 128 OVER WALNUT STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	29	29
PROJECT FILE NO.	613196		

TEMPORARY TRAFFIC SIGN SUMMARY - SHEET 2

MASSDOT 10 BRIDGES_TTCP_WALNUT ST.DWG Plotted on 16-Dec-2025 4:06 PM

Proposal No. 613196-133292

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DOCUMENT A00804

DRAWINGS – LYNNFIELD
BRIDGE NO. L-19-007 (2W6) & (2W7)

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MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

REPAIR PLANS AND DETAILS FOR

I-95/ROUTE 128

(BRIDGE NO. L-19-007)

IN THE TOWN OF

LYNNFIELD

ESSEX COUNTY

FEDERAL AID PROJECT NO. NFA

PS&E RESUBMISSION

LYNNFIELD
I-95/ROUTE 128

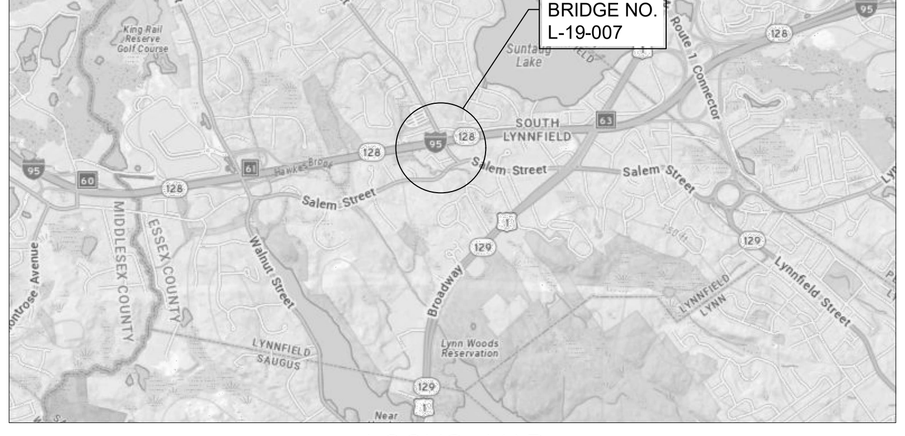
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	1	26
PROJECT FILE NO.	613196		

TITLE SHEET & INDEX

THESE PLANS ARE SUPPLEMENTED BY THE OCTOBER 2025 CONSTRUCTION STANDARD DETAILS, THE 2015 OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS, THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK.

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET & INDEX
2-20	BRIDGE SHEETS
21-26	TEMPORARY TRAFFIC CONTROL PLANS



LOCUS MAP

APPROXIMATE SCALE: 1" = 2000'

DESIGN DESIGNATION (L-19-007)	
DESIGN SPEED	**65 MPH**
ADT (PRESENT)	143,300
ADT (2043)	158,330
K	12%
D	51% NB
T (PEAK HOUR)	7.4%
T (AVERAGE DAY)	6.1%
DHV	11,000
DDHV	6,000
FUNCTIONAL CLASSIFICATION	URBAN INTERSTATE

DATE	DESCRIPTION	REV #

massDOT
Massachusetts Department of Transportation
Highway Division

Jacobs.
120 ST. JAMES AVENUE, 5TH FLOOR
BOSTON, MA 02116

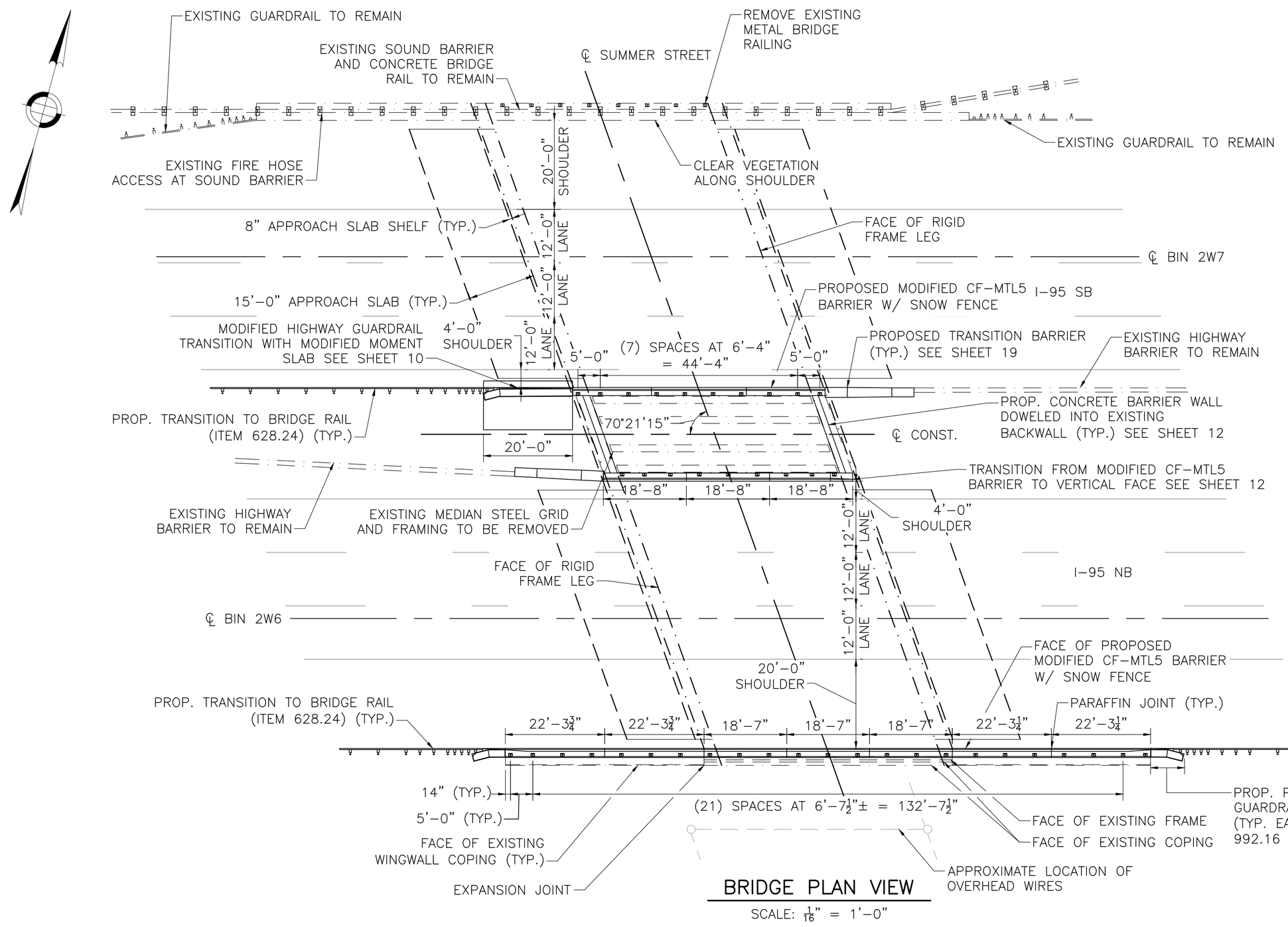
24-October-2025

PS&E Resubmission

01 - COVER_SHEET.DWG Plotted on 22-Oct-2025 9:34 AM

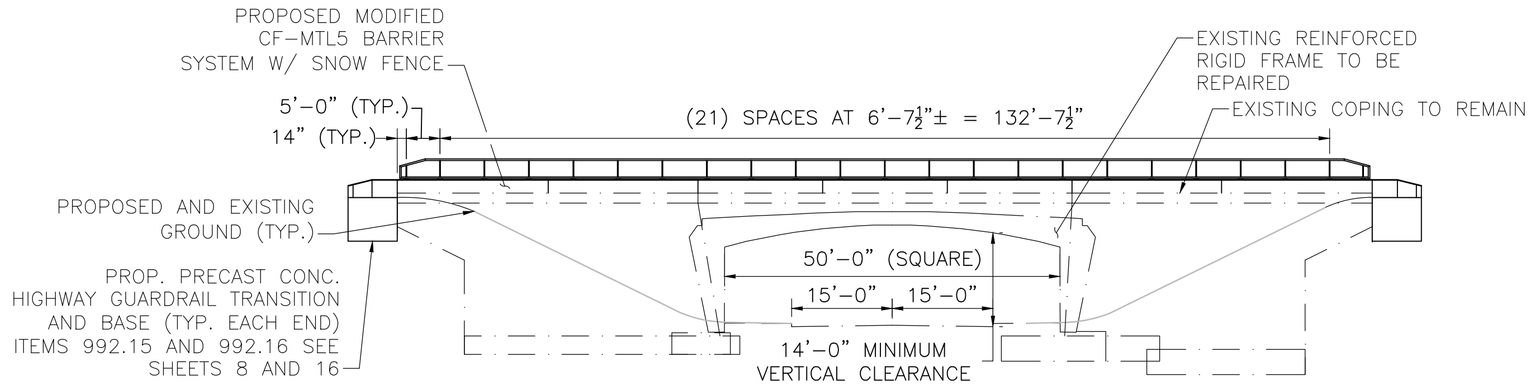
Proposal No. 613196-133292

A00804 - 3



BRIDGE PLAN VIEW

SCALE: 1/16" = 1'-0"



ELEVATION (LOOKING NORTH)

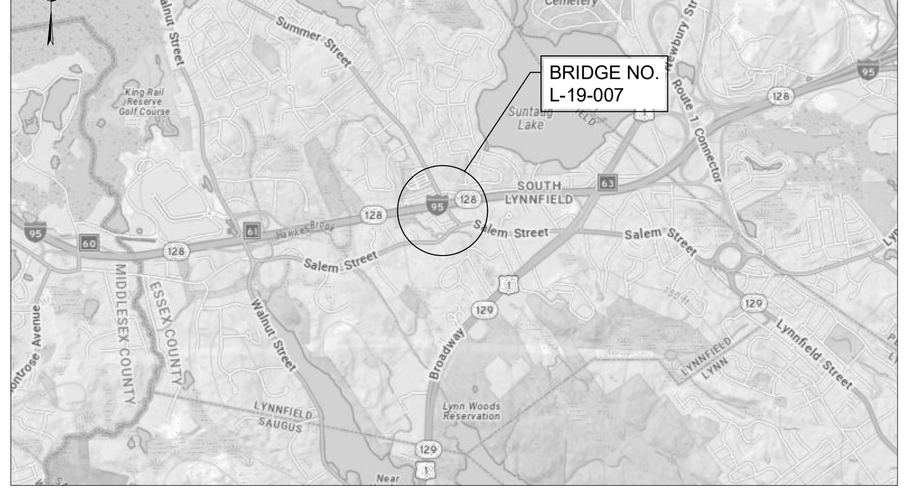
SCALE: 1/16" = 1'-0"

NOTE:
SOUTH ELEVATION SHOWN, NORTH ELEVATION SIMILAR DIMENSIONS UNLESS OTHERWISE NOTED.

LYNNFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	2	26
	PROJECT FILE NO. 613196		

PLAN AND ELEVATION



LOCUS MAP

APPROXIMATE SCALE: 1" = 2000'

INDEX

SHEET NO.	DESCRIPTION
1	PLAN AND ELEVATION
2	GENERAL NOTES
3-5	DEMOLITION CROSS SECTIONS
6	PROPOSED CROSS SECTION
7-8	MODIFICATION DETAILS
9-12	REINFORCING DETAILS
13-15	CONCRETE REPAIRS
16	GUARDRAIL TRANSITION DETAILS
17-18	SNOW FENCE DETAILS
19	TAPERED BARRIER DETAILS

*
2W6
2W7

MONTH DD, YYYY | ISSUED FOR CONSTRUCTION

MassDOT Massachusetts Department of Transportation Highway Division

BRIDGE PRESERVATION

LYNNFIELD

I-95/ROUTE 128
OVER SUMMER STREET

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION
10 PARK PLAZA BOSTON, MASS

Jacobs.
120 ST. JAMES AVENUE, 5TH FLOOR
BOSTON, MA 02116

SHEET 1 OF 19 SHEETS BRIDGE NO. L-19-007 (*)

2-PLAN AND ELEVATION.DWG Plotted on 22-Oct-2025 2:26 PM
24-October-2025
PS&E Resubmission
Proposal No. 613196-133292
A00804 - 4

GENERAL NOTES:

1. DIMENSIONS SHOWN ARE TAKEN FROM ORIGINAL DESIGN DRAWINGS AND ARE NOT GUARANTEED. THE CONTRACTOR SHALL ESTABLISH THEIR 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. NO SURVEY WAS PERFORMED AS PART OF THIS PRESERVATION PROJECT.

2. THE CONTRACTOR SHALL SUBMIT SURVEY OF ROADWAY TO THE ENGINEER TO ESTABLISH THE ACTUAL ROADWAY PROFILE. THE SURVEY SHALL INCLUDE EXISTING ROADWAY ELEVATIONS ALONG EACH EDGE OF PAVEMENT AND CROWN LINE AT 25 FOOT INTERVALS, AT ENDS OF THE BRIDGE AND AT ENDS OF THE WINGWALLS. THE LIMITS OF SURVEY SHALL EXTEND 250 FEET EACH SIDE OF THE LIMITS OF WORK.

3. REMOVE EXISTING PAVEMENT MARKINGS AND REPLACE WITH NEW SLOTTED PAVEMENT MARKINGS AT LOCATIONS DISTURBED BY APPROACH ROADWAY PAVING.

4. DURING SURVEY, CONTRACTOR SHALL MEASURE THE LENGTH OF EACH EXISTING WINGWALL PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES BETWEEN THE LENGTHS SHOWN ON RECORD DRAWINGS OR THESE PLANS SHALL BE REPORTED TO THE ENGINEER PRIOR TO FABRICATION OF THE SNOW FENCE.

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:
SEE TRAFFIC DRAWINGS FOR TRAFFIC MANAGEMENT PLANS.

SCALES:
SCALES NOTED ON THE PLANS ARE NOT APPLICABLE TO REDUCED SIZE PRINTS. DIVIDE SCALES BY 2 FOR HALF-SIZE PRINTS (A3).

ANCHOR BOLTS:
ALL ANCHOR BOLTS SHALL BE SET BY TEMPLATE BEFORE THE CONCRETE IS PLACED.

CONCRETE:
5000 PSI, $\frac{3}{8}$ INCH, 710 HP CEMENT CONCRETE TO BE USED FOR BARRIER RECONSTRUCTION WORK.

4000 PSI, $\frac{3}{8}$ INCH, 660 CEMENT CONCRETE TO BE USED FOR PATCHING OF FRAMES AND FRAME WALLS.

REINFORCEMENT:
RENFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M31 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"	19"	23"
2. 12" OF CONCRETE BELOW BAR	20"	25"	30"
3. EPOXY COATED BARS, COVER < $3d_b$, OR CLEAR SPACING <$6d_b$	23"	29"	34"
4. COATED BARS, ALL OTHER CASES	18"	23"	27"
5. CONDITION 2. AND 3.	26"	32"	39"
6. CONDITION 2. AND 4.	24"	30"	36"

ALL OTHER BARS SHALL BE LAPPED AS SHOWN ON THE CONSTRUCTION DRAWINGS.

DATE:
TO BE PLACED ON THE INSIDE FACE OF THE SOUTHWEST HIGHWAY GUARDRAIL TRANSITION. A SHEET SHOWING SIZE AND CHARACTER OF NUMERALS WILL BE FURNISHED. THE DATE USED SHALL BE 1960 (THE YEAR THE BRIDGE WAS REBUILT).

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

UTILITIES
EXISTING FIRE CONNECTION AT NORTHWEST CORNER TO REMAIN ACCESSIBLE DURING CONSTRUCTION.

OVERHEAD WIRES AT SOUTH FASCIA TO REMAIN.

ESTIMATED QUANTITIES
(NOT GUARANTEED)

SELECTIVE CLEARING AND THINNING AT BRIDGES	184	SY
EARTH EXCAVATION	36	CY
REINFORCED CONCRETE RIGID FRAME EXCAVATION (PARTIAL DEPTH)	2.07	CY
BRIDGE EXCAVATION ALONG RIGID FRAME RAILING BRIDGE NO. L-19-007 (BIN 2W6)	1	LS
BRIDGE EXCAVATION ALONG RIGID FRAME RAILING BRIDGE NO. L-19-007 (BIN 2W7)	1	LS
GRAVEL BORROW FOR BACKFILLING STRUCTURES AND PIPES	83	CY
CONTROLLED LOW-STRENGTH MATERIAL (>300 PSI)	20	CY
DISPOSAL OF TREATED WOOD PRODUCTS	4334	LBS
HMA FOR PATCHING	214	TONS
TRANSITION TO BRIDGE RAIL	3	EA
SILT SACK	4	EA
SEEDING	3700	SF
PAVEMENT MILLING MULCH UNDER GUARDRAIL	150	FT
DELINEATION FOR GUARD RAIL TERMINI	4	EA
4000 PSI, 3/8 INCH, 660 CEMENT CONCRETE	53	CF
REPAIRS TO UNDERSIDE OF REINFORCED CONCRETE RIGID FRAMES	30	SF
ALTERATION TO BRIDGE NO. L-19-007 (BIN 2W6)	1	LS
ALTERATION TO BRIDGE NO. L-19-007 (BIN 2W7)	1	LS

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MA	NFA	3	26
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GENERAL NOTES

TRAFFIC DATA	ROADWAY OVER	ROADWAY UNDER
DESIGN YEAR	2043	2043
AVERAGE DAILY TRAFFIC – PRESENT	143300	8400
AVERAGE DAILY TRAFFIC – DESIGN YEAR	158330	9300
DESIGN HOURLY VOLUME	11000	780
DIRECTIONAL DISTRIBUTION	51% NB	52% SB
TRUCK PERCENTAGE – AVERAGE DAY	6.1%	3.3%
TRUCK PERCENTAGE – PEAK HOUR	7.4%	7.5%
DESIGN SPEED	65	40
DIRECTIONAL DESIGN HOURLY VOLUME	6000	470

PROJECT INFORMATION
PROJECT FILE NO.: 613196
PROJECT DESCRIPTION: 10 BRIDGE BUNDLE
BRIDGE DESIGN LOADING: H-20
SURVEY: N/A

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2W6
2W7

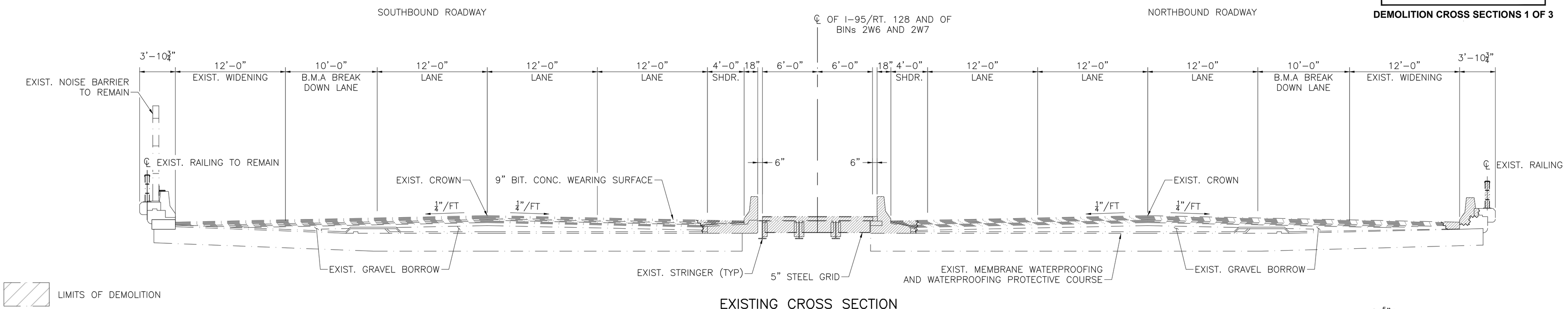
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

3-GENERAL NOTES.DWG Plotted on 22-Oct-2025 1:11 PM
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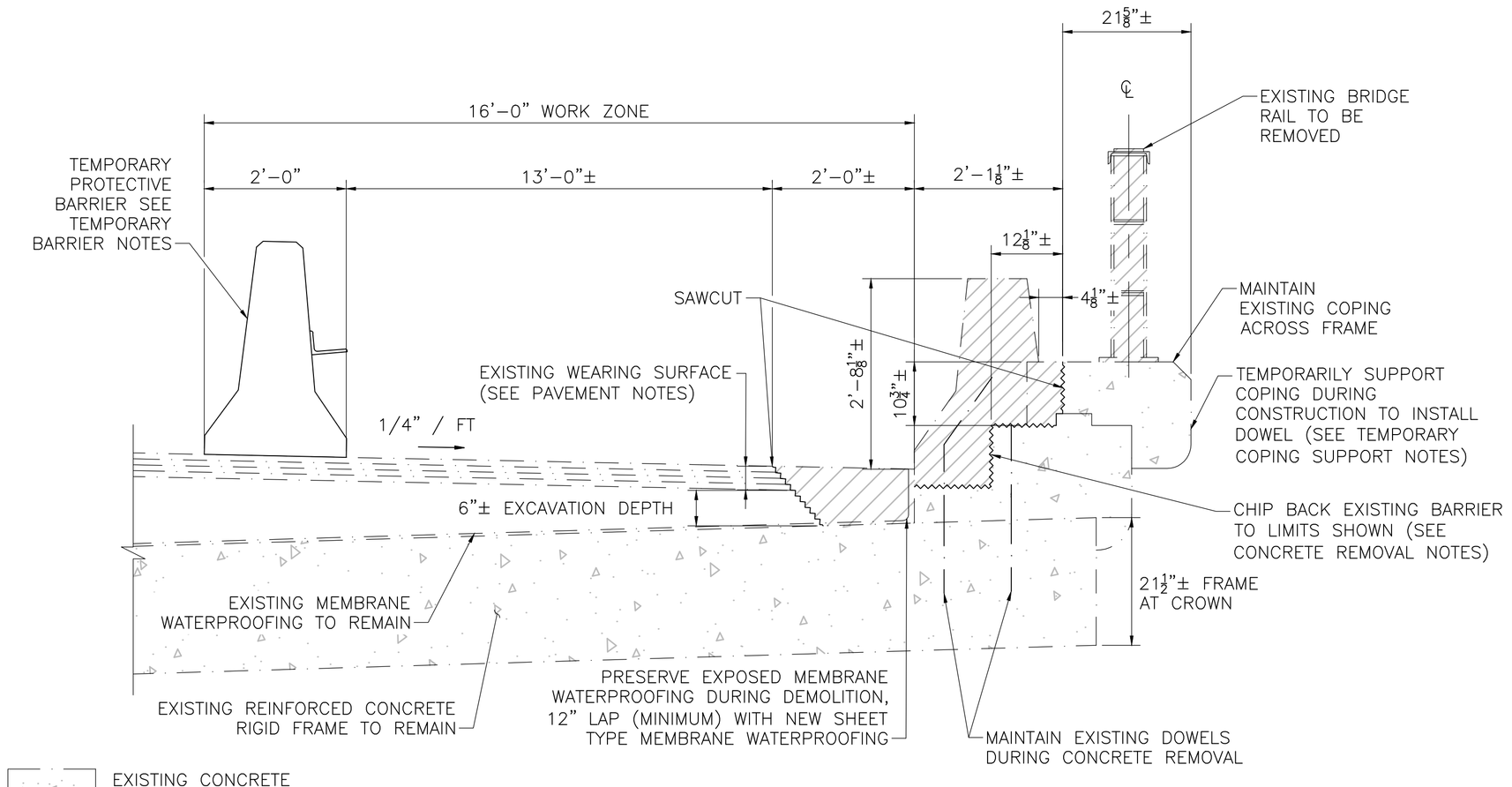
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	4	26
	PROJECT FILE NO. 613196		

DEMOLITION CROSS SECTIONS 1 OF 3



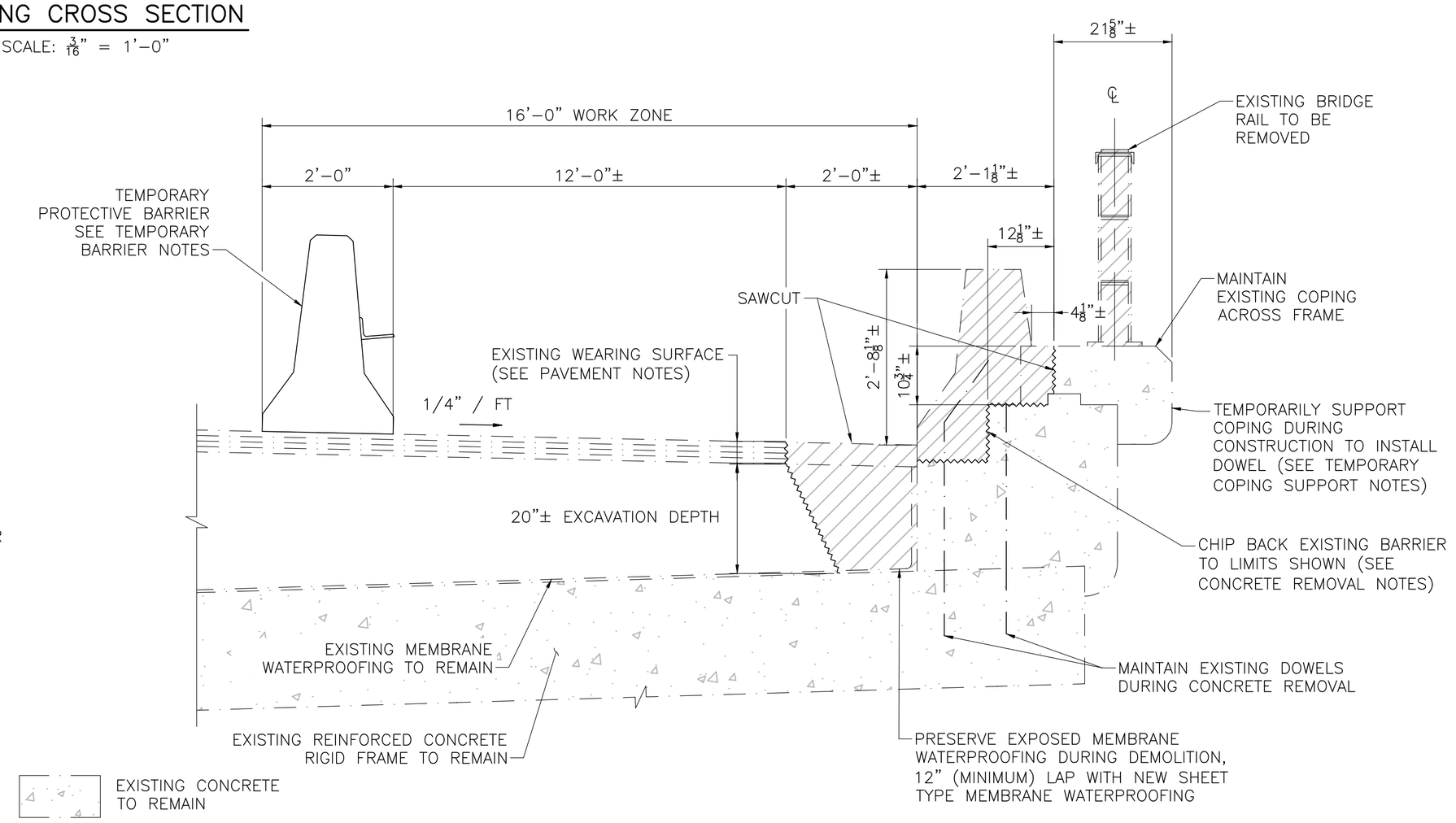
EXISTING CROSS SECTION

SCALE: $\frac{3}{16}$" = 1'-0"



LIMITS OF DEMOLITION AT NORTHBOUND ROADWAY AT MIDSPAN (SOUTH FASCIA)

NOT TO SCALE



LIMITS OF DEMOLITION AT NORTHBOUND ROADWAY AT ABUTMENT (SOUTH FASCIA)

NOT TO SCALE

NOTES:

ALL EXISTING LANE LINES SHOWN FROM RECORD DRAWINGS ARE APPROXIMATE. NO SURVEY WAS PERFORMED AS PART OF THIS BRIDGE PRESERVATION TASK. CONTRACTOR TO CONFIRM LANE LINE MARKINGS PRIOR TO START OF WORK.

WORK ZONE NOTES:

WORK ZONE AT MEDIAN BARRIERS REQUIRES TEMPORARY LANE SHIFTS OR REDUCTION OF TRAVEL LANES TO 11'. CONTRACTOR TO COORDINATE WITH DISTRICT TRAFFIC.

PAVEMENT NOTES:

1. EXISTING PAVEMENT THICKNESS IS BASED OFF EXISTING RECORD DRAWINGS, CONTRACTOR SHALL CONFIRM EXISTING THICKNESS PRIOR TO CONSTRUCTION.
2. PROPOSED PAVEMENT SHALL BE PLACED IN MAXIMUM 3" LIFTS AND MATCH EXISTING THICKNESS.
3. TO BE PAID UNDER ITEM 451. HMA FOR PATCHING. ASPHALT EMULSION FOR TACK COAT AND HMA JOINT SEALANT ARE INCIDENTAL TO ITEM 451. AND SHALL BE USED IN ACCORDANCE WITH MASSDOT STANDARD SPECIFICATIONS SECTION 450, PAVEMENT MIX SPC-B-12.5.

CONCRETE REMOVAL NOTES:

1. EXISTING BARRIER CONCRETE SHALL BE CHIPPED BACK TO COLD JOINT OF PREVIOUS BARRIER MODIFICATIONS.
2. IF CONCRETE IS DETERMINED TO BE UNSOUND PAST THE LIMITS OF CONCRETE REMOVAL, THEN THE LIMITS MAY BE INCREASED AS DIRECTED BE THE RESIDENT ENGINEER. SEE SPECIAL PROVISIONS.
3. EXISTING BRIDGE RAIL ANCHOR BOLTS SHALL BE CUT DOWN ¾" DEEP INTO EXISTING COPING AND HOLES TO BE FILLED WITH SEALANT.

TEMPORARY BARRIER NOTES:

TEMPORARY CONCRETE BARRIER SHALL BE RETROFITTED TO MASH TL-3 STANDARDS IN ACCORDANCE WITH DRAWING NUMBERS 853.23.1 AND 853.23.2 OF THE MASSDOT CONSTRUCTION STANDARDS ISSUED JUNE OF 2025.

TEMPORARY COPING SUPPORT:

1. TEMPORARY COPING SUPPORT SHALL REMAIN IN PLACE UNTIL CONCRETE HAS CURED FOR 28 DAYS.
2. SUPPORT SHALL NOT REDUCE EXISTING BRIDGE MINIMUM VERTICAL CLEARANCE.

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2W6
2W7

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
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Proposal No. 613196-133292
4-6-DEMO CROSS SECTIONS.DWG Plotted on 22-Oct-2025 1:11 PM
24-October-2025
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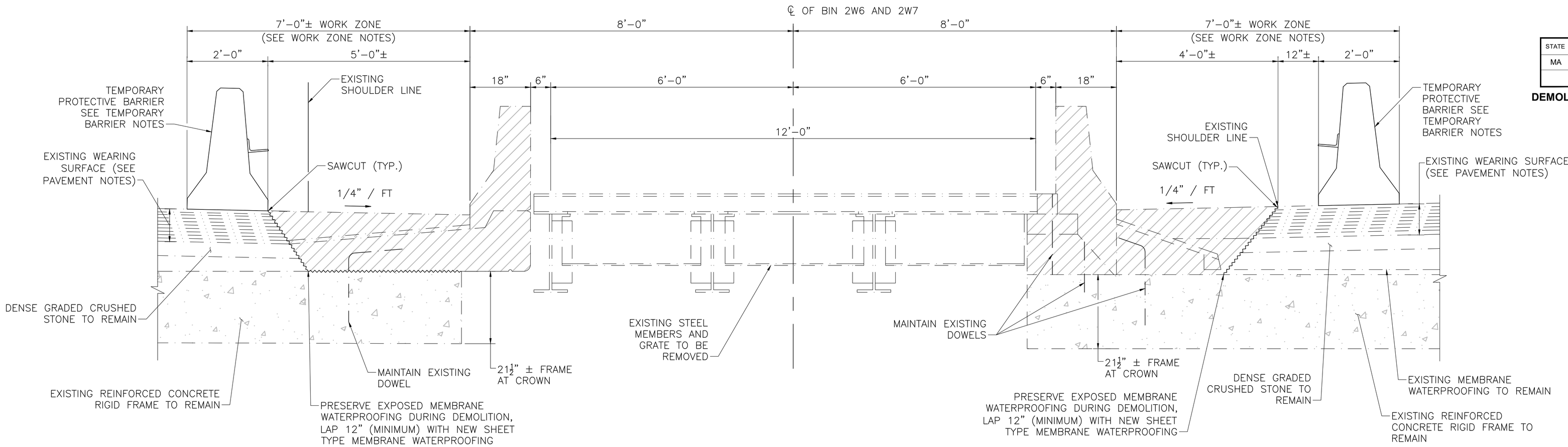
Proposal No. 613196-133292

4-6-DEMO CROSS SECTIONS.DWG Plotted on 24-Oct-2025 12:58 PM

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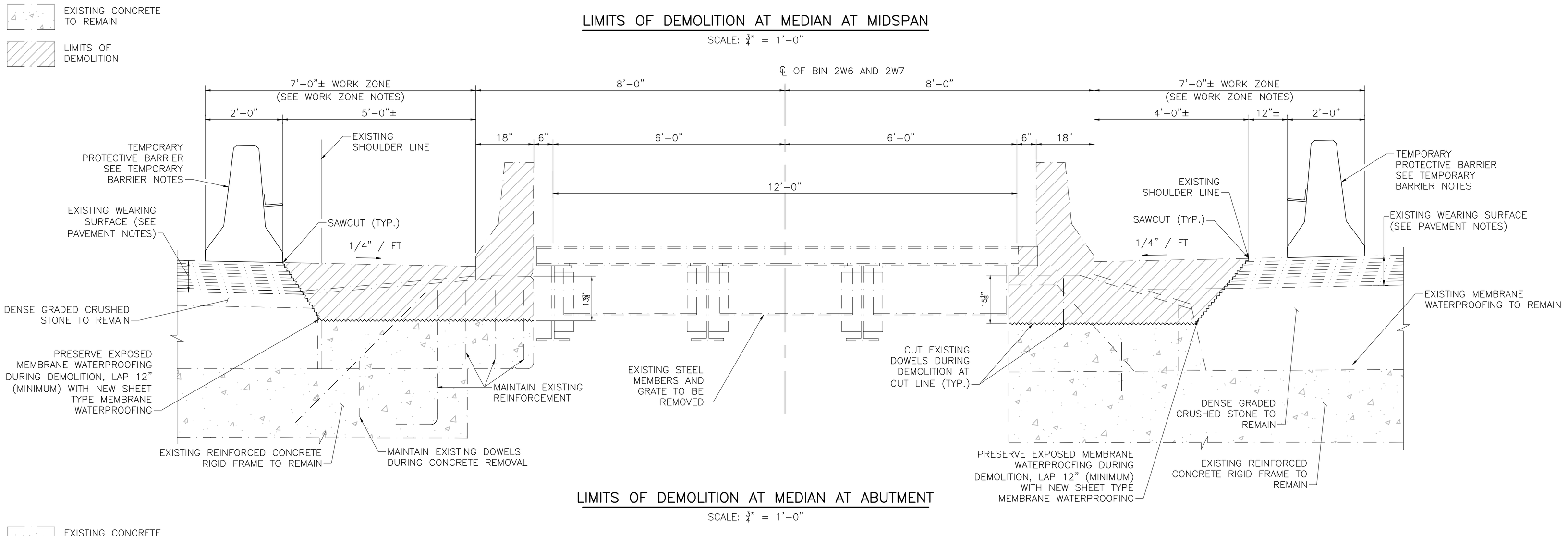
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	5	26
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DEMOLITION CROSS SECTIONS 2 OF 3



LIMITS OF DEMOLITION AT MEDIAN AT MIDSPAN

SCALE: ¾" = 1'–0"



LIMITS OF DEMOLITION AT MEDIAN AT ABUTMENT

SCALE: ¾" = 1'–0"

WORK ZONE NOTES:

SEE SHEET 3 FOR WORK ZONE NOTES.

PAVEMENT NOTES:

SEE SHEET 3 FOR PAVEMENT NOTES.

CONCRETE REMOVAL NOTES:

SEE SHEET 3 FOR CONCRETE REMOVAL NOTES.

TEMPORARY BARRIER NOTES:

SEE SHEET 3 FOR TEMPORARY BARRIER NOTES.

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2W6
2W7

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
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USE ONLY PRINTS OF LATEST DATE	

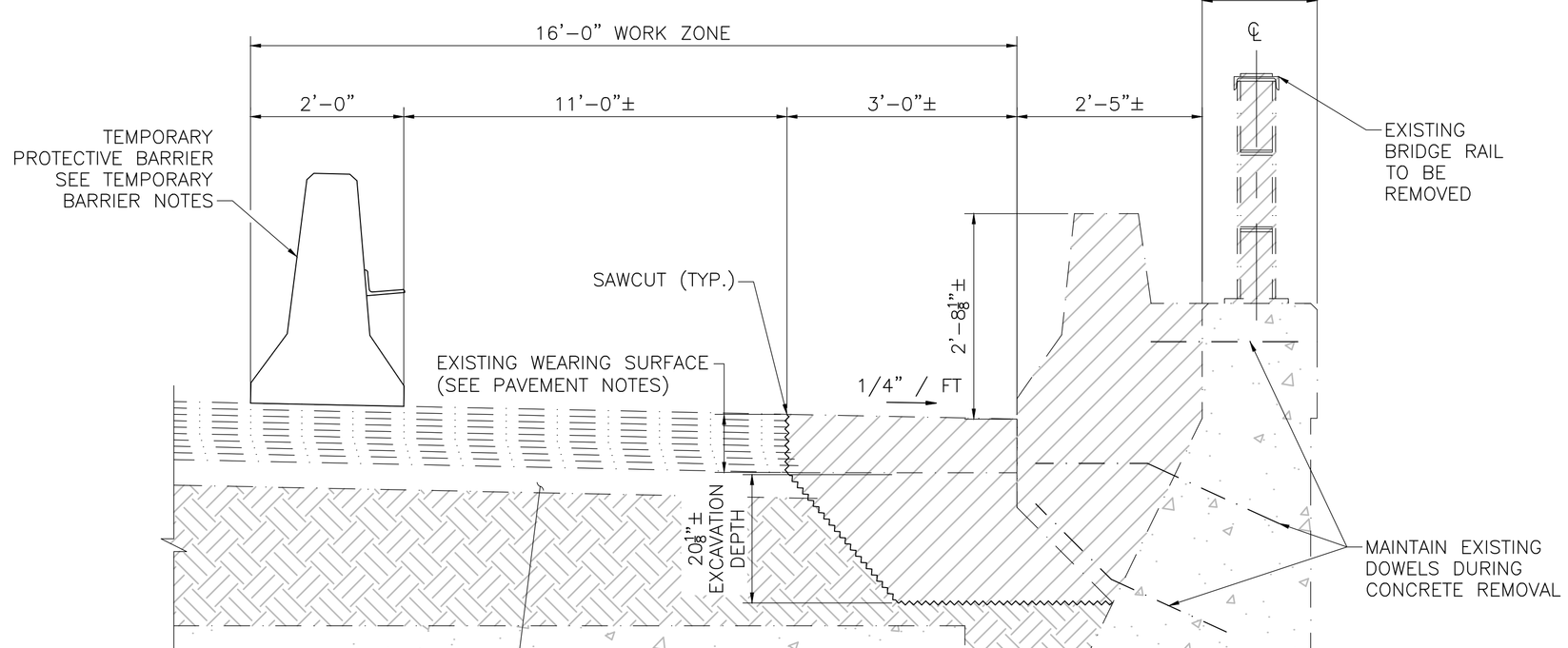
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STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	6	26
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DEMOLITION CROSS SECTIONS 3 OF 3



EXISTING CONCRETE TO REMAIN

LIMITS OF DEMOLITION

EXISTING FILL TO REMAIN

LIMITS OF DEMOLITION AT SOUTH WINGWALLS

SCALE: ¾" = 1'–0"

WORK ZONE NOTES:

SEE SHEET 3 FOR WORK ZONE NOTES.

CONCRETE REMOVAL NOTES:

SEE SHEET 3 FOR CONCRETE REMOVAL NOTES.

PAVEMENT NOTES:

SEE SHEET 3 FOR PAVEMENT NOTES.

TEMPORARY BARRIER NOTES:

SEE SHEET 3 FOR TEMPORARY BARRIER NOTES.

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2W6
2W7

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
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USE ONLY PRINTS OF LATEST DATE	

4-6-DEMO CROSS SECTIONS.DWG Plotted on 22-Oct-2025 1:11 PM
Proposal No. 613196-133292
24-October-2025
PS&E Resubmission
A00804 - 8

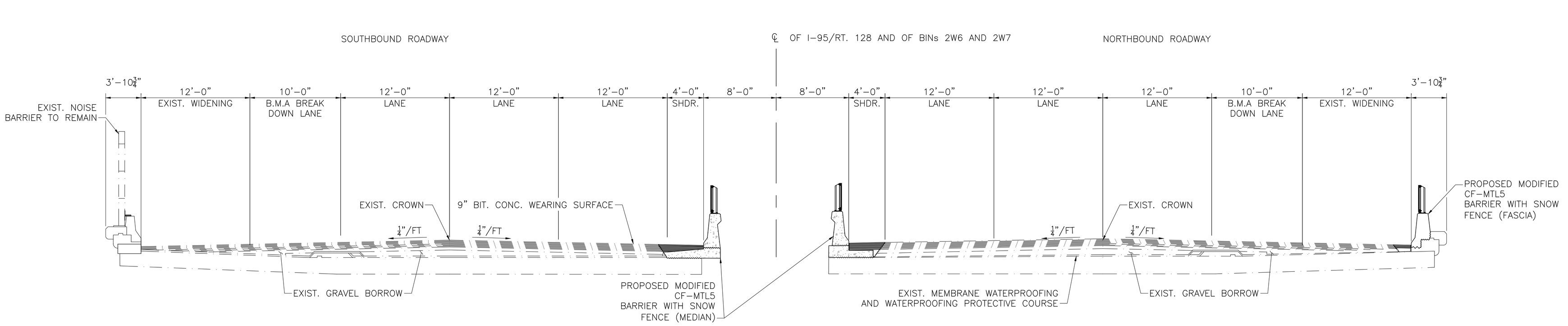
LYNNFIELD
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STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	7	26
	PROJECT FILE NO. 613196		

PROPOSED CROSS SECTION

NOTES:

1. ALL EXISTING LANE LINES SHOWN FROM RECORD DRAWINGS ARE APPROXIMATE. NO SURVEY WAS PERFORMED AS PART OF THIS BRIDGE PRESERVATION TASK. CONTRACTOR TO CONFIRM LANE LINE MARKINGS PRIOR TO START OF WORK.



PROPOSED CROSS SECTION

SCALE: $\frac{3}{16}$" = 1'-0"

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2W6
2W7

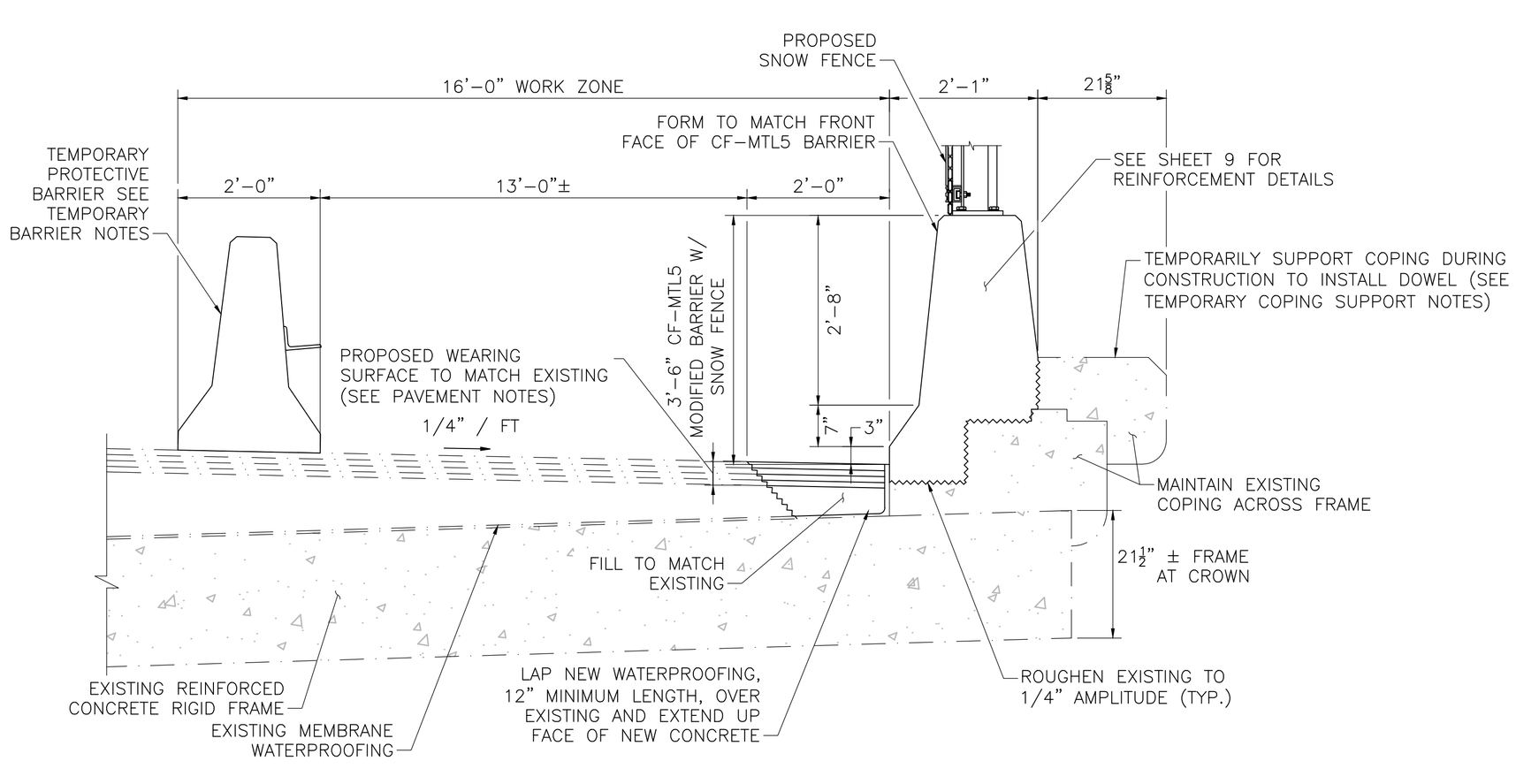
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

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Proposal No. 613196-133292
7-PROPOSED CROSS SECTION.DWG Plotted on 22-Oct-2025 2:23 PM
24-October-2025
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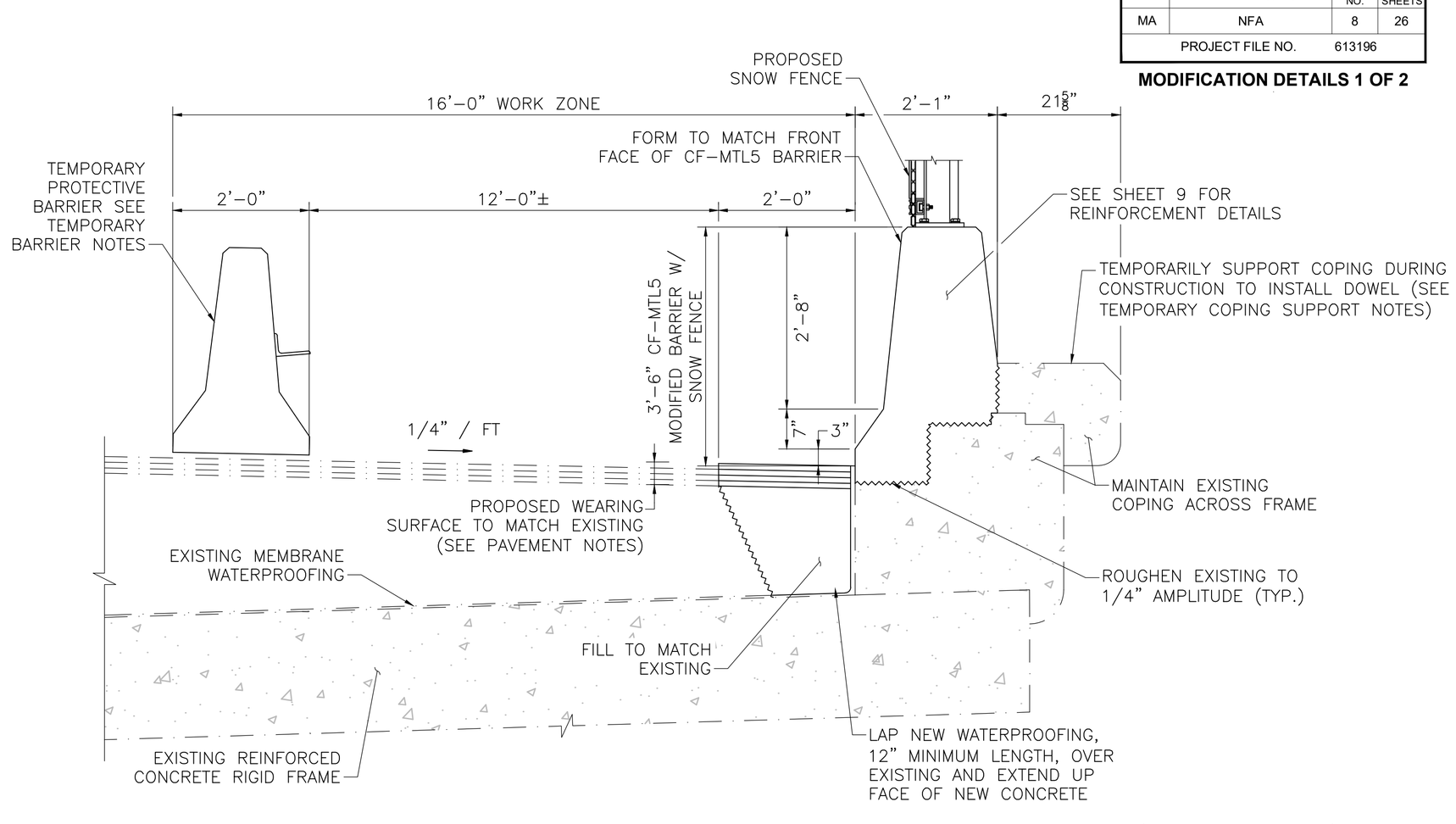
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	8	26
	PROJECT FILE NO. 613196		

MODIFICATION DETAILS 1 OF 2



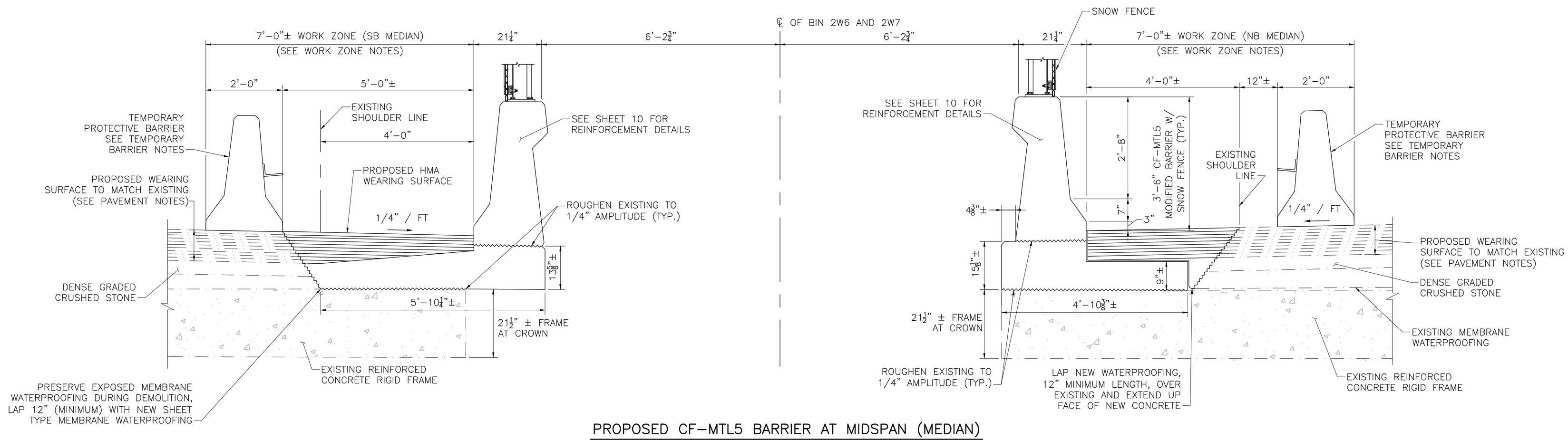
PROPOSED CF-MTL5 BARRIER AT NORTHBOUND ROADWAY AT MIDSPAN (SOUTH FASCIA)

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



PROPOSED CF-MTL5 BARRIER AT NORTHBOUND ROADWAY AT ABUTMENT (SOUTH FASCIA)

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



PROPOSED CF-MTL5 BARRIER AT MIDSPAN (MEDIAN)

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

WORK ZONE NOTES:

SEE SHEET 3 FOR WORK ZONE NOTES.

PAVEMENT NOTES:

SEE SHEET 3 FOR PAVEMENT NOTES.

CONCRETE REMOVAL NOTES:

SEE SHEET 3 FOR REMOVAL NOTES.

TEMPORARY BARRIER NOTES:

SEE SHEET 3 FOR BARRIER NOTES.

TEMPORARY COPING SUPPORT NOTES:

SEE SHEET 3 FOR TEMPORARY SUPPORT NOTES.

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2W6
2W7

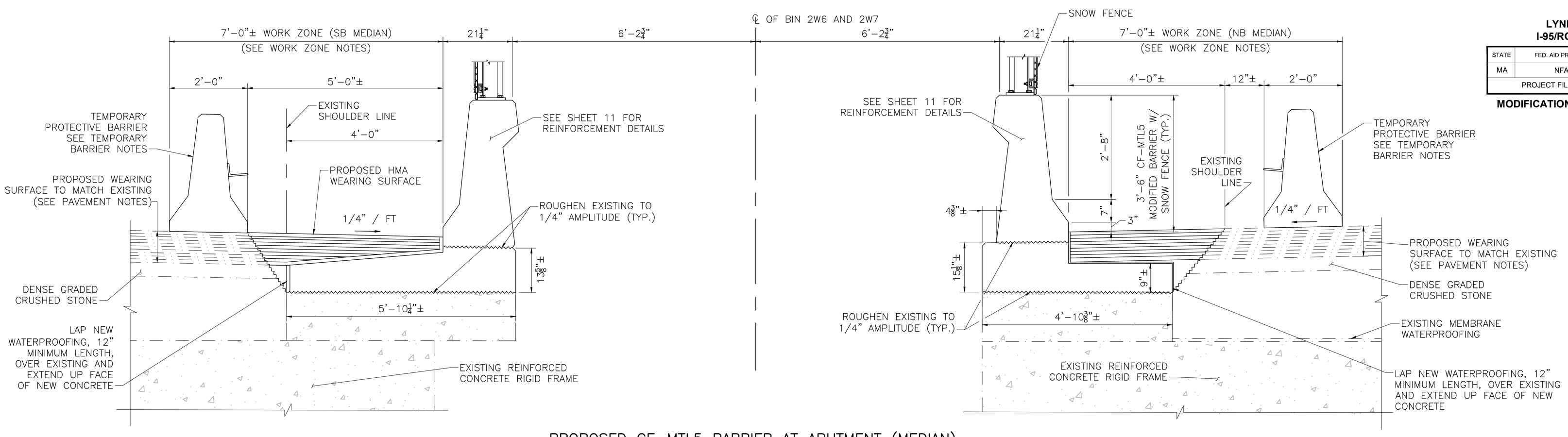
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

8-8-MODIFICATION DETAILS.DWG Plotted on 24-Oct-2025 1:02 PM
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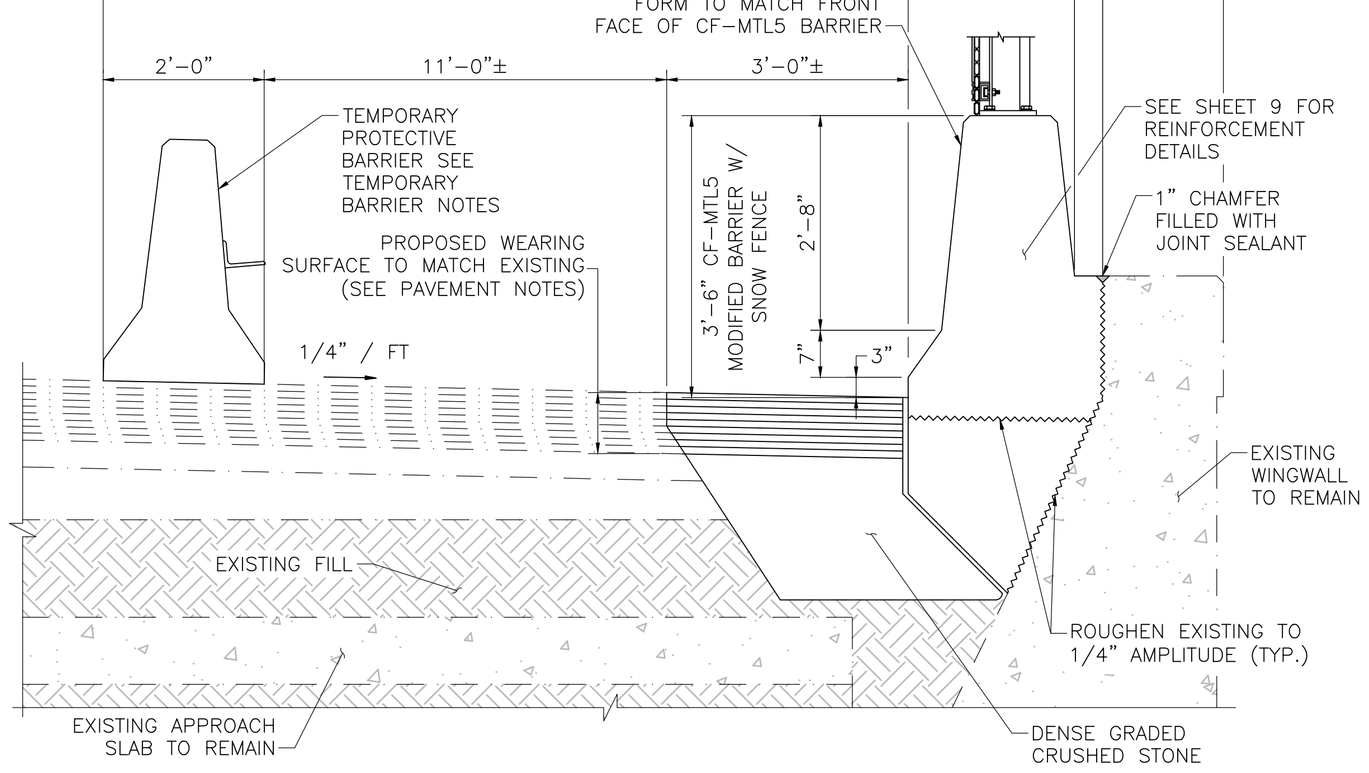
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	9	26
PROJECT FILE NO.	613196		

MODIFICATION DETAILS 2 OF 2



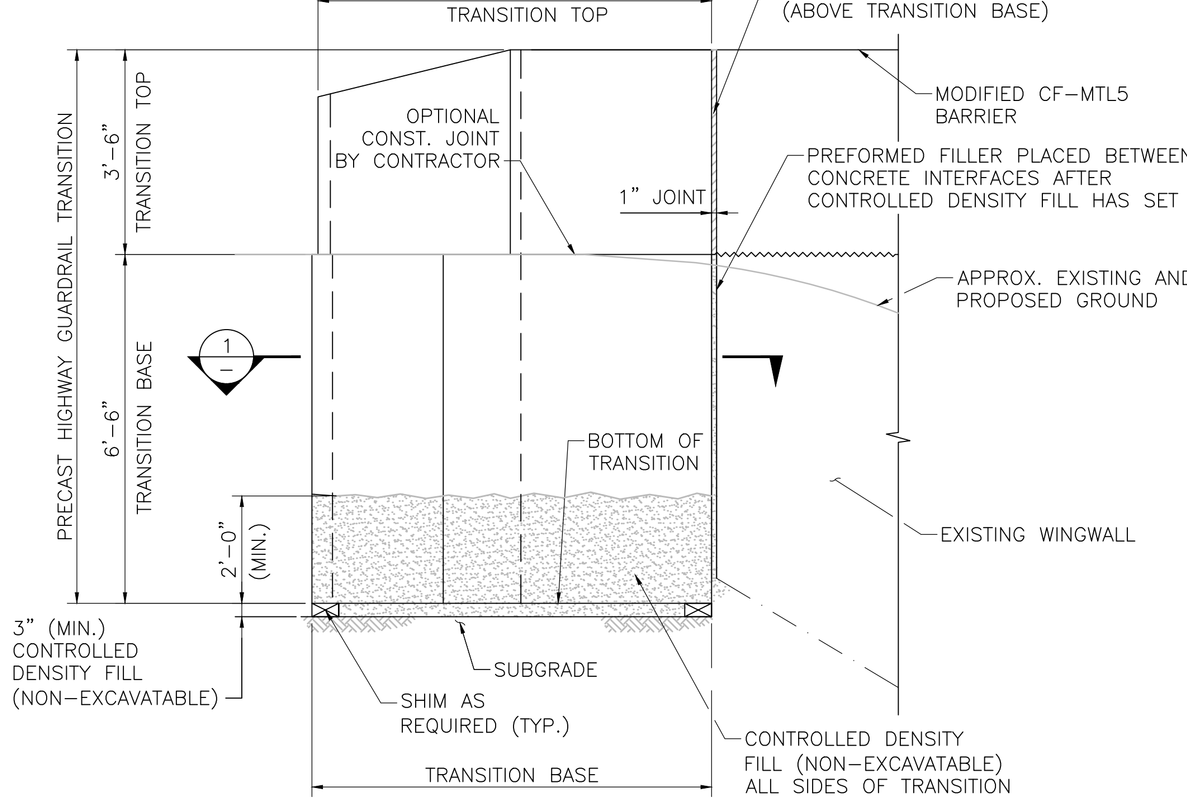
PROPOSED CF-MTL5 BARRIER AT ABUTMENT (MEDIAN)

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



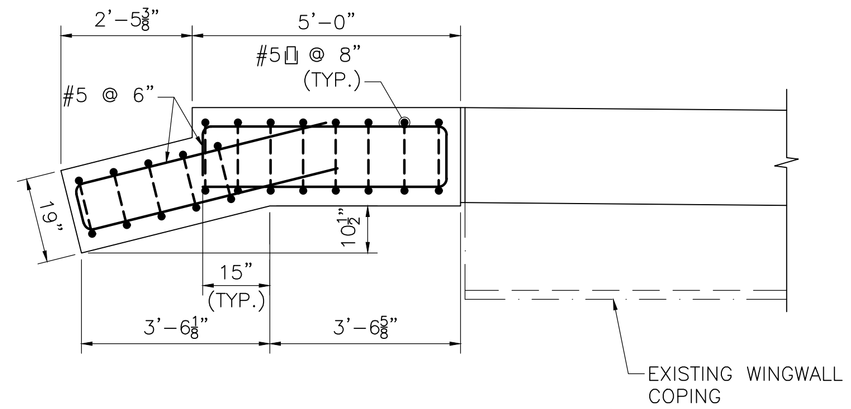
PROPOSED CF-MTL5 BARRIER AT NORTHBOUND ROADWAY (AT WINGWALLS)

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



GUARDRAIL TRANSITION BASE ELEVATION (INSIDE FACE)

SCALE: 1/2" = 1'-0"



SECTION 1 —
SCALE: 1/2" = 1'-0"

TRANSITION BASE NOTES:

1. PRECAST GUARDRAIL TRANSITION (HGT) SHALL BE 5000 PSI, 3/4 IN, 685 HP CEMENT CONCRETE.
2. PRECAST GUARDRAIL TRANSITION BASE UNITS TO BE INSTALLED PRIOR TO CONSTRUCTING BASE OF WINGWALL BARRIERS.
3. GRAVEL BORROW SHALL BE PLACED AND THOROUGHLY COMPACTED TO THE GRADE OF 3" (MIN.) BELOW THE INTENDED BOTTOM OF THE PRECAST GUARDRAIL TRANSITION BASE AND TO A HEIGHT OF 2'-0" (MIN.) ON ALL SIDES OF THE TRANSITION BASE TO FORM A TRENCH IN WHICH TO SET THE TRANSITION. WHERE NO GRAVEL BORROW IS REQUIRED BELOW THE BASE, IT SHALL BE PLACED ON UNDISTURBED SOIL.
4. CONTRACTOR SHALL SET THE PRECAST GUARDRAIL TRANSITION TO THE REQUIRED ELEVATION AND ALIGNMENT, AND BACKFILL PRECAST GUARDRAIL TRANSITION WITH CONTROLLED DENSITY FILL (NON-EXCAVATABLE) TO THE ELEVATION SHOWN.
5. CONTRACTOR TO PROVIDE METHOD OF INSTALLATION OF HGT WITHIN THE CLEAR ZONE LIMITS BEHIND THE BARRIERS AT ALL CORNERS.
6. SEE ITEMS 992.15 AND 992.16 FOR MEASUREMENT AND PAYMENT.

PAVEMENT NOTES:

SEE SHEET 3 FOR PAVEMENT DETAILS.

CONCRETE REMOVAL NOTES:

SEE SHEET 3 FOR REMOVAL DETAILS.

TEMPORARY BARRIER NOTES:

SEE SHEET 3 FOR BARRIER DETAILS.

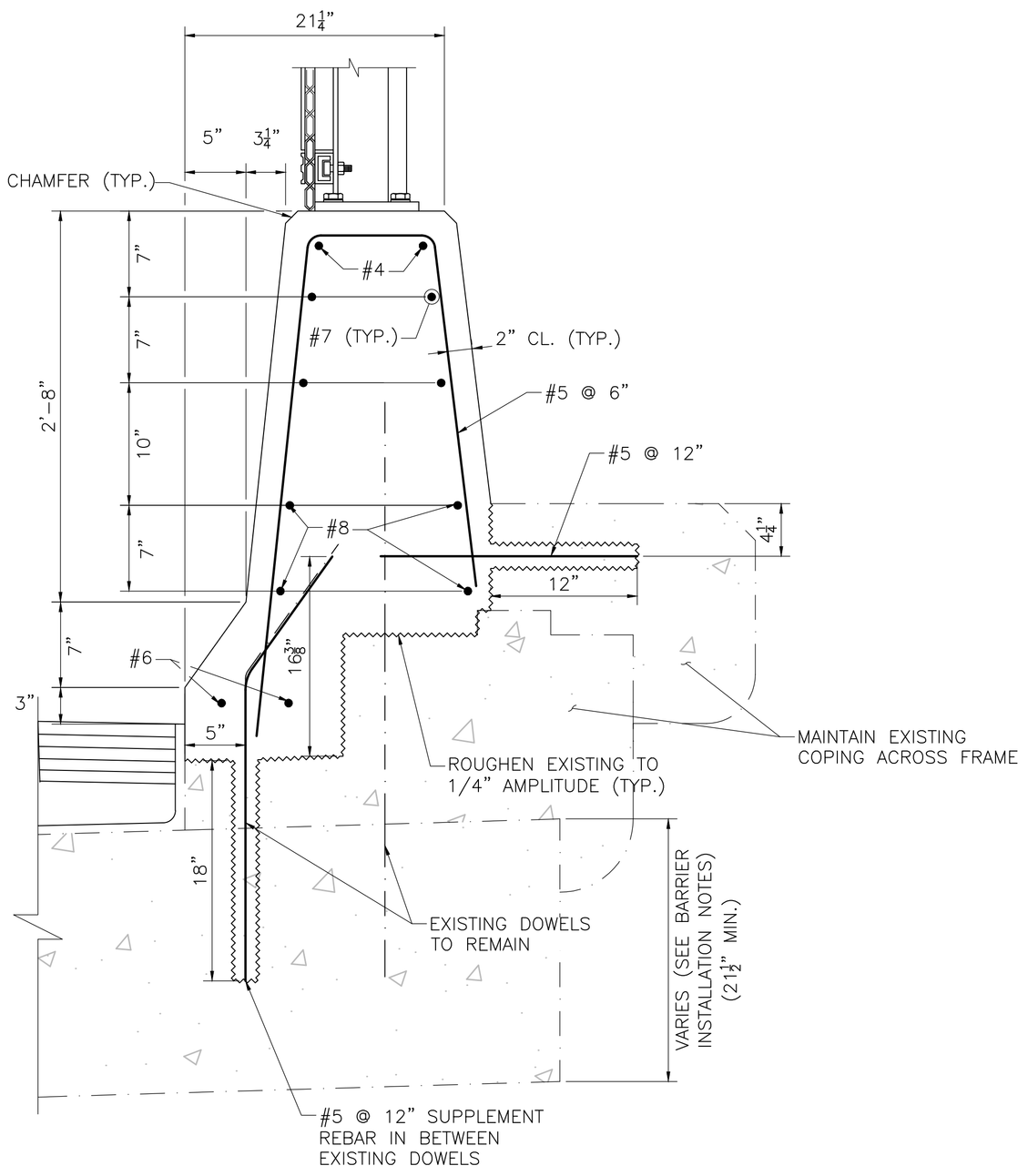
*
2W6
2W7

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
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STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	12	26
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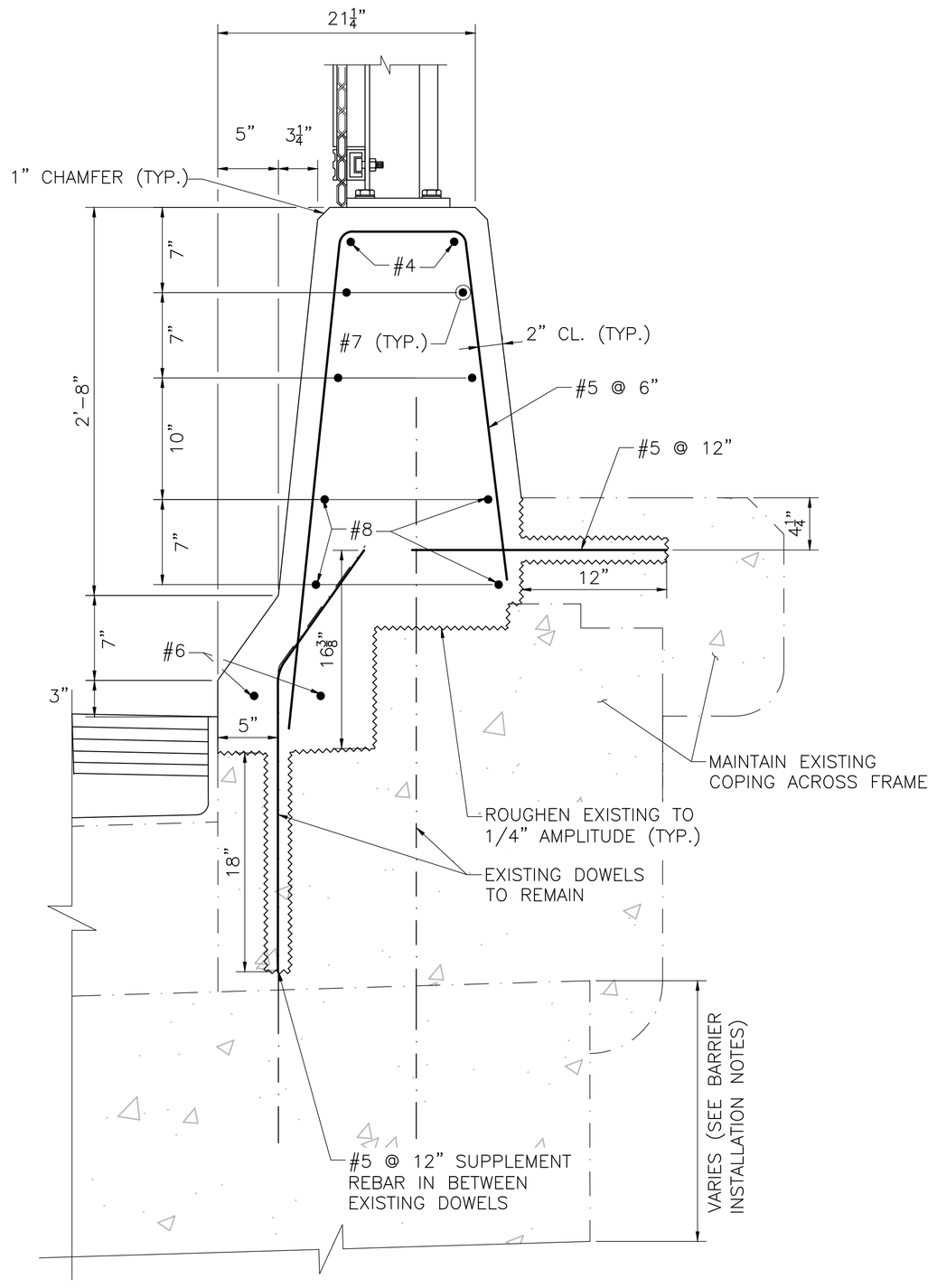
REINFORCING DETAILS SHEET 1 OF 4



PROPOSED MODIFIED CF–MTL5 BARRIER REINFORCING

DETAIL AT NORTHBOUND FASCIA AT MIDSPAN (SOUTH FASCIA)

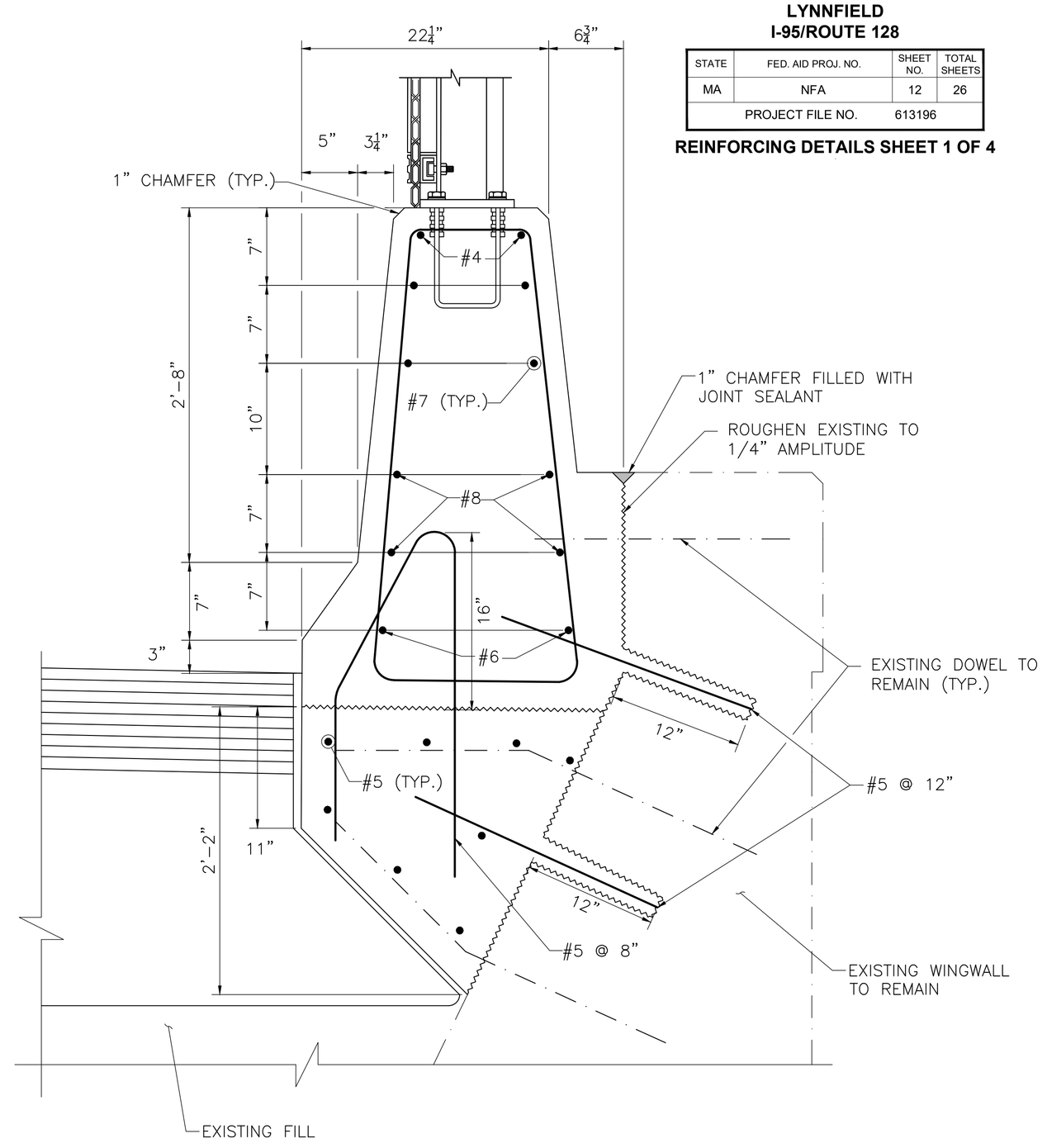
SCALE: 1½" = 1'–0"



PROPOSED MODIFIED CF–MTL5 BARRIER REINFORCING

DETAIL AT NORTHBOUND FASCIA AT ABUTMENT (SOUTH FASCIA)

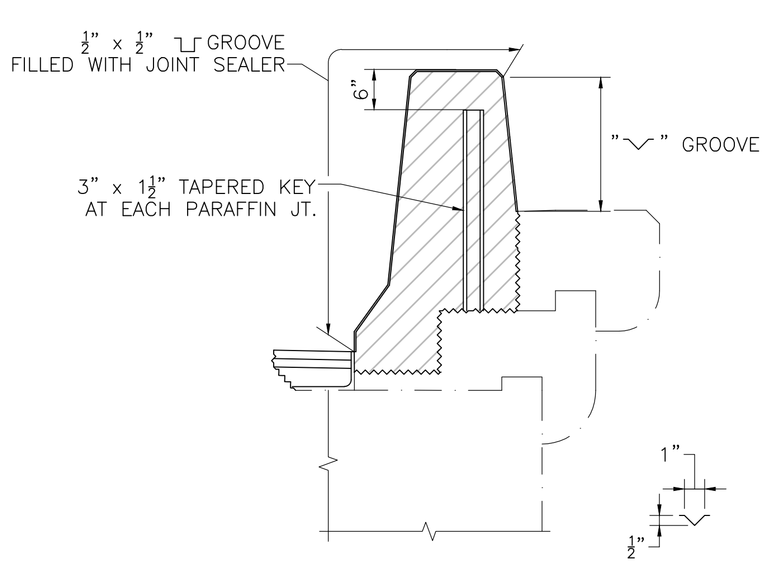
SCALE: 1½" = 1'–0"

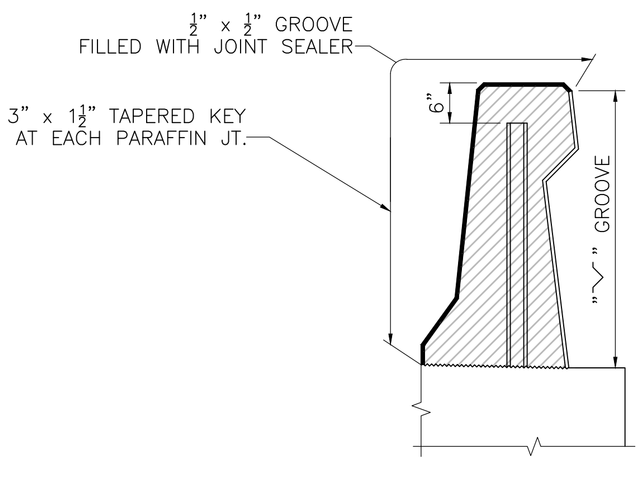


PROPOSED MODIFIED CF–MTL5 BARRIER REINFORCING

DETAIL AT NORTHBOUND FASCIA (AT WINGWALLS)

SCALE: 1½" = 1'–0"





PARAFIN JOINT DETAILS

SCALE: ¾" = 1'–0"

NOTES:

1. ALL CONCRETE ABOVE RIGID FRAME SHALL BE POURED IN ALTERNATING SECTIONS WITH NOT LESS THAN 3 DAYS BETWEEN POURS.
2. DO NOT CARRY LONGITUDINAL BARS THROUGH THE PARAFFIN END THE REINFORCEMENT 2" CLEAR OF JOINT.
3. JOINT SHALL BE SQUARE TO FACE OF CURB OR COPING.

DRILL & GROUT NOTES:

1. LOCATIONS FOR DRILLING AND GROUTING SHALL BE CAREFULLY SELECTED TO AVOID EXISTING REINFORCING.
2. GROUT SHALL BE CHOSEN FROM MASSDOT QUALIFIED CONSTRUCTION MATERIALS LIST (QCML).

BARRIER INSTALLATION NOTES:

1. CONTRACTOR SHALL REMOVE EXISTING RAILING AND CONCRETE BASE TO LIMITS DETERMINED BY THE ENGINEER.
2. DRILL AND GROUT DOWELS PRIOR TO POURING OF REPAIRED CONCRETE AREA AND BARRIER.
3. BARRIER AND REPAIRED AREA SHALL BE POURED SEPARATE WITH A CONSTRUCTION JOINT BETWEEN THE REPAIRED AREA AND THE BASE OF THE BARRIER.

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2W6
2W7

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
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USE ONLY PRINTS OF LATEST DATE	

10-13-REINFORCING DETAILS.DWG Plotted on 22-Oct-2025 1:25 PM
Proposal No. 613196-133292
24-October-2025
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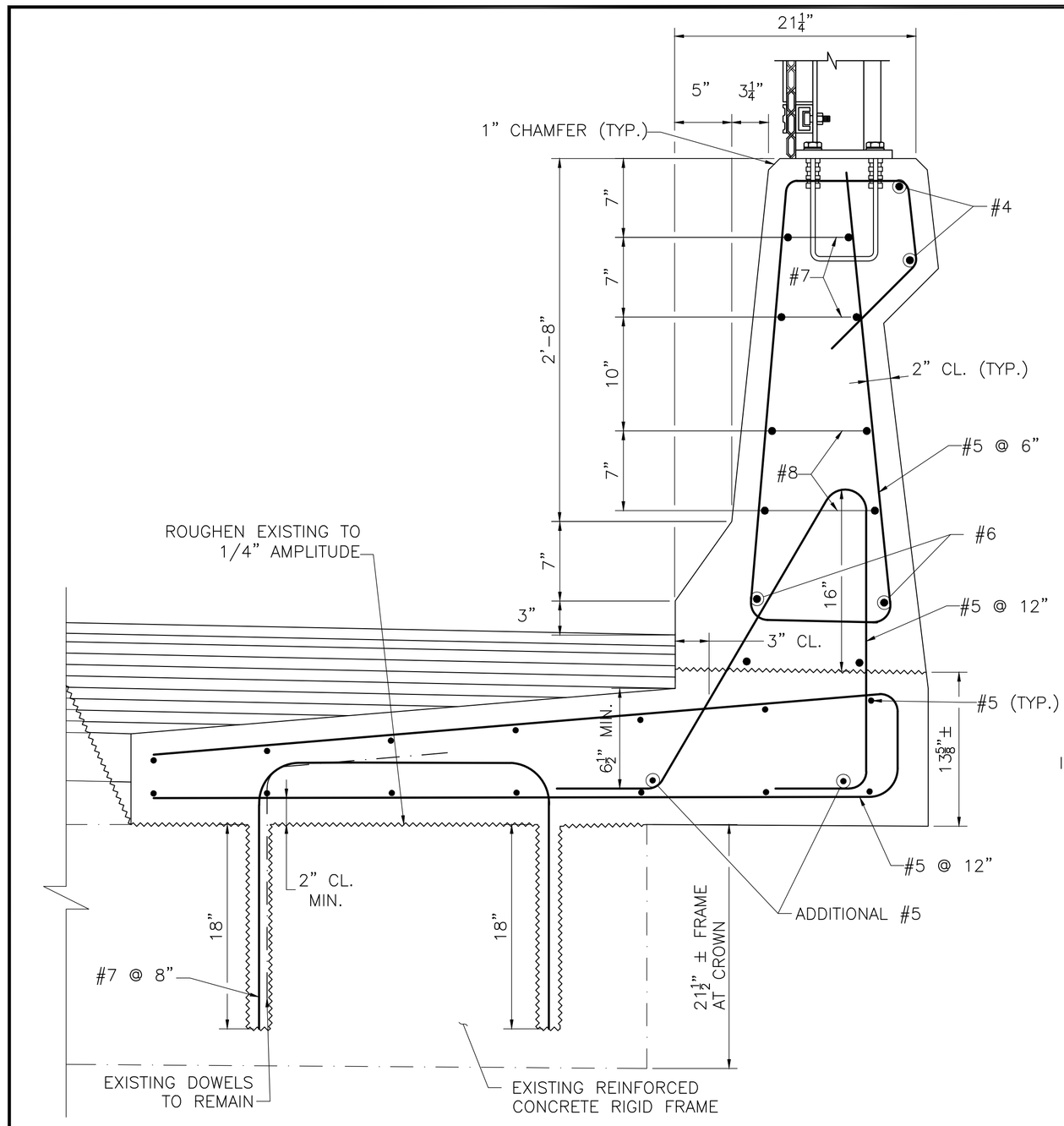
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STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	11	26
	PROJECT FILE NO. 613196		

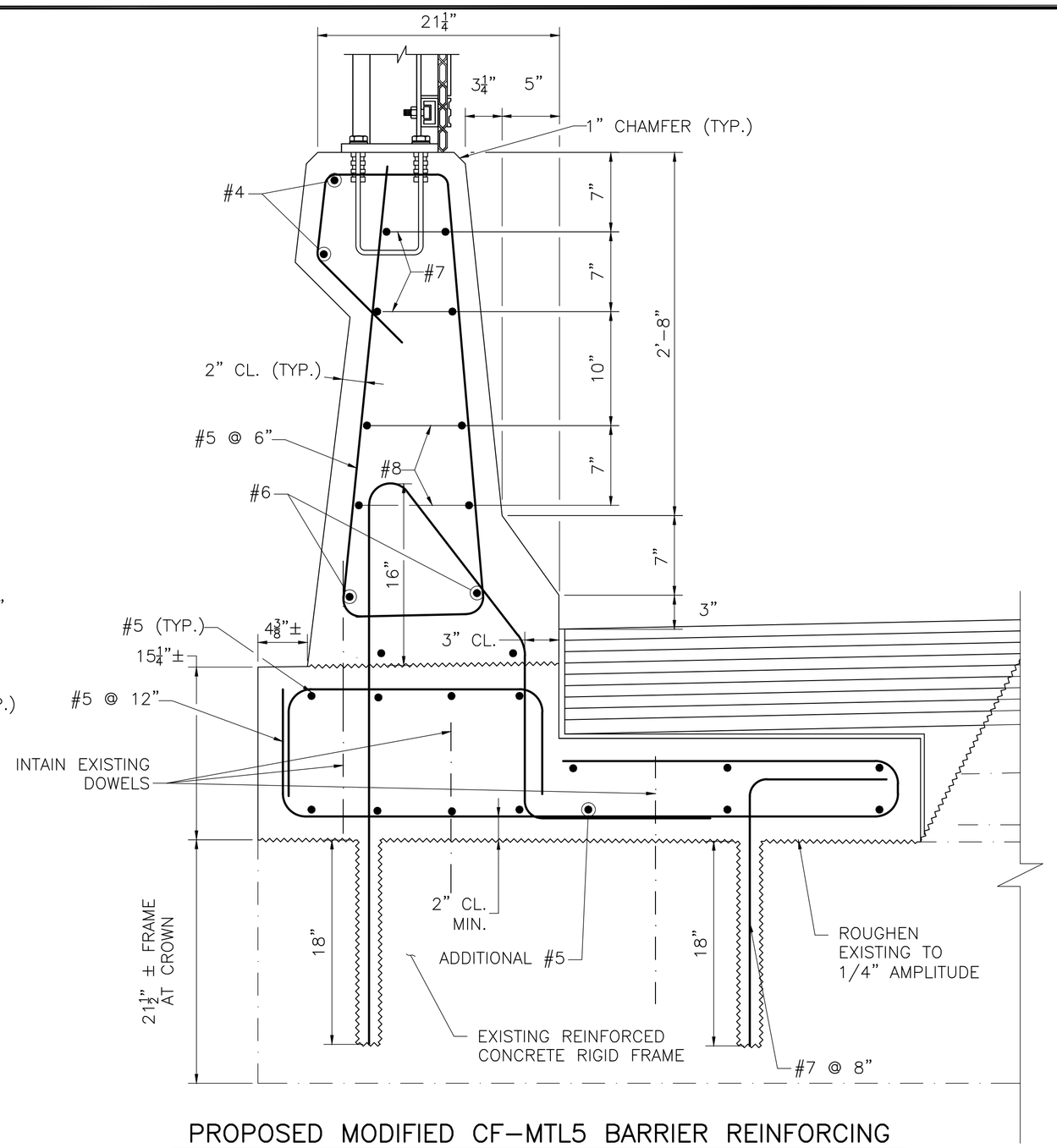
REINFORCING DETAILS SHEET 2 OF 4

10-13-REINFORCING DETAILS.DWG Plotted on 22-Oct-2025 1:25 PM

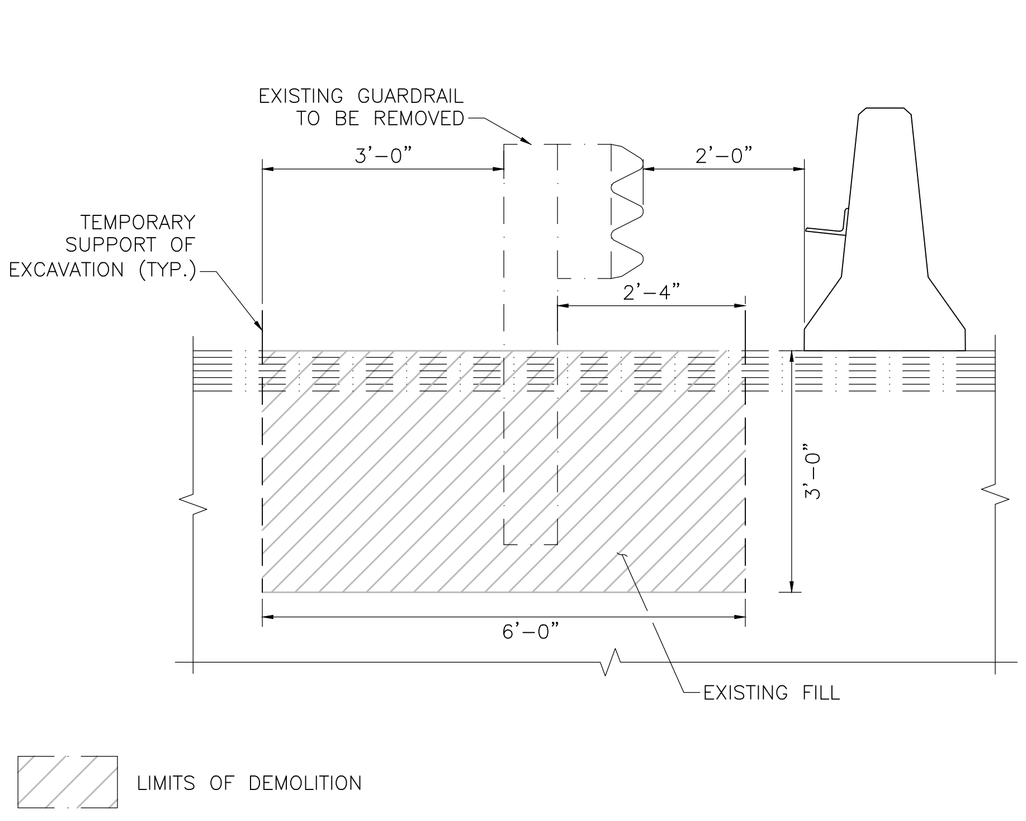
Proposal No. 613196-133292



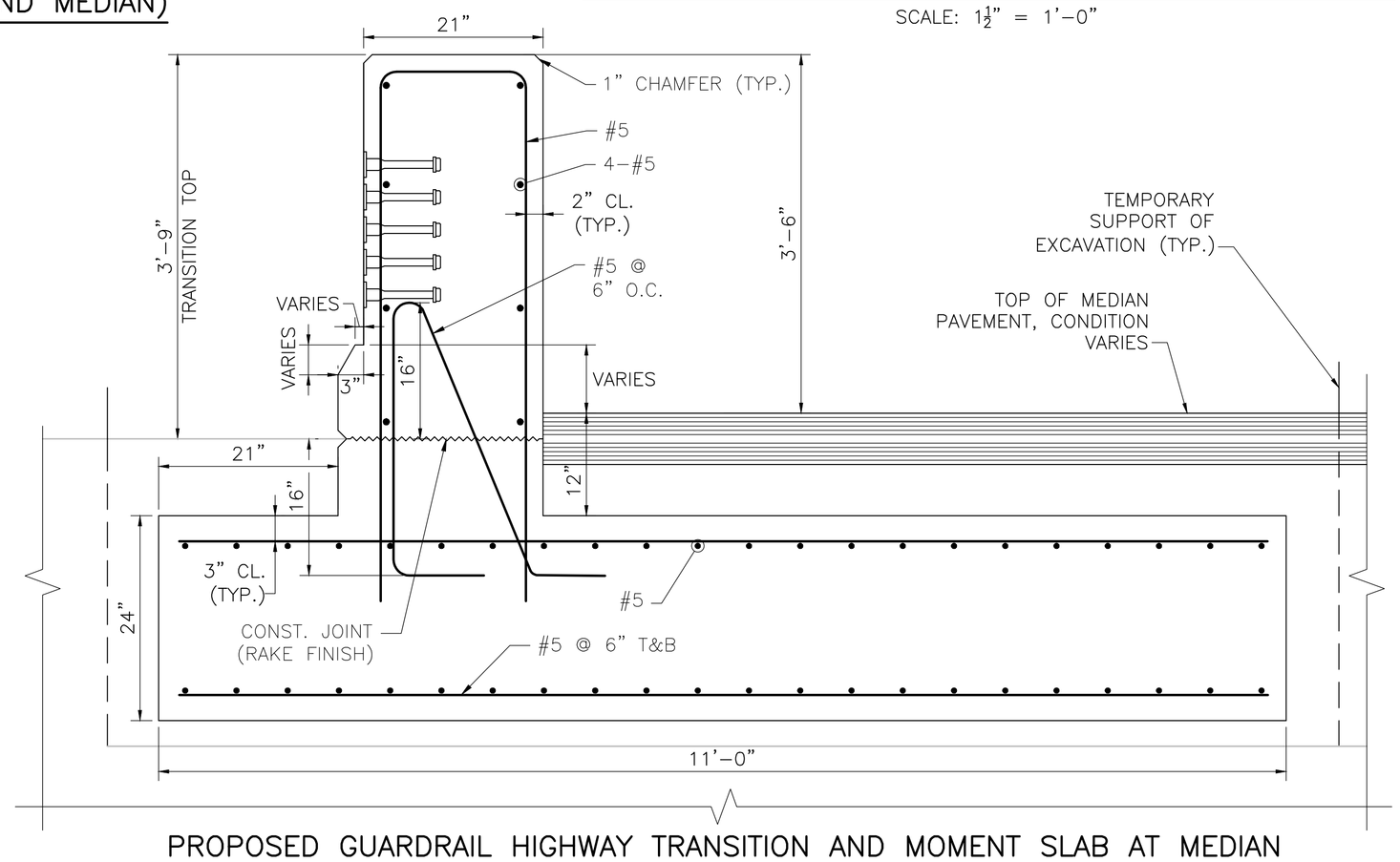
PROPOSED MODIFIED CF–MTL5 BARRIER REINFORCING
DETAIL AT MEDIAN AT MIDSPAN (SOUTHBOUND MEDIAN)
SCALE: 1½" = 1'–0"



PROPOSED MODIFIED CF–MTL5 BARRIER REINFORCING
DETAIL AT MEDIAN AT MIDSPAN (NORTHBOUND MEDIAN)
SCALE: 1½" = 1'–0"



EXISTING GUARDRAIL HIGHWAY TRANSITION AT MEDIAN
SCALE: ¾" = 1'–0"



PROPOSED GUARDRAIL HIGHWAY TRANSITION AND MOMENT SLAB AT MEDIAN
SCALE: 1" = 1'–0"

DRILL & GROUT NOTES:

1. SEE SHEET 9 FOR DRILL & GROUT NOTES.

BARRIER INSTALLATION NOTES:

1. SEE SHEET 9 FOR BARRIER INSTALLATION NOTES.

GUARDRAIL TRANSITION AT MEDIAN NOTES:

1. CONTRACTOR TO DESIGN TEMPORARY EARTH SUPPORT AT LOCATIONS AS REQUIRED. SHALL BE INCIDENTAL TO THE INSTALLATION OF THIS ITEM.

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
	USE ONLY PRINTS OF LATEST DATE

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2W6
2W7

24-October-2025

PS&E Resubmission

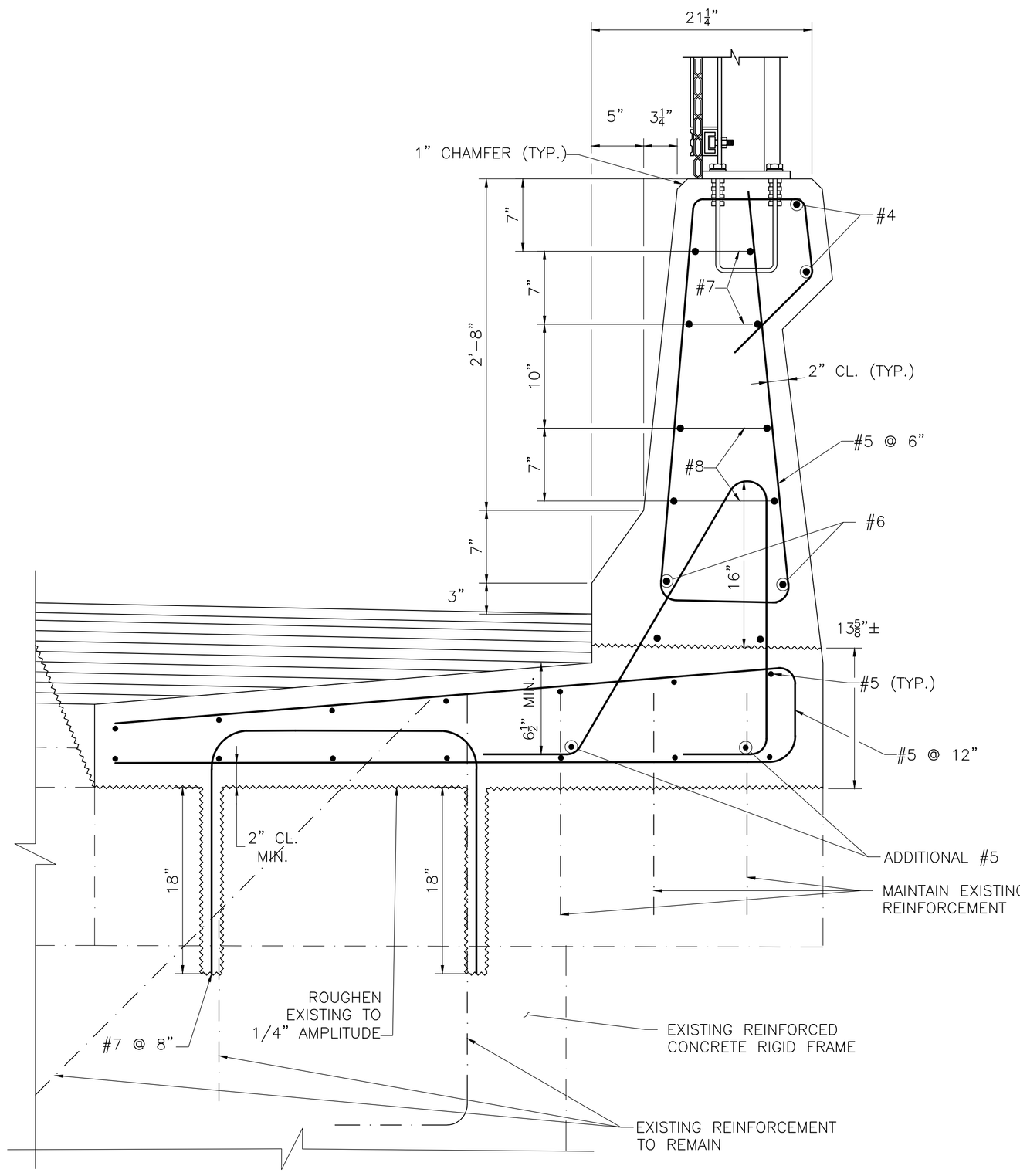
LYNNFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	10	26
	PROJECT FILE NO. 613196		

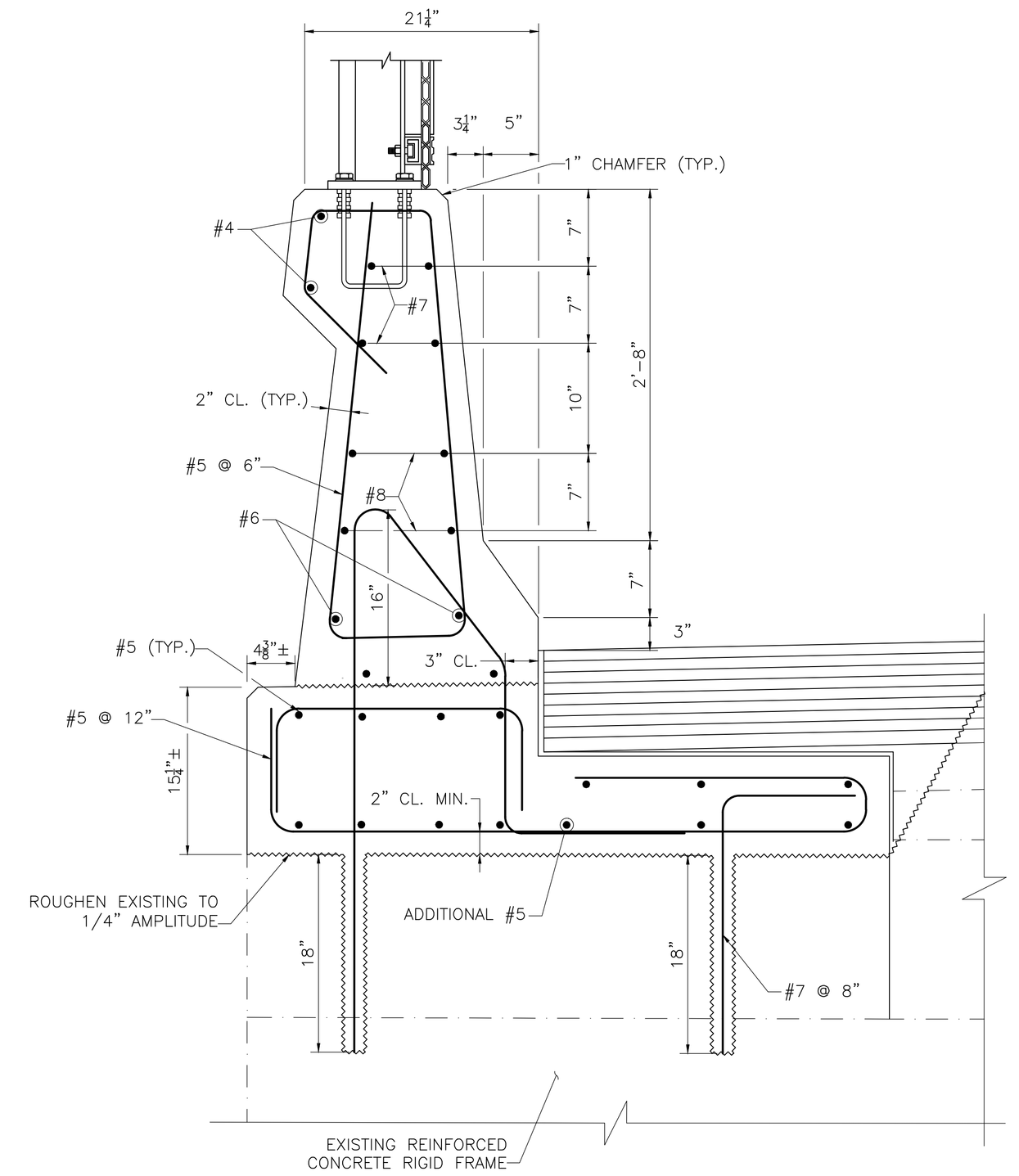
REINFORCING DETAILS SHEET 3 OF 4

10-13-REINFORCING DETAILS.DWG Plotted on 22-Oct-2025 1:25 PM

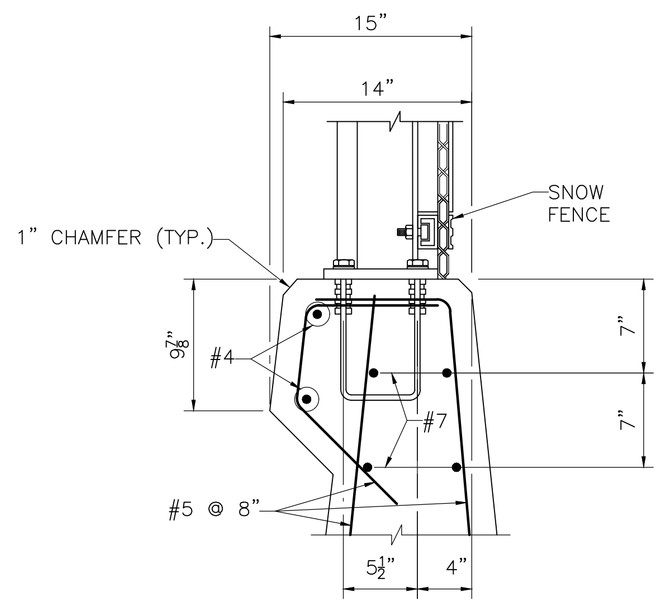
Proposal No. 613196-133292



PROPOSED MODIFIED CF–MTL5 BARRIER REINFORCING
DETAIL AT MEDIAN AT ABUTMENT (SOUTHBOUND MEDIAN)
SCALE: 1½" = 1'–0"



PROPOSED MODIFIED CF–MTL5 BARRIER REINFORCING
DETAIL AT MEDIAN AT ABUTMENT (NORTHBOUND MEDIAN)
SCALE: 1½" = 1'–0"



SECTION THRU MODIFIED BARRIER
SCALE: 1½" = 1'–0"

DRILL & GROUT NOTES:

SEE SHEET 9 FOR DRILL & GROUT NOTES.

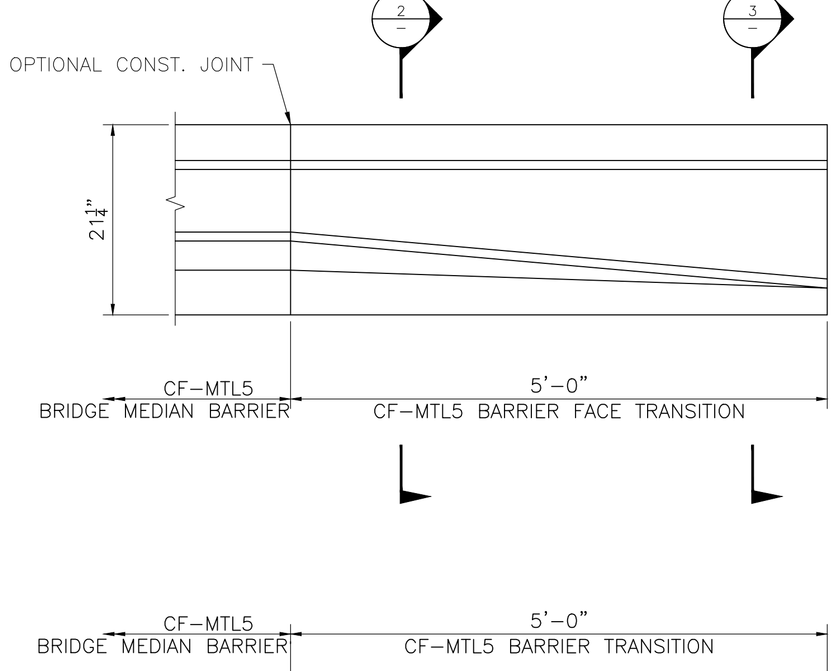
BARRIER INSTALLATION NOTES:

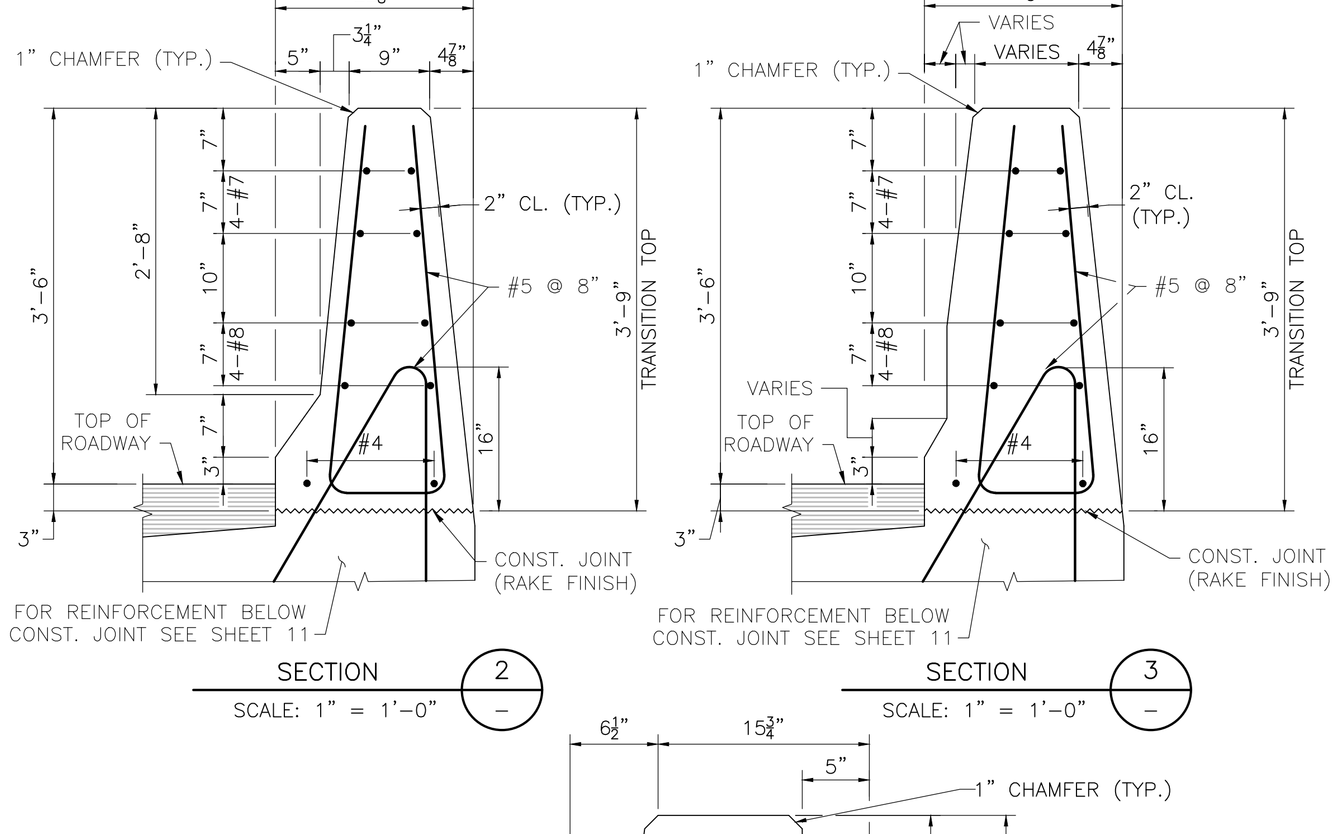
SEE SHEET 9 FOR BARRIER INSTALLATION NOTES.

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MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

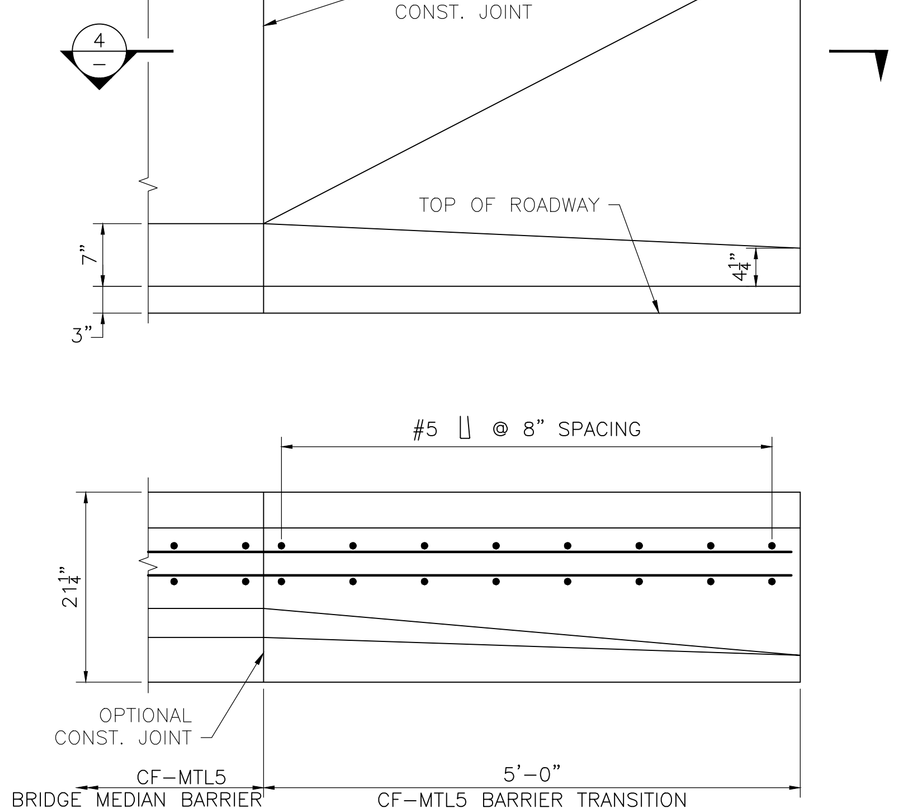
24-October-2025 PS&E Resubmission





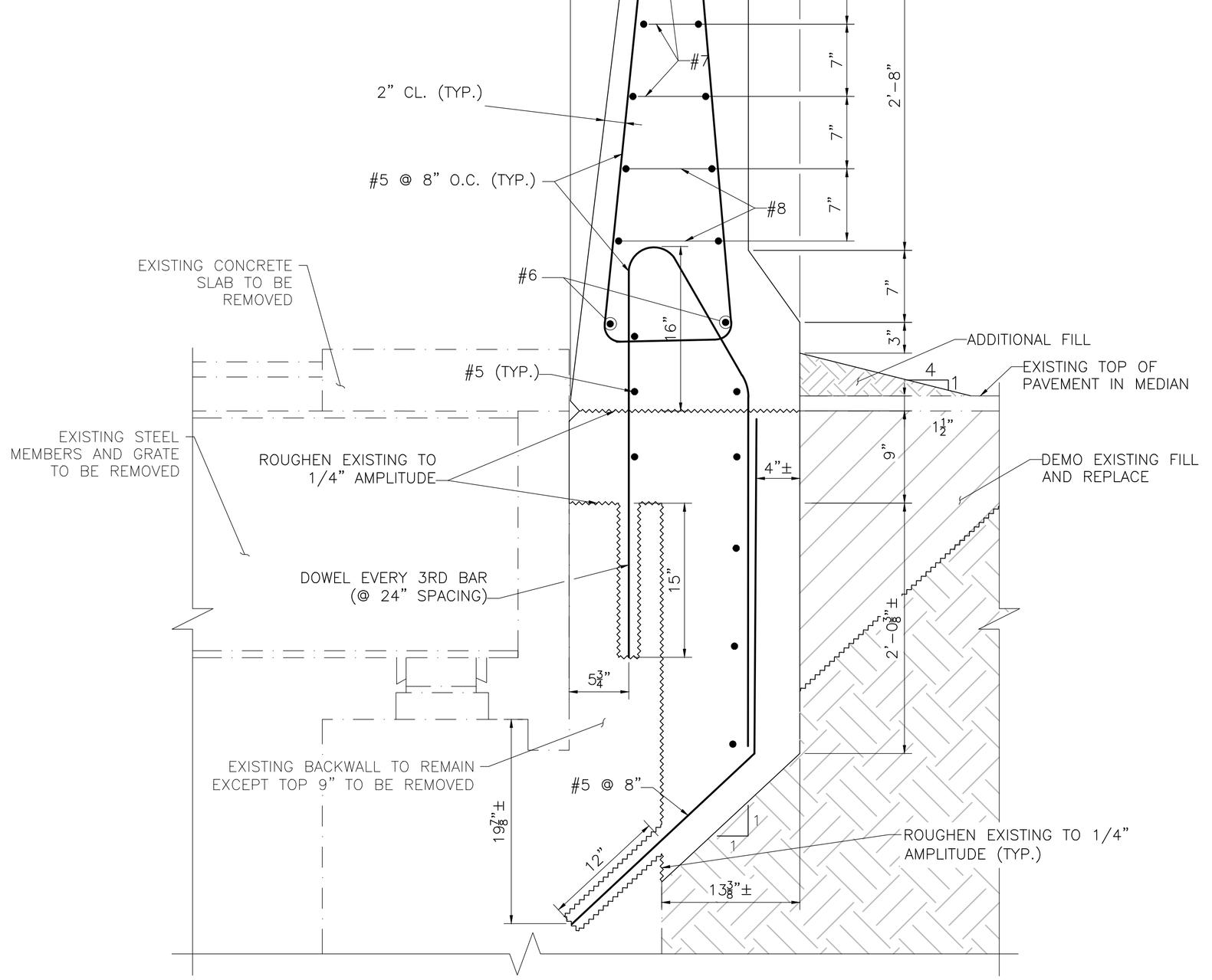
SECTION 2 – SCALE: 1" = 1'–0"

SECTION 3 – SCALE: 1" = 1'–0"



SECTION 4 – SCALE: 1" = 1'–0"

PROPOSED MEDIAN BARRIER TRANSITION TO VERTICAL FACE



PROPOSED CF–MTL5 BARRIER AT ABUTMENT BACKWALL

SCALE: 1½" = 1'–0"

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STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	13	26
	PROJECT FILE NO. 613196		

REINFORCING DETAILS SHEET 4 OF 4

DRILL & GROUT NOTES:

SEE SHEET 9 FOR DRILL & GROUT NOTES.

BARRIER INSTALLATION NOTES:

SEE SHEET 9 FOR BARRIER INSTALLATION NOTES.

NOTE:

CONTRACTOR TO DEMOLISH EXISTING FILL AND REPLACE TO MATCH EXISTING GRADE. SUBSURFACE CONDITIONS BASED ON EXISTING RECORD DRAWINGS AND SHOULD BE CONFIRMED BEFORE EXCAVATION.

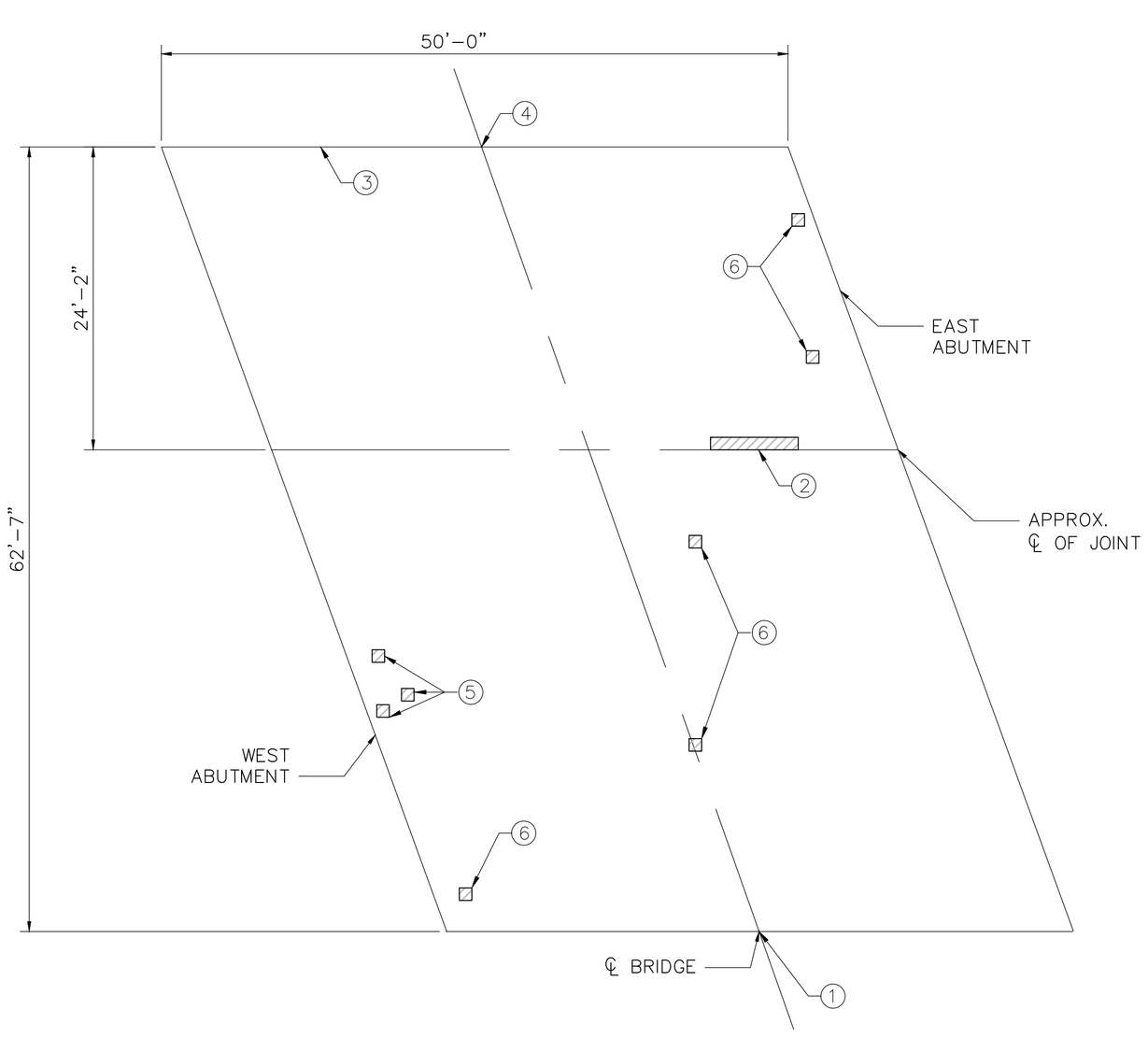
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MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

10-13-REINFORCING DETAILS.DWG Plotted on 24-Oct-2025 1:25 PM
24-October-2025
PS&E Resubmission
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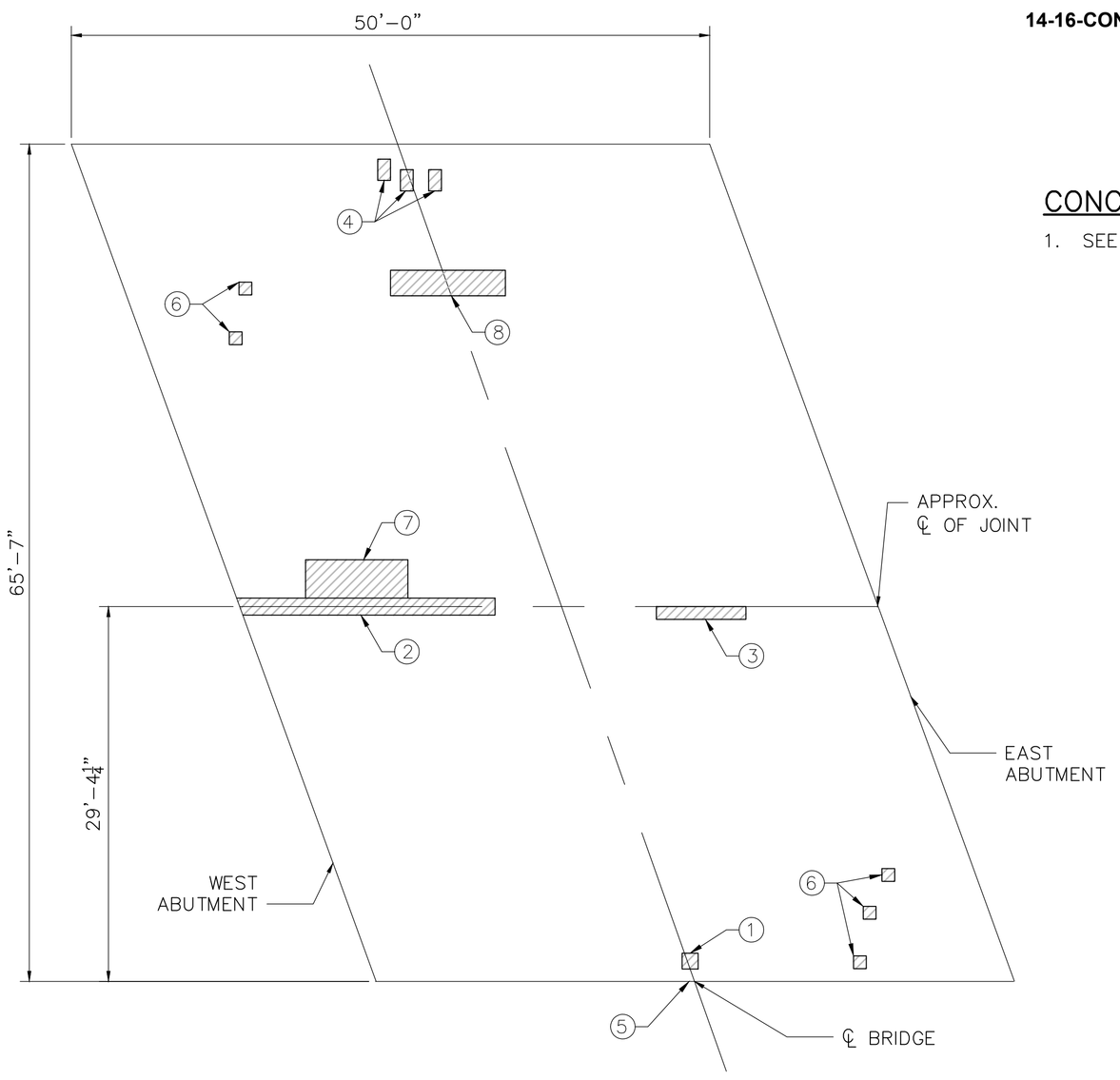
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	14	26
PROJECT FILE NO.	613196		

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14-16-CONCRETE REPAIRS.DWG



UNDERSIDE OF DECK PLAN (2W7/I–95 SB)

SCALE: $\frac{1}{8}$" = 1'–0"



UNDERSIDE OF DECK PLAN (2W6/I–95 NB)

SCALE: $\frac{1}{8}$" = 1'–0"

CONCRETE REPAIR NOTES:

1. SEE SHEET 15 FOR CONCRETE REPAIR NOTES.

LEGEND:

SPALLED/DELAMINATED CONCRETE AREAS TO BE REPAIRED

REPAIR AREA #	LENGTH	WIDTH	DEPTH	DEFICIENCY
1	UP TO 12" DIA.	N/A	UP TO 1"	TWELVE (12) SPALLS/DELAMINATIONS WITH EXPOSED REBAR (PARAPET SLAB)
2	7'–0"	10"	1"	SPALL/DELAMINATION
3	6" DIA.	N/A	1/2"	SPALL
4	FULL LENGTH	N/A	UP TO 3"	SPALL/DELAMINATION WITH EXPOSED REBAR (COPING)
5	4" DIA.	N/A	1/2"	SPALL/DELAMINATION WITH EXPOSED REBAR
6	3" DIA.	N/A	1/2"	SPALL/POPOUT

LEGEND:

SPALLED/DELAMINATED CONCRETE AREAS TO BE REPAIRED

REPAIR AREA #	LENGTH	WIDTH	DEPTH	DEFICIENCY
1	15" DIA.	N/A	2"	SPALL
2	20'–0"	16"	7"	SPALL/DELAMINATION WITH EXPOSED REBAR
3	7'–0"	14"	3"	SPALL/DELAMINATION
4	8"	20"	UP TO 1"	THREE (3) SPALLS WITH EXPOSED REBAR
5	FULL LENGTH	N/A	UP TO 3"	SPALL/DELAMINATION WITH EXPOSED REBAR (COPING)
6	3" DIA.	N/A	1/2"	SPALL/POPOUT
7	8'–0"	3'–0"	1/2"	AREA WITH TWELVE (12) SPALLS/POPOUTS
8	8'–0"	2'–0"	1/2"	AREA WITH FIVE (5) SPALLS/POPOUTS

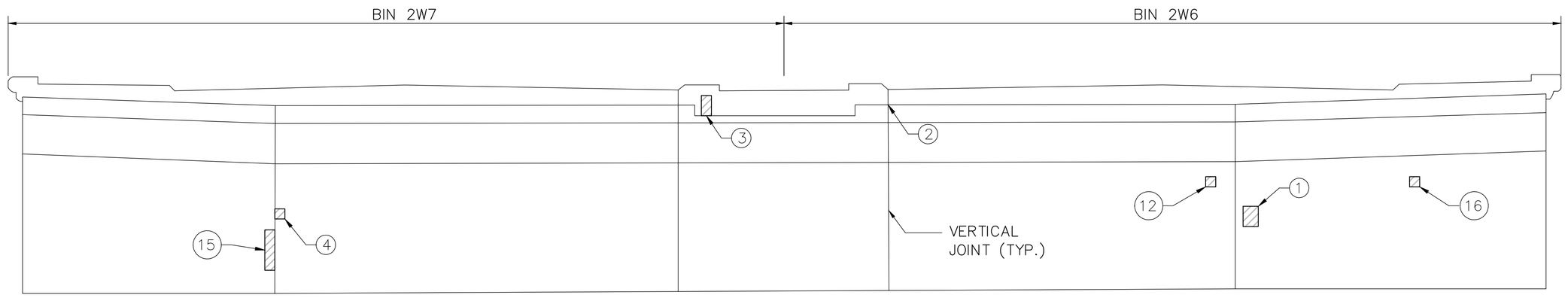
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2W6
2W7

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

24-October-2025
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Proposal No. 613196-133292

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14-16-CONCRETE REPAIRS.DWG



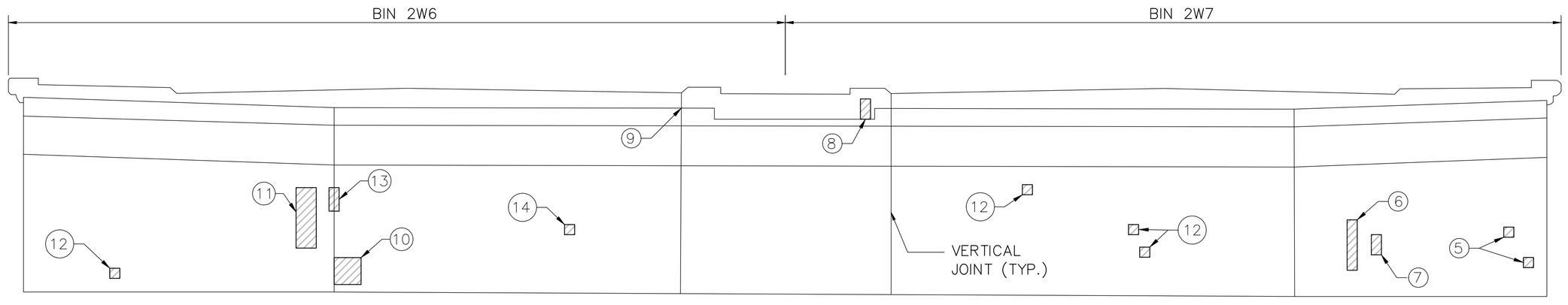
EAST ABUTMENT ELEVATION

SCALE: $\frac{1}{8}$" = 1'–0"

CONCRETE REPAIR NOTES:

1. SEE SHEET 15 FOR CONCRETE REPAIR NOTES.

REPAIR AREA #	HEIGHT	WIDTH	DEPTH	DEFICIENCY
1	2'–0"	18"	N/A	DELAMINATION
2	FULL HEIGHT	FULL WIDTH	UP TO 3"	SPALLING (SPANDREL WALL)
3	FULL HEIGHT	6"	3"	SPALL
4	8"	3"	1"	SPALL
5	UP TO 12"	UP TO 2"	UP TO 1"	TWO (2) SPALLS
6	5'–0"	3"	2"	SPALL WITH EXPOSED REBAR
7	2'–4"	3"	2"	SPALL WITH EXPOSED REBAR
8	FULL HEIGHT	6"	5"	SPALL
9	FULL HEIGHT	FULL WIDTH	UP TO 3"	SPALLING (SPANDREL WALL)
10	2'–8"	12"	1"	SPALL/DELAMINATION
11	6'–0"	2'–0"	N/A	DELAMINATION
12	4" DIA.	N/A	UP TO 2"	POPOUT
13	2'–4"	2"	2"	SPALL
14	9"	2"	1"	SPALL
15	4'–0"	5"	N/A	DELAMINATION
16	9"	2–1/2"	1"	SPALL WITH EXPOSED REBAR



WEST ABUTMENT ELEVATION

SCALE: $\frac{1}{8}$" = 1'–0"

LEGEND:

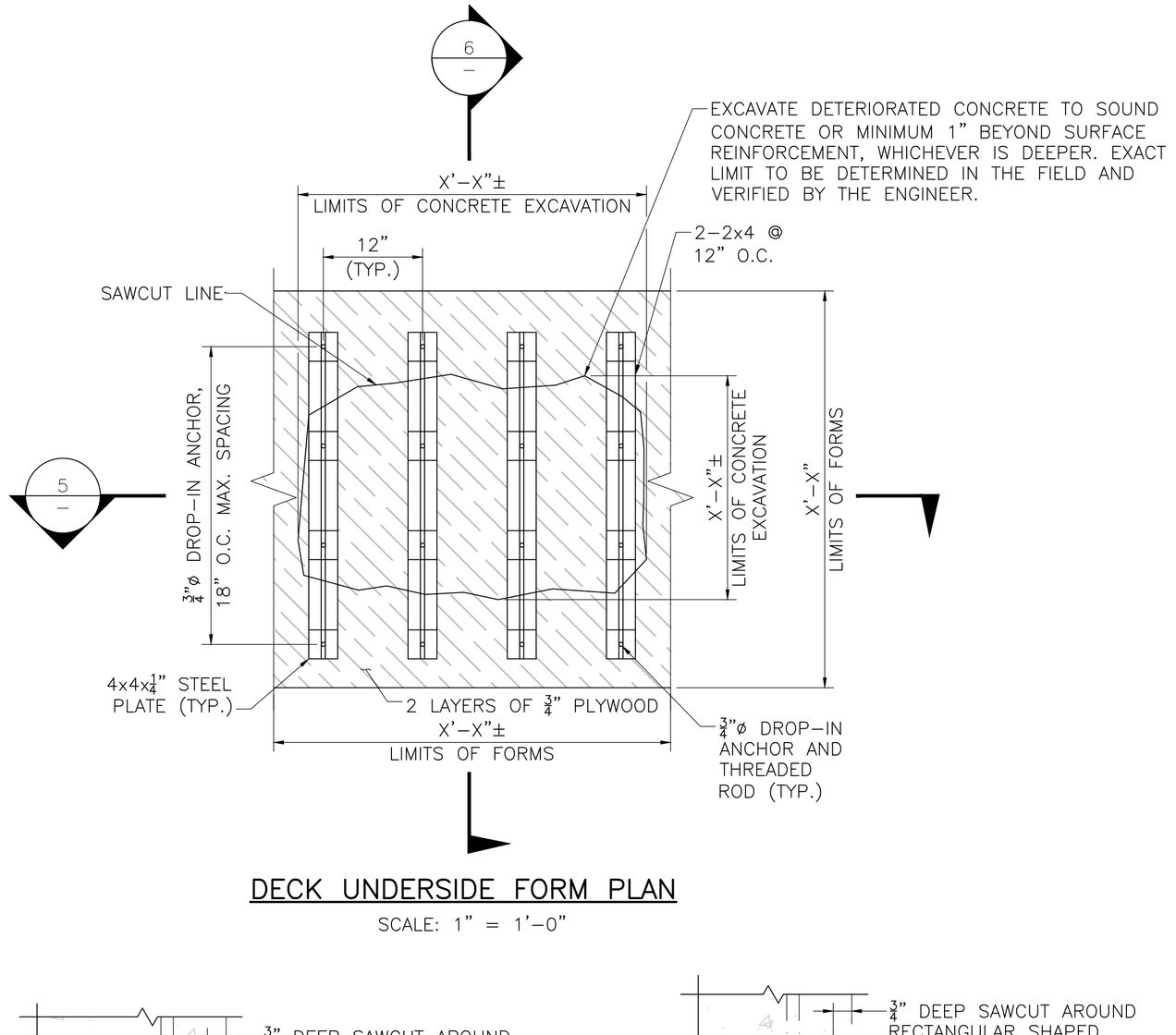
SPALLED/DELAMINATED CONCRETE AREAS TO BE REPAIRED

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2W6
2W7

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

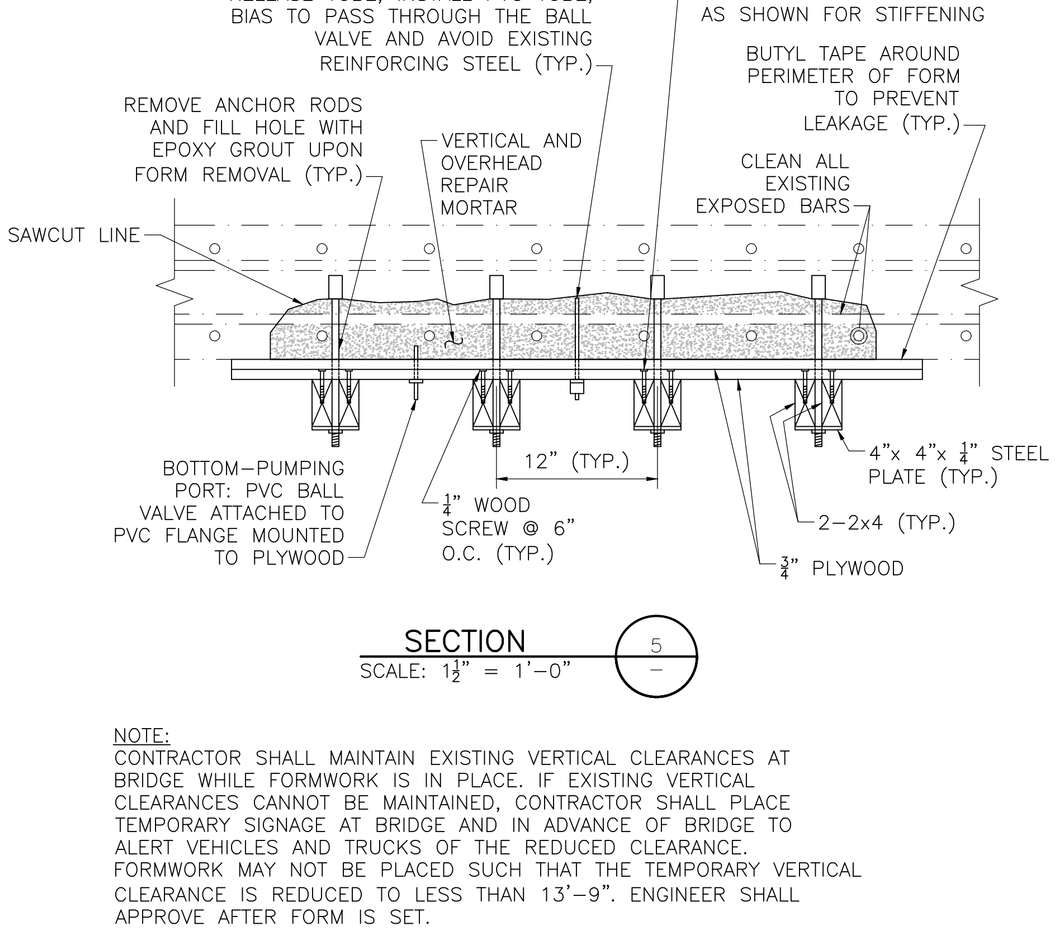
24-October-2025
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DECK UNDERSIDE FORM PLAN

SCALE: 1" = 1'–0"

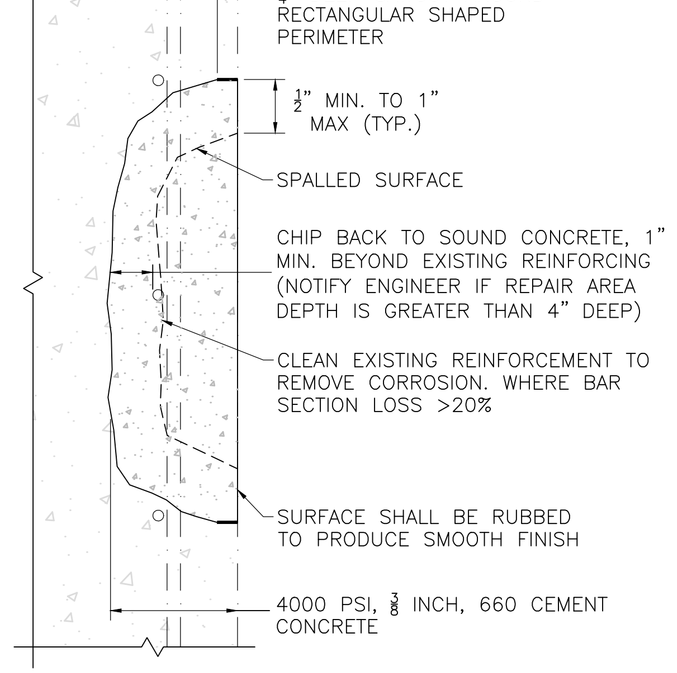


SECTION

SCALE: 1½" = 1'–0"

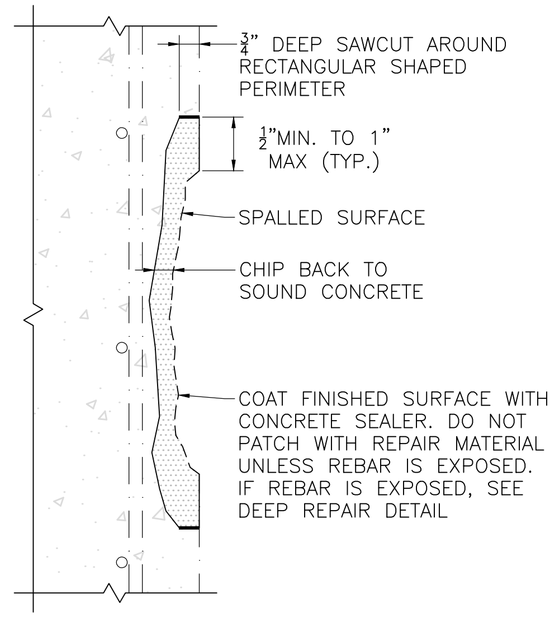
5

NOTE:
CONTRACTOR SHALL MAINTAIN EXISTING VERTICAL CLEARANCES AT BRIDGE WHILE FORMWORK IS IN PLACE. IF EXISTING VERTICAL CLEARANCES CANNOT BE MAINTAINED, CONTRACTOR SHALL PLACE TEMPORARY SIGNAGE AT BRIDGE AND IN ADVANCE OF BRIDGE TO ALERT VEHICLES AND TRUCKS OF THE REDUCED CLEARANCE. FORMWORK MAY NOT BE PLACED SUCH THAT THE TEMPORARY VERTICAL CLEARANCE IS REDUCED TO LESS THAN 13'–9". ENGINEER SHALL APPROVE AFTER FORM IS SET.



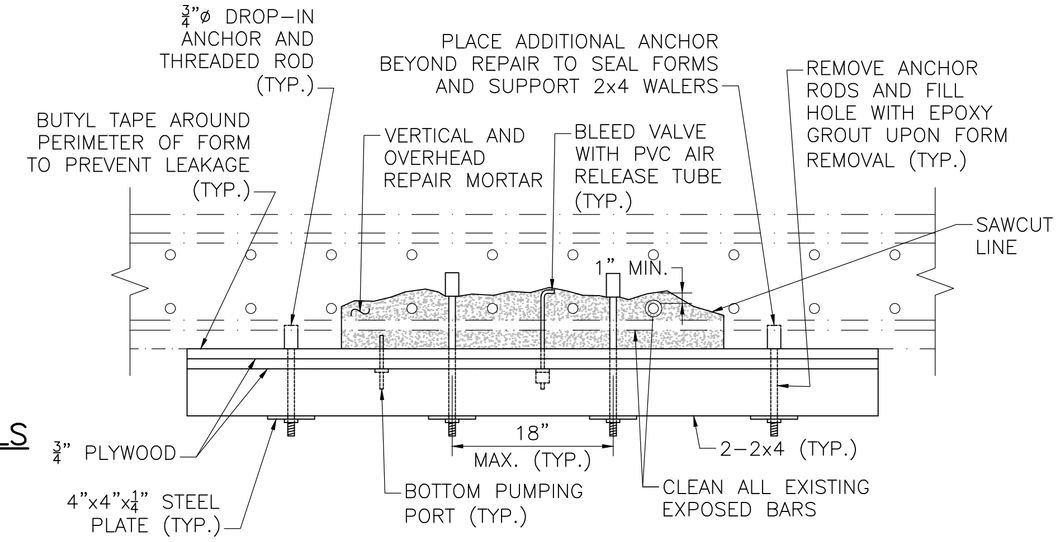
DEEP REPAIR WITH EXPOSED REBAR ALONG FRAME LEGS

(AVERAGE DEPTH OF SPALL IS GREATER THAN 2" OR SPALL WITH EXPOSED REBAR)



CONCRETE REMOVAL OF SHALLOW SPALLS

(AVERAGE DEPTH OF SPALL IS LESS THAN 2" AND NO EXPOSED REBAR)



SECTION

SCALE: 1½" = 1'–0"

6

NOTE:
CONTRACTOR SHALL MAINTAIN EXISTING VERTICAL CLEARANCES AT BRIDGE WHILE FORMWORK IS IN PLACE. IF EXISTING VERTICAL CLEARANCES CANNOT BE MAINTAINED, CONTRACTOR SHALL PLACE TEMPORARY SIGNAGE AT BRIDGE AND IN ADVANCE OF BRIDGE TO ALERT VEHICLES AND TRUCKS OF THE REDUCED CLEARANCE. FORMWORK MAY NOT BE PLACED SUCH THAT THE TEMPORARY VERTICAL CLEARANCE IS REDUCED TO LESS THAN 13'–9". ENGINEER SHALL APPROVE AFTER FORM IS SET.

CURING
1. LEAVE THE FORM WORK IN PLACE UNTIL THE COMPRESSIVE STRENGTH OF THE VERTICAL AND OVERHEAD REPAIR MORTAR REACHES 2,500 PSI.
2. IF HAND PATCHING IS REQUIRED TO FILL THE PORT AREA, DRY–PACK WITH A NON–SAG MORTAR.
3. THE FORMS SHALL BE LEFT IN PLACE FOR A MINIMUM OF 5 DAYS. ONCE THE FORMS ARE STRIPPED CURING COMPOUND SHALL BE APPLIED TO THE REPAIR IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

CONCRETE SEALER
1. AT SHALLOW REPAIRS, NO REPAIR MORTAR OR REPAIR CONCRETE SHALL BE APPLIED. REMOVE LOOSE CONCRETE.

LYNNFIELD
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STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	16	26
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14-16-CONCRETE REPAIRS - CONCRETE REPAIRS SHEET 3 OF 3

CONCRETE REPAIR NOTES:

1. THE CONTRACTOR SHALL EXERCISE CARE WHEN REMOVING CONCRETE AROUND REINFORCEMENT TO ONLY REMOVE DETERIORATED CONCRETE AND TO LIMIT THE SOUND CONCRETE REMOVED TO THE MINIMUM NECESSARY TO PRODUCE A GOOD REPAIR.
2. THE CONTRACTOR SHALL ESTABLISH LIMITS OF VARIOUS REPAIRS AS SHOWN ON THE PLANS AND AT THE DIRECTION OF THE ENGINEER. THE LOCATIONS SHOWN ON THE PLANS ARE BASED UPON RECORDS OF BRIDGE INSPECTIONS AND OBSERVATIONS FROM THE GROUND ARE ARE NOT GUARANTEED. THE LOCATION AND EXTENT OF ALL CONCRETE REPAIRS ARE TO BE FIELD VERIFIED AND APPROVED BE THE ENGINEER AFTER THE CONTRACTOR HAS SOUNDED AND MARKED OUT THE REPAIR AREAS. REASONABLY FOLLOW OUTLINES OF DETERIORATION PREFERABLY WITH SQUARE CORNERS.
3. THE LIMITS OF THE REPAIRS SHALL BE SAWCUT ALONG NEAT LINES TO A DEPTH OF ¾" TO PRODUCE A CLEAN EDGE.
4. REMOVE DETERIORATED AND UNSOUND CONCRETE AS WELL AS SOUND CONCRETE WHERE NECESSARY TO A MINIMUM OF 1" BEYOND SURFACE REINFORCEMENT.
5. EXPOSED REINFORCEMENT TO BE CLEANED BY MECHANICAL CLEANING AND HIGH PRESSURE WASHING WITH WATER THAT CONTAINS NO DETERGENTS OF BOND INHIBITING CHEMICALS. WHERE ACTIVE CORROSION HAS OCCURRED (THAT WHICH WOULD INHIBIT BONDING) SANDBLAST STEEL TO WHITE METAL FINISH.
6. A NEW REINFORCEMENT BAR SHALL BE PLACED TO SUPPLEMENT AN EXISTING REINFORCEMENT BAR WHEN AN EXISTING BAR HAS A SECTION LOSS OF 20% OF MORE OF THE ORIGINAL CROSS SECTION, AS DETERMINED BY THE ENGINEER, OR THE EXISTING REINFORCEMENT IS BROKEN. IN LIEU OF SUPPLEMENTING A BAR ADJACENT TO A DETERIORATED BAR, THE CONTRACTOR MAY CUT OUT THE DETERIORATED BAR AND MECHANICALLY SPLICE THE NEW BAR TO EXISTING REINFORCEMENT.
7. AFTER REMOVAL AND EDGE PREPARATION ARE COMPLETE, REMOVE BOND INHIBITING MATERIALS (DIRT, GREASE, LOOSELY BONDED AGGREGATE) BY ABRASION BLASTING OR HIGH PRESSURE WATER BLASTING WITH WATER THAT CONTAINS NO DETERGENTS OR BOND INHIBITING CHEMICALS. CHECK THE CONCRETE SURFACES AFTER CLEANING TO INSURE THAT THE SURFACE IS FREE FROM ADDITIONAL LOOSE AGGREGATE OR THAT ADDITIONAL DELAMINATIONS ARE NOT PRESENT.
8. AT THE TIME THE REPAIR CONCRETE/MORTAR IS APPLIED, THE EXISTING CONCRETE SUBSTRATE SHOULD BE SATURATED SURFACE DRY.
9. WHERE CONCRETE REMOVAL AND REPLACEMENT NECESSITATES ADJACENT SEPARATE CONCRETE PLACEMENTS, CONCRETE REMOVAL SHALL NOT BE ALLOWED WITHIN 1 FOOT OF ADJACENT REPAIR AREAS. ADJACENT AREAS WHERE THIS 1 FOOT BUFFER IS NOT ATTAINABLE SHALL BE COMBINED INTO A SINGLE REPAIR AREA.
10. IN SEQUENCING WORK, THE CONTRACTOR SHALL NOT BEGIN CONCRETE REMOVAL AT A LOCATION ADJACENT TO A COMPLETED REPAIR UNTIL A MINIMUM OF 7 CURING DAYS HAVE PASSED.
11. ALL HORIZONTAL AND VERTICAL CONCRETE SURFACES IN CONTACT WITH REPAIR MATERIAL SHALL BE FREE OF OIL, GREASE, LAITANCE, AND OTHER CONTAMINANTS.
12. ALL HORIZONTAL AND VERTICAL CONCRETE SURFACES MUST BE CLEAN, SOUND AND ROUGH TO ENSURE A GOOD BOND.
13. THE CONTRACTOR SHALL MAINTAIN UNDERDECK LIGHTING AND COMMUNICATION CABLES. REMOVAL AND REATTACHMENT OF FIXTURES HOLDING COMMUNICATION LINES AND STREET LIGHTING SHALL BE INCIDENTAL TO CONCRETE REPAIRS.
14. REPAIR CONCRETE SHALL MEET THE REQUIREMENTS OF ITEM 905.001.

FORMWORK
1. FORMS DESIGNED FOR 12 PSI PRESSURE.
2. INSTALL FORMS ON THE FACE OF EACH REPAIR AREA. GROUT PORTS TO BE PLACED AT 4'–0" MAX. ON CENTER EACH WAY MAX. VENT TUBES TO BE PLACED AT 2'–0" MAX. ON CENTER EACH WAY.
3. FORMS ARE TO BE WATERTIGHT. PREFORMED FOAM GASKETS OR CAST IN PLACE FOAM SHALL BE USED TO MATCH SURFACES.
4. AT REPAIRS ADJACENT TO THE JOINTS IN THE RIGID FRAME, MAINTAIN THE EXISTING JOINT OPENING OF 1–1/2".

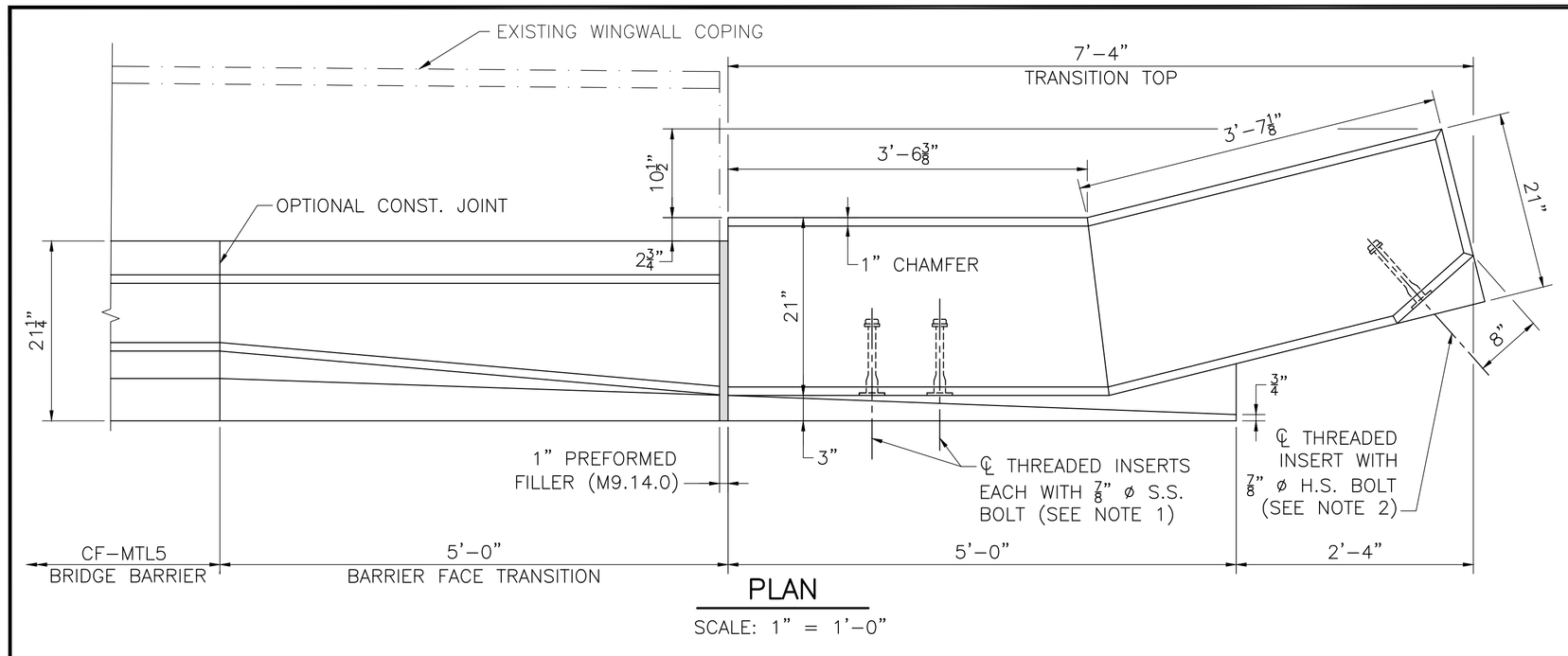
MIXING AND PUMPING
1. SATURATE HOST CONCRETE SUBSTRATE USING A WATER HOSE THROUGH FORM PORTS PRIOR TO PLACING GROUT. AT TIME OF GROUT PLACEMENT, SUBSTRATE SHALL BE SATURATED SURFACE DRY WITH NO STANDING WATER.
2. VERTICAL AND OVERHEAD REPAIR MORTAR SHALL BE USED TO MAKE THE REPAIRS AND SHALL BE MIXED ACCORDING TO THE MANUFACTURER SPECIFICATIONS AND IN ACCORDANCE WITH THE MASSDOT QCML.
3. THE PUMP MUST BE CAPABLE OF CONTINUOUS EVEN FLOW OF MATERIALS TO THE REPAIR AREA WITHOUT HAVING ANY LINE SURGE. LIVE SURGE WILL RESULT IN AIR VOIDS AND POSSIBLE AGGREGATE SEGREGATION.
4. PRIOR TO PUMPING MATERIALS, ALL HOSES MUST BE WET OUT WITH CLEAN WATER TO ENSURE INITIAL FLOW PROPERTIES ARE MAINTAINED.
5. THE PUMPING DISTANCE MUST BE KEPT TO A MINIMUM. THE PUMPING HOSE SHALL BE A MINIMUM 3 TIMES THE SIZE OF THE LARGEST AGGREGATE ON THE VERTICAL AND OVERHEAD REPAIR MORTAR (⅜"X3).
6. ADDITIONAL WATER BEYOND THE RECOMMENDED LEVEL WILL NOT INCREASE THE FLOW CHARACTERISTICS OF THE VERTICAL AND OVERHEAD REPAIR MORTAR. KEEP PUMPING PRESSURE TO A MINIMUM NECESSARY TO FILL CAVITY.

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2W7

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USE ONLY PRINTS OF LATEST DATE	

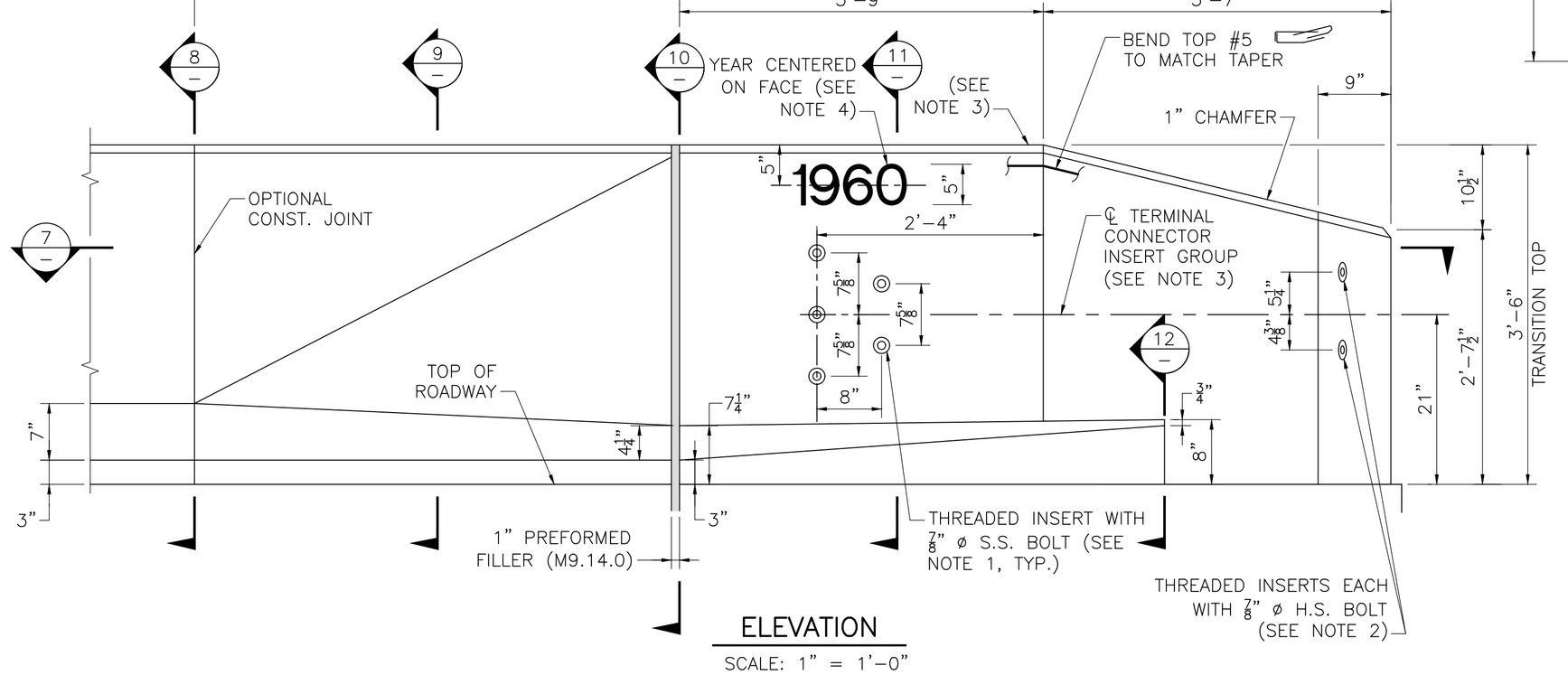
SHEET 15 OF 19 SHEETS BRIDGE NO. L–19–007 (*)

A00804 - 18
Proposal No. 613196-133292
Plotted on 22-Oct-2025 1:25 PM
14-16-CONCRETE REPAIRS.DWG
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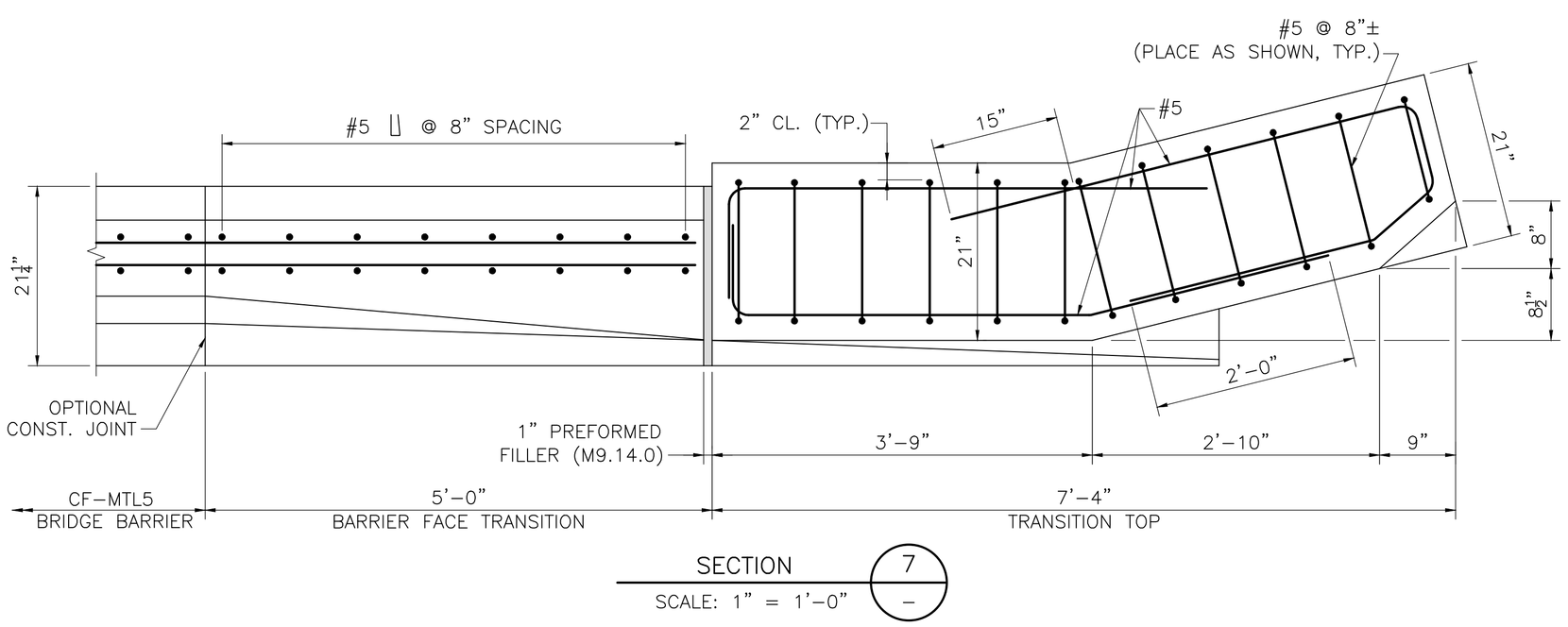
PLAN

SCALE: 1" = 1'-0"



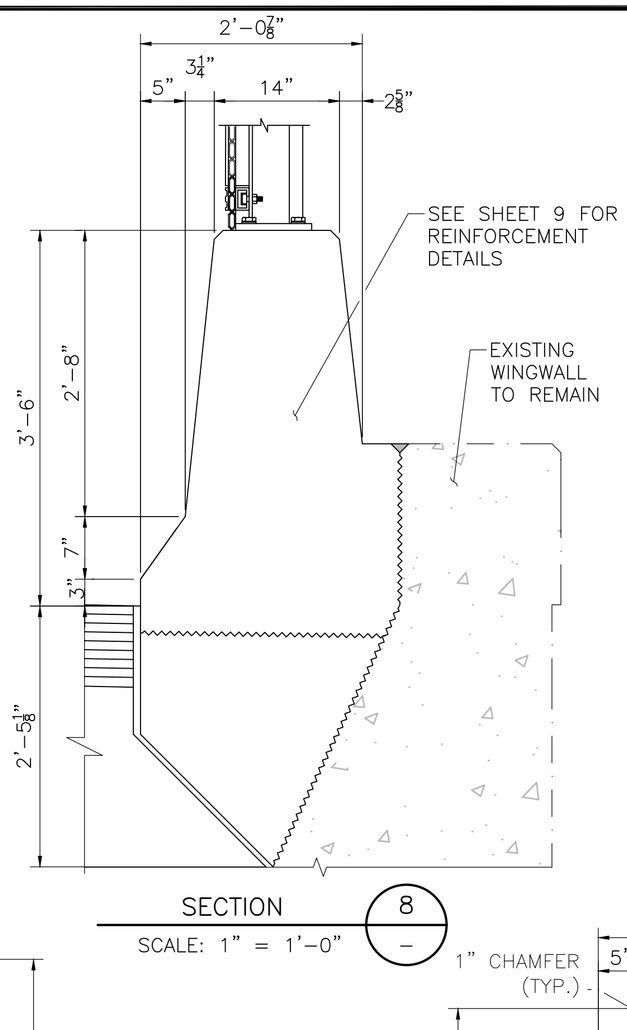
ELEVATION

SCALE: 1" = 1'-0"



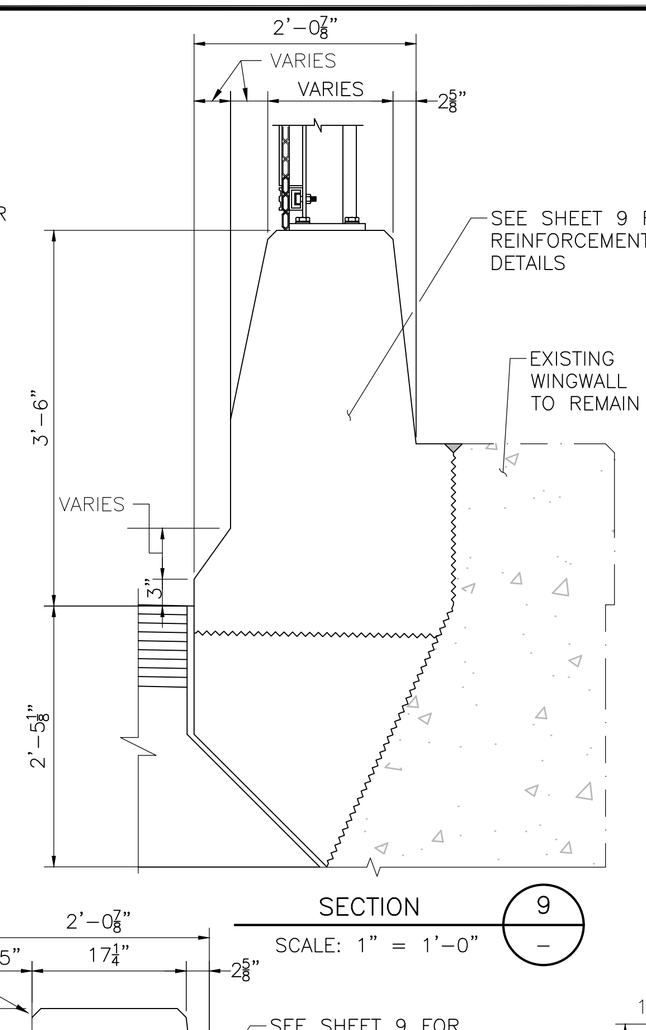
SECTION 7

SCALE: 1" = 1'-0"



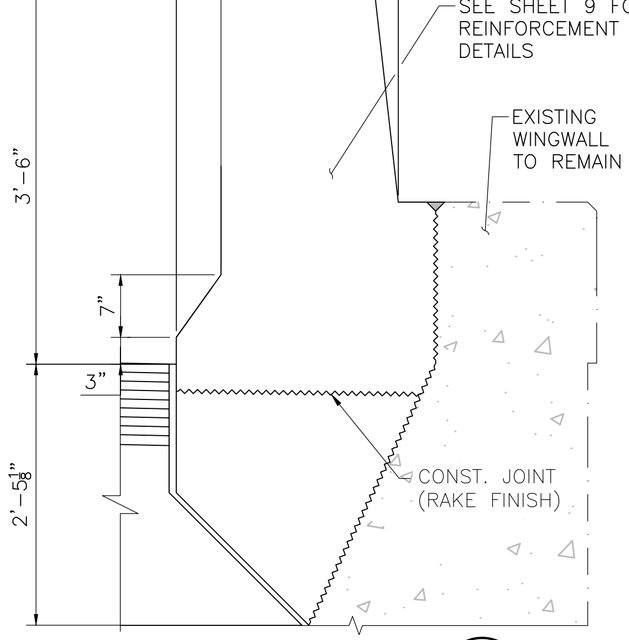
SECTION 8

SCALE: 1" = 1'-0"



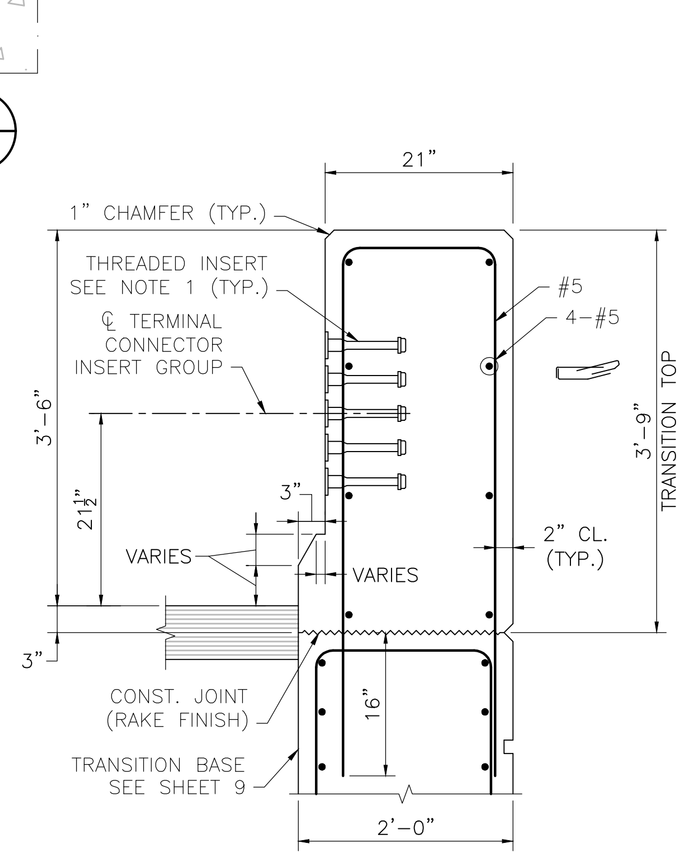
SECTION 9

SCALE: 1" = 1'-0"



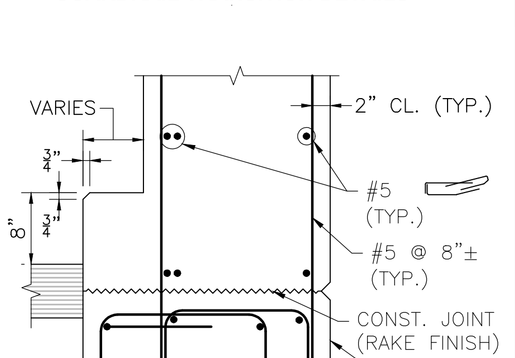
SECTION 10

SCALE: 1" = 1'-0"



SECTION 11

SCALE: 1" = 1'-0"



SECTION 12

SCALE: 1" = 1'-0"

NOTES:

1. THREADED INSERTS SHALL BE PREQUALIFIED BY THE MANUFACTURER AS BEING CAPABLE OF DEVELOPING A NOMINAL SHEAR RESISTANCE OF 20 KIPS PER ⅞" ø S.S. (STAINLESS STEEL) BOLT. S.S. BOLTS SHALL BE ⅞" ø x 1½" LONG FULLY THREADED CONFORMING TO ASTM F593D WITH AISI TYPE 304N S.S. WASHERS. INSERTS FOR ⅞" S.S. BOLTS SHALL BE GALVANIZED AND CAST INTO THE TRANSITION.
2. ⅞" ø HIGH STRENGTH BOLTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F3125 GRADE 325 TYPE 1 GALVANIZED. USE ADDITIONAL WASHERS AS REQUIRED TO PROPERLY ENGAGE THE BOLTS.
3. FOR AN APPROACH GRADE IN EXCESS OF 3%, THE TRANSITION TOP AND THE TOP OF THE BRIDGE BARRIERS SHALL FOLLOW THE APPROACH GRADE. THE HEIGHT OF THE TRANSITION TOP SHALL VARY PROVIDED THAT THE MINIMUM DIMENSIONS SHOWN ON THE CONSTRUCTION DRAWINGS ARE MET. THE BOTTOM OF THE TRANSITION BASE SHALL BE SET LEVEL WITH THE MINIMUM EMBEDMENT DEPTH SHOWN. THE TERMINAL CONNECTOR INSERT GROUP SHALL BE SLOPED TO FOLLOW THE APPROACH GRADE.TO PROPERLY ENGAGE THE BOLTS. FOR AN APPROACH GRADE UP TO 3%, THE TRANSITION MAY BE CAST SQUARE AND SET PLUMB WITH THE MINIMUM EMBEDMENT DEPTH SHOWN. THE TERMINAL CONNECTOR INSERT GROUP SHALL BE SQUARE TO THE POST.
4. USE THE YEAR 1960 (YEAR BRIDGE WAS REBUILT) WHEN THE FIRST GUARDRAIL TRANSITION IS CAST. USE THIS YEAR FOR THE SOUTHWEST GUARDRAIL TRANSITION.
5. ALL CONCRETE FOR THE PRECAST HIGHWAY GUARDRAIL TRANSITION SHALL BE 5000 PSI, ¾", 685 HP CEMENT CONCRETE (ITEMS 992.15 AND 992.16).
6. LIFTING DEVICES (NOT SHOWN), INCLUDING THEIR NUMBER AND LOCATION, SHALL BE DESIGNED AND DETAILED BY THE PRECASTER. THEY SHALL BE GALVANIZED AND SHALL BE PLACED AND RECESSED IN POCKETS TO PROVIDE 1½" CLEAR COVER TO THE FACE OF THE TRANSITION CONCRETE. THESE DEVICES SHALL BE CLEARLY SHOWN ON THE SHOP DRAWINGS ALONG WITH ALL SUPPORTING CALCULATIONS AND/OR CATALOG CUTS. ONCE THE PRECAST TRANSITION IS SET IN PLACE, THE LIFTING DEVICE POCKETS SHALL BE FILLED WITH A NON-SHRINK GROUT THAT MATCHES THE COLOR OF THE TRANSITION CONCRETE WHEN CURED AND THE FILLED POCKETS SHALL BE RUBBED WITH A CORUNDUM STONE TO BLEND OUT THE JOINTS.

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STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	17	26
	PROJECT FILE NO. 613196		

GUARDRAIL TRANSITION DETAILS

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
	USE ONLY PRINTS OF LATEST DATE

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2W6
2W7

SHEET 16 OF 19 SHEETS BRIDGE NO. L-19-007 (*)

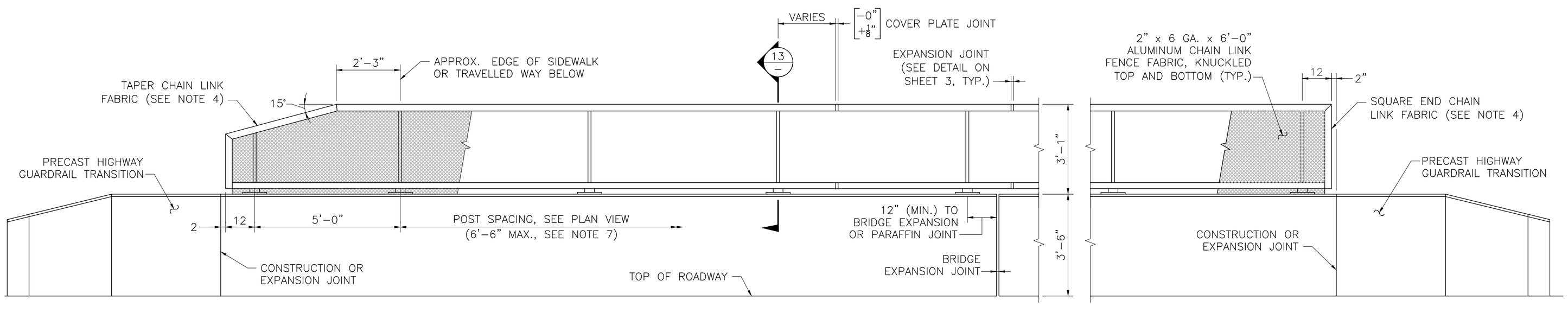
17-GUARDRAIL TRANSITION DETAILS.DWG Plotted on 22-Oct-2025 1:58 PM

24-October-2025

PS&E Resubmission

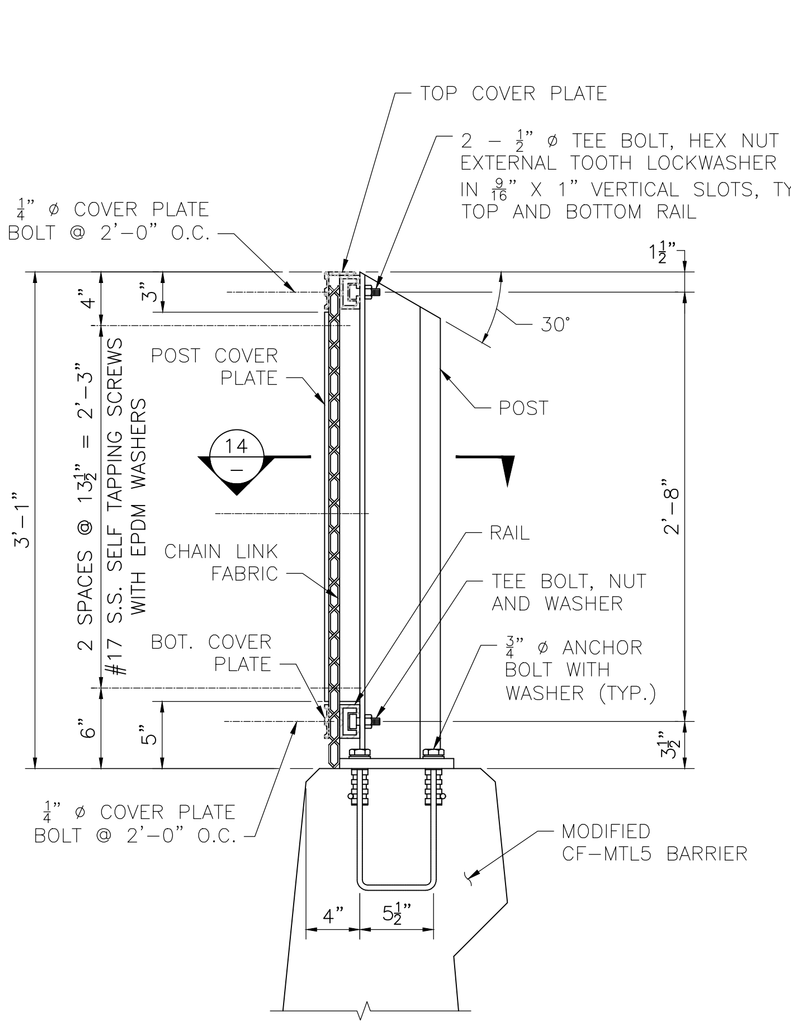
Proposal No. 613196-133292

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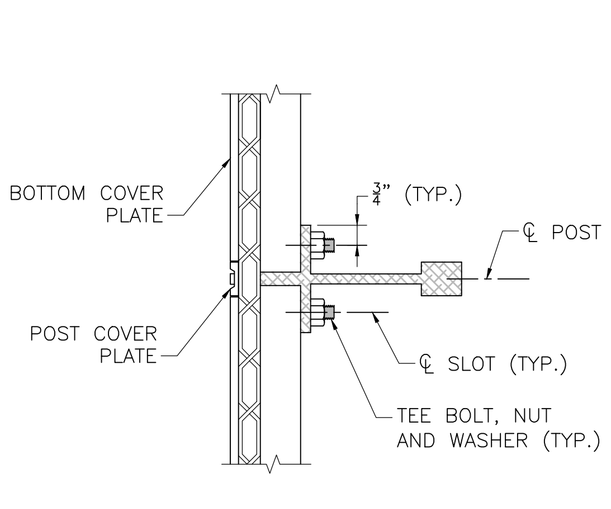


SNOW FENCE ELEVATION FOR CF−MTL5 BARRIERS

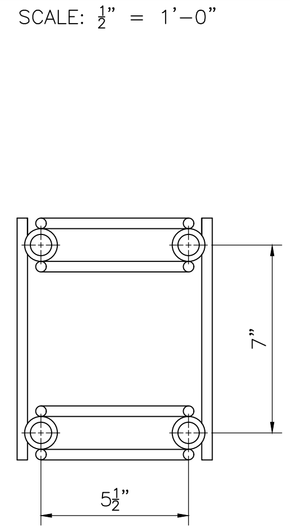
SCALE: ½" = 1'−0"



SECTION 14 / SCALE: 3" = 1'−0"

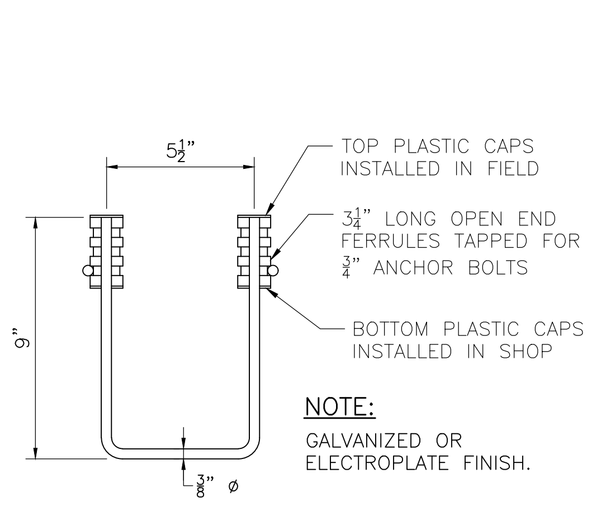


SECTION 13 / SCALE: 1½" = 1'−0"

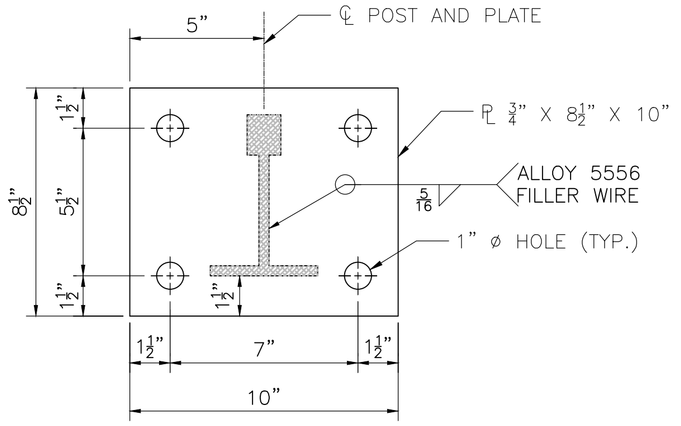


ANCHOR CAGE

SCALE: 3" = 1'−0"

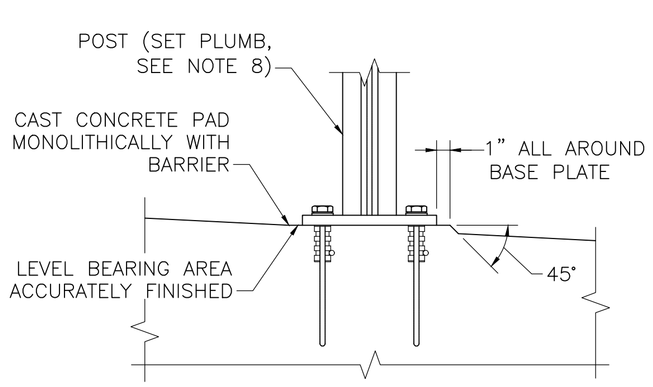


NOTE:
GALVANIZED OR ELECTROPLATE FINISH.



BASE PLATE DETAIL

SCALE: 3" = 1'−0"



PROFILE GRADE OVER 3%

SETTING OF POSTS

SCALE: 1½" = 1'−0"

FINISHES:

1. POSTS, RAILS, COVER PLATES AND SPLICE PLATES SHALL RECEIVE A DARK BRONZE ANODIZED FINISH.
2. CHAIN LINK FABRIC SHALL RECEIVE A 4±1 MIL POLYESTER POWDER COAT FINISH. THE COLOR SHALL BE DARK BRONZE TO MATCH COLOR OF ANODIZED ALUMINUM FRAMEWORK.
3. #17 SELF TAPPING SCREWS AND ¼" ø COVER PLATE BOLTS TO BE COLORED TO MATCH THE ANODIZED EXTRUSIONS.

MATERIALS:

EXTRUSIONS & PLATES	ASTM B 221, ALLOY 6061−T6
CHAIN LINK FABRIC	AASHTO M 181 TYPE III (ALLOY 6061−T89 OR T94)
SELF TAPPING SCREWS	TYPE 304 STAINLESS STEEL WITH ¼" THICK EPDM (ETHYLENE PROPYLENE DIENE MONOMER) WASHERS
ANCHOR BOLTS	ASTM F3125 GRADE 325 TYPE 1 GALVANIZED (ROTATION CAPACITY TEST NOT REQUIRED)
TEE BOLTS	ASTM A 307 GALVANIZED OR TYPE 304 STAINLESS STEEL
COVER PLATE BOLTS	TYPE 304 STAINLESS STEEL WITH OVERSIZED STAINLESS WASHER AND STAINLESS NUT WITH NYLON INSERT

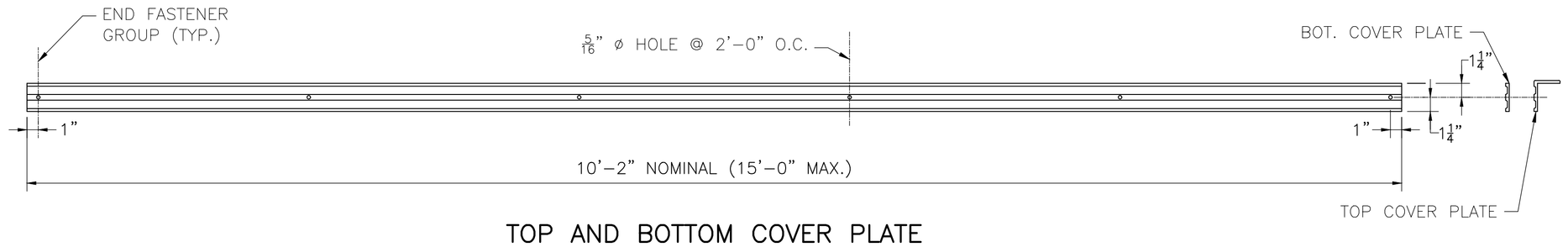
NOTES:

1. RAILS SHALL BE CONTINUOUS OVER A MINIMUM OF FOUR POSTS, IF POSSIBLE.
2. RAILS SHALL HAVE AN EXPANSION JOINT IN THE PANEL OVER A BRIDGE EXPANSION JOINT, IF ANY, AND AT 30 FOOT MAXIMUM SPACING ELSEWHERE.
3. BOTTOM OF POST BASE PLATE TO BE SET ON A ⅛" MOLDED FABRIC BEARING PAD (M9.16.2). THE THICKNESS OF THE PAD SHALL BE IGNORED BY THE DETAILER.
4. THE CHAIN LINK FABRIC SHALL BE SECURED BY KNUCKLING TOGETHER THE CUT ENDS OF THE FABRIC WIRE IN A MANNER SIMILAR TO THE ORIGINALLY MANUFACTURED END.
5. WHERE THE R.O.W. FENCE MUST MEET THE SCREEN, USE THE SQUARE END TO HIGHWAY GUARDRAIL TRANSITION DETAIL.
6. ALL SCREEN ENDS SHALL BE TAPERED.
7. POST SPACING SHALL BE UNIFORM BETWEEN TAPERED ENDS.
8. SET POSTS PERPENDICULAR TO GRADE FOR GRADES UP TO 3%. SET POSTS PLUMB FOR GRADES GREATER THAN 3%.

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2W6
2W7

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

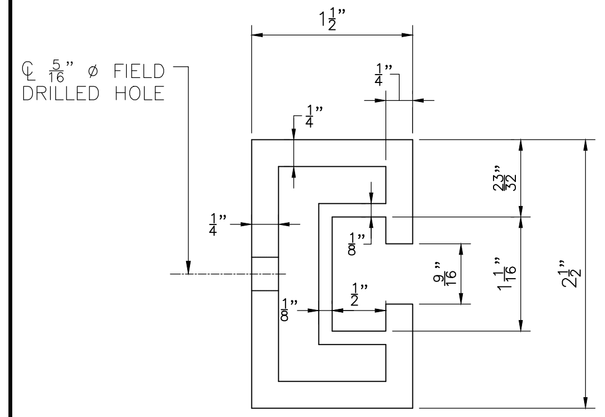
18-19-SNOW FENCE DETAILS.DWG Plotted on 22-Oct-2025 1:58 PM
24-October-2025
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TOP AND BOTTOM COVER PLATE
SCALE: 1½" = 1'-0"

COVER PLATE NOTES:

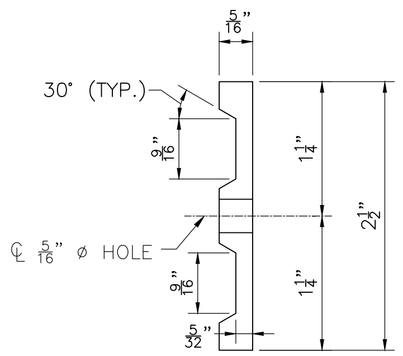
1. COVER PLATES MAY BE CONTINUOUS OVER A RAIL EXPANSION JOINT SPLICE. COVER PLATES SHALL BE FIELD CUT AS REQUIRED TO CLEAR THE EXPANSION JOINT. SEE DETAIL AT EXPANSION JOINT.
2. FIELD DRILL 5/16" ø HOLE 1" FROM THE FIELD CUT END OF A COVER PLATE, UNLESS THERE IS AN EXISTING HOLE WITHIN 6" FROM THE COVER PLATE END.
3. FIELD PAINT THE FIELD CUT ENDS OF THE COVER PLATES TO MATCH THE ANODIZED COLOR.



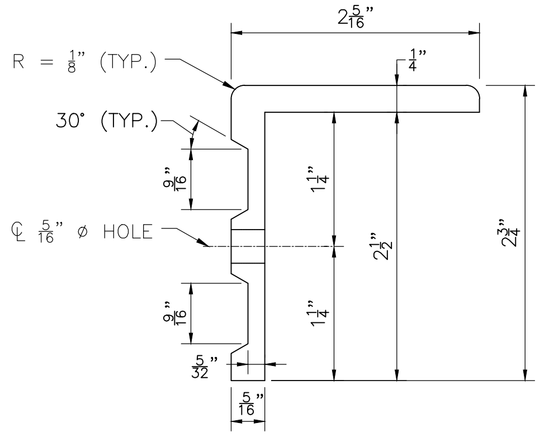
NOTE:

OTHER CONFIGURATIONS OF THE INTERNAL WALLS OF THE RAIL EXTRUSION MAY BE SUBMITTED FOR APPROVAL.

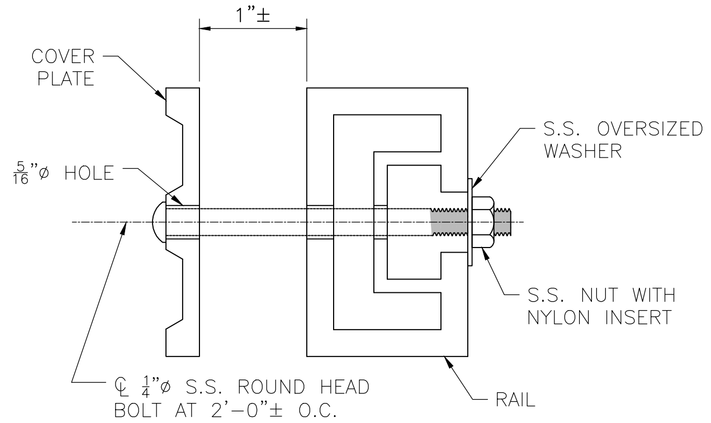
RAIL EXTRUSION
FULL SIZE



BOTTOM COVER PLATE EXTRUSION
FULL SIZE



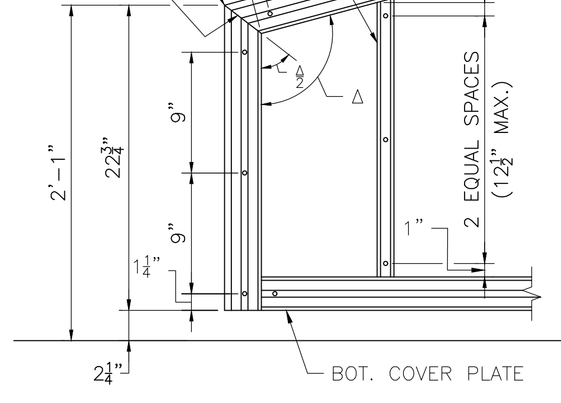
TOP COVER PLATE EXTRUSION
FULL SIZE



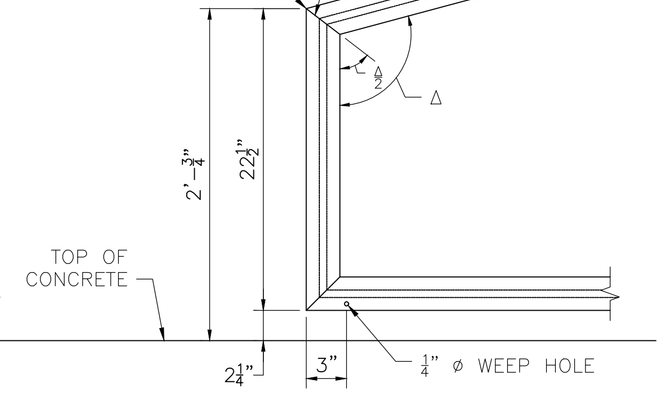
NOTE:

BOLTS SHALL BE TYPE 304 WITH A DRIVE HEAD TO BE COLORED TO MATCH ANODIZING.

RAIL & COVER PLATE DETAIL
FULL SIZE



COVER PLATE DETAILS

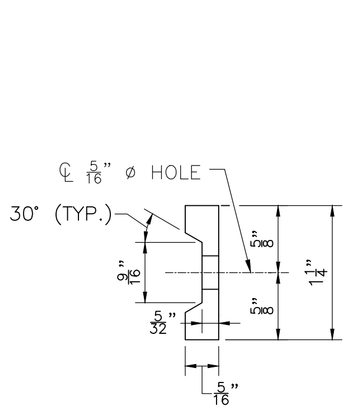


RAIL DETAILS

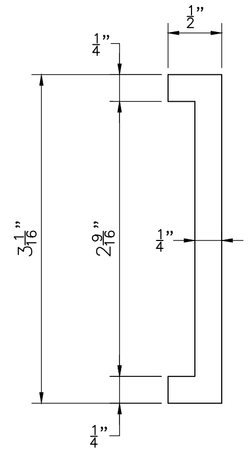
NOTES:

1. WELDING OF TOP COVER PLATE AND RAILS OF NON-TAPERED END IS SIMILAR.
2. WELDS AND MITERING TYPICAL FOR ALL ANGLED CORNERS.
3. WELD TYPICAL FOR TOP AND BOTTOM END CORNERS OF RAIL. INTERRUPT WELD AT SLOT IN BACK OF RAIL.

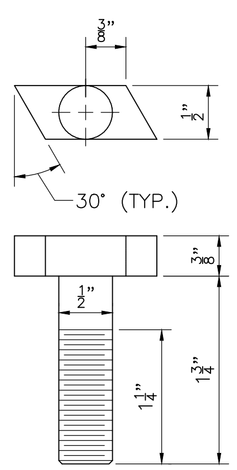
TAPERED END DETAILS
SCALE: 1½" = 1'-0"



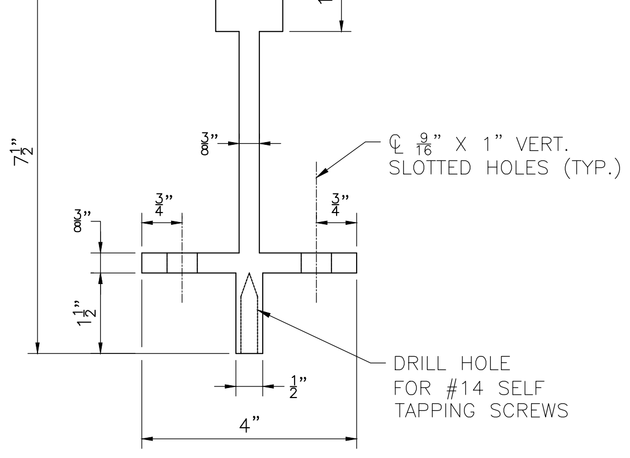
POST COVER PLATE EXTRUSION
FULL SIZE



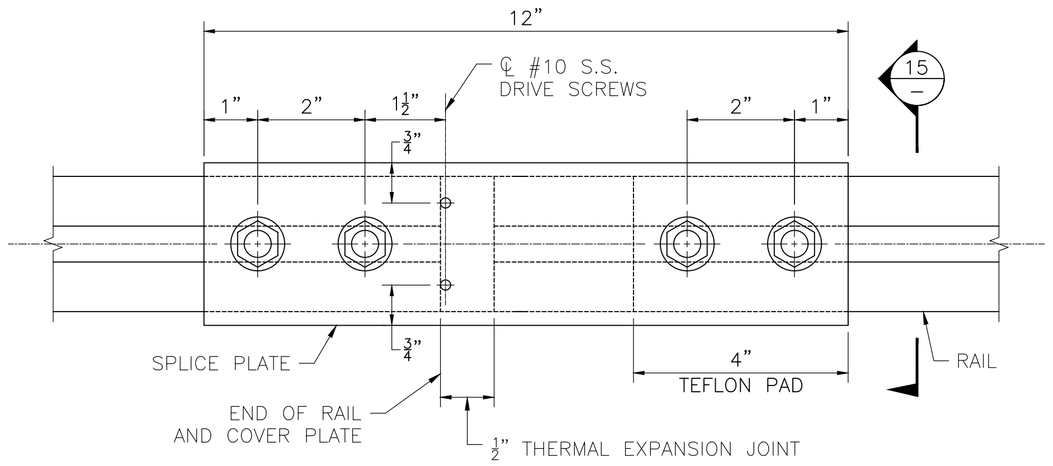
SPLICE PLATE EXTRUSION
FULL SIZE



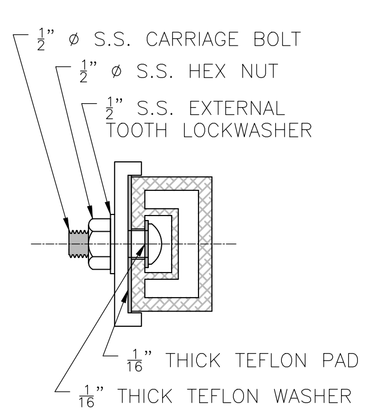
TEE BOLT
FULL SIZE



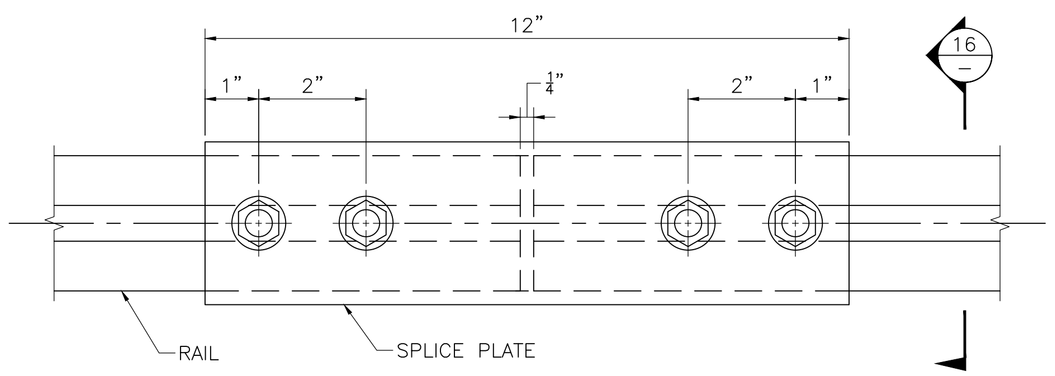
POST EXTRUSION
SCALE: 6" = 1'-0"



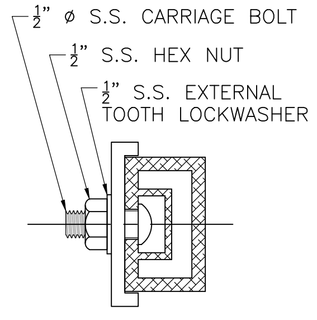
DETAIL AT RAIL EXPANSION JOINT SPLICE
SCALE: 6" = 1'-0"



SECTION 15 / –
SCALE: 6" = 1'-0"



DETAIL AT RAIL SPLICE JOINT
SCALE: 6" = 1'-0"



SECTION 16 / –
SCALE: 6" = 1'-0"

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
	USE ONLY PRINTS OF LATEST DATE

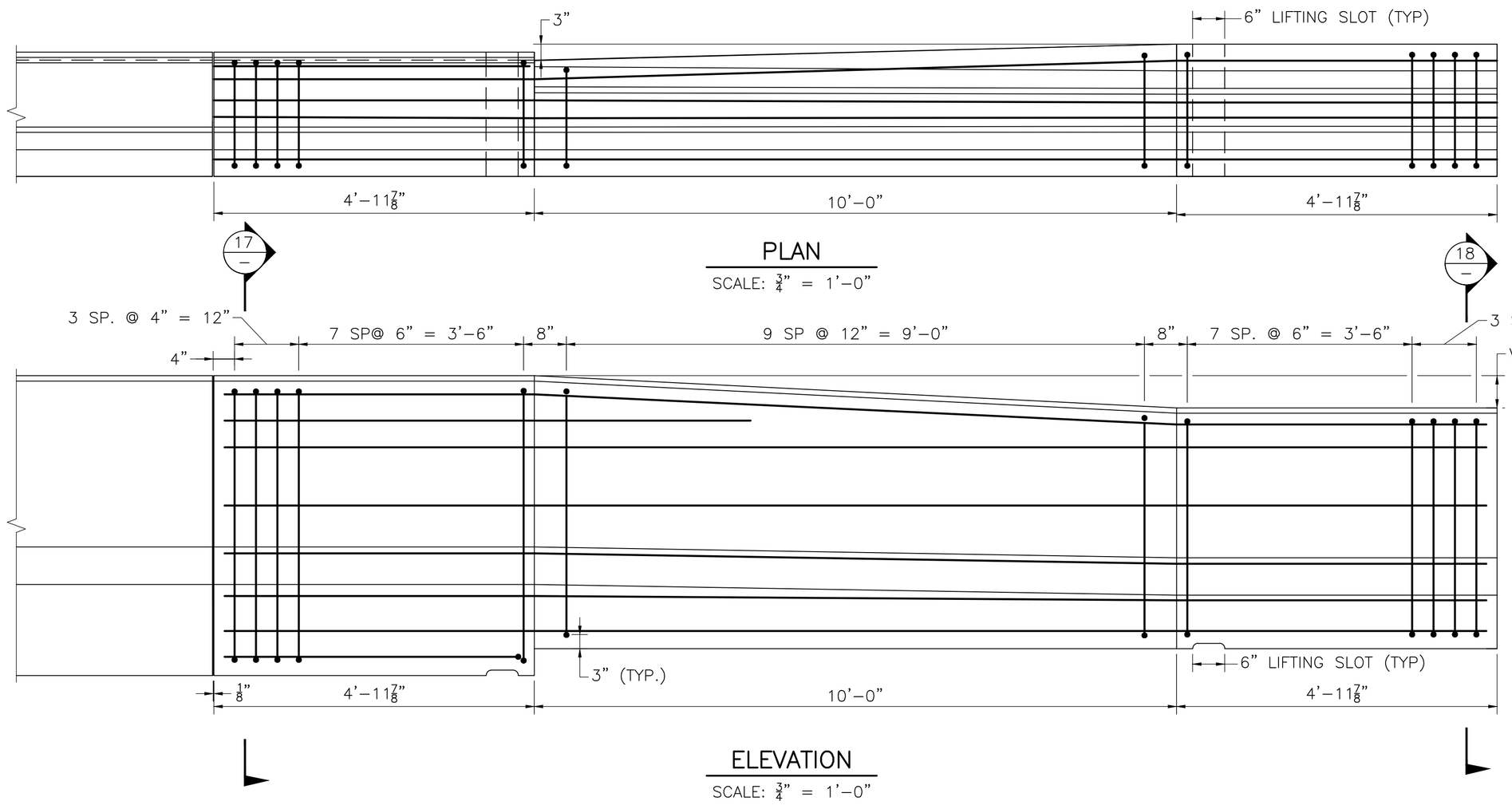
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2W6
2W7

18-19-SNOW FENCE DETAILS.DWG Plotted on 22-Oct-2025 1:58 PM
Proposal No. 613196-133292
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24-October-2025
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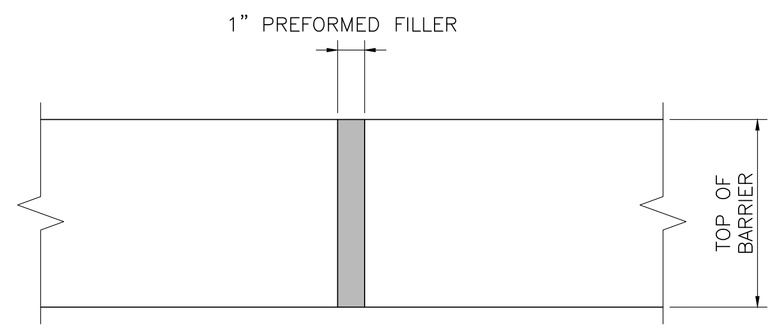
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	20	26
	PROJECT FILE NO.	613196	

TAPERED BARRIER DETAILS

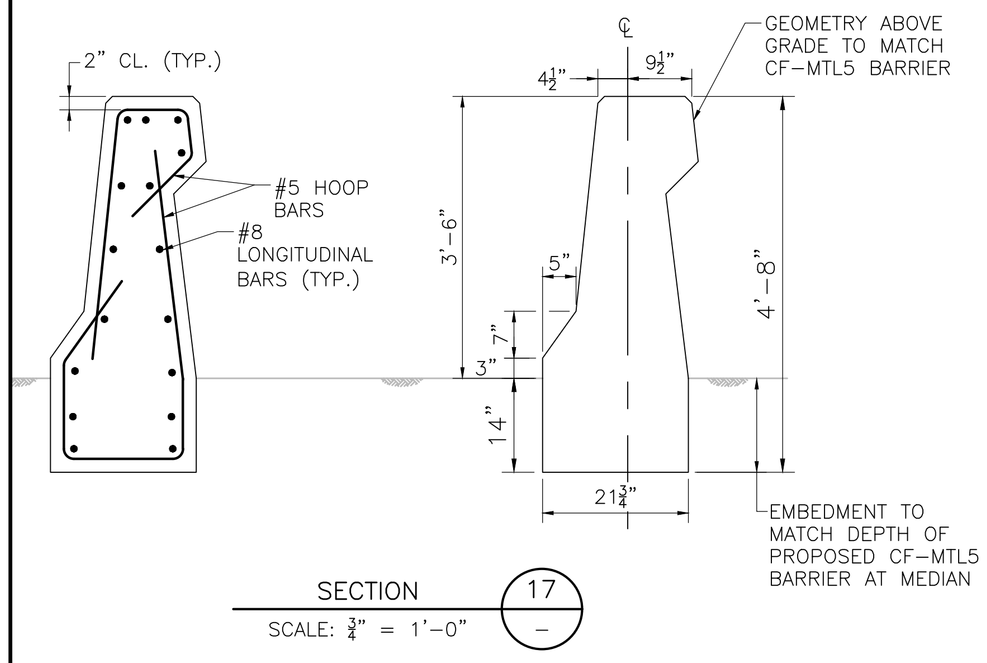


PLAN
SCALE: ¾" = 1'–0"

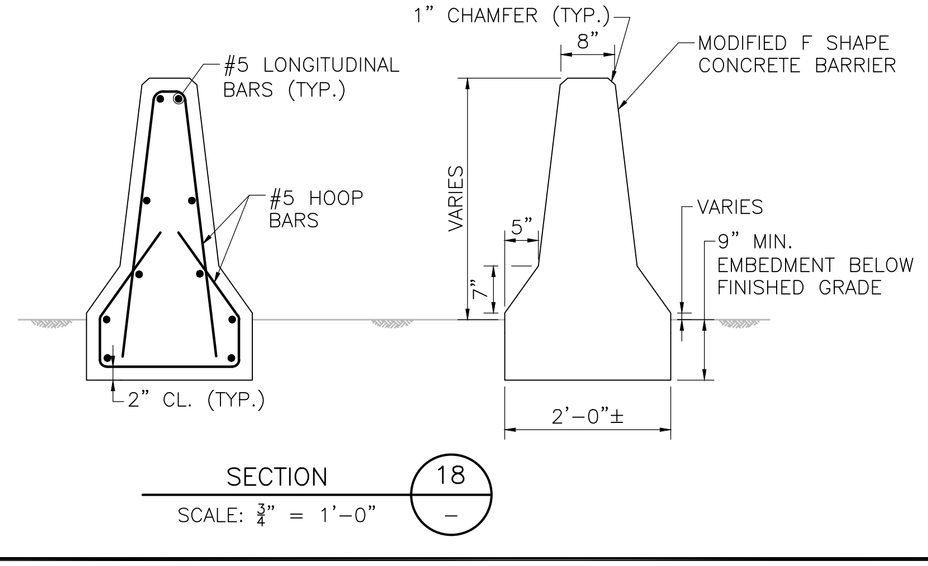
ELEVATION
SCALE: ¾" = 1'–0"



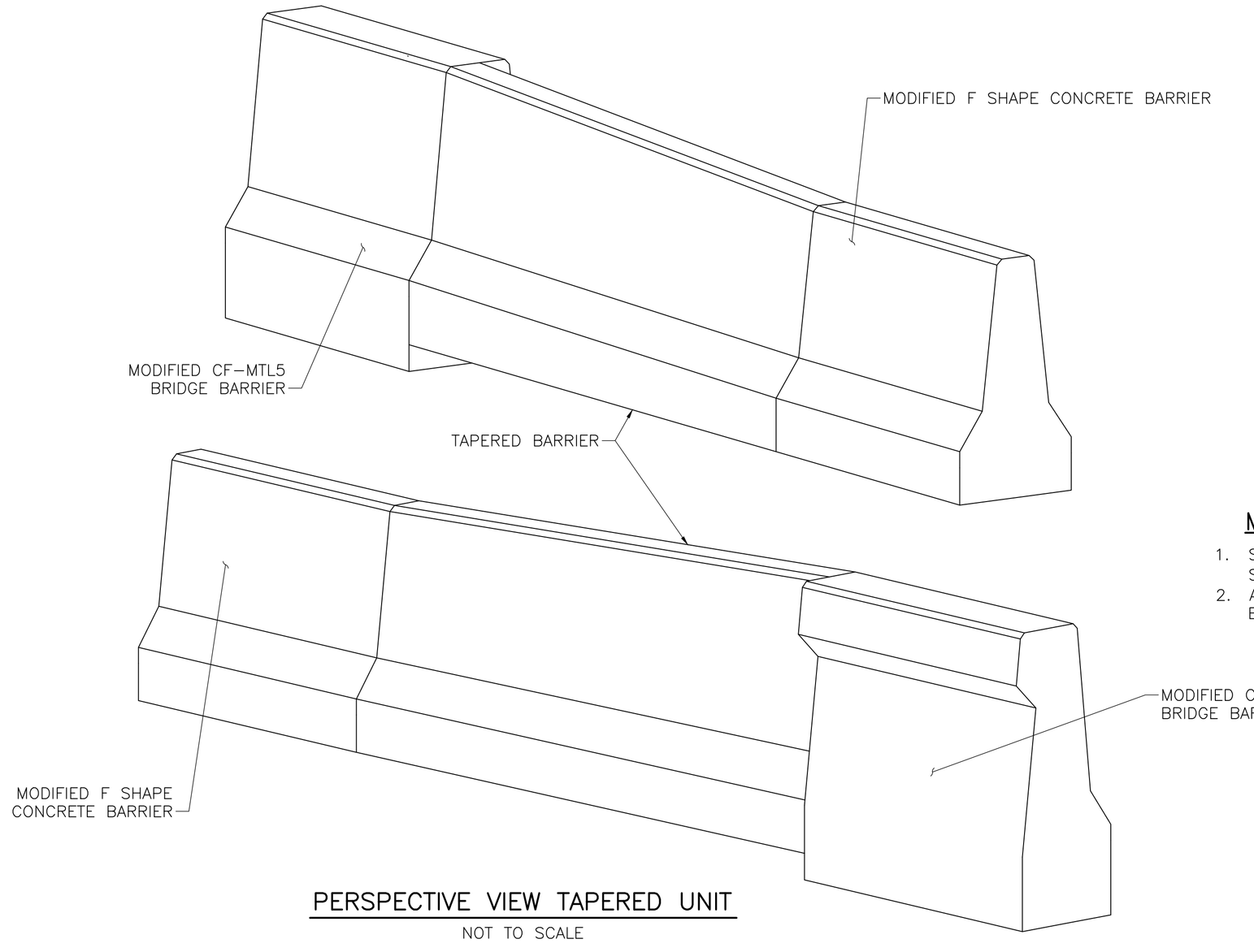
JOINT DETAIL
SCALE: 3" = 1'–0"



SECTION 17 –
SCALE: ¾" = 1'–0"



SECTION 18 –
SCALE: ¾" = 1'–0"



PERSPECTIVE VIEW TAPERED UNIT
NOT TO SCALE

MATERIAL NOTES:

1. SEE SHEET 2 FOR CONCRETE NOTES. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1", UNLESS NOTED OTHERWISE.
2. ALL REINFORCING STEEL SHALL BE AASHTO M31 (ASTM A615) GRADE 60, EPOXY COATED.

*
2W6
2W7

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

SHEET 19 OF 19 SHEETS BRIDGE NO. L–19–007 (*)

20-TAPERED BARRIER DETAILS.DWG Plotted on 22-Oct-2025 1:33 PM

24-October-2025

PS&E Resubmission

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NOTES:

1. ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND THE MASSACHUSETTS AMENDMENTS TO THE MUTCD.
2. TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
3. 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.
4. SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, CHANNELIZING DEVICES, BARRIERS, AND CRASH ATTENUATORS MUST PASS THE CRITERIA SET FORTH IN NCHRP REPORT 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES" AND/OR "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH).
5. CONTRACTORS SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT, AND SIMILAR OPERATIONS.
6. THE FIRST 10 REFLECTORIZED DRUMS OF A TAPER SHALL BE MOUNTED WITH SEQUENTIALLY FLASHING LIGHTS WHEN USED FOR NIGHT WORK BETWEEN DUSK AND DAWN.
7. DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
8. MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
9. MINIMUM LANE WIDTH IS TO BE 11 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF DRUMS OR MEDIAN BARRIER.
10. ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.
11. ANY WORK REQUIRING A SINGLE LANE CLOSURE ON INTERSTATE 95 SHALL BE LIMITED TO NIGHT WORK BETWEEN 9:00PM–5:00AM, PER THE SCHEDULE OF WORK DEFINED IN THE CONTRACT SPECIAL PROVISIONS.
12. ANY WORK REQUIRING CLOSURE OF MULTIPLE LANES ON INTERSTATE 95 SHALL BE LIMITED TO NIGHT WORK BETWEEN 12:00AM–5:00AM, PER THE SCHEDULE OF WORK DEFINED IN THE CONTRACT SPECIAL PROVISIONS.
13. ANY WORK REQUIRING A FULL ROAD CLOSURE OF SUMMER STREET SHALL BE LIMITED TO NIGHT WORK BETWEEN 11:00PM–5:00AM, PER THE SCHEDULE OF WORK DEFINED IN THE CONTRACT SPECIAL PROVISIONS.
14. ANY WORK REQUIRING ONE–LANE ALTERNATING TRAFFIC CONTROL SET UPS ON SUMMER STREET SHALL BE LIMITED TO NIGHT WORK BETWEEN 9:00PM–5:00AM, PER THE SCHEDULE OF WORK DEFINED IN THE CONTRACT SPECIAL PROVISIONS.

LEGEND:

- REFLECTORIZED PLASTIC DRUM OR 36" CONE
- P/F POLICE/FLAGGER DETAIL
- TYPE III BARRICADE
- CHANGEABLE MESSAGE SIGN
- ARROW BOARD
- WORK ZONE
- DIRECTION OF TRAFFIC
- IMPACT ATTENUATOR
- MEDIAN BARRIER
- MEDIAN BARRIER WITH WARNING LIGHTS
- WORK VEHICLE
- TRUCK MOUNTED ATTENUATOR
- TRAFFIC OR PEDESTRIAN SIGNAL
- SIGN
- TEMPORARY PORTABLE RUMBLE STRIP ARRAY

THE IDEAL CAPACITY OF A MAJOR HIGHWAY IS GENERALLY CONSIDERED TO BE 1900 PASSENGER CARS PER HOUR PER LANE (PCPHPL). IN WORK ZONES ON A MULTI–LANE DIVIDED HIGHWAY, THE FOLLOWING VOLUME GUIDELINES HAVE BEEN SUGGESTED:

MEASURED AVERAGE WORK ZONE CAPACITIES

NUMBER OF LANES		NUMBER OF STUDIES	AVERAGE CAPACITY	
NORMAL (EXISTING)	OPEN (TO TRAFFIC)		VPH	VPHPL
3	1	7	1,170	1,170
2	1	8	1,340	1,340
5	2	8	2,740	1,370
4	2	4	2,960	1,480
3	2	9	2,980	1,490
4	3	4	4,560	1,520

Source: Dudek, C., Notes on Work Zone Capacity and Level of Service. Texas Transportation Institute, Texas A&M University, College Station, Texas (1984)

BY OBTAINING HOURLY TRAFFIC COUNTS FOR A PARTICULAR ROADWAY (WITH A MINIMUM OF A 48–HOUR AUTOMATIC TRAFFIC RECORDER (ATR) COUNT), THIS WILL HELP TO DETERMINE AT WHAT TIMES OF THE DAY OR NIGHT A CERTAIN NUMBER OF LANES MAY BE CLOSED.

SUGGESTED WORK ZONE WARNING SIGN SPACING

ROAD TYPE*	DISTANCE BETWEEN SIGNS **			
	A	B	C	D
URBAN (30 MPH OR LESS)	100	100	100	100
URBAN (35 MPH OR GREATER)	350	350	350	350
RURAL	500	500	500	500
EXPRESSWAY/FREEWAY	1,000	1,500	2,640	500

* ROAD TYPE TO BE DETERMINED BY MASSDOT OFFICE OF TRANSPORTATION PLANNING.

** DISTANCES ARE SHOWN IN FEET. THE COLUMN HEADINGS A, B, AND C ARE THE DIMENSIONS SHOWN IN THE DETAIL/ TYPICAL SETUP FIGURES. THE A DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN. THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS. THE C DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE "THIRD" SIGN IS THE FIRST ONE TYPICALLY ENCOUNTERED BY A DRIVER APPROACHING A TEMPORARY TRAFFIC CONTROL (TTC) ZONE.)

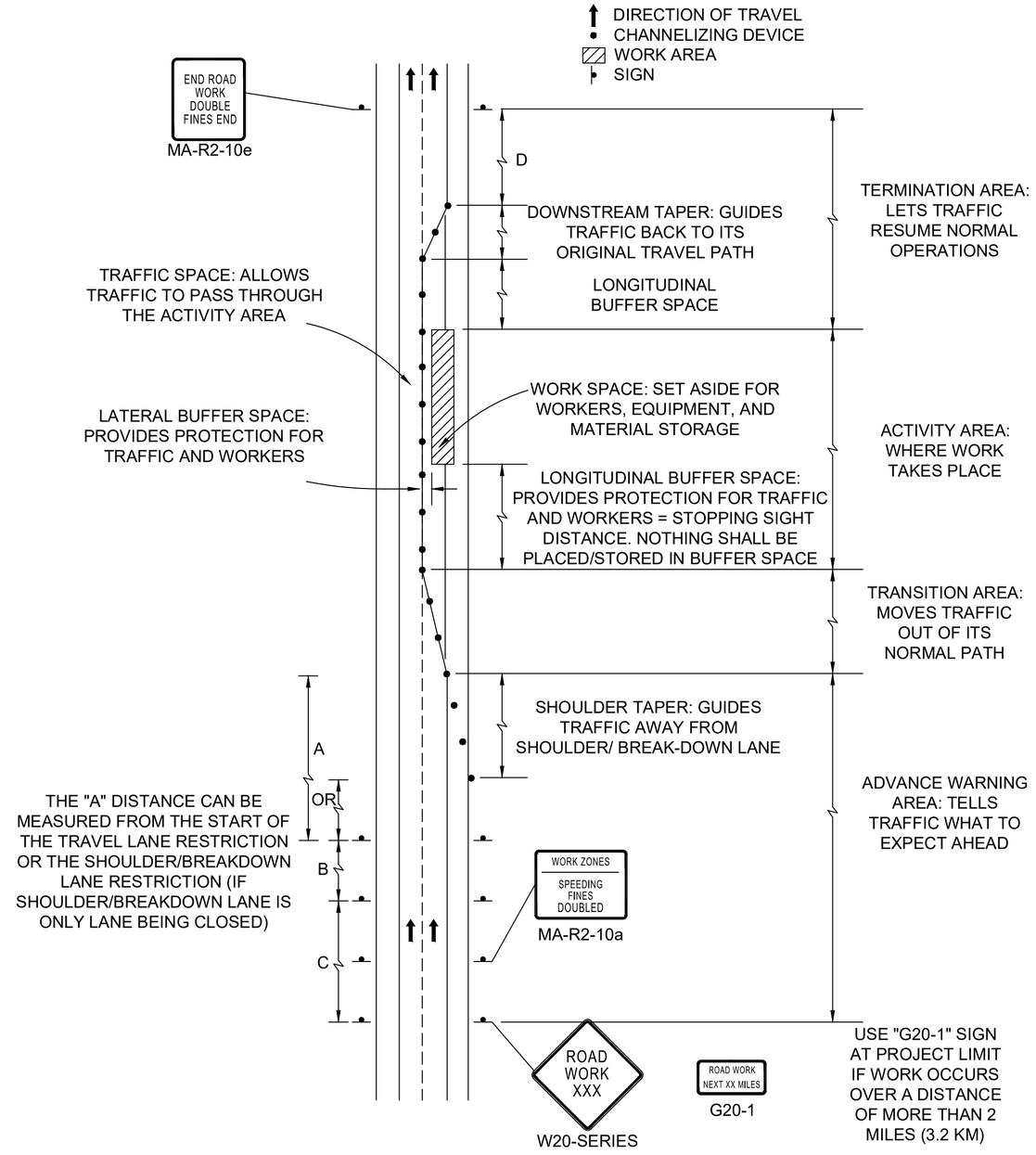
THE "THIRD" SIGN ABOVE IS TYPICALLY REFERRED TO AS AN "ADVANCE WARNING" SIGN ON THE TTCP SETUPS. THESE ADVANCE WARNING SIGNS ARE LOCATED PRIOR TO THE PROJECT LIMITS ON ALL APPROACHES (i.e. THE W20–1 SERIES (ROAD WORK XX FT) SIGNS), AND USUALLY REMAIN FOR THE DURATION OF THE PROJECT. ADDITIONAL SIGNS (i.e. "RIGHT LANE CLOSED 1 MILE" AND "LEFT LANE CLOSED 1 MILE") HAVE BEEN SHOWN IN SOME FIGURES AS EXAMPLES OF REINFORCEMENT SIGN PLACEMENT BUT ARE USED IN RARE OCCASIONS.

THE FIRST AND SECOND WARNING SIGNS ABOVE ARE REFERRED TO AS THE OPERATIONAL (DAY–TO–DAY) WORK ZONE SIGNS AND MAY BE MOVED DEPENDING ON WHERE THE SPECIFIC ROADWAY WORK FOR THAT DAY IS LOCATED.

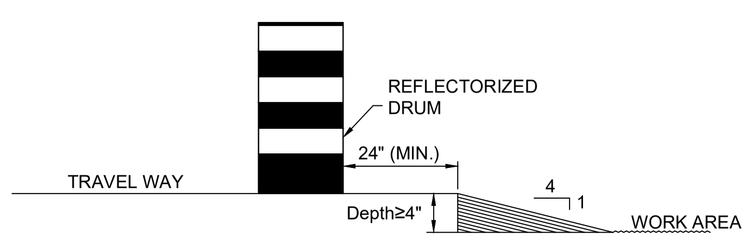
MA R2–10a SIGNS SHALL BE PLACED BETWEEN THE SECOND AND THIRD SIGNS AS DESCRIBED ABOVE.

MA R2–10a, MA R2–10e, AND W20–1 SERIES SIGNS ARE TO BE INCLUDED ON ALL DETAILS/TYPICAL SETUPS.

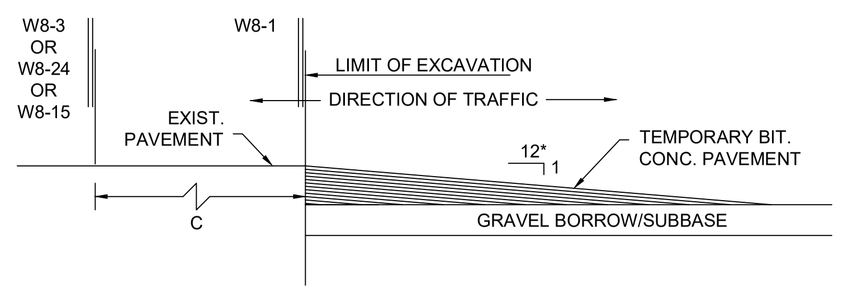
Based on: Table 6C–1 MUTCD LATEST EDITION



COMPONENT PARTS OF A TEMPORARY TRAFFIC CONTROL (TTC) ZONE
NOT TO SCALE



LATERAL DROP-OFF DETAIL
NOT TO SCALE

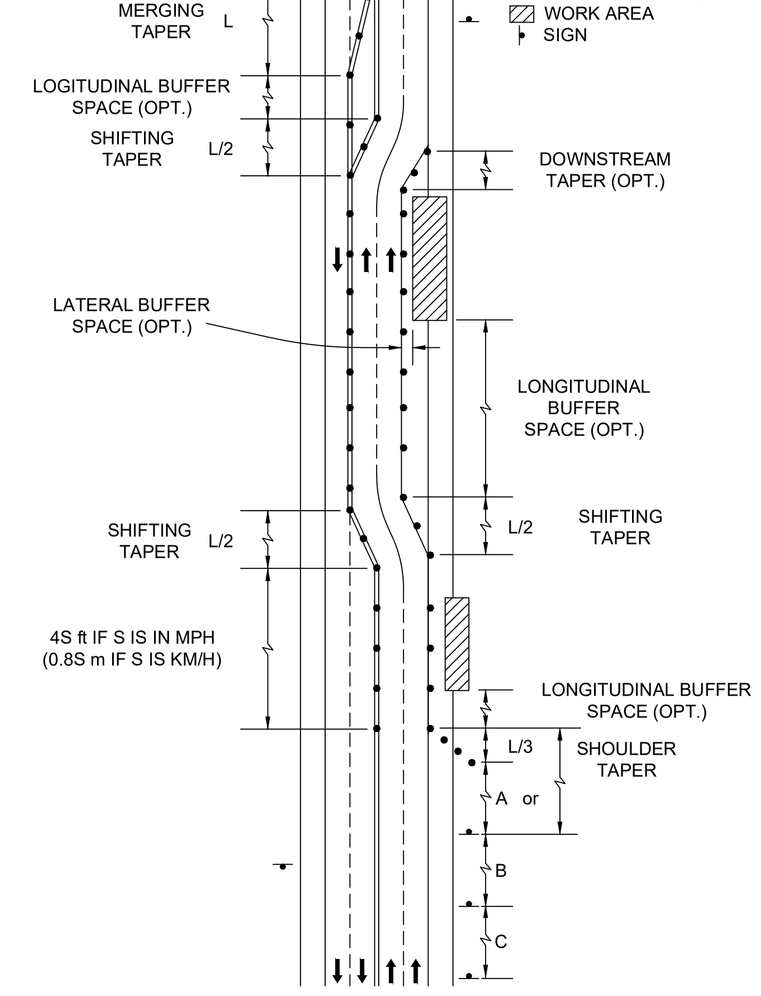


LONGITUDINAL DROP-OFF DETAIL
NOT TO SCALE
* - INCREASE SLOPE RATIO FOR HIGHER SPEEDS (50:1)

LYNNFIELD
I-95/ROUTE 128 OVER SUMMER STREET

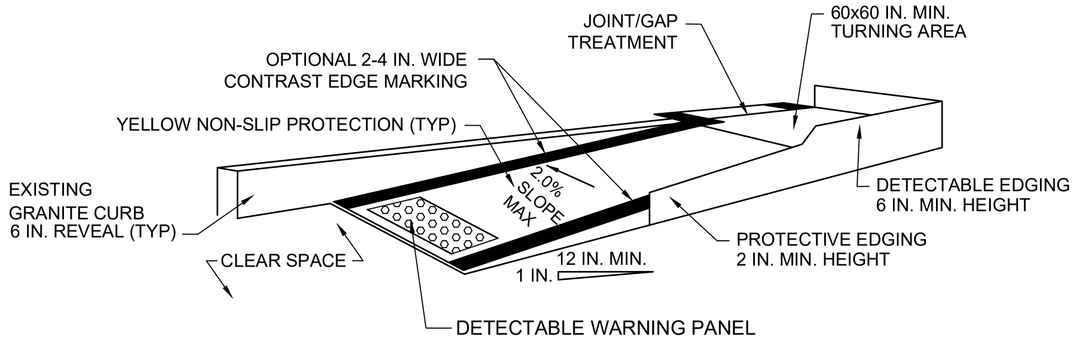
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	21	26
PROJECT FILE NO.	613196		

TEMPORARY TRAFFIC CONTROL PLANS - SHEET 1



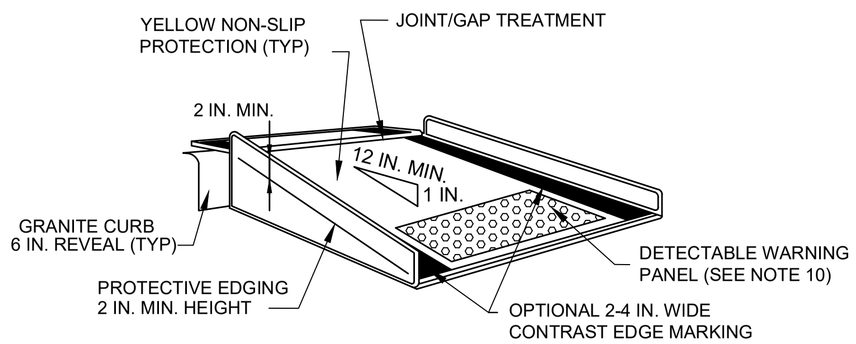
TAPER AND BUFFER DETAILS
NOT TO SCALE

Plotted on 16-Dec-2025 4:08 PM
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TEMPORARY CURB RAMP-PARALLEL TO CURB

NOT TO SCALE



TEMPORARY CURB RAMP-PERPENDICULAR TO CURB

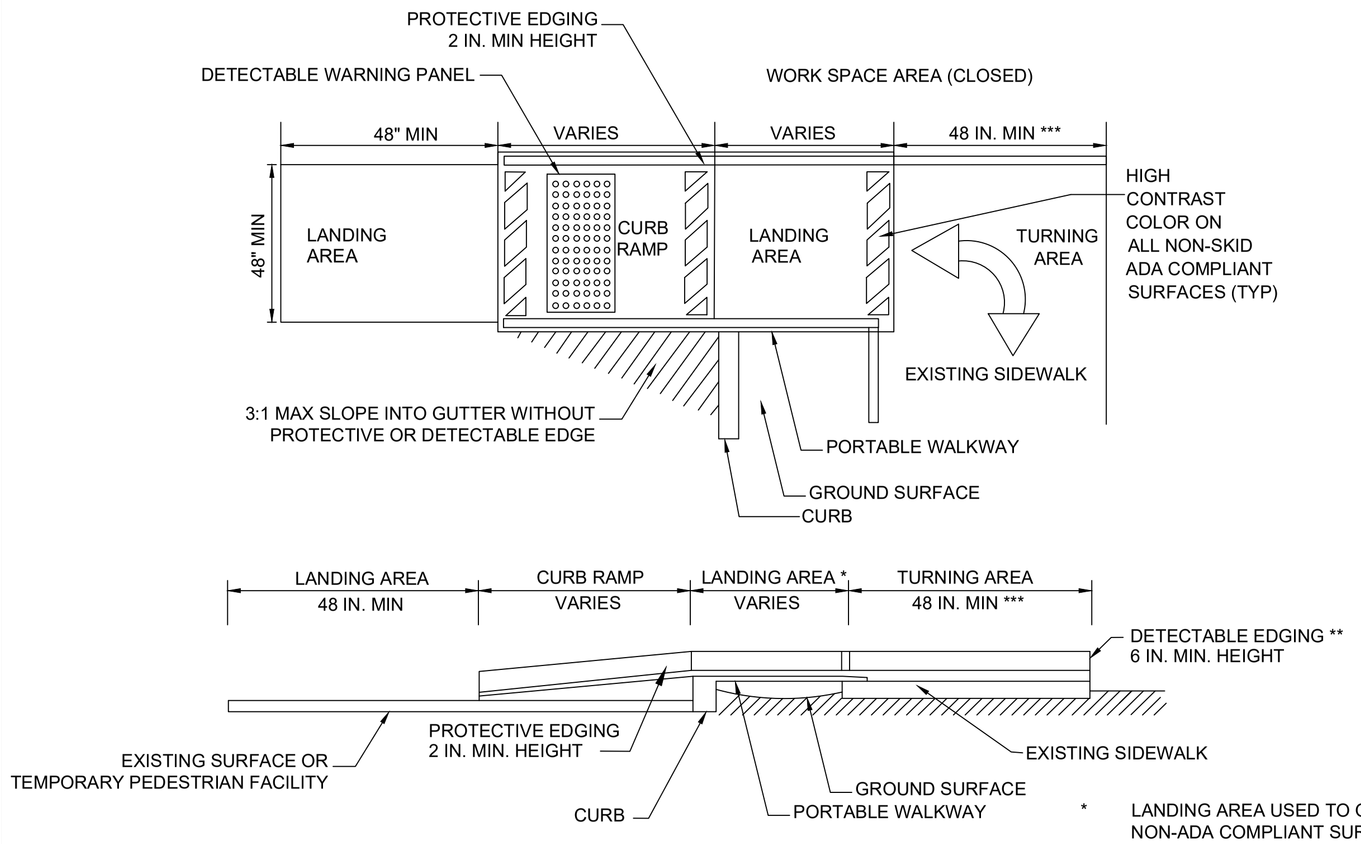
NOT TO SCALE

NOTES:

1. CURB RAMPS SHALL BE 60 IN. MINIMUM WIDTH WITH A FIRM, STABLE AND NON-SLIP SURFACE.
2. 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 SLOP 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.
3. DETECTABLE EDGING WITH 6 IN. MINIMUM HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
4. THE CURB RAMP WALKWAY AND LANDING AREA SURFACE SHALL BE OF A SOLID CONTINUOUS CONTRASTING COLOR ABUTTING UP TO THE EXISTING SIDEWALK.
5. CURB RAMPS AND LANDINGS SHOULD HAVE A 1:50 (2%) MAX CROSS-SLOPE.
6. CLEAR SPACE OF 48x48 IN. MINIMUM SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
7. WATER FLOW IN THE GUTTER SYSTEM SHALL HAVE MINIMAL RESTRICTION.
8. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 0.5 IN. WIDTH.
9. 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.
10. 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 DETECTABLE WARNING PANEL SHALL NOT BE INSTALLED ON THE RAMP.

850.1.1 - TEMPORARY CURB RAMP (1 OF 2)

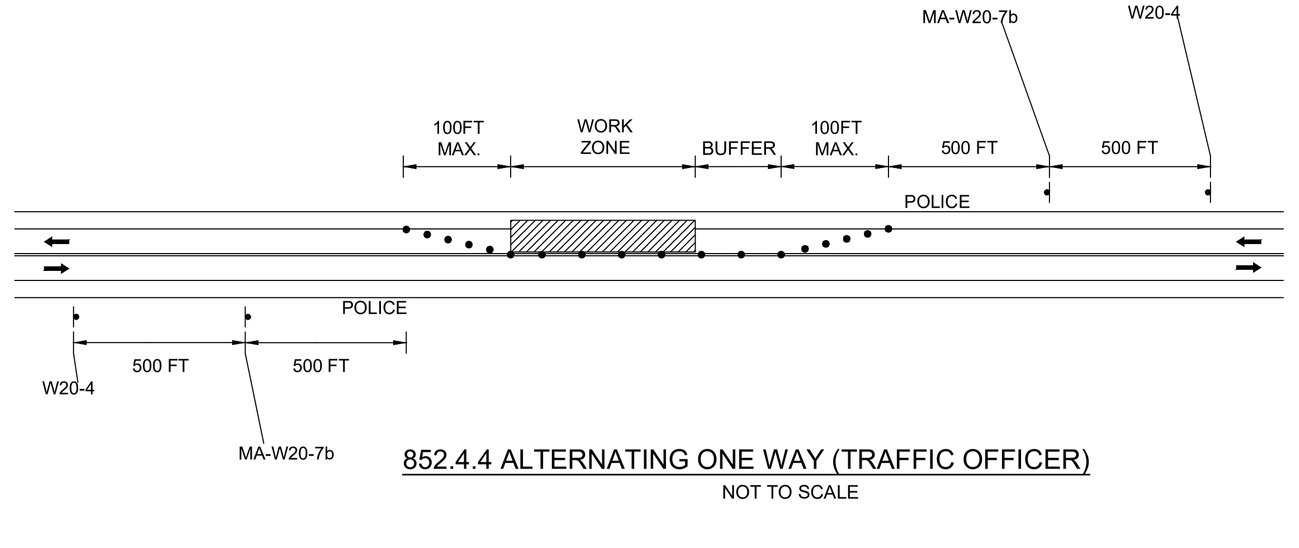
NOT TO SCALE



* LANDING AREA USED TO OVERLAP NON-ADA COMPLIANT SURFACES.
** DETECTABLE EDGING REMOVED IF A CONTINUOUS SIDEWALK.
*** 60 IN. MINIMUM IF AN OBSTRUCTION IS AT BACK OF SIDEWALK.

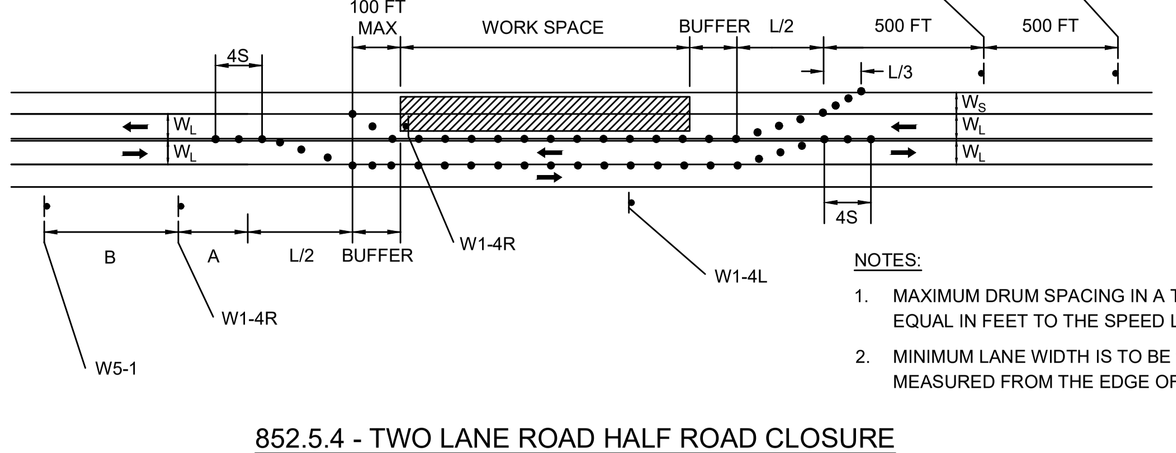
850.1.2 - TEMPORARY CURB RAMP (2 OF 2)

NOT TO SCALE



852.4.4 ALTERNATING ONE WAY (TRAFFIC OFFICER)

NOT TO SCALE

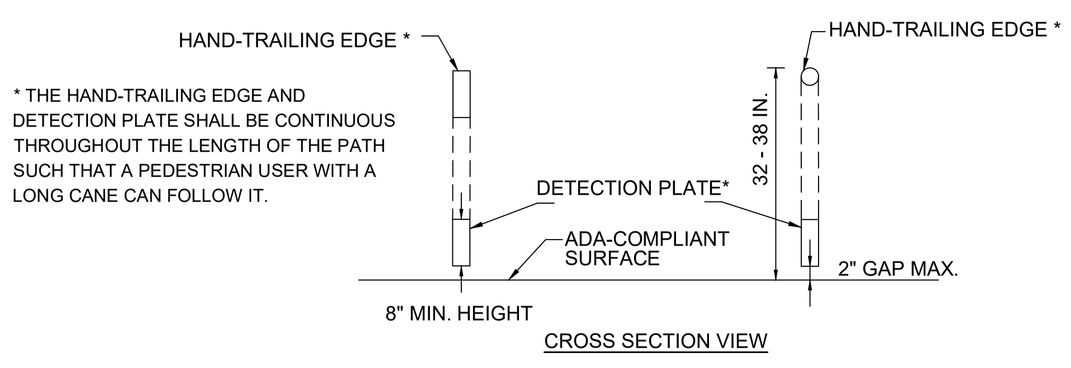


NOTES:

1. MAXIMUM DRUM SPACING IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
2. MINIMUM LANE WIDTH IS TO BE 11 FEET MEASURED FROM THE EDGE OF DRUMS.

852.5.4 - TWO LANE ROAD HALF ROAD CLOSURE

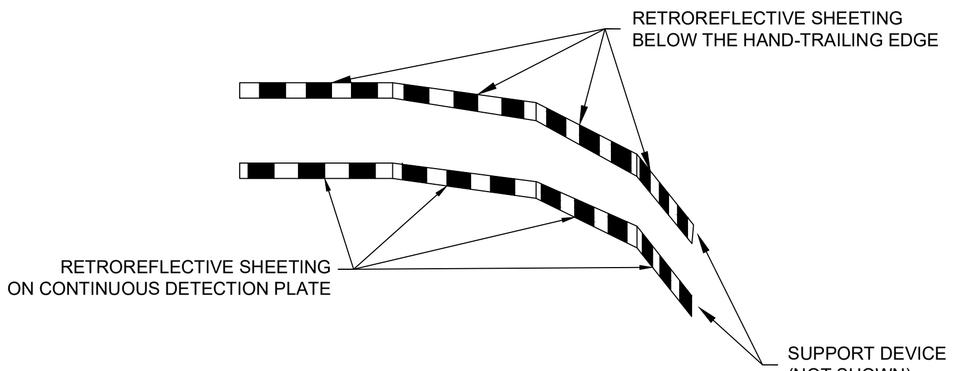
NOT TO SCALE



* THE HAND-TRAILING EDGE AND DETECTION PLATE SHALL BE CONTINUOUS THROUGHOUT THE LENGTH OF THE PATH SUCH THAT A PEDESTRIAN USER WITH A LONG CANE CAN FOLLOW IT.

CROSS SECTION VIEW

STANDARD RETROREFLECTIVE LAYOUT FOR PEDESTRIAN CHANNELIZING DEVICES



851.3.1 - PEDESTRIAN CHANNELIZING DEVICE

NOT TO SCALE

LYNNFIELD
I-95/ROUTE 128 OVER SUMMER STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	22	26
PROJECT FILE NO.	613196		

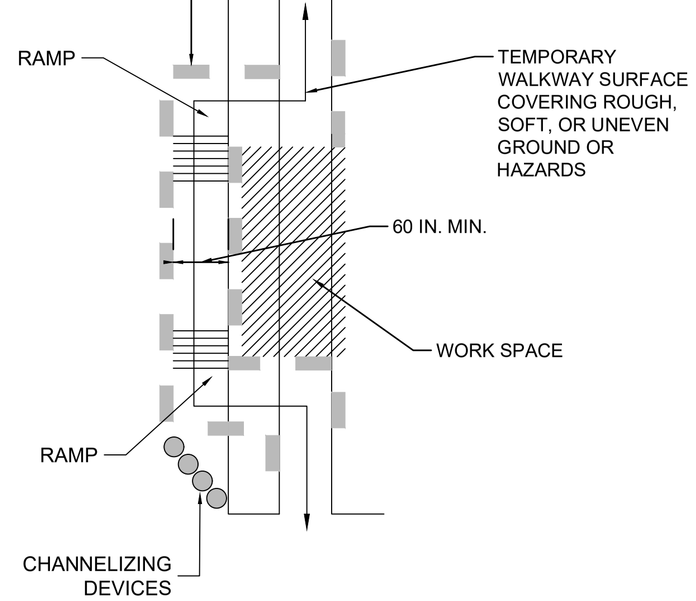
TEMPORARY TRAFFIC CONTROL PLANS - SHEET 2

MINIMUM LENGTH OF LONGITUDINAL BUFFER IS EQUAL TO THE STOPPING SIGHT DISTANCE AT THE POSTED SPEED AND CAN BE DETERMINED FROM THE FOLLOWING TABLE

STOPPING SIGHT DISTANCE	
SPEED (MPH)	DISTANCE (FT)
25	155
30	200
35	250
40	305

TYPICAL TAPER LENGTHS (L) IN FEET			
SPEED LIMIT (S) IN MPH	WIDTH OF OFFSET (W_L OR W_S) IN FEET		
	10	11	12
25	104	115	125
30	150	165	180
35	204	225	245
40	267	293	320

NOTE: FOR OFFSET WIDTHS NOT LISTED IN TABLE, USE $L=WS^2/60$.



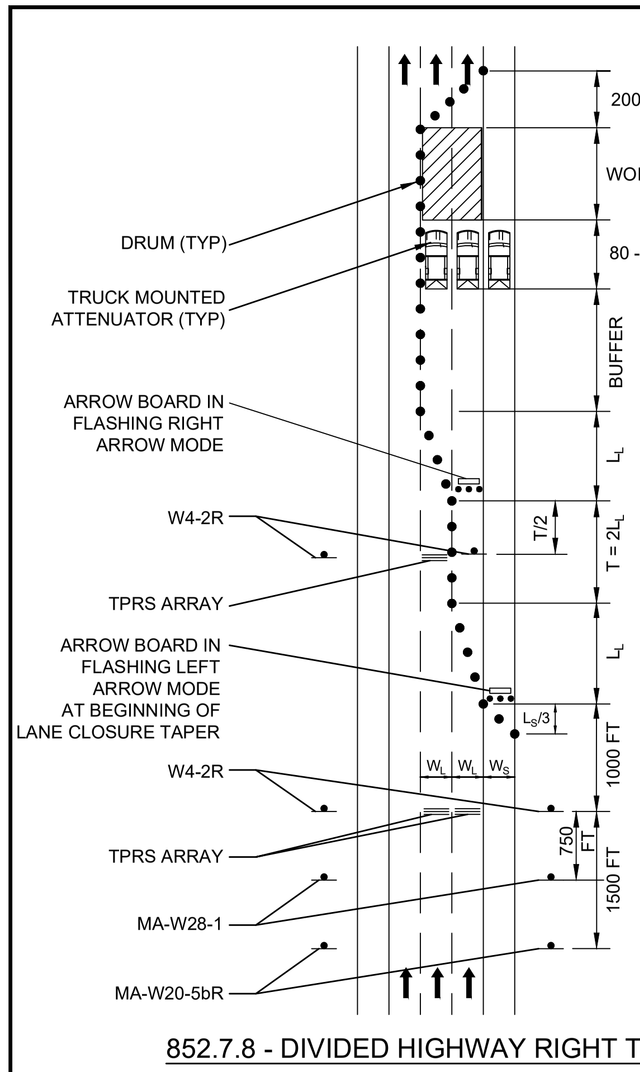
852.1.2 - SIDEWALK DIVERSION

NOT TO SCALE

NOTES:

1. A MAXIMUM 2-INCH GAP BETWEEN THE BOTTOM OF THE CONTINUOUS DETECTION PLATE AND THE WALKWAY SURFACE MAY BE USED TO PROVIDE DRAINAGE.
2. HAND-TRAILING EDGE AND DETECTION PLATE ARE OPTIONAL FOR CONTINUOUS WALLS.
3. SUPPORT DEVICE FOR CONTINUOUS DETECTION PLATE AND CONTINUOUS HAND-TRAILING EDGE NOT SHOWN ON THE PLAN.
4. STRIPING ON SHEETING PANELS MAY BE EITHER VERTICAL OR AT A 45-DEGREE ANGLE.
5. RETROREFLECTIVE AREAS CAN BE DISTRIBUTED IN A MANNER THAT ENSURES VISIBILITY AND DETECTION WITHOUT NECESSITATING A SINGLE CONTINUOUS APPLICATION.

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852.7.8 - DIVIDED HIGHWAY RIGHT TWO LANES CLOSURE (SHORT TERM)

NOT TO SCALE

TEMPORARY PORTABLE RUMBLE STRIP (TPRS)

A TPRS ARRAY SHALL HAVE THEE RUMBLE STRIPS. SPACING SHALL BE AS FOLLOWS:

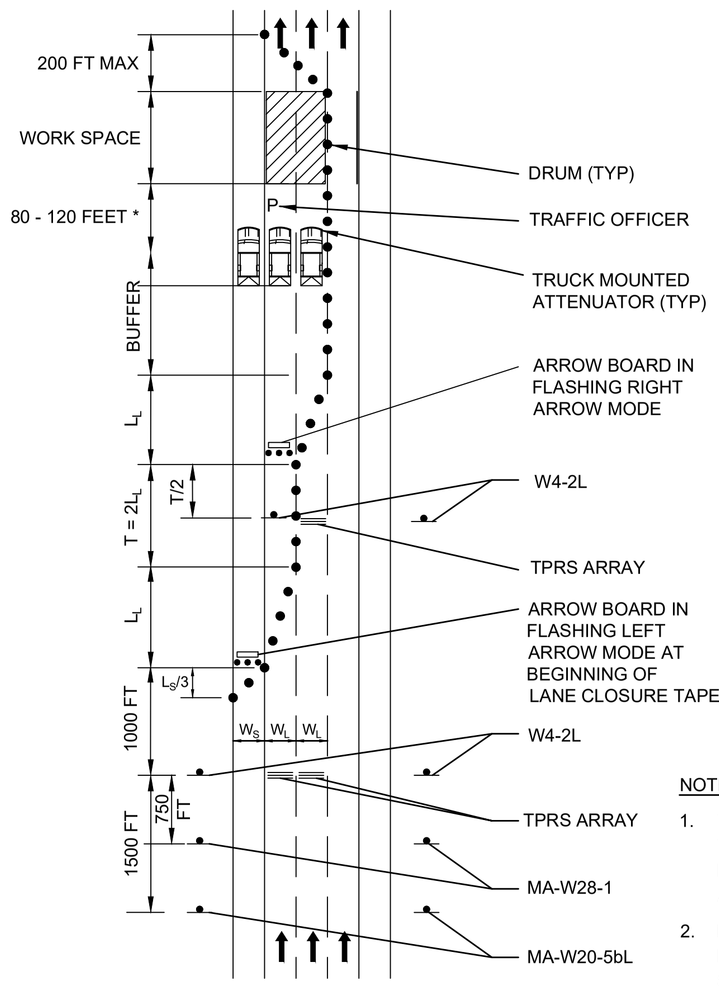
POSTED REGULATORY OR WORK ZONE SPEED	
60 MPH AND ABOVE	20'
40 MPH TO 55 MPH	15'

NOTE: TPRS SHALL BE DEPLOYED ONLY FOR SETUPS OF 12 HOURS OR LESS

NOTES:

1. THE FIRST TEN DRUMS OF EACH LANE CLOSURE TAPER SHALL BE MOUNTED WITH SEQUENTIALLY FLASHING LIGHTS IF DEPLOYED BETWEEN DUSK AND DAWN.
2. MAXIMUM DRUM SPACING IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH. IN TANGENT SECTIONS, MAXIMUM SPACING IN FEET IS EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH.
3. THIS SETUP ALSO APPLIES TO 3 OR 4 LANE SECTIONS.

* DISTANCE MAY BE INCREASED IF ADDITIONAL ROLL-AHEAD ALLOWANCE IS NEEDED. REFER TO MANUFACTURER'S SPECIFICATIONS.



852.7.9 - DIVIDED HIGHWAY LEFT TWO LANES CLOSURE (SHORT TERM)

NOT TO SCALE

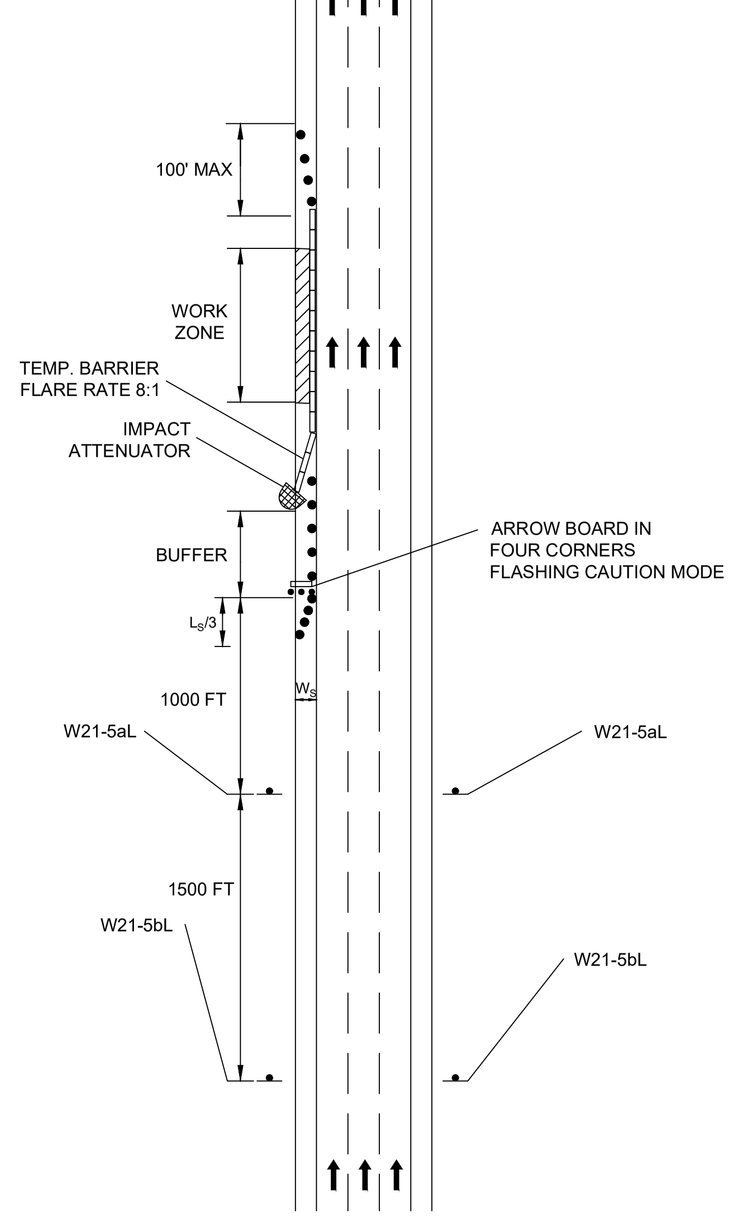
NOTES:

1. THE FIRST TEN DRUMS OF EACH LANE CLOSURE TAPER SHALL BE MOUNTED WITH SEQUENTIALLY FLASHING LIGHTS IF DEPLOYED BETWEEN DUSK AND DAWN.
2. MAXIMUM DRUM SPACING IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH. IN TANGENT SECTIONS, MAXIMUM SPACING IN FEET IS EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH.
3. THIS SETUP ALSO APPLIES TO 3 OR 4 LANE SECTIONS.

* DISTANCE MAY BE INCREASED IF ADDITIONAL ROLL-AHEAD ALLOWANCE IS NEEDED. REFER TO MANUFACTURER'S SPECIFICATIONS.

TYPICAL TAPER LENGTHS (L_L, L_S) IN FEET			
SPEED LIMIT (S) IN MPH	WIDTH OF OFFSET (W_L OR W_S) IN FEET		
	10	11	12
50	500	550	600
55	550	605	660
60	600	660	720
65	650	715	780

NOTE: FOR OFFSET WIDTHS NOT LISTED IN TABLE, USE L=WS.

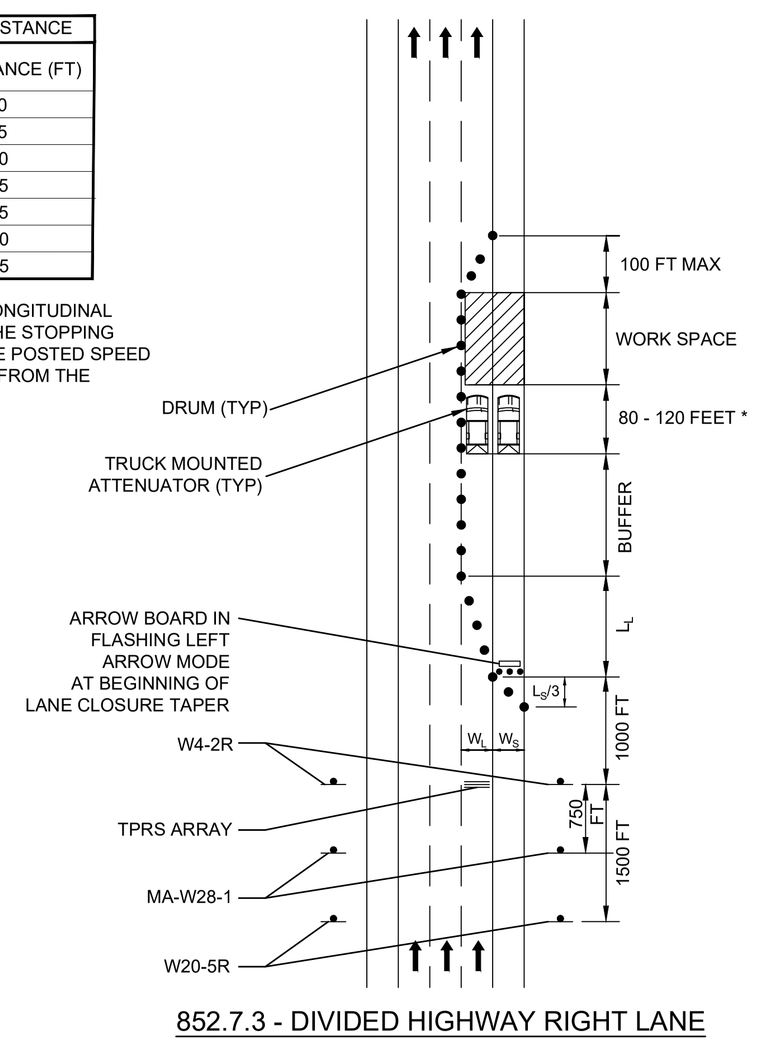


DIVIDED HIGHWAY - LEFT SHOULDER CLOSURE (LONG TERM)

NOT TO SCALE

STOPPING SIGHT DISTANCE	
SPEED (MPH)	DISTANCE (FT)
35	250
40	305
45	360
50	425
55	495
60	570
65	645

MINIMUM LENGTH OF LONGITUDINAL BUFFER IS EQUAL TO THE STOPPING SIGHT DISTANCE AT THE POSTED SPEED AND CAN DETERMINED FROM THE FOLLOWING TABLE



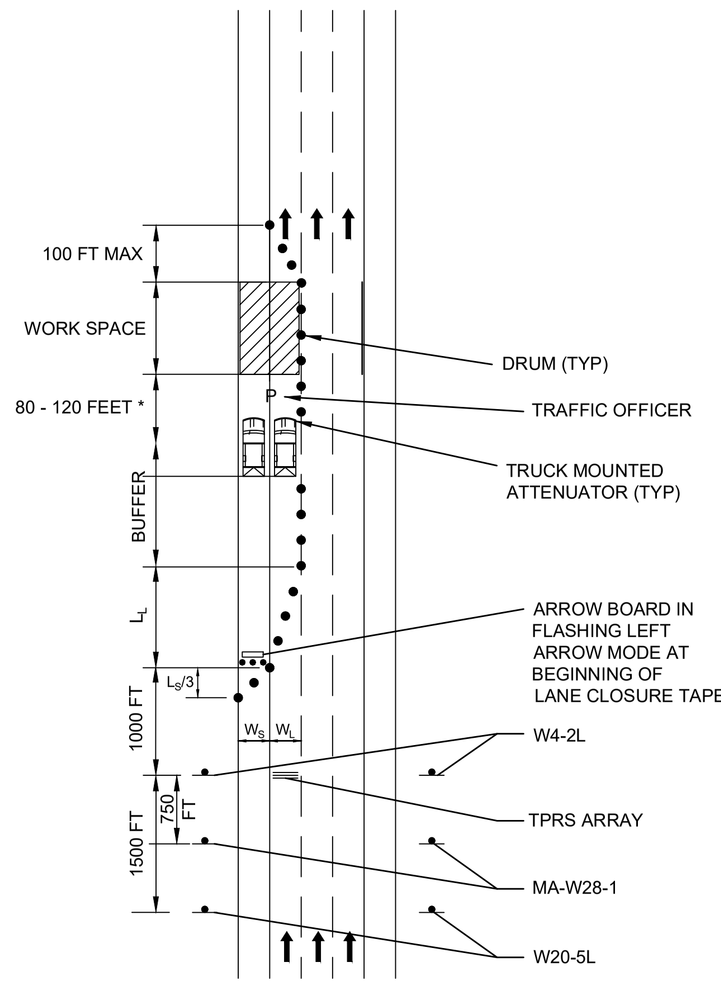
852.7.3 - DIVIDED HIGHWAY RIGHT LANE CLOSURE (SHORT TERM)

NOT TO SCALE

NOTES:

1. THE FIRST TEN DRUMS OF EACH LANE CLOSURE TAPER SHALL BE MOUNTED WITH SEQUENTIALLY FLASHING LIGHTS IF DEPLOYED BETWEEN DUSK AND DAWN.
2. MAXIMUM DRUM SPACING IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH. IN TANGENT SECTIONS, MAXIMUM SPACING IN FEET IS EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH.
3. THIS SETUP ALSO APPLIES TO 3 OR 4 LANE SECTIONS.

* DISTANCE MAY BE INCREASED IF ADDITIONAL ROLL-AHEAD ALLOWANCE IS NEEDED. REFER TO MANUFACTURER'S SPECIFICATIONS.



852.7.4 - DIVIDED HIGHWAY LEFT LANE CLOSURE (SHORT TERM)

NOT TO SCALE

NOTES:

1. THE FIRST TEN DRUMS OF EACH LANE CLOSURE TAPER SHALL BE MOUNTED WITH SEQUENTIALLY FLASHING LIGHTS IF DEPLOYED BETWEEN DUSK AND DAWN.
2. MAXIMUM DRUM SPACING IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH. IN TANGENT SECTIONS, MAXIMUM SPACING IN FEET IS EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH.
3. THIS SETUP ALSO APPLIES TO 3 OR 4 LANE SECTIONS.

* DISTANCE MAY BE INCREASED IF ADDITIONAL ROLL-AHEAD ALLOWANCE IS NEEDED. REFER TO MANUFACTURER'S SPECIFICATIONS.

LYNNFIELD
I-95/ROUTE 128 OVER SUMMER STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	23	26
PROJECT FILE NO.	613196		

TEMPORARY TRAFFIC CONTROL PLANS - SHEET 3

Plotted on 16-Dec-2025 4:08 PM

MASSDOT 10 BRIDGES_TTCP_SUMMER ST.DWG

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LYNNFIELD
I-95/ROUTE 128 OVER SUMMER STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	24	26
PROJECT FILE NO.	613196		

DETOUR PLAN &TTCP

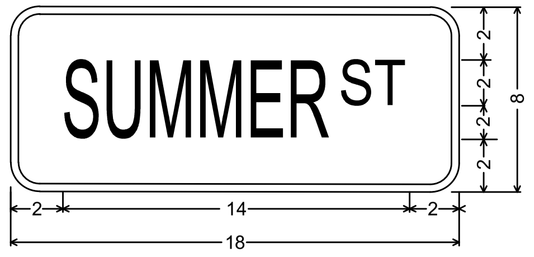
MASSDOT 10 BRIDGES_DET.DWG Plotted on 23-Dec-2025 1:18 PM

Proposal No. 613196-133292

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TRAFFIC DEVICE LEGEND:

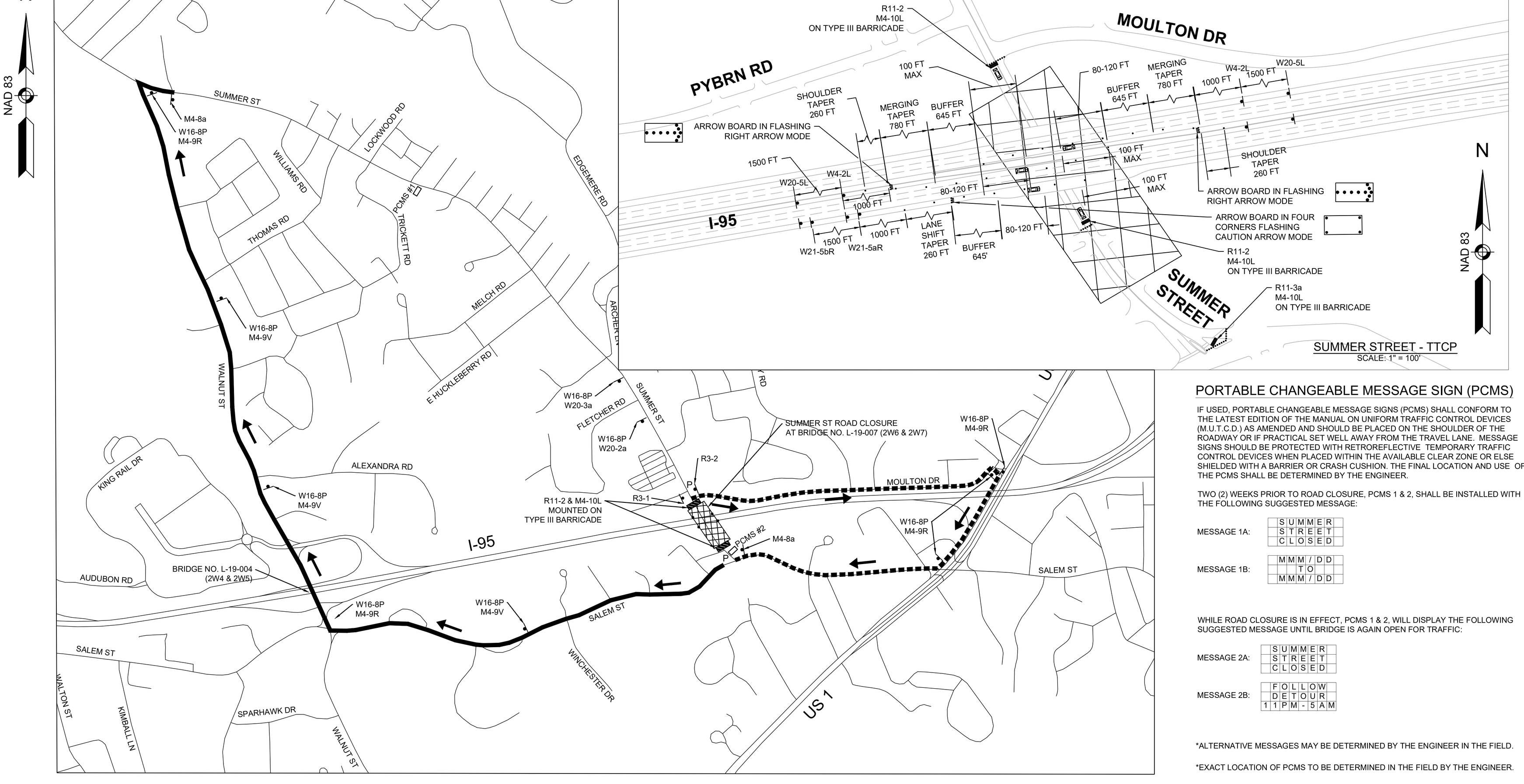
- CONSTRUCTION AREA
- TEMPORARY ROADSIDE SIGN
- SUMMER ST NB DETOUR ROUTE
- SUMMER ST SB DETOUR ROUTE
- DIRECTIONAL TRAFFIC FLOW
- TYPE III BARRICADE
- P — POLICE DETAIL
- REFLECTORIZED DRUM
- ARROW BOARD
- TRUCK MOUNTED ATTENUATOR



1.5" Radius, 0.375" Border, Black on Orange;
"SUMMER ST", B 2K;

SIGN DETAIL W16-8P
N.T.S

NOTE:
ALL LANE AND ROAD CLOSURES WILL HAVE POLICE DETAILS PRESENT TO MANAGE TRAFFIC AND OVERRIDE SIGNALS AS NECESSARY TO ENSURE SAFETY AND PROPER OPERATIONS.



SUMMER STREET - TTCP
SCALE: 1" = 100'

SUMMER STREET DETOUR ROUTE
SCALE: 1" = 500'

PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

IF USED, PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) AS AMENDED AND SHOULD BE PLACED ON THE SHOULDER OF THE ROADWAY OR IF PRACTICAL SET WELL AWAY FROM THE TRAVEL LANE. MESSAGE SIGNS SHOULD BE PROTECTED WITH RETROREFLECTIVE TEMPORARY TRAFFIC CONTROL DEVICES WHEN PLACED WITHIN THE AVAILABLE CLEAR ZONE OR ELSE SHIELDED WITH A BARRIER OR CRASH CUSHION. THE FINAL LOCATION AND USE OF THE PCMS SHALL BE DETERMINED BY THE ENGINEER.

TWO (2) WEEKS PRIOR TO ROAD CLOSURE, PCMS 1 & 2, SHALL BE INSTALLED WITH THE FOLLOWING SUGGESTED MESSAGE:

MESSAGE 1A:

	S	U	M	M	E	R		
	S	T	R	E	E	T		
	C	L	O	S	E	D		

MESSAGE 1B:

	M	M	M	/	D	D		
			T	O				
	M	M	M	/	D	D		

WHILE ROAD CLOSURE IS IN EFFECT, PCMS 1 & 2, WILL DISPLAY THE FOLLOWING SUGGESTED MESSAGE UNTIL BRIDGE IS AGAIN OPEN FOR TRAFFIC:

MESSAGE 2A:

	S	U	M	M	E	R	
	S	T	R	E	E	T	
	C	L	O	S	E	D	

MESSAGE 2B:

	F	O	L	L	O	W	
	D	E	T	O	U	R	
1	1	P	M	-	5	A	M

*ALTERNATIVE MESSAGES MAY BE DETERMINED BY THE ENGINEER IN THE FIELD.

*EXACT LOCATION OF PCMS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

LYNNFIELD
I-95/ROUTE 128 OVER SUMMER STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	25	26
PROJECT FILE NO.	613196		

TEMPORARY TRAFFIC SIGN SUMMARY - SHEET 1

CONSTRUCTION SIGN SUMMARY (CONTINUED)

IDENTIFICATION NUMBER	SIZE WIDTH (IN)	SIZE HEIGHT (IN)	TEXT	DIMENSIONS (IN) LETTER HEIGHT	DIMENSIONS (IN) VERTICAL SPACING	DIMENSIONS (IN) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACK-GROUND	COLOR LEGEND	COLOR BORDER	UNIT AREA (S.F.)	TOTAL AREA (S.F.)
M4-8a	24"	18"	END DETOUR	(1)	(1)	(1)	2	FLUOR. ORANGE	BLACK	BLACK	3.00	6.00
M4-9R	48"	36"	DETOUR →				5	FLUOR. ORANGE	BLACK	BLACK	12.00	60.00
M4-9V	48"	36"	DETOUR ↑				3	FLUOR. ORANGE	BLACK	BLACK	12.00	36.00
M4-9VR	48"	36"	DETOUR ↗				4	FLUOR. ORANGE	BLACK	BLACK	12.00	48.00
M4-10L	48"	18"	← DETOUR				2	FLUOR. ORANGE	BLACK	BLACK	6.00	12.00
MA-R2-10a	48"	36"	WORK ZONES / SPEEDING FINES DOUBLED	(2)	(2)	(2)	4	FLUOR. ORANGE & WHITE	BLACK	BLACK	12.00	48.00
	60"	48"					4				20.00	80.00
MA-R2-10e	36"	48"	END ROAD WORK DOUBLE FINES END				4	FLUOR. ORANGE & WHITE	BLACK	BLACK	12.00	48.00
	48"	60"					4				20.00	80.00
MA-W20-5bL	48"	48"	LEFT TWO LANES CLOSED XX FT				2	FLUOR. ORANGE & WHITE	BLACK	BLACK	16.00	32.00
MA-W20-5bR	48"	48"	RIGHT TWO LANES CLOSED XX FT				2	FLUOR. ORANGE & WHITE	BLACK	BLACK	16.00	32.00
MA-W20-7b	36"	36"	POLICE OFFICER AHEAD				4	FLUOR. ORANGE	BLACK	BLACK	9.00	36.00
R3-1	24"	24"		(1)	(1)	(1)	1	WHITE	RED / BLACK	BLACK	4.00	4.00
R3-2	24"	24"					1	WHITE	RED / BLACK	BLACK	4.00	4.00
R9-11aL	24"	12"	SIDEWALK CLOSED ← CROSS HERE				1	WHITE	BLACK	BLACK	2.00	2.00
R9-11aR	24"	12"	SIDEWALK CLOSED → CROSS HERE				1	WHITE	BLACK	BLACK	2.00	2.00
R11-2	48"	30"	ROAD CLOSED				2	WHITE	BLACK	BLACK	10.00	20.00

CONSTRUCTION SIGN SUMMARY (CONTINUED)

IDENTIFICATION NUMBER	SIZE WIDTH (IN)	SIZE HEIGHT (IN)	TEXT	DIMENSIONS (IN) LETTER HEIGHT	DIMENSIONS (IN) VERTICAL SPACING	DIMENSIONS (IN) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACK-GROUND	COLOR LEGEND	COLOR BORDER	UNIT AREA (S.F.)	TOTAL AREA (S.F.)
R11-3a	60"	30"	ROAD CLOSED AHEAD LOCAL TRAFFIC ONLY	(1)	(1)	(1)	1	WHITE	BLACK	BLACK	12.50	12.50
W1-4L	36"	36"		(1)	(1)	(1)	2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W1-4R	36"	36"					2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W4-2L	48"	48"					4	FLUOR. ORANGE	BLACK	BLACK	16.00	64.00
W4-2R	48"	48"					4	FLUOR. ORANGE	BLACK	BLACK	16.00	64.00
W5-1	36"	36"	ROAD NARROWS				2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W11-2	36"	36"					4	FLUOR. YELLOW GREEN	BLACK	BLACK	9.00	36.00
W13-1p	24"	24"	XX MPH				2	FLUOR. ORANGE	BLACK	BLACK	4.00	8.00
	30"	30"					4				6.25	25.00
W16-7pL	18"	8"					4	FLUOR. YELLOW GREEN	BLACK	BLACK	2.00	8.00
W16-8P	18"	8"	SUMMER ST	2.00 / 4.00	2.00	-	9	FLUOR. ORANGE	BLACK	BLACK	1.00	9.00
W20-1	36"	36"	ROAD WORK AHEAD	(1)	(1)	(1)	4	FLUOR. ORANGE	BLACK	BLACK	9.00	36.00
	48"	48"					4				16.00	64.00

NOTES:

1. RETROREFLECTIVE SHEETING FOR ALL GUIDE AND TRAFFIC SIGNS SHALL CONFORM TO MASSDOT STANDARD SPECIFICATION SECTION M9.30.0. FLUORESCENT SHEETING SHALL BE USED FOR ALL ORANGE BACKGROUND SIGNS.

(1) SEE THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND "STANDARD HIGHWAY SIGNS" BY FEDERAL HIGHWAY ADMINISTRATION (LATEST EDITIONS) FOR TEXT DIMENSIONS AND COLORS. SEE ALSO THE "MASSACHUSETTS MUTCD AMENDMENTS".

(2) SEE THE MASSDOT "STANDARD SIGNS" LATEST EDITION.

Proposal No. 613196-133292
MASSDOT 10 BRIDGES_TTCP_SUMMER ST.DWG Plotted on 16-Dec-2025 4:08 PM

CONSTRUCTION SIGN SUMMARY (CONTINUED)

IDENTIFICATION NUMBER	SIZE WIDTH (IN)	SIZE HEIGHT (IN)	TEXT	DIMENSIONS (IN) LETTER HEIGHT	DIMENSIONS (IN) VERTICAL SPACING	DIMENSIONS (IN) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACKGROUND	COLOR LEGEND	COLOR BORDER	UNIT AREA (S.F.)	TOTAL AREA (S.F.)
W20-2a	36"	36"	DETOUR AHEAD	(1)	(1)	(1)	2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W20-3a	36"	36"	ROAD CLOSED AHEAD				2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W20-4	36"	36"	ONE LANE ROAD AHEAD				2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W20-5L	36"	36"	LEFT LANE CLOSED AHEAD				2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
	48"	48"					2				16.00	32.00
W20-5R	36"	36"	RIGHT LANE CLOSED AHEAD				1	FLUOR. ORANGE	BLACK	BLACK	9.00	9.00
	48"	48"					2				16.00	32.00
W21-5aR	48"	48"	RIGHT SHOULDER CLOSED				4	FLUOR. ORANGE	BLACK	BLACK	16.00	64.00
W21-5bR	48"	48"	RIGHT SHOULDER CLOSED AHEAD				4	FLUOR. ORANGE	BLACK	BLACK	16.00	64.00

NOTES:

1. RETROREFLECTIVE SHEETING FOR ALL GUIDE AND TRAFFIC SIGNS SHALL CONFORM TO MASSDOT STANDARD SPECIFICATION SECTION M9.30.0. FLUORESCENT SHEETING SHALL BE USED FOR ALL ORANGE BACKGROUND SIGNS.

(1) SEE THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND "STANDARD HIGHWAY SIGNS" BY FEDERAL HIGHWAY ADMINISTRATION (LATEST EDITIONS) FOR TEXT DIMENSIONS AND COLORS. SEE ALSO THE "MASSACHUSETTS MUTCD AMENDMENTS".

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MASSDOT 10 BRIDGES_TTCP_SUMMER ST.DWG Plotted on 16-Dec-2025 4:08 PM

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DOCUMENT A00805

DRAWINGS – LYNNFIELD
BRIDGE NO. L-19-011 (2FD)

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MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

LYNNFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	1	25
PROJECT FILE NO.	613196		

TITLE SHEET & INDEX

REPAIR PLANS AND DETAILS FOR

I-95/ROUTE 128

(BRIDGE NO. L-19-011)

IN THE TOWN OF

LYNNFIELD

ESSEX COUNTY

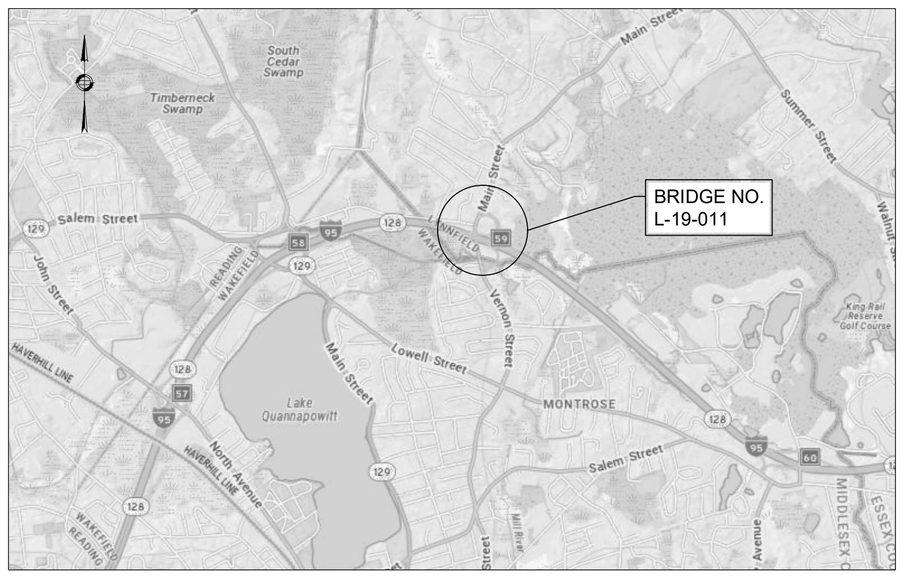
FEDERAL AID PROJECT NO. NFA

PS&E RESUBMISSION

THESE PLANS ARE SUPPLEMENTED BY THE OCTOBER 2025 CONSTRUCTION STANDARD DETAILS, THE 2015 OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS,THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK.

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET & INDEX
2-17	BRIDGE SHEETS
18-25	TEMPORARY TRAFFIC CONTROL PLANS



LOCUS MAP

APPROXIMATE SCALE: 1" = 2000'

DESIGN DESIGNATION (L-19-011)

DESIGN SPEED	65 MPH
ADT (PRESENT)	142,650
ADT (2043)	157,600
K	5%
D	53% NB
T (PEAK HOUR)	7.8%
T (AVERAGE DAY)	5.7%
DHV	10,240
DDHV	5,370
FUNCTIONAL CLASSIFICATION	URBAN INTERSTATE

DATE	DESCRIPTION	REV #

massDOT
Massachusetts Department of Transportation
Highway Division

Jacobs.
120 ST. JAMES AVENUE, 5TH FLOOR
BOSTON, MA. 02116

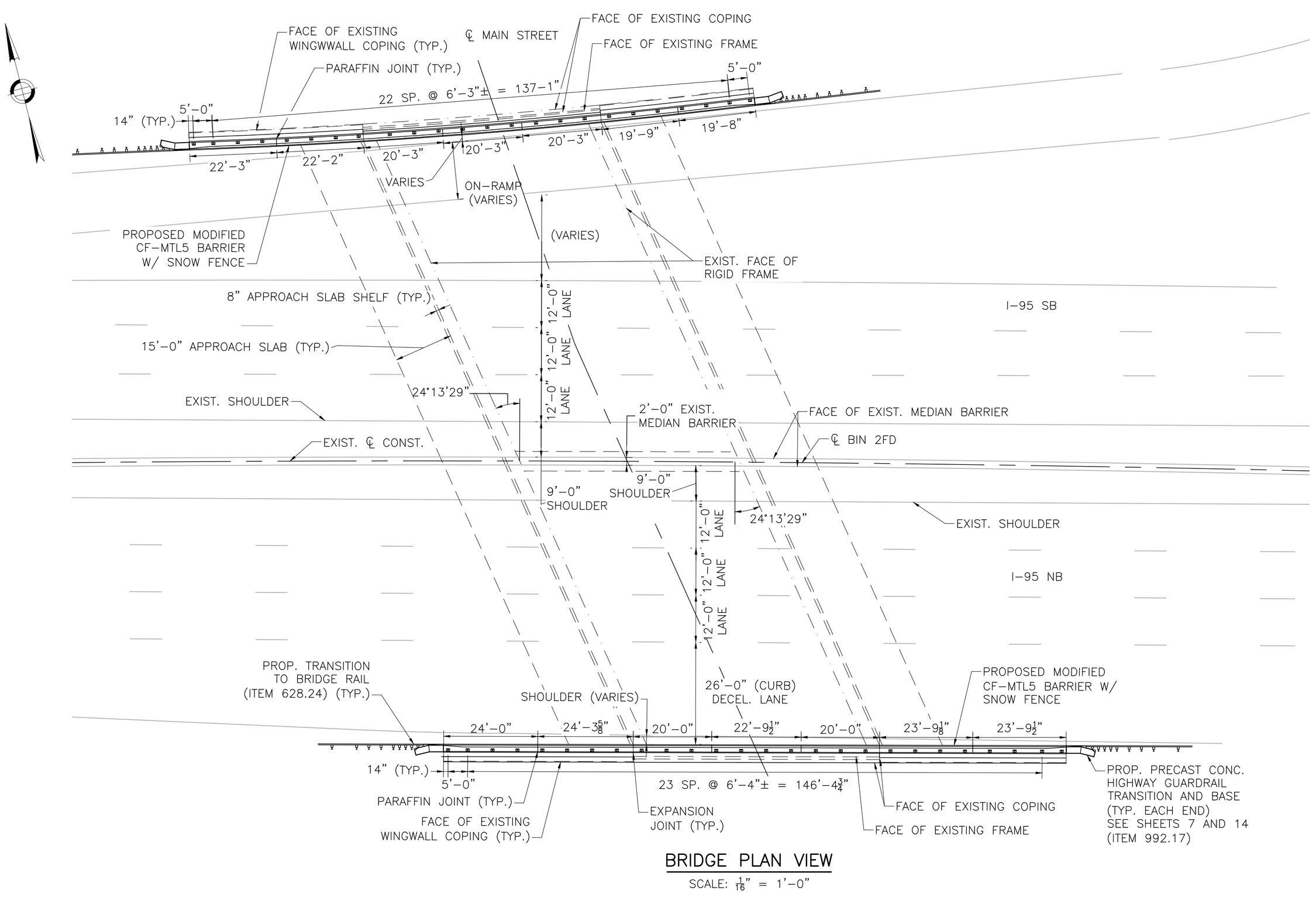
24-October-2025

PS&E Resubmission

00 - COVER_SHEET.DWG Plotted on 20-Oct-2025 2:55 PM

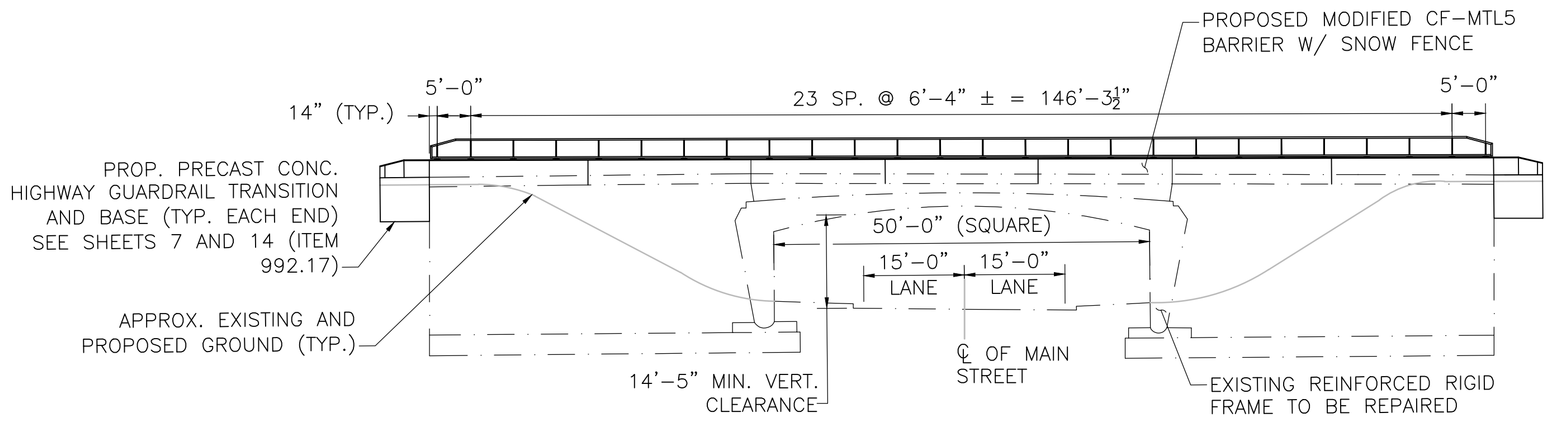
Proposal No. 613196-133292

A00805 - 3



BRIDGE PLAN VIEW

SCALE: 1/16" = 1'-0"



LIMITS OF DEMOLITION

ELEVATION (LOOKING NORTH)

SCALE: 1/16" = 1'-0"

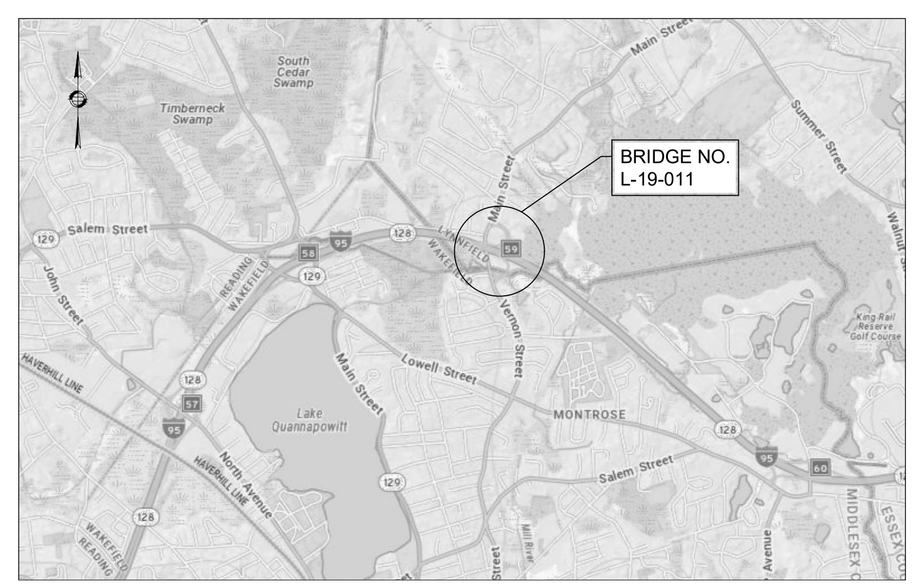
NOTE:

SOUTH ELEVATION SHOWN, NORTH ELEVATION SIMILAR DIMENSIONS UNLESS OTHERWISE NOTED.

LYNNFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	2	25
	PROJECT FILE NO. 613196		

PLAN AND ELEVATION



LOCUS MAP

APPROXIMATE SCALE: 1" = 2000'

INDEX

SHEET NO.	DESCRIPTION
1	PLAN AND ELEVATION
2	GENERAL NOTES
3-4	DEMOLITION CROSS SECTIONS
5	PROPOSED CROSS SECTION
6-7	MODIFICATION DETAILS
8-10	REINFORCING DETAILS
11-13	CONCRETE REPAIRS
14	GUARDRAIL TRANSITION DETAILS
15-16	SNOW FENCE DETAILS

MONTH DD, YYYY | ISSUED FOR CONSTRUCTION

MassDOT Massachusetts Department of Transportation Highway Division

BRIDGE PRESERVATION

LYNNFIELD

I-95/ROUTE 128
OVER MAIN STREET

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION
10 PARK PLAZA BOSTON, MASS

Jacobs
120 ST. JAMES AVENUE, 5TH FLOOR
BOSTON, MA 02116

PS&E Resubmission 24-October-2025

SHEET 1 OF 16 SHEETS BRIDGE NO. L-19-011 (2FD)

S - 1 - TITLE SHEET.DWG Plotted on 24-Oct-2025 9:54 AM

Proposal No. 613196-133292

A00805 - 4

GENERAL NOTES:

1. DIMENSIONS SHOWN ARE TAKEN FROM ORIGINAL DESIGN DRAWINGS AND ARE NOT GUARANTEED. THE CONTRACTOR SHALL ESTABLISH THEIR 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. NO SURVEY WAS PERFORMED AS PART OF THIS PRESERVATION PROJECT.

2. THE CONTRACTOR SHALL SUBMIT SURVEY OF ROADWAY TO THE ENGINEER TO ESTABLISH THE ACTUAL ROADWAY PROFILE. THE SURVEY SHALL INCLUDE EXISTING ROADWAY ELEVATIONS ALONG EACH EDGE OF PAVEMENT AND CROWN LINE AT 25 FOOT INTERVALS, AT ENDS OF THE BRIDGE AND AT ENDS OF THE WINGWALLS. THE LIMITS OF SURVEY SHALL EXTEND 250 FEET EACH SIDE OF THE LIMITS OF WORK.

3. REMOVE EXISTING PAVEMENT MARKINGS AND REPLACE WITH NEW SLOTTED PAVEMENT MARKINGS AT LOCATIONS DISTURBED BY APPROACH ROADWAY PAVING.

4. DURING SURVEY, CONTRACTOR SHALL MEASURE THE LENGTH OF EACH EXISTING WINGWALL PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES BETWEEN THE LENGTHS SHOWN ON RECORD DRAWINGS OR THESE PLANS SHALL BE REPORTED TO THE ENGINEER PRIOR TO FABRICATION OF THE SNOW FENCE.

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:
SEE TRAFFIC DRAWINGS FOR TRAFFIC MANAGEMENT PLANS.

SCALES:
SCALES NOTED ON THE PLANS ARE NOT APPLICABLE TO REDUCED SIZE PRINTS. DIVIDE SCALES BY 2 FOR HALF-SIZE PRINTS (A3).

ANCHOR BOLTS:
ALL ANCHOR BOLTS SHALL BE SET BY TEMPLATE BEFORE THE CONCRETE IS PLACED.

CONCRETE:
5000 PSI, 3/8 INCH, 710 HP CEMENT CONCRETE TO BE USED FOR BARRIER RECONSTRUCTION WORK.

4000 PSI, 3/8 INCH, 660 CEMENT CONCRETE TO BE USED FOR PATCHING OF FRAMES AND FRAME WALLS.

REINFORCEMENT:
RENFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M31 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"	19"	23"
2. 12" OF CONCRETE BELOW BAR	20"	25"	30"
3. EPOXY COATED BARS, COVER < $3d_b$, OR CLEAR SPACING <$6d_b$	23"	29"	34"
4. COATED BARS, ALL OTHER CASES	18"	23"	27"
5. CONDITION 2. AND 3.	26"	32"	39"
6. CONDITION 2. AND 4.	24"	30"	36"

ALL OTHER BARS SHALL BE LAPPED AS SHOWN ON THE CONSTRUCTION DRAWINGS.

DATE:
TO BE PLACED ON THE INSIDE FACE OF THE SOUTHWEST AND NORTHEAST HIGHWAY GUARDRAIL TRANSITIONS. A SHEET SHOWING SIZE AND CHARACTER OF NUMERALS WILL BE FURNISHED. THE DATE USED SHALL BE 1960 (THE YEAR THE BRIDGE WAS REBUILT).

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

UTILITIES:
THE CONTRACTOR SHALL LOCATE AND PROTECT EXISTING UTILITIES FROM ALL DAMAGE.

ESTIMATED QUANTITIES

(NOT GUARANTEED)

SELECTIVE CLEARING AND THINNING AT BRIDGES	204	SY
EARTH EXCAVATION	61	CY
REINFORCED CONCRETE RIGID FRAME EXCAVATION (PARTIAL DEPTH)	0.26	CY
BRIDGE EXCAVATION ALONG RIGID FRAME RAILING BRIDGE NO. L-19-011 (2FD)	1	LS
GRAVEL BORROW FOR BACKFILLING STRUCTURES AND PIPES	74	CY
CONTROLLED DENSITY FILL - EXCAVATABLE	9	CY
DISPOSAL OF TREATED WOOD PRODUCTS	4178	LBS
HMA FOR PATCHING	19.57	TONS
TRANSITION TO BRIDGE RAIL	4	EA
SILT SACK	4	EA
SEEDING	3390	SF
PAVEMENT MILLING MULCH UNDER GUARDRAIL	150	FT
DELINEATION FOR GUARD RAIL TERMINI	2	EA
4000 PSI, 3/8 INCH, 660 CEMENT CONCRETE	6	CF
REPAIRS TO UNDERSIDE OF REINFORCED CONCRETE RIGID FRAMES	16.0	SF
ALTERATION TO BRIDGE NO. L-19-011 (BIN 2FD)	1	LS

LYNNFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	3	25
PROJECT FILE NO.	613196		

GENERAL NOTES

TRAFFIC DATA		
	ROADWAY OVER	ROADWAY UNDER
DESIGN YEAR	2043	2043
AVERAGE DAILY TRAFFIC - PRESENT	142650	10960
AVERAGE DAILY TRAFFIC - DESIGN YEAR	157600	12110
DESIGN HOURLY VOLUME	10240	1070
DIRECTIONAL DISTRIBUTION	53% NB	65% NB
TRUCK PERCENTAGE - AVERAGE DAY	5.7%	3.1%
TRUCK PERCENTAGE - PEAK HOUR	7.8%	4.1%
DESIGN SPEED	65	4
DIRECTIONAL DESIGN HOURLY VOLUME	5370	740

PROJECT INFORMATION
PROJECT FILE NO.: 613196
PROJECT DESCRIPTION: 10 BRIDGE BUNDLE
BRIDGE DESIGN LOADING: H-20
SURVEY: N/A

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

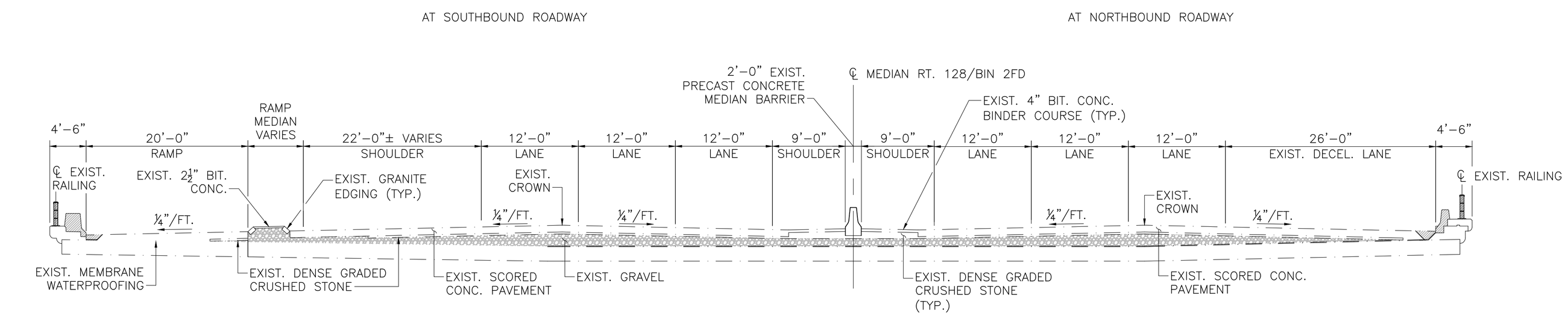
24-October-2025 PS&E Resubmission

S - 2 - GENERAL NOTES.DWG Plotted on 24-Oct-2025 10:04 AM
Proposal No. 613196-133292
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LYNNFIELD
I-95/ROUTE 128

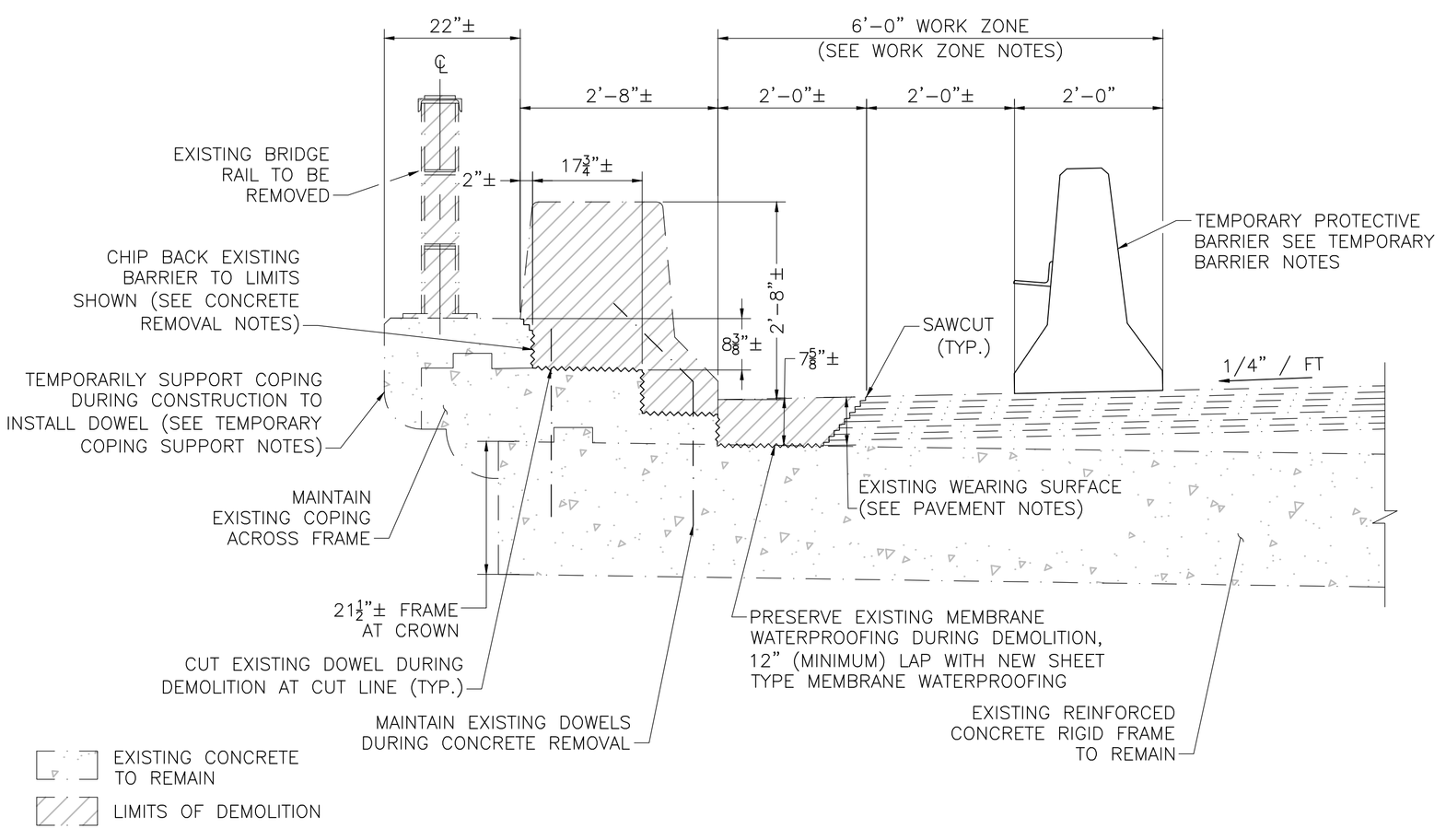
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	4	25
	PROJECT FILE NO. 613196		

DEMO CROSS SECTION 1 OF 2



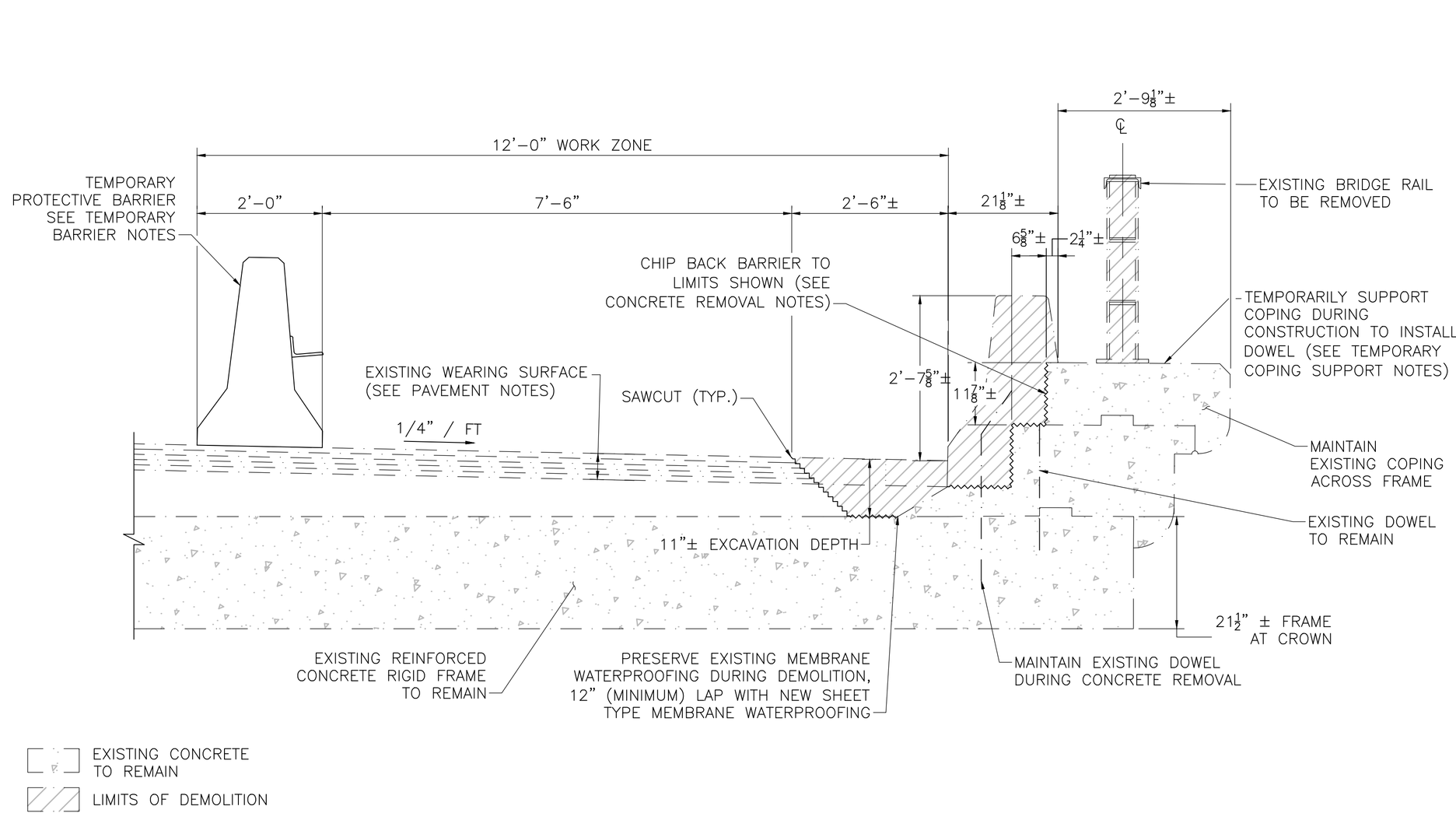
EXISTING CROSS SECTION

SCALE: ⅛" = 1'-0"



LIMITS OF DEMOLITION AT SOUTHBOUND ROADWAY AT MIDSPAN (NORTH FASCIA)

SCALE: ¾" = 1'-0"



LIMITS OF DEMOLITION AT NORTHBOUND ROADWAY AT MIDSPAN (SOUTH FASCIA)

SCALE: ¾" = 1'-0"

NOTES:

ALL EXISTING LANE LINES SHOWN FROM RECORD DRAWINGS ARE APPROXIMATE. NO SURVEY WAS PERFORMED AS PART OF THIS BRIDGE PRESERVATION TASK. CONTRACTOR TO CONFIRM LANE LINE MARKINGS PRIOR TO START OF WORK.

WORK ZONE NOTES:

WORK ZONE REQUIRES TEMPORARY LANE SHIFT OR REDUCTION OF RAMP LANE TO 11'. CONTRACTOR TO COORDINATE WITH DISTRICT TRAFFIC

PAVEMENT NOTES:

1. EXISTING PAVEMENT THICKNESS IS BASED OFF EXISTING RECORD DRAWINGS, CONTRACTOR SHALL CONFIRM EXISTING THICKNESS PRIOR TO CONSTRUCTION.
2. PROPOSED PAVEMENT SHALL BE PLACED IN MAXIMUM 3" LIFTS AND MATCH EXISTING THICKNESS.
3. TO BE PAID UNDER ITEM 451. HMA FOR PATCHING. ASPHALT EMULSION FOR TACK COAT AND HMA JOINT SEALANT ARE INCIDENTAL TO ITEM 451. AND SHALL BE USED IN ACCORDANCE WITH MASSDOT STANDARD SPECIFICATIONS SECTION 450, PAVEMENT MIX SPC-B-12.5.

TEMPORARY COPING SUPPORT:

1. TEMPORARY COPING SUPPORT SHALL REMAIN IN PLACE UNTIL CONCRETE HAS CURED FOR 28 DAYS.
2. SUPPORT SHALL NOT REDUCE EXISTING BRIDGE MINIMUM VERTICAL CLEARANCE.

CONCRETE REMOVAL NOTES:

1. EXISTING BARRIER CONCRETE SHALL BE CHIPPED BACK TO COLD JOINT OF PREVIOUS BARRIER MODIFICATIONS.
2. IF CONCRETE IS DETERMINED TO BE UNSOUND PAST THE LIMITS OF CONCRETE REMOVAL, THEN THE LIMITS MAY BE INCREASED AS DIRECTED BE THE RESIDENT ENGINEER. SEE SPECIAL PROVISIONS.
3. EXISTING BRIDGE RAIL ANCHOR BOLTS SHALL BE CUT DOWN ¾" DEEP INTO EXISTING COPING AND HOLES TO BE FILLED WITH SEALANT.

TEMPORARY BARRIER NOTES:

TEMPORARY CONCRETE BARRIER SHALL BE RETROFITTED TO MASH TL-3 STANDARDS IN ACCORDANCE WITH DRAWING NUMBERS 853.23.1 AND 853.23.2 OF THE MASSDOT CONSTRUCTION STANDARDS ISSUED JUNE OF 2025.

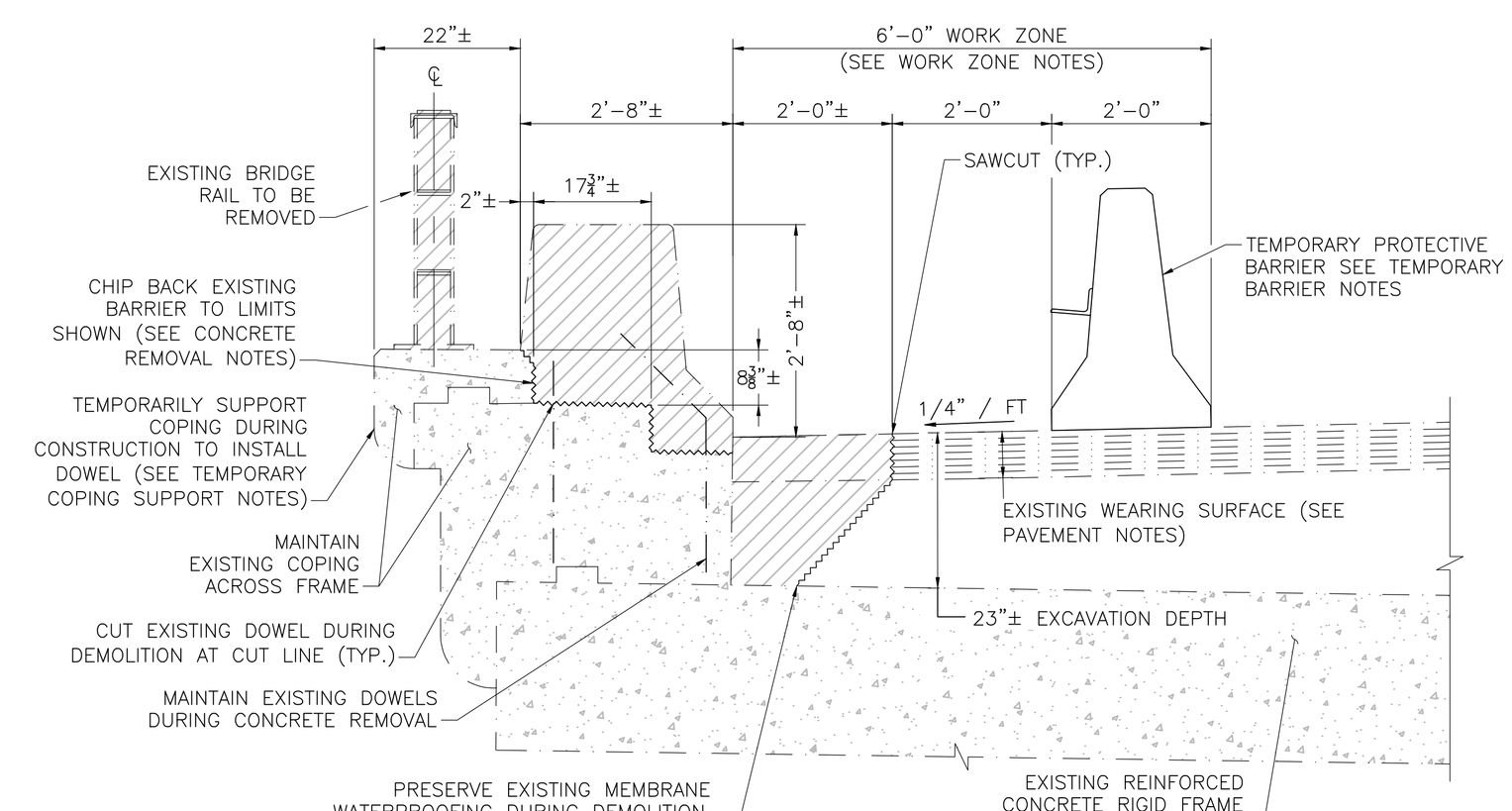
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
	USE ONLY PRINTS OF LATEST DATE

PS&E Resubmission 24-October-2025

LYNNFIELD
I-95/ROUTE 128

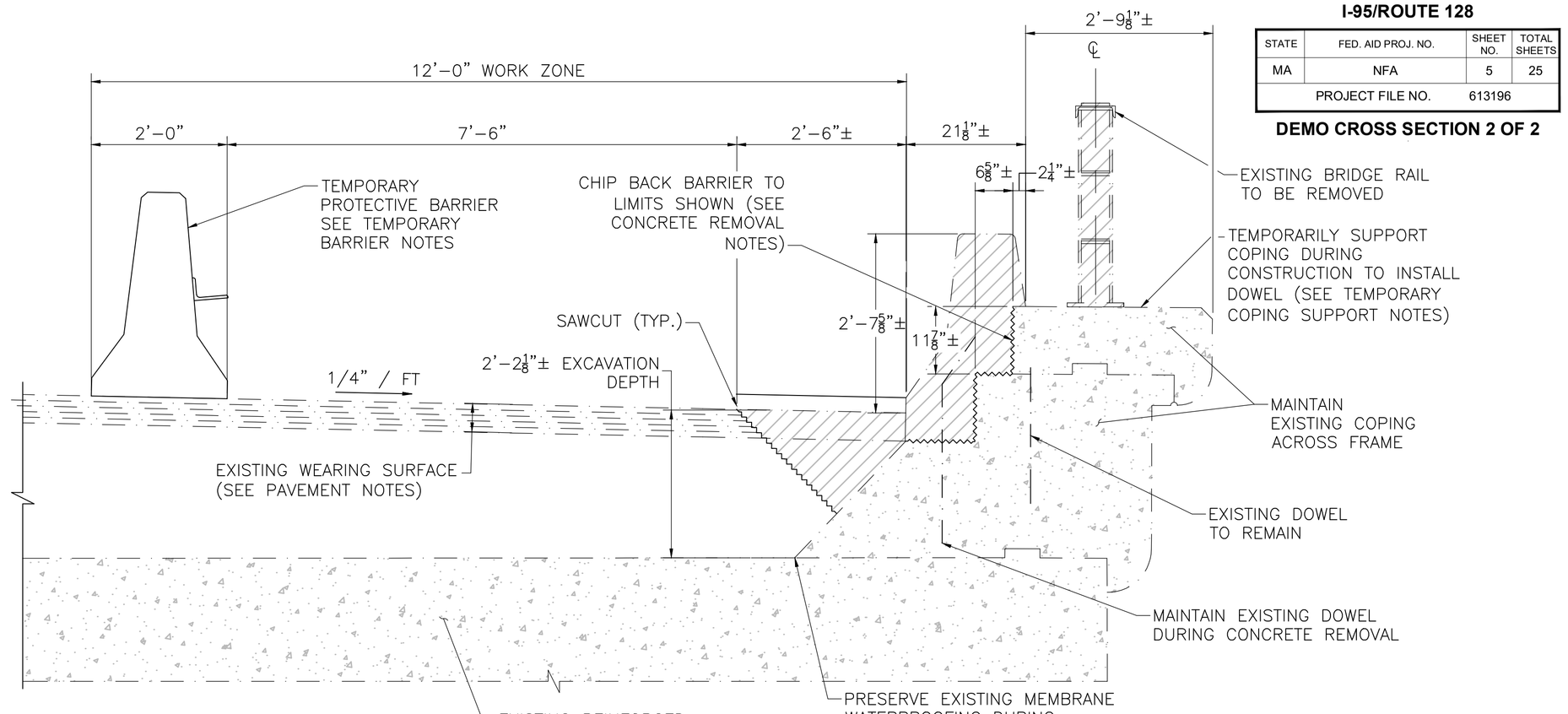
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	5	25
	PROJECT FILE NO.	613196	

DEMO CROSS SECTION 2 OF 2



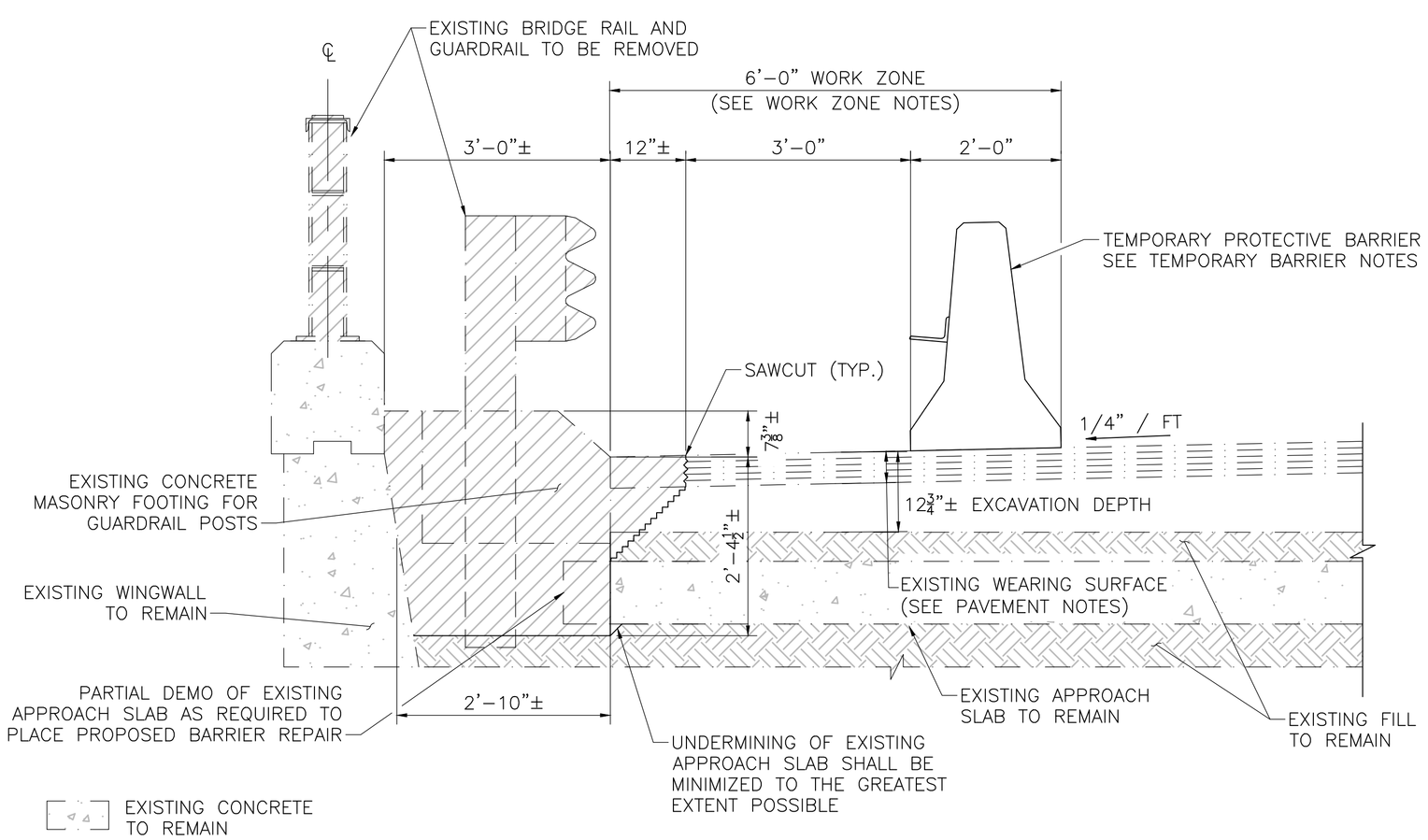
LIMITS OF DEMOLITION AT SOUTHBOUND ROADWAY AT ABUTMENT (NORTH FASCIA)

SCALE: ¾" = 1'–0"



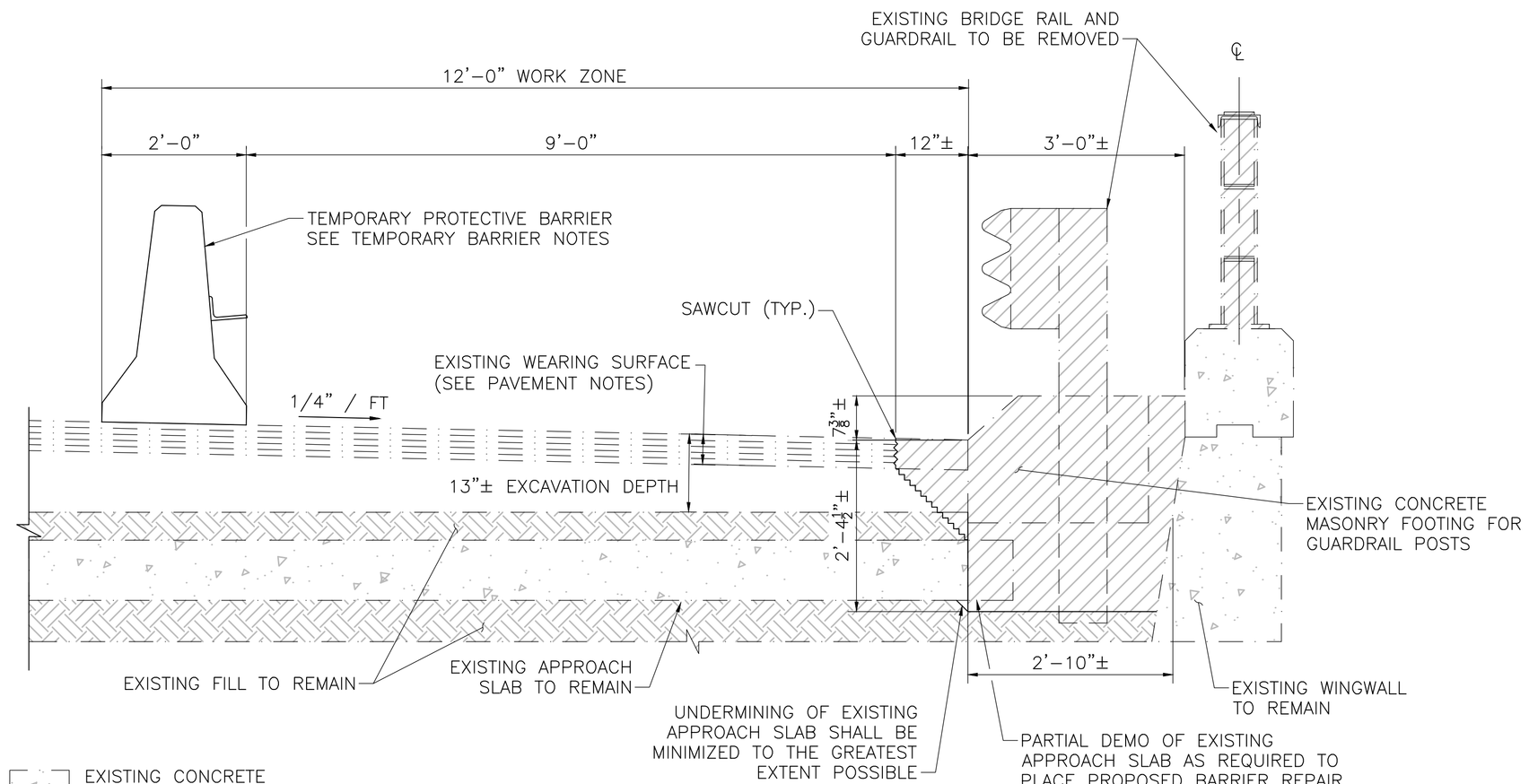
LIMITS OF DEMOLITION AT NORTHBOUND ROADWAY AT ABUTMENT (SOUTH FASCIA)

SCALE: ¾" = 1'–0"



LIMITS OF DEMOLITION AT SOUTHBOUND ROADWAY (WINGWALL)

SCALE: ¾" = 1'–0"



LIMITS OF DEMOLITION AT NORTHBOUND ROADWAY (WINGWALL)

SCALE: ¾" = 1'–0"

WORK ZONE NOTES:

SEE SHEET 3 FOR WORK ZONE DETAILS.

PAVEMENT NOTES:

SEE SHEET 3 FOR PAVEMENT DETAILS.

CONCRETE REMOVAL NOTES:

SEE SHEET 3 FOR CONCRETE REMOVAL DETAILS.

TEMPORARY BARRIER NOTES:

SEE SHEET 3 FOR BARRIER DETAILS.

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

PS&E Resubmission 24-October-2025

LYNNFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	6	25
	PROJECT FILE NO.	613196	

PROPOSED CROSS SECTION

S - 5 - PROPOSED CROSS SECTION.DWG Plotted on 20-Oct-2025 3:20 PM

Proposal No. 613196-133292

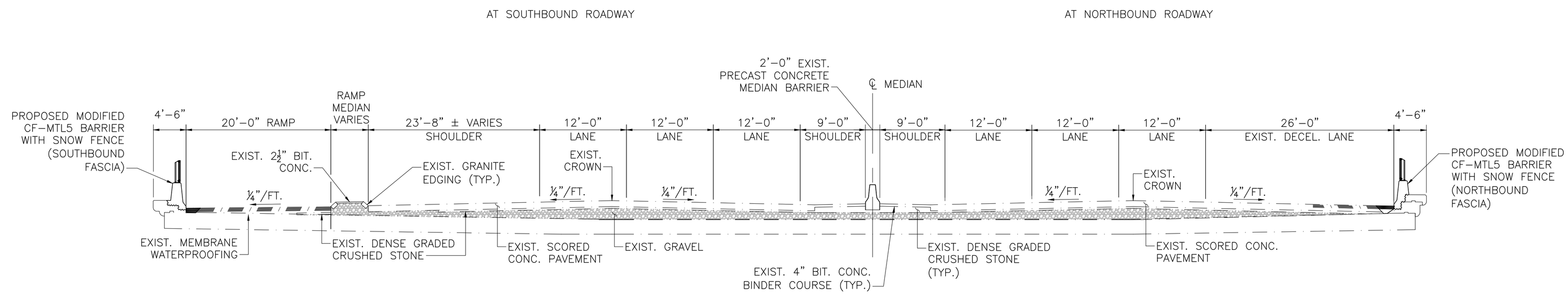
A00805 - 8

NOTES:

ALL EXISTING LANE LINES SHOWN FROM RECORD DRAWINGS ARE APPROXIMATE. NO SURVEY WAS PERFORMED AS PART OF THIS BRIDGE PRESERVATION TASK. CONTRACTOR TO CONFIRM LANE LINE MARKINGS PRIOR TO START OF WORK.

AT SOUTHBOUND ROADWAY

AT NORTHBOUND ROADWAY



PROPOSED CROSS SECTION

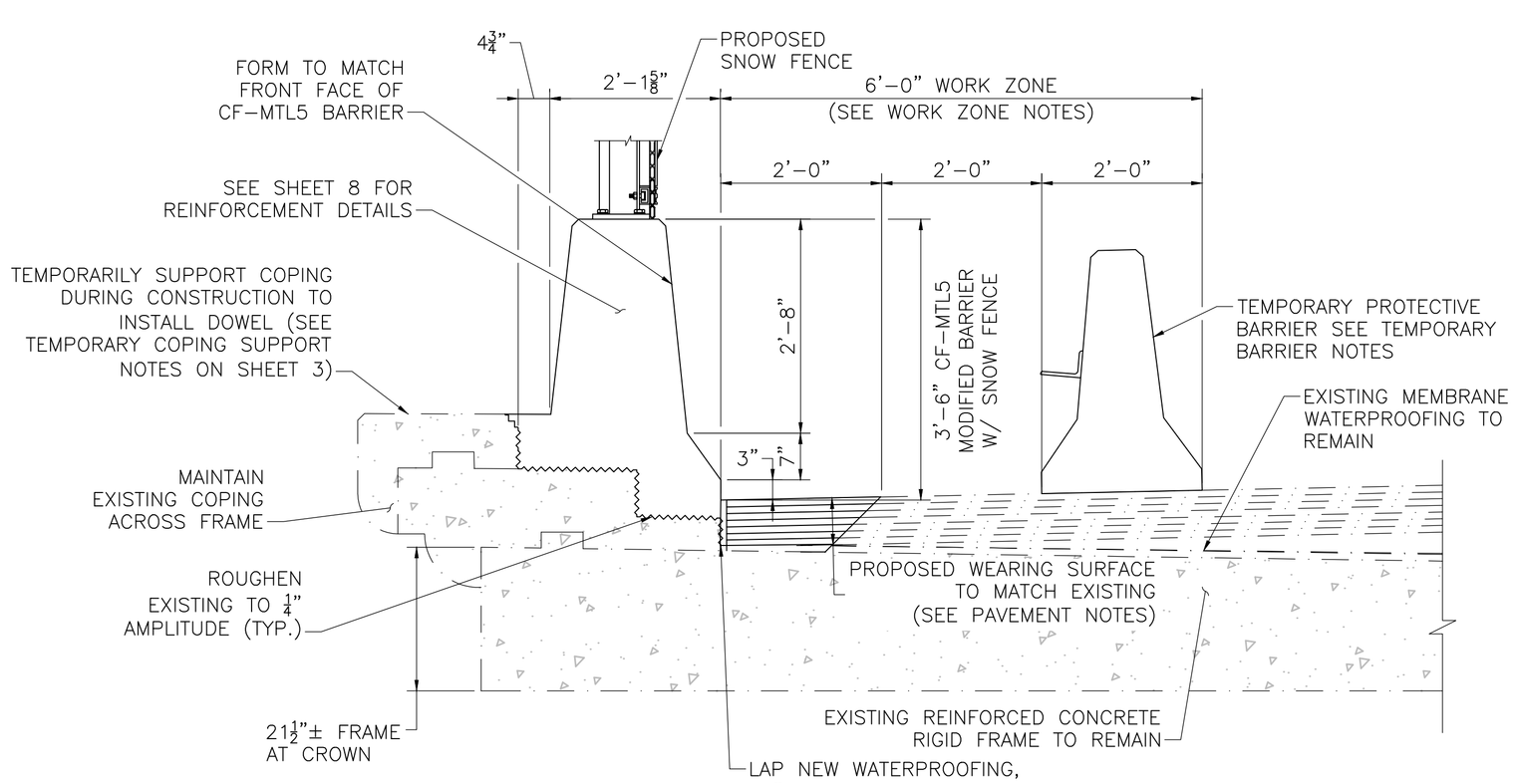
SCALE: ⅛" = 1'-0"

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

PS&E Resubmission 24-October-2025

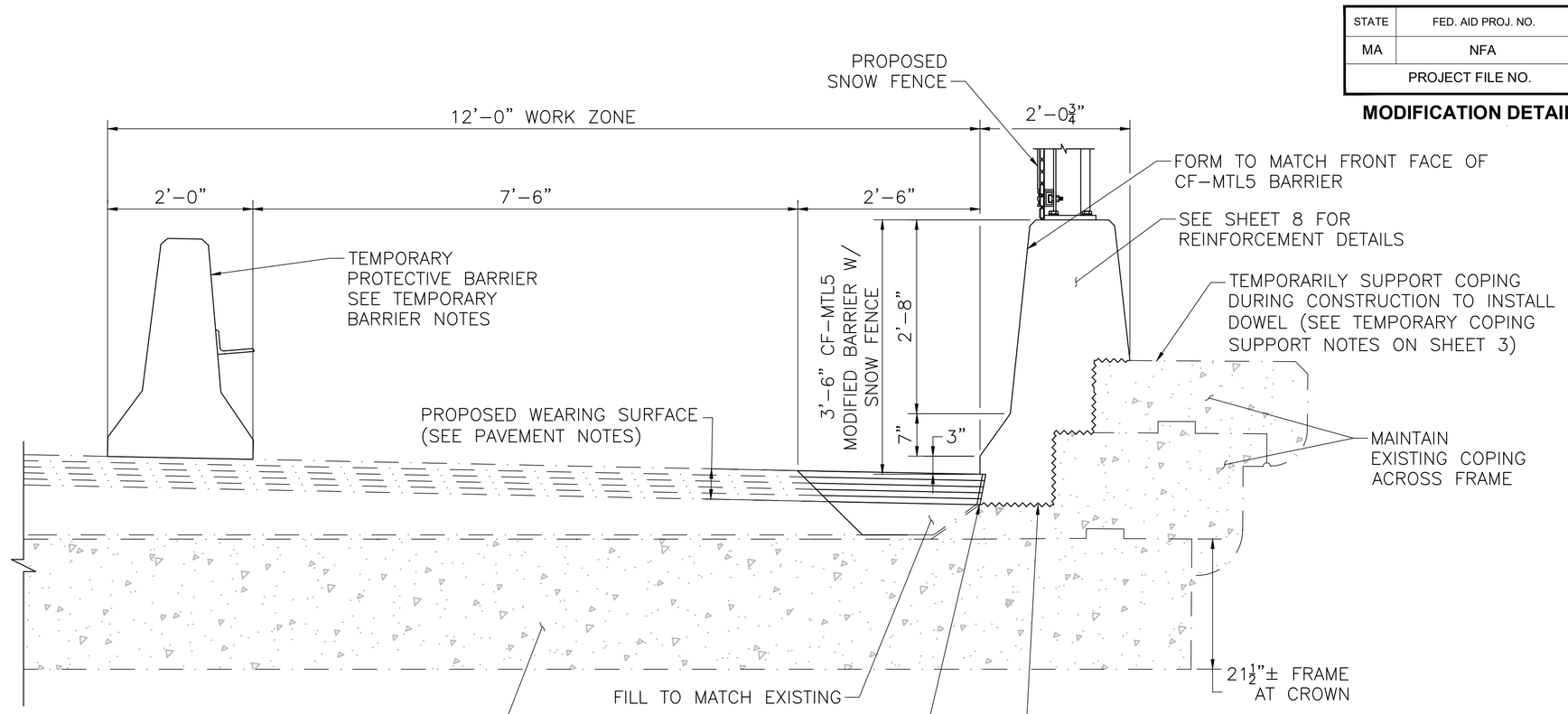
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	7	25
PROJECT FILE NO.	613196		

MODIFICATION DETAILS 1 OF 2



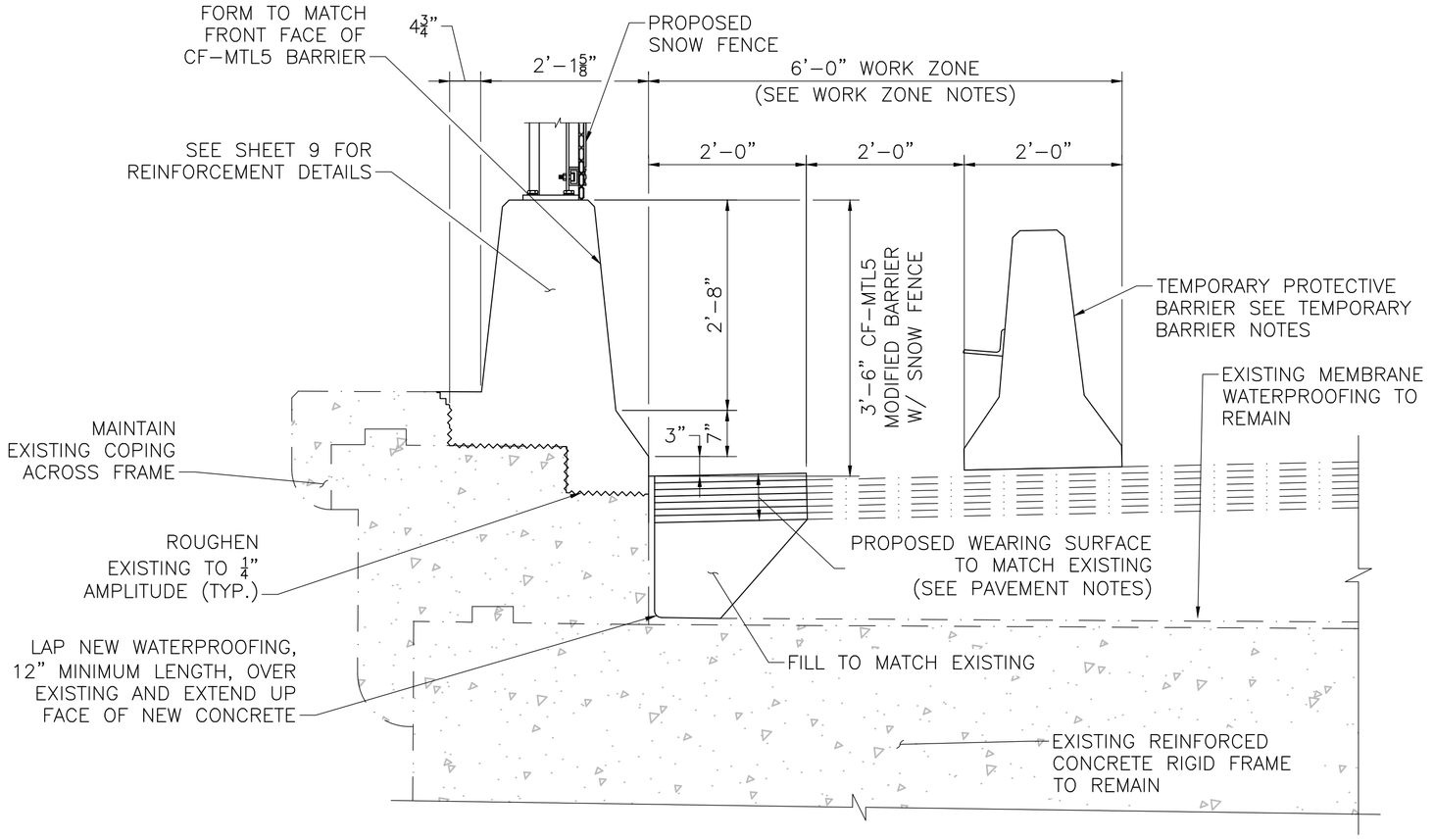
PROPOSED CF–MTL5 BARRIER AT SOUTHBOUND ROADWAY AT MIDSPAN (NORTH FASCIA)

SCALE: ¾" = 1'–0"



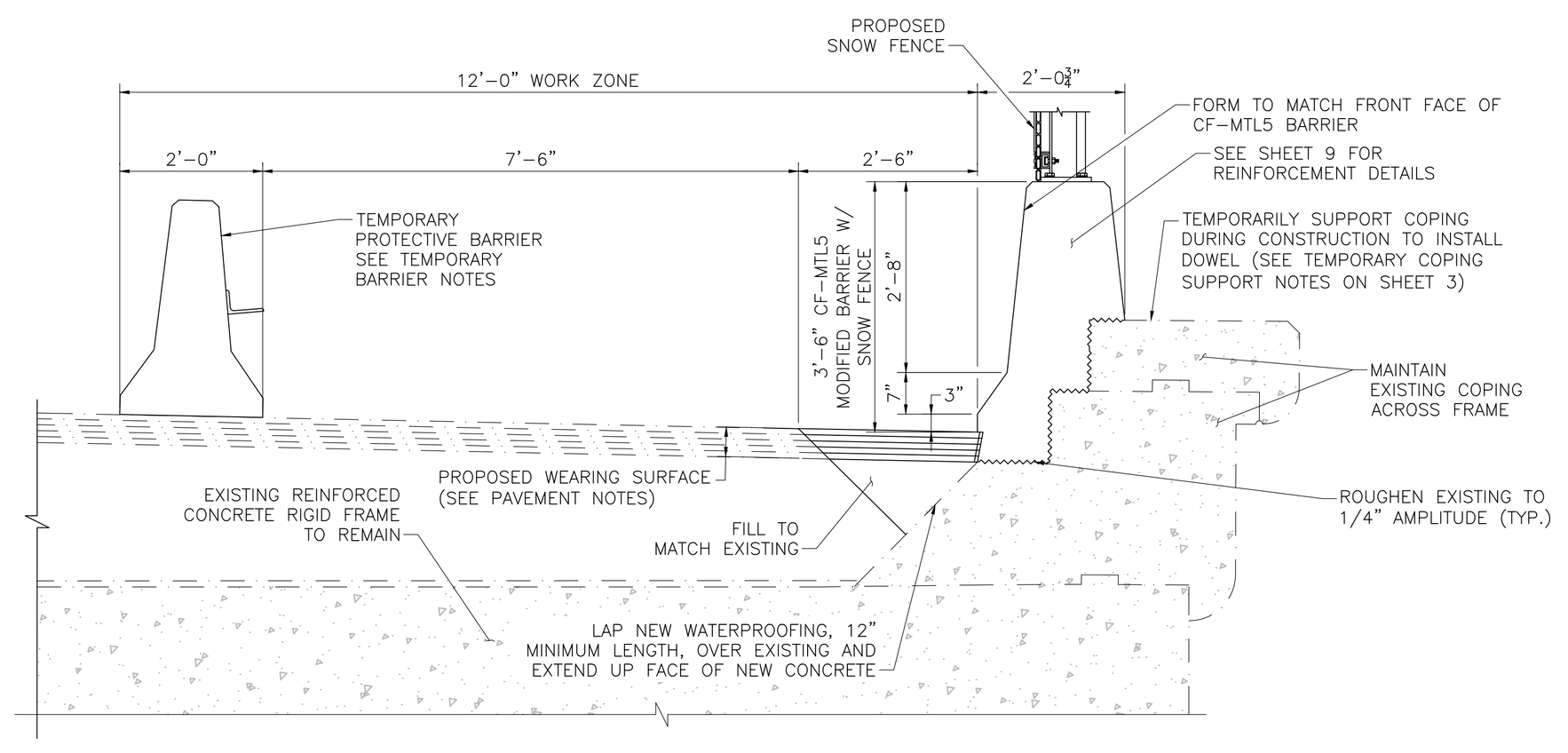
PROPOSED CF–MTL5 BARRIER AT NORTHBOUND ROADWAY AT MIDSPAN (SOUTH FASCIA)

SCALE: ¾" = 1'–0"



PROPOSED CF–MTL5 BARRIER AT SOUTHBOUND ROADWAY AT ABUTMENT (NORTH FASCIA)

SCALE: ¾" = 1'–0"



PROPOSED CF–MTL5 BARRIER AT NORTHBOUND ROADWAY AT ABUTMENT (SOUTH FASCIA)

SCALE: ¾" = 1'–0"

PAVEMENT NOTES:

SEE SHEET 3 FOR PAVEMENT DETAILS.

WORK ZONE NOTES:

SEE SHEET 3 FOR WORK ZONE DETAILS.

CONCRETE REMOVAL NOTES:

SEE SHEET 3 FOR REMOVAL DETAILS.

TEMPORARY BARRIER NOTES:

SEE SHEET 3 FOR BARRIER DETAILS.

TEMPORARY COPING SUPPORT NOTES:

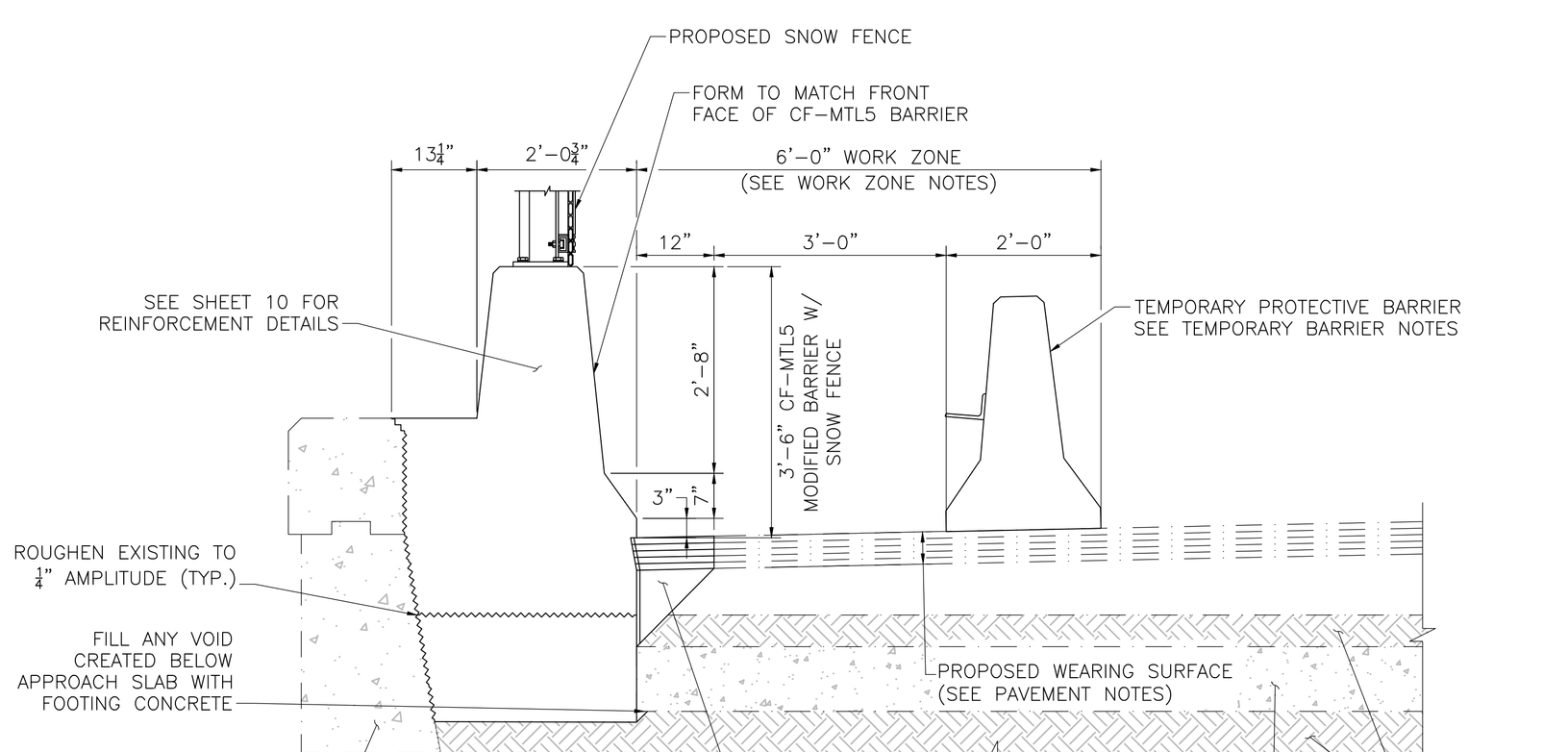
SEE SHEET 3 FOR TEMPORARY COPING SUPPORT NOTES.

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

S - 6-7 - MODIFICATION DETAILS.DWG Plotted on 20-Oct-2025 3:30 PM
Proposal No. 613196-133292
A008053 - 9
PS&E Resubmission 24-October-2025

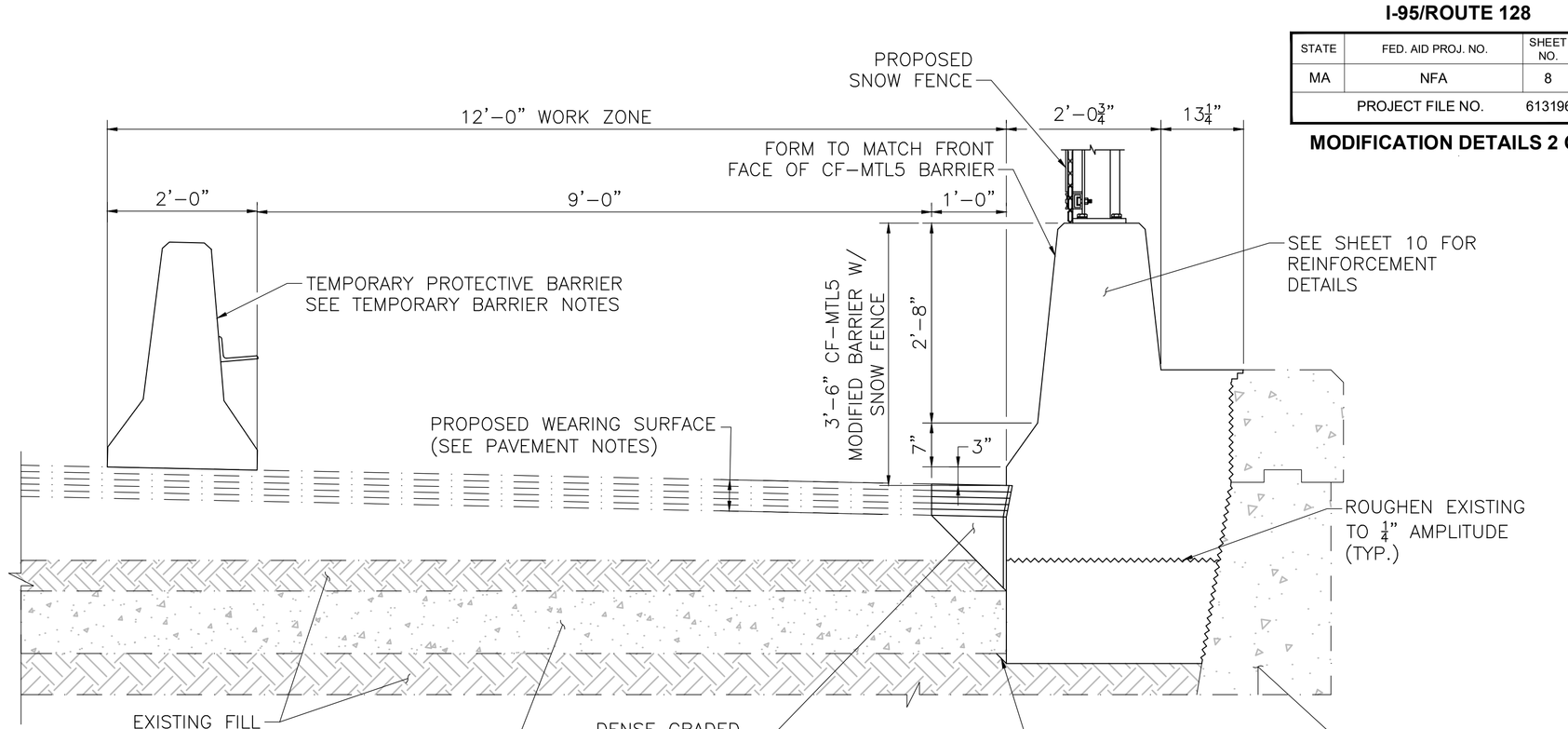
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	8	25
PROJECT FILE NO.	613196		

MODIFICATION DETAILS 2 OF 2



PROPOSED CF-MTL5 BARRIER AT SOUTHBOUND ROADWAY (WINGWALL)

SCALE: ¾" = 1'-0"



PROPOSED CF-MTL5 BARRIER AT NORTHBOUND ROADWAY (WINGWALL)

SCALE: ¾" = 1'-0"

TRANSITION BASE NOTES:

1. PRECAST HIGHWAY GUARDRAIL TRANSITION (HGT) SHALL BE 5000 PSI, ¾ IN, 685 HP CEMENT CONCRETE.
2. PRECAST GUARDRAIL TRANSITION BASE UNITS TO BE INSTALLED PRIOR TO CONSTRUCTING MOMENT SLAB FOR BRIDGE RAILING.
3. GRAVEL BORROW SHALL BE PLACED AND THOROUGHLY COMPACTED TO THE GRADE OF 3" (MIN.) BELOW THE INTENDED BOTTOM OF THE PRECAST GUARDRAIL TRANSITION BASE AND TO A HEIGHT OF 2'-0" (MIN.) ON ALL SIDES OF THE TRANSITION BASE TO FORM A TRENCH IN WHICH TO SET THE TRANSITION. WHERE NO GRAVEL BORROW IS REQUIRED BELOW THE BASE, IT SHALL BE PLACED ON UNDISTURBED SOIL.
4. CONTRACTOR SHALL SET THE PRECAST GUARDRAIL TRANSITION TO THE REQUIRED ELEVATION AND ALIGNMENT, AND BACKFILL PRECAST GUARDRAIL TRANSITION WITH CONTROLLED DENSITY FILL (NON-EXCAVATABLE) TO THE ELEVATION SHOWN.
5. CONTRACTOR TO PROVIDE METHOD OF INSTALLATION OF HGT WITHIN THE CLEAR ZONE LIMITS BEHIND THE BARRIERS AT ALL CORNERS.
6. SEE ITEM 992.17 FOR MEASUREMENT AND PAYMENT.

PAVEMENT NOTES:

SEE SHEET 3 FOR PAVEMENT DETAILS.

WORK ZONE NOTES:

SEE SHEET 3 FOR WORK ZONE DETAILS.

CONCRETE REMOVAL NOTES:

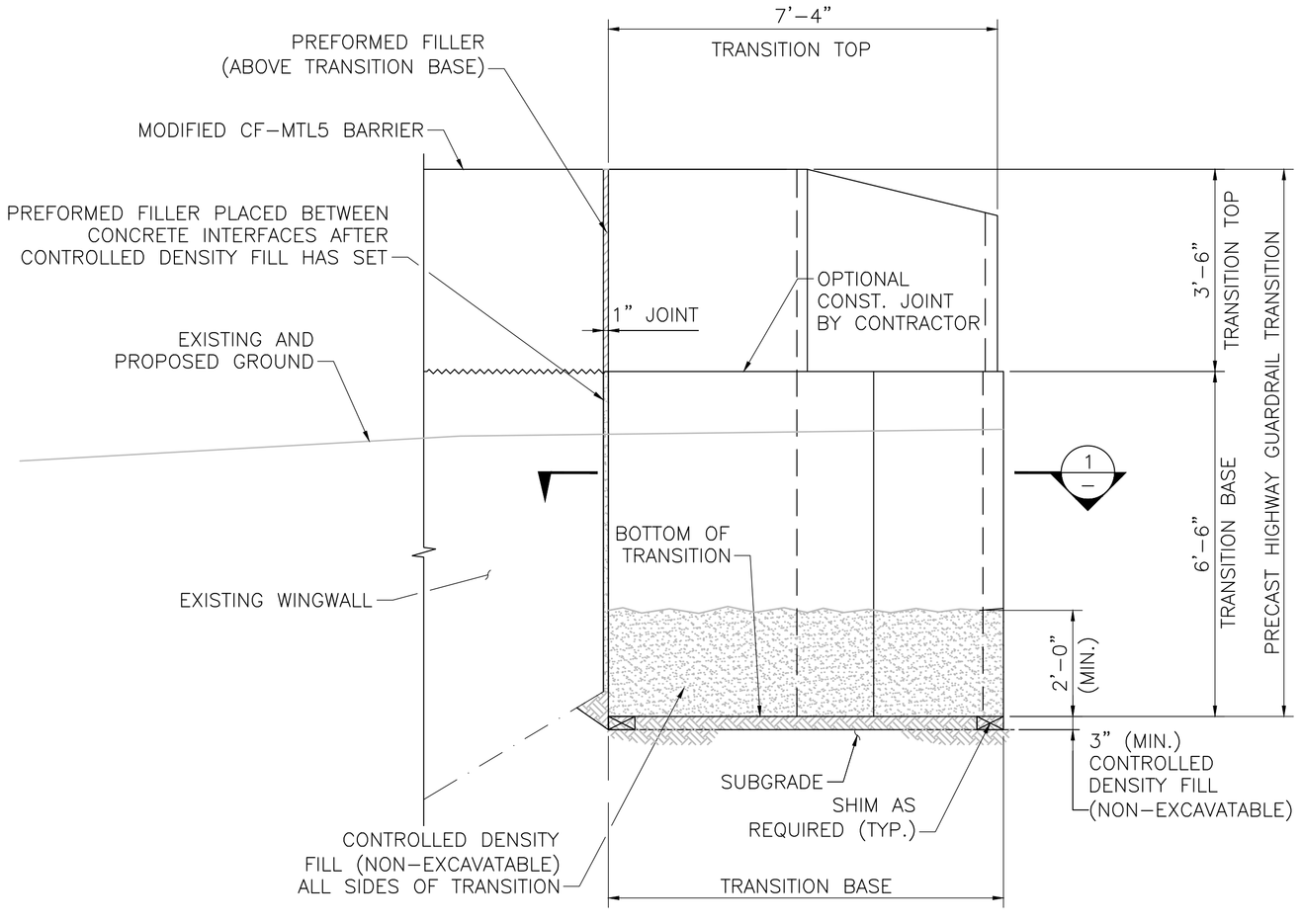
SEE SHEET 3 FOR REMOVAL DETAILS.

TEMPORARY BARRIER NOTES:

SEE SHEET 3 FOR BARRIER DETAILS.

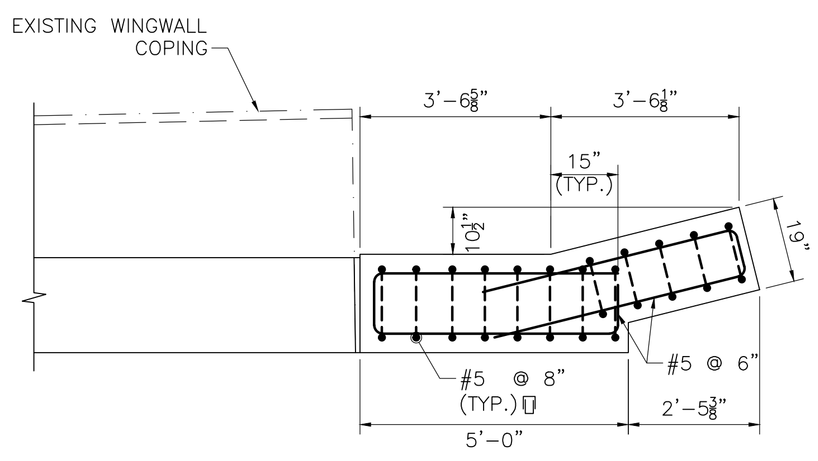
TEMPORARY COPING SUPPORT NOTES:

SEE SHEET 3 FOR TEMPORARY COPING SUPPORT NOTES.



GUARDRAIL TRANSITION BASE ELEVATION (INSIDE FACE)

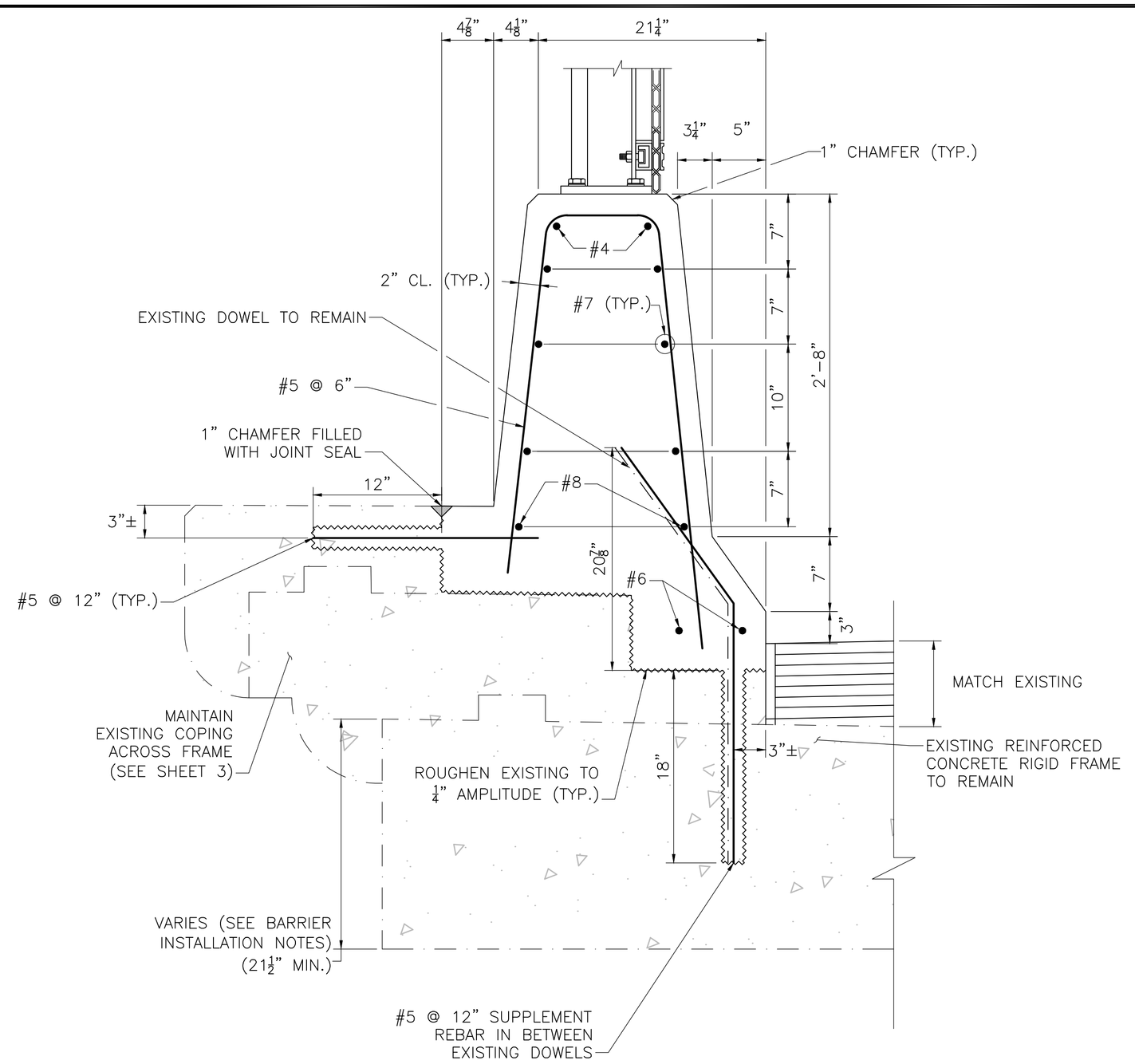
SCALE: ½" = 1'-0"



SECTION 1 – SCALE: ½" = 1'-0"

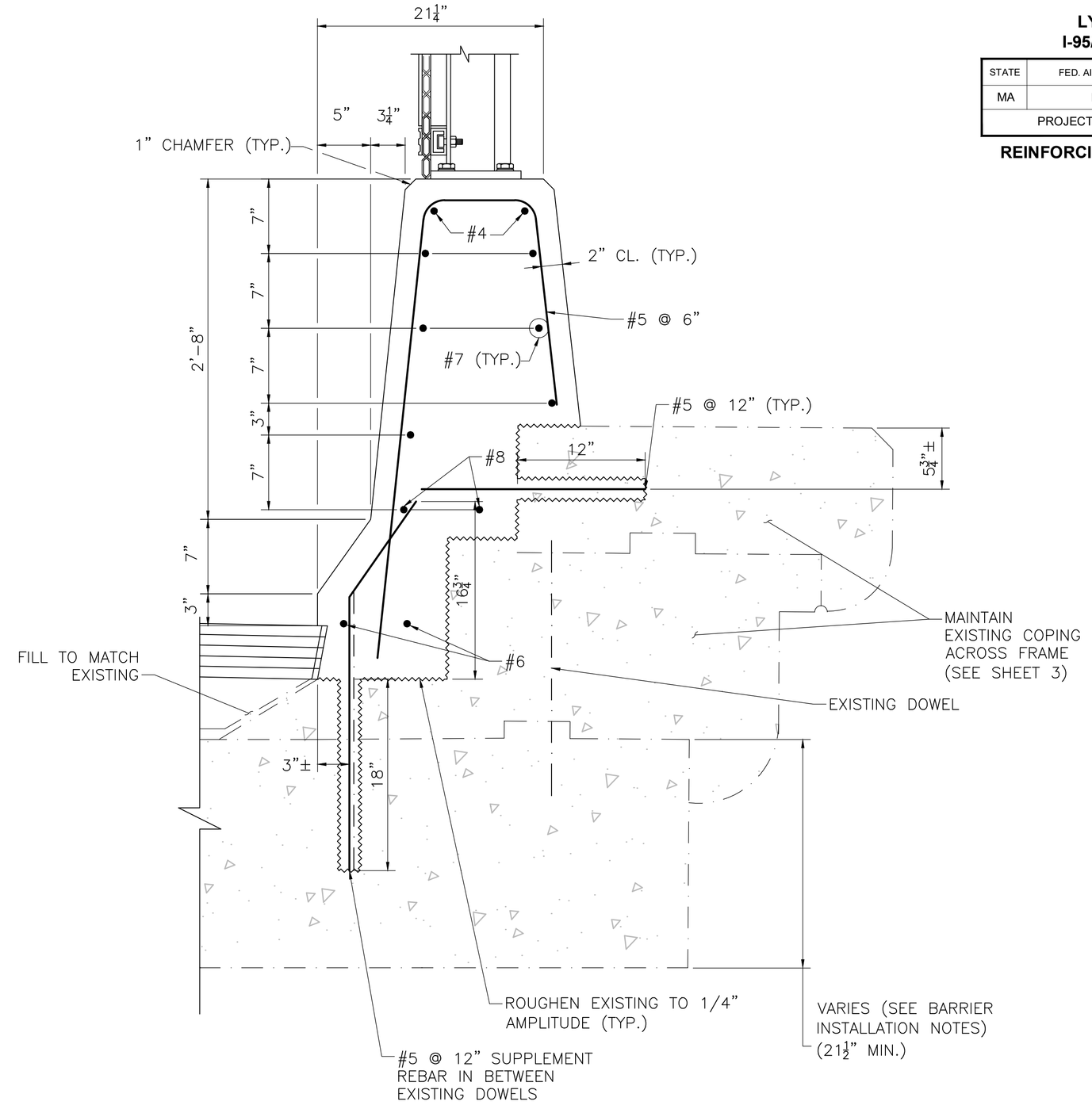
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

S - 6-7 - MODIFICATION DETAILS.DWG Plotted on 20-Oct-2025 3:33 PM
Proposal No. 613196-133292
A00805 - 10
PS&E Resubmission 24-October-2025



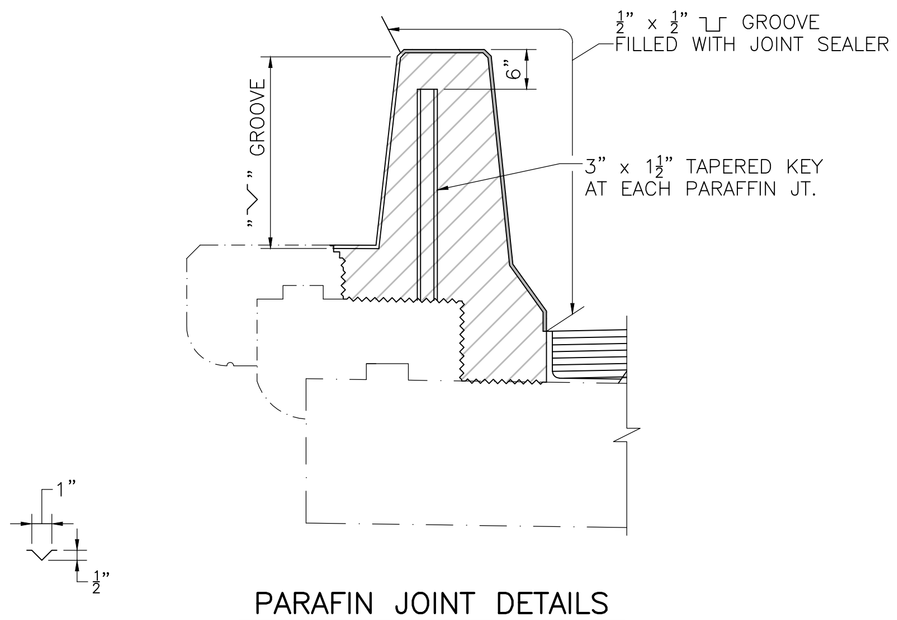
PROPOSED CF-MTL5 BARRIER REINFORCING DETAIL AT SOUTHBOUND ROADWAY AT MIDSPAN

SCALE: 1½" = 1'-0"



PROPOSED CF-MTL5 BARRIER REINFORCING DETAIL AT NORTHBOUND ROADWAY AT MIDSPAN

SCALE: 1½" = 1'-0"



PARAFIN JOINT DETAILS

SCALE: ¾" = 1'-0"

NOTES:

1. ALL CONCRETE ABOVE RIGID FRAMES SHALL BE POURED IN ALTERNATING SECTIONS WITH NOT LESS THAN 3 DAYS BETWEEN POURS.
2. DO NOT CARRY LONGITUDINAL BARS THROUGH THE PARAFFIN JOINTS. END THE REINFORCEMENT 2" CLEAR OF JOINT.
3. JOINT SHALL BE SQUARE TO FACE OF CURB OR COPING.

DRILL & GROUT NOTES:

1. LOCATIONS FOR DRILLING AND GROUTING SHALL BE CAREFULLY SELECTED TO AVOID EXISTING REINFORCING.
2. GROUT SHALL BE CHOSEN FROM MASSDOT QUALIFIED CONSTRUCTION MATERIALS LIST (QCML).

BARRIER INSTALLATION NOTES:

1. CONTRACTOR SHALL REMOVE EXISTING RAILING AND CONCRETE BASE TO LIMITS AS SHOWN ON THE PLANS AND AS DETERMINED BY THE ENGINEER. SEE NOTES OF SHEET 3 FOR CONCRETE REMOVAL.
2. DRILL AND GROUT DOWELS PRIOR TO POURING OF REPAIRED CONCRETE AREA AND BARRIER.
3. BARRIER AND REPAIRED AREA SHALL BE POURED SEPARATE WITH A CONSTRUCTION JOINT BETWEEN THE REPAIRED AREA AND THE BASE OF THE BARRIER.

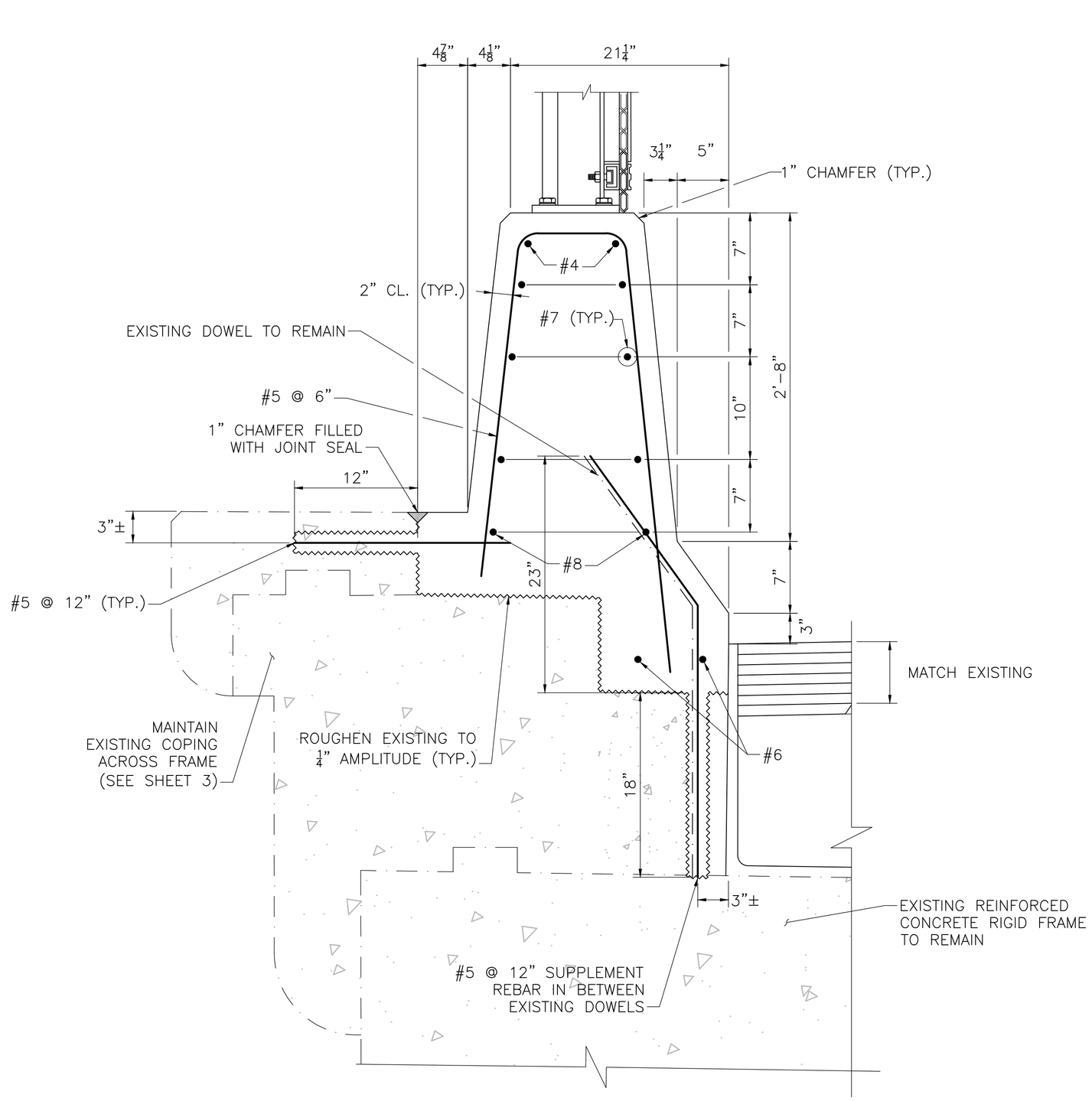
LYNNFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	9	25
PROJECT FILE NO.	613196		

REINFORCING DETAILS 1 OF 3

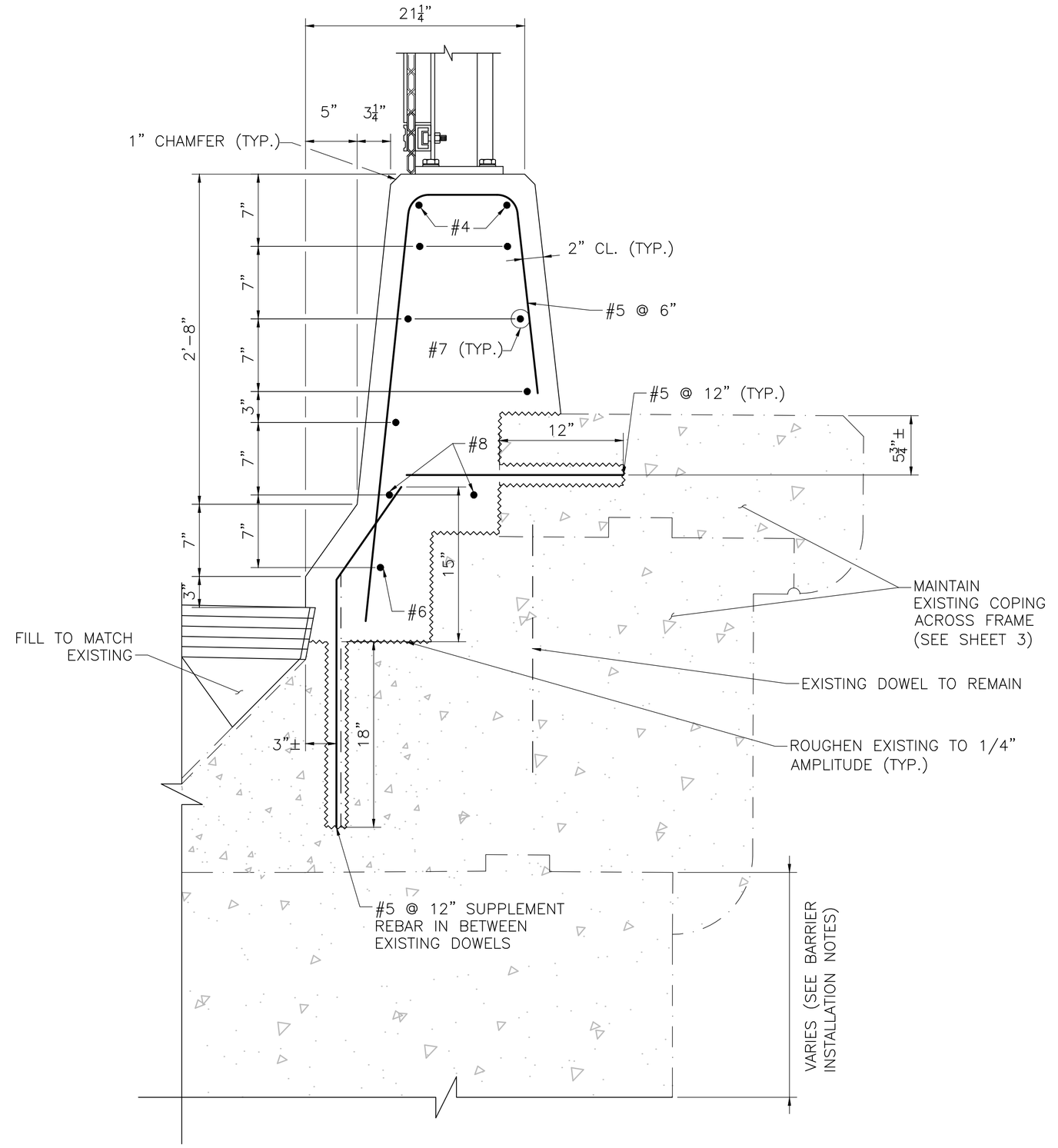
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

S - 8-10 - REINFORCING DETAILS.DWG Plotted on 24-Oct-2025 10:47 AM
A00805 - 11
Proposal No. 613196-133292
PS&E Resubmission 24-October-2025



PROPOSED CF–MTL5 BARRIER REINFORCING DETAIL AT SOUTHBOUND ROADWAY AT ABUTMENT

SCALE: 1½" = 1'–0"



PROPOSED CF–MTL5 BARRIER REINFORCING DETAIL AT NORTHBOUND ROADWAY AT ABUTMENT

SCALE: 1½" = 1'–0"

DRILL & GROUT NOTES:

1. SEE SHEET 8 FOR DRILL & GROUT NOTES.

BARRIER INSTALLATION NOTES:

1. SEE SHEET 8 FOR BARRIER INSTALLATION NOTES.

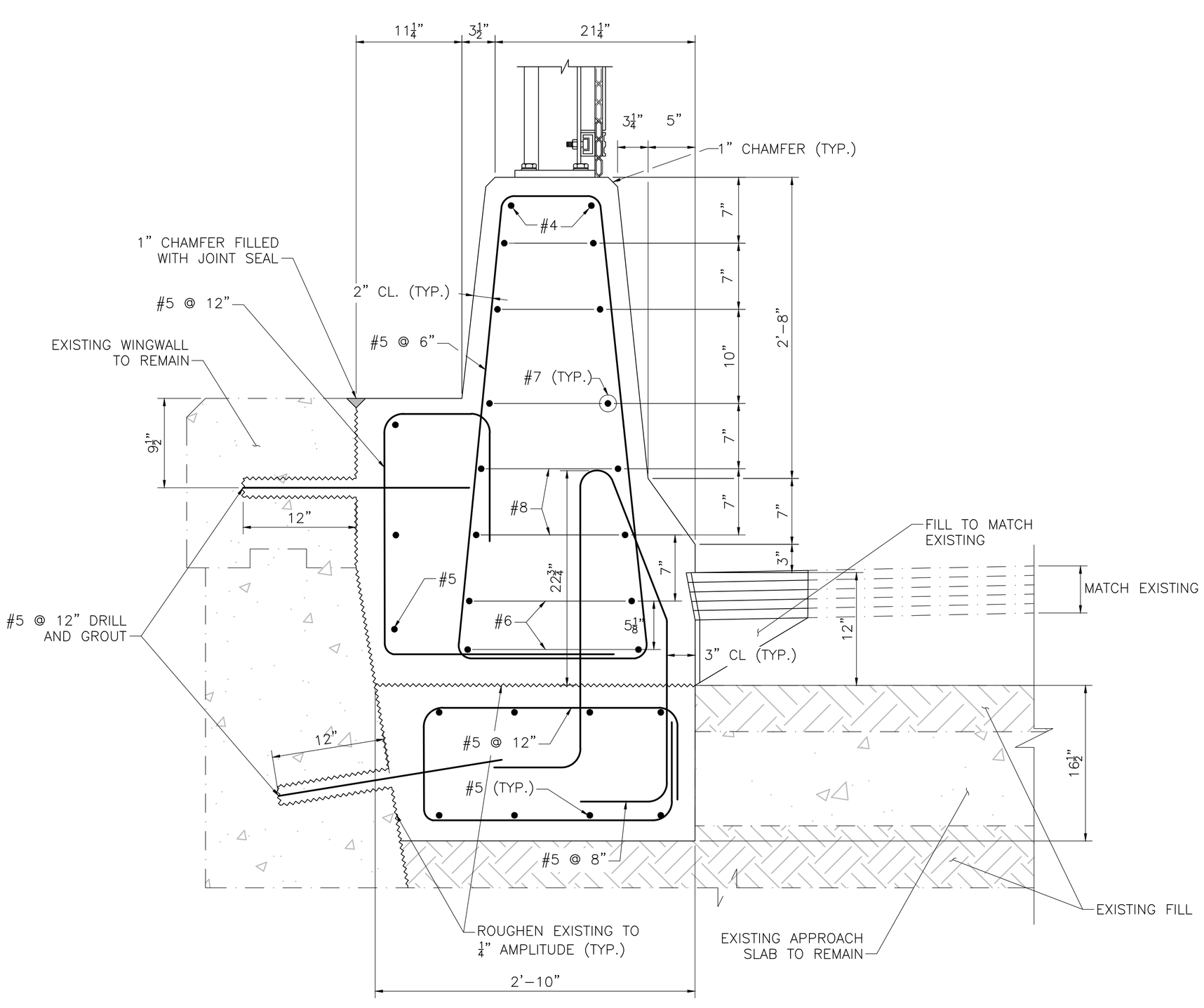
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

A00805 - 12
S - 8-10 - REINFORCING DETAILS.DWG Plotted on 24-Oct-2025 10:39 AM
Proposal No. 613196-133292
PS&E Resubmission 24-October-2025

LYNNFIELD
I-95/ROUTE 128

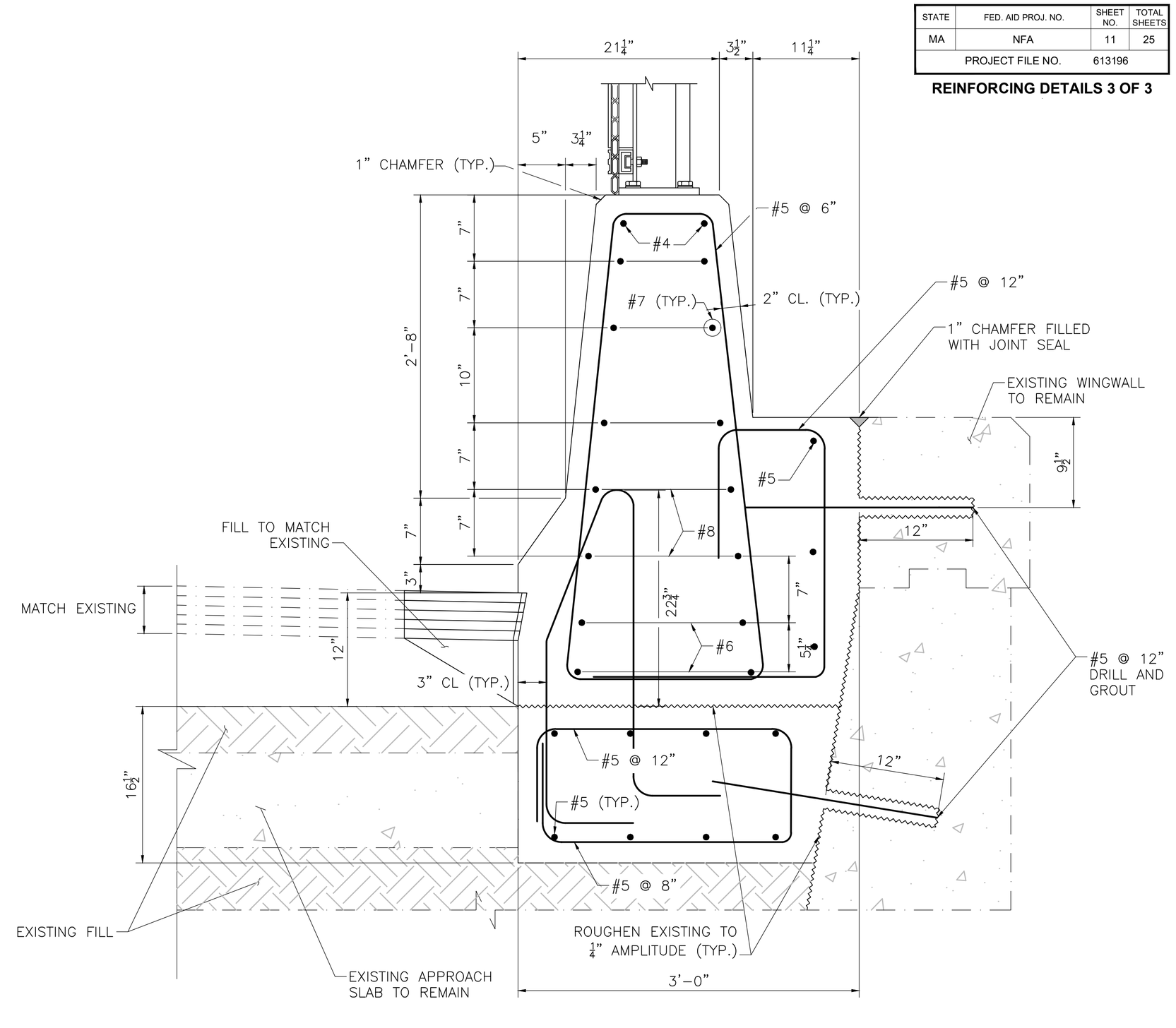
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	11	25
	PROJECT FILE NO. 613196		

REINFORCING DETAILS 3 OF 3



PROPOSED CF–MTL5 BARRIER REINFORCING DETAIL AT SOUTHBOUND ROADWAY (WINGWALL)

SCALE: 1½" = 1'–0"



PROPOSED CF–MTL5 BARRIER REINFORCING DETAIL AT NORTHBOUND ROADWAY (WINGWALL)

SCALE: 1½" = 1'–0"

DRILL & GROUT NOTES:

1. SEE SHEET 8 FOR DRILL & GROUT NOTES.

BARRIER INSTALLATION NOTES:

1. SEE SHEET 8 FOR BARRIER INSTALLATION NOTES.

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

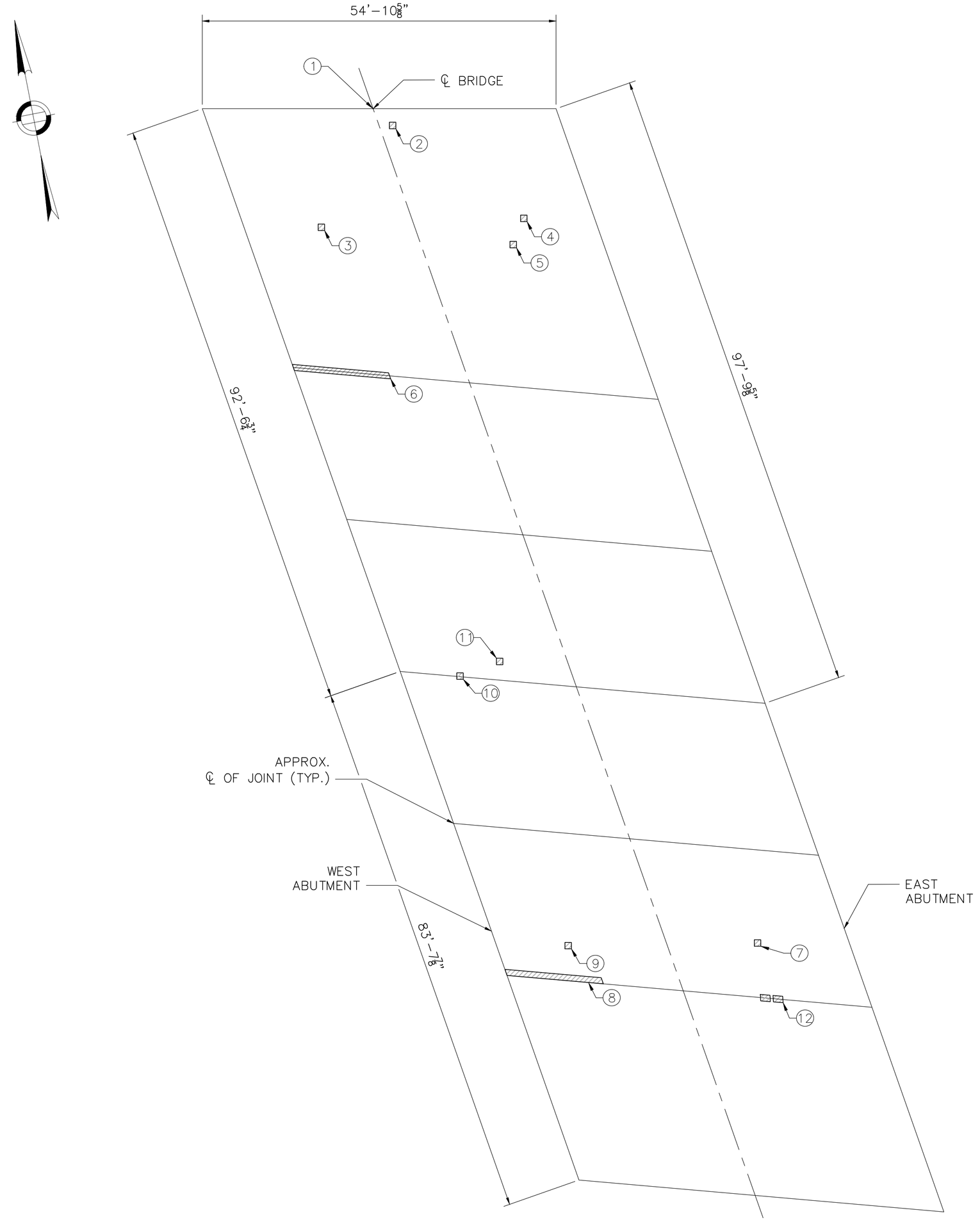
PS&E Resubmission 24-October-2025

S - 8-10 - REINFORCING DETAILS.DWG Plotted on 20-Oct-2025 3:58 PM

Proposal No. 613196-133292

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	12	25
PROJECT FILE NO.	613196		

CONCRETE REPAIRS 1 OF 3



CONCRETE REPAIR NOTES:

1. SEE SHEET 13 FOR CONCRETE REPAIR NOTES.

REPAIR AREA #	LENGTH	WIDTH	DEPTH	DEFICIENCY
1	FULL LENGTH	N/A	1"	SPALLS WITH EXPOSED REBAR (COPING)
2	12" DIA.	N/A	4"	SPALL WITH EXPOSED REBAR
3	12"	4"	2"	SPALL WITH EXPOSED REBAR
4	12" DIA.	N/A	2"	SPALL WITH EXPOSED REBAR
5	12" DIA.	N/A	2"	SPALL WITH EXPOSED REBAR
6	15'-0"	3"	1"	SPALL
7	6" DIA.	N/A	1"	(4) SPALLS WITH EXPOSED REBAR
8	15'-0"	6"	2"	SPALL
9	UP TO 4" DIA.	N/A	1/2"	(2) SPALLS WITH EXPOSED REBAR
10	8"	3"	3"	(2) SPALLS WITH EXPOSED REBAR
11	12"	4"	1/2"	SPALL
12	18"	6"	3"	(2) SPALLS WITH EXPOSED REBAR

LEGEND:

SPALLED/DELAMINATED CONCRETE AREAS TO BE REPAIRED

UNDERSIDE OF DECK PLAN (2FD/I-95 NB & SB)

SCALE: $\frac{3}{32}$" = 1'-0"

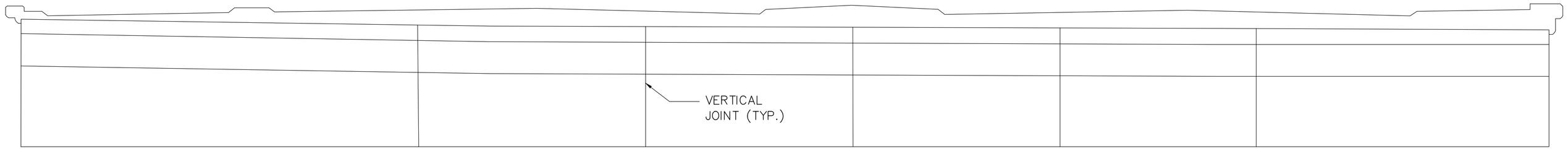
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

S - 11-13 - CONCRETE REPAIRS.DWG Plotted on 20-Oct-2025 4:04 PM
Proposal No. 613196-133292
PS&E Resubmission 24-October-2025
A00805 - 14

LYNNFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	13	25
PROJECT FILE NO.	613196		

CONCRETE REPAIRS 2 OF 3

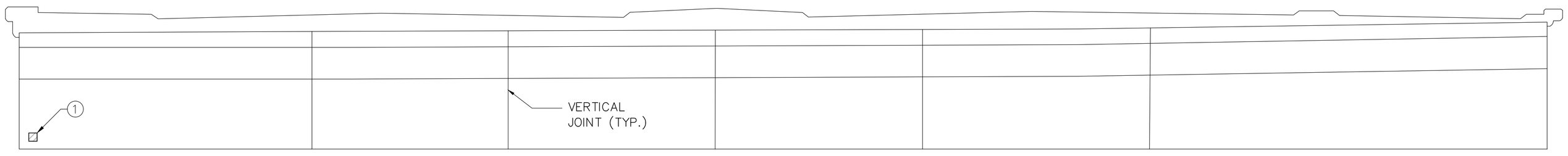


EAST ABUTMENT ELEVATION
SCALE: $\frac{1}{8}$" = 1'–0"

CONCRETE REPAIR NOTES:

1. SEE SHEET 13 FOR CONCRETE REPAIR NOTES.

REPAIR AREA #	HEIGHT	WIDTH	DEPTH	DEFICIENCY
1	8"	5"	2"	SPALL



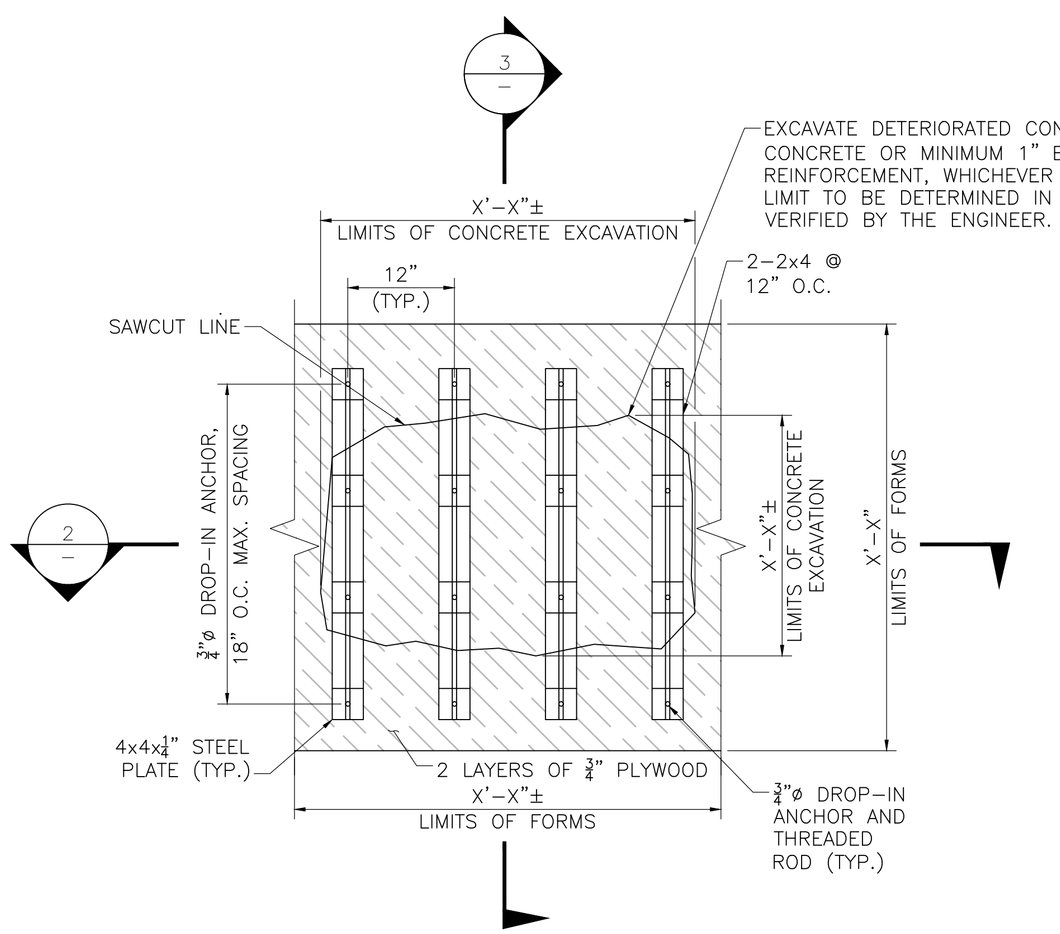
WEST ABUTMENT ELEVATION
SCALE: $\frac{1}{8}$" = 1'–0"

LEGEND:

SPALLED/DELAMINATED CONCRETE AREAS TO BE REPAIRED

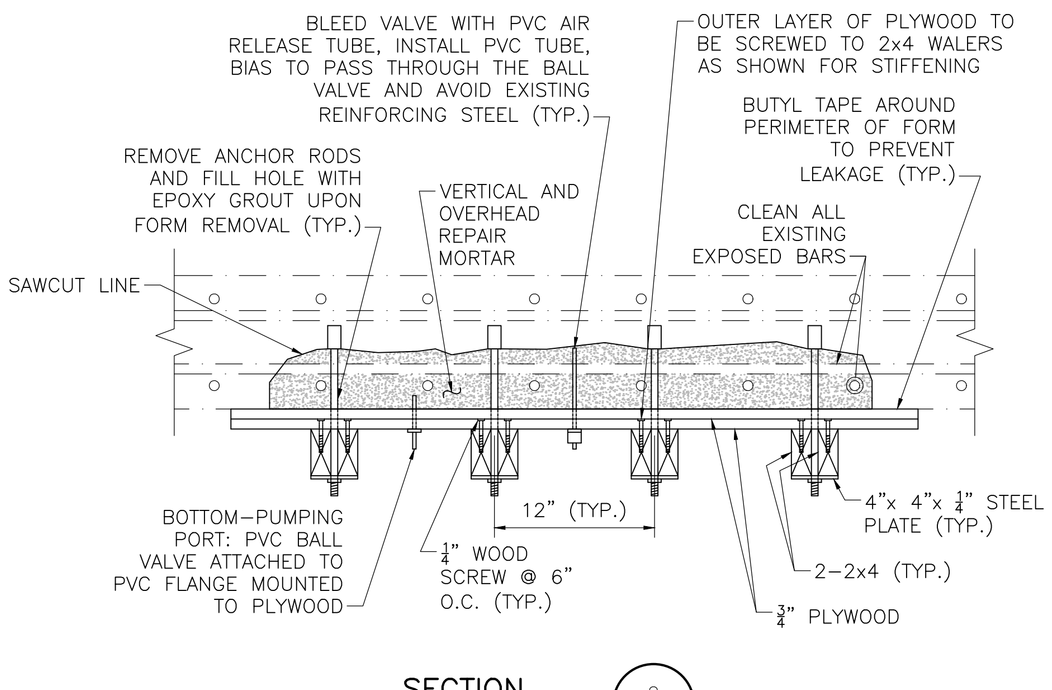
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

S - 11-13 - CONCRETE REPAIRS.DWG Plotted on 20-Oct-2025 4:08 PM
PS&E Resubmission 24-October-2025
Proposal No. 613196-133292
A00805 - 15



DECK UNDERSIDE FORM PLAN

SCALE: 1" = 1'-0"



SECTION

SCALE: 1½" = 1'-0"

NOTE:
CONTRACTOR SHALL MAINTAIN EXISTING VERTICAL CLEARANCES AT BRIDGE WHILE FORMWORK IS IN PLACE. IF EXISTING VERTICAL CLEARANCES CANNOT BE MAINTAINED, CONTRACTOR SHALL PLACE TEMPORARY SIGNAGE AT BRIDGE AND IN ADVANCE OF BRIDGE TO ALERT VEHICLES AND TRUCKS OF THE REDUCED CLEARANCE. FORMWORK MAY NOT BE PLACED SUCH THAT THE TEMPORARY VERTICAL CLEARANCE IS REDUCED TO LESS THAN 13'-9". ENGINEER SHALL APPROVE AFTER FORM IS SET.

LYNNFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	14	25
	PROJECT FILE NO. 613196		

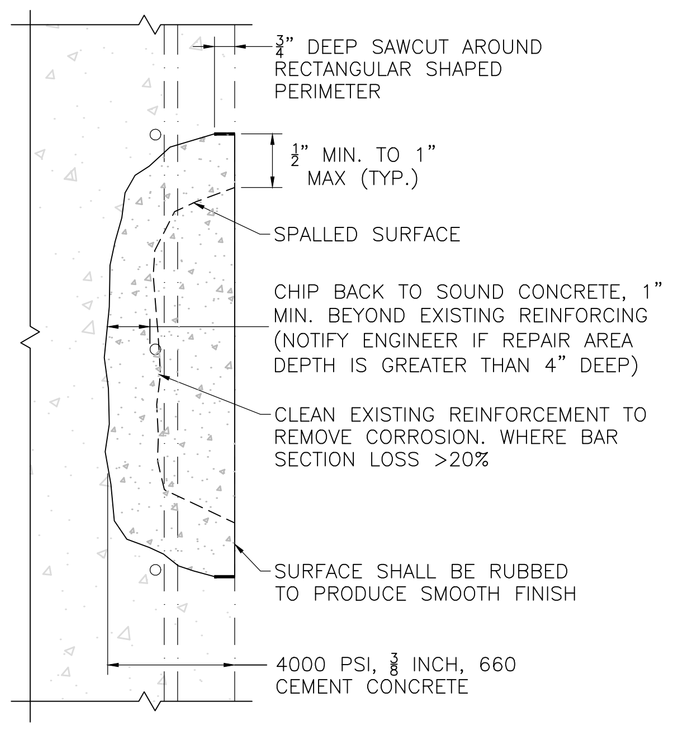
CONCRETE REPAIRS 3 OF 3

CONCRETE REPAIR NOTES:

1. THE CONTRACTOR SHALL EXERCISE CARE WHEN REMOVING CONCRETE AROUND REINFORCEMENT TO ONLY REMOVE DETERIORATED CONCRETE AND TO LIMIT THE SOUND CONCRETE REMOVED TO THE MINIMUM NECESSARY TO PRODUCE A GOOD REPAIR.
2. THE CONTRACTOR SHALL ESTABLISH LIMITS OF VARIOUS REPAIRS AS SHOWN ON THE PLANS AND AT THE DIRECTION OF THE ENGINEER. THE LOCATIONS SHOWN ON THE PLANS ARE BASED UPON RECORDS OF BRIDGE INSPECTIONS AND OBSERVATIONS FROM THE GROUND ARE ARE NOT GUARANTEED. THE LOCATION AND EXTENT OF ALL CONCRETE REPAIRS ARE TO BE FIELD VERIFIED AND APPROVED BE THE ENGINEER AFTER THE CONTRACTOR HAS SOUNDED AND MARKED OUT THE REPAIR AREAS. REASONABLY FOLLOW OUTLINES OF DETERIORATION PREFERABLY WITH SQUARE CORNERS.
3. THE LIMITS OF THE REPAIRS SHALL BE SAWCUT ALONG NEAT LINES TO A DEPTH OF ¾" TO PRODUCE A CLEAN EDGE.
4. REMOVE DETERIORATED AND UNSOUND CONCRETE AS WELL AS SOUND CONCRETE WHERE NECESSARY TO A MINIMUM OF 1" BEYOND SURFACE REINFORCEMENT.
5. EXPOSED REINFORCEMENT TO BE CLEANED BY MECHANICAL CLEANING AND HIGH PRESSURE WASHING WITH WATER THAT CONTAINS NO DETERGENTS OF BOND INHIBITING CHEMICALS. WHERE ACTIVE CORROSION HAS OCCURRED (THAT WHICH WOULD INHIBIT BONDING) SANDBLAST STEEL TO WHITE METAL FINISH.
6. A NEW REINFORCEMENT BAR SHALL BE PLACED TO SUPPLEMENT AN EXISTING REINFORCEMENT BAR WHEN AN EXISTING BAR HAS A SECTION LOSS OF 20% OF MORE OF THE ORIGINAL CROSS SECTION, AS DETERMINED BY THE ENGINEER, OR THE EXISTING REINFORCEMENT IS BROKEN. IN LIEU OF SUPPLEMENTING A BAR ADJACENT TO A DETERIORATED BAR, THE CONTRACTOR MAY CUT OUT THE DETERIORATED BAR AND MECHANICALLY SPLICE THE NEW BAR TO EXISTING REINFORCEMENT.
7. AFTER REMOVAL AND EDGE PREPARATION ARE COMPLETE, REMOVE BOND INHIBITING MATERIALS (DIRT, GREASE, LOOSELY BONDED AGGREGATE) BY ABRASION BLASTING OR HIGH PRESSURE WATER BLASTING WITH WATER THAT CONTAINS NO DETERGENTS OR BOND INHIBITING CHEMICALS. CHECK THE CONCRETE SURFACES AFTER CLEANING TO INSURE THAT THE SURFACE IS FREE FROM ADDITIONAL LOOSE AGGREGATE OR THAT ADDITIONAL DELAMINATIONS ARE NOT PRESENT.
8. AT THE TIME THE REPAIR CONCRETE/MORTAR IS APPLIED, THE EXISTING CONCRETE SUBSTRATE SHOULD BE SATURATED SURFACE DRY.
9. WHERE CONCRETE REMOVAL AND REPLACEMENT NECESSITATES ADJACENT SEPARATE CONCRETE PLACEMENTS, CONCRETE REMOVAL SHALL NOT BE ALLOWED WITHIN 1 FOOT OF ADJACENT REPAIR AREAS. ADJACENT AREAS WHERE THIS 1 FOOT BUFFER IS NOT ATTAINABLE SHALL BE COMBINED INTO A SINGLE REPAIR AREA.
10. IN SEQUENCING WORK, THE CONTRACTOR SHALL NOT BEGIN CONCRETE REMOVAL AT A LOCATION ADJACENT TO A COMPLETED REPAIR UNTIL A MINIMUM OF 7 CURING DAYS HAVE PASSED.
11. ALL HORIZONTAL AND VERTICAL CONCRETE SURFACES IN CONTACT WITH REPAIR MATERIAL SHALL BE FREE OF OIL, GREASE, LAITANCE, AND OTHER CONTAMINANTS.
12. ALL HORIZONTAL AND VERTICAL CONCRETE SURFACES MUST BE CLEAN, SOUND AND ROUGH TO ENSURE A GOOD BOND.
13. THE CONTRACTOR SHALL MAINTAIN UNDERDECK LIGHTING AND COMMUNICATION CABLES. REMOVAL AND REATTACHMENT OF FIXTURES HOLDING COMMUNICATION LINES AND STREET LIGHTING SHALL BE INCIDENTAL TO CONCRETE REPAIRS.
14. REPAIR CONCRETE SHALL MEET THE REQUIREMENTS OF ITEM 905.001.

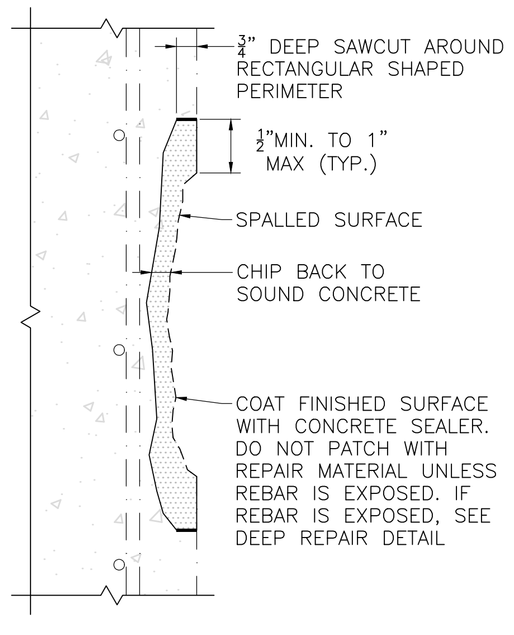
FORMWORK
1. FORMS DESIGNED FOR 12 PSI PRESSURE.
2. INSTALL FORMS ON THE FACE OF EACH REPAIR AREA. GROUT PORTS TO BE PLACED AT 4'-0" MAX. ON CENTER EACH WAY MAX. VENT TUBES TO BE PLACED AT 2'-0" MAX. ON CENTER EACH WAY.
3. FORMS ARE TO BE WATERTIGHT. PREFORMED FOAM GASKETS OR CAST IN PLACE FOAM SHALL BE USED TO MATCH SURFACES.
4. AT REPAIRS ADJACENT TO THE JOINTS IN THE RIGID FRAME, MAINTAIN THE EXISTING JOINT OPENING OF 1-1/2".

MIXING AND PUMPING
1. SATURATE HOST CONCRETE SUBSTRATE USING A WATER HOSE THROUGH FORM PORTS PRIOR TO PLACING GROUT. AT TIME OF GROUT PLACEMENT, SUBSTRATE SHALL BE SATURATED SURFACE DRY WITH NO STANDING WATER.
2. VERTICAL AND OVERHEAD REPAIR MORTAR SHALL BE USED TO MAKE THE REPAIRS AND SHALL BE MIXED ACCORDING TO THE MANUFACTURER SPECIFICATIONS AND IN ACCORDANCE WITH THE MASSDOT QCML.
3. THE PUMP MUST BE CAPABLE OF CONTINUOUS EVEN FLOW OF MATERIALS TO THE REPAIR AREA WITHOUT HAVING ANY LINE SURGE. LIVE SURGE WILL RESULT IN AIR VOIDS AND POSSIBLE AGGREGATE SEGREGATION.
4. PRIOR TO PUMPING MATERIALS, ALL HOSES MUST BE WET OUT WITH CLEAN WATER TO ENSURE INITIAL FLOW PROPERTIES ARE MAINTAINED.
5. THE PUMPING DISTANCE MUST BE KEPT TO A MINIMUM. THE PUMPING HOSE SHALL BE A MINIMUM 3 TIMES THE SIZE OF THE LARGEST AGGREGATE ON THE VERTICAL AND OVERHEAD REPAIR MORTAR (⅜"X3).
6. ADDITIONAL WATER BEYOND THE RECOMMENDED LEVEL WILL NOT INCREASE THE FLOW CHARACTERISTICS OF THE VERTICAL AND OVERHEAD REPAIR MORTAR. KEEP PUMPING PRESSURE TO A MINIMUM NECESSARY TO FILL CAVITY.



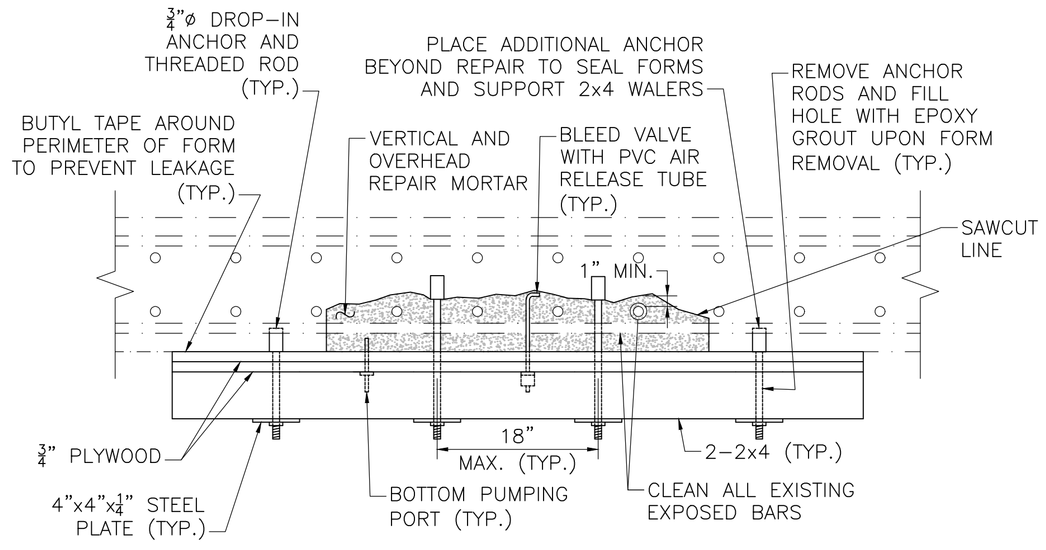
DEEP REPAIR WITH EXPOSED REBAR ALONG FRAME LEGS

(AVERAGE DEPTH OF REPAIR IS GREATER THAN 2" OR SPALL WITH EXPOSED REBAR.)



CONCRETE REMOVAL OF SHALLOW SPALLS

(AVERAGE DEPTH OF SPALL IS LESS THAN 2" AND NO EXPOSED REBAR)



SECTION

SCALE: 1½" = 1'-0"

NOTE:
CONTRACTOR SHALL MAINTAIN EXISTING VERTICAL CLEARANCES AT BRIDGE WHILE FORMWORK IS IN PLACE. IF EXISTING VERTICAL CLEARANCES CANNOT BE MAINTAINED, CONTRACTOR SHALL PLACE TEMPORARY SIGNAGE AT BRIDGE AND IN ADVANCE OF BRIDGE TO ALERT VEHICLES AND TRUCKS OF THE REDUCED CLEARANCE. FORMWORK MAY NOT BE PLACED SUCH THAT THE TEMPORARY VERTICAL CLEARANCE IS REDUCED TO LESS THAN 13'-9". ENGINEER SHALL APPROVE AFTER FORM IS SET.

CURING
1. LEAVE THE FORM WORK IN PLACE UNTIL THE COMPRESSIVE STRENGTH OF THE VERTICAL AND OVERHEAD REPAIR MORTAR REACHES 2,500 PSI.
2. IF HAND PATCHING IS REQUIRED TO FILL THE PORT AREA, DRY-PACK WITH A NON-SAG MORTAR.
3. THE FORMS SHALL BE LEFT IN PLACE FOR A MINIMUM OF 5 DAYS. ONCE THE FORMS ARE STRIPPED CURING COMPOUND SHALL BE APPLIED TO THE REPAIR IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

CONCRETE SEALER
1. AT SHALLOW REPAIRS, NO REPAIR MORTAR OR REPAIR CONCRETE SHALL BE APPLIED. REMOVE LOOSE CONCRETE.

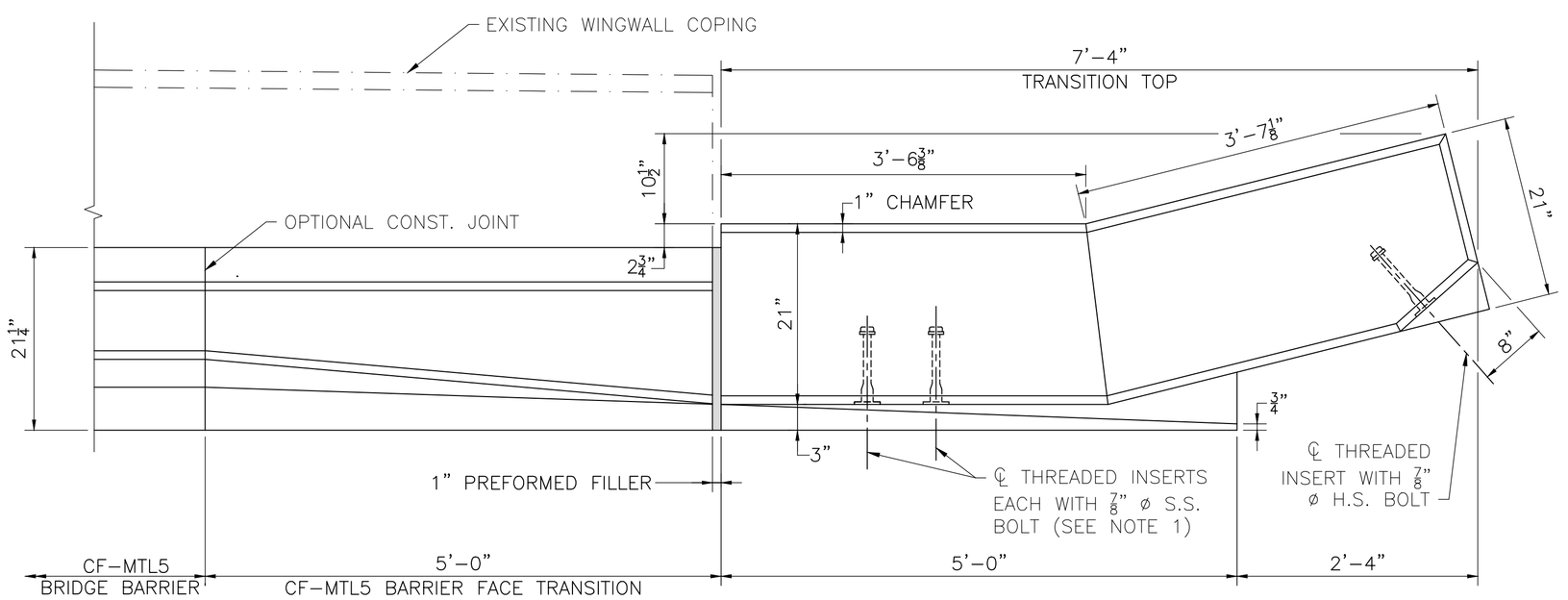
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

A00805 - 16
S - 11-13 - CONCRETE REPAIRS.DWG Plotted on 20-Oct-2025 4:11 PM
Proposal No. 613196-133292
24-October-2025 PS&E Resubmission

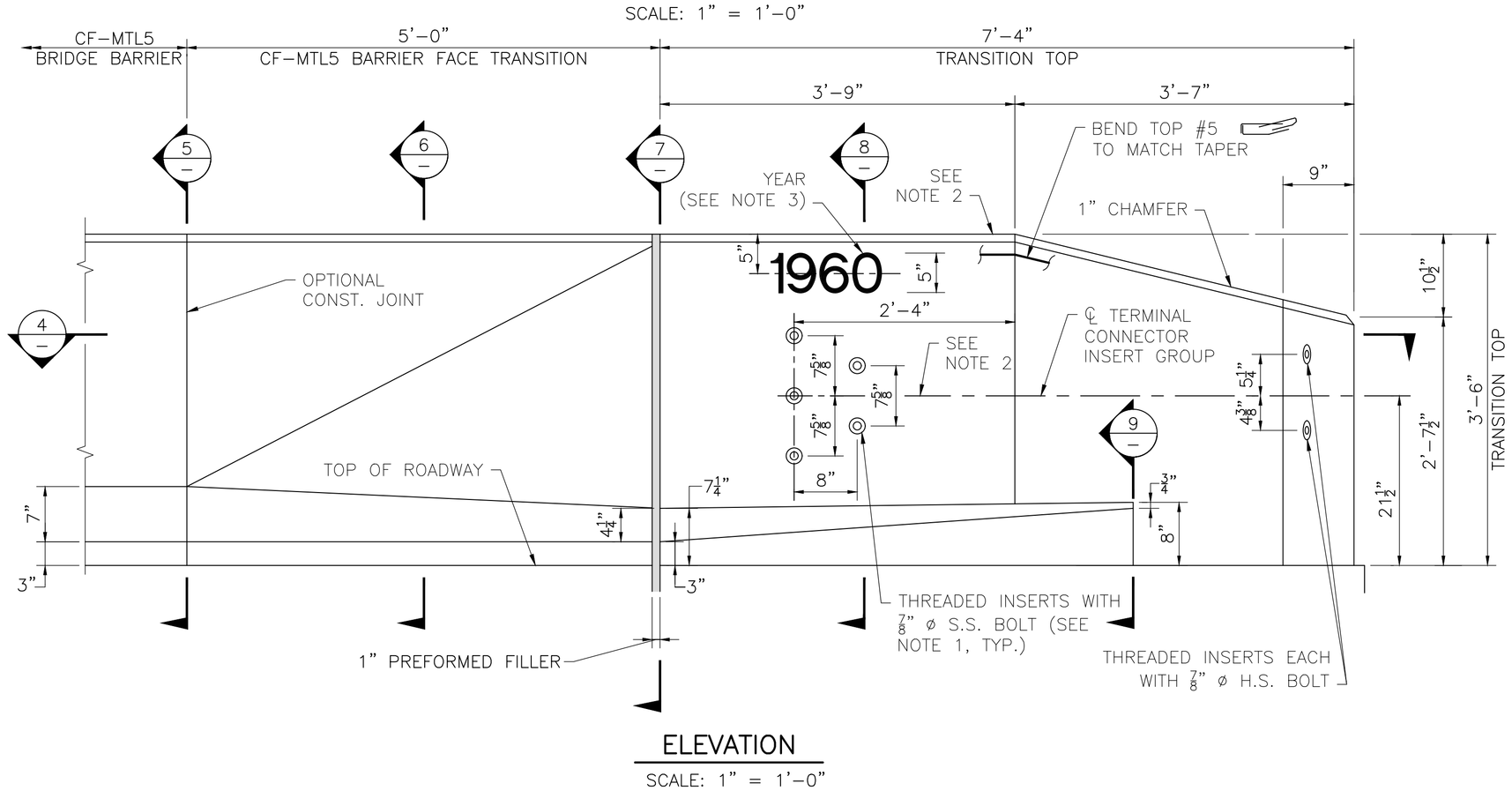
LYNNFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	15	25
	PROJECT FILE NO. 613196		

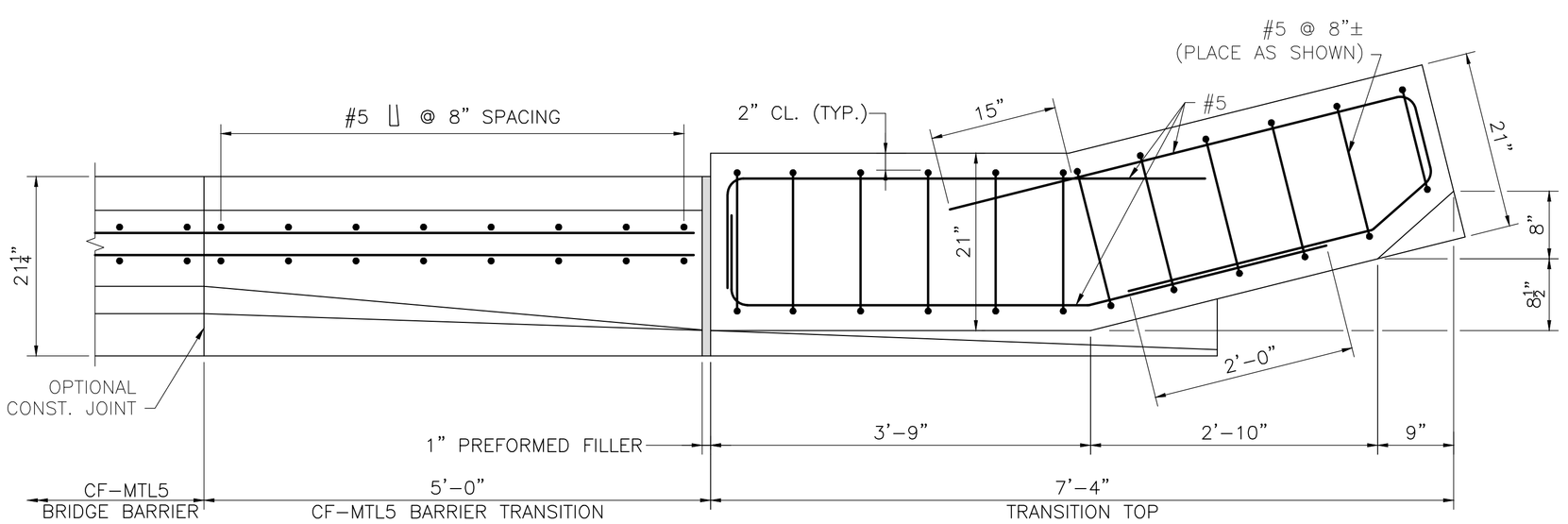
GUARDRAIL TRANSITION DETAILS



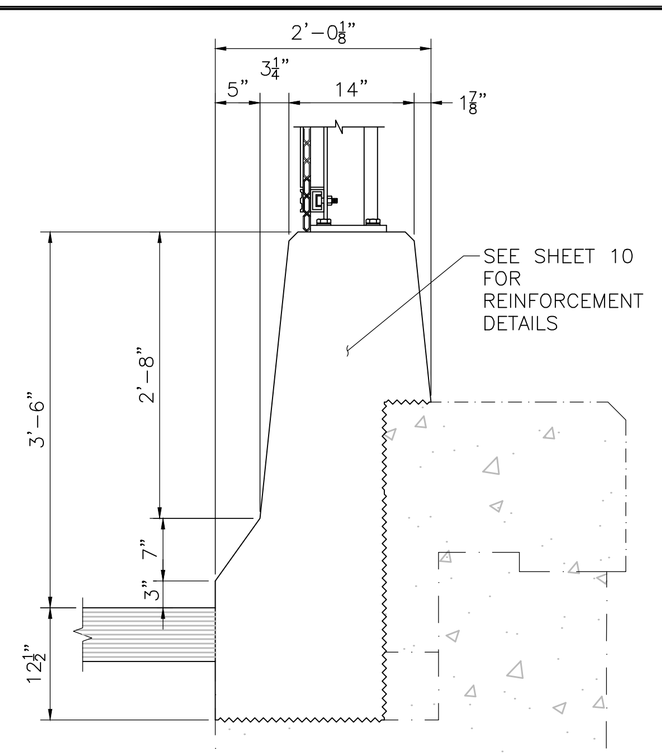
PLAN
SCALE: 1" = 1'-0"



ELEVATION
SCALE: 1" = 1'-0"

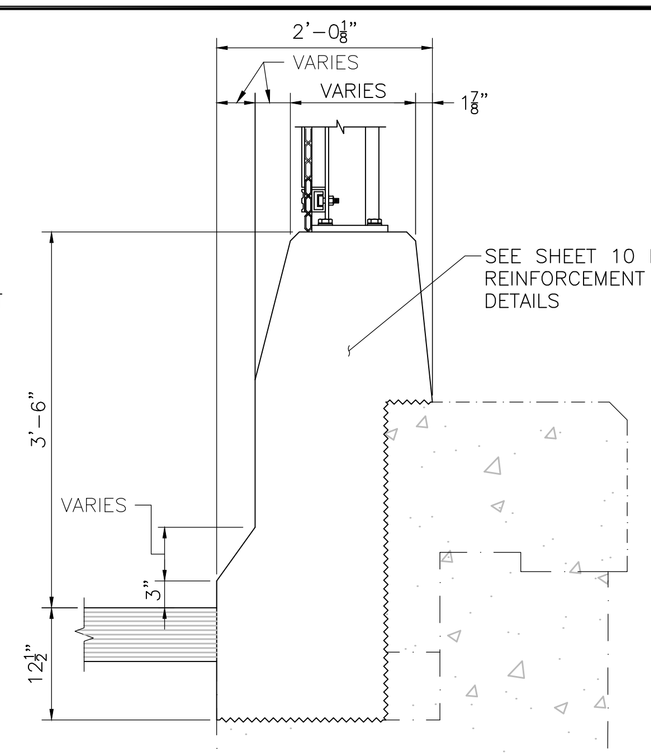


SECTION 4
SCALE: 1" = 1'-0"



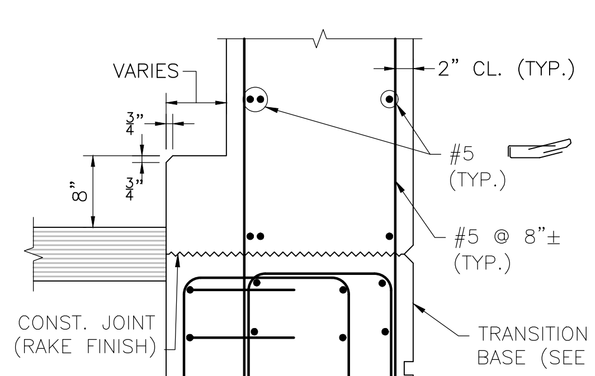
NORTHBOUND ROADWAY SHOWN

SECTION 5
SCALE: 1" = 1'-0"

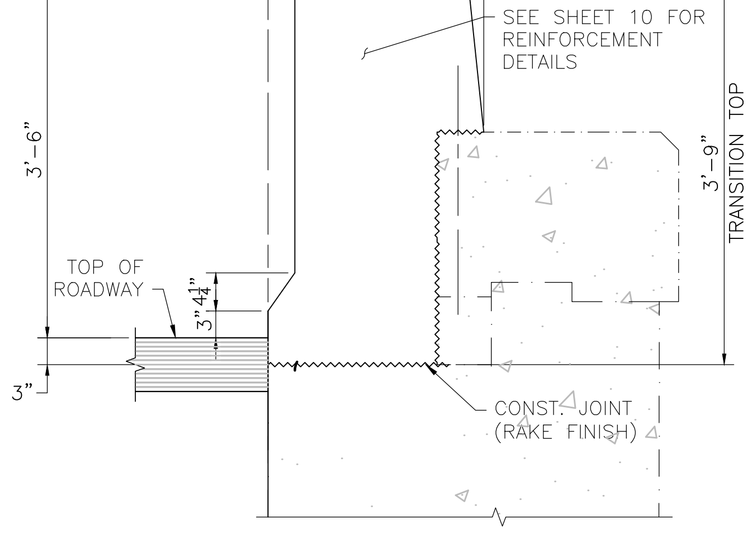


NORTHBOUND ROADWAY SHOWN

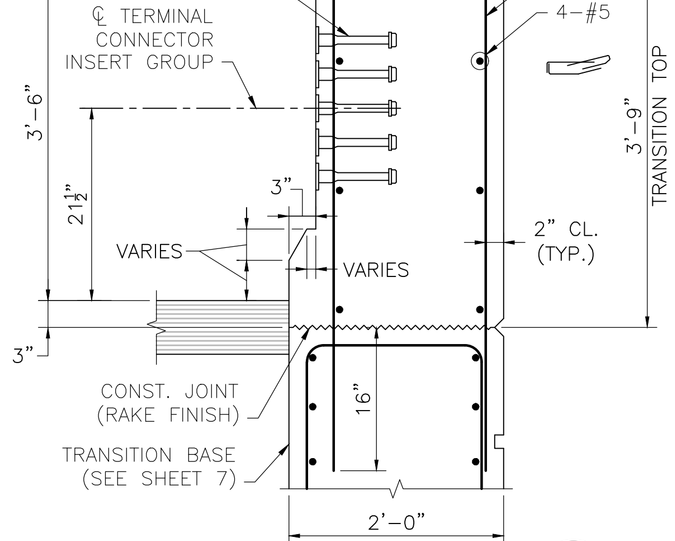
SECTION 6
SCALE: 1" = 1'-0"



SECTION 9
SCALE: 1" = 1'-0"



SECTION 7
SCALE: 1" = 1'-0"



SECTION 8
SCALE: 1" = 1'-0"

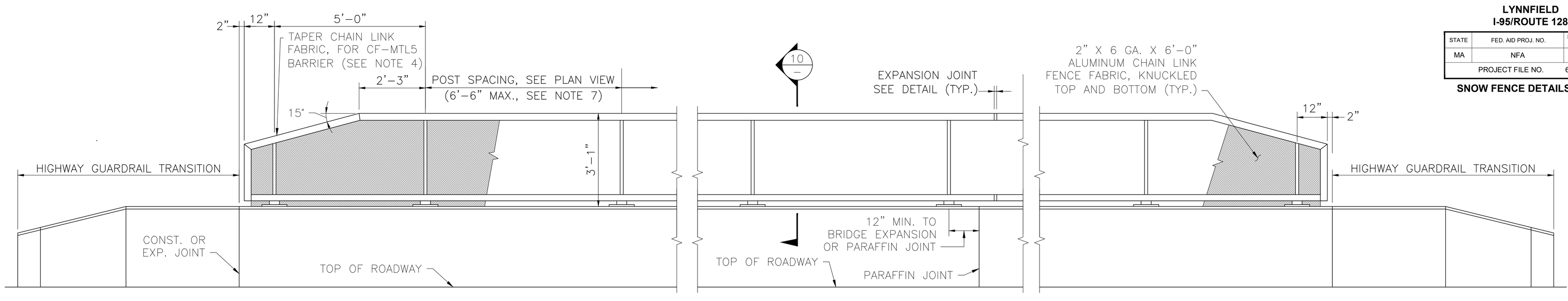
NOTES:

1. THREADED INSERTS SHALL BE PREQUALIFIED BY THE MANUFACTURER AS BEING CAPABLE OF DEVELOPING A NOMINAL SHEAR RESISTANCE OF 20 KIPS PER ⅞" ø S.S. (STAINLESS STEEL) BOLT. S.S. BOLTS SHALL BE ⅞" ø x 1½" LONG FULLY THREADED CONFORMING TO ASTM F593D WITH AISI TYPE 304N S.S. WASHERS. INSERTS FOR ⅞" S.S. BOLTS SHALL BE GALVANIZED AND CAST INTO THE TRANSITION.
2. ⅞" ø HIGH STRENGTH BOLTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F3125 GRADE 325 TYPE 1 GALVANIZED. USE ADDITIONAL WASHERS AS REQUIRED TO PROPERLY ENGAGE THE BOLTS.
3. FOR AN APPROACH GRADE IN EXCESS OF 3%, THE TRANSITION TOP AND THE TOP OF THE BRIDGE BARRIERS SHALL FOLLOW THE APPROACH GRADE. THE HEIGHT OF THE TRANSITION TOP SHALL VARY PROVIDED THAT THE MINIMUM DIMENSIONS SHOWN ON THE CONSTRUCTION DRAWINGS ARE MET. THE BOTTOM OF THE TRANSITION BASE SHALL BE SET LEVEL WITH THE MINIMUM EMBEDMENT DEPTH SHOWN. THE TERMINAL CONNECTOR INSERT GROUP SHALL BE SLOPED TO FOLLOW THE APPROACH GRADE.TO PROPERLY ENGAGE THE BOLTS.

   FOR AN APPROACH GRADE UP TO 3%, THE TRANSITION MAY BE CAST SQUARE AND SET PLUMB WITH THE MINIMUM EMBEDMENT DEPTH SHOWN. THE TERMINAL CONNECTOR INSERT GROUP SHALL BE SQUARE TO THE POST.
4. USE THE YEAR 1960 (YEAR BRIDGE WAS REBUILT) WHEN THE FIRST GUARDRAIL TRANSITION IS CAST. USE THIS YEAR FOR THE SOUTHWEST GUARDRAIL TRANSITION.
5. ALL CONCRETE FOR THE PRECAST HIGHWAY GUARDRAIL TRANSITION SHALL BE 5000 PSI, ¾", 685 HP CEMENT CONCRETE (ITEM 992.17).
6. LIFTING DEVICES (NOT SHOWN), INCLUDING THEIR NUMBER AND LOCATION, SHALL BE DESIGNED AND DETAILED BY THE PRECASTER. THEY SHALL BE GALVANIZED AND SHALL BE PLACED AND RECESSED IN POCKETS TO PROVIDE 1½" CLEAR COVER TO THE FACE OF THE TRANSITION CONCRETE. THESE DEVICES SHALL BE CLEARLY SHOWN ON THE SHOP DRAWINGS ALONG WITH ALL SUPPORTING CALCULATIONS AND/OR CATALOG CUTS. ONCE THE PRECAST TRANSITION IS SET IN PLACE, THE LIFTING DEVICE POCKETS SHALL BE FILLED WITH A NON-SHRINK GROUT THAT MATCHES THE COLOR OF THE TRANSITION CONCRETE WHEN CURED AND THE FILLED POCKETS SHALL BE RUBBED WITH A CORUNDUM STONE TO BLEND OUT THE JOINTS.

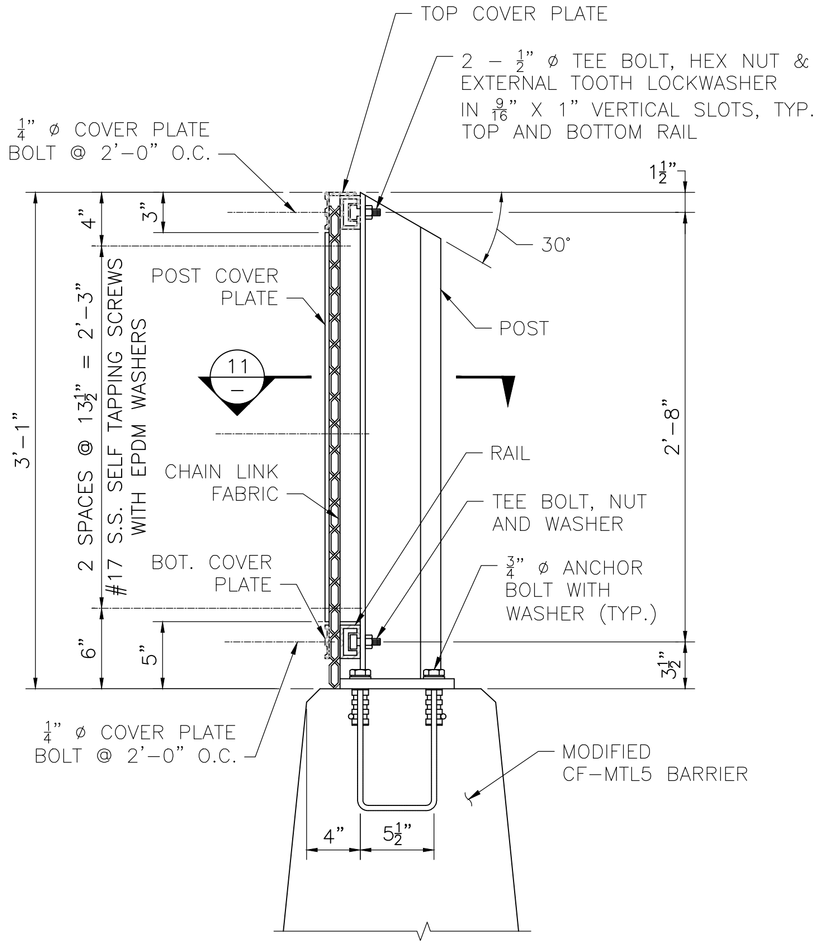
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
	USE ONLY PRINTS OF LATEST DATE

PS&E Resubmission 24-October-2025

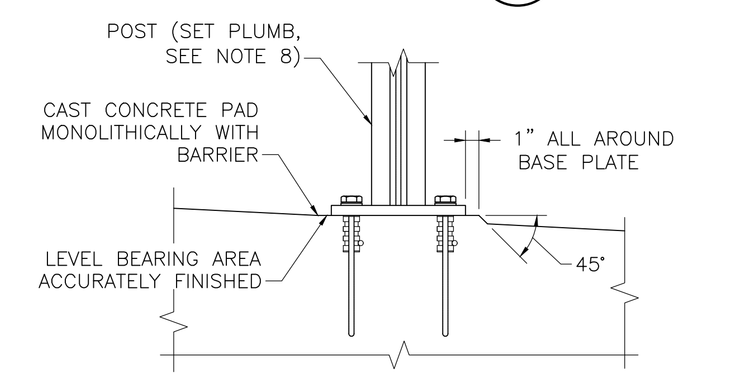


SNOW FENCE ELEVATION FOR CF–MTL5 BARRIERS

SCALE: $\frac{1}{2}$" = 1'–0"



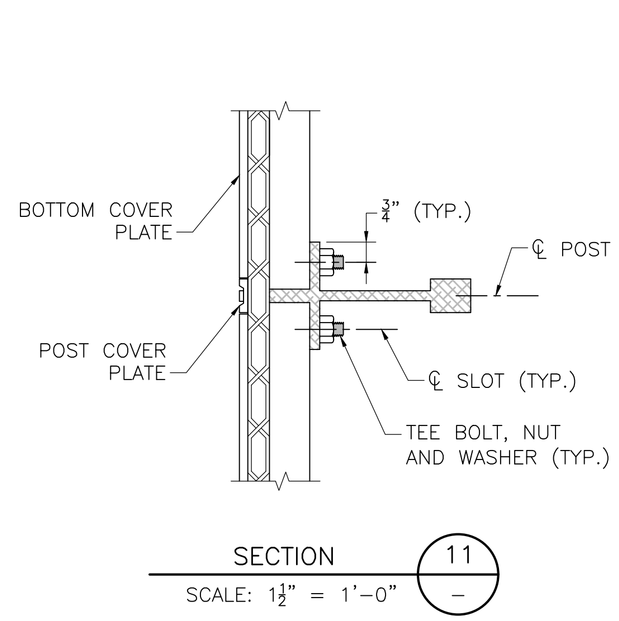
SECTION 10 (–)
SCALE: 1½" = 1'–0"



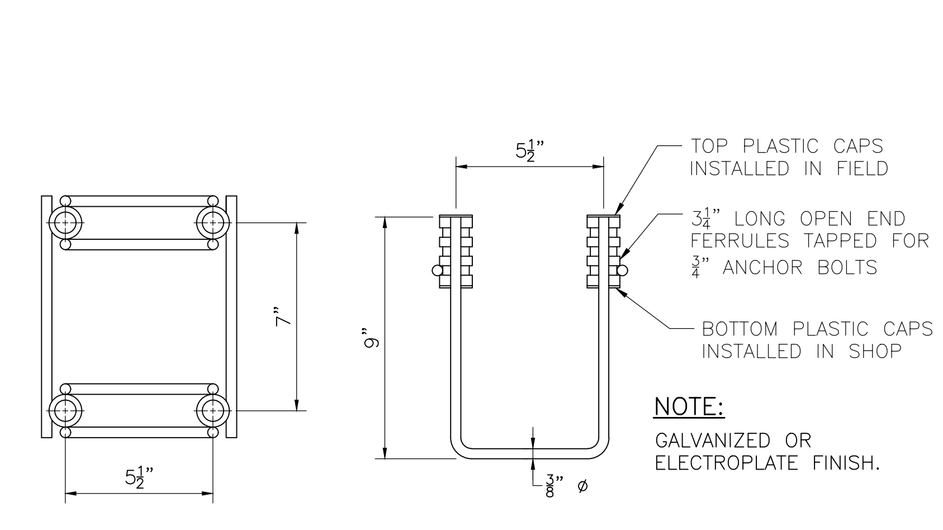
PROFILE GRADE OVER 3%

SETTING OF POSTS

SCALE: 1½" = 1'–0"

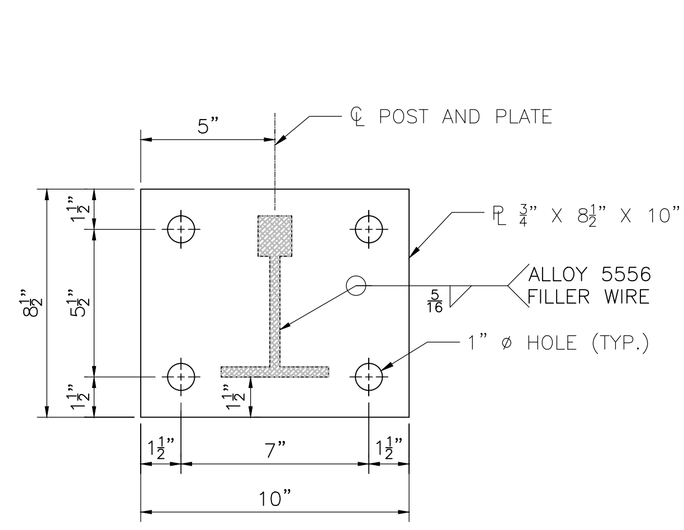


SECTION 11 (–)
SCALE: 1½" = 1'–0"



ANCHOR CAGE

SCALE: 3" = 1'–0"



BASE PLATE DETAIL

SCALE: 3" = 1'–0"

FINISHES:

1. POSTS, RAILS, COVER PLATES AND SPLICE PLATES SHALL RECEIVE A DARK BRONZE ANODIZED FINISH.
2. CHAIN LINK FABRIC SHALL RECEIVE A 4±1 MIL POLYESTER POWDER COAT FINISH. THE COLOR SHALL BE DARK BRONZE TO MATCH COLOR OF ANODIZED ALUMINUM FRAMEWORK.
3. #17 SELF TAPPING SCREWS AND ¼" ø COVER PLATE BOLTS TO BE COLORED TO MATCH THE ANODIZED EXTRUSIONS.

MATERIALS:

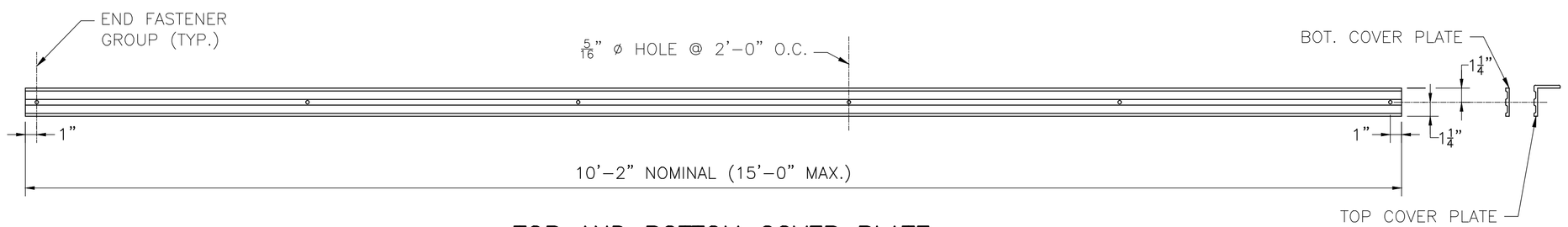
EXTRUSIONS & PLATES	ASTM B 221, ALLOY 6061–T6
CHAIN LINK FABRIC	AASHTO M 181 TYPE III (ALLOY 6061–T89 OR T94)
SELF TAPPING SCREWS	TYPE 304 STAINLESS STEEL WITH ¼" THICK EPDM (ETHYLENE PROPYLENE DIENE MONOMER) WASHERS
ANCHOR BOLTS	ASTM F3125 GRADE 325 TYPE 1 GALVANIZED (ROTATION CAPACITY TEST NOT REQUIRED)
TEE BOLTS	ASTM A 307 GALVANIZED OR TYPE 304 STAINLESS STEEL
COVER PLATE BOLTS	TYPE 304 STAINLESS STEEL WITH OVERSIZED STAINLESS WASHER AND STAINLESS NUT WITH NYLON INSERT

NOTES:

1. RAILS SHALL BE CONTINUOUS OVER A MINIMUM OF FOUR POSTS, IF POSSIBLE.
2. RAILS SHALL HAVE AN EXPANSION JOINT IN THE PANEL OVER A BRIDGE EXPANSION JOINT, IF ANY, AND AT 30 FOOT MAXIMUM SPACING ELSEWHERE.
3. BOTTOM OF POST BASE PLATE TO BE SET ON A ⅛" MOLDED FABRIC BEARING PAD (M9.16.2). THE THICKNESS OF THE PAD SHALL BE IGNORED BY THE DETAILER.
4. THE CHAIN LINK FABRIC SHALL BE SECURED BY KNUCKLING TOGETHER THE CUT ENDS OF THE FABRIC WIRE IN A MANNER SIMILAR TO THE ORIGINALLY MANUFACTURED END.
5. WHERE THE R.O.W. FENCE MUST MEET THE SCREEN, USE THE SQUARE END TO HIGHWAY GUARDRAIL TRANSITION DETAIL.
6. ALL SCREEN ENDS SHALL BE TAPERED.
7. POST SPACING SHALL BE UNIFORM BETWEEN TAPERED ENDS.
8. SET POSTS PERPENDICULAR TO GRADE FOR GRADES UP TO 3%. SET POSTS PLUMB FOR GRADES GREATER THAN 3%.

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

S - 15-16 - SNOW FENCE DETAILS.DWG Plotted on 20-Oct-2025 4:26 PM
Proposal No. 613196-133292
A00805 - 18
PS&E Resubmission 24-October-2025



TOP AND BOTTOM COVER PLATE

SCALE: 1 1/2" = 1'-0"

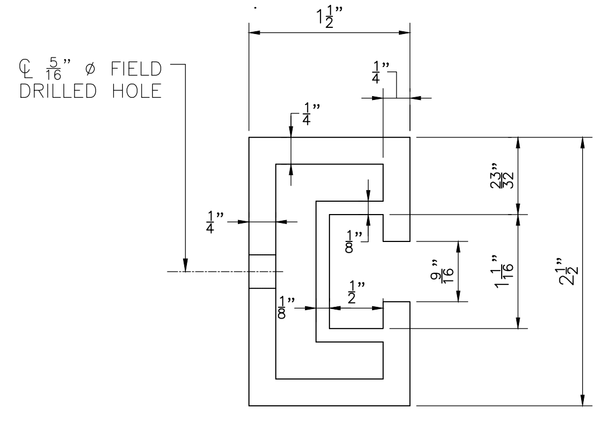
COVER PLATE NOTES:

1. COVER PLATES MAY BE CONTINUOUS OVER A RAIL EXPANSION JOINT SPLICE. COVER PLATES SHALL BE FIELD CUT AS REQUIRED TO CLEAR THE EXPANSION JOINT. SEE DETAIL AT EXPANSION JOINT.
2. FIELD DRILL 5/16" ø HOLE 1" FROM THE FIELD CUT END OF A COVER PLATE, UNLESS THERE IS AN EXISTING HOLE WITHIN 6" FROM THE COVER PLATE END.
3. FIELD PAINT THE FIELD CUT ENDS OF THE COVER PLATES TO MATCH THE ANODIZED COLOR.

LYNNFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	17	25
	PROJECT FILE NO.	613196	

SNOW FENCE DETAILS 2 OF 2

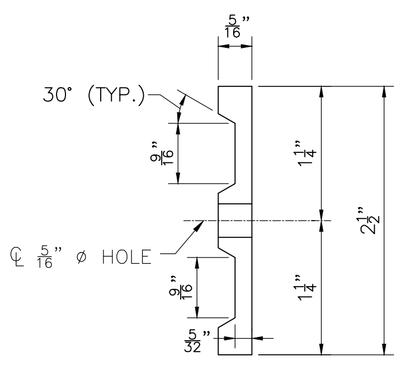


NOTE:

OTHER CONFIGURATIONS OF THE INTERNAL WALLS OF THE RAIL EXTRUSION MAY BE SUBMITTED FOR APPROVAL.

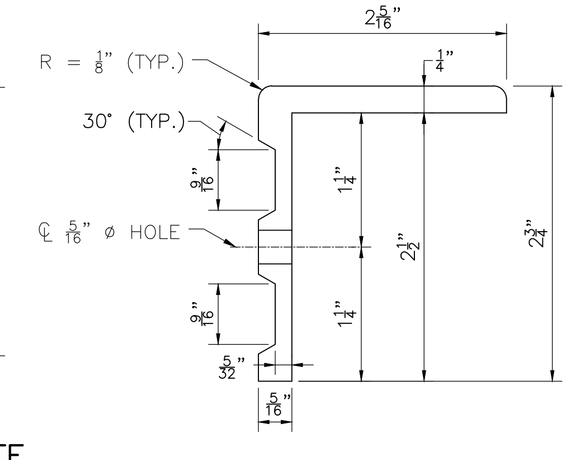
RAIL EXTRUSION

FULL SIZE



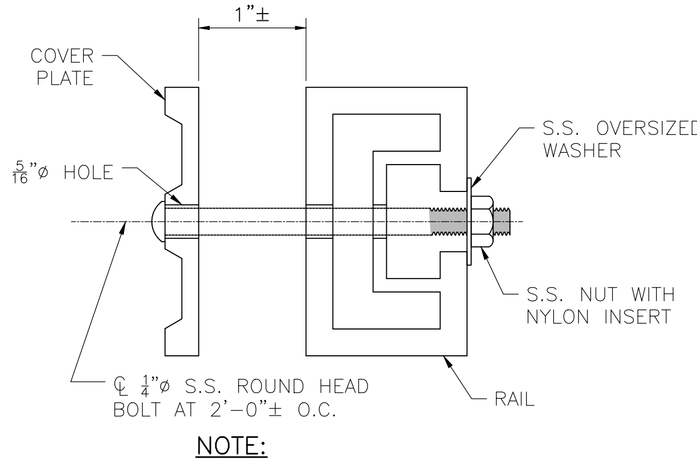
BOTTOM COVER PLATE EXTRUSION

FULL SIZE



TOP COVER PLATE EXTRUSION

FULL SIZE

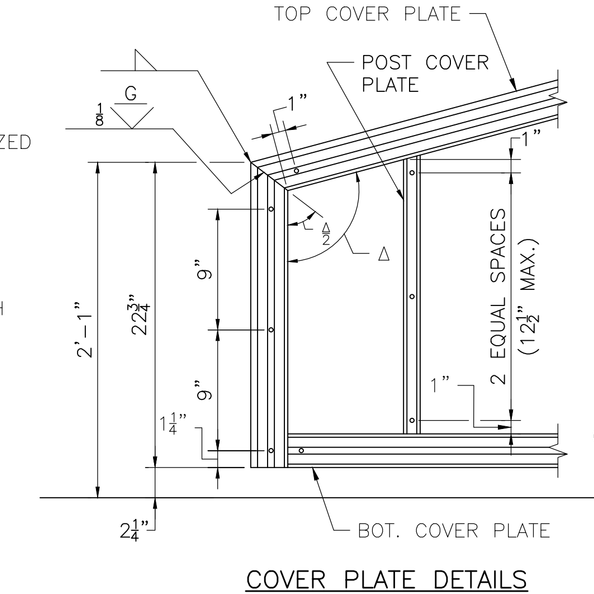


NOTE:

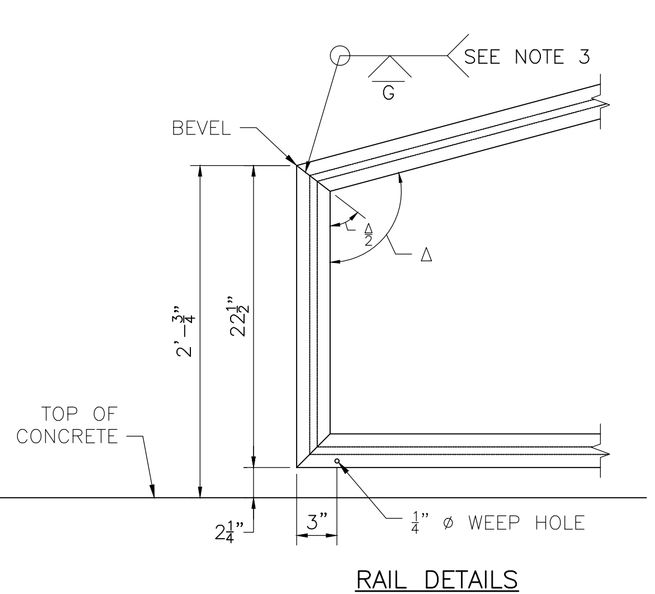
BOLTS SHALL BE TYPE 304 WITH A DRIVE HEAD TO BE COLORED TO MATCH ANODIZING.

RAIL & COVER PLATE DETAIL

FULL SIZE



COVER PLATE DETAILS



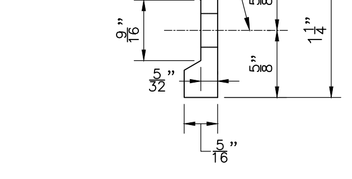
RAIL DETAILS

NOTES:

1. WELDING OF TOP COVER PLATE AND RAILS OF NON-TAPERED END IS SIMILAR.
2. WELDS AND MITERING TYPICAL FOR ALL ANGLED CORNERS.
3. WELD TYPICAL FOR TOP AND BOTTOM END CORNERS OF RAIL. INTERRUPT WELD AT SLOT IN BACK OF RAIL.

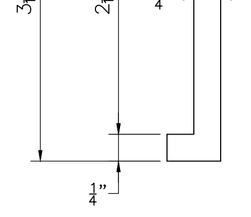
TAPERED END DETAILS

SCALE: 1 1/2" = 1'-0"



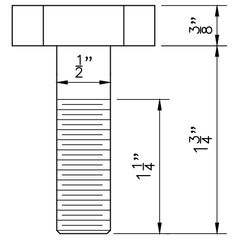
POST COVER PLATE EXTRUSION

FULL SIZE



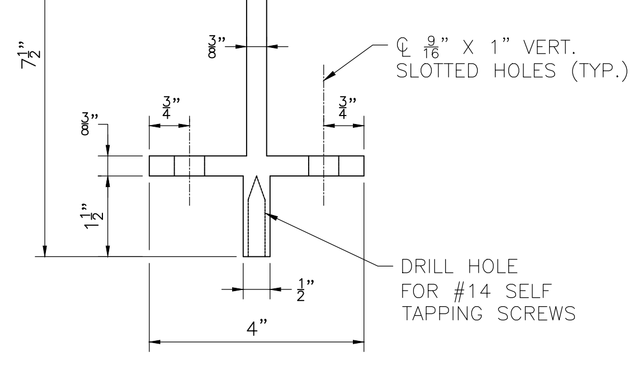
SPLICE PLATE EXTRUSION

FULL SIZE



TEE BOLT

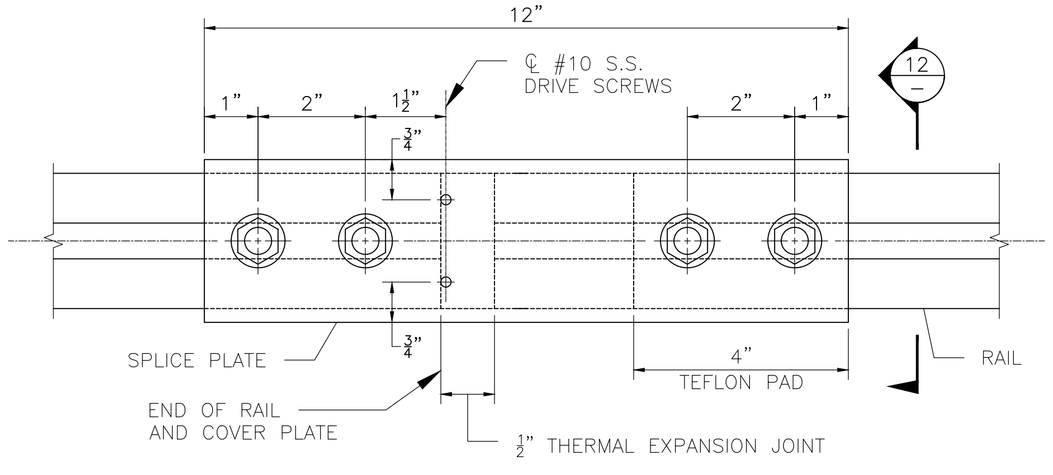
FULL SIZE



POST EXTRUSION

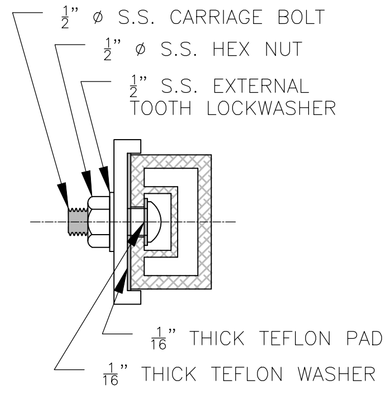
SCALE: 6" = 1'-0"

SCALE: 6" = 1'-0"



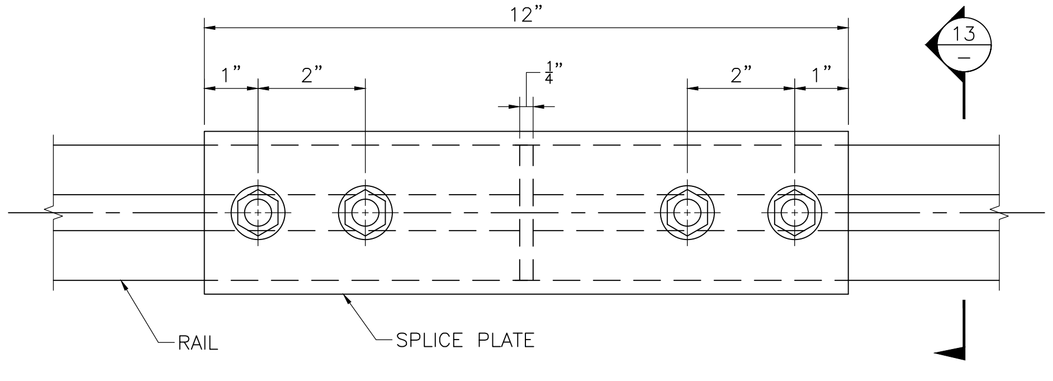
DETAIL AT RAIL EXPANSION JOINT SPLICE

SCALE: 6" = 1'-0"



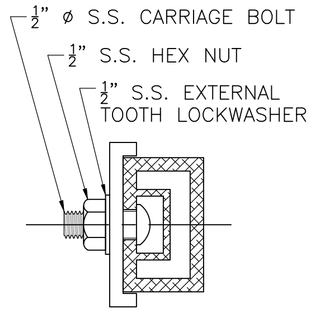
SECTION 12 / –

SCALE: 6" = 1'-0"



DETAIL AT RAIL SPLICE JOINT

SCALE: 6" = 1'-0"



SECTION 13 / –

SCALE: 6" = 1'-0"

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

A00805 - 19
S - 15-16 - SNOW FENCE DETAILS.DWG Plotted on 20-Oct-2025 4:31 PM
Proposal No. 613196-133292
PS&E Resubmission 24-October-2025

NOTES:

1. ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND THE MASSACHUSETTS AMENDMENTS TO THE MUTCD.
2. TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
3. 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.
4. SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, CHANNELIZING DEVICES, BARRIERS, AND CRASH ATTENUATORS MUST PASS THE CRITERIA SET FORTH IN NCHRP REPORT 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES" AND/OR "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH).
5. CONTRACTORS SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT, AND SIMILAR OPERATIONS.
6. THE FIRST 10 REFLECTORIZED DRUMS OF A TAPER SHALL BE MOUNTED WITH SEQUENTIALLY FLASHING LIGHTS WHEN USED FOR NIGHT WORK BETWEEN DUSK AND DAWN.
7. DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
8. MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
9. MINIMUM LANE WIDTH IS TO BE 11 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF DRUMS OR MEDIAN BARRIER.
10. ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.
11. ANY WORK REQUIRING A SINGLE LANE CLOSURE ON INTERSTATE 95 SHALL BE LIMITED TO NIGHT WORK BETWEEN 9:00PM–5:00AM, PER THE SCHEDULE OF WORK DEFINED IN THE CONTRACT SPECIAL PROVISIONS.
12. ANY WORK REQUIRING CLOSURE OF MULTIPLE LANES ON INTERSTATE 95 SHALL BE LIMITED TO NIGHT WORK BETWEEN 12:00AM–5:00AM, PER THE SCHEDULE OF WORK DEFINED IN THE CONTRACT SPECIAL PROVISIONS.
13. ANY WORK REQUIRING A FULL ROAD CLOSURE OF MAIN STREET/I–95 SOUTH ON–RAMP SHALL BE LIMITED TO NIGHT WORK BETWEEN 11:00PM–5:00AM, PER THE SCHEDULE OF WORK DEFINED IN THE CONTRACT SPECIAL PROVISIONS.
14. ANY WORK REQUIRING ONE–LANE ALTERNATING TRAFFIC CONTROL SET UPS ON MAIN STREET/I–95 SOUTH ON–RAMP SHALL BE LIMITED TO NIGHT WORK BETWEEN 9:00PM–5:00AM, PER THE SCHEDULE OF WORK DEFINED IN THE CONTRACT SPECIAL PROVISIONS.

LEGEND:

- REFLECTORIZED PLASTIC DRUM OR 36" CONE
- P/F POLICE/FLAGGER DETAIL
- TYPE III BARRICADE
- CHANGEABLE MESSAGE SIGN
- ARROW BOARD
- WORK ZONE
- DIRECTION OF TRAFFIC
- IMPACT ATTENUATOR
- MEDIAN BARRIER
- MEDIAN BARRIER WITH WARNING LIGHTS
- WORK VEHICLE
- TRUCK MOUNTED ATTENUATOR
- TRAFFIC OR PEDESTRIAN SIGNAL
- SIGN
- TEMPORARY PORTABLE RUMBLE STRIP ARRAY

THE IDEAL CAPACITY OF A MAJOR HIGHWAY IS GENERALLY CONSIDERED TO BE 1900 PASSENGER CARS PER HOUR PER LANE (PCPHPL). IN WORK ZONES ON A MULTI–LANE DIVIDED HIGHWAY, THE FOLLOWING VOLUME GUIDELINES HAVE BEEN SUGGESTED:

MEASURED AVERAGE WORK ZONE CAPACITIES

NUMBER OF LANES		NUMBER OF STUDIES	AVERAGE CAPACITY	
NORMAL (EXISTING)	OPEN (TO TRAFFIC)		VPH	VPHPL
3	1	7	1,170	1,170
2	1	8	1,340	1,340
5	2	8	2,740	1,370
4	2	4	2,960	1,480
3	2	9	2,980	1,490
4	3	4	4,560	1,520

Source: Dudek, C., Notes on Work Zone Capacity and Level of Service. Texas Transportation Institute, Texas A&M University, College Station, Texas (1984)

BY OBTAINING HOURLY TRAFFIC COUNTS FOR A PARTICULAR ROADWAY (WITH A MINIMUM OF A 48–HOUR AUTOMATIC TRAFFIC RECORDER (ATR) COUNT), THIS WILL HELP TO DETERMINE AT WHAT TIMES OF THE DAY OR NIGHT A CERTAIN NUMBER OF LANES MAY BE CLOSED.

SUGGESTED WORK ZONE WARNING SIGN SPACING

ROAD TYPE*	DISTANCE BETWEEN SIGNS **			
	A	B	C	D
URBAN (30 MPH OR LESS)	100	100	100	100
URBAN (35 MPH OR GREATER)	350	350	350	350
RURAL	500	500	500	500
EXPRESSWAY/FREEWAY	1,000	1,500	2,640	500

* ROAD TYPE TO BE DETERMINED BY MASSDOT OFFICE OF TRANSPORTATION PLANNING.

** DISTANCES ARE SHOWN IN FEET. THE COLUMN HEADINGS A, B, AND C ARE THE DIMENSIONS SHOWN IN THE DETAIL/ TYPICAL SETUP FIGURES. THE A DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN. THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS. THE C DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE "THIRD" SIGN IS THE FIRST ONE TYPICALLY ENCOUNTERED BY A DRIVER APPROACHING A TEMPORARY TRAFFIC CONTROL (TTC) ZONE.)

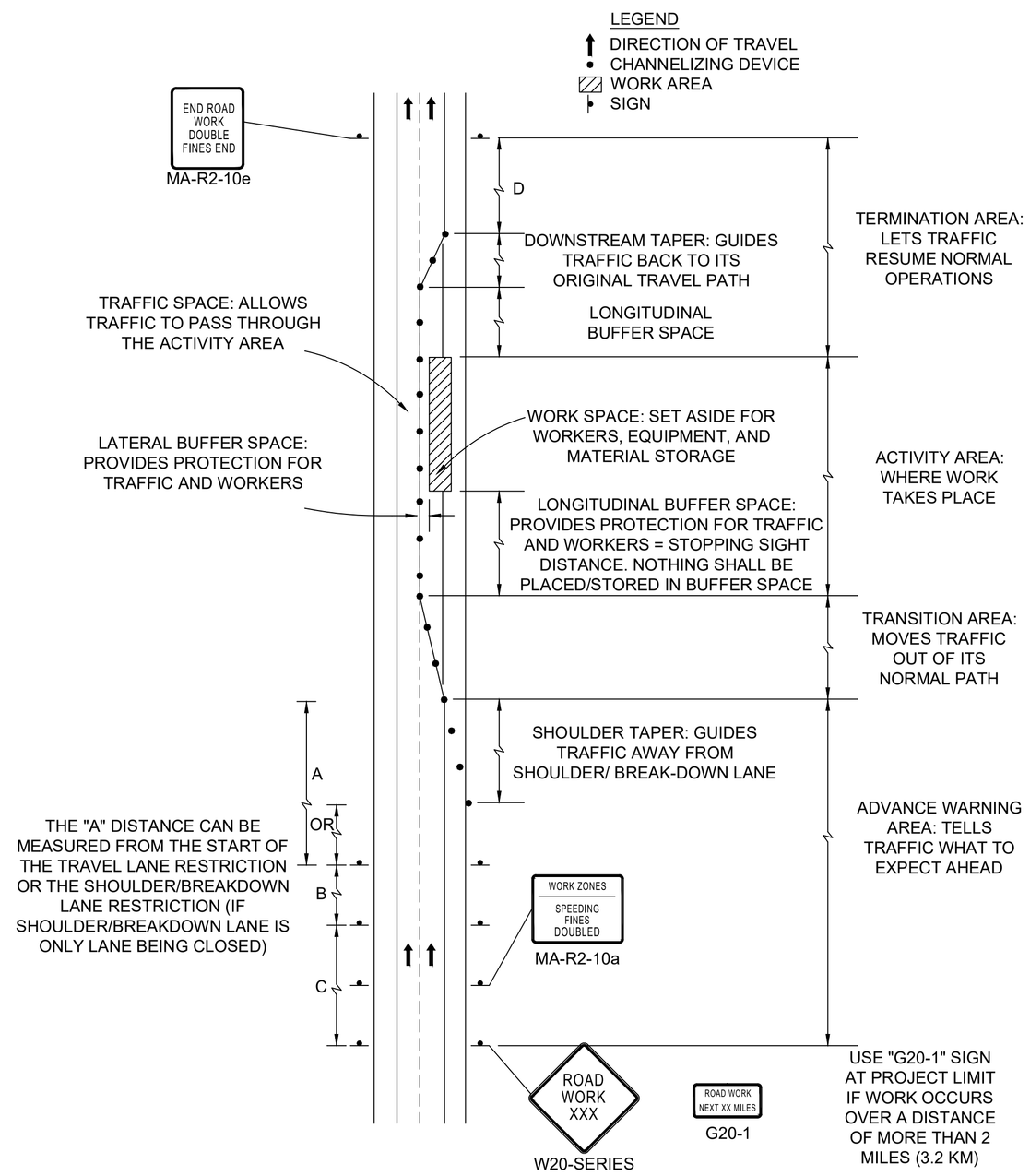
THE "THIRD" SIGN ABOVE IS TYPICALLY REFERRED TO AS AN "ADVANCE WARNING" SIGN ON THE TTCP SETUPS. THESE ADVANCE WARNING SIGNS ARE LOCATED PRIOR TO THE PROJECT LIMITS ON ALL APPROACHES (i.e. THE W20–1 SERIES (ROAD WORK XX FT) SIGNS), AND USUALLY REMAIN FOR THE DURATION OF THE PROJECT. ADDITIONAL SIGNS (i.e. "RIGHT LANE CLOSED 1 MILE" AND "LEFT LANE CLOSED 1 MILE") HAVE BEEN SHOWN IN SOME FIGURES AS EXAMPLES OF REINFORCEMENT SIGN PLACEMENT BUT ARE USED IN RARE OCCASIONS.

THE FIRST AND SECOND WARNING SIGNS ABOVE ARE REFERRED TO AS THE OPERATIONAL (DAY–TO–DAY) WORK ZONE SIGNS AND MAY BE MOVED DEPENDING ON WHERE THE SPECIFIC ROADWAY WORK FOR THAT DAY IS LOCATED.

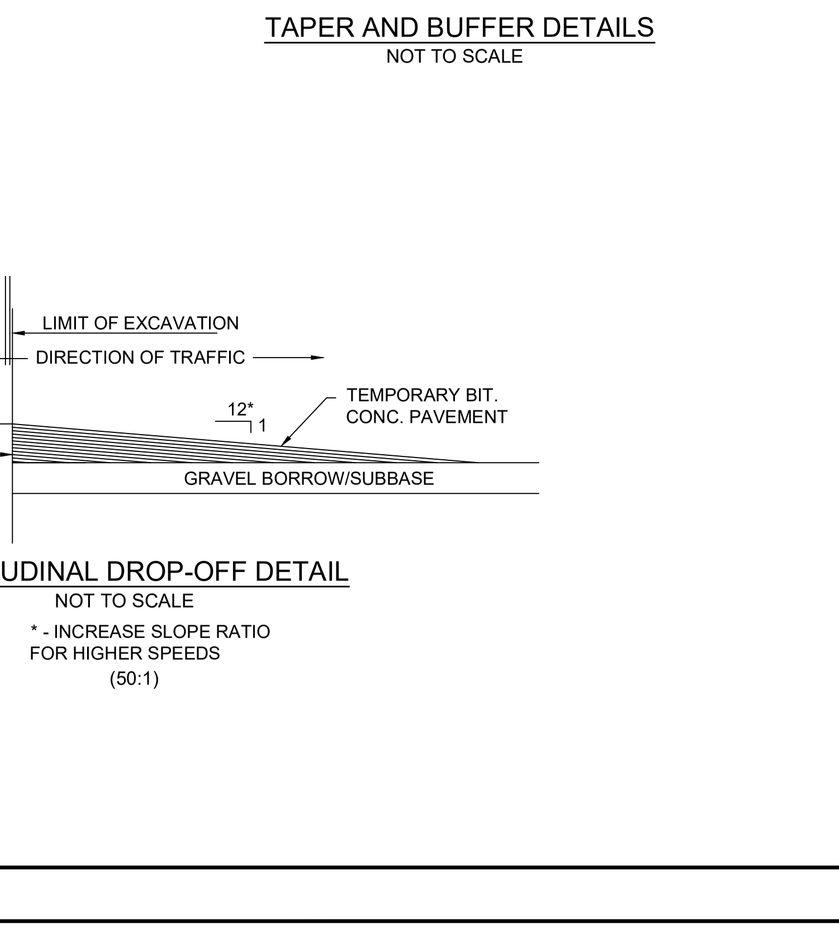
MA R2–10a SIGNS SHALL BE PLACED BETWEEN THE SECOND AND THIRD SIGNS AS DESCRIBED ABOVE.

MA R2–10a, MA R2–10e, AND W20–1 SERIES SIGNS ARE TO BE INCLUDED ON ALL DETAILS/TYPICAL SETUPS.

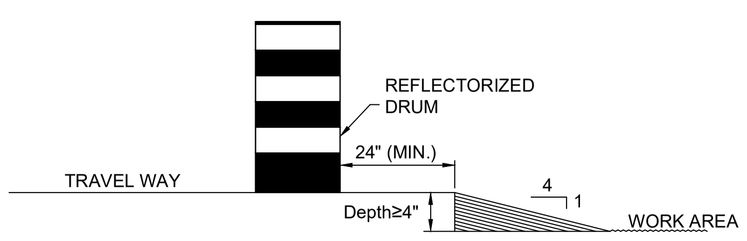
Based on: Table 6C–1 MUTCD LATEST EDITION



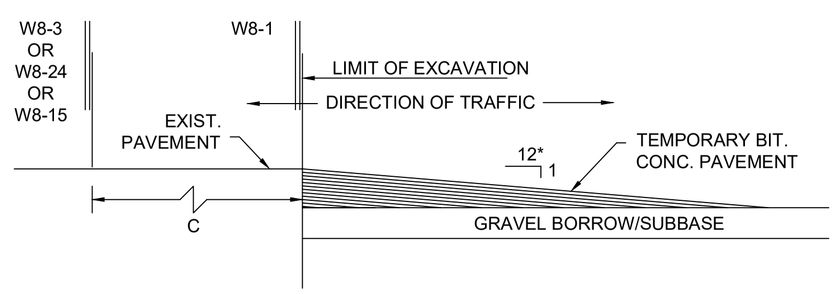
COMPONENT PARTS OF A TEMPORARY TRAFFIC CONTROL (TTC) ZONE
NOT TO SCALE



TAPER AND BUFFER DETAILS
NOT TO SCALE



LATERAL DROP-OFF DETAIL
NOT TO SCALE



LONGITUDINAL DROP-OFF DETAIL
NOT TO SCALE
* - INCREASE SLOPE RATIO FOR HIGHER SPEEDS (50:1)

LYNNFIELD
I-95/ROUTE 128 OVER MAIN STREET

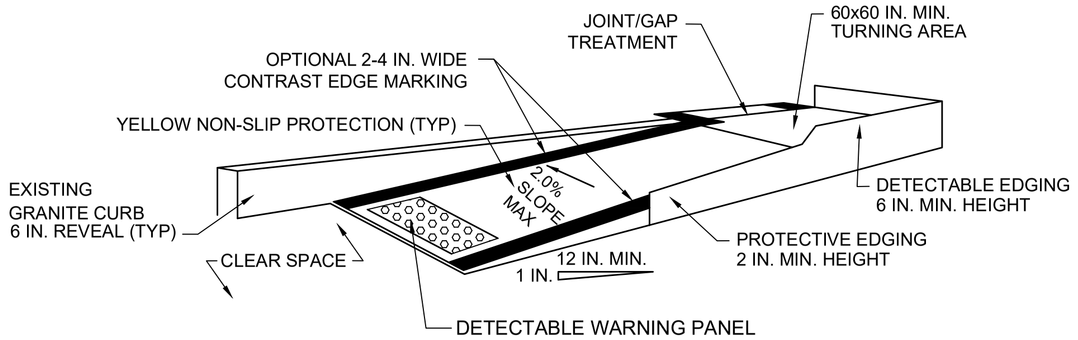
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	18	25
PROJECT FILE NO.	613196		

TEMPORARY TRAFFIC CONTROL PLANS - SHEET 1

MASSDOT 10 BRIDGES_TTCP_MAIN ST.DWG Plotted on 16-Dec-2025 3:56 PM

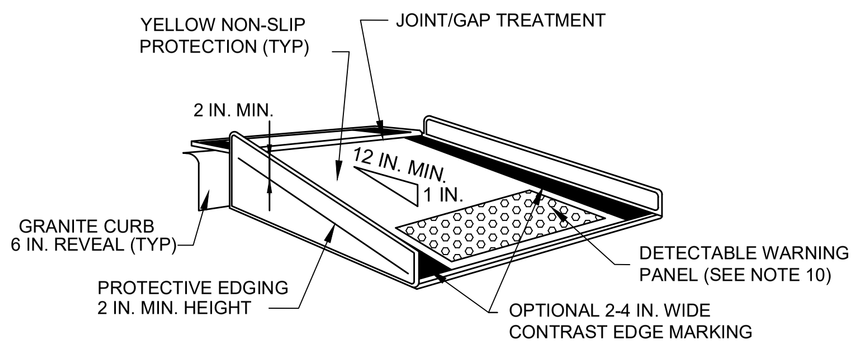
Proposal No. 613196-133292

A00805 - 20



TEMPORARY CURB RAMP-PARALLEL TO CURB

NOT TO SCALE



TEMPORARY CURB RAMP-PERPENDICULAR TO CURB

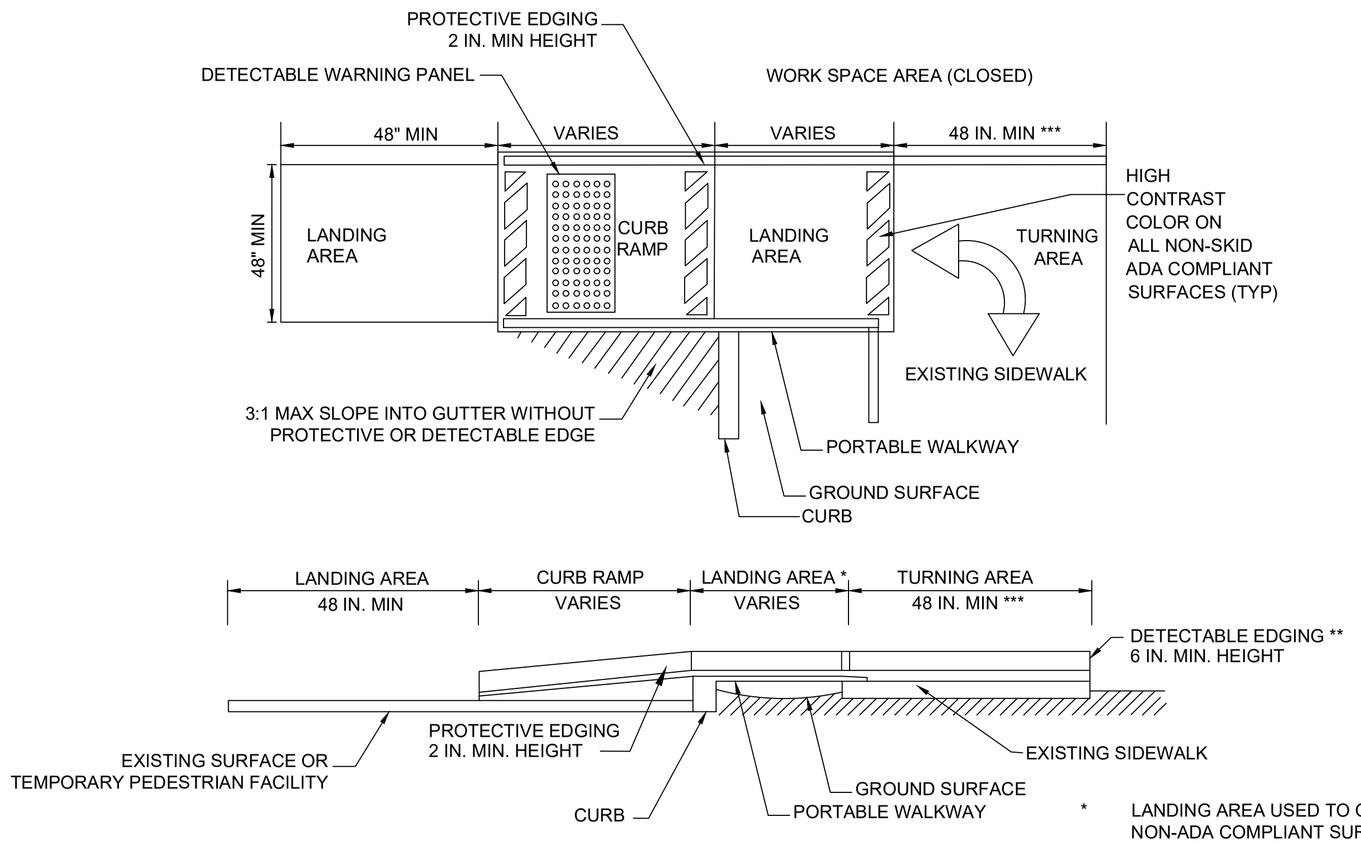
NOT TO SCALE

NOTES:

1. CURB RAMPS SHALL BE 60 IN. MINIMUM WIDTH WITH A FIRM, STABLE AND NON-SLIP SURFACE.
2. 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 SLOP 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.
3. DETECTABLE EDGING WITH 6 IN. MINIMUM HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
4. THE CURB RAMP WALKWAY AND LANDING AREA SURFACE SHALL BE OF A SOLID CONTINUOUS CONTRASTING COLOR ABUTTING UP TO THE EXISTING SIDEWALK.
5. CURB RAMPS AND LANDINGS SHOULD HAVE A 1:50 (2%) MAX CROSS-SLOPE.
6. CLEAR SPACE OF 48x48 IN. MINIMUM SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
7. WATER FLOW IN THE GUTTER SYSTEM SHALL HAVE MINIMAL RESTRICTION.
8. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 0.5 IN. WIDTH.
9. 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.
10. 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 DETECTABLE WARNING PANEL SHALL NOT BE INSTALLED ON THE RAMP.

850.1.1 - TEMPORARY CURB RAMP (1 OF 2)

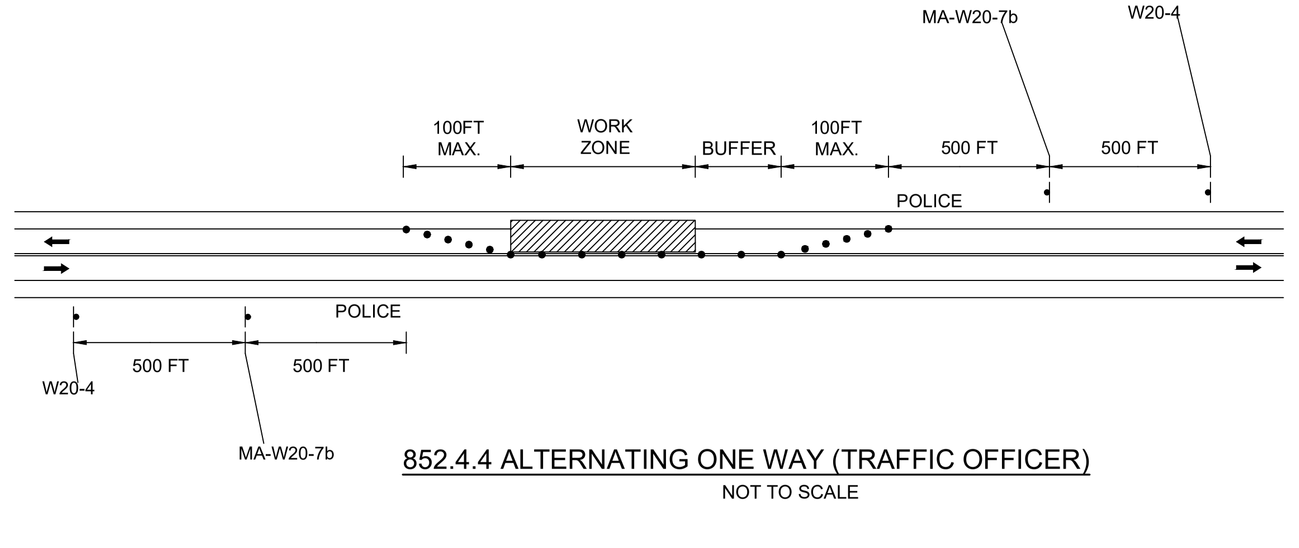
NOT TO SCALE



* LANDING AREA USED TO OVERLAP NON-ADA COMPLIANT SURFACES.
** DETECTABLE EDGING REMOVED IF A CONTINUOUS SIDEWALK.
*** 60 IN. MINIMUM IF AN OBSTRUCTION IS AT BACK OF SIDEWALK.

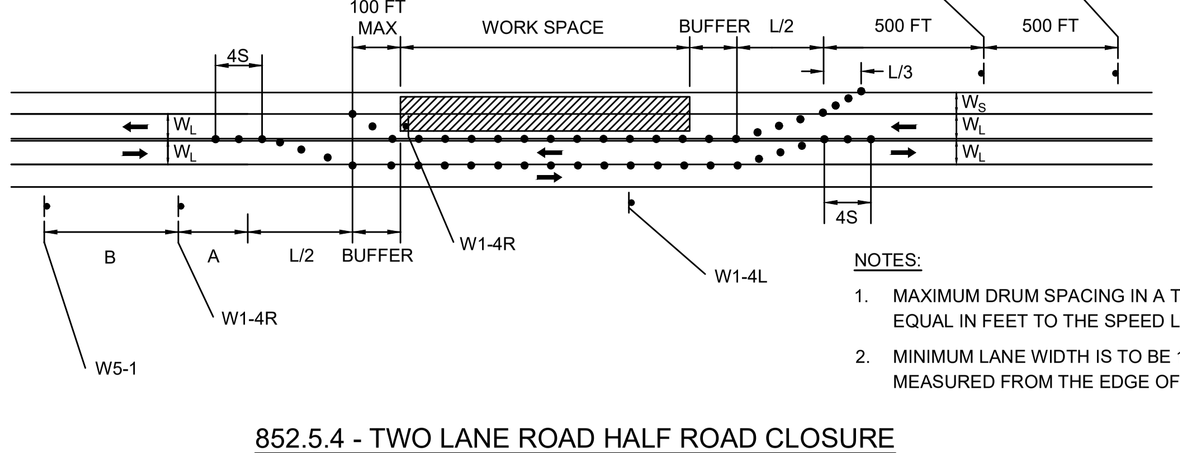
850.1.2 - TEMPORARY CURB RAMP (2 OF 2)

NOT TO SCALE



852.4.4 ALTERNATING ONE WAY (TRAFFIC OFFICER)

NOT TO SCALE

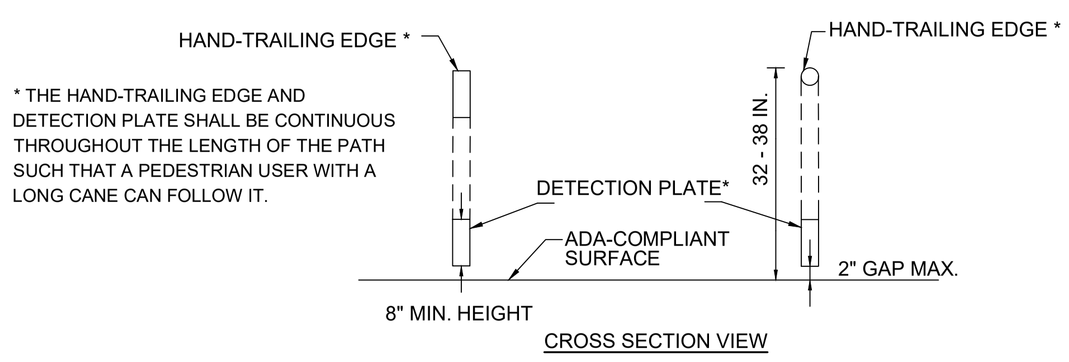


NOTES:

1. MAXIMUM DRUM SPACING IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
2. MINIMUM LANE WIDTH IS TO BE 11 FEET MEASURED FROM THE EDGE OF DRUMS.

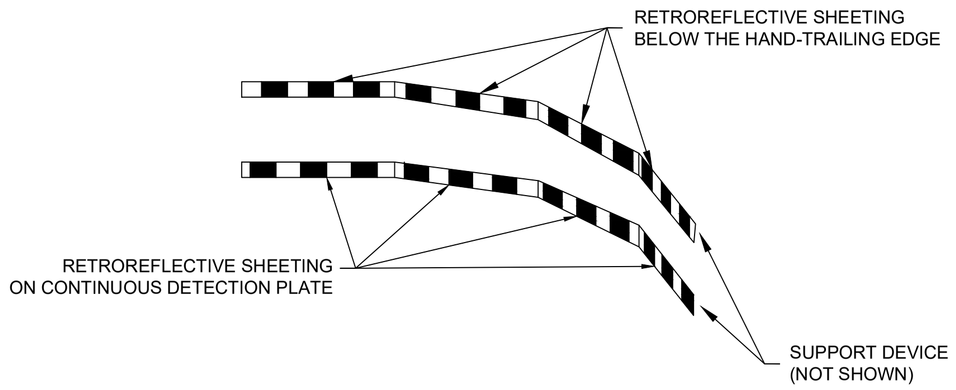
852.5.4 - TWO LANE ROAD HALF ROAD CLOSURE

NOT TO SCALE



CROSS SECTION VIEW

STANDARD RETROREFLECTIVE LAYOUT FOR PEDESTRIAN CHANNELIZING DEVICES



851.3.1 - PEDESTRIAN CHANNELIZING DEVICE

NOT TO SCALE

LYNNFIELD
I-95/ROUTE 128 OVER MAIN STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	19	25
PROJECT FILE NO.	613196		

TEMPORARY TRAFFIC CONTROL PLANS - SHEET 2

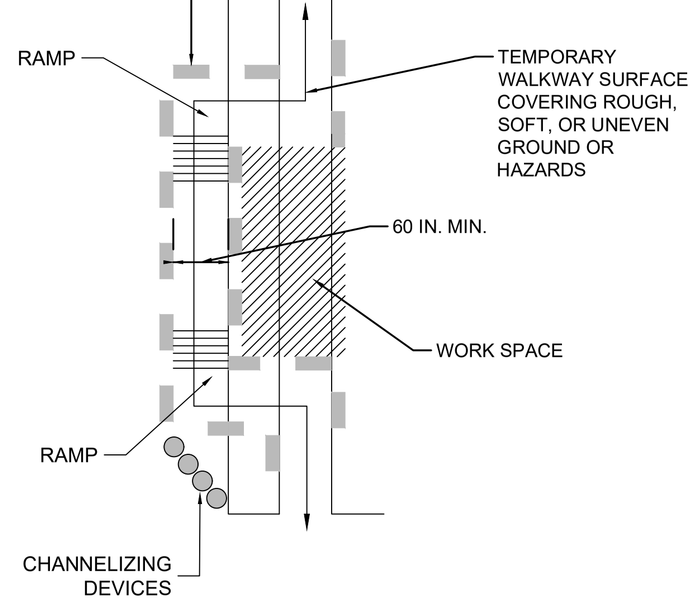
MINIMUM LENGTH OF LONGITUDINAL BUFFER IS EQUAL TO THE STOPPING SIGHT DISTANCE AT THE POSTED SPEED AND CAN BE DETERMINED FROM THE FOLLOWING TABLE

STOPPING SIGHT DISTANCE	
SPEED (MPH)	DISTANCE (FT)
25	155
30	200
35	250
40	305

852.5.4 - TYPICAL TAPER LENGTHS (L) IN FEET

SPEED LIMIT (S) IN MPH	WIDTH OF OFFSET (W_L OR W_S) IN FEET		
	10	11	12
25	104	115	125
30	150	165	180
35	204	225	245
40	267	293	320

NOTE: FOR OFFSET WIDTHS NOT LISTED IN TABLE, USE $L=WS^2/60$.



852.1.2 - SIDEWALK DIVERSION

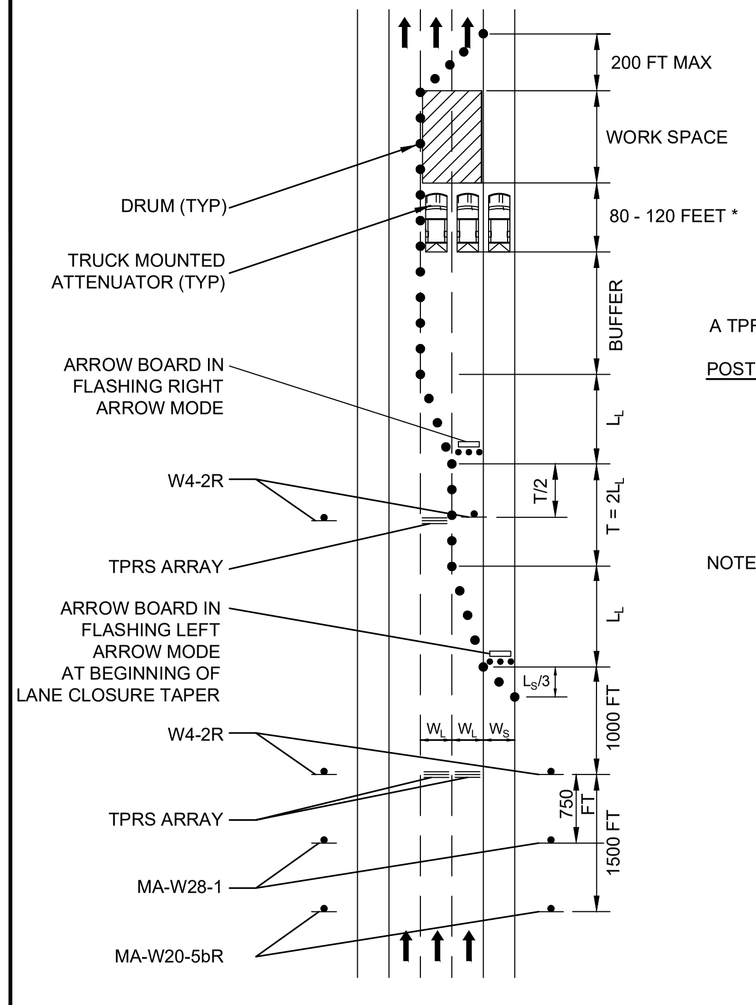
NOT TO SCALE

NOTES:

1. A MAXIMUM 2-INCH GAP BETWEEN THE BOTTOM OF THE CONTINUOUS DETECTION PLATE AND THE WALKWAY SURFACE MAY BE USED TO PROVIDE DRAINAGE.
2. HAND-TRAILING EDGE AND DETECTION PLATE ARE OPTIONAL FOR CONTINUOUS WALLS.
3. SUPPORT DEVICE FOR CONTINUOUS DETECTION PLATE AND CONTINUOUS HAND-TRAILING EDGE NOT SHOWN ON THE PLAN.
4. STRIPING ON SHEETING PANELS MAY BE EITHER VERTICAL OR AT A 45-DEGREE ANGLE.
5. RETROREFLECTIVE AREAS CAN BE DISTRIBUTED IN A MANNER THAT ENSURES VISIBILITY AND DETECTION WITHOUT NECESSITATING A SINGLE CONTINUOUS APPLICATION.

MASSDOT 10 BRIDGES_TTCP_MAIN ST.DWG Plotted on 24-Oct-2025 7:53 AM
Proposal No. 613196-133292
A00805 - 21

Plotted on 24-Oct-2025 7:53 AM
MASSDOT 10 BRIDGES_TTCP_MAIN ST.DWG
Proposal No. 613196-133292
A00805 - 22



852.7.8 - DIVIDED HIGHWAY RIGHT TWO LANES CLOSURE (SHORT TERM)
NOT TO SCALE

TEMPORARY PORTABLE RUMBLE STRIP (TPRS)
A TPRS ARRAY SHALL HAVE THEE RUMBLE STRIPS. SPACING SHALL BE AS FOLLOWS:

POSTED REGULATORY OR WORK ZONE SPEED	
60 MPH AND ABOVE	20'
40 MPH TO 55 MPH	15'

NOTE: TPRS SHALL BE DEPLOYED ONLY FOR SETUPS OF 12 HOURS OR LESS

TYPICAL TAPER LENGTHS (L_L,L_R,L_S) IN FEET			
SPEED LIMIT (S) IN MPH	WIDTH OF OFFSET (W_L, W_S OR W_R) IN FEET		
	10	11	12
40	400	440	480
45	450	495	540
50	500	550	600
55	550	605	660
60	600	660	720
65	650	715	780

NOTE: FOR OFFSET WIDTHS NOT LISTED IN TABLE, USE L=WS.

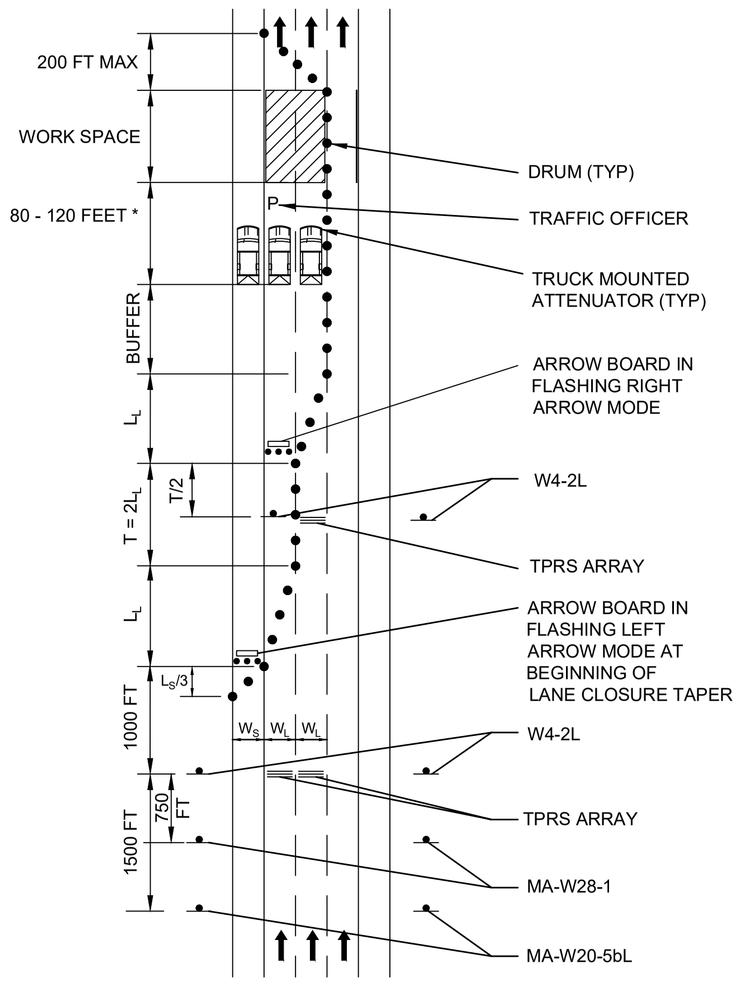
STOPPING SIGHT DISTANCE	
SPEED (MPH)	DISTANCE (FT)
35	250
40	305
45	360
50	425
55	495
60	570
65	645

MINIMUM LENGTH OF LONGITUDINAL BUFFER IS EQUAL TO THE STOPPING SIGHT DISTANCE AT THE POSTED SPEED AND CAN DETERMINED FROM THE FOLLOWING TABLE

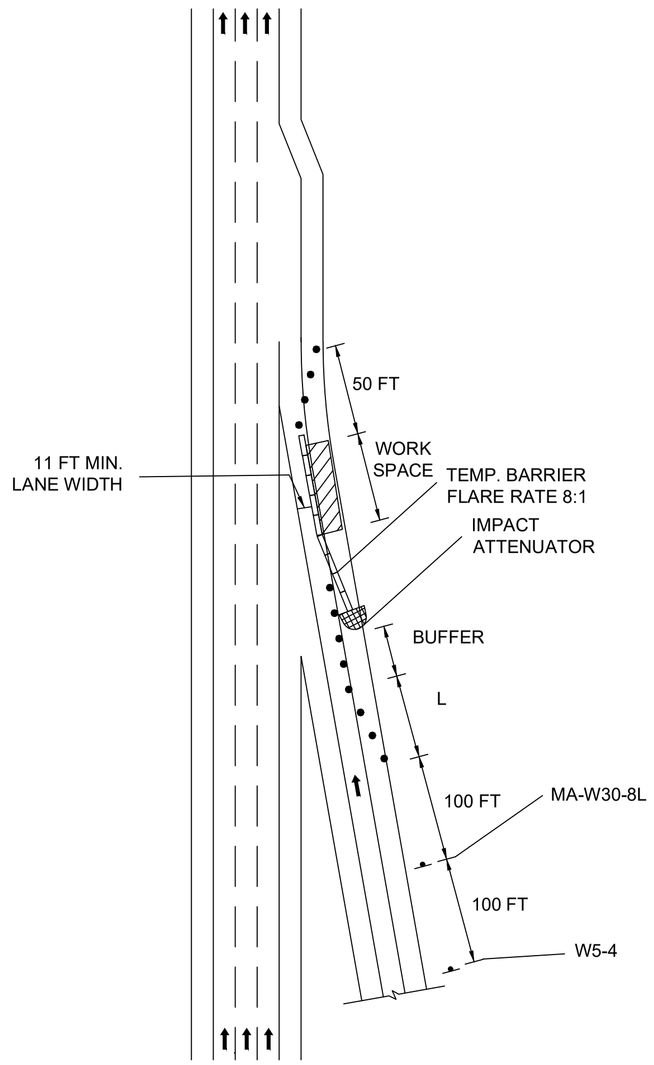
NOTES:

1. THE FIRST TEN DRUMS OF EACH LANE CLOSURE TAPER SHALL BE MOUNTED WITH SEQUENTIALLY FLASHING LIGHTS IF DEPLOYED BETWEEN DUSK AND DAWN.
2. MAXIMUM DRUM SPACING IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH. IN TANGENT SECTIONS, MAXIMUM SPACING IN FEET IS EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH.
3. THIS SETUP ALSO APPLIES TO 3 OR 4 LANE SECTIONS.

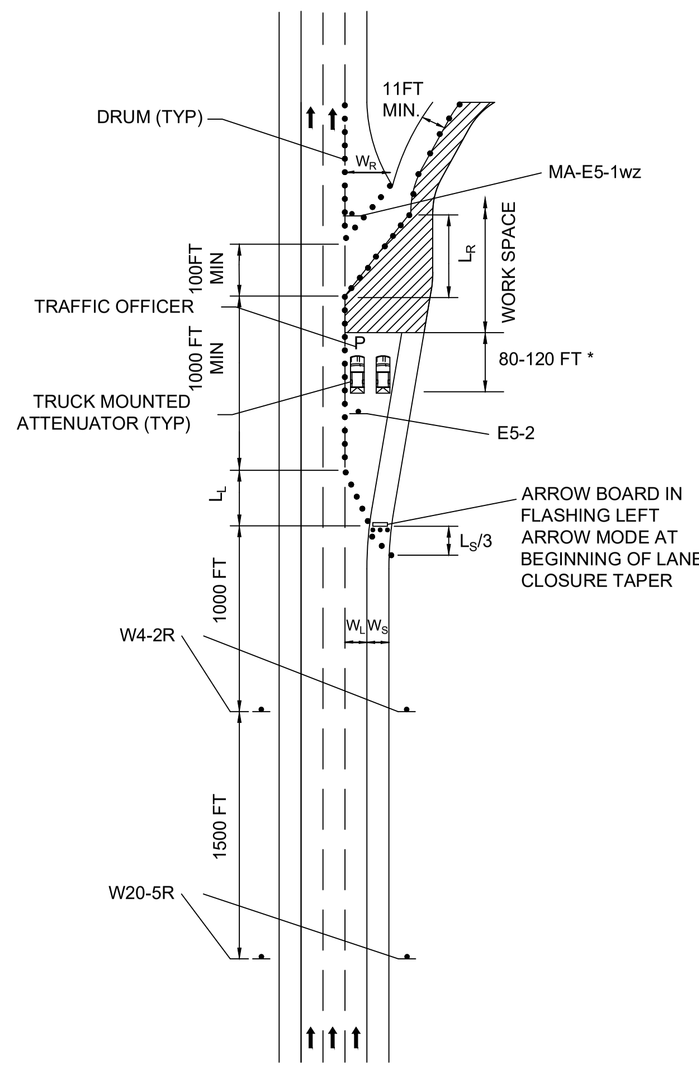
* DISTANCE MAY BE INCREASED IF ADDITIONAL ROLL-AHEAD ALLOWANCE IS NEEDED. REFER TO MANUFACTURER'S SPECIFICATIONS.



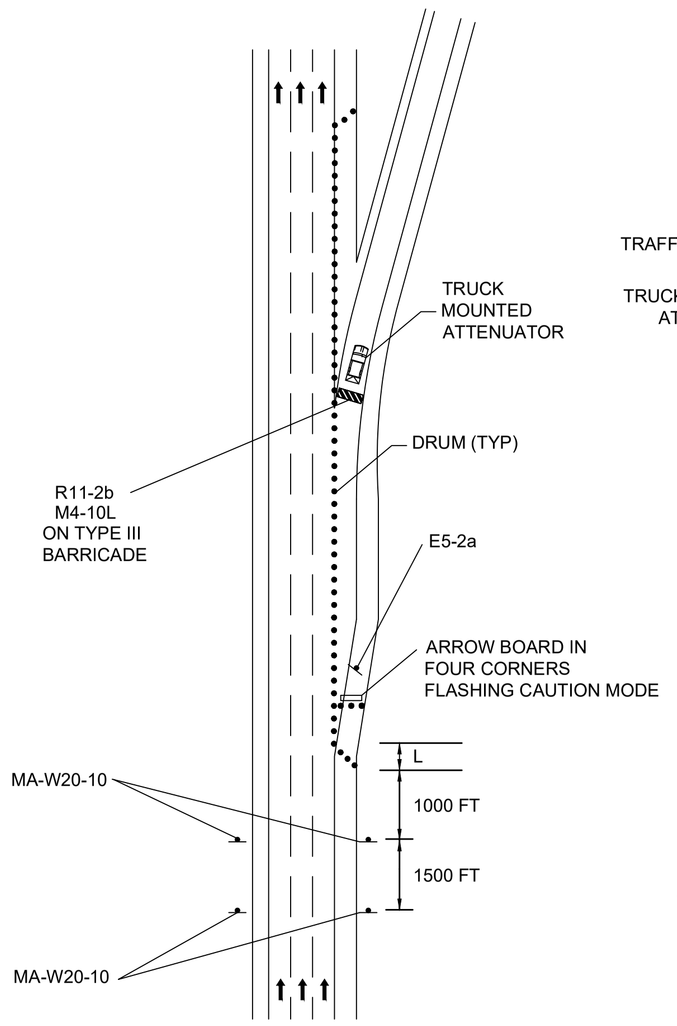
852.7.9 - DIVIDED HIGHWAY LEFT TWO LANES CLOSURE (SHORT TERM)
NOT TO SCALE



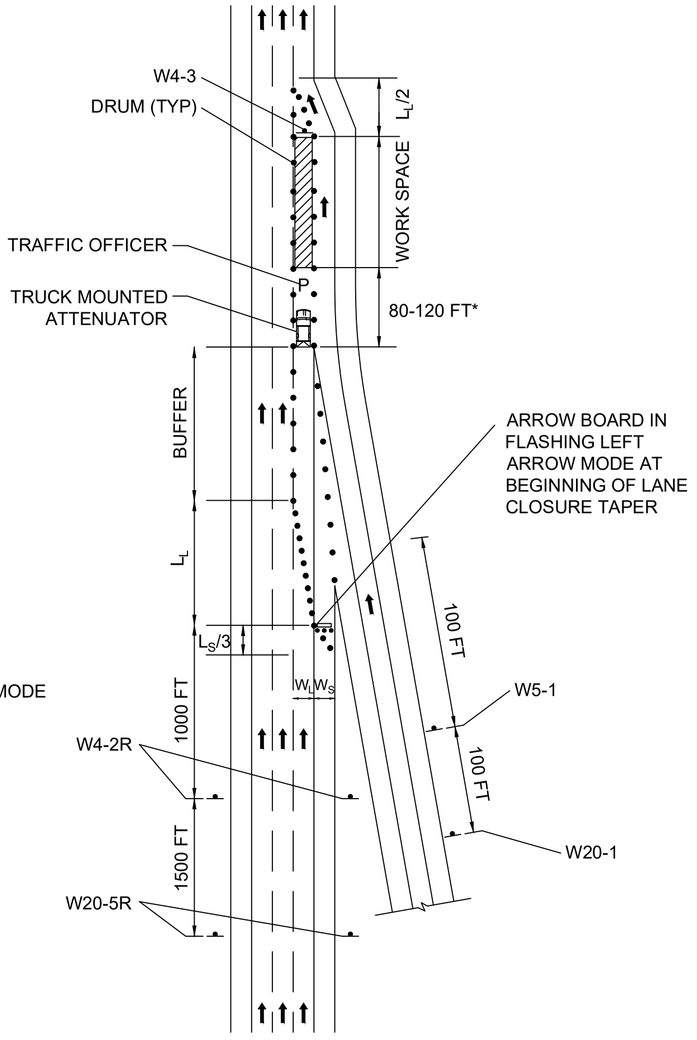
PARTIAL ENTRANCE RAMP CLOSURE (LONG TERM)
NOT TO SCALE



852.8.6 - EXIT RAMP
WORK WITHIN VICINITY OF RAMP
(APPROACH SIDE)
NOT TO SCALE



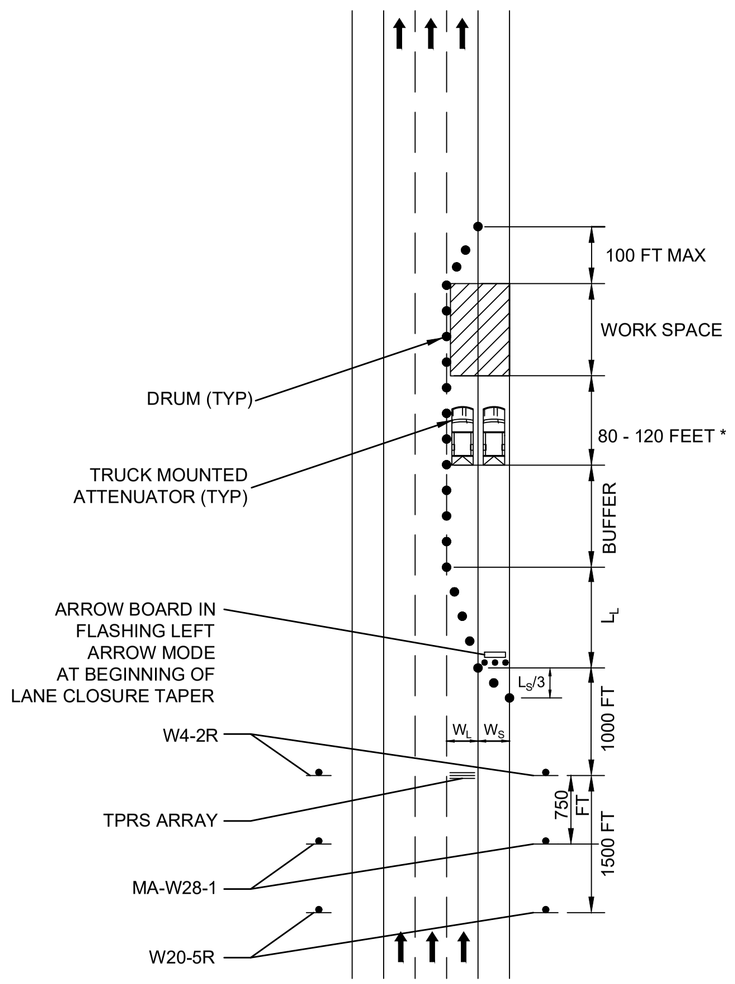
852.8.3 - EXIT RAMP TYPICAL CLOSURE
NOT TO SCALE



852.9.2 - ENTRANCE RAMP
WORK WITHIN VICINITY OF RAMP
NOT TO SCALE

MASSDOT 10 BRIDGES_TTCP_MAIN ST.DWG Plotted on 24-Oct-2025 7:54 AM

Proposal No. 613196-133292



852.7.3 - DIVIDED HIGHWAY RIGHT LANE CLOSURE (SHORT TERM)
NOT TO SCALE

TEMPORARY PORTABLE RUMBLE STRIP (TPRS)
A TPRS ARRAY SHALL HAVE THEE RUMBLE STRIPS. SPACING SHALL BE AS FOLLOWS:

POSTED REGULATORY OR WORK ZONE SPEED

60 MPH AND ABOVE — 20'

40 MPH TO 55 MPH — 15'

NOTE: TPRS SHALL BE DEPLOYED ONLY FOR SETUPS OF 12 HOURS OR LESS

TYPICAL TAPER LENGTHS (L, L_L, L_S) IN FEET

SPEED LIMIT (S) IN MPH	WIDTH OF OFFSET (W_L OR W_S) IN FEET		
	10	11	12
50	500	550	600
55	550	605	660
60	600	660	720
65	650	715	780

NOTE: FOR OFFSET WIDTHS NOT LISTED IN TABLE, USE L=WS.

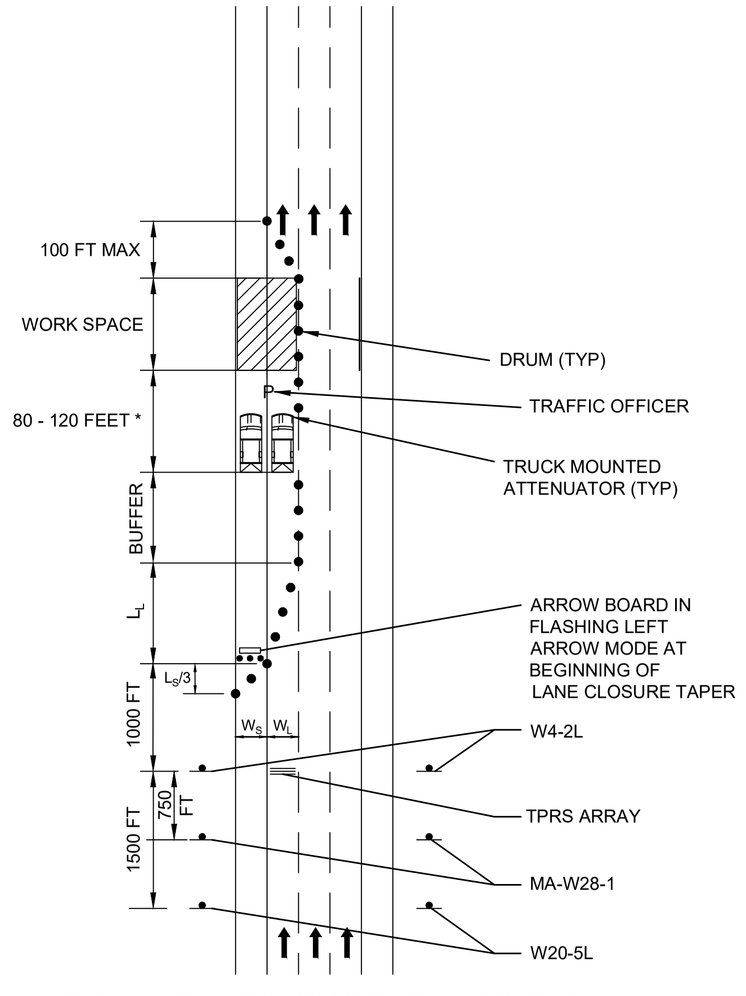
STOPPING SIGHT DISTANCE	
SPEED (MPH)	DISTANCE (FT)
35	250
40	305
45	360
50	425
55	495
60	570
65	645

MINIMUM LENGTH OF LONGITUDINAL BUFFER IS EQUAL TO THE STOPPING SIGHT DISTANCE AT THE POSTED SPEED AND CAN DETERMINED FROM THE FOLLOWING TABLE

NOTES:

1. THE FIRST TEN DRUMS OF EACH LANE CLOSURE TAPER SHALL BE MOUNTED WITH SEQUENTIALLY FLASHING LIGHTS IF DEPLOYED BETWEEN DUSK AND DAWN.
2. MAXIMUM DRUM SPACING IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH. IN TANGENT SECTIONS, MAXIMUM SPACING IN FEET IS EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH.
3. THIS SETUP ALSO APPLIES TO 3 OR 4 LANE SECTIONS.

* DISTANCE MAY BE INCREASED IF ADDITIONAL ROLL-AHEAD ALLOWANCE IS NEEDED. REFER TO MANUFACTURER'S SPECIFICATIONS.



852.7.4 - DIVIDED HIGHWAY LEFT LANE CLOSURE (SHORT TERM)
NOT TO SCALE

DIVIDED HIGHWAY - LEFT SHOULDER CLOSURE (LONG TERM)
NOT TO SCALE

852.9.3 - ENTRANCE RAMP WORK DOWNSTREAM
NOT TO SCALE

PARTIAL ENTRANCE RAMP CLOSURE (LONG TERM)
NOT TO SCALE

PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

IF USED, PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) AS AMENDED AND SHOULD BE PLACED ON THE SHOULDER OF THE ROADWAY OR IF PRACTICAL SET WELL AWAY FROM THE TRAVEL LANE. MESSAGE SIGNS SHOULD BE PROTECTED WITH RETROREFLECTIVE TEMPORARY TRAFFIC CONTROL DEVICES WHEN PLACED WITHIN THE AVAILABLE CLEAR ZONE OR ELSE SHIELDED WITH A BARRIER OR CRASH CUSHION. THE FINAL LOCATION AND USE OF THE PCMS SHALL BE DETERMINED BY THE ENGINEER.

*ALTERNATIVE MESSAGES MAY BE DETERMINED BY THE ENGINEER IN THE FIELD.

*EXACT LOCATION OF PCMS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

TWO (2) WEEKS PRIOR TO ROAD CLOSURE, PCMS 1 & 2, SHALL BE INSTALLED WITH THE FOLLOWING SUGGESTED MESSAGE:

MESSAGE 1A:	M	A	I	N		S	T							
		C	L	O	S	E	D							
MESSAGE 1B:		M	M	M	/	D	D							
				T	O									
		M	M	M	/	D	D							

WHILE ROAD CLOSURE IS IN EFFECT, PCMS 1 & 2, WILL DISPLAY THE FOLLOWING SUGGESTED MESSAGE UNTIL BRIDGE IS AGAIN OPEN FOR TRAFFIC:

MESSAGE 2A:	M	A	I	N		S	T							
		C	L	O	S	E	D							
	1	1	P	M	-	5	A	M						
MESSAGE 2B:		F	O	L	L	O	W							
		D	E	T	O	U	R							

NOTE:
ALL LANE AND ROAD CLOSURES WILL HAVE POLICE DETAILS PRESENT TO MANAGE TRAFFIC AND OVERRIDE SIGNALS AS NECESSARY TO ENSURE SAFETY AND PROPER OPERATIONS.

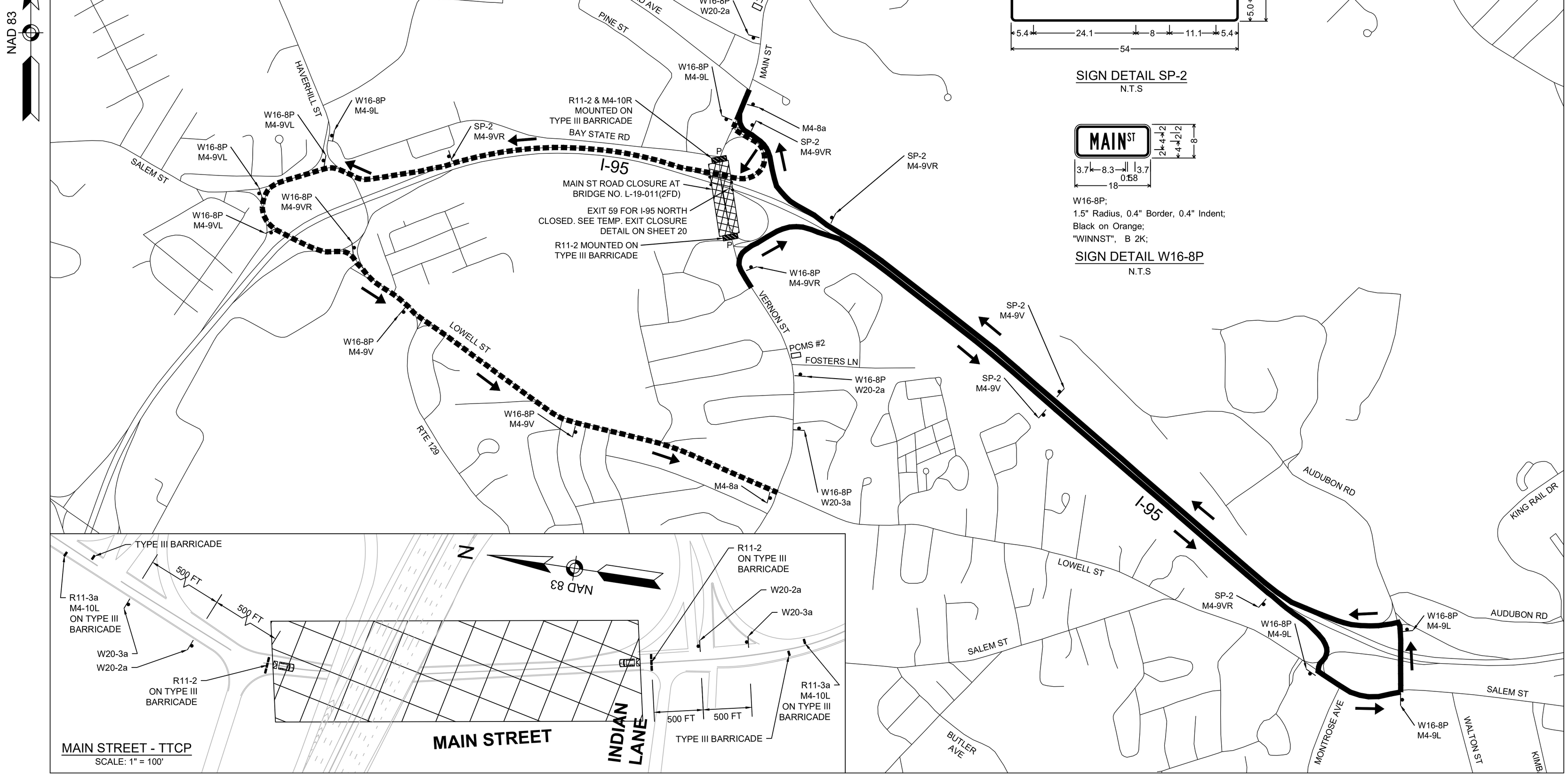
TRAFFIC DEVICE LEGEND:

- CONSTRUCTION AREA
- TEMPORARY ROADSIDE SIGN
- MAIN ST NB DETOUR ROUTE
- MAIN ST SB DETOUR ROUTE
- DIRECTIONAL TRAFFIC FLOW
- TYPE III BARRICADE
- P — POLICE DETAIL
- CHANGEABLE MESSAGE SIGN
- REFLECTORIZED DRUM

LYNNFIELD
I-95/ROUTE 128 OVER MAIN STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	22	25
PROJECT FILE NO.		613196	

DETOUR PLAN & TTCP - MAIN STREET



MAIN ST
5.4 — 24.1 — 8 — 11.1 — 5.4 = 54
5.0 + 8 + 5.0 = 18

SIGN DETAIL SP-2
N.T.S

MAIN ST
3.7 — 8.3 — 0.6 — 3.7 = 18
2 + 4 + 2 + 2 = 8

W16-8P;
1.5" Radius, 0.4" Border, 0.4" Indent;
Black on Orange;
"WINNST", B 2K;

SIGN DETAIL W16-8P
N.T.S

MAIN STREET - TTCP
SCALE: 1" = 100'

MAIN STREET / VERNON STREET DETOUR ROUTE
SCALE: 1" = 500'

MASSDOT 10 BRIDGES_DET_2.DWG Plotted on 22-Dec-2025 2:09 PM
Proposal No. 613196-133292
A00805 - 24

PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

IF USED, PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) AS AMENDED AND SHOULD BE PLACED ON THE SHOULDER OF THE ROADWAY OR IF PRACTICAL SET WELL AWAY FROM THE TRAVEL LANE. MESSAGE SIGNS SHOULD BE PROTECTED WITH RETROREFLECTIVE TEMPORARY TRAFFIC CONTROL DEVICES WHEN PLACED WITHIN THE AVAILABLE CLEAR ZONE OR ELSE SHIELDED WITH A BARRIER OR CRASH CUSHION. THE FINAL LOCATION AND USE OF THE PCMS SHALL BE DETERMINED BY THE ENGINEER.

*ALTERNATIVE MESSAGES MAY BE DETERMINED BY THE ENGINEER IN THE FIELD.

*EXACT LOCATION OF PCMS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

TWO (2) WEEKS PRIOR TO ROAD CLOSURE, PCMS 1 & 2, SHALL BE INSTALLED WITH THE FOLLOWING SUGGESTED MESSAGE:

MESSAGE 1A:

I	-	9	5		S	O	U	T	H
	O	N		R	A	M	P		
		C	L	O	S	E	D		

MESSAGE 1B:

M	M	M	/	D	D	
		T	O			
M	M	M	/	D	D	

WHILE ROAD CLOSURE IS IN EFFECT, PCMS 1 & 2, WILL DISPLAY THE FOLLOWING SUGGESTED MESSAGE UNTIL BRIDGE IS AGAIN OPEN FOR TRAFFIC:

MESSAGE 2A:

I	-	9	5		S	O	U	T	H
R	A	M	P		C	L	O	S	E	D
	1	1	P	M	-	5	A	M		

MESSAGE 2B:

	F	O	L	L	O	W
	D	E	T	O	U	R

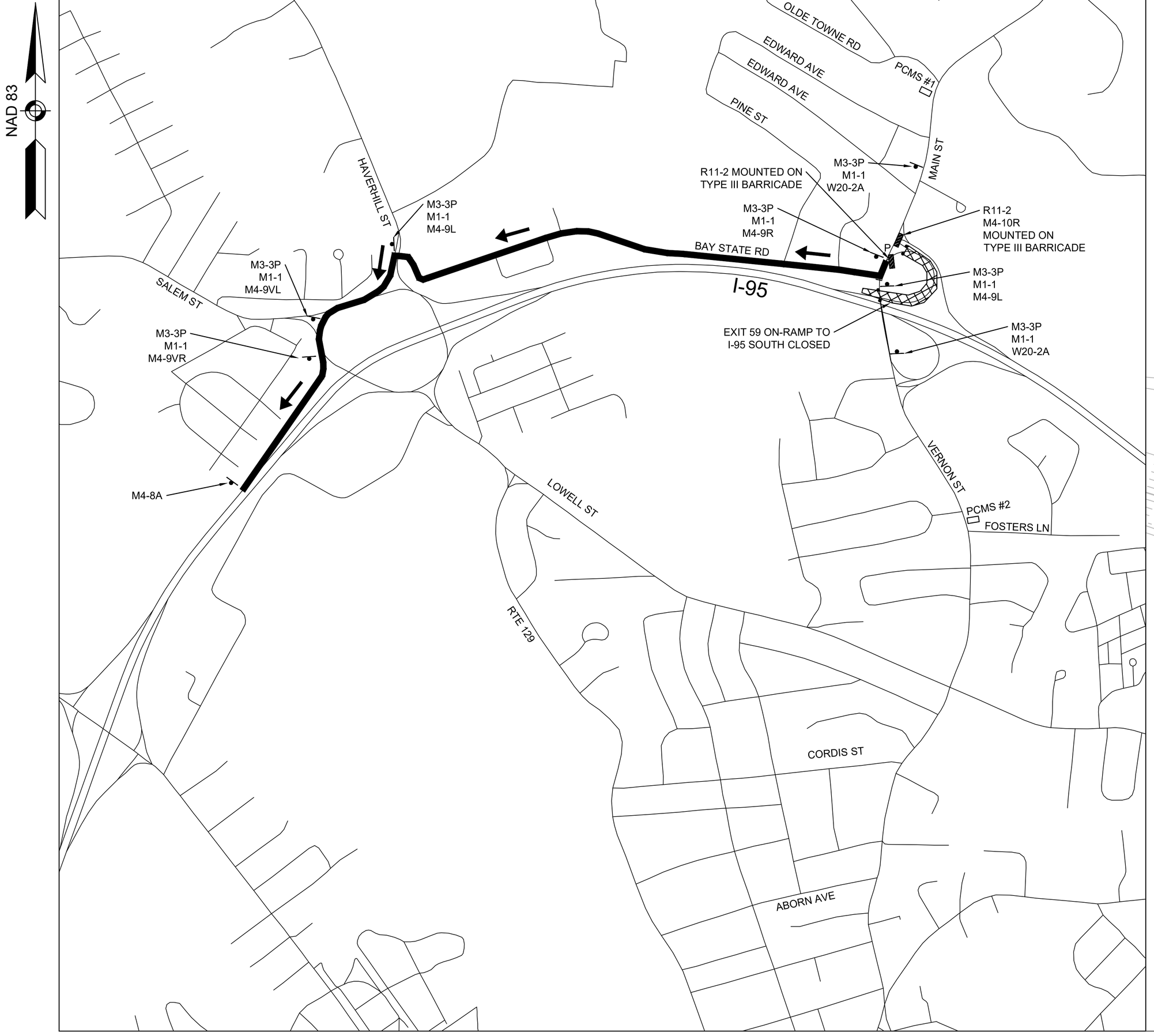
TRAFFIC DEVICE LEGEND:

- CONSTRUCTION AREA
- TEMPORARY ROADSIDE SIGN
- I-95 SB DETOUR ROUTE
- DIRECTIONAL TRAFFIC FLOW
- TYPE III BARRICADE
- REFLECTORIZED DRUM
- P POLICE DETAIL
- ARROW BOARD
- TRUCK MOUNTED ATTENUATOR

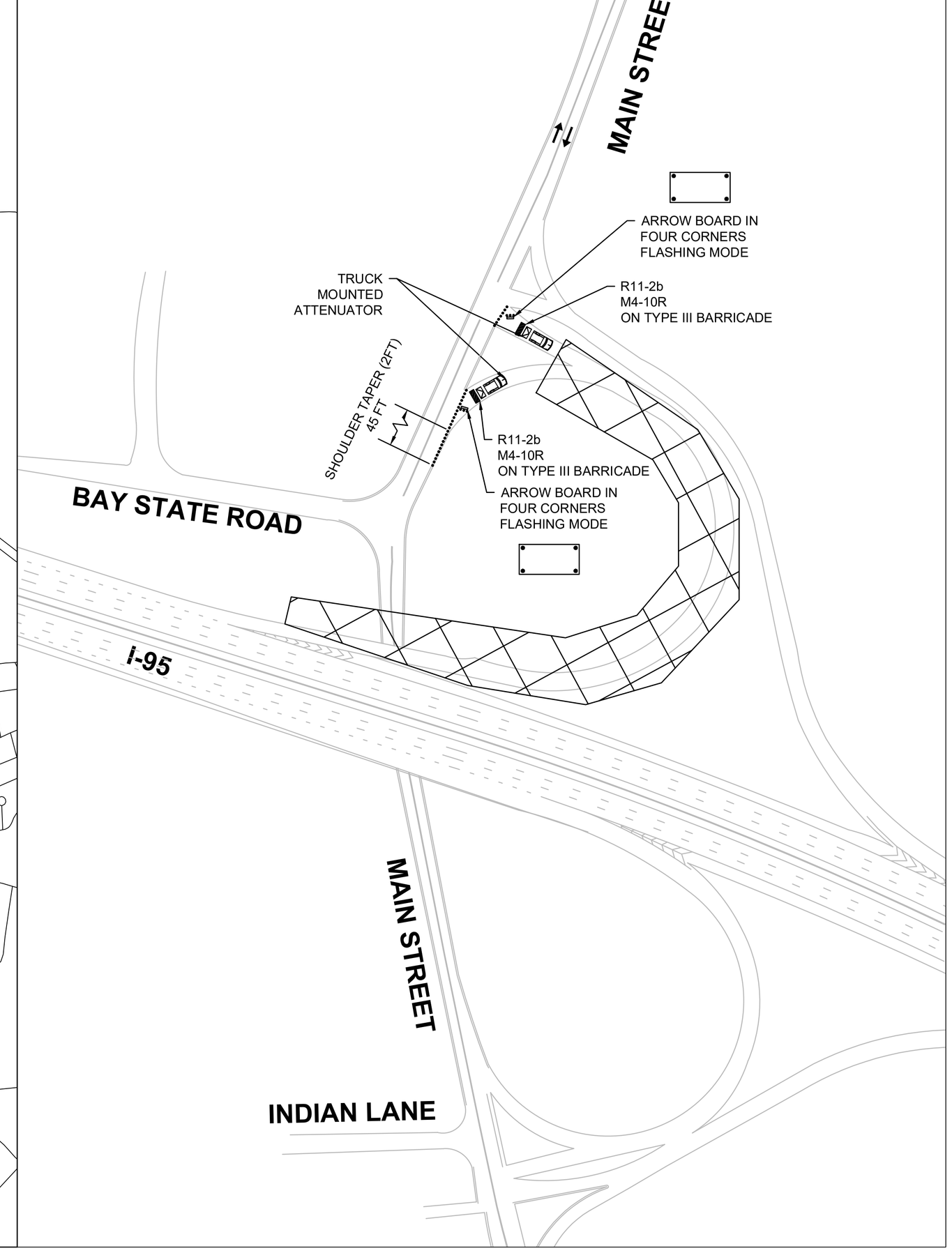
LYNNFIELD
I-95/ROUTE 128 OVER MAIN STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	23	25
PROJECT FILE NO.	613196		

DETOUR PLAN & TTCP - I-95 SOUTH ON-RAMP



I-95 SOUTH ON-RAMP AT MAIN STREET - DETOUR
SCALE: 1" = 500'



I-95 SOUTH ON-RAMP AT MAIN STREET - TTCP
SCALE: 1" = 100'

MASSDOT 10 BRIDGES_DET_FAS.DWG Plotted on 24-Oct-2025 10:34 AM
Proposal No. 613196-133292
A00805 - 25

CONSTRUCTION SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE WIDTH (IN)	SIZE HEIGHT (IN)	TEXT	DIMENSIONS (IN) LETTER HEIGHT	DIMENSIONS (IN) VERTICAL SPACING	DIMENSIONS (IN) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACKGROUND	COLOR LEGEND	COLOR BORDER	UNIT AREA (S.F.)	TOTAL AREA (S.F.)
E5-2	48"	36"	EXIT OPEN	(1)	(1)	(1)	1	FLUOR. ORANGE	BLACK	BLACK	12.00	12.00
E5-2a	48"	36"	EXIT CLOSED				1	FLUOR. ORANGE	BLACK	BLACK	12.00	12.00
M1-1	24"	24"	INTERSTATE 95				7	BLUE/RED	WHITE	WHITE	4.00	28.00
M3-3P	24"	12"	SOUTH				7	FLUOR. ORANGE	BLACK	BLACK	2.00	14.00
M4-8a	24"	18"	END DETOUR				3	FLUOR. ORANGE	BLACK	BLACK	3.00	9.00
M4-9L	48"	36"	DETOUR ←				6	FLUOR. ORANGE	BLACK	BLACK	12.00	72.00
M4-9R	48"	36"	DETOUR →				1	FLUOR. ORANGE	BLACK	BLACK	12.00	12.00
M4-9V	48"	36"	DETOUR ↑				4	FLUOR. ORANGE	BLACK	BLACK	12.00	48.00
M4-9VL	48"	36"	DETOUR ↖				4	FLUOR. ORANGE	BLACK	BLACK	12.00	48.00
M4-9VR	48"	36"	DETOUR ↗				6	FLUOR. ORANGE	BLACK	BLACK	12.00	72.00
M4-10L	48"	18"	← DETOUR				1	FLUOR. ORANGE	BLACK	BLACK	6.00	6.00
M4-10R	48"	18"	DETOUR →				1	FLUOR. ORANGE	BLACK	BLACK	6.00	6.00
MA-E5-1wz	48"	48"	EXIT ↗	(2)	(2)	(2)	1	FLUOR. ORANGE	BLACK	BLACK	16.00	16.00
MA-R2-10a	48"	36"	WORK ZONES / SPEEDING FINES DOUBLED				3	FLUOR. ORANGE & WHITE	BLACK	BLACK	12.00	36.00
	60"	48"					5				20.00	100.00
MA-R2-10e	36"	48"	END ROAD WORK DOUBLE FINES END				3	FLUOR. ORANGE & WHITE	BLACK	BLACK	12.00	36.00
	48"	60"					5				20.00	100.00
MA-W20-5bL	48"	48"	LEFT TWO LANES CLOSED XX FT				2	FLUOR. ORANGE	BLACK	BLACK	16.00	32.00

LYNNFIELD
I-95/ROUTE 128 OVER MAIN STREET

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	24	25
PROJECT FILE NO.	613196		

TEMPORARY TRAFFIC SIGN SUMMARY - SHEET 1

CONSTRUCTION SIGN SUMMARY (CONTINUED)

IDENTIFICATION NUMBER	SIZE WIDTH (IN)	SIZE HEIGHT (IN)	TEXT	DIMENSIONS (IN) LETTER HEIGHT	DIMENSIONS (IN) VERTICAL SPACING	DIMENSIONS (IN) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACKGROUND	COLOR LEGEND	COLOR BORDER	UNIT AREA (S.F.)	TOTAL AREA (S.F.)
MA-W20-5bR	48"	48"	RIGHT TWO LANES CLOSED XX FT	(2)	(2)	(2)	2	FLUOR. ORANGE	BLACK	BLACK	16.00	32.00
MA-W20-7b	36"	36"	POLICE OFFICER AHEAD				2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
MA-W20-10	48"	48"	EXIT CLOSED XXX				4	FLUOR. ORANGE	BLACK	BLACK	16.00	64.00
MA-W30-8L	48"	48"	SQUEEZE LEFT				1	FLUOR. ORANGE	BLACK	BLACK	16.00	16.00
R1-2	48" x 48" x 48"		YIELD				1	WHITE	RED	RED	6.93	6.93
R9-11aL	24"	12"	SIDEWALK CLOSED ← CROSS HERE				1	WHITE	BLACK	BLACK	2.00	2.00
R9-11aR	24"	12"	SIDEWALK CLOSED → CROSS HERE				1	WHITE	BLACK	BLACK	2.00	2.00
R11-2	48"	30"	ROAD CLOSED				4	WHITE	BLACK	BLACK	10.00	40.00
R11-2b	48"	30"	RAMP CLOSED				1	WHITE	BLACK	BLACK	10.00	10.00
SP-2	54"	18"	MAIN ST	8.00	5.00	-	6	FLUOR. ORANGE	BLACK	BLACK	6.75	40.50
W1-4L	36"	36"		(1)	(1)	(1)	2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W1-4R	36"	36"					2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W3-2	48"	48"					1	FLUOR. ORANGE	BLACK	BLACK	16.00	16.00

NOTES:

1. RETROREFLECTIVE SHEETING FOR ALL GUIDE AND TRAFFIC SIGNS SHALL CONFORM TO MASSDOT STANDARD SPECIFICATION SECTION M9.30.0. FLUORESCENT SHEETING SHALL BE USED FOR ALL ORANGE BACKGROUND SIGNS.

(1) SEE THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND "STANDARD HIGHWAY SIGNS" BY FEDERAL HIGHWAY ADMINISTRATION (LATEST EDITIONS) FOR TEXT DIMENSIONS AND COLORS. SEE ALSO THE "MASSACHUSETTS MUTCD AMENDMENTS".

(2) SEE THE MASSDOT "STANDARD SIGNS" LATEST EDITION.

MASSDOT 10 BRIDGES_TTCP_MAIN ST.DWG Plotted on 24-Oct-2025 7:54 AM
Proposal No. 613196-133292
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CONSTRUCTION SIGN SUMMARY (CONTINUED)

IDENTIFICATION NUMBER	SIZE WIDTH (IN)	SIZE HEIGHT (IN)	TEXT	DIMENSIONS (IN) LETTER HEIGHT	DIMENSIONS (IN) VERTICAL SPACING	DIMENSIONS (IN) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACKGROUND	COLOR LEGEND	COLOR BORDER	UNIT AREA (S.F.)	TOTAL AREA (S.F.)
W4-1	48"	48"		(1)	(1)	(1)	1	FLUOR. ORANGE	BLACK	BLACK	16.00	16.00
W4-2L	48"	48"					4	FLUOR. ORANGE	BLACK	BLACK	16.00	64.00
W4-2R	48"	48"					4	FLUOR. ORANGE	BLACK	BLACK	16.00	64.00
W4-3	48"	48"					1	FLUOR. ORANGE	BLACK	BLACK	16.00	16.00
W5-1	36"	36"	ROAD NARROWS				2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
	48"	48"					1				16.00	16.00
W5-4	48"	48"	RAMP NARROWS				1	FLUOR. ORANGE	BLACK	BLACK	16.00	16.00
W11-2	36"	36"					4	FLUOR. YELLOW GREEN	BLACK	BLACK	9.00	36.00
W13-1p	24"	24"	XX MPH				2	FLUOR. ORANGE	BLACK	BLACK	4.00	8.00
	30"	30"					2				6.25	12.50
W16-7pL	24"	12"					4	FLUOR. YELLOW GREEN	BLACK	BLACK	2.00	8.00
W16-8P	18"	8"	MAIN ST	2.00 4.00	2.00	-	15	FLUOR. ORANGE	BLACK	BLACK	1.00	15.00
W20-1	36"	36"	ROAD WORK AHEAD	(1)	(1)	(1)	3	FLUOR. ORANGE	BLACK	BLACK	9.00	27.00
	48"	48"					5				16.00	80.00
W20-2a	36"	36"	DETOUR AHEAD				4	FLUOR. ORANGE	BLACK	BLACK	9.00	36.00
W20-3a	36"	36"	ROAD CLOSED AHEAD				2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W20-4	36"	36"	ONE LANE ROAD AHEAD				2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W20-5L	48"	48"	LEFT LANE CLOSED AHEAD				4	FLUOR. ORANGE	BLACK	BLACK	16.00	64.00

CONSTRUCTION SIGN SUMMARY (CONTINUED)

IDENTIFICATION NUMBER	SIZE WIDTH (IN)	SIZE HEIGHT (IN)	TEXT	DIMENSIONS (IN) LETTER HEIGHT	DIMENSIONS (IN) VERTICAL SPACING	DIMENSIONS (IN) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACKGROUND	COLOR LEGEND	COLOR BORDER	UNIT AREA (S.F.)	TOTAL AREA (S.F.)
W20-5R	48"	48"	RIGHT LANE CLOSED AHEAD	(1)	(1)	(1)	2	FLUOR. ORANGE	BLACK	BLACK	16.00	32.00
W21-5aL	48"	48"	LEFT SHOULDER CLOSED				4	FLUOR. ORANGE	BLACK	BLACK	16.00	64.00
W21-5aR	48"	48"	RIGHT SHOULDER CLOSED				2	FLUOR. ORANGE	BLACK	BLACK	16.00	32.00
W21-5bL	48"	48"	LEFT SHOULDER CLOSED AHEAD				4	FLUOR. ORANGE	BLACK	BLACK	16.00	64.00

NOTES:

1. RETROREFLECTIVE SHEETING FOR ALL GUIDE AND TRAFFIC SIGNS SHALL CONFORM TO MASSDOT STANDARD SPECIFICATION SECTION M9.30.0. FLUORESCENT SHEETING SHALL BE USED FOR ALL ORANGE BACKGROUND SIGNS.

(1) SEE THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND "STANDARD HIGHWAY SIGNS" BY FEDERAL HIGHWAY ADMINISTRATION (LATEST EDITIONS) FOR TEXT DIMENSIONS AND COLORS. SEE ALSO THE "MASSACHUSETTS MUTCD AMENDMENTS".

(2) SEE THE MASSDOT "STANDARD SIGNS" LATEST EDITION.

MASSDOT 10 BRIDGES_TTCP_MAIN ST.DWG Plotted on 24-Oct-2025 7:54 AM
Proposal No. 613196-133292
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DOCUMENT A00806

DRAWINGS – WAKEFIELD
BRIDGE NO. W-01-008 (2FJ)

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MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

WAKEFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	1	24
PROJECT FILE NO.	613196		

TITLE SHEET & INDEX

REPAIR PLANS AND DETAILS FOR

I-95/ROUTE 128

(BRIDGE NO. W-01-008)

IN THE TOWN OF

WAKEFIELD

MIDDLESEX COUNTY

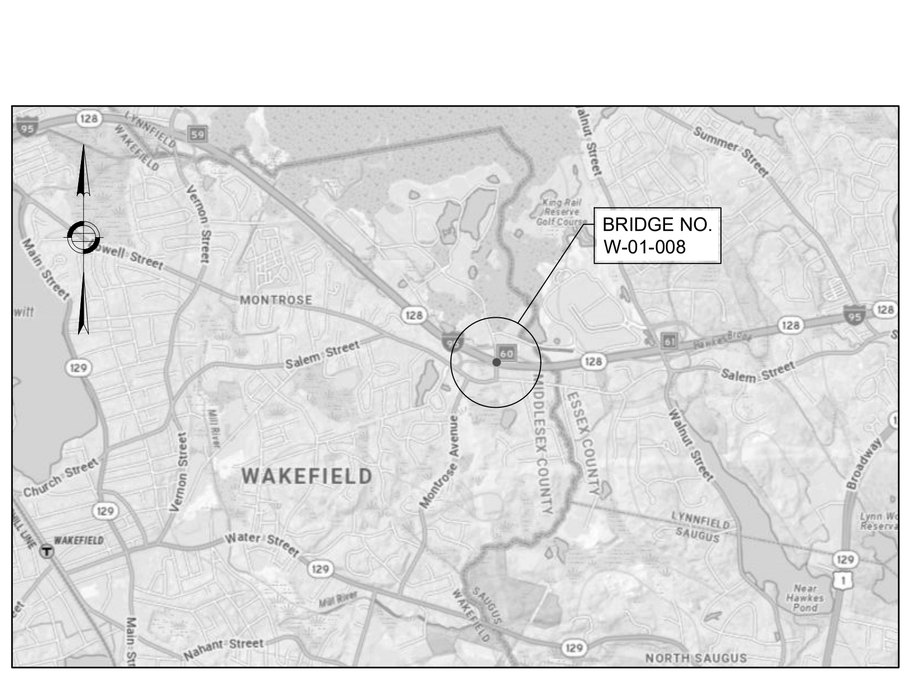
FEDERAL AID PROJECT NO. NFA

PS&E RESUBMISSION

THESE PLANS ARE SUPPLEMENTED BY THE OCTOBER 2025 CONSTRUCTION STANDARD DETAILS, THE 2015 OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS,THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK.

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET & INDEX
2-17	BRIDGE SHEETS
18-24	TEMPORARY TRAFFIC CONTROL PLANS



LOCUS MAP

APPROXIMATE SCALE: 1" = 2000'

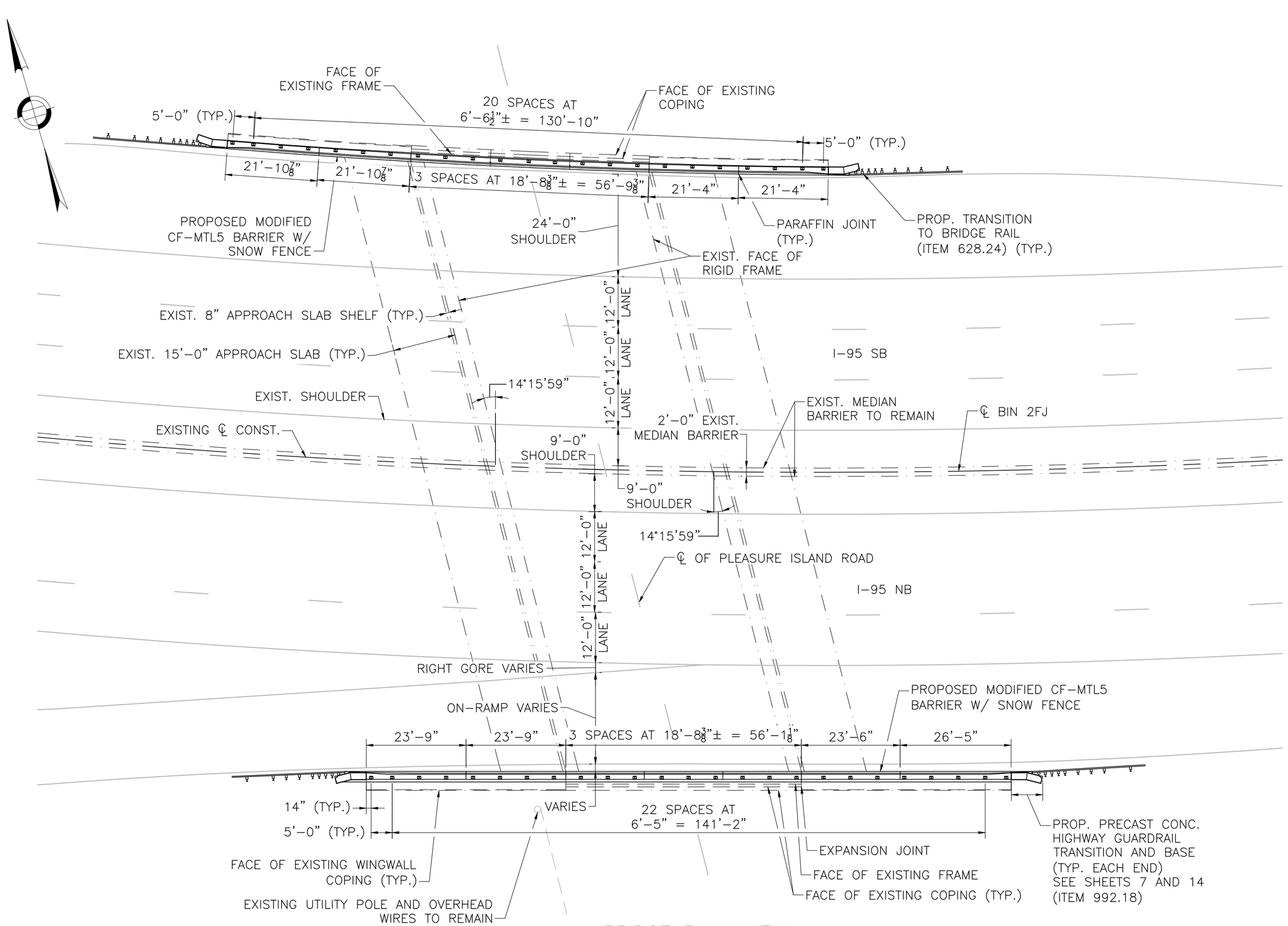
DESIGN DESIGNATION (W-01-008)	
DESIGN SPEED	**65 MPH**
ADT (PRESENT)	142,650
ADT (2043)	157,600
K	6%
D	53% NB
T (PEAK HOUR)	7.8%
T (AVERAGE DAY)	5.7%
DHV	10,240
DDHV	5,370
FUNCTIONAL CLASSIFICATION	URBAN INTERSTATE

DATE	DESCRIPTION	REV #
24-October-2025	PS&E Resubmission	

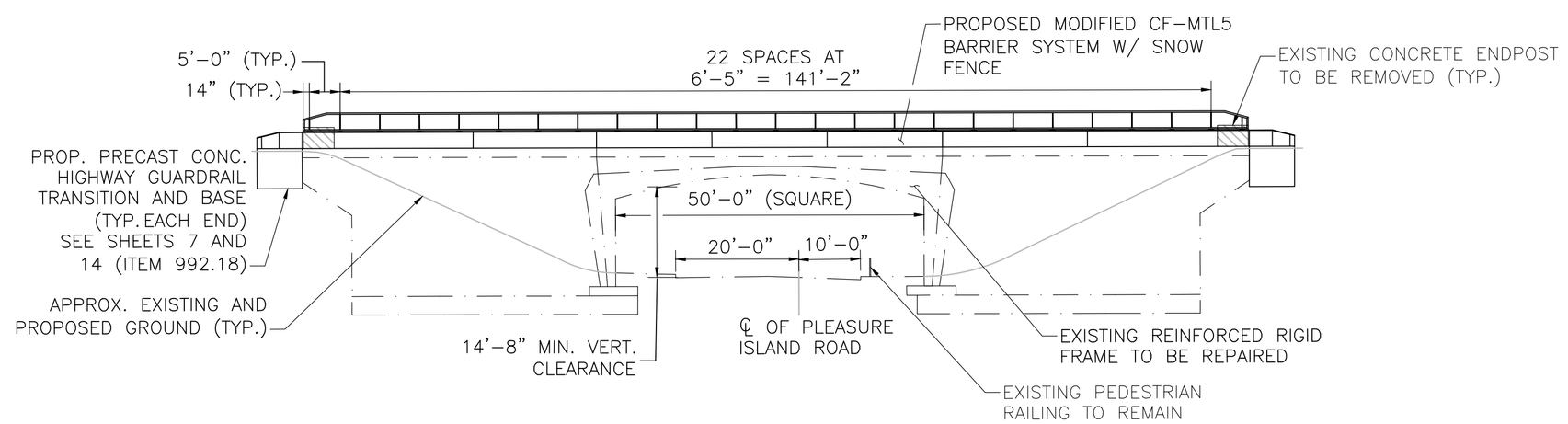
massDOT
Massachusetts Department of Transportation
Highway Division

Jacobs.
120 ST. JAMES AVENUE, 5TH FLOOR
BOSTON, MA 02116

00 - COVER_SHEET.DWG Plotted on 20-Oct-2025 6:01 PM
Proposal NO. 613196-133292
A00806 - 3



BRIDGE PLAN VIEW
SCALE: 1/16" = 1'-0"



ELEVATION (LOOKING NORTH)
SCALE: 1/16" = 1'-0"

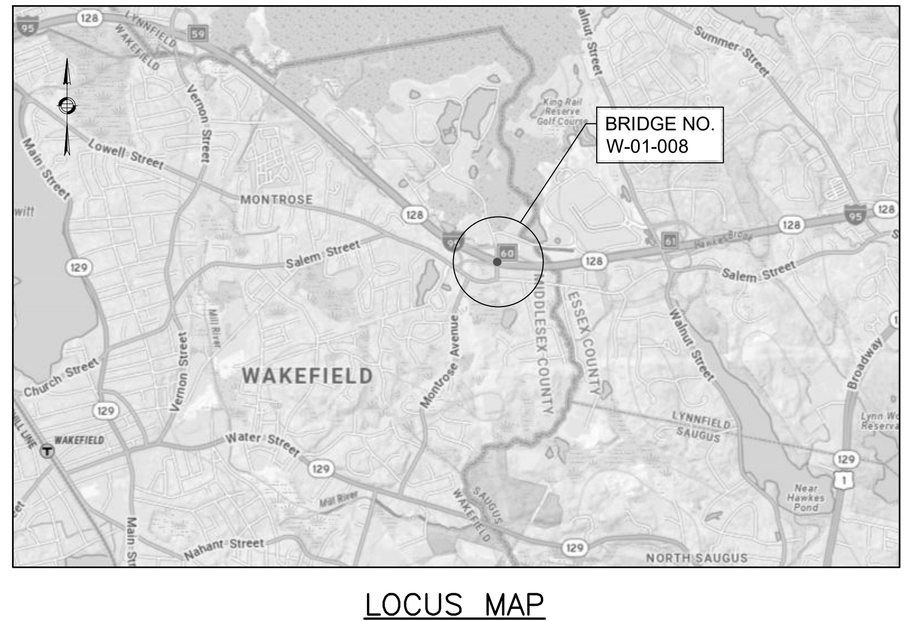
LIMITS OF DEMOLITION

NOTE:
SOUTH ELEVATION SHOWN, NORTH ELEVATION SIMILAR DIMENSIONS UNLESS OTHERWISE NOTED.

WAKEFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	2	24
PROJECT FILE NO.	613196		

PLAN AND ELEVATION



LOCUS MAP
APPROXIMATE SCALE: 1" = 2000'

INDEX

SHEET NO.	DESCRIPTION
1	PLAN AND ELEVATION
2	GENERAL NOTES
3-4	DEMOLITION CROSS SECTIONS
5	PROPOSED CROSS SECTION
6-7	MODIFICATION DETAILS
8-10	REINFORCING DETAILS
11-13	CONCRETE REPAIRS
14	GUARDRAIL TRANSITION DETAILS
15	SNOW FENCE DETAILS
16	GUARDRAIL DETAILS

	MONTH DD, YYYY	ISSUED FOR CONSTRUCTION

MassDOT Massachusetts Department of Transportation Highway Division

BRIDGE PRESERVATION

WAKEFIELD

I-95/ROUTE 128
OVER PLEASURE ISLAND ROAD

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION
10 PARK PLAZA BOSTON, MASS

Jacobs.
120 ST. JAMES AVENUE, 5TH FLOOR
BOSTON, MA 02116

A008806 - 4
1-TITLE SHEET.DWG Plotted on 24-Oct-2025 2:09 PM
Proposal No. 613196-133292
24-October-2025
PS&E Resubmission

GENERAL NOTES:

1. DIMENSIONS SHOWN ARE TAKEN FROM ORIGINAL DESIGN DRAWINGS AND ARE NOT GUARANTEED. THE CONTRACTOR SHALL ESTABLISH THEIR 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. NO SURVEY WAS PERFORMED AS PART OF THIS PRESERVATION PROJECT.

2. THE CONTRACTOR SHALL SUBMIT SURVEY OF ROADWAY TO THE ENGINEER TO ESTABLISH THE ACTUAL ROADWAY PROFILE. THE SURVEY SHALL INCLUDE EXISTING ROADWAY ELEVATIONS ALONG EACH EDGE OF PAVEMENT AND CROWN LINE AT 25 FOOT INTERVALS, AT ENDS OF THE BRIDGE AND AT ENDS OF THE WINGWALLS. THE LIMITS OF SURVEY SHALL EXTEND 250 FEET EACH SIDE OF THE LIMITS OF WORK.

3. REMOVE EXISTING PAVEMENT MARKINGS AND REPLACE WITH NEW SLOTTED PAVEMENT MARKINGS AT LOCATIONS DISTURBED BY APPROACH ROADWAY PAVING.

4. DURING SURVEY, CONTRACTOR SHALL MEASURE THE LENGTH OF EACH EXISTING WINGWALL PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES BETWEEN LENGTHS SHOWN ON RECORD DRAWINGS OR THESE PLANS SHALL BE REPORTED TO THE ENGINEER PRIOR TO FABRICATION OF THE NEW FENCE.

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:
SEE TRAFFIC DRAWINGS FOR TRAFFIC MANAGEMENT PLANS.

SCALES:
SCALES NOTED ON THE PLANS ARE NOT APPLICABLE TO REDUCED SIZE PRINTS. DIVIDE SCALES BY 2 FOR HALF-SIZE PRINTS (A3).

ANCHOR BOLTS:
ALL ANCHOR BOLTS SHALL BE SET BY TEMPLATE BEFORE THE CONCRETE IS PLACED.

CONCRETE:
5000 PSI, 3/8 INCH, 710 HP CEMENT CONCRETE TO BE USED FOR BARRIER RECONSTRUCTION WORK.

4000 PSI, 3/8 INCH, 660 CEMENT CONCRETE TO BE USED FOR PATCHING OF FRAMES AND FRAME WALLS.

REINFORCEMENT:
RENFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M31 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"	19"	23"
2. 12" OF CONCRETE BELOW BAR	20"	25"	30"
3. EPOXY COATED BARS, COVER < $3d_b$, OR CLEAR SPACING <$6d_b$	23"	29"	34"
4. COATED BARS, ALL OTHER CASES	18"	23"	27"
5. CONDITION 2. AND 3.	26"	32"	39"
6. CONDITION 2. AND 4.	24"	30"	36"

ALL OTHER BARS SHALL BE LAPPED AS SHOWN ON THE CONSTRUCTION DRAWINGS.

DATE:
TO BE PLACED ON THE INSIDE FACE OF THE SOUTHWEST AND NORTHEAST HIGHWAY GUARDRAIL TRANSITIONS. A SHEET SHOWING SIZE AND CHARACTER OF NUMERALS WILL BE FURNISHED. THE DATE USED SHALL BE 1960 (THE YEAR THE BRIDGE WAS REBUILT).

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

UTILITIES:
THE CONTRACTOR SHALL LOCATE AND PROTECT EXISTING UTILITIES FROM ALL DAMAGE. OVERHEAD WIRES AT SOUTHWEST WINGWALL SHALL REMAIN IN PLACE AND BE PROTECTED DURING CONSTRUCTION.

ESTIMATED QUANTITIES
(NOT GUARANTEED)

SELECTIVE CLEARING AND THINNING AT BRIDGES	204	SY
EARTH EXCAVATION	61	CY
REINFORCED CONCRETE RIGID FRAME EXCAVATION (PARTIAL DEPTH)	2	CY
BRIDGE EXCAVATION ALONG RIGID FRAME RAILING BRIDGE NO. W-01-008 (BIN 2FJ)	1	LS
GRAVEL BORROW FOR BACKFILLING STRUCTURES AND PIPES	70	CY
CONTROLLED DENSITY FILL - EXCAVATABLE	16	CY
DISPOSAL OF TREATED WOOD PRODUCTS	3656	LBS
HMA FOR PATCHING	26.7	TONS
TRANSITION TO BRIDGE RAIL	4	EA
SILT SACK	4	EA
SEEDING	3340	SF
PAVEMENT MILLING MULCH UNDER GUARDRAIL	150.0	FT
DELINEATION FOR GUARD RAIL TERMINI	4	EA
4000 PSI, 3/8 INCH, 660 CEMENT CONCRETE	49	CF
REPAIRS TO UNDERSIDE OF REINFORCED CONCRETE RIGID FRAMES	48.0	SF
ALTERATION TO BRIDGE NO. W-01-008 (BIN 2FJ)	1	LS

WAKEFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	3	24
PROJECT FILE NO.	613196		

GENERAL NOTES

TRAFFIC DATA

	ROADWAY OVER	ROADWAY UNDER
DESIGN YEAR	2043	2043
AVERAGE DAILY TRAFFIC - PRESENT	142650	13920
AVERAGE DAILY TRAFFIC - DESIGN YEAR	157600	15400
DESIGN HOURLY VOLUME	10240	1400
DIRECTIONAL DISTRIBUTION	53% NB	52% NB
TRUCK PERCENTAGE - AVERAGE DAY	5.7%	4.7%
TRUCK PERCENTAGE - PEAK HOUR	7.8%	7.9%
DESIGN SPEED	65	4
DIRECTIONAL DESIGN HOURLY VOLUME	5370	770

PROJECT INFORMATION

PROJECT FILE NO.: 613196
PROJECT DESCRIPTION: 10 BRIDGE BUNDLE
BRIDGE DESIGN LOADING: H-20
SURVEY: N/A

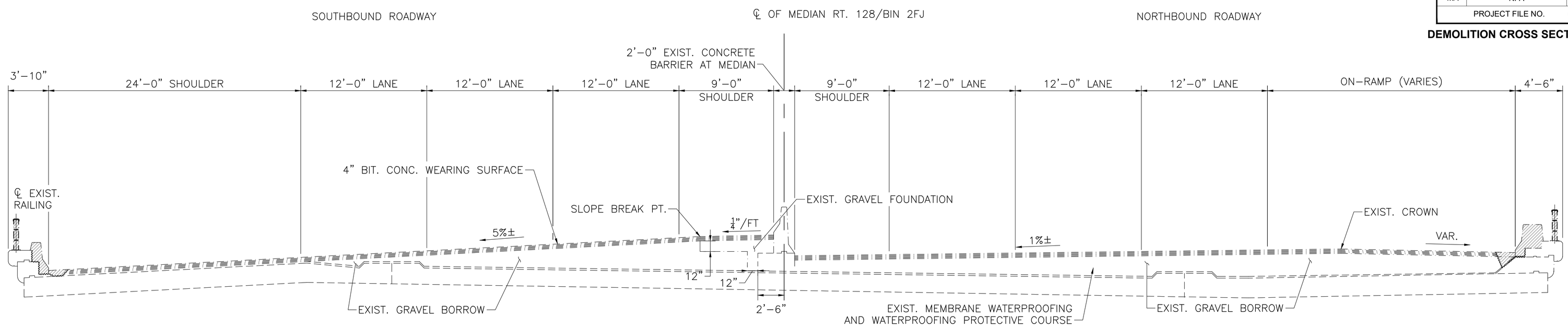
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

A00806 - 5
Plotted on 21-Oct-2025 9:08 AM
2-GENERAL NOTES.DWG
PS&E Resubmission 24-October-2025
Proposal No. 613196-133292

WAKEFIELD
I-95/ROUTE 128

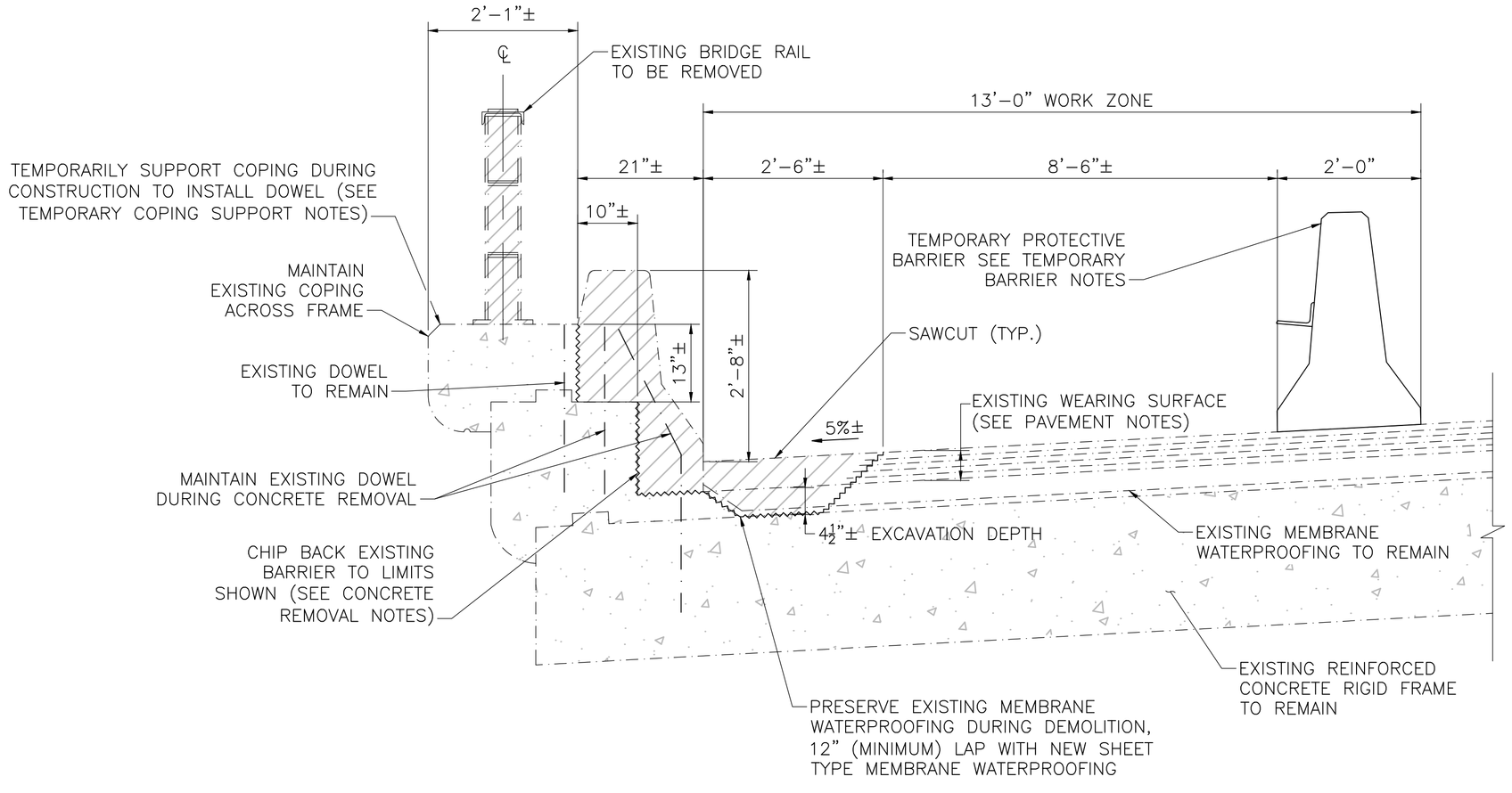
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	4	24
PROJECT FILE NO.	613196		

DEMOLITION CROSS SECTIONS 1 OF 2



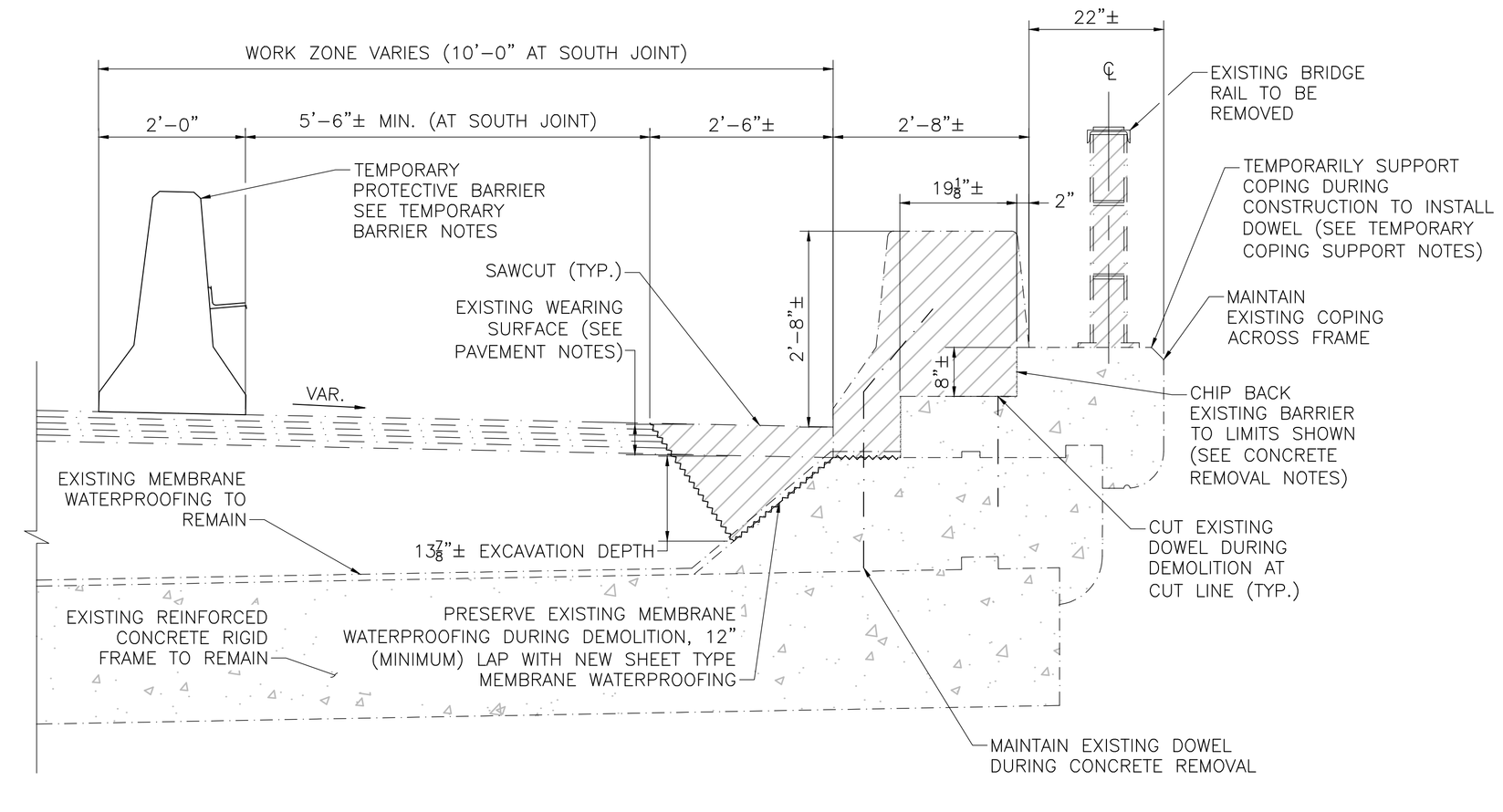
EXISTING CROSS SECTION

SCALE: $\frac{3}{16}$" = 1'–0"



LIMITS OF DEMOLITION AT SOUTHBOUND ROADWAY AT MIDSPAN (NORTH FASCIA)

NOT TO SCALE



LIMITS OF DEMOLITION AT NORTHBOUND ROADWAY AT MIDSPAN (SOUTH FASCIA)

SCALE: $\frac{3}{4}$" = 1'–0"

PAVEMENT NOTES:

1. EXISTING PAVEMENT THICKNESS IS BASED OFF EXISTING RECORD DRAWINGS, CONTRACTOR SHALL CONFIRM EXISTING THICKNESS PRIOR TO CONSTRUCTION.
2. PROPOSED PAVEMENT SHALL BE PLACED IN MAXIMUM 3" LIFTS AND MATCH EXISTING THICKNESS.
3. TO BE PAID UNDER ITEM 451. HMA FOR PATCHING. ASPHALT EMULSION FOR TACK COAT AND HMA JOINT SEALANT ARE INCIDENTAL TO ITEM 451. AND SHALL BE USED IN ACCORDANCE WITH MASSDOT STANDARD SPECIFICATIONS SECTION 450, PAVEMENT MIX SPC–B–12.5.

CONCRETE REMOVAL NOTES:

1. EXISTING BARRIER CONCRETE SHALL BE CHIPPED BACK TO COLD JOINT OF PREVIOUS BARRIER MODIFICATIONS.
2. IF CONCRETE IS DETERMINED TO BE UNSOUND PAST THE LIMITS OF CONCRETE REMOVAL, THEN THE LIMITS MAY BE INCREASED AS DIRECTED BE THE RESIDENT ENGINEER. SEE SPECIAL PROVISIONS.
3. EXISTING BRIDGE RAIL ANCHOR BOLTS SHALL BE CUT DOWN 3/4" DEEP INTO EXISTING COPING AND HOLES TO BE FILLED WITH SEALANT.

TEMPORARY BARRIER NOTES:

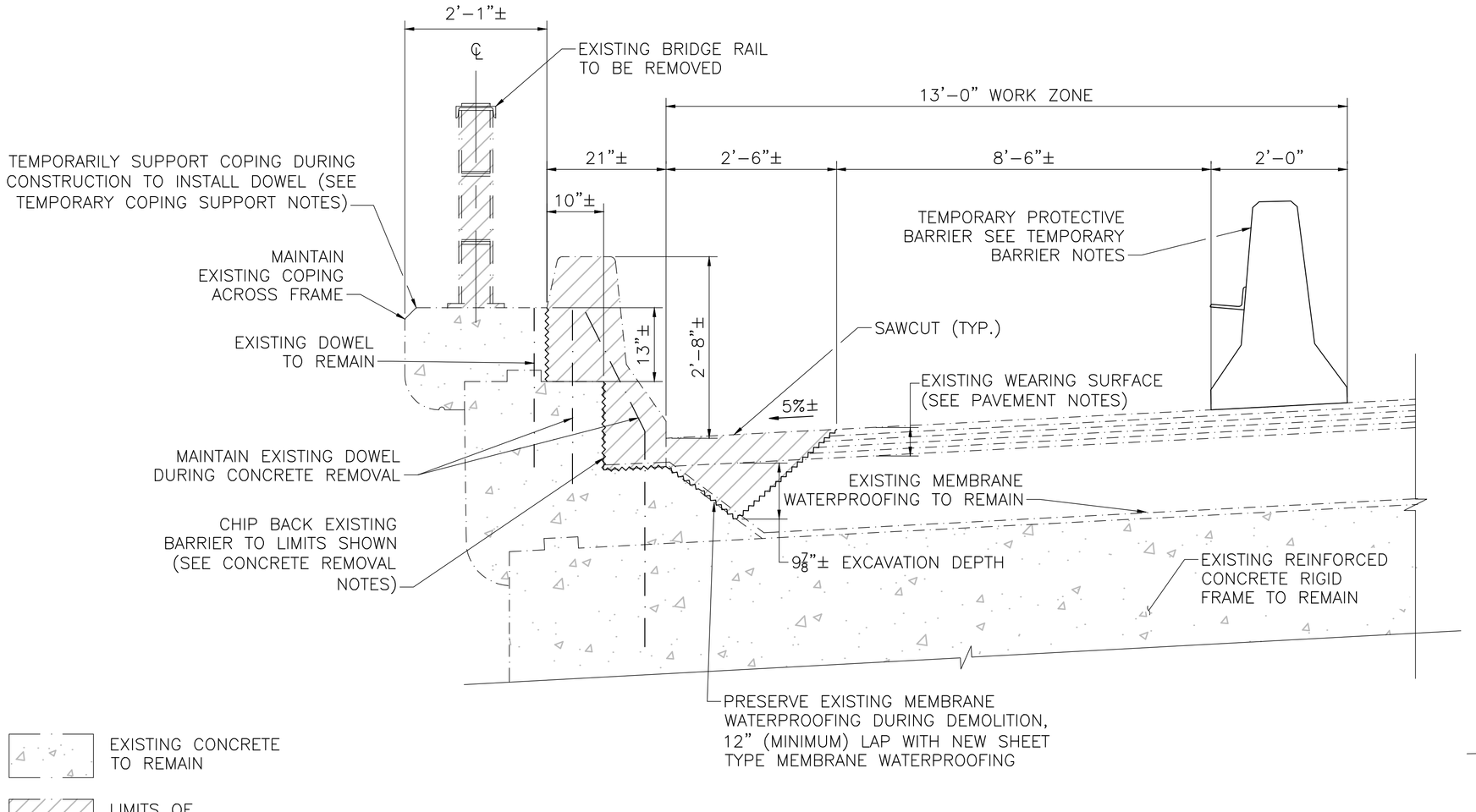
TEMPORARY CONCRETE BARRIER SHALL BE RETROFITTED TO MASH TL–3 STANDARDS IN ACCORDANCE WITH DRAWING NUMBERS 853.23.1 AND 853.23.2 OF THE MASSDOT CONSTRUCTION STANDARDS ISSUED JUNE OF 2025.

TEMPORARY COPING SUPPORT:

1. TEMPORARY COPING SUPPORT SHALL REMAIN IN PLACE UNTIL CONCRETE HAS CURED FOR 28 DAYS.
2. SUPPORT SHALL NOT REDUCE EXISTING BRIDGE MINIMUM VERTICAL CLEARANCE.

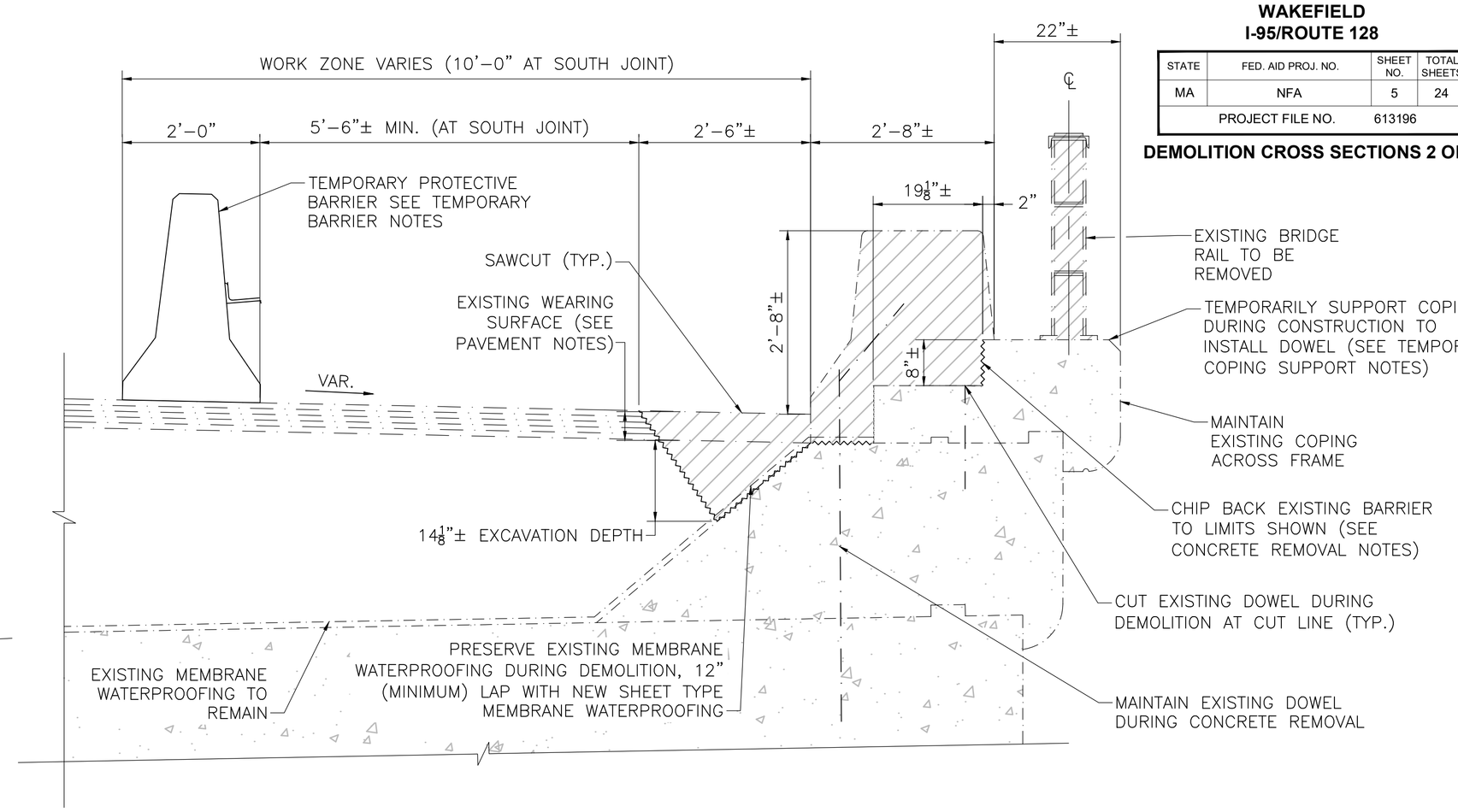
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

A00806 - 9
3-4-DEMO CROSS SECTIONS.DWG Plotted on 21-Oct-2025 9:12 AM
Contract No. 613196-133292
PS&E Resubmission 24-October-2025



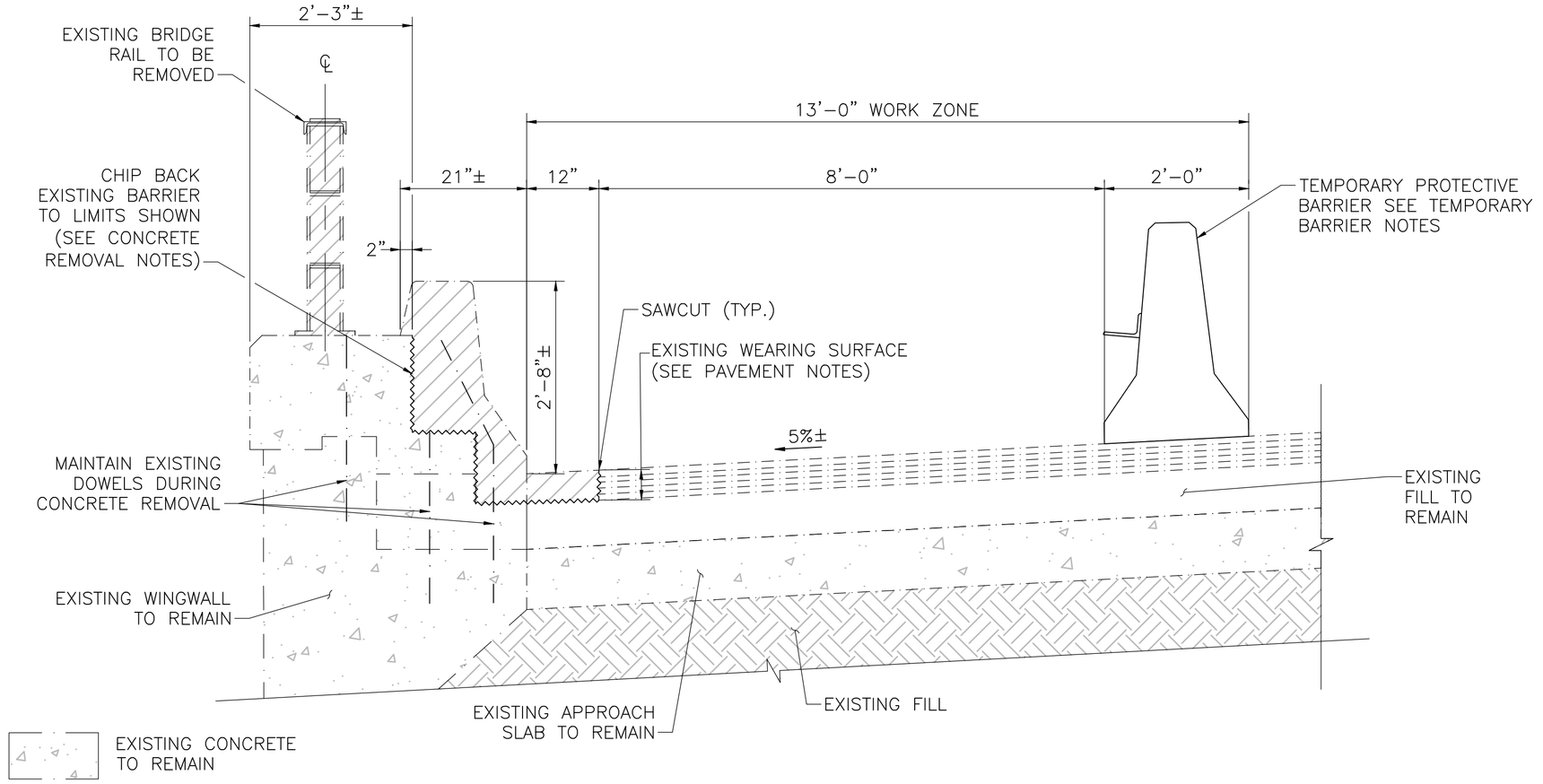
LIMITS OF DEMOLITION AT SOUTHBOUND ROADWAY AT ABUTMENT (NORTH FASCIA)

NOT TO SCALE



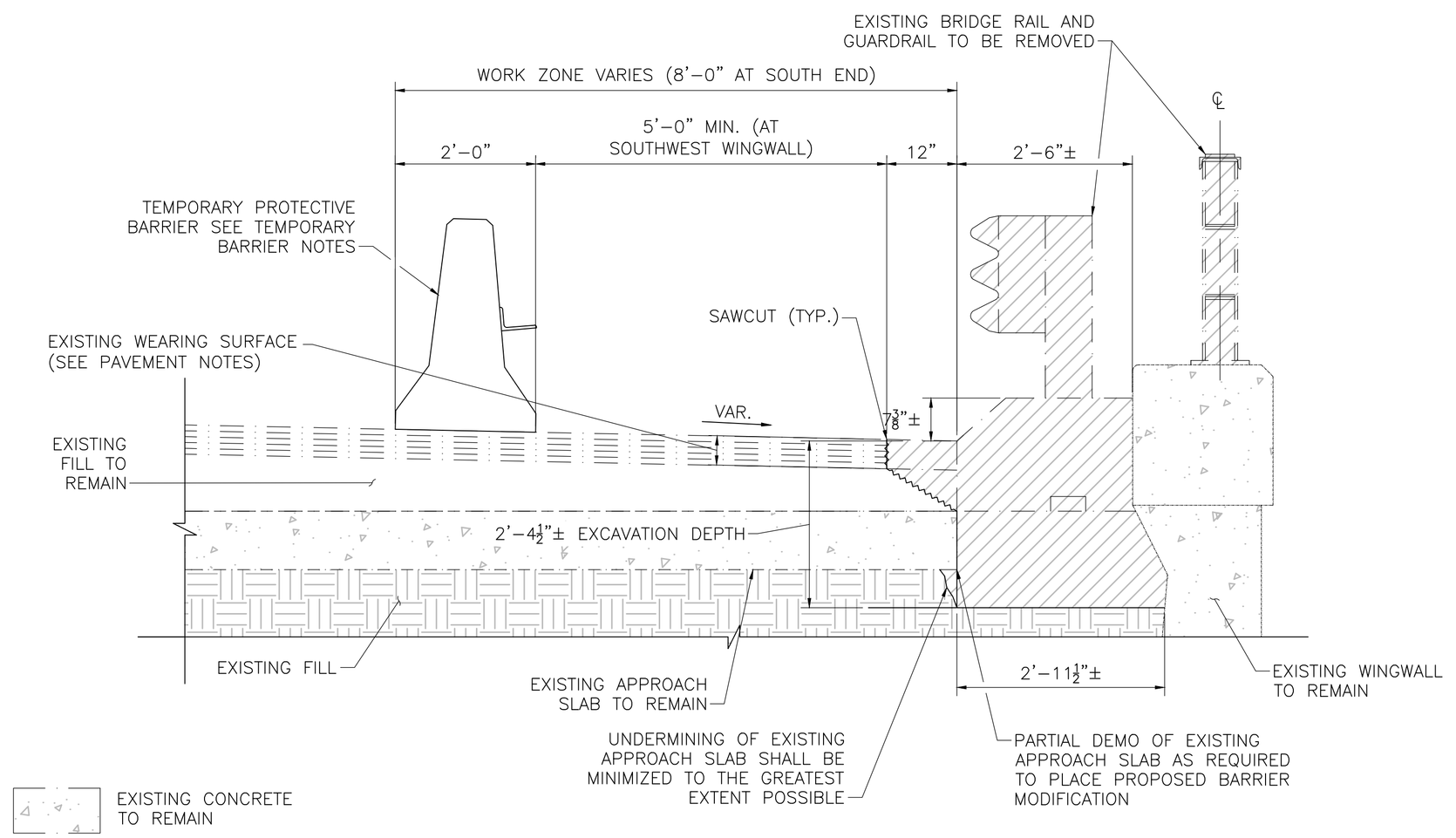
LIMITS OF DEMOLITION AT NORTHBOUND ROADWAY AT ABUTMENT (SOUTH FASCIA)

SCALE: ¾" = 1'–0"



LIMITS OF DEMOLITION AT SOUTHBOUND ROADWAY (WINGWALL)

NOT TO SCALE



LIMITS OF DEMOLITION AT NORTHBOUND ROADWAY (WINGWALL)

SCALE: ¾" = 1'–0"

PAVEMENT NOTES:

SEE SHEET 3 FOR PAVEMENT DETAILS.

CONCRETE REMOVAL NOTES:

SEE SHEET 3 FOR REMOVAL DETAILS.

TEMPORARY BARRIER NOTES:

SEE SHEET 3 FOR BARRIER DETAILS.

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

PS&E Resubmission 24-October-2025

WAKEFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	5	24
PROJECT FILE NO.	613196		

DEMOLITION CROSS SECTIONS 2 OF 2

3-4-DEMO CROSS SECTIONS.DWG Plotted on 24-Oct-2025 8:17 AM

Proposal No. 613196-133292

A00806 - 7

PS&E Resubmission 24-October-2025

5-PROPOSED CROSS SECTION.DWG Plotted on 21-Oct-2025 9:18 AM

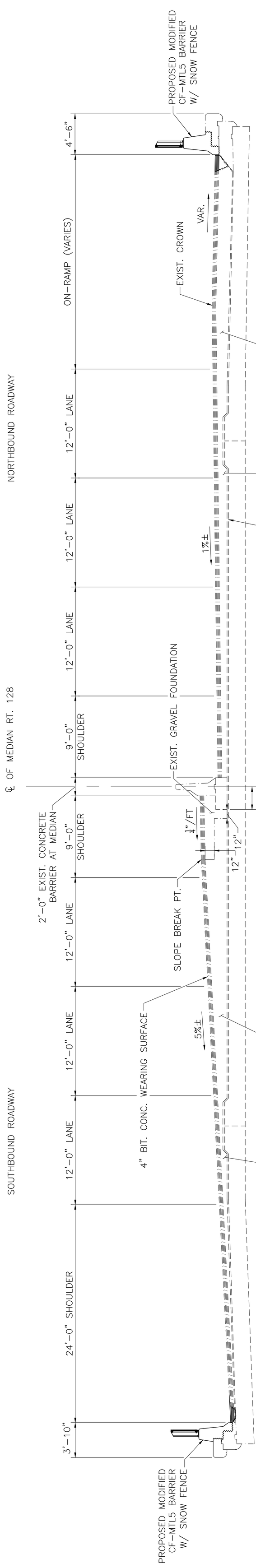
WAKEFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	6	24
	PROJECT FILE NO. 613196		

PROPOSED CROSS SECTION

NOTES:

ALL EXISTING LANE LINES SHOWN FROM RECORD DRAWINGS ARE APPROXIMATE. NO SURVEY WAS PERFORMED AS PART OF THIS BRIDGE PRESERVATION TASK. CONTRACTOR TO CONFIRM LANE LINE MARKINGS PRIOR TO START OF WORK.



PROPOSED CROSS SECTION
SCALE: $\frac{3}{16}$" = 1'-0"

MONTH DD, YYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION

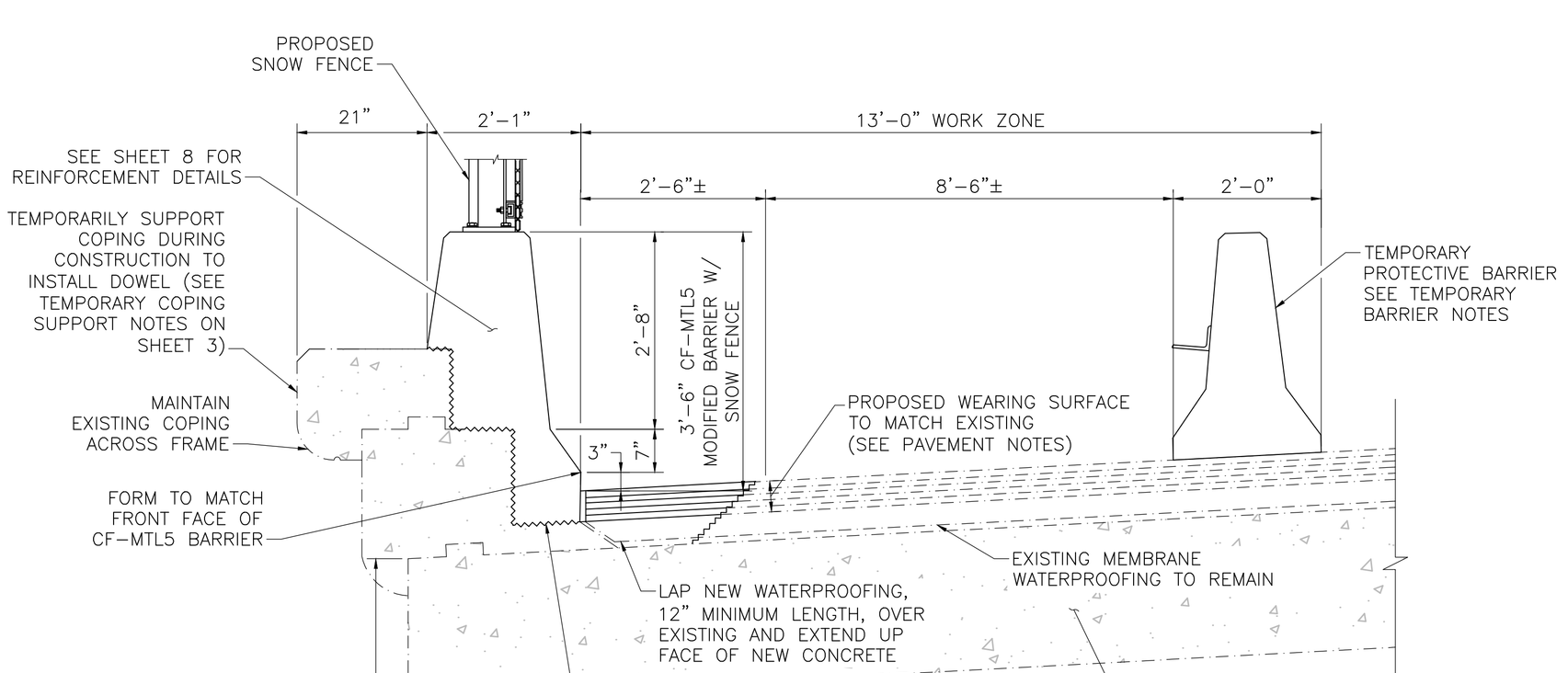
USE ONLY PRINTS OF LATEST DATE

SHEET 5 OF 16 SHEETS BRIDGE NO. W-01-008 (2FJ)

WAKEFIELD
I-95/ROUTE 128

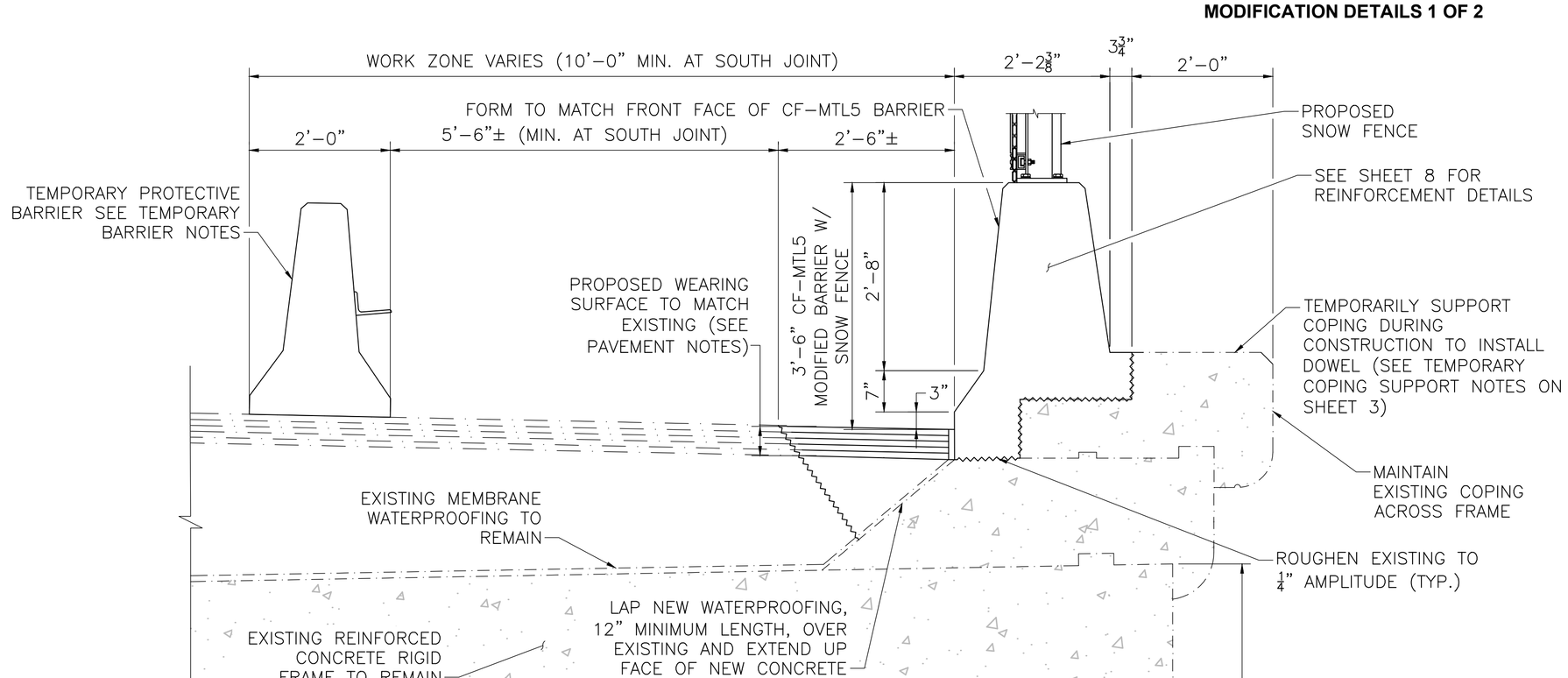
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MA	NFA	7	24
PROJECT FILE NO.	613196		

MODIFICATION DETAILS 1 OF 2



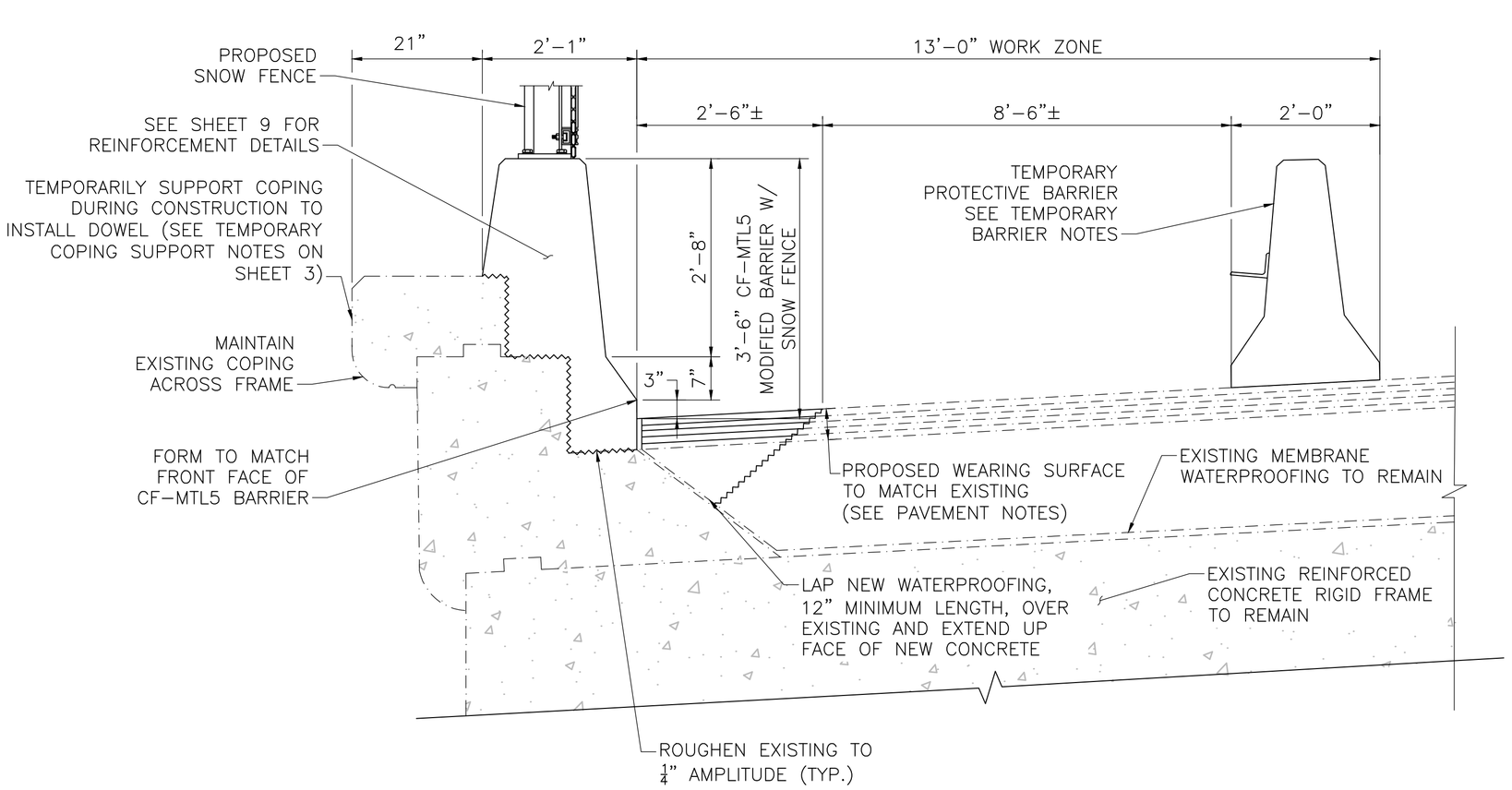
PROPOSED CF–MTL5 BARRIER AT SOUTHBOUND ROADWAY AT MIDSPAN (NORTH FASCIA)

NOT TO SCALE



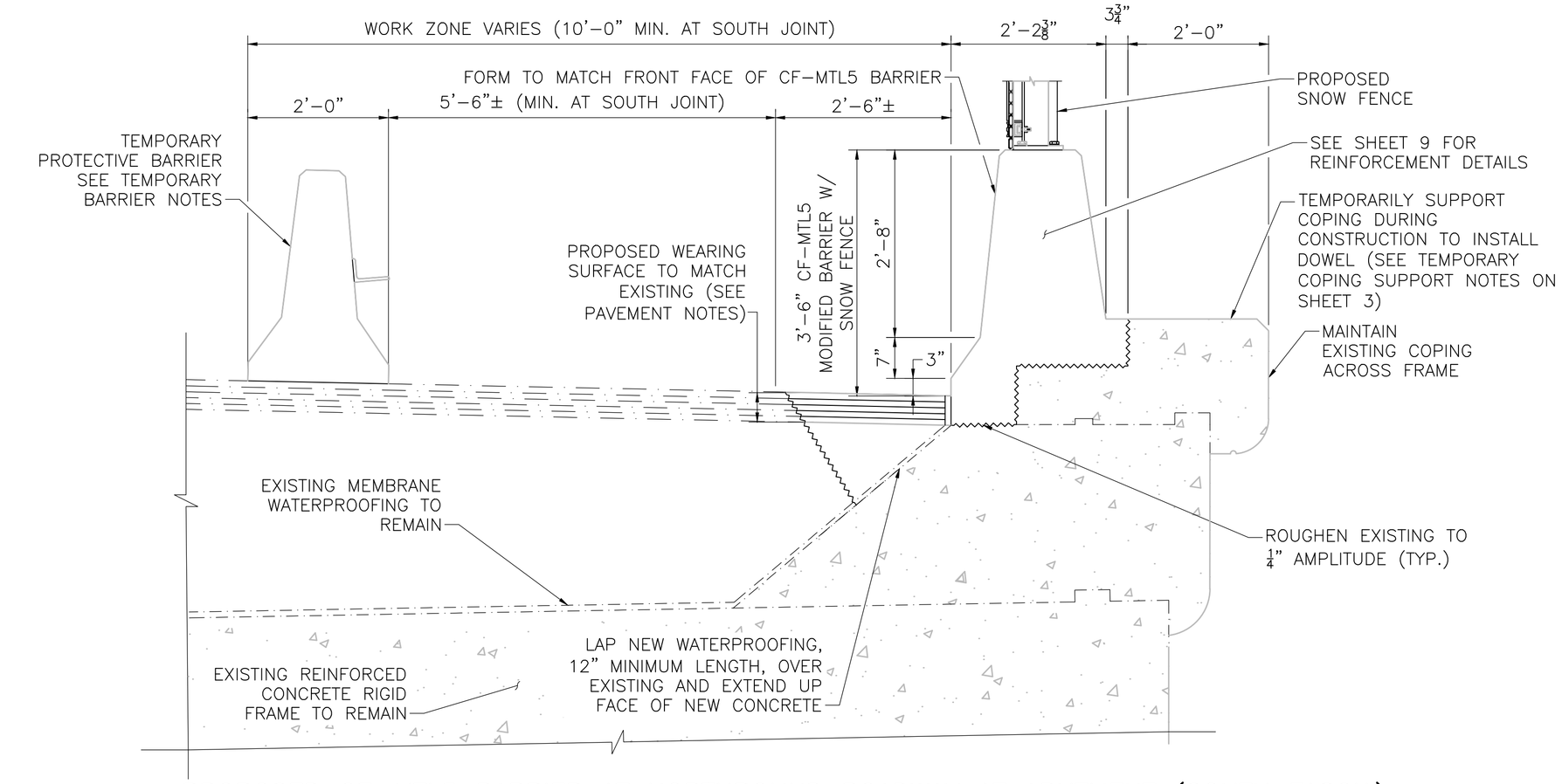
PROPOSED CF–MTL5 BARRIER AT NORTHBOUND ROADWAY AT MIDSPAN (SOUTH FASCIA)

SCALE: ¾" = 1'–0"



PROPOSED CF–MTL5 BARRIER AT SOUTHBOUND ROADWAY AT ABUTMENT (NORTH FASCIA)

NOT TO SCALE



PROPOSED CF–MTL5 BARRIER AT NORTHBOUND ROADWAY AT ABUTMENT (SOUTH FASCIA)

SCALE: ¾" = 1'–0"

PAVEMENT NOTES:

SEE SHEET 3 FOR PAVEMENT DETAILS.

CONCRETE REMOVAL NOTES:

SEE SHEET 3 FOR REMOVAL DETAILS.

TEMPORARY BARRIER NOTES:

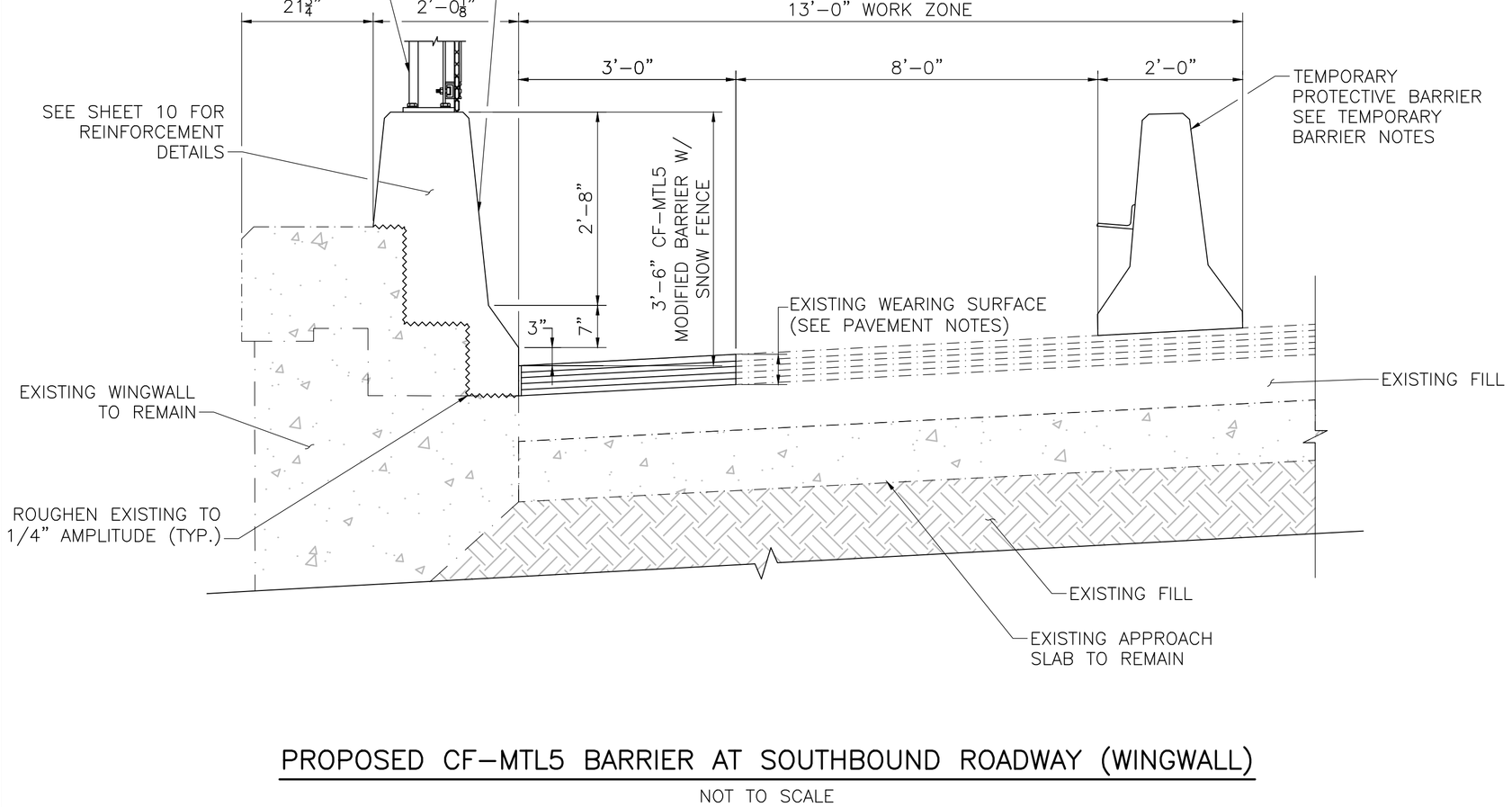
SEE SHEET 3 FOR BARRIER DETAILS.

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

6-7-MODIFICATION DETAILS.DWG Plotted on 21-Oct-2025 10:06 AM
Proposal No. 613196-133292
PS&E Resubmission 24-October-2025
A00806 - 9

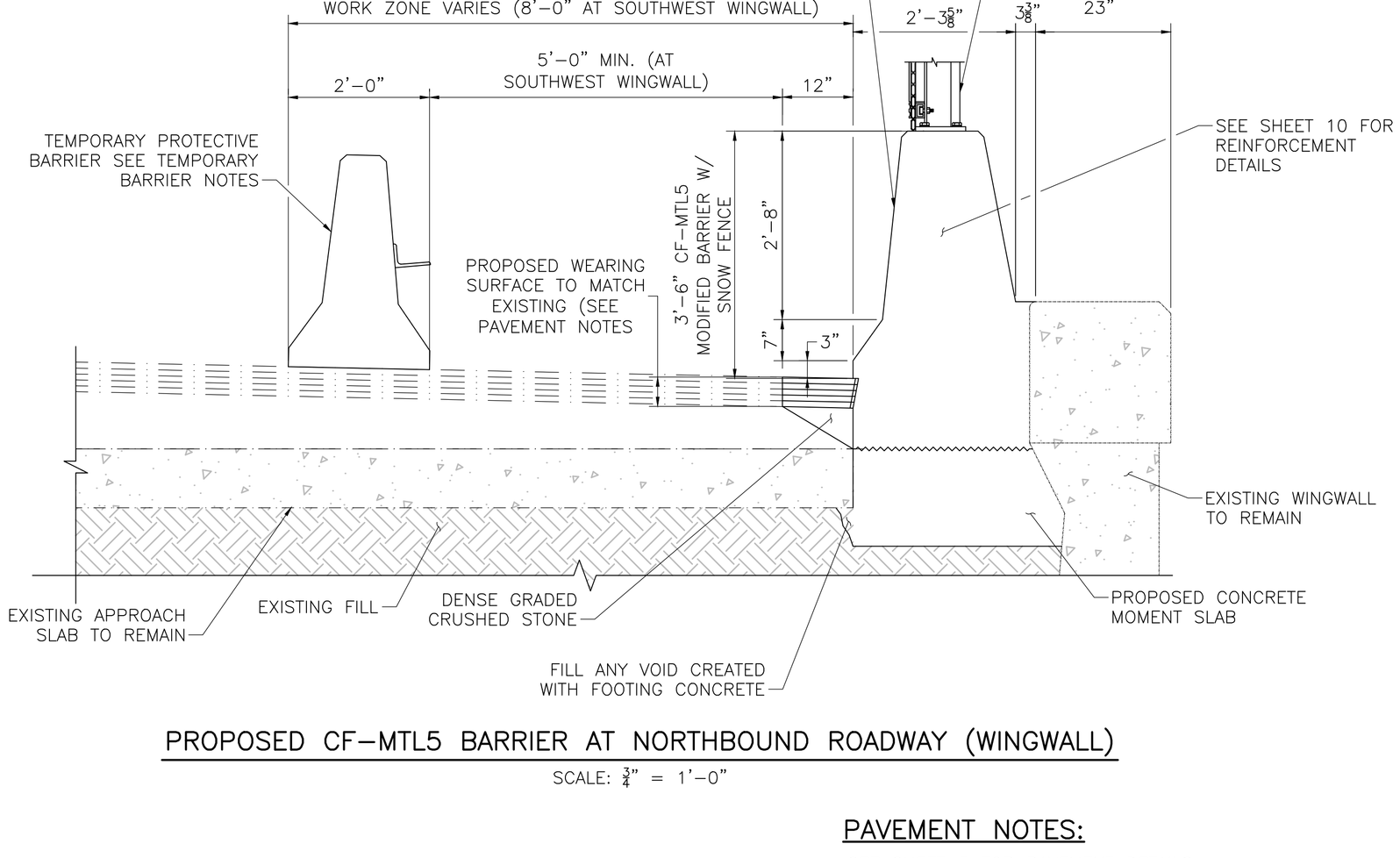
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	8	24
PROJECT FILE NO.	613196		

MODIFICATION DETAILS 2 OF 2



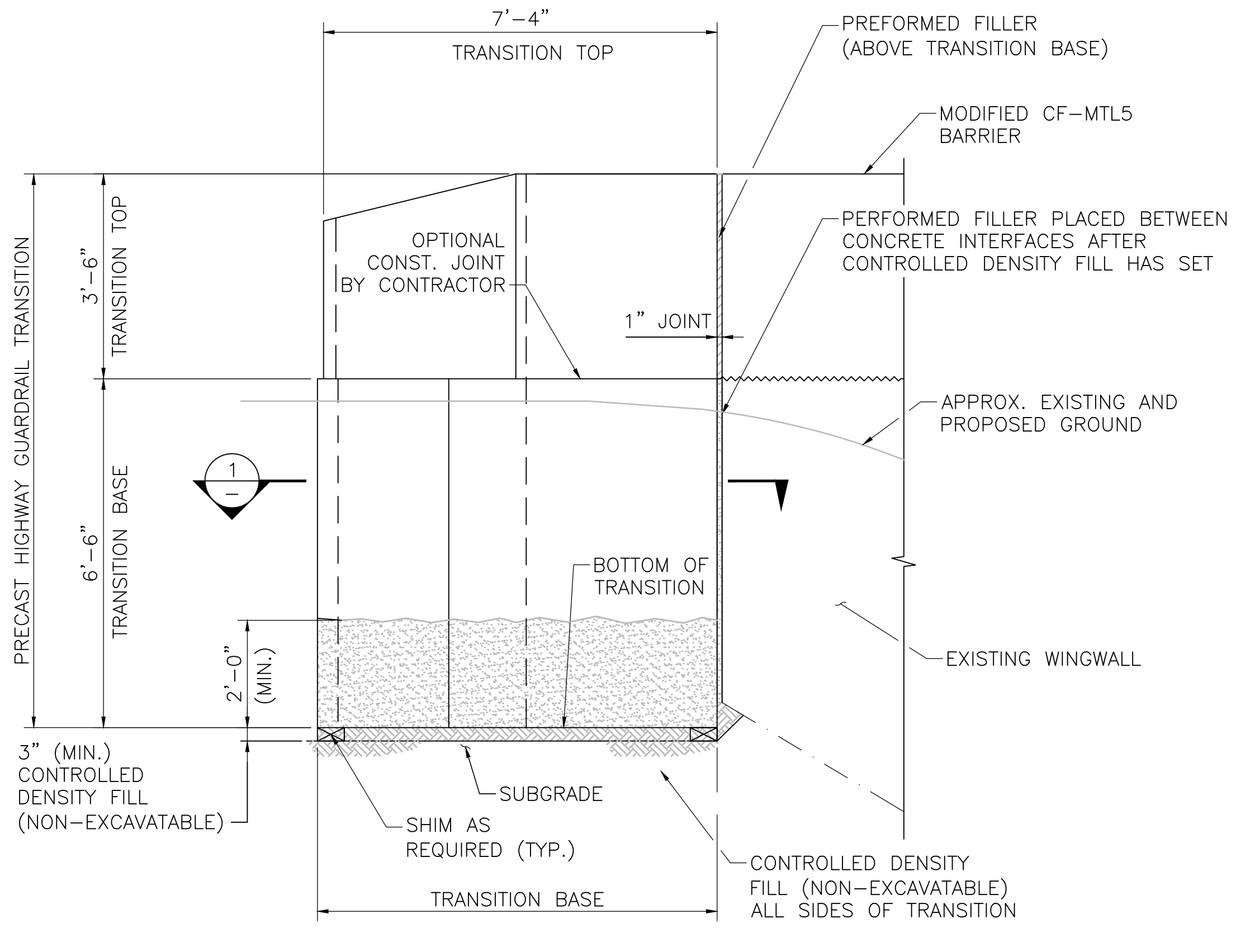
PROPOSED CF–MTL5 BARRIER AT SOUTHBOUND ROADWAY (WINGWALL)

NOT TO SCALE



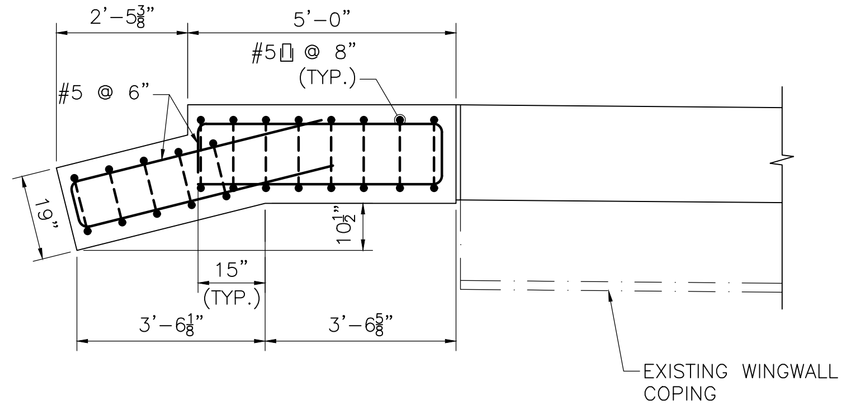
PROPOSED CF–MTL5 BARRIER AT NORTHBOUND ROADWAY (WINGWALL)

SCALE: ¾" = 1'–0"



GUARDRAIL TRANSITION BASE ELEVATION (INSIDE FACE)

SCALE: ½" = 1'–0"



SECTION 1/–

SCALE: ½" = 1'–0"

PAVEMENT NOTES:

SEE SHEET 3 FOR PAVEMENT DETAILS.

CONCRETE REMOVAL NOTES:

SEE SHEET 3 FOR REMOVAL DETAILS.

TEMPORARY BARRIER NOTES:

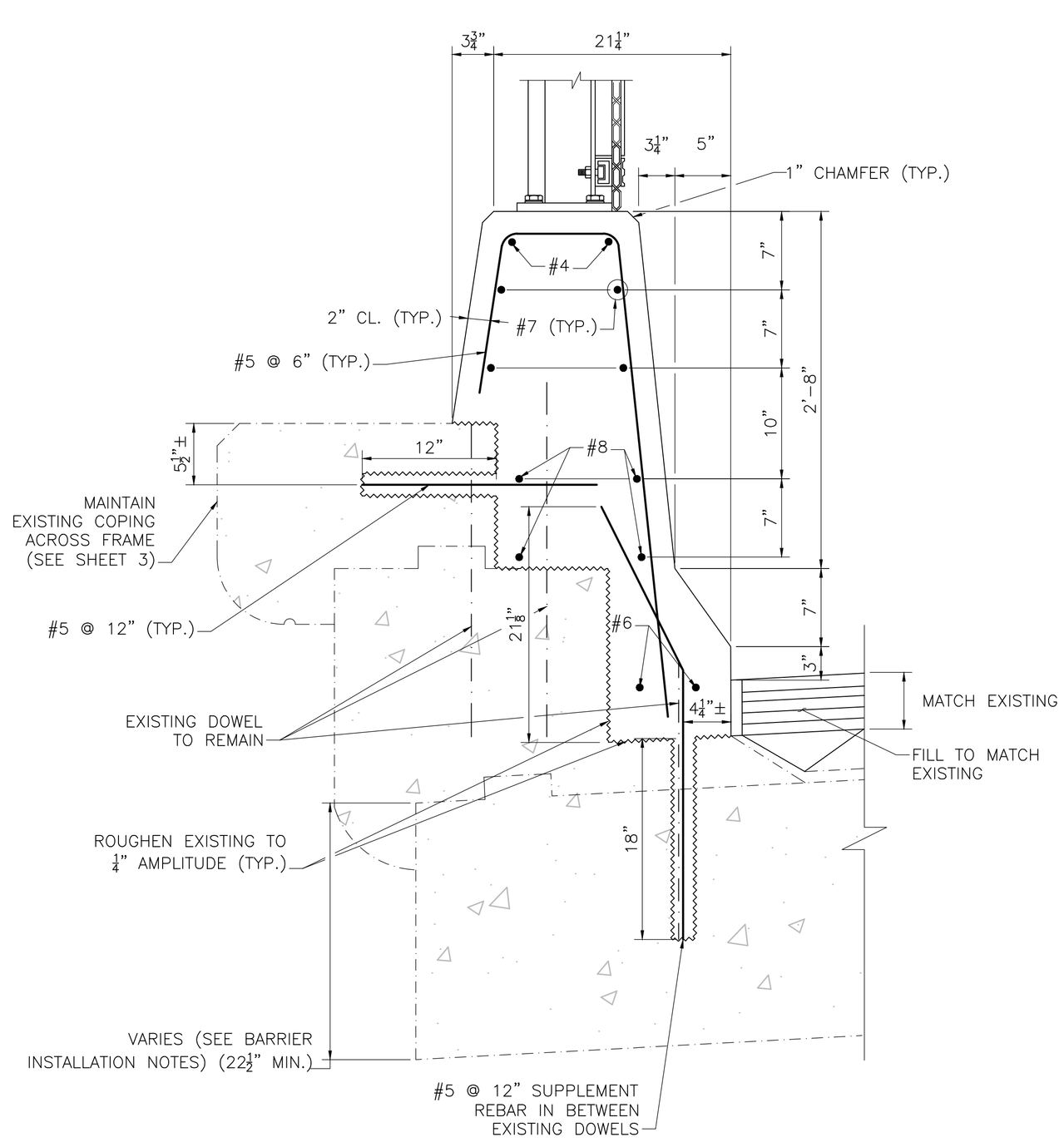
SEE SHEET 3 FOR BARRIER DETAILS.

TRANSITION BASE NOTES:

1. PRECAST HIGHWAY GUARDRAIL TRANSITION (HGT) SHALL BE 5000 PSI, ¾ IN, 685 HP CEMENT CONCRETE.
2. PRECAST GUARDRAIL TRANSITION BASE UNITS TO BE INSTALLED PRIOR TO CONSTRUCTING BASE OF WINGWALL BARRIERS.
3. GRAVEL BORROW SHALL BE PLACED AND THOROUGHLY COMPACTED TO THE GRADE OF 3" (MIN.) BELOW THE INTENDED BOTTOM OF THE PRECAST GUARDRAIL TRANSITION BASE AND TO A HEIGHT OF 2'–0" (MIN.) ON ALL SIDES OF THE TRANSITION BASE TO FORM A TRENCH IN WHICH TO SET THE TRANSITION. WHERE NO GRAVEL BORROW IS REQUIRED BELOW THE BASE, IT SHALL BE PLACED ON UNDISTURBED SOIL.
4. CONTRACTOR SHALL SET THE PRECAST GUARDRAIL TRANSITION TO THE REQUIRED ELEVATION AND ALIGNMENT, AND BACKFILL PRECAST GUARDRAIL TRANSITION WITH CONTROLLED DENSITY FILL (NON–EXCAVATABLE) TO THE ELEVATION SHOWN.
5. CONTRACTOR TO PROVIDE METHOD OF INSTALLATION OF HGT WITHIN THE CLEAR ZONE LIMITS BEHIND THE BARRIERS AT ALL CORNERS.
6. SEE ITEM 992.18 FOR MEASUREMENT AND PAYMENT.

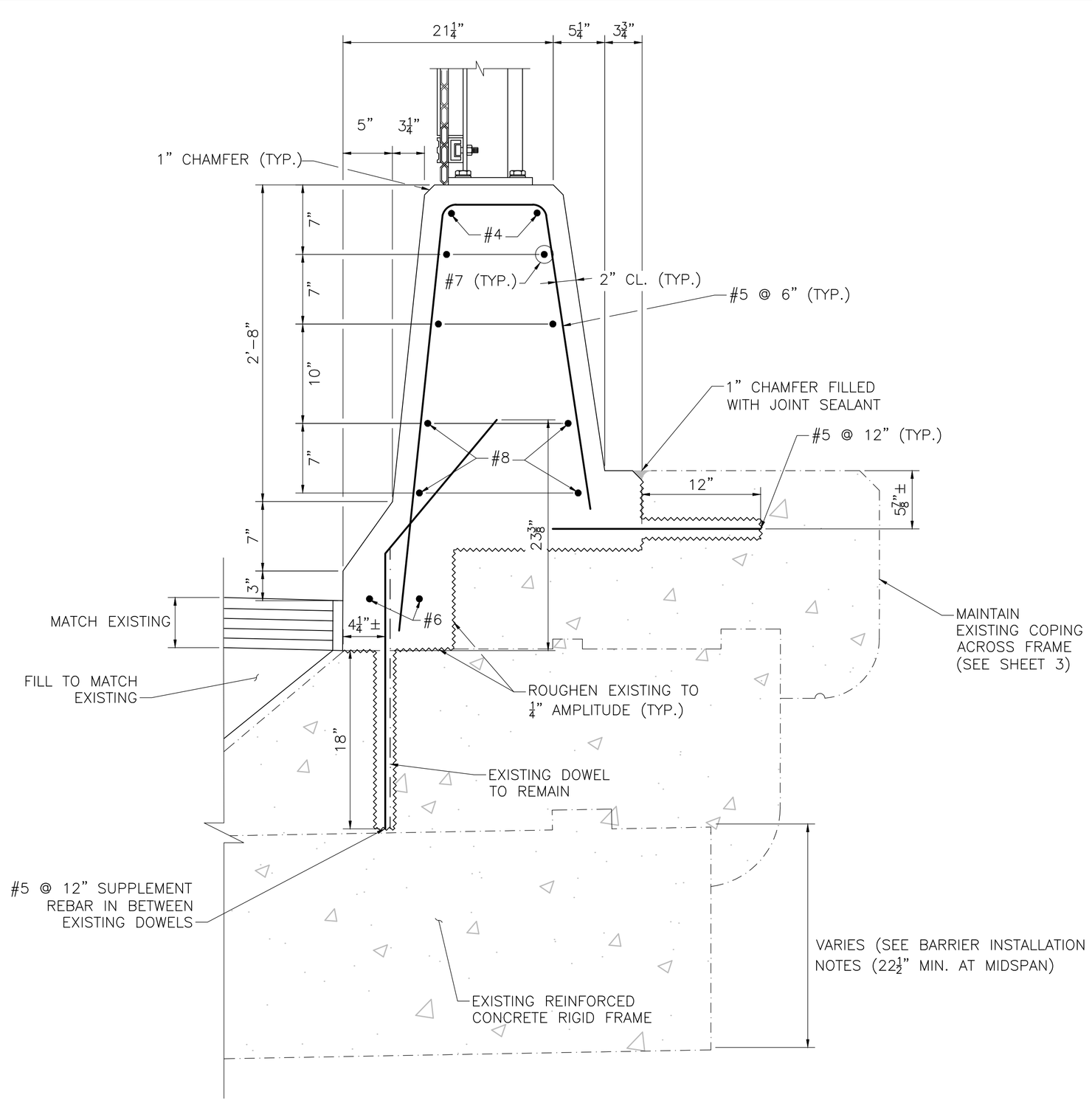
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

A00806 - 10
Plotted on 21-Oct-2025 10:07 AM
6-7-MODIFICATION DETAILS.DWG
Proposal No. 613196-133292
24-October-2025
PS&E Resubmission



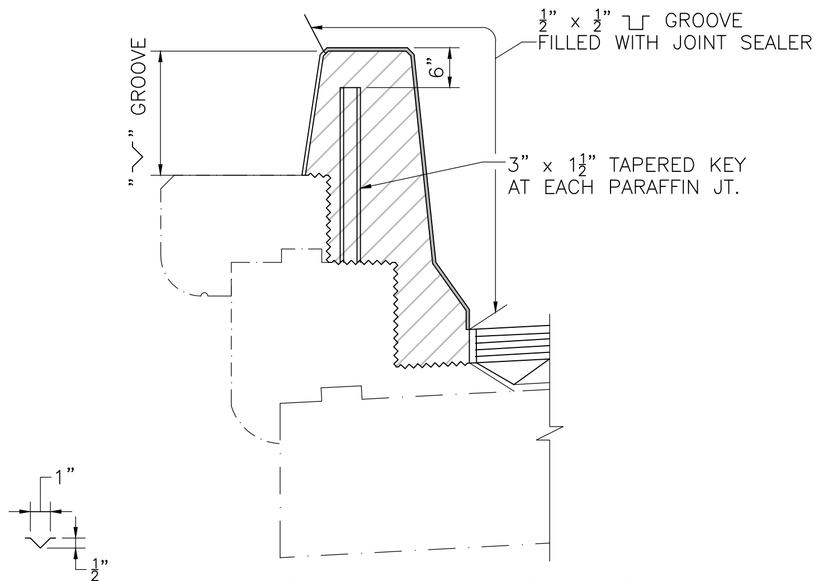
PROPOSED CF–MTL5 BARRIER REINFORCING DETAIL AT SOUTHBOUND ROADWAY AT MIDSPAN

SCALE: 1½" = 1'–0"



PROPOSED CF–MTL5 BARRIER REINFORCING DETAIL AT NORTHBOUND ROADWAY AT MIDSPAN

SCALE: 1½" = 1'–0"



PARAFIN JOINT DETAILS

SCALE: ¾" = 1'–0"

NOTES:

1. ALL CONCRETE ABOVE RIGID FRAMES SHALL BE POURED IN ALTERNATING SECTIONS WITH NOT LESS THAN 3 DAYS BETWEEN POURS.
2. DO NOT CARRY LONGITUDINAL BARS THROUGH THE PARAFFIN JOINTS. END THE REINFORCEMENT 2" CLEAR OF JOINT.
3. JOINT SHALL BE SQUARE TO FACE OF CURB OR COPING.

DRILL & GROUT NOTES:

1. LOCATIONS FOR DRILLING AND GROUTING SHALL BE CAREFULLY SELECTED TO AVOID EXISTING REINFORCING.
2. GROUT SHALL BE CHOSEN FROM MASSDOT QUALIFIED CONSTRUCTION MATERIALS LIST (QCML).

BARRIER INSTALLATION NOTES:

1. CONTRACTOR SHALL REMOVE EXISTING RAILING AND CONCRETE BASE TO LIMITS AS SHOWN ON THE PLANS AND AS DETERMINED BY THE ENGINEER. SEE NOTES ON SHEET 3 FOR CONCRETE REMOVAL.
2. DRILL AND GROUT DOWELS PRIOR TO POURING OF REPAIRED CONCRETE AREA AND BARRIER.
3. BARRIER AND REPAIRED AREA SHALL BE POURED SEPARATE WITH A CONSTRUCTION JOINT BETWEEN THE REPAIRED AREA AND THE BASE OF THE BARRIER. BASE REPAIR AREA ONLY APPLICABLE AT NORTHBOUND WINGWALLS (SEE SHEET 7).

WAKEFIELD
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STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	9	24
PROJECT FILE NO.	613196		

REINFORCING DETAILS 1 OF 3

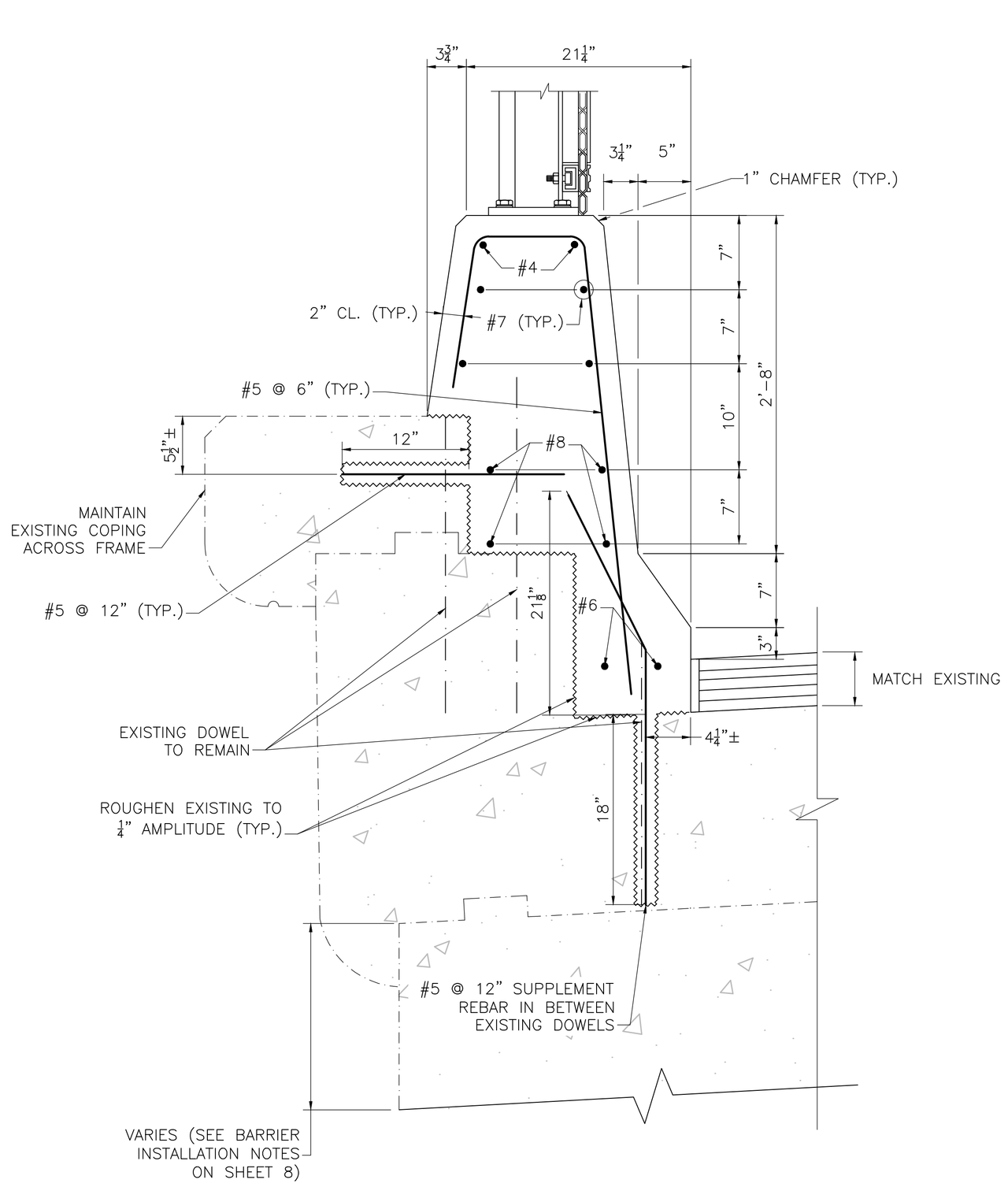
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

A00806 - 11
8-10-REINFORCING DETAILS.DWG Plotted on 24-Oct-2025 8:54 AM
Proposal No. 613196-133292
PS&E Resubmission 24-October-2025

WAKEFIELD
I-95/ROUTE 128

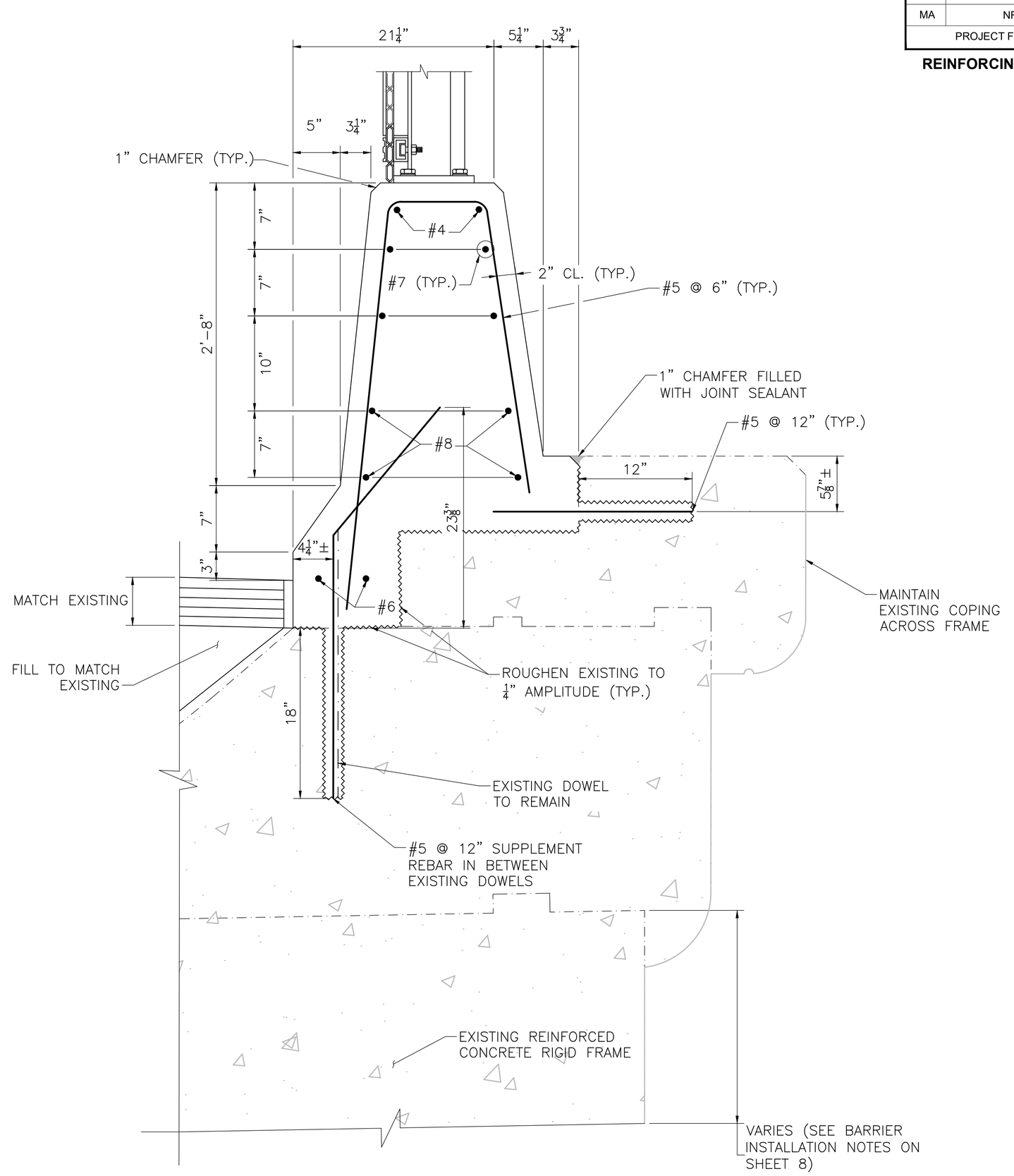
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	10	24
PROJECT FILE NO.	613196		

REINFORCING DETAILS 2 OF 3



PROPOSED CF–MTL5 BARRIER REINFORCING DETAIL AT SOUTHBOUND ROADWAY AT ABUTMENT

SCALE: 1½" = 1'–0"



PROPOSED CF–MTL5 BARRIER REINFORCING DETAIL AT NORTHBOUND ROADWAY AT ABUTMENT

SCALE: 1½" = 1'–0"

DRILL & GROUT NOTES:

1. SEE SHEET 8 FOR DRILL & GROUT NOTES.

BARRIER INSTALLATION NOTES:

1. SEE SHEET 8 FOR BARRIER INSTALLATION NOTES.

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

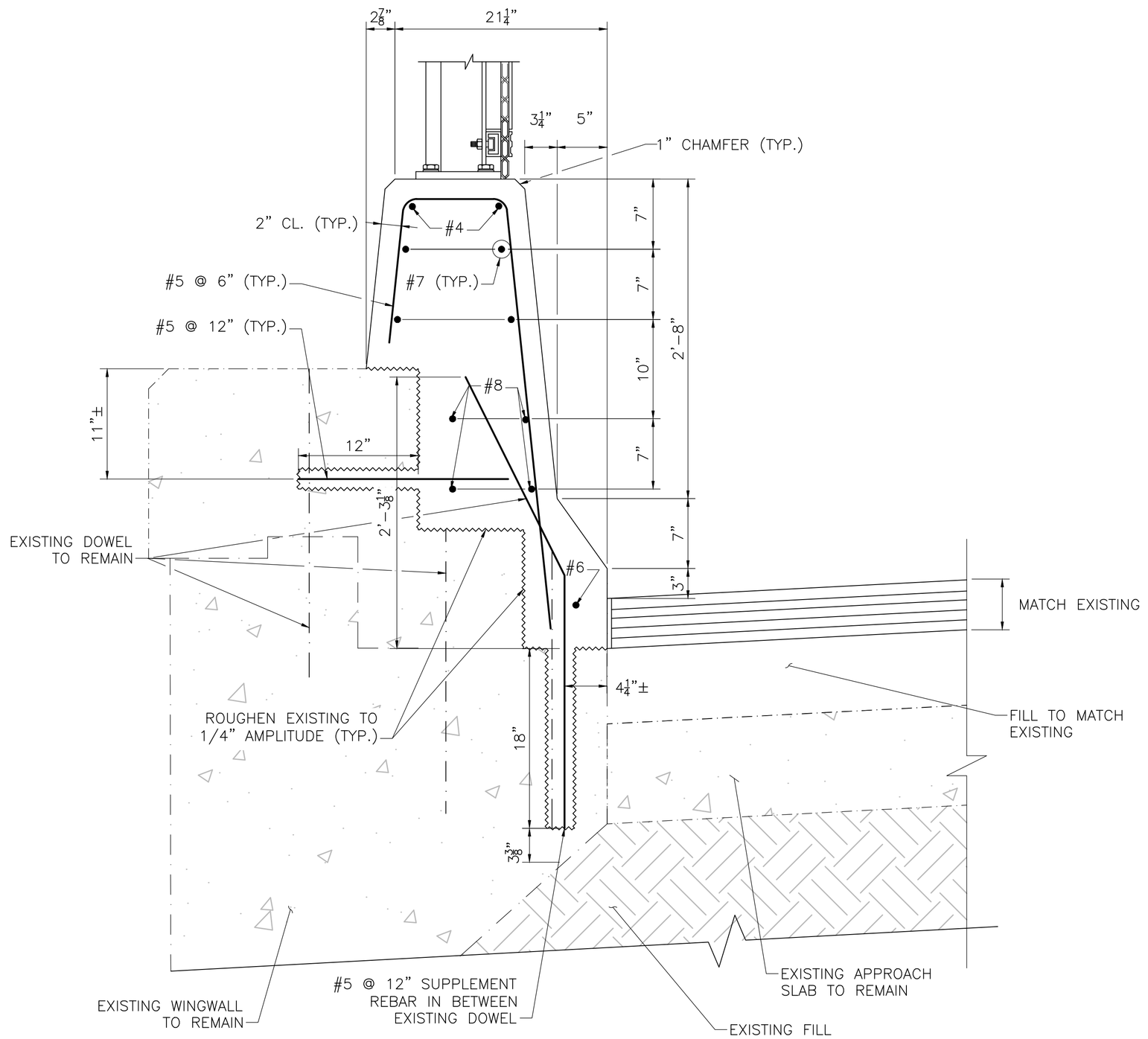
8-10-REINFORCING DETAILS.DWG Plotted on 24-Oct-2025 8:32 AM
Proposal No. 613196-133292
PS&E Resubmission 24-October-2025
A00806 - 12

WAKEFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	11	24
PROJECT FILE NO.	613196		

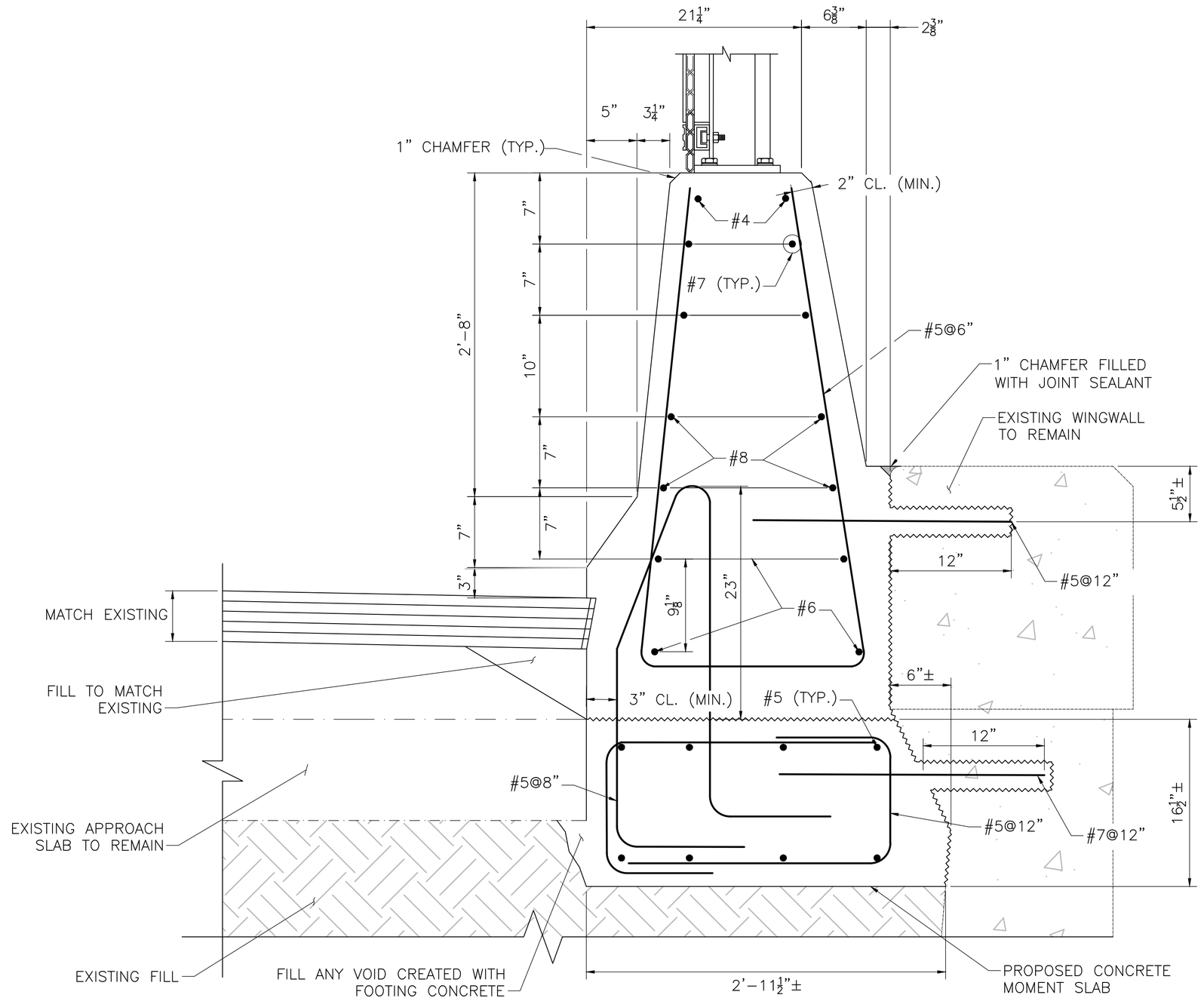
REINFORCING DETAILS 3 OF 3

8-10-REINFORCING DETAILS.DWG Plotted on 21-Oct-2025 9:36 AM



PROPOSED MODIFIED CF–MTL5 BARRIER REINFORCING DETAIL AT SOUTHBOUND ROADWAY (WINGWALL)

SCALE: 1½" = 1'–0"



PROPOSED MODIFIED CF–MTL5 BARRIER REINFORCING DETAIL AT NORTHBOUND ROADWAY (WINGWALL)

SCALE: 1½" = 1'–0"

DRILL & GROUT NOTES:

1. SEE SHEET 8 FOR DRILL & GROUT NOTES.

BARRIER INSTALLATION NOTES:

1. SEE SHEET 8 FOR BARRIER INSTALLATION NOTES.

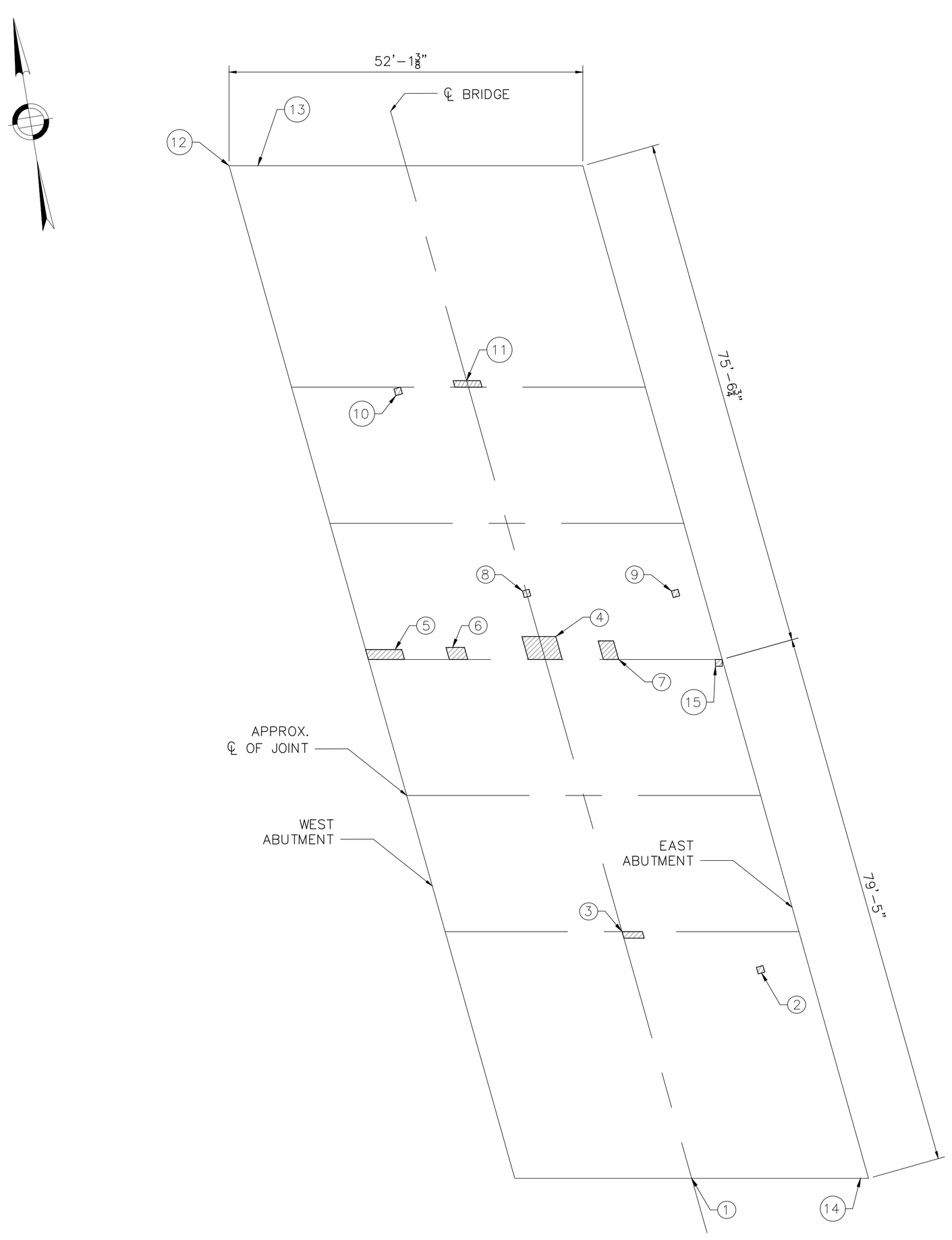
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

24-October-2025 PS&E Resubmission

WAKEFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	12	24
PROJECT FILE NO.	613196		

CONCRETE REPAIRS 1 OF 3



UNDERSIDE OF DECK PLAN (2FJ/I-95 NB & SB)

SCALE: $\frac{3}{32}$" = 1'-0"

CONCRETE REPAIR NOTES:

1. SEE SHEET 13 FOR CONCRETE REPAIR NOTES.

REPAIR AREA #	LENGTH	WIDTH	DEPTH	DEFICIENCY
1	FULL LENGTH	N/A	4"	SPALL/DELAMINATION WITH EXPOSED REBAR (COPING)
2	5-1/2" DIA.	N/A	3"	SPALL WITH EXPOSED REBAR
3	3'-0"	12"	3"	SPALL
4	5'-0"	3'-6"	3"	SPALL/DELAMINATION WITH EXPOSED REBAR
5	5'-4"	18"	2"	SPALL/DELAMINATION
6	19"	16"	1-1/2"	SPALL/DELAMINATION
7	2'-3"	2'-10"	1-1/2"	SPALL/DELAMINATION
8	UP TO 12"	UP TO 12"	UP TO 4"	SPALL WITH EXPOSED REBAR
9	7" DIA.	N/A	2-1/2"	SPALL WITH EXPOSED REBAR
10	1'-0"	2-1/2"	1/4"	SPALL
11	3'-0"	3"	3"	SPALL
12	16"	N/A	8"	SPALL WITH EXPOSED REBAR
13	UP TO 3-1/2" DIA.	N/A	UP TO 3/4"	TWO (2) SPALLS
14	3" DIA.	N/A	1/2"	SPALL WITH EXPOSED REBAR
15	6"	2'	3"	SPALL

LEGEND:

SPALLED/DELAMINATED CONCRETE AREAS TO BE REPAIRED

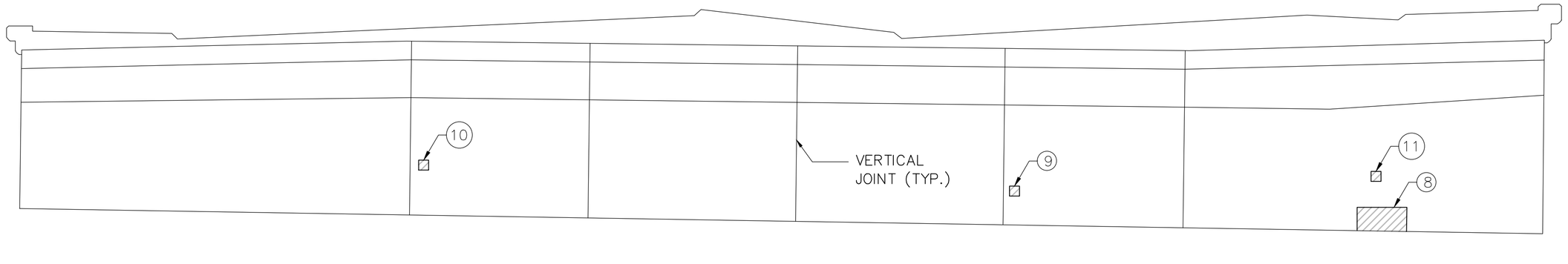
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

11-13-CONCRETE REPAIRS.DWG Plotted on 21-Oct-2025 9:38 AM
PS&E Resubmission 24-October-2025
Proposal No. 613196-133292
A00806 - 14

WAKEFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	13	24
PROJECT FILE NO.	613196		

CONCRETE REPAIRS 2 OF 3



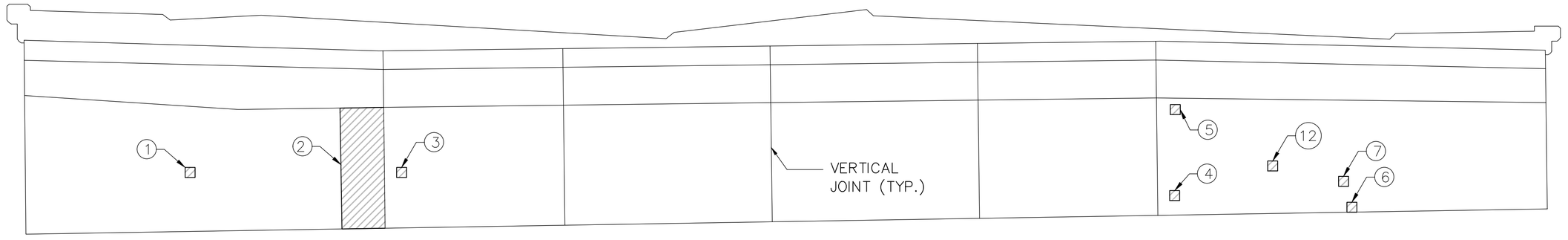
EAST ABUTMENT ELEVATION

SCALE: $\frac{1}{8}$" = 1'–0"

CONCRETE REPAIR NOTES:

1. SEE SHEET 13 FOR CONCRETE REPAIR NOTES.

REPAIR AREA #	HEIGHT	WIDTH	DEPTH	DEFICIENCY
1	5"	4"	1/2"	SPALL WITH EXPOSED REBAR
2	FULL HEIGHT	UP TO 4'–6"	UP TO 2"	DELAMINATION/SPALL WITH EXPOSED REBAR
3	UP TO 3" DIA.	N/A	1/4"	THREE (3) SPALLS
4	10"	5"	1/2"	SPALL
5	2" DIA.	N/A	1/4"	SPALL WITH EXPOSED REBAR
6	16"	7"	3/4"	SPALL
7	4"	7"	1/2"	SPALL WITH EXPOSED REBAR
8	2'–4"	5'–0"	N/A	DELAMINATION
9	UP TO 2" DIA	N/A	1/4"	SPALL WITH EXPOSED REBAR
10	UP TO 3" DIA.	N/A	1/2"	FOUR (4) SPALLS WITH EXPOSED REBAR
11	3" DIA.	N/A	1/2"	SPALL WITH EXPOSED REBAR
12	5"	3"	1/2"	SPALL WITH EXPOSED REBAR



WEST ABUTMENT ELEVATION

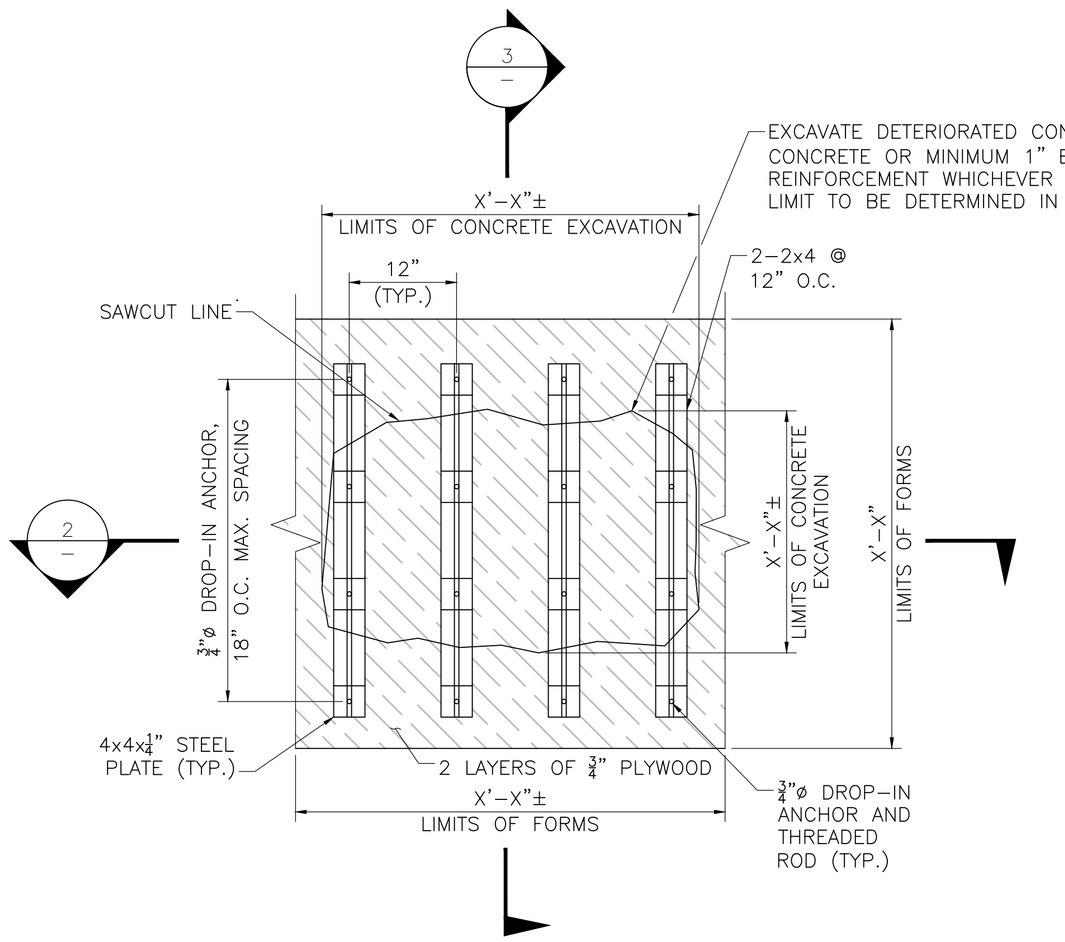
SCALE: $\frac{1}{8}$" = 1'–0"

LEGEND:

SPALLED/DELAMINATED CONCRETE AREAS TO BE REPAIRED

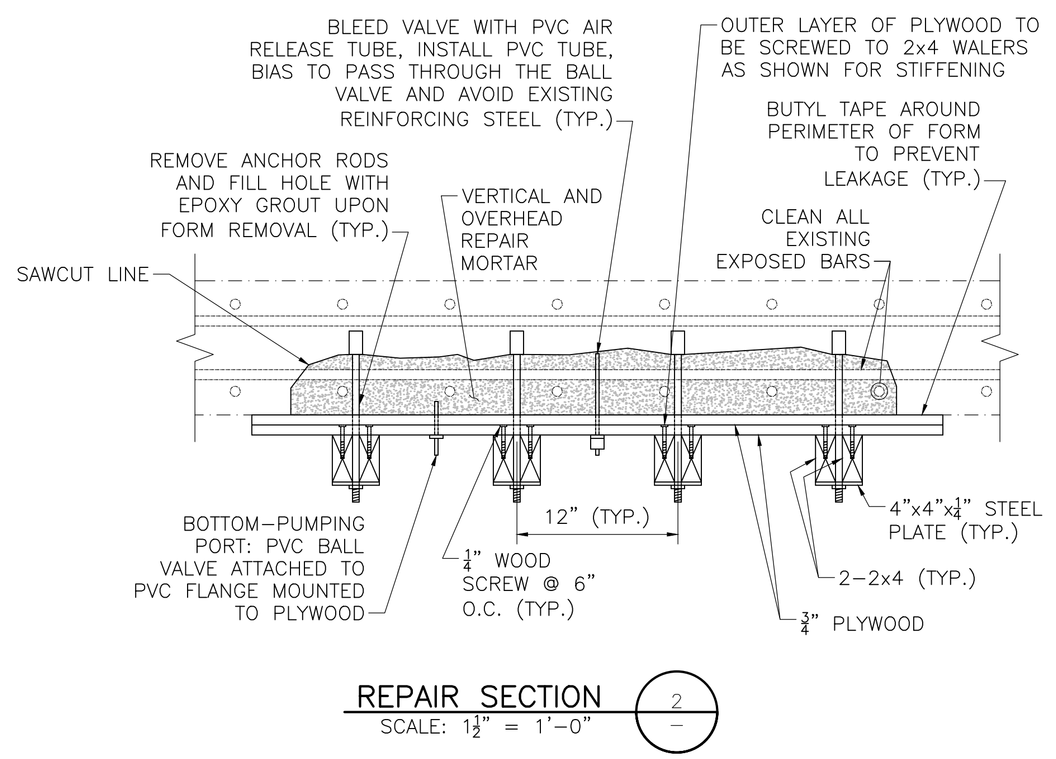
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
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11-13-CONCRETE REPAIRS.DWG Plotted on 21-Oct-2025 9:40 AM
Proposal No. 613196-133292
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A00806 - 15



FORM FRAMING PLAN

SCALE: 1" = 1'-0"

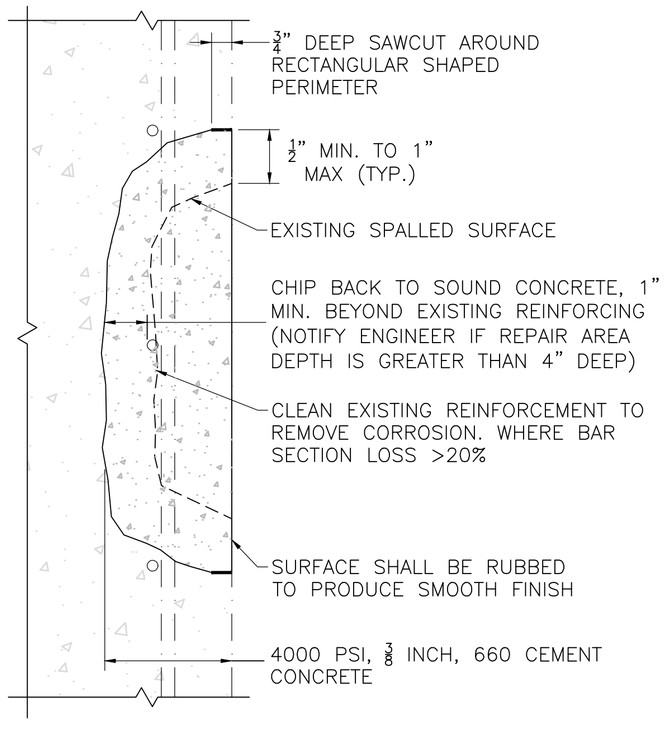


REPAIR SECTION

SCALE: 1½" = 1'-0"

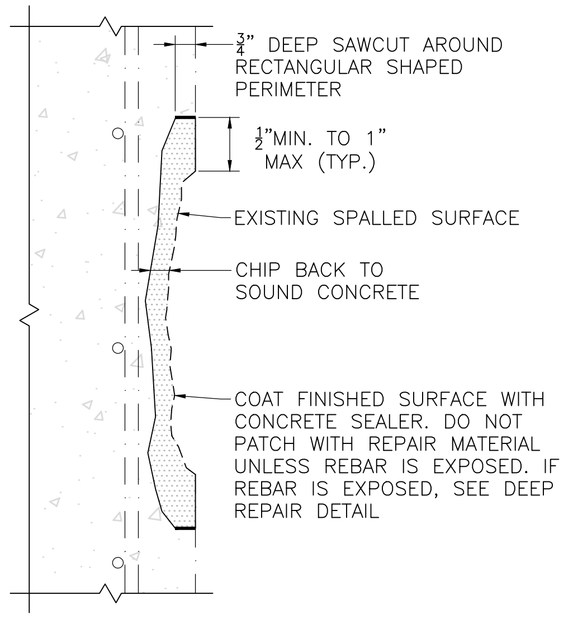
2

NOTE:
CONTRACTOR SHALL MAINTAIN EXISTING VERTICAL CLEARANCES AT BRIDGE WHILE FORMWORK IS IN PLACE. IF EXISTING VERTICAL CLEARANCES CANNOT BE MAINTAINED, CONTRACTOR SHALL PLACE TEMPORARY SIGNAGE AT BRIDGE AND IN ADVANCE OF BRIDGE TO ALERT VEHICLES AND TRUCKS OF THE REDUCED CLEARANCE. FORMWORK MAY NOT BE PLACED SUCH THAT THE TEMPORARY VERTICAL CLEARANCE IS REDUCED TO LESS THAN 13'-9". ENGINEER SHALL APPROVE AFTER FORM IS SET.



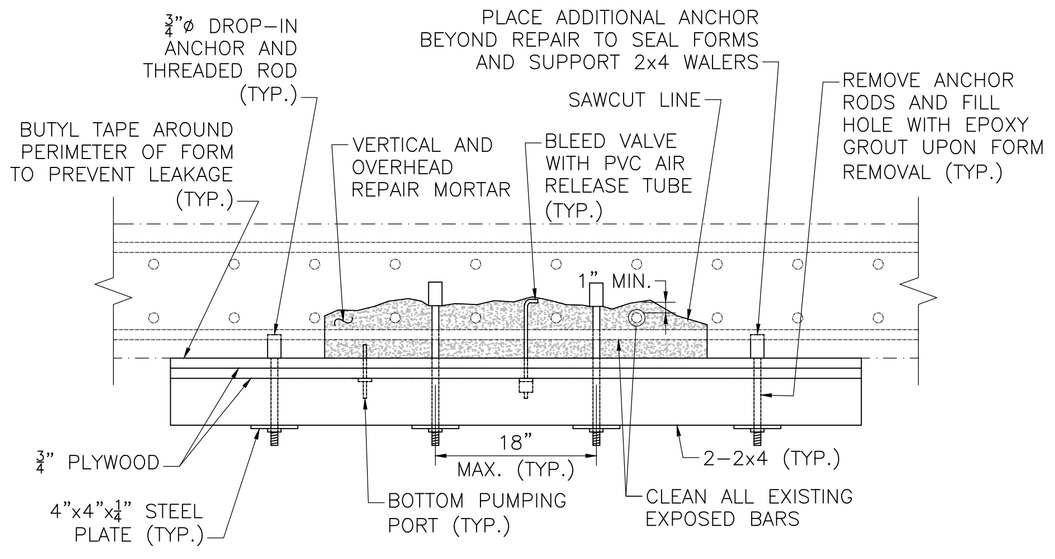
DEEP REPAIR WITH EXPOSED REBAR ALONG FRAME LEGS

(AVERAGE DEPTH OF REPAIR IS GREATER THAN 2" OR SPALL WITH EXPOSED REBAR.)



CONCRETE REMOVAL OF SHALLOW SPALLS

(AVERAGE DEPTH OF SPALL IS LESS THAN 2" AND NO EXPOSED REBAR.)



REPAIR SECTION

SCALE: 1½" = 1'-0"

3

NOTE:
CONTRACTOR SHALL MAINTAIN EXISTING VERTICAL CLEARANCES AT BRIDGE WHILE FORMWORK IS IN PLACE. IF EXISTING VERTICAL CLEARANCES CANNOT BE MAINTAINED, CONTRACTOR SHALL PLACE TEMPORARY SIGNAGE AT BRIDGE AND IN ADVANCE OF BRIDGE TO ALERT VEHICLES AND TRUCKS OF THE REDUCED CLEARANCE. FORMWORK MAY NOT BE PLACED SUCH THAT THE TEMPORARY VERTICAL CLEARANCE IS REDUCED TO LESS THAN 13'-9". ENGINEER SHALL APPROVE AFTER FORM IS SET.

CURING
1. LEAVE THE FORM WORK IN PLACE UNTIL THE COMPRESSIVE STRENGTH OF THE VERTICAL AND OVERHEAD REPAIR MORTAR REACHES 2,500 PSI.
2. IF HAND PATCHING IS REQUIRED TO FILL THE PORT AREA, DRY-PACK WITH A NON-SAG MORTAR.
3. THE FORMS SHALL BE LEFT IN PLACE FOR A MINIMUM OF 5 DAYS. ONCE THE FORMS ARE STRIPPED CURING COMPOUND SHALL BE APPLIED TO THE REPAIR IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

CONCRETE SEALER
1. AT SHALLOW REPAIRS, NO REPAIR MORTAR OR REPAIR CONCRETE SHALL BE APPLIED. REMOVE LOOSE CONCRETE.

CONCRETE REPAIR NOTES:

1. THE CONTRACTOR SHALL EXERCISE CARE WHEN REMOVING CONCRETE AROUND REINFORCEMENT TO ONLY REMOVE DETERIORATED CONCRETE AND TO LIMIT THE SOUND CONCRETE REMOVED TO THE MINIMUM NECESSARY TO PRODUCE A GOOD REPAIR.
2. THE CONTRACTOR SHALL ESTABLISH LIMITS OF VARIOUS REPAIRS AS SHOWN ON THE PLANS AND AT THE DIRECTION OF THE ENGINEER. THE LOCATIONS SHOWN ON THE PLANS ARE BASED UPON RECORDS OF BRIDGE INSPECTIONS AND OBSERVATIONS FROM THE GROUND ARE ARE NOT GUARANTEED. THE LOCATION AND EXTENT OF ALL CONCRETE REPAIRS ARE TO BE FIELD VERIFIED AND APPROVED BE THE ENGINEER AFTER THE CONTRACTOR HAS SOUNDED AND MARKED OUT THE REPAIR AREAS. REASONABLY FOLLOW OUTLINES OF DETERIORATION PREFERABLY WITH SQUARE CORNERS.
3. THE LIMITS OF THE REPAIRS SHALL BE SAWCUT ALONG NEAT LINES TO A DEPTH OF ¾" TO PRODUCE A CLEAN EDGE.
4. REMOVE DETERIORATED AND UNSOUND CONCRETE AS WELL AS SOUND CONCRETE WHERE NECESSARY TO A MINIMUM OF 1" BEYOND SURFACE REINFORCEMENT.
5. EXPOSED REINFORCEMENT TO BE CLEANED BY MECHANICAL CLEANING AND HIGH PRESSURE WASHING WITH WATER THAT CONTAINS NO DETERGENTS OF BOND INHIBITING CHEMICALS. WHERE ACTIVE CORROSION HAS OCCURRED (THAT WHICH WOULD INHIBIT BONDING) SANDBLAST STEEL TO WHITE METAL FINISH.
6. A NEW REINFORCEMENT BAR SHALL BE PLACED TO SUPPLEMENT AN EXISTING REINFORCEMENT BAR WHEN AN EXISTING BAR HAS A SECTION LOSS OF 20% OF MORE OF THE ORIGINAL CROSS SECTION, AS DETERMINED BY THE ENGINEER, OR THE EXISTING REINFORCEMENT IS BROKEN. IN LIEU OF SUPPLEMENTING A BAR ADJACENT TO A DETERIORATED BAR, THE CONTRACTOR MAY CUT OUT THE DETERIORATED BAR AND MECHANICALLY SPLICE THE NEW BAR TO EXISTING REINFORCEMENT.
7. AFTER REMOVAL AND EDGE PREPARATION ARE COMPLETE, REMOVE BOND INHIBITING MATERIALS (DIRT, GREASE, LOOSELY BONDED AGGREGATE) BY ABRASION BLASTING OR HIGH PRESSURE WATER BLASTING WITH WATER THAT CONTAINS NO DETERGENTS OR BOND INHIBITING CHEMICALS. CHECK THE CONCRETE SURFACES AFTER CLEANING TO INSURE THAT THE SURFACE IS FREE FROM ADDITIONAL LOOSE AGGREGATE OR THAT ADDITIONAL DELAMINATIONS ARE NOT PRESENT.
8. AT THE TIME THE REPAIR CONCRETE/MORTAR IS APPLIED, THE EXISTING CONCRETE SUBSTRATE SHOULD BE SATURATED SURFACE DRY.
9. WHERE CONCRETE REMOVAL AND REPLACEMENT NECESSITATES ADJACENT SEPARATE CONCRETE PLACEMENTS, CONCRETE REMOVAL SHALL NOT BE ALLOWED WITHIN 1 FOOT OF ADJACENT REPAIR AREAS. ADJACENT AREAS WHERE THIS 1 FOOT BUFFER IS NOT ATTAINABLE SHALL BE COMBINED INTO A SINGLE REPAIR AREA.
10. IN SEQUENCING WORK, THE CONTRACTOR SHALL NOT BEGIN CONCRETE REMOVAL AT A LOCATION ADJACENT TO A COMPLETED REPAIR UNTIL A MINIMUM OF 7 CURING DAYS HAVE PASSED.
11. ALL HORIZONTAL AND VERTICAL CONCRETE SURFACES IN CONTACT WITH REPAIR MATERIAL SHALL BE FREE OF OIL, GREASE, LAITANCE, AND OTHER CONTAMINANTS.
12. ALL HORIZONTAL AND VERTICAL CONCRETE SURFACES MUST BE CLEAN, SOUND AND ROUGH TO ENSURE A GOOD BOND.
13. THE CONTRACTOR SHALL MAINTAIN UNDERDECK LIGHTING AND COMMUNICATION CABLES. REMOVAL AND REATTACHMENT OF FIXTURES HOLDING COMMUNICATION LINES AND STREET LIGHTING SHALL BE INCIDENTAL TO CONCRETE REPAIRS.
14. REPAIR CONCRETE SHALL MEET THE REQUIREMENTS OF ITEM 905.001.

FORMWORK
1. FORMS DESIGNED FOR 12 PSI PRESSURE.
2. INSTALL FORMS ON THE FACE OF EACH REPAIR AREA. GROUT PORTS TO BE PLACED AT 4'-0" MAX. ON CENTER EACH WAY MAX. VENT TUBES TO BE PLACED AT 2'-0" MAX. ON CENTER EACH WAY.
3. FORMS ARE TO BE WATERTIGHT. PREFORMED FOAM GASKETS OR CAST IN PLACE FOAM SHALL BE USED TO MATCH SURFACES.
4. AT REPAIRS ADJACENT TO THE JOINTS IN THE RIGID FRAME, MAINTAIN THE EXISTING JOINT OPENING OF 1-1/2".

MIXING AND PUMPING
1. SATURATE HOST CONCRETE SUBSTRATE USING A WATER HOSE THROUGH FORM PORTS PRIOR TO PLACING GROUT. AT TIME OF GROUT PLACEMENT, SUBSTRATE SHALL BE SATURATED SURFACE DRY WITH NO STANDING WATER.
2. VERTICAL AND OVERHEAD REPAIR MORTAR SHALL BE USED TO MAKE THE REPAIRS AND SHALL BE MIXED ACCORDING TO THE MANUFACTURER SPECIFICATIONS AND IN ACCORDANCE WITH THE MASSDOT QCML.
3. THE PUMP MUST BE CAPABLE OF CONTINUOUS EVEN FLOW OF MATERIALS TO THE REPAIR AREA WITHOUT HAVING ANY LINE SURGE. LIVE SURGE WILL RESULT IN AIR VOIDS AND POSSIBLE AGGREGATE SEGREGATION.
4. PRIOR TO PUMPING MATERIALS, ALL HOSES MUST BE WET OUT WITH CLEAN WATER TO ENSURE INITIAL FLOW PROPERTIES ARE MAINTAINED.
5. THE PUMPING DISTANCE MUST BE KEPT TO A MINIMUM. THE PUMPING HOSE SHALL BE A MINIMUM 3 TIMES THE SIZE OF THE LARGEST AGGREGATE ON THE VERTICAL AND OVERHEAD REPAIR MORTAR (⅜"X3).
6. ADDITIONAL WATER BEYOND THE RECOMMENDED LEVEL WILL NOT INCREASE THE FLOW CHARACTERISTICS OF THE VERTICAL AND OVERHEAD REPAIR MORTAR. KEEP PUMPING PRESSURE TO A MINIMUM NECESSARY TO FILL CAVITY.

WAKEFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	14	24
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CONCRETE REPAIRS 3 OF 3

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
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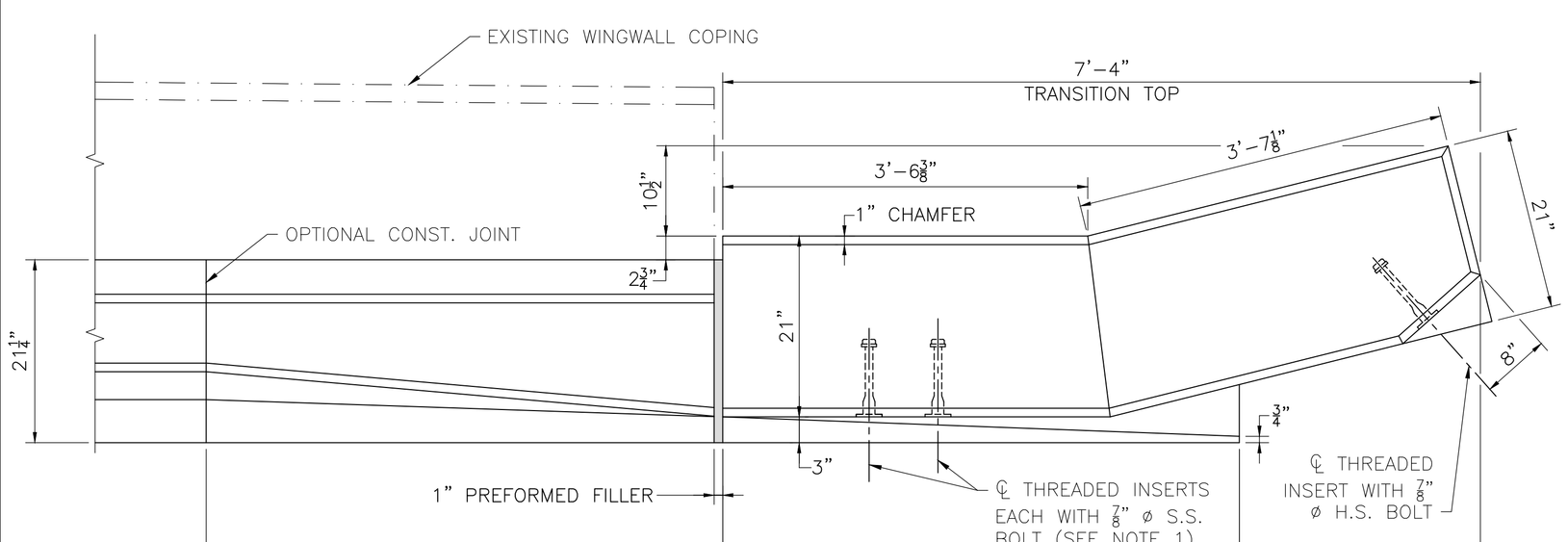
SHEET 13 OF 16 SHEETS BRIDGE NO. W-01-008 (2FJ)

A00806 - 16

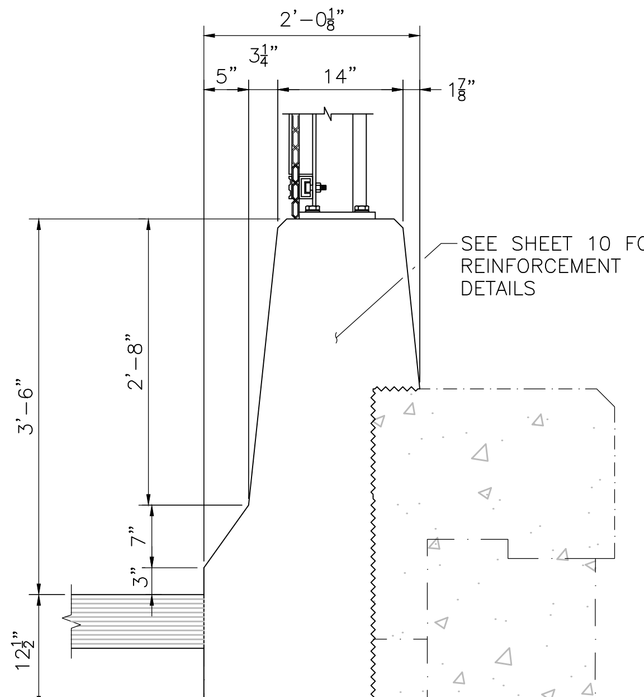
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11-13-CONCRETE REPAIRS.DWG
PS&E Resubmission 24-October-2025
Proposal No. 613196-133292

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MA	NFA	15	24
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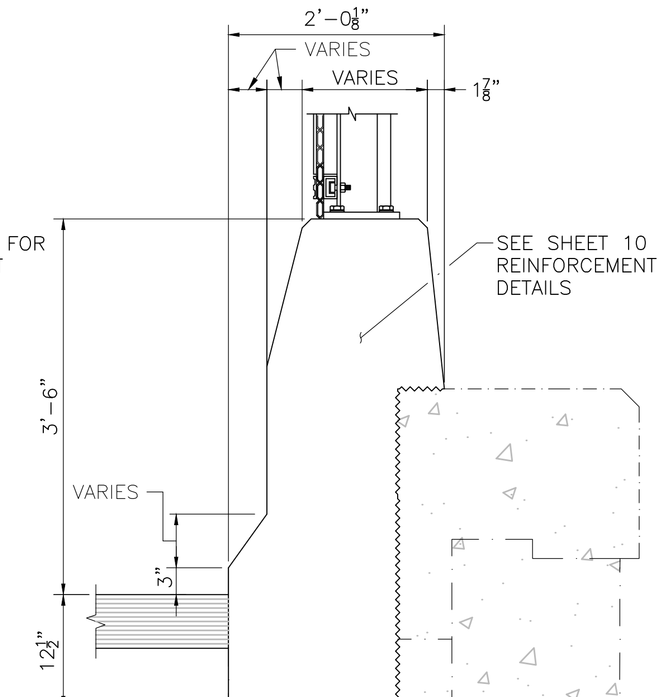
GUARDRAIL TRANSITION DETAILS



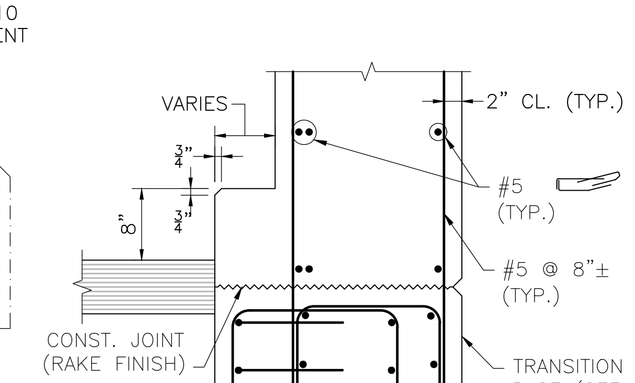
PLAN
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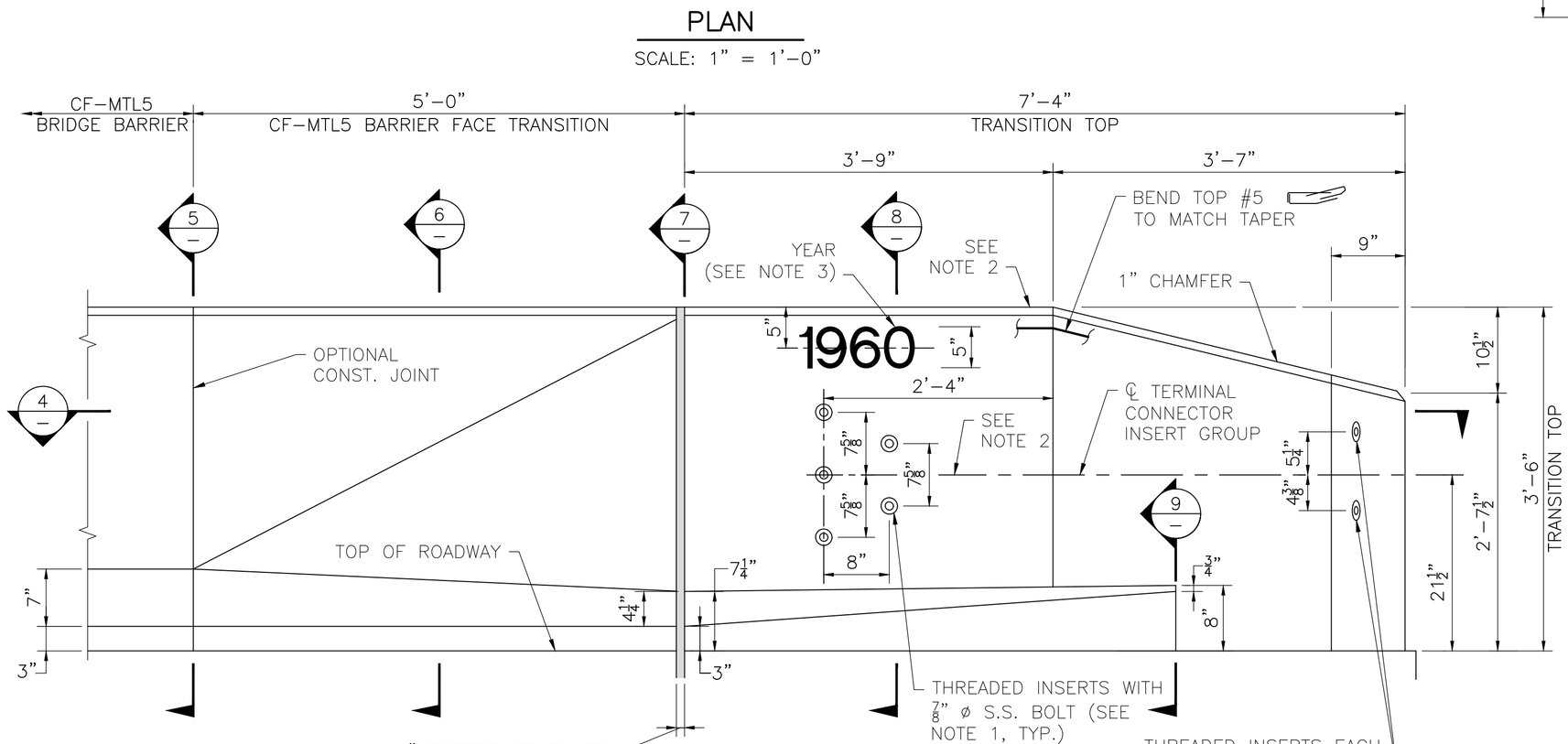
SOUTHBOUND ROADWAY SHOWN
SECTION 5
SCALE: 1" = 1'-0"



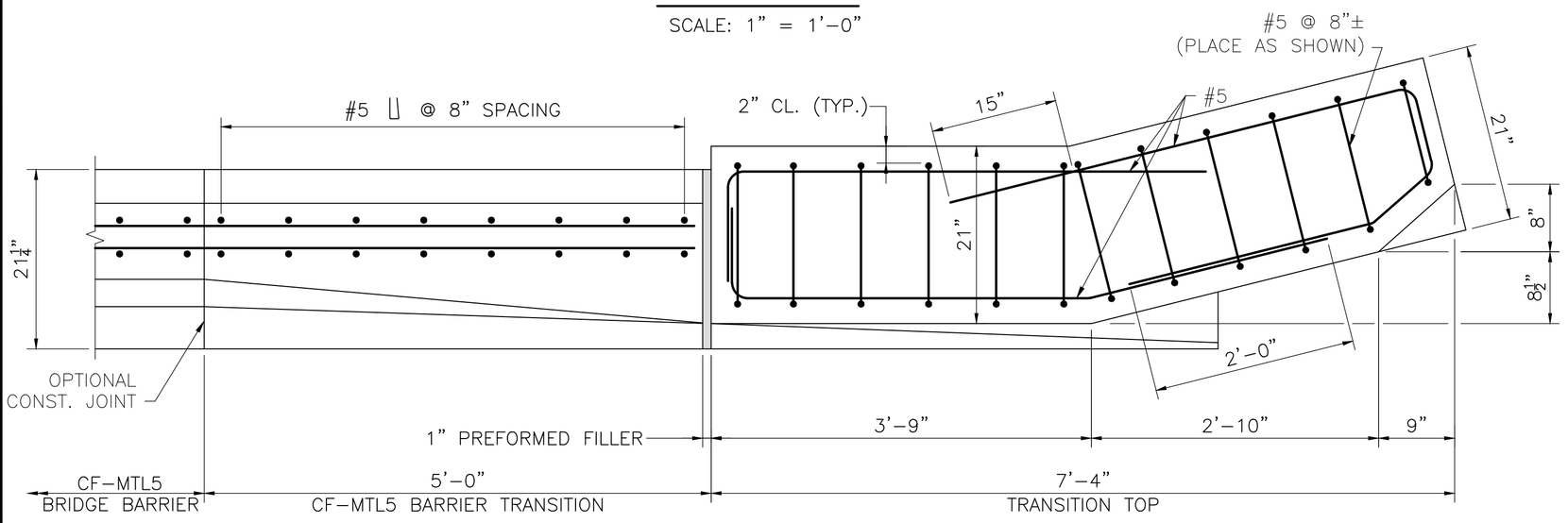
SOUTHBOUND ROADWAY SHOWN
SECTION 6
SCALE: 1" = 1'-0"



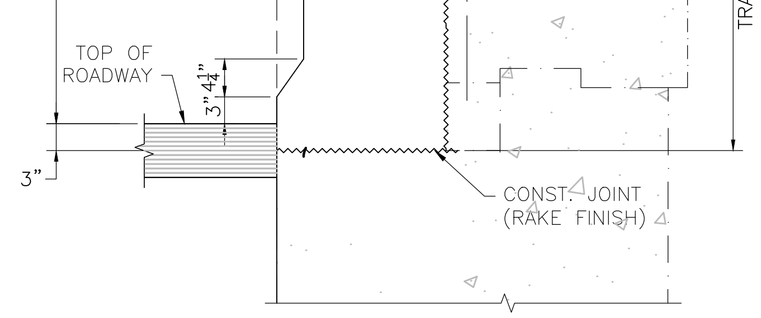
SECTION 9
SCALE: 1" = 1'-0"



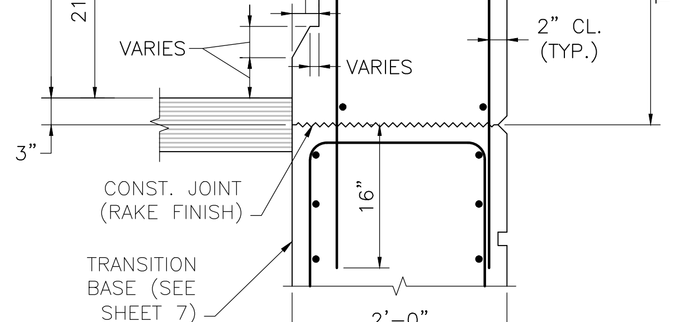
ELEVATION
SCALE: 1" = 1'-0"



SECTION 4
SCALE: 1" = 1'-0"



SOUTHBOUND ROADWAY SHOWN
SECTION 7
SCALE: 1" = 1'-0"



SECTION 8
SCALE: 1" = 1'-0"

NOTES:

1. THREADED INSERTS SHALL BE PREQUALIFIED BY THE MANUFACTURER AS BEING CAPABLE OF DEVELOPING A NOMINAL SHEAR RESISTANCE OF 20 KIPS PER ⅞" ø S.S. BOLT. S.S. BOLTS SHALL BE ⅞" ø x 1½" LONG FULLY THREADED AISI TYPE 304N STAINLESS STEEL. INSERTS FOR ⅞" S.S. BOLTS SHALL BE GALVANIZED AND CAST INTO THE TRANSITION.
2. FOR AN APPROACH GRADE UP TO 3%, THE TRANSITION MAY BE CAST SQUARE AND SET PLUMB WITH THE MINIMUM EMBEDMENT DEPTH SHOWN. THE TERMINAL CONNECTOR INSERT GROUP SHALL BE SQUARE TO THE POST.

   FOR AN APPROACH GRADE IN EXCESS OF 3%, THE TRANSITION TOP AND THE TOP OF THE BRIDGE BARRIERS SHALL FOLLOW THE APPROACH GRADE. THE HEIGHT OF THE TRANSITION TOP SHALL VARY PROVIDED THAT THE MINIMUM DIMENSIONS SHOWN ON THE CONSTRUCTION DRAWINGS ARE MET. THE BOTTOM OF THE TRANSITION BASE SHALL BE SET LEVEL WITH THE MINIMUM EMBEDMENT DEPTH SHOWN. THE TERMINAL CONNECTOR INSERT GROUP SHALL BE SLOPED TO FOLLOW THE APPROACH GRADE.
3. USE THE YEAR 1960 (YEAR BRIDGE WAS REBUILT) WHEN THE FIRST GUARDRAIL TRANSITION IS CAST. USE THIS YEAR FOR THE NORTHEAST AND SOUTHWEST TRANSITIONS.
4. ALL CONCRETE FOR THE PRECAST HIGHWAY GUARDRAIL TRANSITION SHALL BE 5000 PSI, ¾", 685 HP CEMENT CONCRETE (ITEM 992.18).
5. LIFTING DEVICES (NOT SHOWN), INCLUDING THEIR NUMBER AND LOCATION, SHALL BE DESIGNED AND DETAILED BY THE PRECASTER. THEY SHALL BE GALVANIZED AND SHALL BE PLACED AND RECESSED IN POCKETS TO PROVIDE 1½" CLEAR COVER TO THE FACE OF THE TRANSITION CONCRETE. THESE DEVICES SHALL BE CLEARLY SHOWN ON THE SHOP DRAWINGS ALONG WITH ALL SUPPORTING CALCULATIONS AND/OR CATALOG CUTS. ONCE THE PRECAST TRANSITION IS SET IN PLACE, THE LIFTING DEVICE POCKETS SHALL BE FILLED WITH A NON-SHRINK GROUT THAT MATCHES THE COLOR OF THE TRANSITION CONCRETE WHEN CURED AND THE FILLED POCKETS SHALL BE RUBBED WITH A CORUNDUM STONE TO BLEND OUT THE JOINTS.

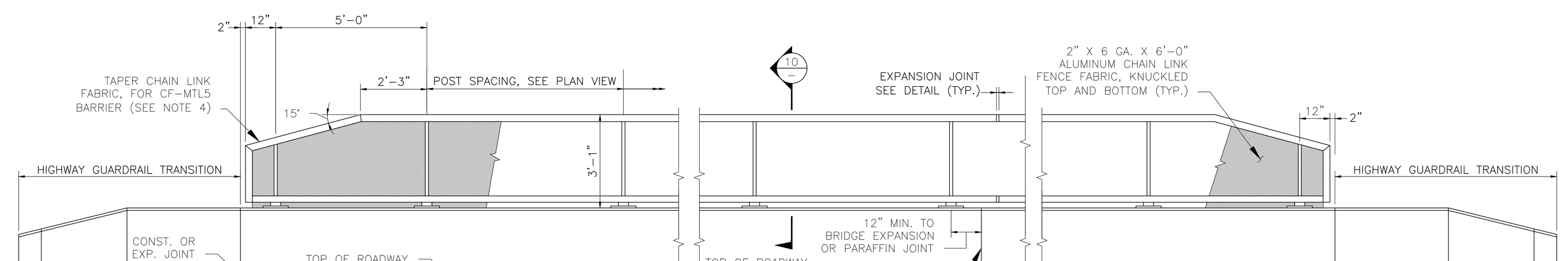
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

14-GUARDRAIL TRANSITION DETAILS.DWG Plotted on 21-Oct-2025 9:44 AM
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WAKEFIELD
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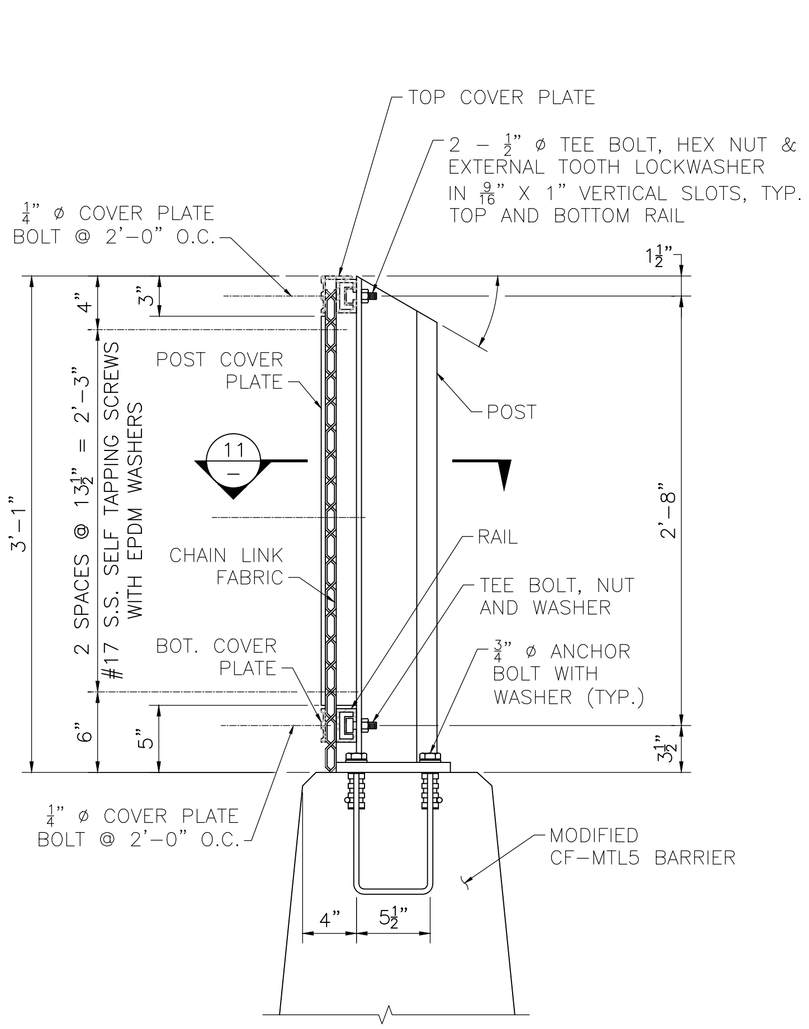
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	16	24
PROJECT FILE NO.	613196		

SNOW FENCE DETAILS



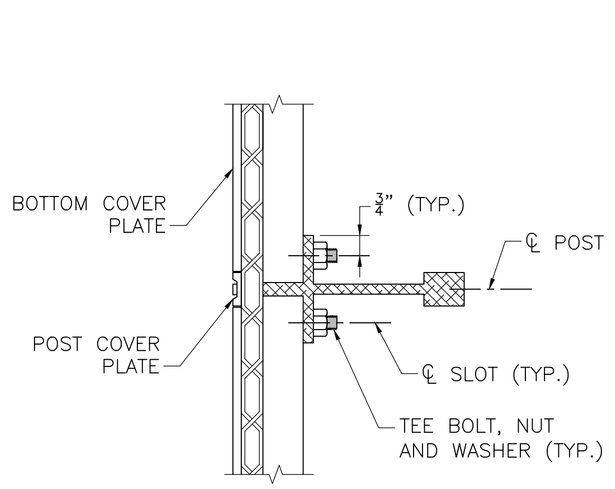
SNOW FENCE ELEVATION FOR CF–MTL5 BARRIERS

SCALE: ½" = 1'–0"



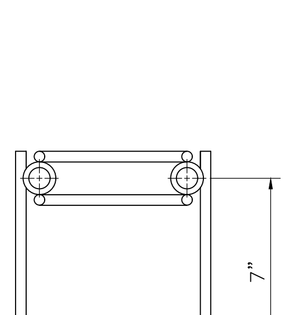
SECTION 10 / –

SCALE: 1½" = 1'–0"



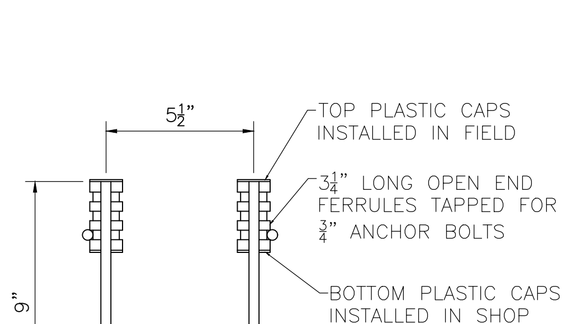
SECTION 11 / –

SCALE: 3" = 1'–0"

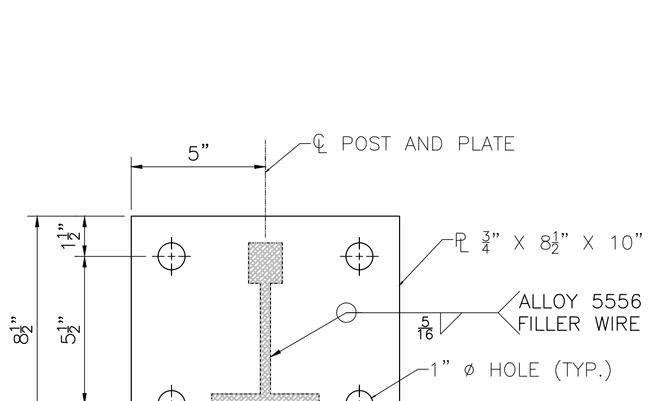


ANCHOR CAGE

SCALE: 3" = 1'–0"

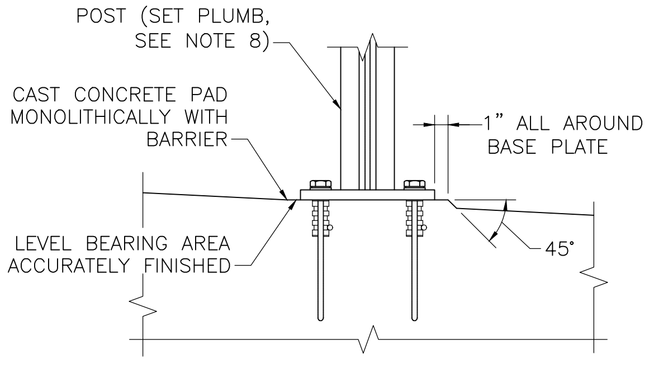


NOTE:
GALVANIZED OR ELECTROPLATE FINISH.



BASE PLATE DETAIL

SCALE: 3" = 1'–0"



PROFILE GRADE OVER 3%

SETTING OF POSTS

SCALE: 1½" = 1'–0"

GENERAL NOTES:

1. RAILS SHALL BE CONTINUOUS OVER A MINIMUM OF FOUR POSTS.
2. RAILS SHALL HAVE AN EXPANSION JOINT IN THE PANEL OVER A BRIDGE EXPANSION JOINT, IF ANY, AND AT 30 FOOT MAXIMUM SPACING ELSEWHERE.
3. BOTTOM OF POST BASE PLATE TO BE SET ON A ⅛" MOLDED FABRIC BEARING PAD (M9.16.2). THE THICKNESS OF THE PAD SHALL BE IGNORED BY THE DETAILER.
4. THE CHAIN LINK FABRIC SHALL BE SECURED BY KNUCKLING TOGETHER THE CUT ENDS OF THE FABRIC WIRE IN A MANNER SIMILAR TO THE ORIGINALLY MANUFACTURED END.
5. ALL SCREEN ENDS SHALL BE TAPERED.
6. POST SPACING SHALL BE UNIFORM BETWEEN TAPERED ENDS.
7. SET POSTS PERPENDICULAR TO GRADE FOR GRADES UP TO 1.5%. SET POSTS PLUMB FOR GRADES GREATER THAN 1.5%.

FINISHES:

1. POSTS, RAILS, COVER PLATES AND SPLICE PLATES SHALL RECEIVE A DARK BRONZE ANODIZED FINISH.
2. CHAIN LINK FABRIC SHALL RECEIVE A 4±1 MIL POLYESTER POWDER COAT FINISH. THE COLOR SHALL BE DARK BRONZE TO MATCH COLOR OF ANODIZED ALUMINUM FRAMEWORK.
3. #17 SELF TAPPING SCREWS AND ¼" ø COVER PLATE BOLTS TO BE COLORED TO MATCH THE ANODIZED EXTRUSIONS.

MATERIALS:

EXTRUSIONS & PLATES — ASTM B 221, ALLOY 6061–T6

CHAIN LINK FABRIC — AASHTO M 181 TYPE III (ALLOY 6061–T89 OR T94)

SELF TAPPING SCREWS — TYPE 304 STAINLESS STEEL WITH ¼" THICK EPDM (ETHYLENE PROPYLENE DIENE MONOMER) WASHERS

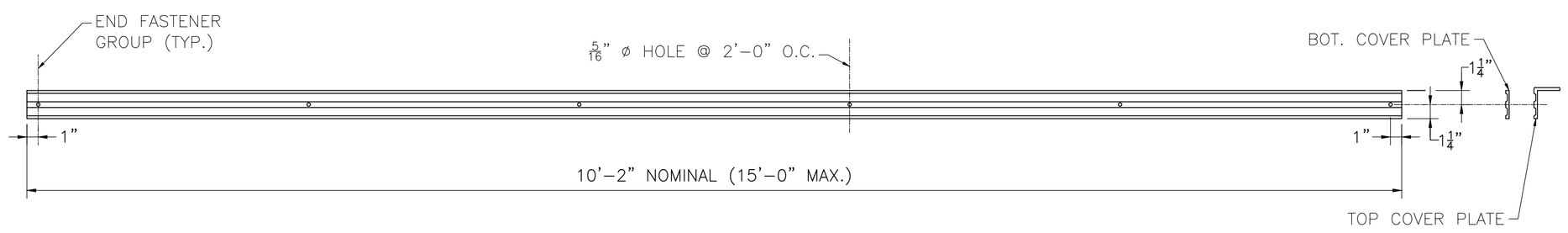
ANCHOR BOLTS — AASHTO M 164 GALVANIZED (ROTATION CAPACITY TEST NOT REQUIRED)

TEE BOLTS — ASTM A 307 GALVANIZED OR TYPE 304 STAINLESS STEEL

COVER PLATE BOLTS — TYPE 304 STAINLESS STEEL WITH OVERSIZED STAINLESS WASHER AND STAINLESS NUT WITH NYLON INSERT

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

15-SNOW FENCE DETAILS.DWG Plotted on 21-Oct-2025 9:46 AM
Proposal No. 613196-133292
PS&E Resubmission 24-October-2025
A00806 - 18



COVER PLATE NOTES:

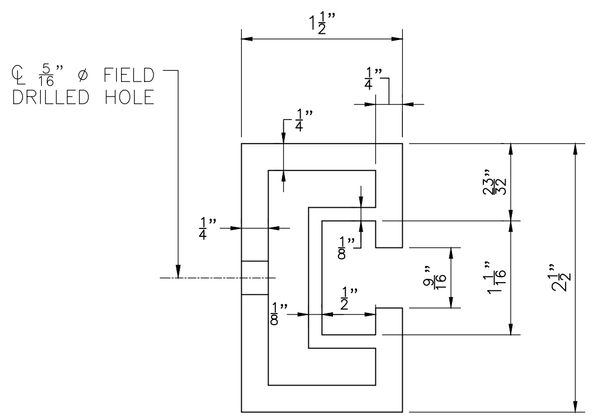
1. COVER PLATES MAY BE CONTINUOUS OVER A RAIL EXPANSION JOINT SPLICE. COVER PLATES SHALL BE FIELD CUT AS REQUIRED TO CLEAR THE EXPANSION JOINT. SEE DETAIL AT EXPANSION JOINT.
2. FIELD DRILL 5/16" ø HOLE 1" FROM THE FIELD CUT END OF A COVER PLATE, UNLESS THERE IS AN EXISTING HOLE WITHIN 6" FROM THE COVER PLATE END.
3. FIELD PAINT THE FIELD CUT ENDS OF THE COVER PLATES TO MATCH THE ANODIZED COLOR.

WAKEFIELD
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	17	24
PROJECT FILE NO.	613196		

GUARDRAIL DETAILS

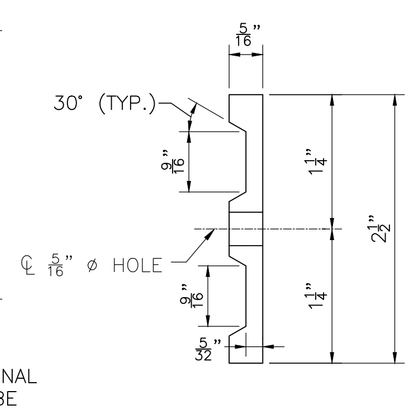
TOP AND BOTTOM COVER PLATE
SCALE: 1 1/2" = 1'-0"



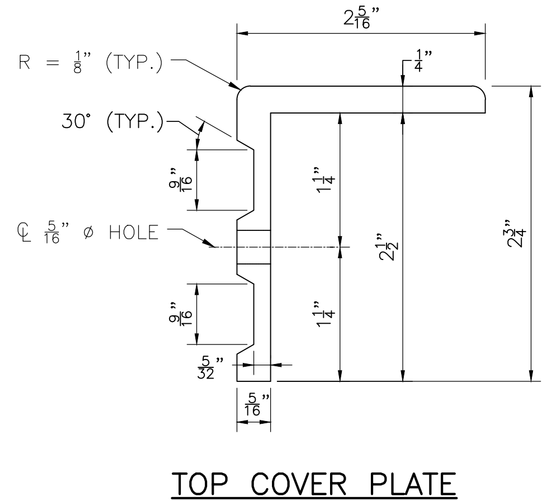
NOTE:

OTHER CONFIGURATIONS OF THE INTERNAL WALLS OF THE RAIL EXTRUSION MAY BE SUBMITTED FOR APPROVAL.

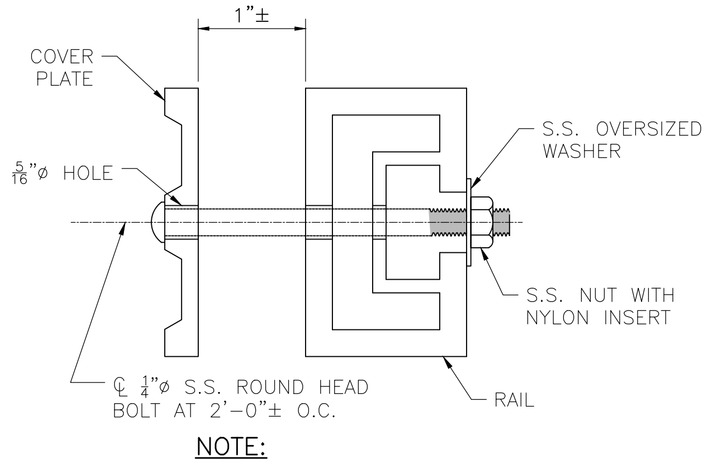
RAIL EXTRUSION
FULL SIZE



BOTTOM COVER PLATE EXTRUSION
FULL SIZE



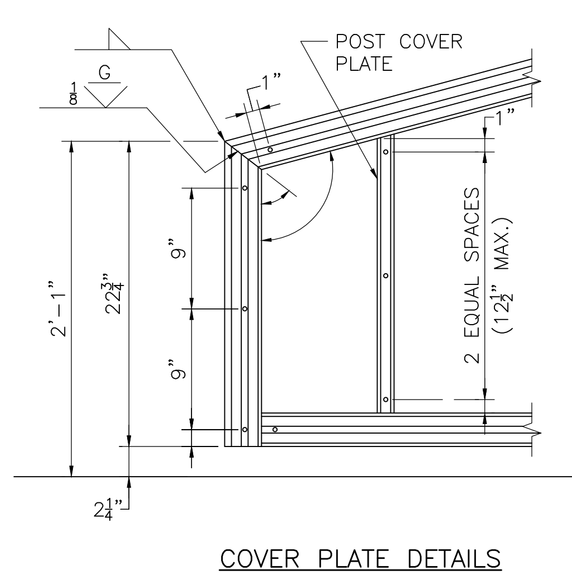
TOP COVER PLATE EXTRUSION
FULL SIZE



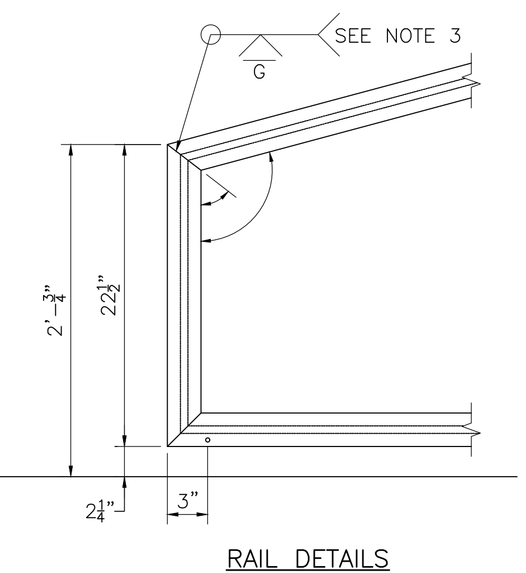
NOTE:

BOLTS SHALL BE TYPE 304 WITH A DRIVE HEAD TO BE COLORED TO MATCH ANODIZING.

RAIL & COVER PLATE DETAIL
FULL SIZE



COVER PLATE DETAILS

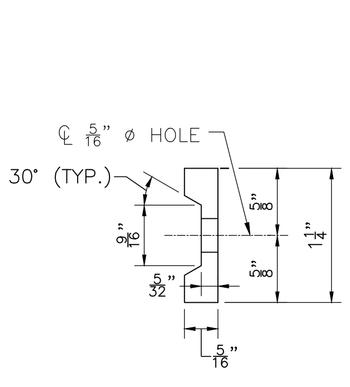


RAIL DETAILS

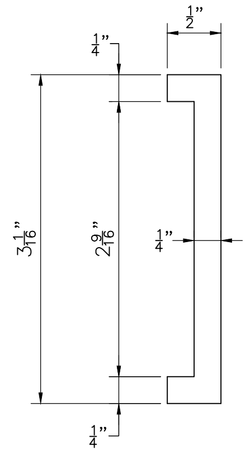
NOTES:

1. WELDING OF TOP COVER PLATE AND RAILS OF NON-TAPERED END IS SIMILAR.
2. WELDS AND MITERING TYPICAL FOR ALL ANGLED CORNERS.
3. WELD TYPICAL FOR TOP AND BOTTOM END CORNERS OF RAIL. INTERRUPT WELD AT SLOT IN BACK OF RAIL.

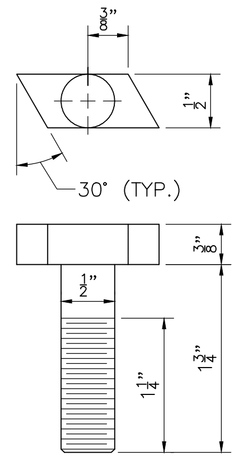
TAPERED END DETAILS
SCALE: 1 1/2" = 1'-0"



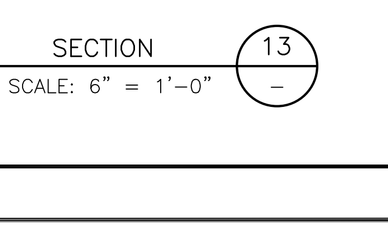
POST COVER PLATE EXTRUSION
FULL SIZE



SPLICE PLATE EXTRUSION
FULL SIZE

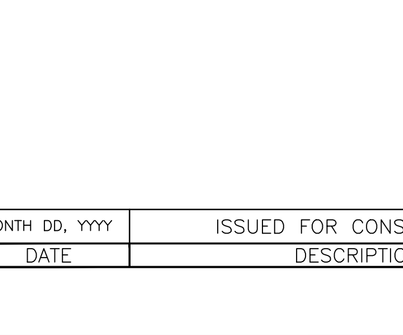


TEE BOLT
FULL SIZE

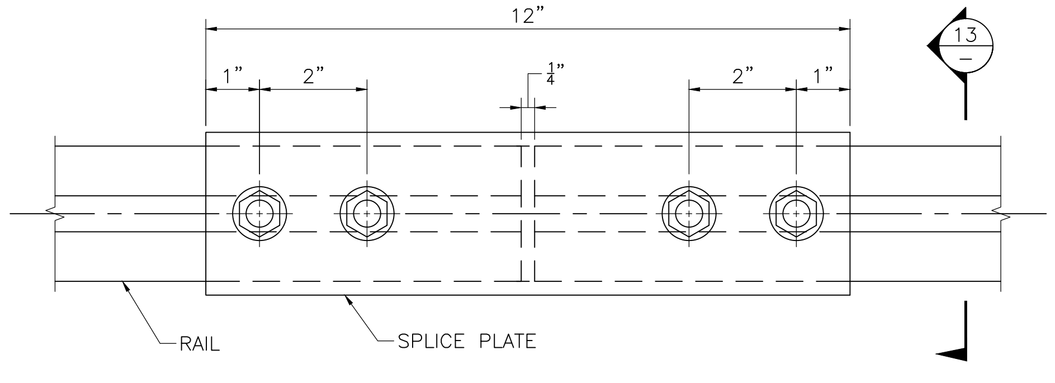


POST EXTRUSION
SCALE: 6" = 1'-0"

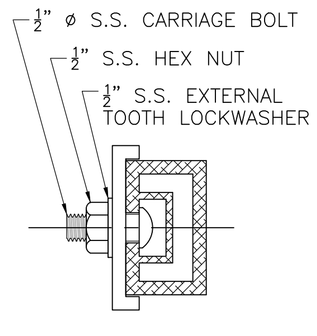
DETAIL AT RAIL EXPANSION JOINT SPLICE
SCALE: 6" = 1'-0"



SECTION 12 / –
SCALE: 6" = 1'-0"



DETAIL AT RAIL SPLICE JOINT
SCALE: 6" = 1'-0"



SECTION 13 / –
SCALE: 6" = 1'-0"

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

A00806 - 19
16-GUARDRAIL DETAILS.DWG Plotted on 21-Oct-2025 9:48 AM
Proposal No. 613196-133292
PS&E Resubmission 24-October-2025

NOTES:

1. ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND THE MASSACHUSETTS AMENDMENTS TO THE MUTCD.
2. TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
3. 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.
4. SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, CHANNELIZING DEVICES, BARRIERS, AND CRASH ATTENUATORS MUST PASS THE CRITERIA SET FORTH IN NCHRP REPORT 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES" AND/OR "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH).
5. CONTRACTORS SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT, AND SIMILAR OPERATIONS.
6. THE FIRST 10 REFLECTORIZED DRUMS OF A TAPER SHALL BE MOUNTED WITH SEQUENTIALLY FLASHING LIGHTS WHEN USED FOR NIGHT WORK BETWEEN DUSK AND DAWN.
7. DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
8. MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
9. MINIMUM LANE WIDTH IS TO BE 11 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF DRUMS OR MEDIAN BARRIER.
10. ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.
11. ANY WORK REQUIRING A SINGLE LANE CLOSURE ON INTERSTATE 95 SHALL BE LIMITED TO NIGHT WORK BETWEEN 9:00PM–5:00AM, PER THE SCHEDULE OF WORK DEFINED IN THE CONTRACT SPECIAL PROVISIONS.
12. ANY WORK REQUIRING CLOSURE OF MULTIPLE LANES ON INTERSTATE 95 SHALL BE LIMITED TO NIGHT WORK BETWEEN 12:00AM–5:00AM, PER THE SCHEDULE OF WORK DEFINED IN THE CONTRACT SPECIAL PROVISIONS.
13. ANY WORK REQUIRING A FULL ROAD CLOSURE OF PLEASURE ISLAND ROAD SHALL BE LIMITED TO NIGHT WORK BETWEEN 11:00PM–5:00AM, PER THE SCHEDULE OF WORK DEFINED IN THE CONTRACT SPECIAL PROVISIONS.
14. ANY WORK REQUIRING ONE–LANE ALTERNATING TRAFFIC CONTROL SET UPS ON PLEASURE ISLAND ROAD SHALL BE LIMITED TO NIGHT WORK BETWEEN 9:00PM–5:00AM, PER THE SCHEDULE OF WORK DEFINED IN THE CONTRACT SPECIAL PROVISIONS.

LEGEND:

- ● REFLECTORIZED PLASTIC DRUM OR 36" CONE
- P/F POLICE/FLAGGER DETAIL
- TYPE III BARRICADE
- CHANGEABLE MESSAGE SIGN
- ARROW BOARD
- WORK ZONE
- DIRECTION OF TRAFFIC
- IMPACT ATTENUATOR
- MEDIAN BARRIER
- MEDIAN BARRIER WITH WARNING LIGHTS
- WORK VEHICLE
- TRUCK MOUNTED ATTENUATOR
- TRAFFIC OR PEDESTRIAN SIGNAL
- SIGN
- TEMPORARY PORTABLE RUMBLE STRIP ARRAY

THE IDEAL CAPACITY OF A MAJOR HIGHWAY IS GENERALLY CONSIDERED TO BE 1900 PASSENGER CARS PER HOUR PER LANE (PCPHPL). IN WORK ZONES ON A MULTI–LANE DIVIDED HIGHWAY, THE FOLLOWING VOLUME GUIDELINES HAVE BEEN SUGGESTED:

MEASURED AVERAGE WORK ZONE CAPACITIES

NUMBER OF LANES		NUMBER OF STUDIES	AVERAGE CAPACITY	
NORMAL (EXISTING)	OPEN (TO TRAFFIC)		VPH	VPHPL
3	1	7	1,170	1,170
2	1	8	1,340	1,340
5	2	8	2,740	1,370
4	2	4	2,960	1,480
3	2	9	2,980	1,490
4	3	4	4,560	1,520

Source: Dudek, C., Notes on Work Zone Capacity and Level of Service. Texas Transportation Institute, Texas A&M University, College Station, Texas (1984)

BY OBTAINING HOURLY TRAFFIC COUNTS FOR A PARTICULAR ROADWAY (WITH A MINIMUM OF A 48–HOUR AUTOMATIC TRAFFIC RECORDER (ATR) COUNT), THIS WILL HELP TO DETERMINE AT WHAT TIMES OF THE DAY OR NIGHT A CERTAIN NUMBER OF LANES MAY BE CLOSED.

SUGGESTED WORK ZONE WARNING SIGN SPACING

ROAD TYPE*	DISTANCE BETWEEN SIGNS **			
	A	B	C	D
URBAN (30 MPH OR LESS)	100	100	100	100
URBAN (35 MPH OR GREATER)	350	350	350	350
RURAL	500	500	500	500
EXPRESSWAY/FREEWAY	1,000	1,500	2,640	500

* ROAD TYPE TO BE DETERMINED BY MASSDOT OFFICE OF TRANSPORTATION PLANNING.

** DISTANCES ARE SHOWN IN FEET. THE COLUMN HEADINGS A, B, AND C ARE THE DIMENSIONS SHOWN IN THE DETAIL/ TYPICAL SETUP FIGURES. THE A DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN. THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS. THE C DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE "THIRD" SIGN IS THE FIRST ONE TYPICALLY ENCOUNTERED BY A DRIVER APPROACHING A TEMPORARY TRAFFIC CONTROL (TTC) ZONE.)

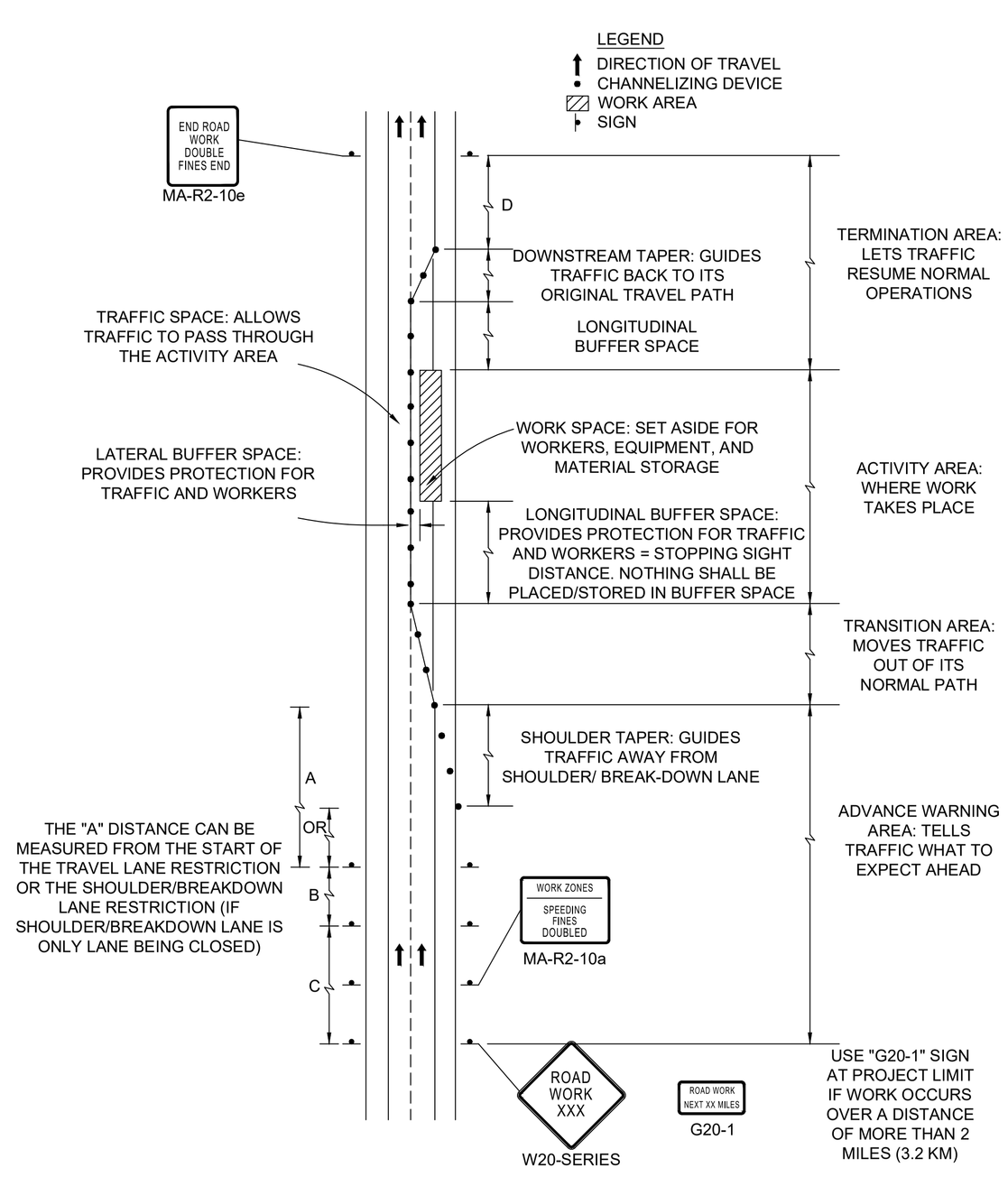
THE "THIRD" SIGN ABOVE IS TYPICALLY REFERRED TO AS AN "ADVANCE WARNING" SIGN ON THE TTCP SETUPS. THESE ADVANCE WARNING SIGNS ARE LOCATED PRIOR TO THE PROJECT LIMITS ON ALL APPROACHES (i.e. THE W20–1 SERIES (ROAD WORK XX FT) SIGNS), AND USUALLY REMAIN FOR THE DURATION OF THE PROJECT. ADDITIONAL SIGNS (i.e. "RIGHT LANE CLOSED 1 MILE" AND "LEFT LANE CLOSED 1 MILE") HAVE BEEN SHOWN IN SOME FIGURES AS EXAMPLES OF REINFORCEMENT SIGN PLACEMENT BUT ARE USED IN RARE OCCASIONS.

THE FIRST AND SECOND WARNING SIGNS ABOVE ARE REFERRED TO AS THE OPERATIONAL (DAY–TO–DAY) WORK ZONE SIGNS AND MAY BE MOVED DEPENDING ON WHERE THE SPECIFIC ROADWAY WORK FOR THAT DAY IS LOCATED.

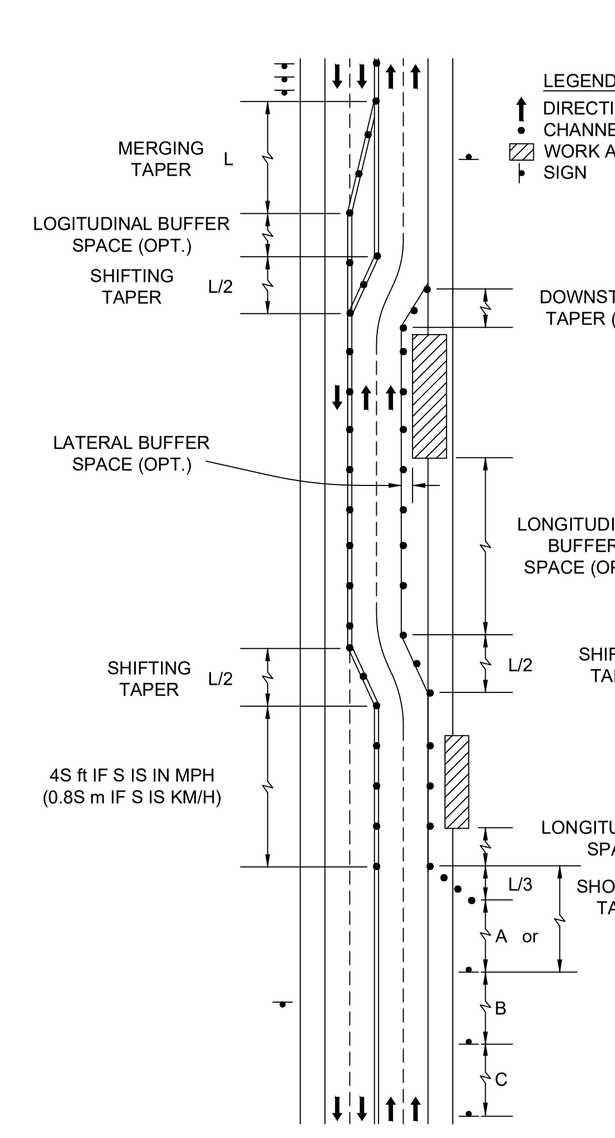
MA R2–10a SIGNS SHALL BE PLACED BETWEEN THE SECOND AND THIRD SIGNS AS DESCRIBED ABOVE.

MA R2–10a, MA R2–10e, AND W20–1 SERIES SIGNS ARE TO BE INCLUDED ON ALL DETAILS/TYPICAL SETUPS.

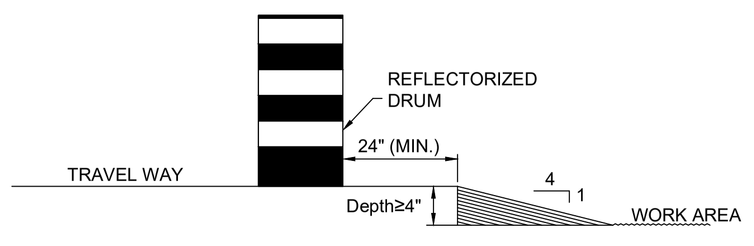
Based on: Table 6C–1 MUTCD LATEST EDITION



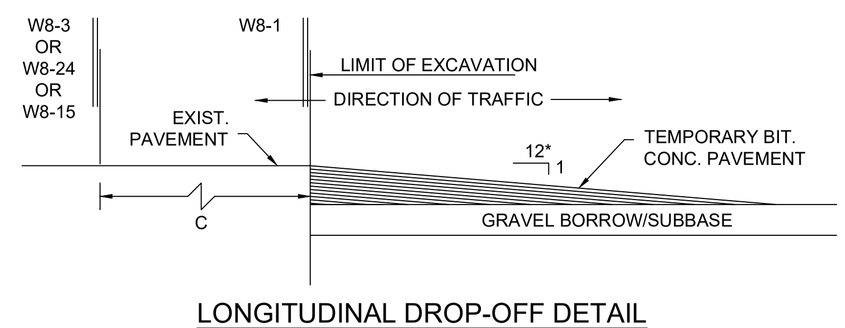
COMPONENT PARTS OF A TEMPORARY TRAFFIC CONTROL (TTC) ZONE
NOT TO SCALE



TAPER AND BUFFER DETAILS
NOT TO SCALE



LATERAL DROP-OFF DETAIL
NOT TO SCALE



LONGITUDINAL DROP-OFF DETAIL
NOT TO SCALE
* - INCREASE SLOPE RATIO FOR HIGHER SPEEDS (50:1)

WAKEFIELD
I-95/ROUTE 128 OVER PLEASURE ISLAND ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	18	24
PROJECT FILE NO.	613196		

TEMPORARY TRAFFIC CONTROL PLANS - SHEET 1

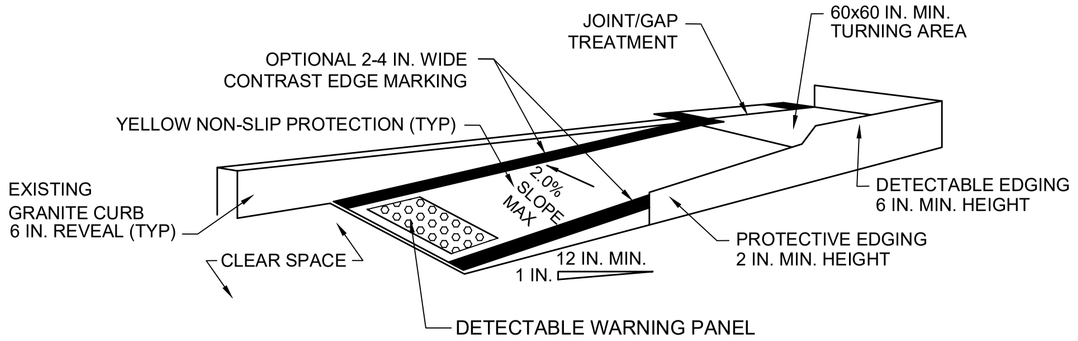
MASSDOT 10 BRIDGES_TTCP_PLEASURE ISLAND RD.DWG Plotted on 16-Dec-2025 3:48 PM

Proposal No. 613196-133792

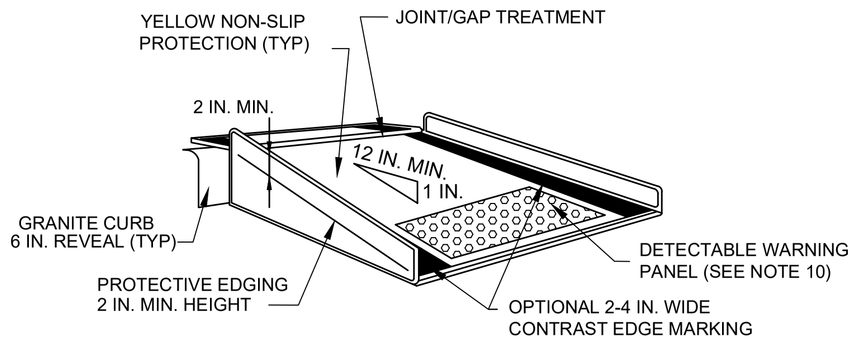
A00806 - 20

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	19	24
PROJECT FILE NO.	613196		

TEMPORARY TRAFFIC CONTROL PLANS - SHEET 2



TEMPORARY CURB RAMP-PARALLEL TO CURB
NOT TO SCALE

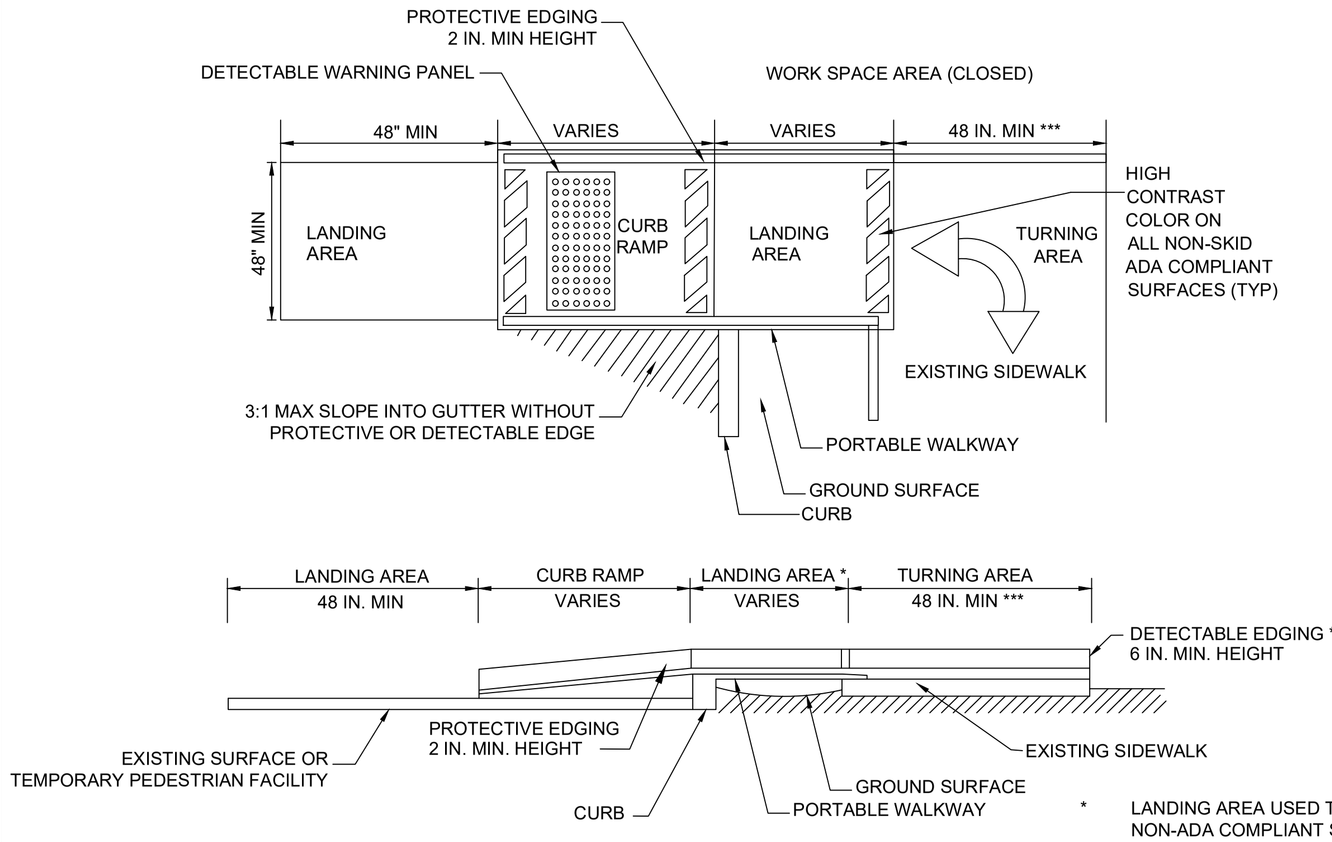


TEMPORARY CURB RAMP-PERPENDICULAR TO CURB
NOT TO SCALE

NOTES:

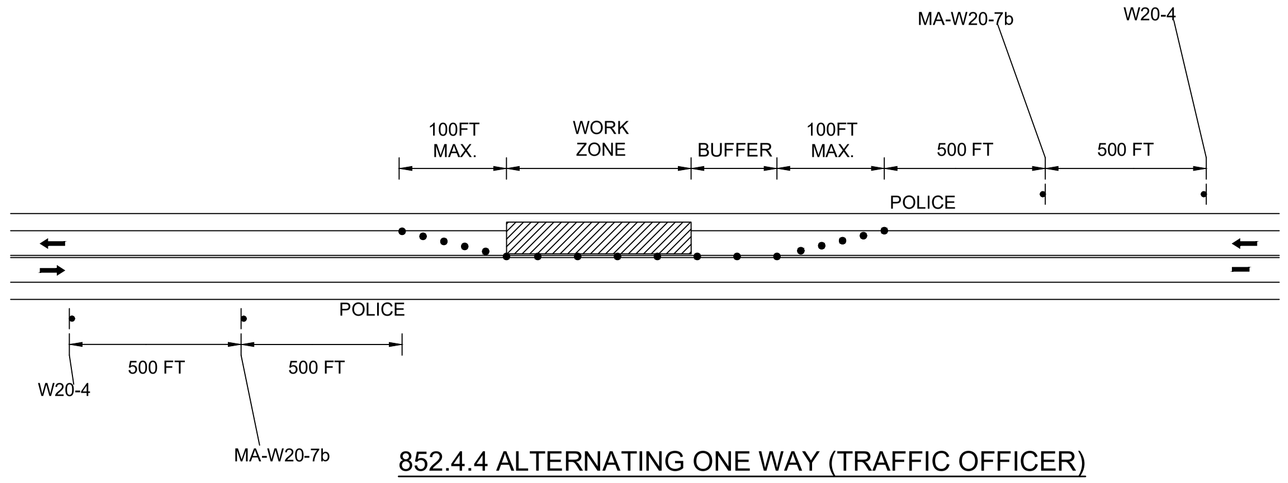
1. CURB RAMPS SHALL BE 60 IN. MINIMUM WIDTH WITH A FIRM, STABLE AND NON-SLIP SURFACE.
2. PROTECTIVE EDGING WITH A 2 IN. MINIMUM HEIGHT SHALL BE INSTALLED WHEN THE CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6 IN. OR GREATER OR HAS A SIDE APRON SLOP STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN THE CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3 IN. OR MORE.
3. DETECTABLE EDGING WITH 6 IN. MINIMUM HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
4. THE CURB RAMP WALKWAY AND LANDING AREA SURFACE SHALL BE OF A SOLID CONTINUOUS CONTRASTING COLOR ABUTTING UP TO THE EXISTING SIDEWALK.
5. CURB RAMPS AND LANDINGS SHOULD HAVE A 1:50 (2%) MAX CROSS-SLOPE.
6. CLEAR SPACE OF 48x48 IN. MINIMUM SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
7. WATER FLOW IN THE GUTTER SYSTEM SHALL HAVE MINIMAL RESTRICTION.
8. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 0.5 IN. WIDTH.
9. 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.
10. 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 DETECTABLE WARNING PANEL SHALL NOT BE INSTALLED ON THE RAMP.

850.1.1 - TEMPORARY CURB RAMP (1 OF 2)
NOT TO SCALE

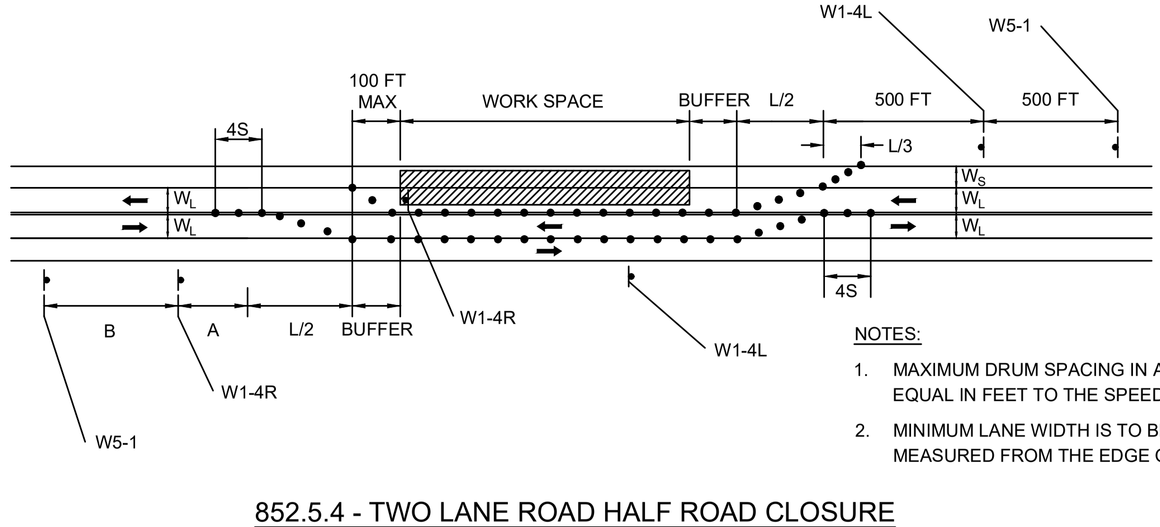


* LANDING AREA USED TO OVERLAP NON-ADA COMPLIANT SURFACES.
** DETECTABLE EDGING REMOVED IF A CONTINUOUS SIDEWALK.
*** 60 IN. MINIMUM IF AN OBSTRUCTION IS AT BACK OF SIDEWALK.

850.1.2 - TEMPORARY CURB RAMP (2 OF 2)
NOT TO SCALE



852.4.4 ALTERNATING ONE WAY (TRAFFIC OFFICER)
NOT TO SCALE



NOTES:

1. MAXIMUM DRUM SPACING IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
2. MINIMUM LANE WIDTH IS TO BE 11 FEET MEASURED FROM THE EDGE OF DRUMS.

852.5.4 - TWO LANE ROAD HALF ROAD CLOSURE
NOT TO SCALE

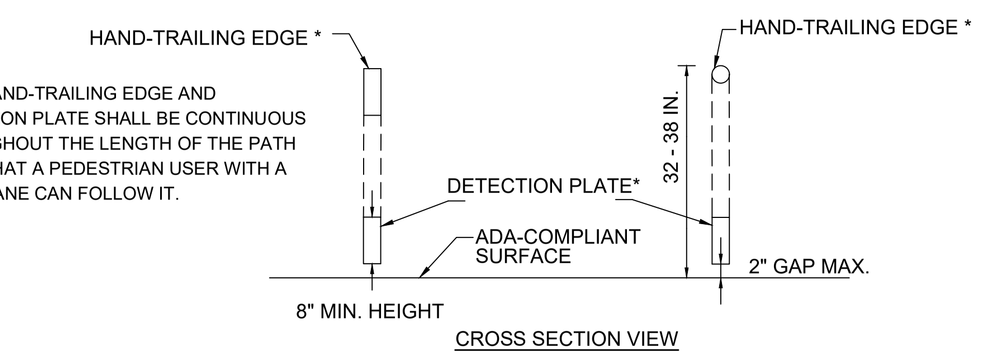
MINIMUM LENGTH OF LONGITUDINAL BUFFER IS EQUAL TO THE STOPPING SIGHT DISTANCE AT THE POSTED SPEED AND CAN BE DETERMINED FROM THE FOLLOWING TABLE

STOPPING SIGHT DISTANCE	
SPEED (MPH)	DISTANCE (FT)
25	155
30	200
35	250
40	305

852.5.4 - TYPICAL TAPER LENGTHS (L) IN FEET

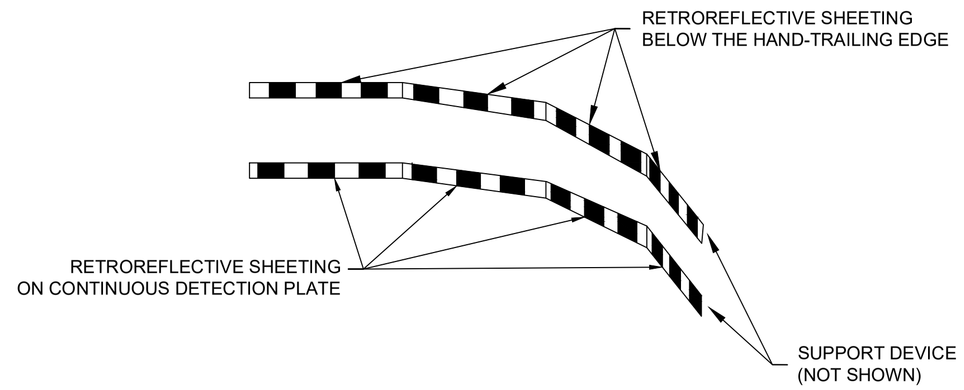
SPEED LIMIT (S) IN MPH	WIDTH OF OFFSET (W_L OR W_S) IN FEET		
	10	11	12
25	104	115	125
30	150	165	180
35	204	225	245
40	267	293	320

NOTE: FOR OFFSET WIDTHS NOT LISTED IN TABLE, USE $L=WS^2/60$.

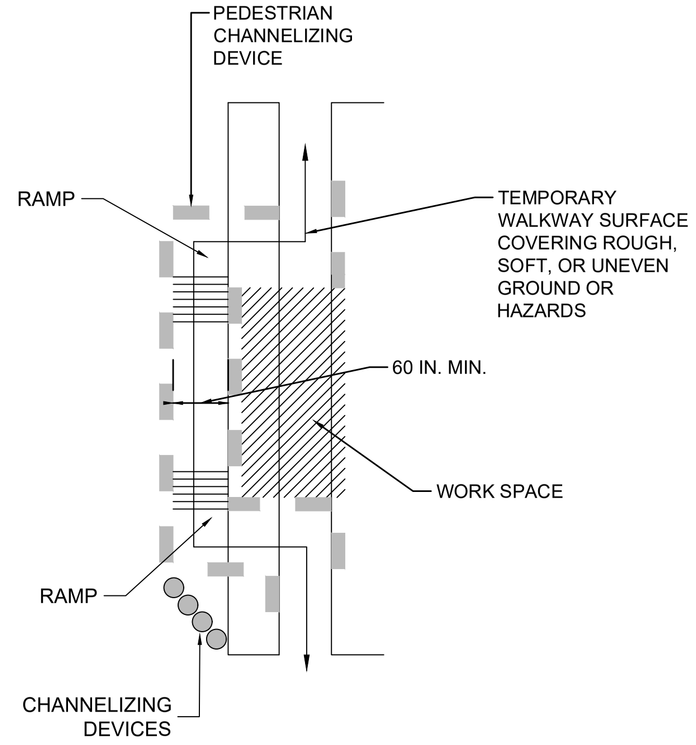


CROSS SECTION VIEW

STANDARD RETROREFLECTIVE LAYOUT FOR PEDESTRIAN CHANNELIZING DEVICES



851.3.1 - PEDESTRIAN CHANNELIZING DEVICE
NOT TO SCALE



852.1.2 - SIDEWALK DIVERSION
NOT TO SCALE

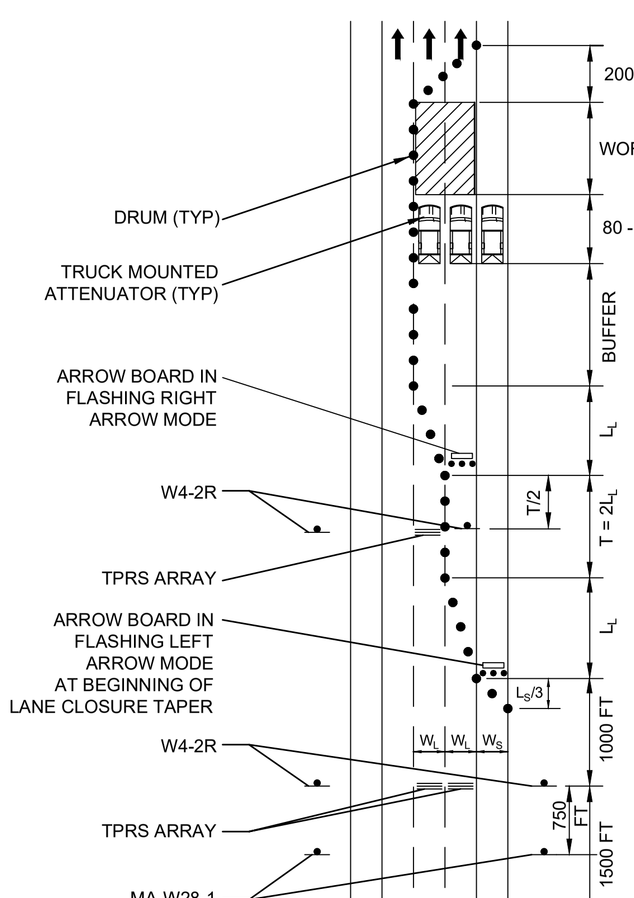
NOTES:

1. A MAXIMUM 2-INCH GAP BETWEEN THE BOTTOM OF THE CONTINUOUS DETECTION PLATE AND THE WALKWAY SURFACE MAY BE USED TO PROVIDE DRAINAGE.
2. HAND-TRAILING EDGE AND DETECTION PLATE ARE OPTIONAL FOR CONTINUOUS WALLS.
3. SUPPORT DEVICE FOR CONTINUOUS DETECTION PLATE AND CONTINUOUS HAND-TRAILING EDGE NOT SHOWN ON THE PLAN.
4. STRIPING ON SHEETING PANELS MAY BE EITHER VERTICAL OR AT A 45-DEGREE ANGLE.
5. RETROREFLECTIVE AREAS CAN BE DISTRIBUTED IN A MANNER THAT ENSURES VISIBILITY AND DETECTION WITHOUT NECESSITATING A SINGLE CONTINUOUS APPLICATION.

Plotted on 24-Oct-2025 12:17 PM
MASSDOT 10 BRIDGES_TTCP_PLEASURE ISLAND RD.DWG
Proposal No. 613196-133792
A000806 - 21

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	20	24
PROJECT FILE NO.	613196		

TEMPORARY TRAFFIC CONTROL PLANS - SHEET 3



852.7.8 - DIVIDED HIGHWAY RIGHT TWO LANES CLOSURE (SHORT TERM)
NOT TO SCALE

TEMPORARY PORTABLE RUMBLE STRIP (TPRS)

A TPRS ARRAY SHALL HAVE THEE RUMBLE STRIPS. SPACING SHALL BE AS FOLLOWS:

POSTED REGULATORY OR WORK ZONE SPEED	
60 MPH AND ABOVE	20'
40 MPH TO 55 MPH	15'

NOTE: TPRS SHALL BE DEPLOYED ONLY FOR SETUPS OF 12 HOURS OR LESS

TYPICAL TAPER LENGTHS (L_L,L_R,L_S) IN FEET			
SPEED LIMIT (S) IN MPH	WIDTH OF OFFSET (W_L, W_S OR W_R) IN FEET		
	10	11	12
40	400	440	480
45	450	495	540
50	500	550	600
55	550	605	660
60	600	660	720
65	650	715	780

NOTE: FOR OFFSET WIDTHS NOT LISTED IN TABLE, USE L=WS.

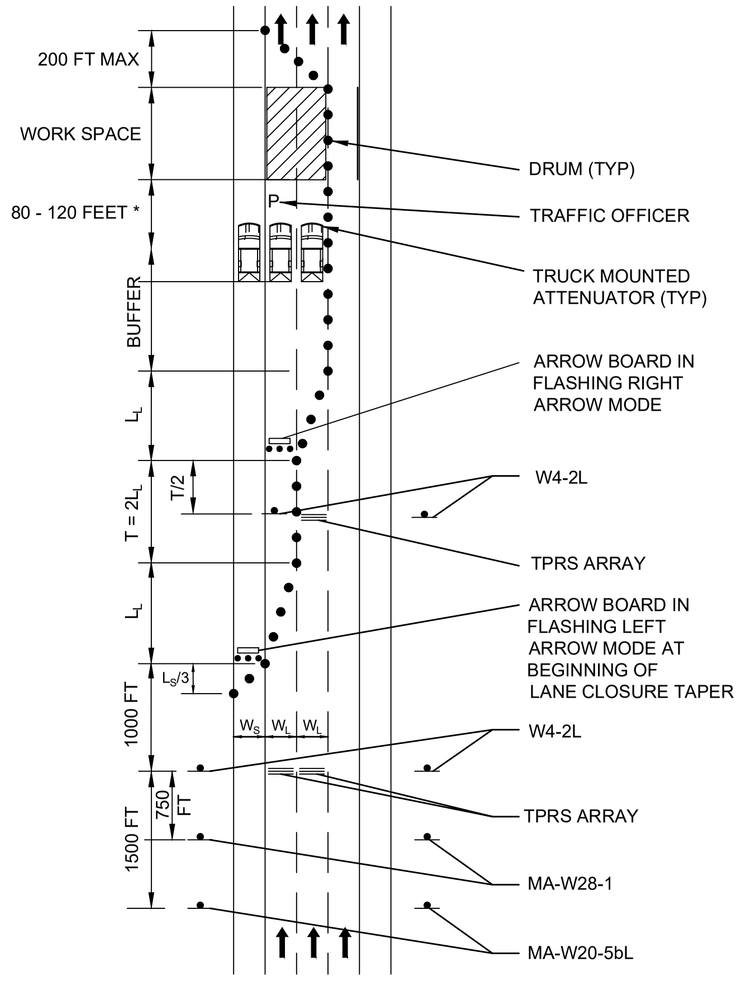
STOPPING SIGHT DISTANCE	
SPEED (MPH)	DISTANCE (FT)
35	250
40	305
45	360
50	425
55	495
60	570
65	645

MINIMUM LENGTH OF LONGITUDINAL BUFFER IS EQUAL TO THE STOPPING SIGHT DISTANCE AT THE POSTED SPEED AND CAN DETERMINED FROM THE FOLLOWING TABLE

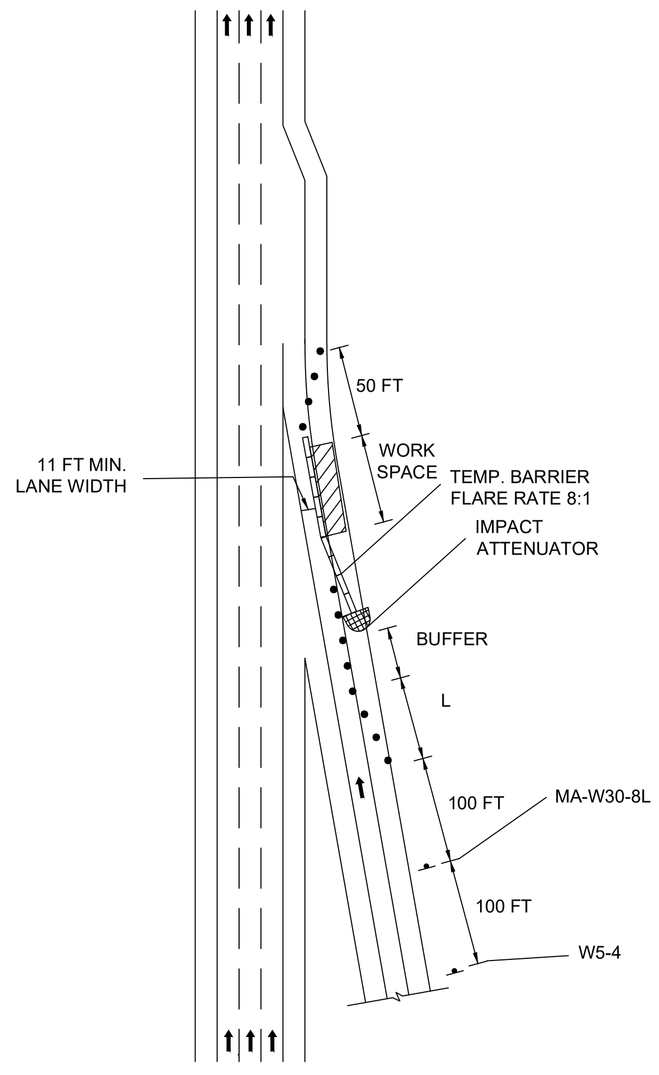
NOTES:

1. THE FIRST TEN DRUMS OF EACH LANE CLOSURE TAPER SHALL BE MOUNTED WITH SEQUENTIALLY FLASHING LIGHTS IF DEPLOYED BETWEEN DUSK AND DAWN.
2. MAXIMUM DRUM SPACING IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH. IN TANGENT SECTIONS, MAXIMUM SPACING IN FEET IS EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH.
3. THIS SETUP ALSO APPLIES TO 3 OR 4 LANE SECTIONS.

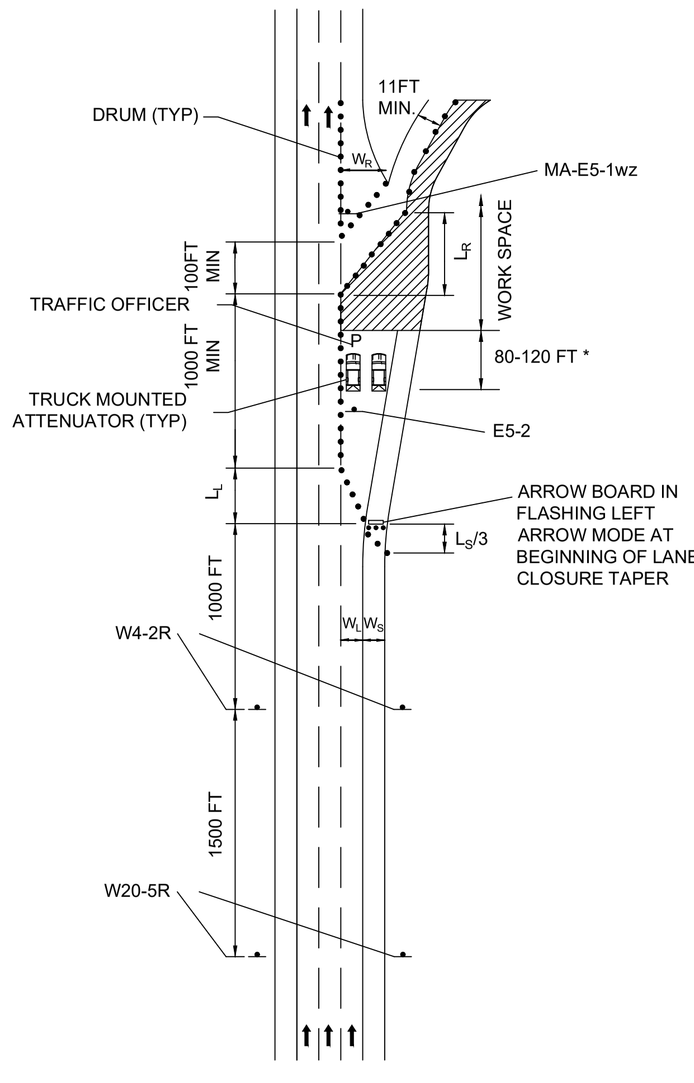
* DISTANCE MAY BE INCREASED IF ADDITIONAL ROLL-AHEAD ALLOWANCE IS NEEDED. REFER TO MANUFACTURER'S SPECIFICATIONS.



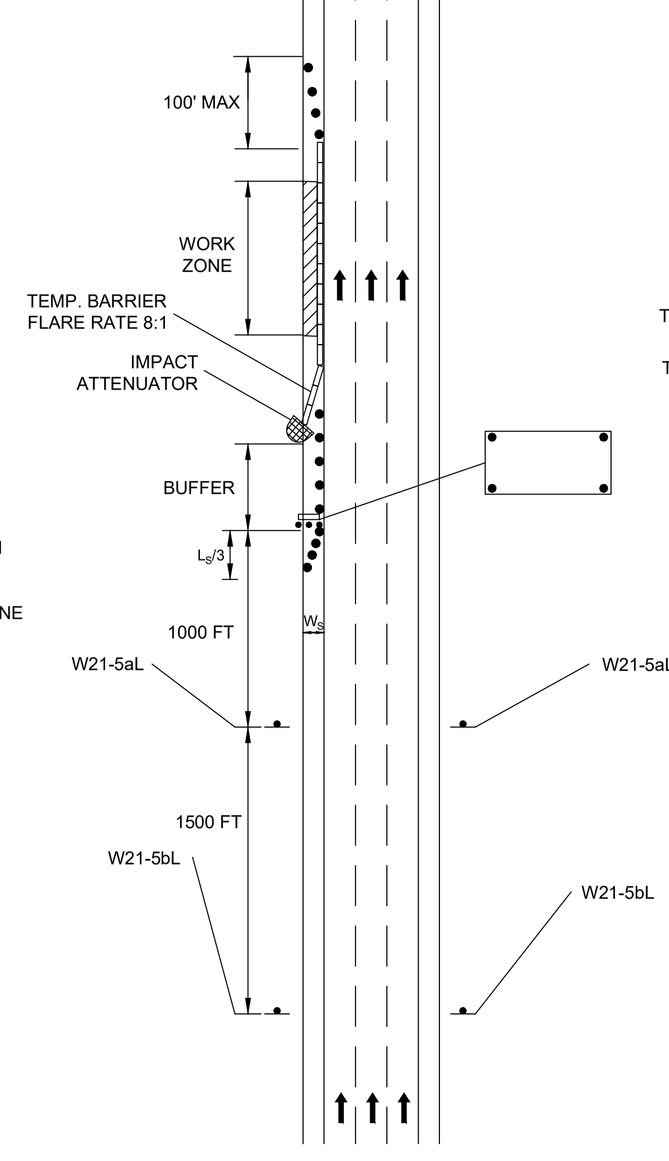
852.7.9 - DIVIDED HIGHWAY LEFT TWO LANES CLOSURE (SHORT TERM)
NOT TO SCALE



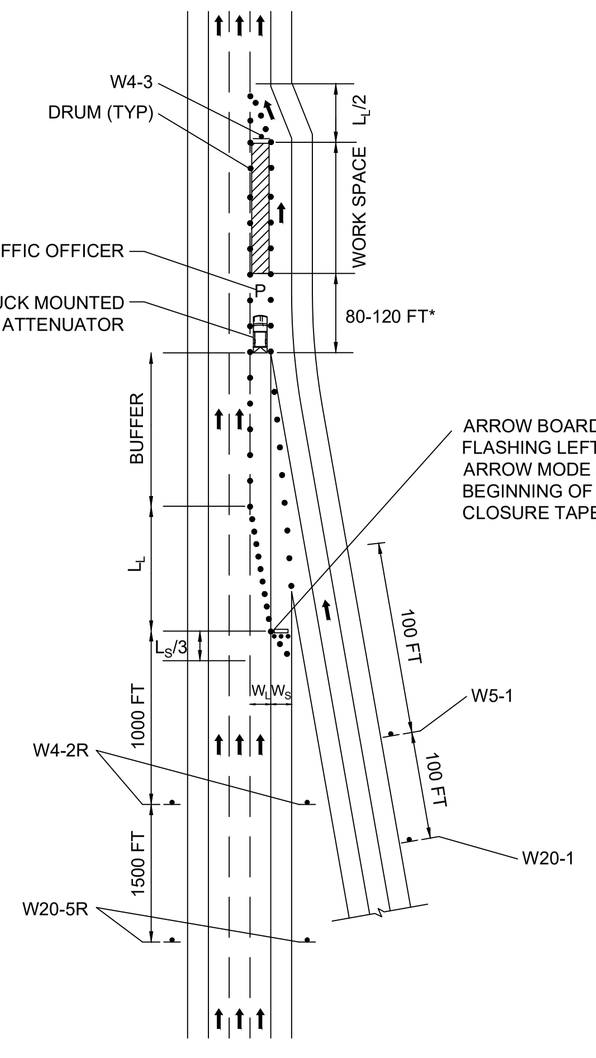
PARTIAL ENTRANCE RAMP CLOSURE (LONG TERM)
NOT TO SCALE



852.8.6 - EXIT RAMP
WORK WITHIN VICINITY OF RAMP
(APPROACH SIDE)
NOT TO SCALE



DIVIDED HIGHWAY - LEFT SHOULDER CLOSURE (LONG TERM)
NOT TO SCALE



852.9.2 - ENTRANCE RAMP
WORK WITHIN VICINITY OF RAMP
NOT TO SCALE

Plotted on 24-Oct-2025 12:17 PM
MASSDOT 10 BRIDGES_TTCP_PLEASURE ISLAND RD.DWG
Proposal No. 613196-133292
A00806 - 22

WAKEFIELD
I-95/ROUTE 128 OVER PLEASURE ISLAND ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	21	24
PROJECT FILE NO.	613196		

TEMPORARY TRAFFIC CONTROL PLANS - SHEET 4

MASSDOT 10 BRIDGES_TTCP_PLEASURE ISLAND RD.DWG Plotted on 24-Oct-2025 12:17 PM

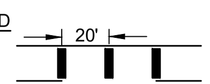
Proposal No. 613196-133292

A00806 - 23

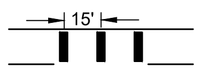
TEMPORARY PORTABLE RUMBLE STRIP (TPRS)
A TPRS ARRAY SHALL HAVE THEE RUMBLE STRIPS. SPACING SHALL BE AS FOLLOWS:

POSTED REGULATORY OR WORK ZONE SPEED

60 MPH AND ABOVE



40 MPH TO 55 MPH



NOTE: TPRS SHALL BE DEPLOYED ONLY FOR SETUPS OF 12 HOURS OR LESS

TYPICAL TAPER LENGTHS (L, L_L, L_S) IN FEET			
SPEED LIMIT (S) IN MPH	WIDTH OF OFFSET (W_L OR W_S) IN FEET		
	10	11	12
50	500	550	600
55	550	605	660
60	600	660	720
65	650	715	780

NOTE: FOR OFFSET WIDTHS NOT LISTED IN TABLE, USE L=WS.

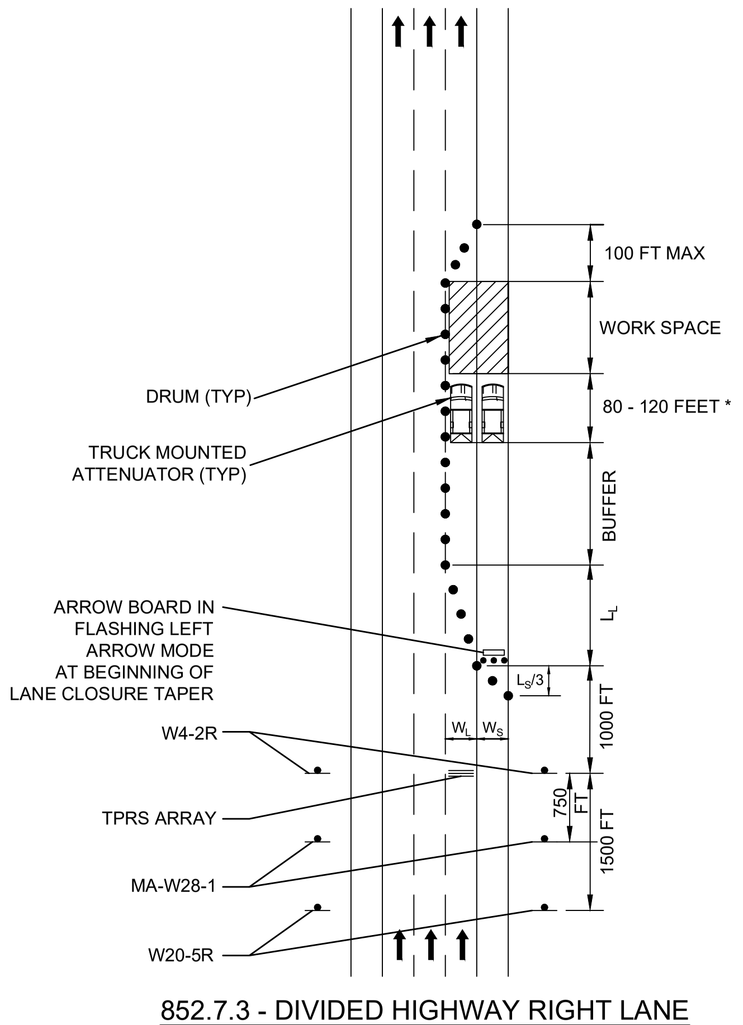
STOPPING SIGHT DISTANCE	
SPEED (MPH)	DISTANCE (FT)
35	250
40	305
45	360
50	425
55	495
60	570
65	645

MINIMUM LENGTH OF LONGITUDINAL BUFFER IS EQUAL TO THE STOPPING SIGHT DISTANCE AT THE POSTED SPEED AND CAN DETERMINED FROM THE FOLLOWING TABLE

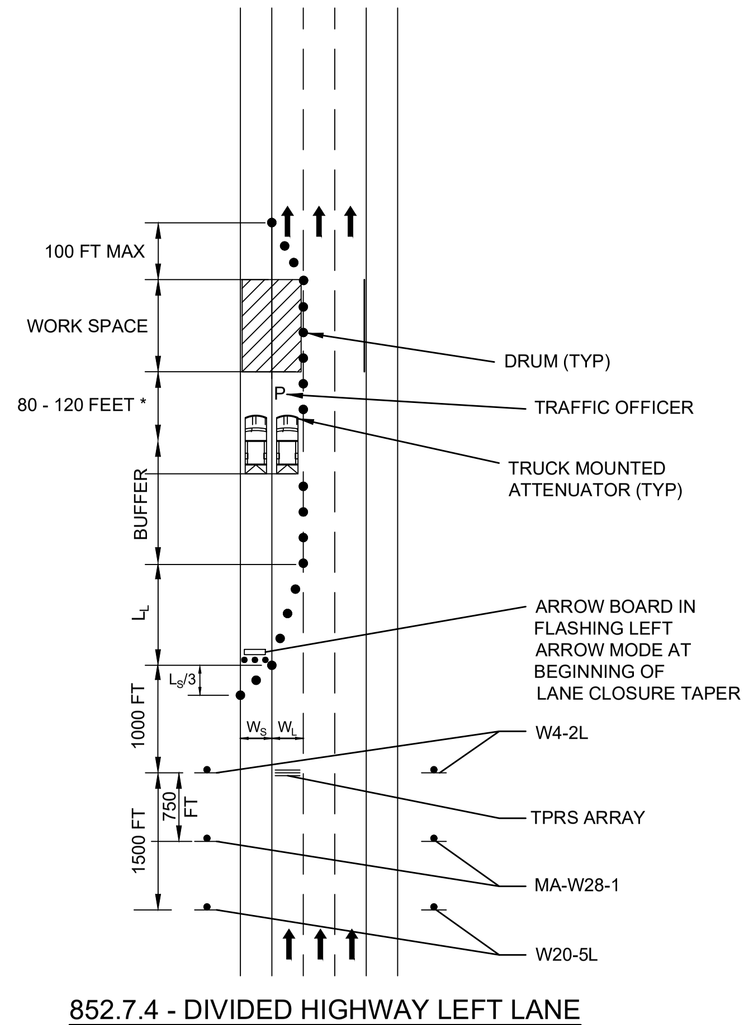
NOTES:

1. THE FIRST TEN DRUMS OF EACH LANE CLOSURE TAPER SHALL BE MOUNTED WITH SEQUENTIALLY FLASHING LIGHTS IF DEPLOYED BETWEEN DUSK AND DAWN.
2. MAXIMUM DRUM SPACING IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH. IN TANGENT SECTIONS, MAXIMUM SPACING IN FEET IS EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH.
3. THIS SETUP ALSO APPLIES TO 3 OR 4 LANE SECTIONS.

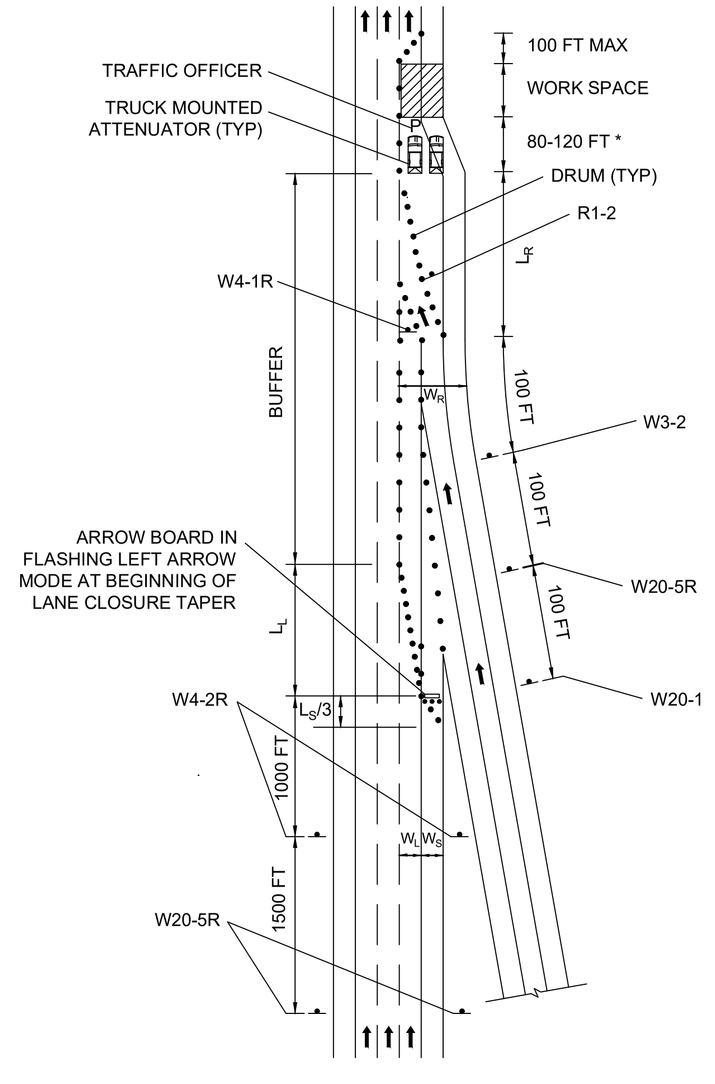
* DISTANCE MAY BE INCREASED IF ADDITIONAL ROLL-AHEAD ALLOWANCE IS NEEDED. REFER TO MANUFACTURER'S SPECIFICATIONS.



852.7.3 - DIVIDED HIGHWAY RIGHT LANE CLOSURE (SHORT TERM)
NOT TO SCALE



852.7.4 - DIVIDED HIGHWAY LEFT LANE CLOSURE (SHORT TERM)
NOT TO SCALE



852.9.3 - ENTRANCE RAMP WORK DOWNSTREAM
NOT TO SCALE

WAKEFIELD
I-95/ROUTE 128 OVER PLEASURE ISLAND ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	22	24
PROJECT FILE NO.	613196		

DETOUR PLAN & TTCP

TRAFFIC DEVICE LEGEND:

- CONSTRUCTION AREA
- TEMPORARY ROADSIDE SIGN
- PLEASURE ISLAND RD NB DETOUR ROUTE
- PLEASURE ISLAND RD SB DETOUR ROUTE
- DIRECTIONAL TRAFFIC FLOW
- TYPE III BARRICADE
- P POLICE DETAIL
- REFLECTORIZED DRUM
- ARROW BOARD
- TRUCK MOUNTED ATTENUATOR

PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

IF USED, PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) AS AMENDED AND SHOULD BE PLACED ON THE SHOULDER OF THE ROADWAY OR IF PRACTICAL SET WELL AWAY FROM THE TRAVEL LANE. MESSAGE SIGNS SHOULD BE PROTECTED WITH RETROREFLECTIVE TEMPORARY TRAFFIC CONTROL DEVICES WHEN PLACED WITHIN THE AVAILABLE CLEAR ZONE OR ELSE SHIELDED WITH A BARRIER OR CRASH CUSHION. THE FINAL LOCATION AND USE OF THE PCMS SHALL BE DETERMINED BY THE ENGINEER.

*ALTERNATIVE MESSAGES MAY BE DETERMINED BY THE ENGINEER IN THE FIELD.

*EXACT LOCATION OF PCMS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

TWO (2) WEEKS PRIOR TO ROAD CLOSURE, PCMS 1 & 2, SHALL BE INSTALLED WITH THE FOLLOWING SUGGESTED MESSAGE:

MESSAGE 1A:

P		I	S	L	A	N	D
		R	O	A	D		
	C	L	O	S	E	D	

MESSAGE 1B:

		M	M	M	/	D	D
				T	O		
		M	M	M	/	D	D

WHILE ROAD CLOSURE IS IN EFFECT, PCMS 1 & 2, WILL DISPLAY THE FOLLOWING SUGGESTED MESSAGE UNTIL BRIDGE IS AGAIN OPEN FOR TRAFFIC:

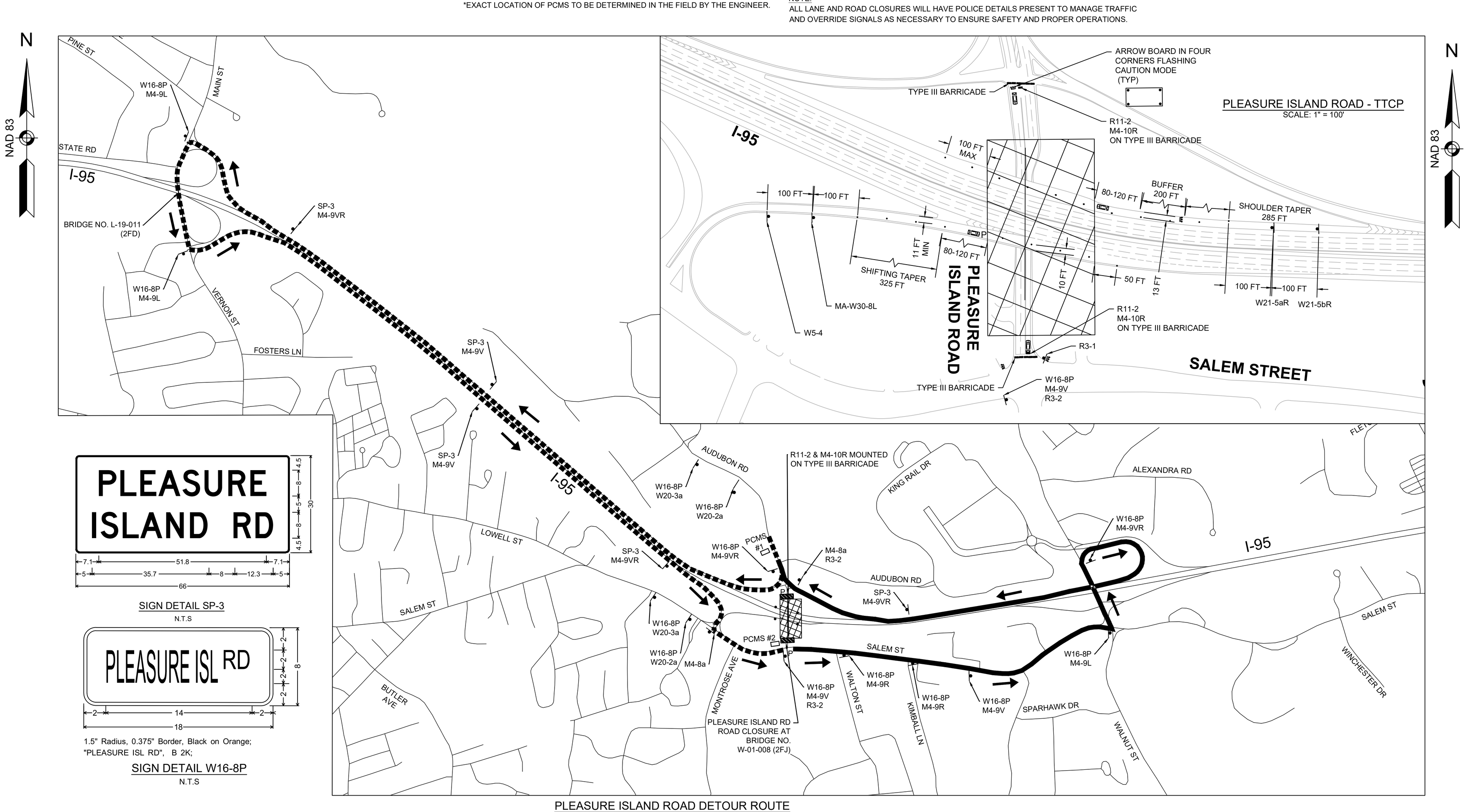
MESSAGE 2A:

P		I	S	L	A	N	D
		R	O	A	D		
	C	L	O	S	E	D	

MESSAGE 2B:

		F	O	L	L	O	W
		D	E	T	O	U	R
1	1	P	M	-	5	A	M

NOTE:
ALL LANE AND ROAD CLOSURES WILL HAVE POLICE DETAILS PRESENT TO MANAGE TRAFFIC AND OVERRIDE SIGNALS AS NECESSARY TO ENSURE SAFETY AND PROPER OPERATIONS.



PLEASURE ISLAND ROAD DETOUR ROUTE
SCALE: 1" = 500'

PLEASURE ISLAND ROAD - TTCP
SCALE: 1" = 100'

SIGN DETAIL SP-3
N.T.S

1.5" Radius, 0.375" Border, Black on Orange;
"PLEASURE ISL RD", B 2K;

SIGN DETAIL W16-8P
N.T.S

MASSDOT 10 BRIDGES_DET.DWG Plotted on 23-Dec-2025 12:17 PM
Proposal No. 613196-133292
A00806 - 24

CONSTRUCTION SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE WIDTH (IN)	SIZE HEIGHT (IN)	TEXT	DIMENSIONS (IN) LETTER HEIGHT	DIMENSIONS (IN) VERTICAL SPACING	DIMENSIONS (IN) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACKGROUND	COLOR LEGEND	COLOR BORDER	UNIT AREA (S.F.)	TOTAL AREA (S.F.)
M4-8a	24"	18"	END DETOUR	(1)	(1)	(1)	2	FLUOR. ORANGE	BLACK	BLACK	3.00	6.00
M4-9L	48"	36"	DETOUR ←				3	FLUOR. ORANGE	BLACK	BLACK	12.00	36.00
M4-9V	48"	36"	DETOUR ↑				4	FLUOR. ORANGE	BLACK	BLACK	12.00	24.00
M4-9VR	48"	36"	DETOUR ↗				5	FLUOR. ORANGE	BLACK	BLACK	12.00	60.00
M4-10R	48"	18"	DETOUR →				2	FLUOR. ORANGE	BLACK	BLACK	6.00	12.00
MA-R2-10a	48"	36"	WORK ZONES / SPEEDING FINES DOUBLED	(2)	(2)	(2)	4	FLUOR. ORANGE & WHITE	BLACK	BLACK	12.00	48.00
	60"	48"					4				20.00	80.00
MA-R2-10e	36"	48"	END ROAD WORK DOUBLE FINES END				4	FLUOR. ORANGE & WHITE	BLACK	BLACK	12.00	48.00
	48"	60"					4				20.00	80.00
MA-W20-5bL	48"	48"	LEFT TWO LANES CLOSED XX FT				2	FLUOR. ORANGE	BLACK	BLACK	16.00	32.00
MA-W20-5bR	48"	48"	RIGHT TWO LANES CLOSED XX FT				2	FLUOR. ORANGE	BLACK	BLACK	16.00	32.00
MA-W20-7b	36"	36"	POLICE OFFICER AHEAD				4	FLUOR. ORANGE	BLACK	BLACK	9.00	36.00
MA-W30-8L	48"	48"	SQUEEZE LEFT				1	FLUOR. ORANGE	BLACK	BLACK	16.00	16.00
R1-2	48" x 48" x 48"		YIELD	(1)	(1)	(1)	1	WHITE	RED	RED	6.93	6.93
R3-1	36"	36"					1	WHITE	RED / BLACK	BLACK	9.00	9.00
R3-2	36"	36"					2	WHITE	RED / BLACK	BLACK	9.00	18.00
R9-11aL	24"	12"	SIDEWALK CLOSED ← CROSS HERE				1	WHITE	BLACK	BLACK	2.00	2.00
R9-11aR	24"	12"	SIDEWALK CLOSED → CROSS HERE				1	WHITE	BLACK	BLACK	2.00	2.00

WAKEFIELD
I-95/ROUTE 128 OVER PLEASURE ISLAND ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	23	24
PROJECT FILE NO.	613196		

TEMPORARY TRAFFIC SIGN SUMMARY - SHEET 1

CONSTRUCTION SIGN SUMMARY (CONTINUED)

IDENTIFICATION NUMBER	SIZE WIDTH (IN)	SIZE HEIGHT (IN)	TEXT	DIMENSIONS (IN) LETTER HEIGHT	DIMENSIONS (IN) VERTICAL SPACING	DIMENSIONS (IN) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACKGROUND	COLOR LEGEND	COLOR BORDER	UNIT AREA (S.F.)	TOTAL AREA (S.F.)
R11-2	48"	30"	ROAD CLOSED	(1)	(1)	(1)	2	WHITE	BLACK	BLACK	10.00	20.00
SP-3	66"	30"	PLEASURE ISLAND RD	8.00	5.00	-	5	FLUOR. ORANGE	BLACK	BLACK	13.75	68.75
W1-4L	36"	36"		(1)	(1)	(1)	2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W1-4R	36"	36"					2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W3-2	48"	48"					1	FLUOR. ORANGE	BLACK	BLACK	16.00	16.00
W4-1	48"	48"					1	FLUOR. ORANGE	BLACK	BLACK	16.00	16.00
W4-2L	36"	36"					2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
	48"	48"					4				16.00	64.00
W4-2R	36"	36"					1	FLUOR. ORANGE	BLACK	BLACK	9.00	9.00
	48"	48"					4				16.00	64.00
W4-3	48"	48"					1	FLUOR. ORANGE	BLACK	BLACK	16.00	16.00
W5-1	36"	36"	ROAD NARROWS				2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W5-4	48"	48"	RAMP NARROWS				1	FLUOR. ORANGE	BLACK	BLACK	16.00	16.00
W11-2	36"	36"					4	FLUOR. YELLOW GREEN	BLACK	BLACK	9.00	36.00
W13-1p	24"	24"	XX MPH				2	FLUOR. ORANGE	BLACK	BLACK	4.00	8.00
	30"	30"					4				6.25	25.00

NOTES:

1. RETROREFLECTIVE SHEETING FOR ALL GUIDE AND TRAFFIC SIGNS SHALL CONFORM TO MASSDOT STANDARD SPECIFICATION SECTION M9.30.0. FLUORESCENT SHEETING SHALL BE USED FOR ALL ORANGE BACKGROUND SIGNS.

(1) SEE THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND "STANDARD HIGHWAY SIGNS" BY FEDERAL HIGHWAY ADMINISTRATION (LATEST EDITIONS) FOR TEXT DIMENSIONS AND COLORS. SEE ALSO THE "MASSACHUSETTS MUTCD AMENDMENTS".

(2) SEE THE MASSDOT "STANDARD SIGNS" LATEST EDITION.

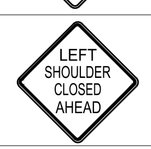
Plotted on 24-Oct-2025 12:18 PM
MASSDOT 10 BRIDGES_TTCP_PLEASURE ISLAND RD.DWG
Proposal No. 613196-133292
A00806 - 25

WAKEFIELD
I-95/ROUTE 128 OVER PLEASURE ISLAND ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	24	24
PROJECT FILE NO.	613196		

TEMPORARY TRAFFIC SIGN SUMMARY - SHEET 2

CONSTRUCTION SIGN SUMMARY (CONTINUED)

IDENTIFICATION NUMBER	SIZE WIDTH (IN)	SIZE HEIGHT (IN)	TEXT	DIMENSIONS (IN) LETTER HEIGHT	DIMENSIONS (IN) VERTICAL SPACING	DIMENSIONS (IN) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACKGROUND	COLOR LEGEND	COLOR BORDER	UNIT AREA (S.F.)	TOTAL AREA (S.F.)
W16-7pL	24"	12"		(1)	(1)	(1)	4	FLUOR. YELLOW GREEN	BLACK	BLACK	2.00	8.00
W16-8P	18"	8"		2.00	2.00	-	13	FLUOR. ORANGE	BLACK	BLACK	1.00	13.00
				4.00								
W20-1	36"	36"		(1)	(1)	(1)	4	FLUOR. ORANGE	BLACK	BLACK	9.00	36.00
	48"	48"					5				16.00	80.00
W20-2a	36"	36"					2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W20-3a	36"	36"					2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W20-4	36"	36"					2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W20-5L	36"	36"					2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
	48"	48"					2				16.00	32.00
W20-5R	36"	36"					1	FLUOR. ORANGE	BLACK	BLACK	9.00	9.00
	48"	48"					2				16.00	32.00
W21-5aL	48"	48"					4	FLUOR. ORANGE	BLACK	BLACK	16.00	64.00
W21-5bL	48"	48"					4	FLUOR. ORANGE	BLACK	BLACK	16.00	64.00

NOTES:

1. RETROREFLECTIVE SHEETING FOR ALL GUIDE AND TRAFFIC SIGNS SHALL CONFORM TO MASSDOT STANDARD SPECIFICATION SECTION M9.30.0. FLUORESCENT SHEETING SHALL BE USED FOR ALL ORANGE BACKGROUND SIGNS.

(1) SEE THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND "STANDARD HIGHWAY SIGNS" BY FEDERAL HIGHWAY ADMINISTRATION (LATEST EDITIONS) FOR TEXT DIMENSIONS AND COLORS. SEE ALSO THE "MASSACHUSETTS MUTCD AMENDMENTS".

(2) SEE THE MASSDOT "STANDARD SIGNS" LATEST EDITION.

MASSDOT 10 BRIDGES_TTCP_PLEASURE ISLAND RD.DWG Plotted on 24-Oct-2025 12:18 PM
Proposal No. 613196-133792
A00806 - 26

DOCUMENT A00807

DRAWINGS – WOBURN
BRIDGE NO. W-43-031 (2F6) & (2F7)

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MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

WOBURN
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	1	24
PROJECT FILE NO.	613196		

TITLE SHEET & INDEX

REPAIR PLANS AND DETAILS FOR

I-95/ROUTE 128

(BRIDGE NO. W-43-031)

IN THE CITY OF

WOBURN

MIDDLESEX COUNTY

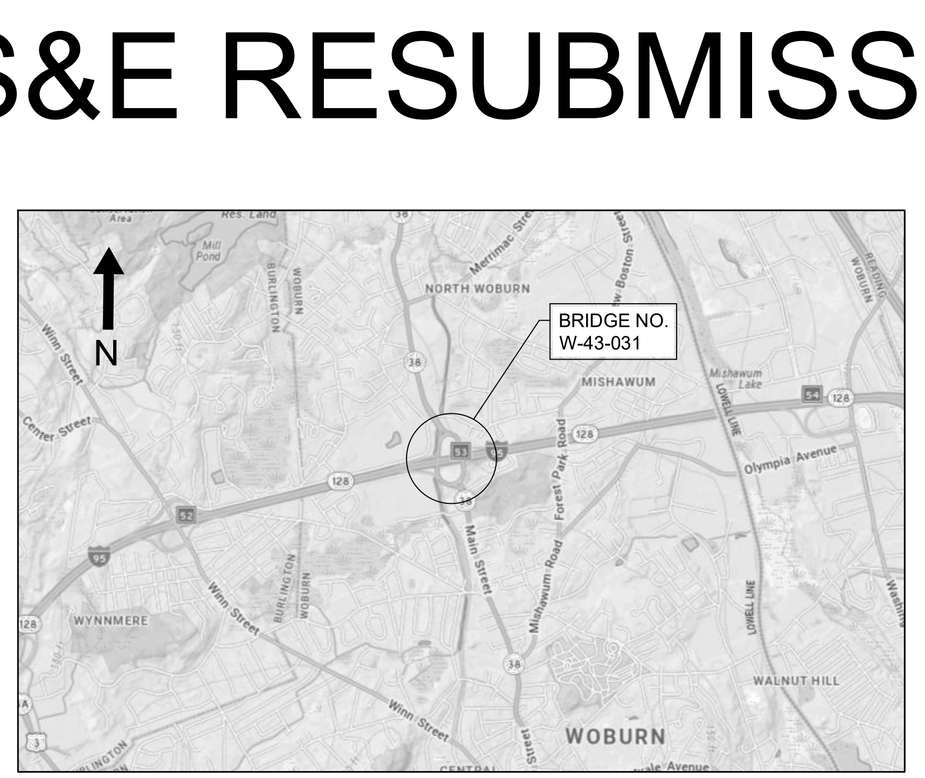
FEDERAL AID PROJECT NO. NFA

PS&E RESUBMISSION

THESE PLANS ARE SUPPLEMENTED BY THE OCTOBER 2025 CONSTRUCTION STANDARD DETAILS, THE 2015 OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS, THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK.

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET & INDEX
2-18	BRIDGE SHEETS
19-24	TEMPORARY TRAFFIC CONTROL PLANS



LOCUS MAP

APPROXIMATE SCALE: 1" = 2000'

DESIGN DESIGNATION (W-43-031)

DESIGN SPEED	65 MPH
ADT (PRESENT)	165,750
ADT (2043)	183,150
K	7%
D	53% SB
T (PEAK HOUR)	6.4%
T (AVERAGE DAY)	9.6%
DHV	11,720
DDHV	6,430
FUNCTIONAL CLASSIFICATION	URBAN INTERSTATE

DATE	DESCRIPTION	REV #

massDOT
Massachusetts Department of Transportation
Highway Division

Jacobs.
120 ST. JAMES AVENUE, 5TH FLOOR
BOSTON, MA 02116

24-October-2025

PS&E Resubmission

A00807 - 3

00 - COVER_SHEET.DWG Plotted on 22-Oct-2025 10:16 AM

Proposal No. 613196-133292

A00807 - 4

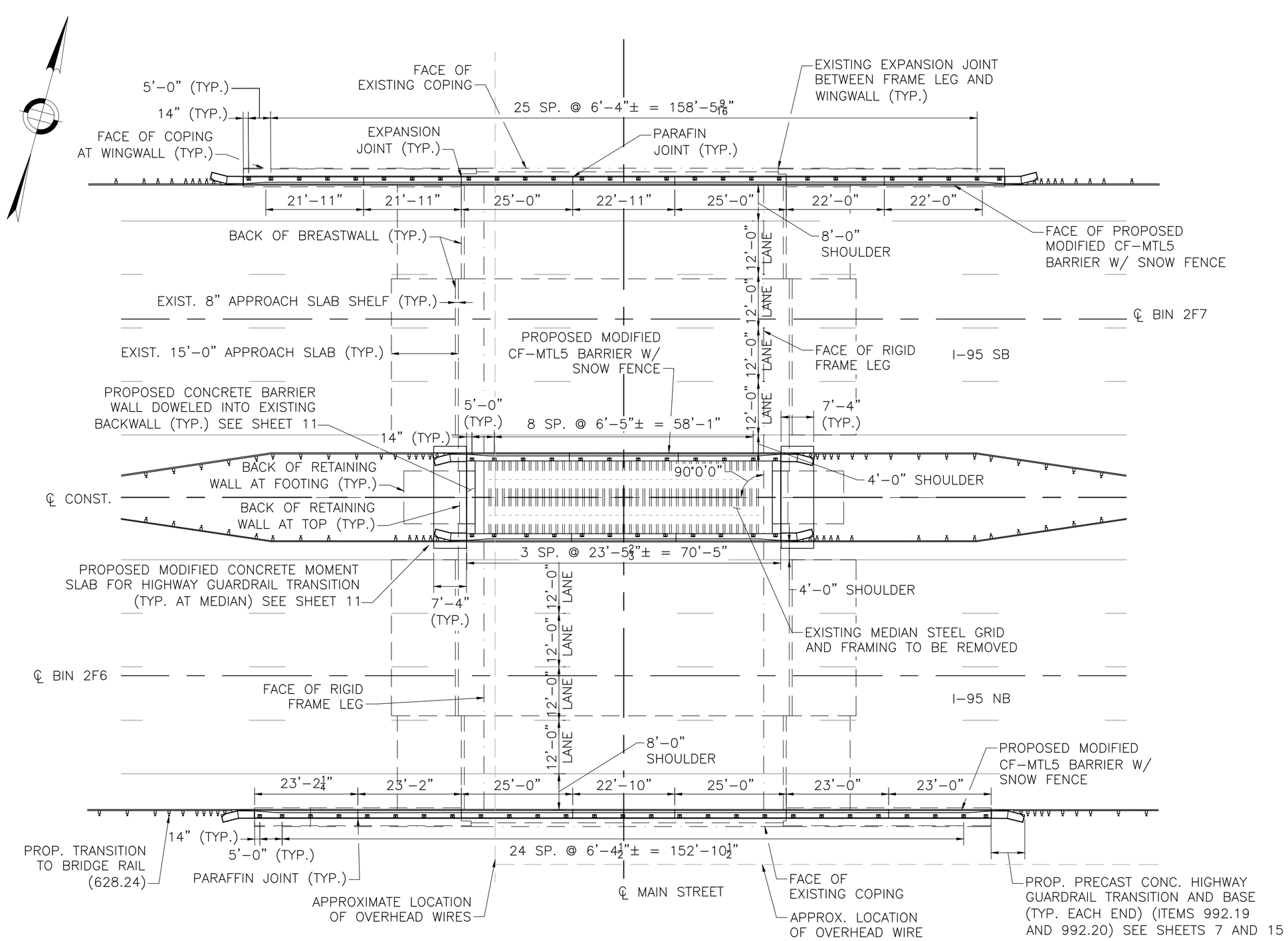
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Proposal No. 613196-133292

WOBURN
I-95/ROUTE 128

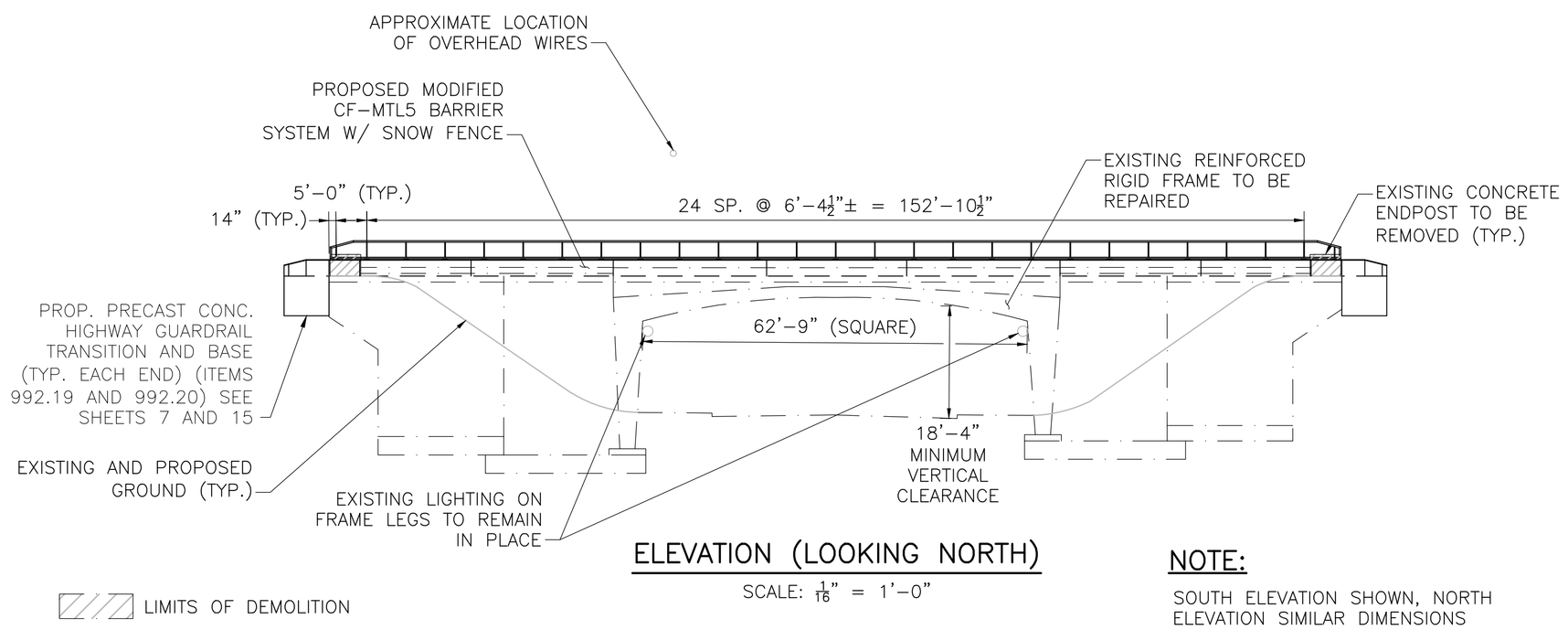
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	2	24
	PROJECT FILE NO. 613196		

PLAN AND ELEVATION



BRIDGE PLAN VIEW

SCALE: 1/16" = 1'-0"

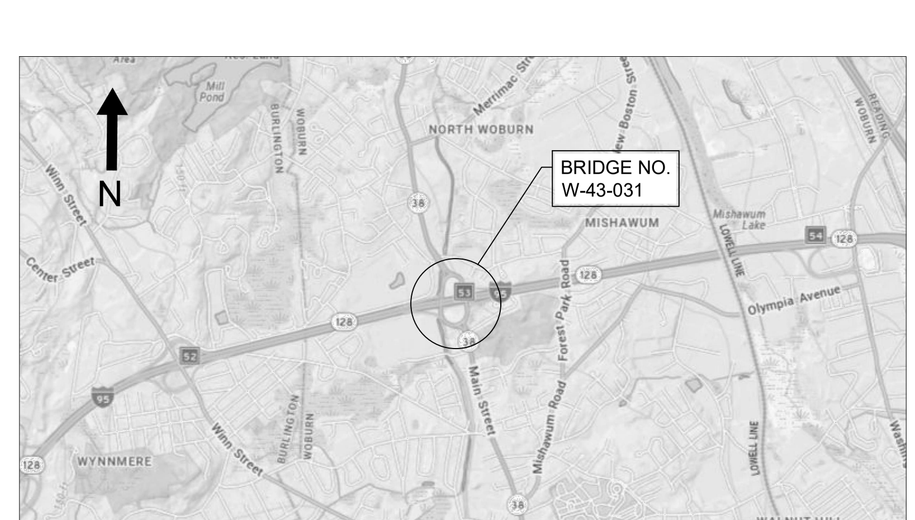


ELEVATION (LOOKING NORTH)

SCALE: 1/16" = 1'-0"

NOTE:

SOUTH ELEVATION SHOWN, NORTH ELEVATION SIMILAR DIMENSIONS UNLESS OTHERWISE NOTED.



LOCUS MAP

APPROXIMATE SCALE: 1" = 2000'

INDEX

SHEET NO.	DESCRIPTION
1	PLAN AND ELEVATION
2	GENERAL NOTES
3-4	DEMOLITION CROSS SECTIONS
5	PROPOSED CROSS SECTION
6-7	MODIFICATION DETAILS
8-11	REINFORCING DETAILS
12-14	CONCRETE REPAIRS
15	GUARDRAIL TRANSITION DETAILS
16	SNOW FENCE DETAILS
17	GUARDRAIL DETAILS

*
2F6
2F7

MONTH DD, YYYY | ISSUED FOR CONSTRUCTION

MassDOT Massachusetts Department of Transportation Highway Division

BRIDGE PRESERVATION

WOBURN

I-95/ROUTE 128
OVER STATE ROUTE 38

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION
10 PARK PLAZA BOSTON, MASS

Jacobs.
120 ST. JAMES AVENUE, 5TH FLOOR
BOSTON, MA 02116

24-October-2025 PS&E Resubmission

GENERAL NOTES:

1. DIMENSIONS SHOWN ARE TAKEN FROM ORIGINAL DESIGN DRAWINGS AND ARE NOT GUARANTEED. THE CONTRACTOR SHALL ESTABLISH THEIR 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. NO SURVEY WAS PERFORMED AS PART OF THIS PRESERVATION PROJECT.

2. THE CONTRACTOR SHALL SUBMIT SURVEY OF ROADWAY TO THE ENGINEER TO ESTABLISH THE ACTUAL ROADWAY PROFILE. THE SURVEY SHALL INCLUDE EXISTING ROADWAY ELEVATIONS ALONG EACH EDGE OF PAVEMENT AND CROWN LINE AT 25 FOOT INTERVALS, AT ENDS OF THE BRIDGE AND AT ENDS OF THE WINGWALLS. THE LIMITS OF SURVEY SHALL EXTEND 250 FEET EACH SIDE OF THE LIMITS OF WORK.

3. REMOVE EXISTING PAVEMENT MARKINGS AND REPLACE WITH NEW SLOTTED PAVEMENT MARKINGS AT LOCATIONS DISTURBED BY APPROACH ROADWAY PAVING.

4. DURING SURVEY, CONTRACTOR SHALL MEASURE THE LENGTH OF EACH EXISTING WINGWALL PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES BETWEEN THE LENGTHS SHOWN ON RECORD DRAWINGS OR THESE PLANS SHALL BE REPORTED TO THE ENGINEER PRIOR TO FABRICATION OF THE SNOW FENCE.

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:
SEE TRAFFIC DRAWINGS FOR TRAFFIC MANAGEMENT PLANS.

SCALES:
SCALES NOTED ON THE PLANS ARE NOT APPLICABLE TO REDUCED SIZE PRINTS. DIVIDE SCALES BY 2 FOR HALF-SIZE PRINTS (A3).

ANCHOR BOLTS:
ALL ANCHOR BOLTS SHALL BE SET BY TEMPLATE BEFORE THE CONCRETE IS PLACED.

CONCRETE:
5000 PSI, $\frac{3}{8}$ INCH, 710 HP CEMENT CONCRETE TO BE USED FOR BARRIER RECONSTRUCTION WORK.

4000 PSI, $\frac{3}{8}$ INCH, 660 CEMENT CONCRETE TO BE USED FOR PATCHING OF FRAMES AND FRAME WALLS.

REINFORCEMENT:
REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M31 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"	19"	23"
2. 12" OF CONCRETE BELOW BAR	20"	25"	30"
3. EPOXY COATED BARS, COVER < $3d_b$, OR CLEAR SPACING <$6d_b$	23"	29"	34"
4. COATED BARS, ALL OTHER CASES	18"	23"	27"
5. CONDITION 2. AND 3.	26"	32"	39"
6. CONDITION 2. AND 4.	24"	30"	36"

ALL OTHER BARS SHALL BE LAPPED AS SHOWN ON THE CONSTRUCTION DRAWINGS.

DATE:
TO BE PLACED ON THE INSIDE FACE OF THE SOUTHWEST AND NORTHEAST HIGHWAY GUARDRAIL TRANSITIONS. A SHEET SHOWING SIZE AND CHARACTER OF NUMERALS WILL BE FURNISHED. THE DATE USED SHALL BE SHOWN AS 1961 (THE YEAR THE BRIDGE WAS REBUILT).

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

UTILITIES:
THE CONTRACTOR SHALL LOCATE AND PROTECT EXISTING UTILITIES FROM ALL DAMAGE. OVERHEAD WIRES OVER BRIDGE OVER THE SOUTH ABUTMENT (OVER I-95) AND ACROSS SOUTH FASCIA (TERMINATION IN THE SOUTHEAST EMBANKMENT), UNDER DECK BRIDGE LIGHTING ATTACHED TO BOTH ABUTMENTS, CCTV ADJACENT TO SOUTHEAST WINGWALL, FIRE HYDRANT ADJACENT TO NB SIDE OF SOUTH ABUTMENT SHALL ALL REMAIN IN PLACE AND BE PROTECTED DURING CONSTRUCTION.

ESTIMATED QUANTITIES
(NOT GUARANTEED)

SELECTIVE CLEARING AND THINNING AT BRIDGES	204	SY
EARTH EXCAVATION	73	CY
REINFORCED CONCRETE RIGID FRAME EXCAVATION (PARTIAL DEPTH)	0.78	CY
BRIDGE EXCAVATION ALONG RIGID FRAME RAILING BRIDGE NO. W-43-031 (BIN 2F6)	1	LS
BRIDGE EXCAVATION ALONG RIGID FRAME RAILING BRIDGE NO. W-43-031 (BIN 2F7)	1	LS
GRAVEL BORROW FOR BACKFILLING STRUCTURES AND PIPES	83	CY
CONTROLLED DENSITY FILL - EXCAVATABLE	3	CY
DISPOSAL OF TREATED WOOD PRODUCTS	0	LBS
HMA FOR PATCHING	26.6	TONS
TRANSITION TO BRIDGE RAIL	8	EA
SILT SACK	4	EA
SEEDING	3300	SF
PAVEMENT MILLING MULCH UNDER GUARDRAIL	150	FT
DELINEATION FOR GUARD RAIL TERMINI	4	EA
4000 PSI, 3/8 INCH, 660 CEMENT CONCRETE	18	CF
REPAIRS TO UNDERSIDE OF REINFORCED CONCRETE RIGID FRAMES	20	SF
ALTERATIONS TO BRIDGE NO. W-43-031 (BIN 2F6)	1	LS
ALTERATIONS TO BRIDGE NO. W-43-031 (BIN 2F7)	1	LS

WOBURN
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	3	24
PROJECT FILE NO.	613196		

GENERAL NOTES

TRAFFIC DATA

	ROADWAY OVER	ROADWAY UNDER
DESIGN YEAR	2043	2043
AVERAGE DAILY TRAFFIC - PRESENT	165750	23900
AVERAGE DAILY TRAFFIC - DESIGN YEAR	183150	26400
DESIGN HOURLY VOLUME	11720	1950
DIRECTIONAL DISTRIBUTION	53% SB	57% NB
TRUCK PERCENTAGE - AVERAGE DAY	6.4%	4.4%
TRUCK PERCENTAGE - PEAK HOUR	9.6%	5.8%
DESIGN SPEED	65	40
DIRECTIONAL DESIGN HOURLY VOLUME	6430	1120

PROJECT INFORMATION

PROJECT FILE NO.: 613196
PROJECT DESCRIPTION: 10 BRIDGE BUNDLE
BRIDGE DESIGN LOADING: H-20
SURVEY: N/A

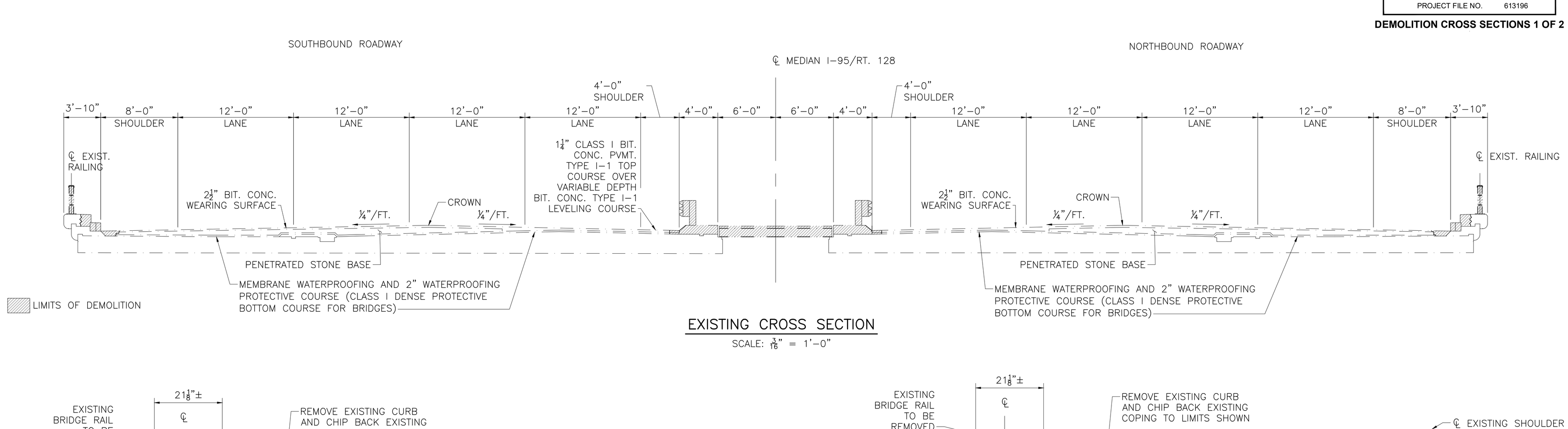
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2F6
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MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

2-GENERAL NOTES.DWG Plotted on 22-Oct-2025 10:34 AM
24-October-2025
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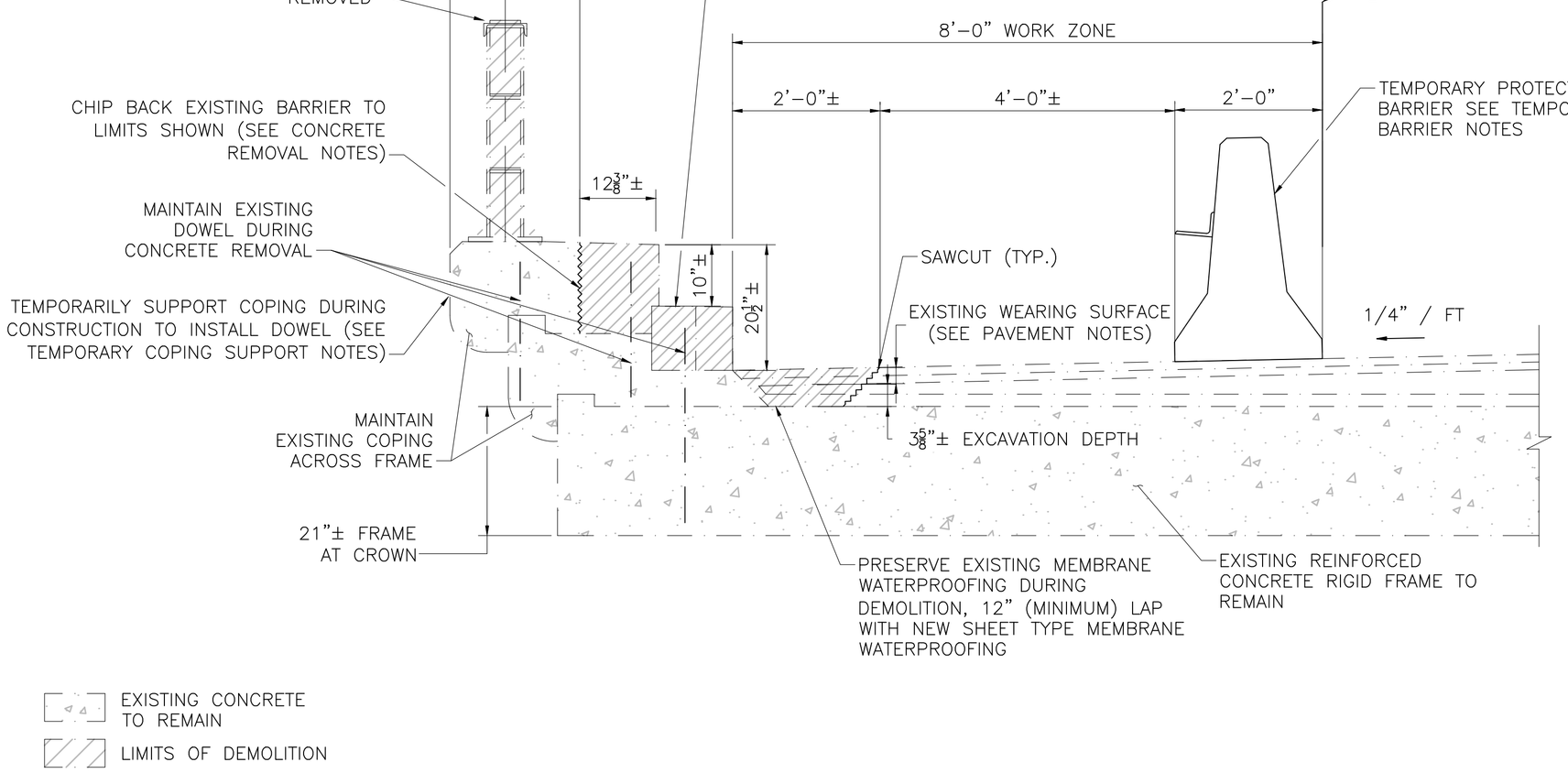
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	4	24
PROJECT FILE NO.	613196		

DEMOLITION CROSS SECTIONS 1 OF 2



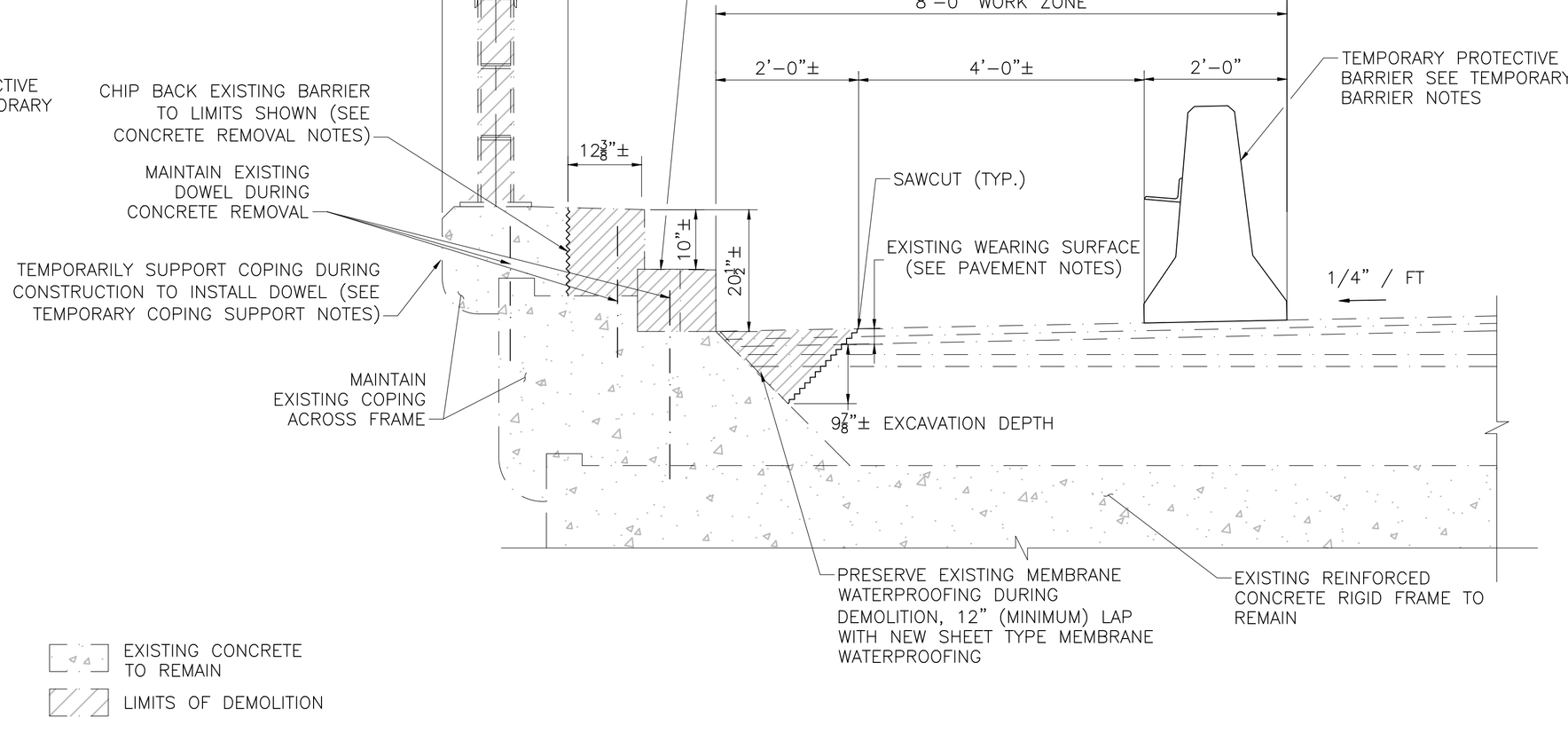
EXISTING CROSS SECTION

SCALE: $\frac{3}{16}$" = 1'-0"



LIMITS OF DEMOLITION AT MIDSPAN (BOTH FASCIA)

SCALE: $\frac{3}{4}$" = 1'-0"



LIMITS OF DEMOLITION AT ABUTMENTS (BOTH FASCIA)

SCALE: $\frac{3}{4}$" = 1'-0"

PAVEMENT NOTES:

1. EXISTING PAVEMENT THICKNESS IS BASED OFF EXISTING RECORD DRAWINGS, CONTRACTOR SHALL CONFIRM EXISTING THICKNESS PRIOR TO CONSTRUCTION.
2. PROPOSED PAVEMENT SHALL BE PLACED IN MAXIMUM 3" LIFTS AND MATCH EXISTING THICKNESS.
3. TO BE PAID UNDER ITEM 451. HMA FOR PATCHING. ASPHALT EMULSION FOR TACK COAT AND HMA JOINT SEALANT ARE INCIDENTAL TO ITEM 451. AND SHALL BE USED IN ACCORDANCE WITH MASSDOT STANDARD SPECIFICATIONS SECTION 450, PAVEMENT MIX SPC-B-12.5.

CONCRETE REMOVAL NOTES:

1. EXISTING BARRIER CONCRETE SHALL BE CHIPPED BACK TO COLD JOINT OF PREVIOUS BARRIER MODIFICATIONS.
2. IF CONCRETE IS DETERMINED TO BE UNSOUND PAST THE LIMITS OF CONCRETE REMOVAL, THEN THE LIMITS MAY BE INCREASED AS DIRECTED BE THE RESIDENT ENGINEER. SEE SPECIAL PROVISIONS.
3. EXISTING BRIDGE RAIL ANCHOR BOLTS SHALL BE CUT DOWN ¾" DEEP INTO EXISTING COPING AND HOLES TO BE FILLED WITH SEALANT.

TEMPORARY COPING SUPPORT:

1. TEMPORARY COPING SUPPORT SHALL REMAIN IN PLACE UNTIL CONCRETE HAS CURED FOR 28 DAYS.
2. SUPPORT SHALL NOT REDUCE EXISTING BRIDGE MINIMUM VERTICAL CLEARANCE.

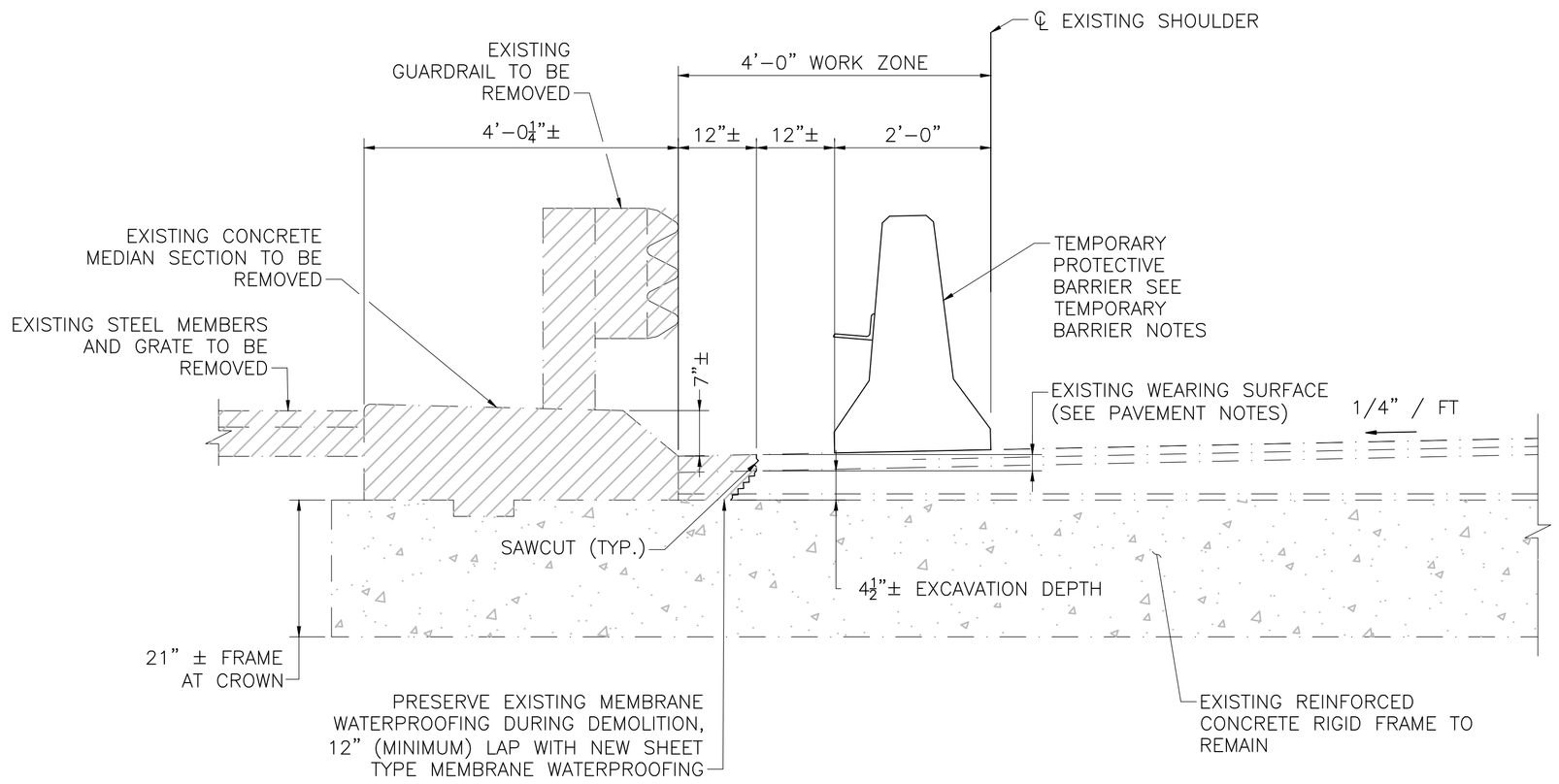
TEMPORARY BARRIER NOTES:

TEMPORARY CONCRETE BARRIER SHALL BE RETROFITTED TO MASH TL-3 STANDARDS IN ACCORDANCE WITH DRAWING NUMBERS 853.23.1 AND 853.23.2 OF THE MASSDOT CONSTRUCTION STANDARDS ISSUED JUNE OF 2025

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2F6
2F7

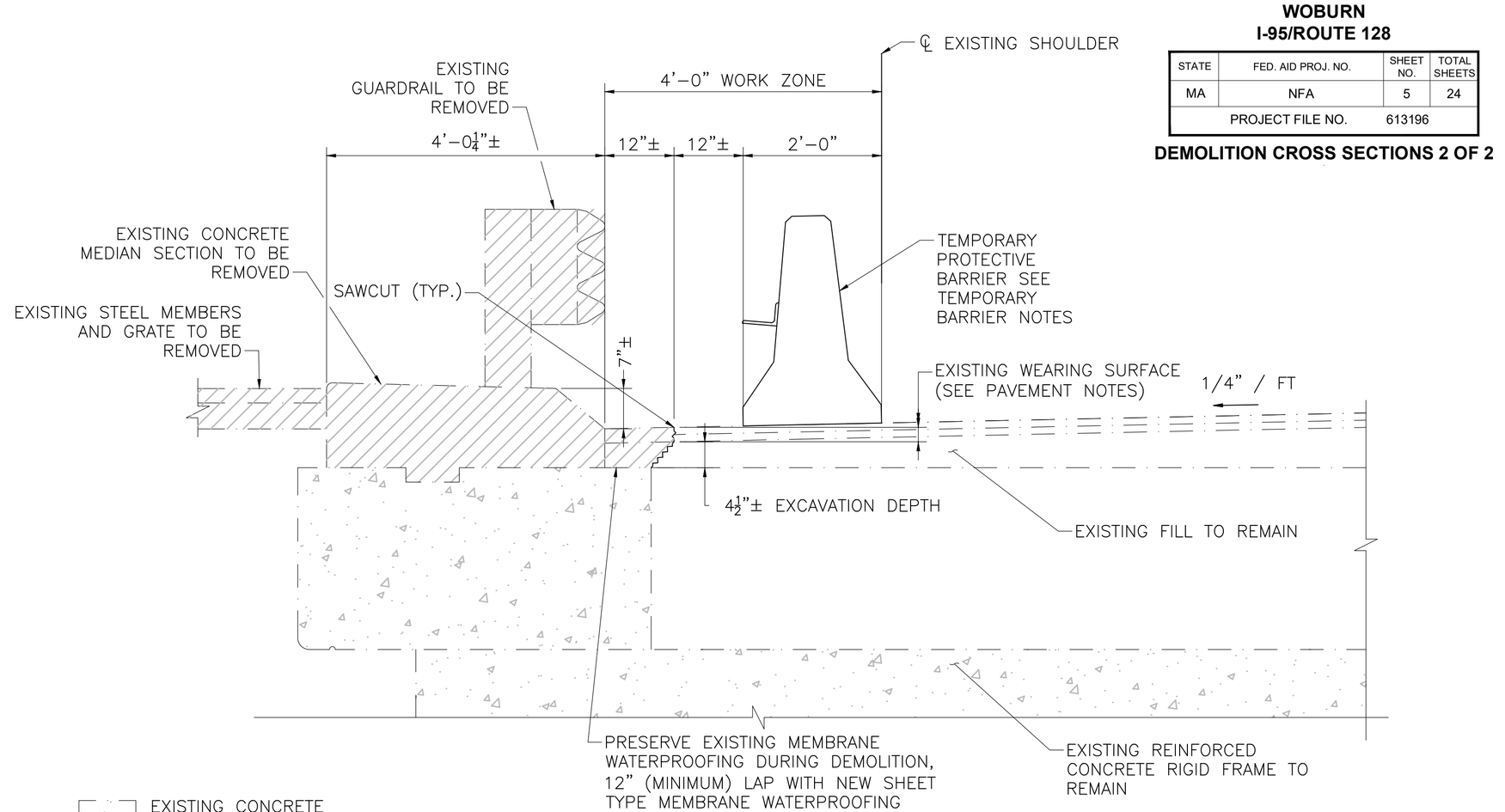
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
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3-4-DEMO CROSS SECTIONS.DWG Plotted on 22-Oct-2025 10:53 AM
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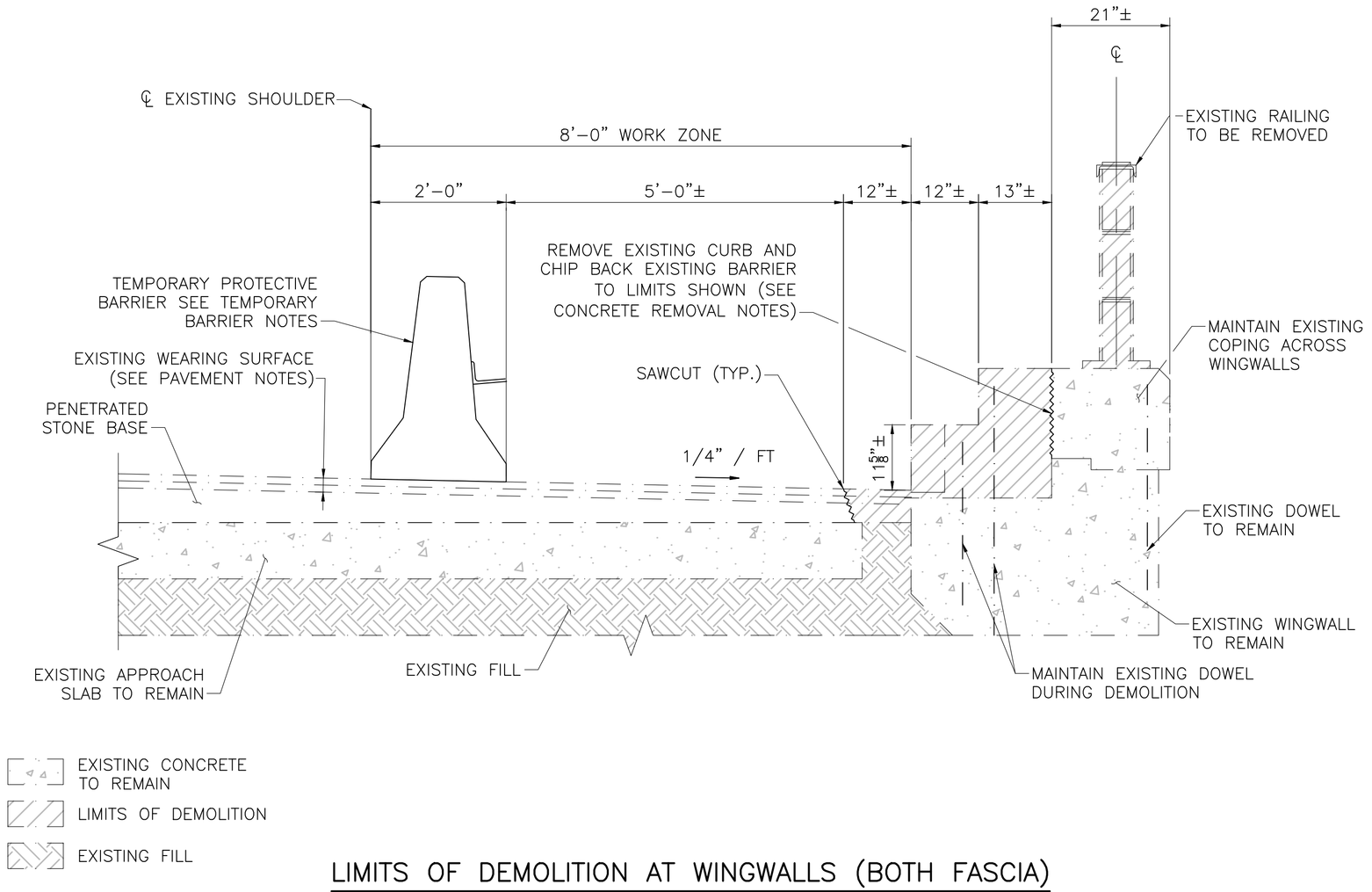
LIMITS OF DEMOLITION AT MIDSPAN (BOTH MEDIAN BARRIERS)

SCALE: ¾" = 1'–0"



LIMITS OF DEMOLITION AT ABUTMENTS (BOTH MEDIAN BARRIERS)

SCALE: ¾" = 1'–0"



LIMITS OF DEMOLITION AT WINGWALLS (BOTH FASCIA)

SCALE: ¾" = 1'–0"

PAVEMENT NOTES:

SEE SHEET 3 FOR PAVEMENT NOTES.

CONCRETE REMOVAL NOTES:

SEE SHEET 3 FOR REMOVAL NOTES.

TEMPORARY COPING SUPPORT:

SEE SHEET 3 FOR TEMPORARY COPING NOTES.

TEMPORARY BARRIER NOTES:

SEE SHEET 3 FOR TEMPORARY BARRIER NOTES.

WOBURN
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	5	24
PROJECT FILE NO.	613196		

DEMOLITION CROSS SECTIONS 2 OF 2

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2F6
2F7

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

3-4-DEMO CROSS SECTIONS.DWG Plotted on 22-Oct-2025 10:53 AM

24-October-2025

P&E Resubmission

Proposal No. 613196-133292

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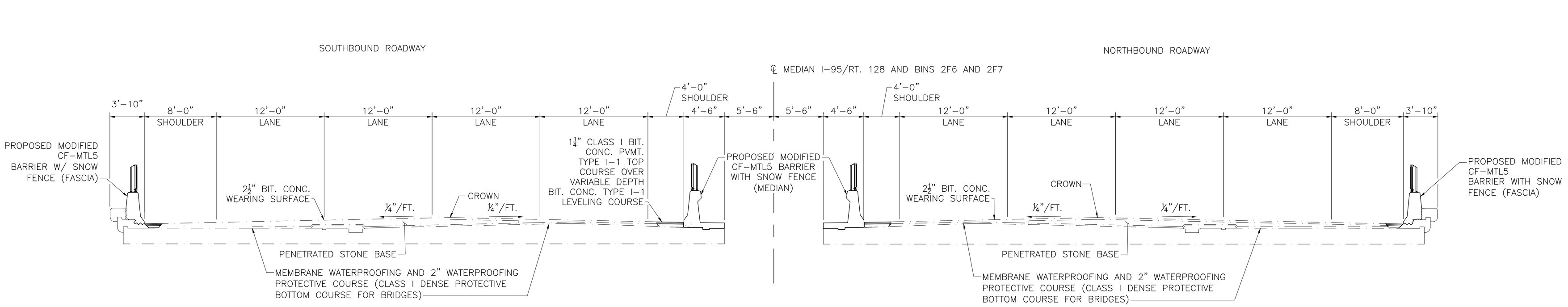
WOBURN
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	6	24
	PROJECT FILE NO. 613196		

PROPOSED CROSS SECTION

NOTES:

1. ALL EXISTING LANE LINES SHOWN FROM RECORD DRAWINGS ARE APPROXIMATE. NO SURVEY WAS PERFORMED AS PART OF THIS BRIDGE PRESERVATION TASK. CONTRACTOR TO CONFIRM LANE LINE MARKINGS PRIOR TO START OF WORK.



PROPOSED CROSS SECTION

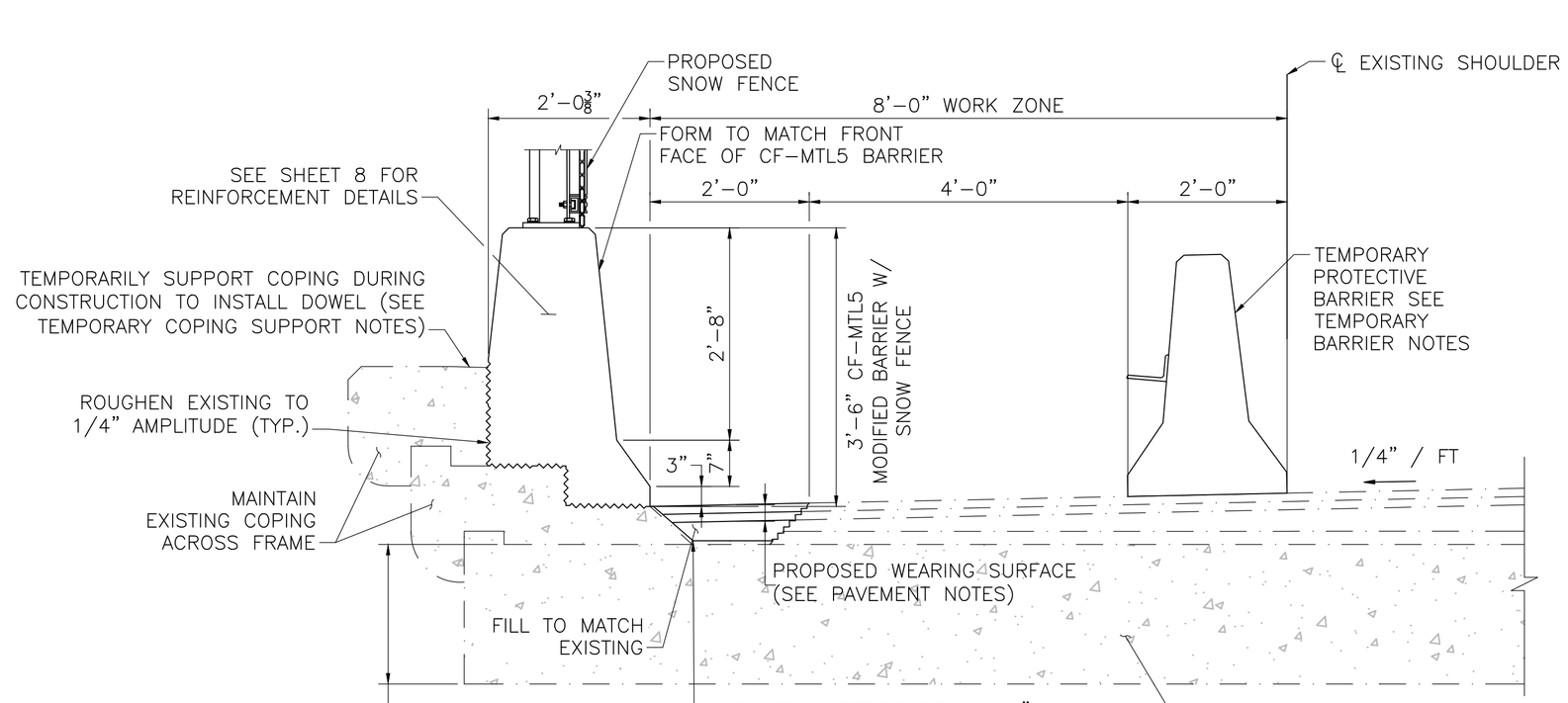
SCALE: $\frac{3}{16}$" = 1'-0"

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

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2F6
2F7

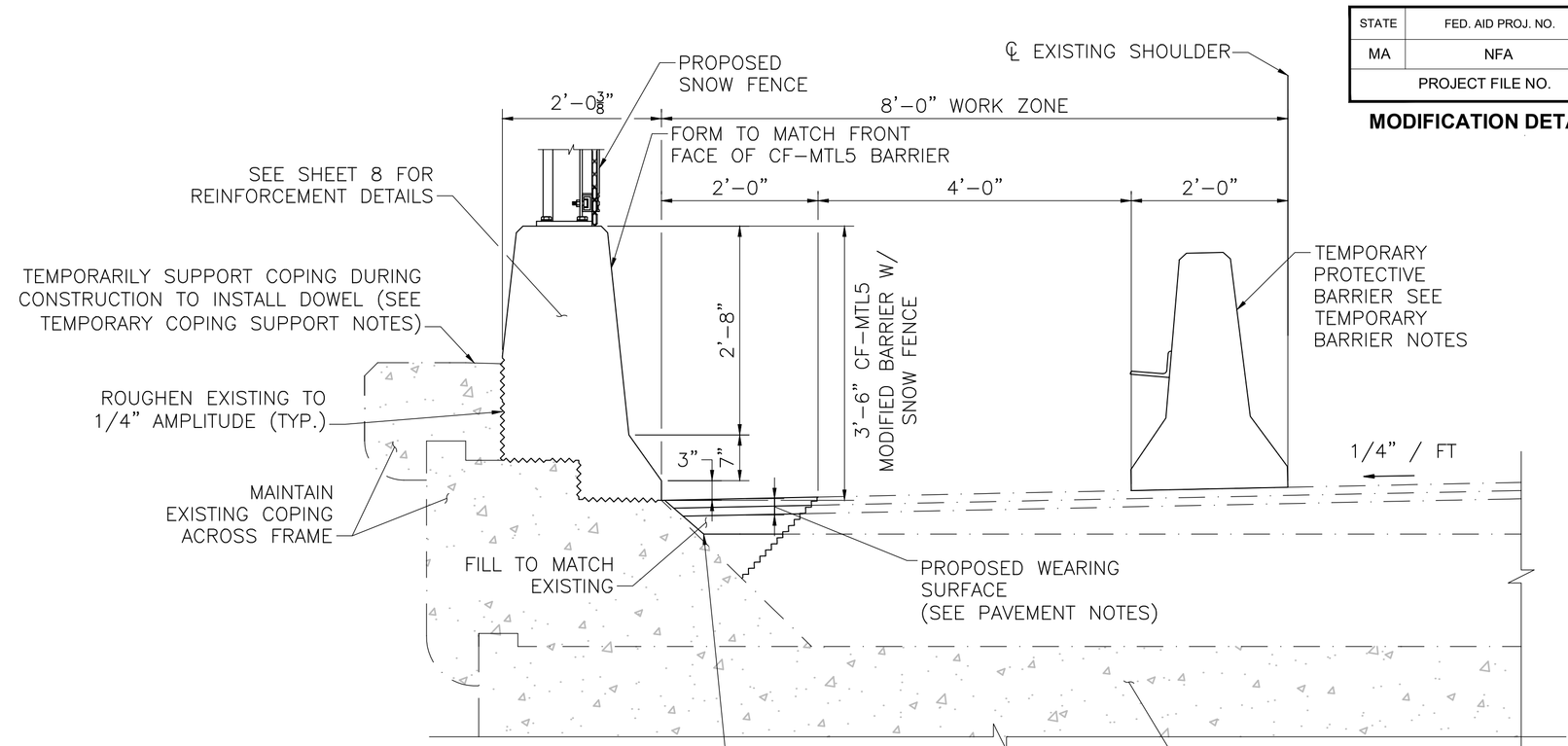
SHEET 5 OF 17 SHEETS BRIDGE NO. W-43-031 (*)

A00807 - 8
5-PROPOSED CROSS SECTION.DWG Plotted on 22-Oct-2025 11:47 AM
Proposal No. 613196-133292
24-October-2025
PS&E Resubmission



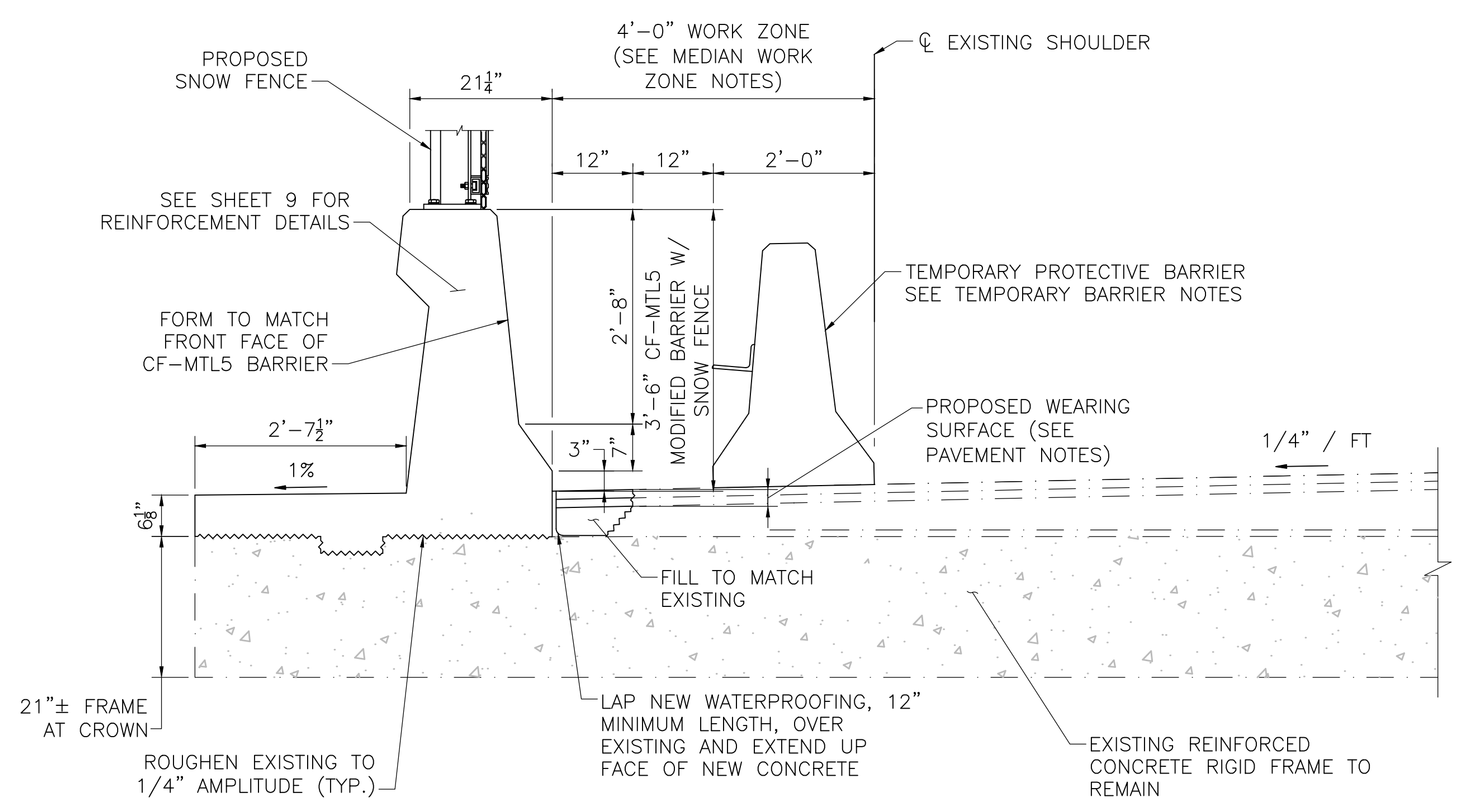
PROPOSED MODIFIED CF–MTL5 BARRIER AT MIDSPAN (BOTH FASCIA)

SCALE: ¾" = 1'–0"



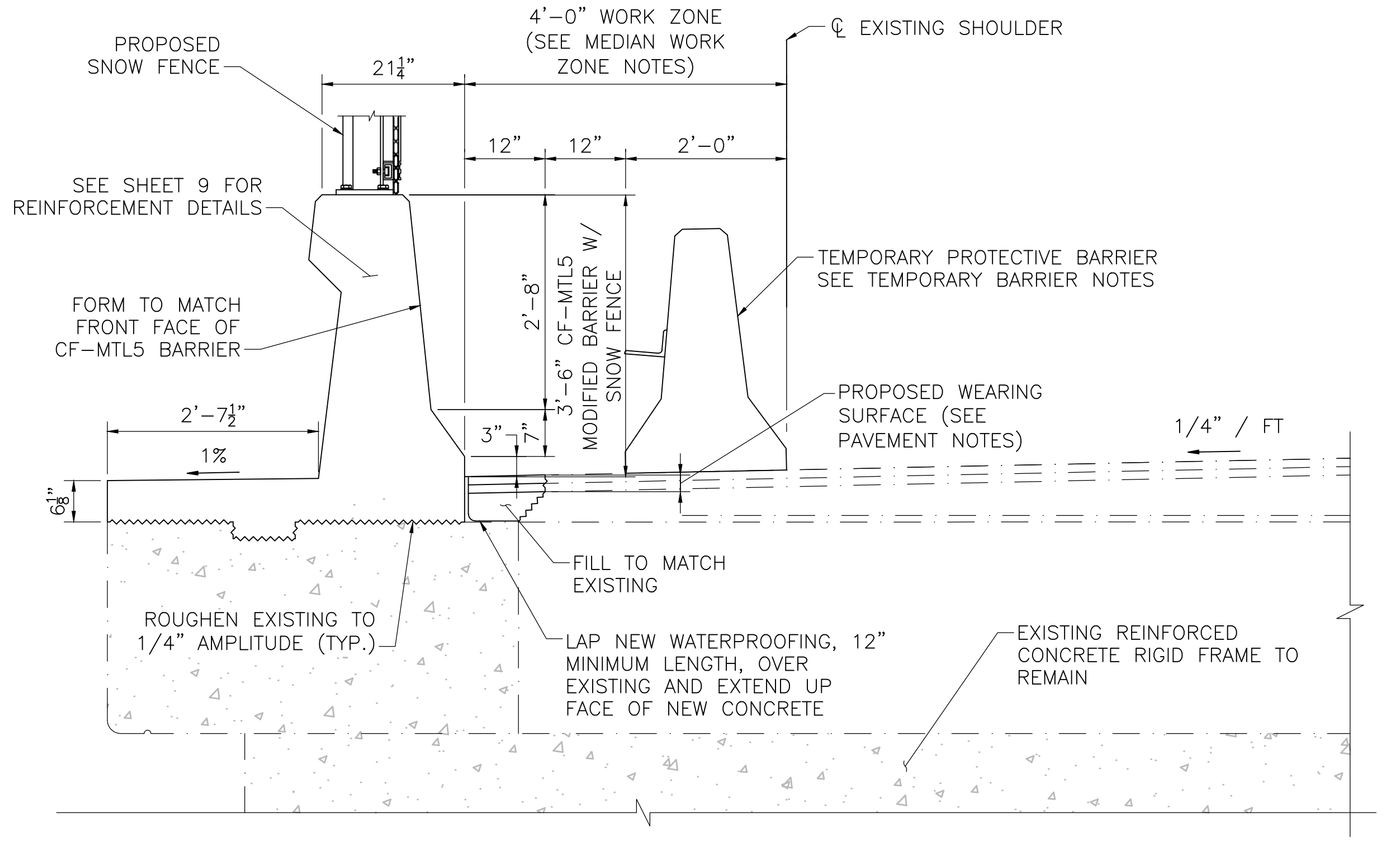
PROPOSED MODIFIED CF–MTL5 BARRIER AT ABUTMENTS (BOTH FASCIA)

SCALE: ¾" = 1'–0"



PROPOSED MODIFIED CF–MTL5 BARRIER AT MIDSPAN (BOTH MEDIAN BARRIERS)

SCALE: ¾" = 1'–0"



PROPOSED MODIFIED CF–MTL5 BARRIER AT ABUTMENTS (BOTH MEDIAN BARRIERS)

SCALE: ¾" = 1'–0"

PAVEMENT NOTES:

SEE SHEET 3 FOR PAVEMENT NOTES.

CONCRETE REMOVAL NOTES:

SEE SHEET 3 FOR REMOVAL NOTES.

TEMPORARY COPING SUPPORT NOTES:

SEE SHEET 3 FOR TEMPORARY COPING SUPPORT NOTES.

TEMPORARY BARRIER NOTES:

SEE SHEET 3 FOR TEMPORARY BARRIER NOTES.

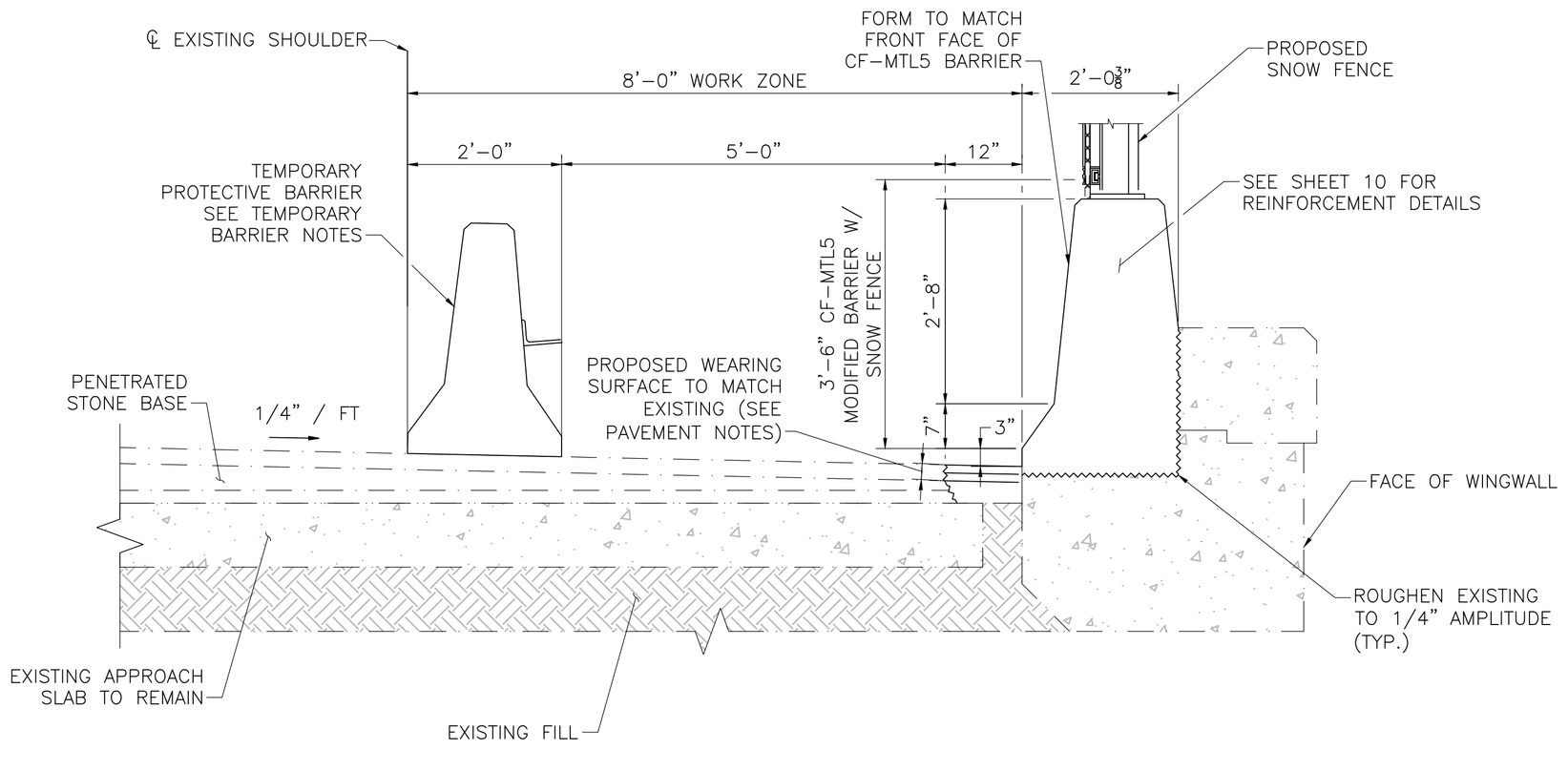
MEDIAN WORK ZONE NOTES:

AT MEDIAN CONTRACTOR SHALL WORK FROM WITHIN DEMOLISHED MEDIAN AREA OR UTILIZE NIGHTLY LANE CLOSURES ON I–95 TO SUPPLEMENT WORK ZONE AREA IN ORDER TO DEMOLISH EXISTING MEDIAN CONCRETE AND GUARDRAIL AND PLACE PROPOSED BARRIER.

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2F6
2F7

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
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6-7-MODIFICATION DETAILS.DWG Plotted on 22-Oct-2025 11:58 AM
Proposal No. 613196-133292
24-October-2025
PS&E Resubmission



PROPOSED MODIFIED CF–MTL5 BARRIER AT WINGWALLS (BOTH FASCIA)

SCALE: ¾" = 1'–0"

TRANSITION BASE NOTES:

1. PRECAST HIGHWAY GUARDRAIL TRANSITION (HGT) SHALL BE 5000 PSI, ¾ IN, 685 HP CEMENT CONCRETE.
2. PRECAST GUARDRAIL TRANSITION BASE UNITS TO BE INSTALLED PRIOR TO BASE OF WINGWALL BARRIERS CONSTRUCTION.
3. GRAVEL BORROW SHALL BE PLACED AND THOROUGHLY COMPACTED TO THE GRADE OF 3" (MIN.) BELOW THE INTENDED BOTTOM OF THE PRECAST GUARDRAIL TRANSITION BASE AND TO A HEIGHT OF 2'–0" (MIN.) ON ALL SIDES OF THE TRANSITION BASE TO FORM A TRENCH IN WHICH TO SET THE TRANSITION. WHERE NO GRAVEL BORROW IS REQUIRED BELOW THE BASE, IT SHALL BE PLACED ON UNDISTURBED SOIL.
4. CONTRACTOR SHALL SET THE PRECAST GUARDRAIL TRANSITION TO THE REQUIRED ELEVATION AND ALIGNMENT, AND BACKFILL PRECAST GUARDRAIL TRANSITION WITH CONTROLLED DENSITY FILL (NON–EXCAVATABLE) TO THE ELEVATION SHOWN.
5. CONTRACTOR TO PROVIDE METHOD OF INSTALLATION OF HGT WITHIN THE CLEAR ZONES LIMITS BEHIND THE BARRIERS AT ALL CORNERS.
6. SEE ITEMS 992.19 AND 992.20 FOR MEASUREMENT AND PAYMENT.

PAVEMENT NOTES:

SEE SHEET 3 FOR PAVEMENT DETAILS.

CONCRETE REMOVAL NOTES:

SEE SHEET 3 FOR REMOVAL DETAILS.

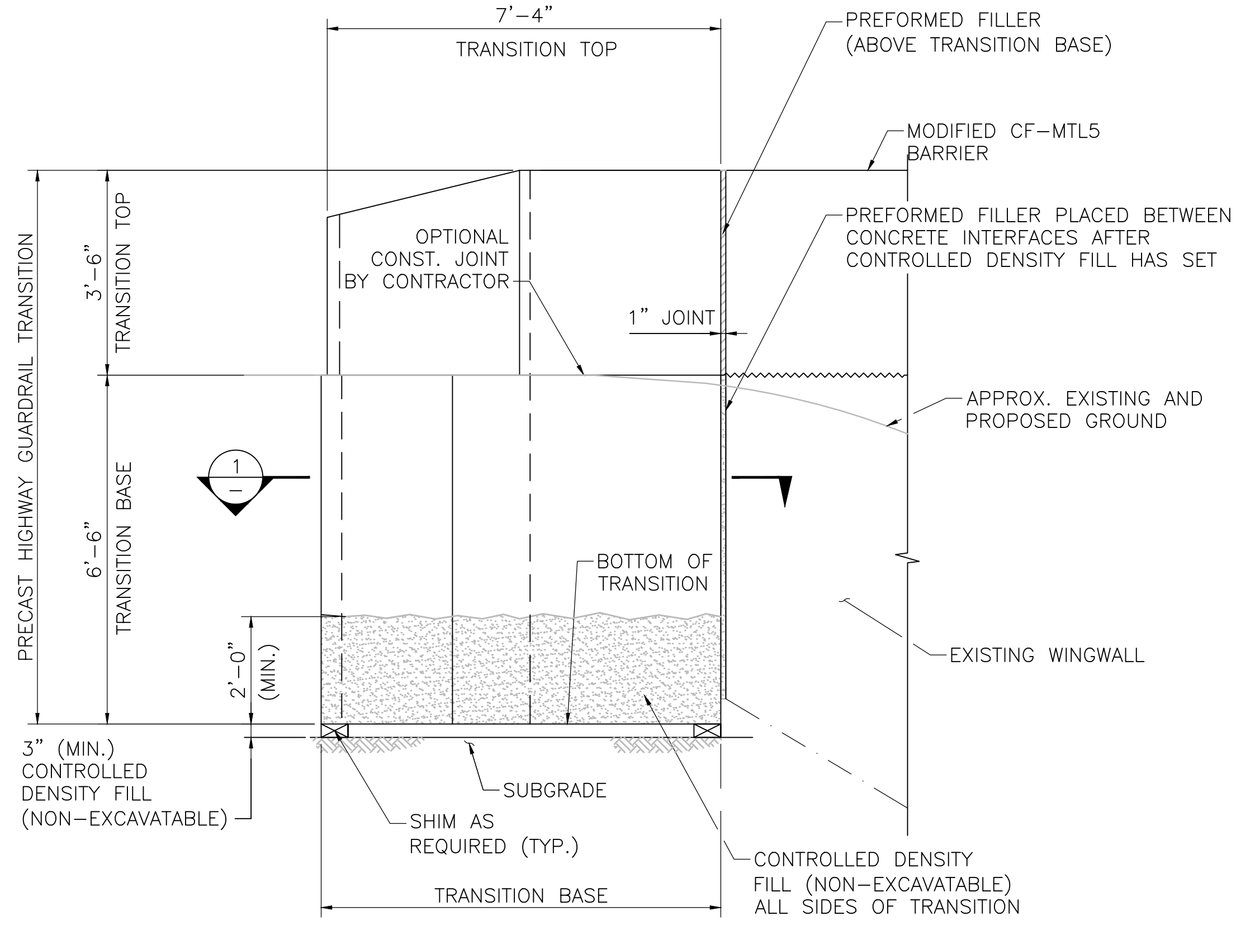
TEMPORARY BARRIER NOTES:

SEE SHEET 3 FOR BARRIER DETAILS.

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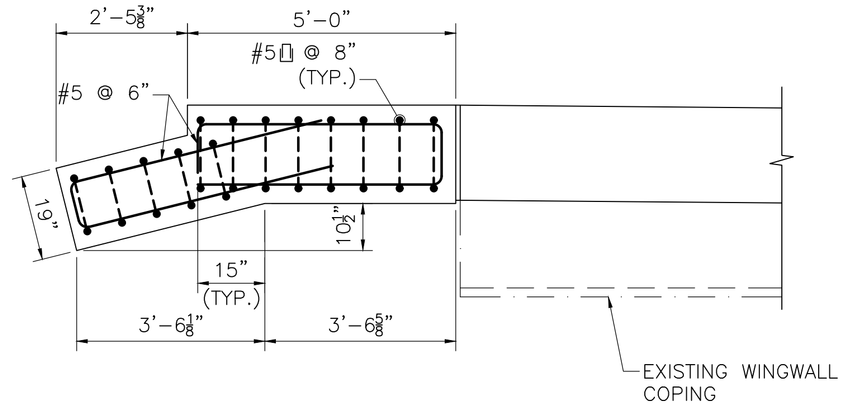
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	8	24
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MODIFICATION DETAILS 2 OF 2



GUARDRAIL TRANSITION BASE ELEVATION (INSIDE FACE)

SCALE: ½" = 1'–0"



SECTION 1 – SCALE: ½" = 1'–0"

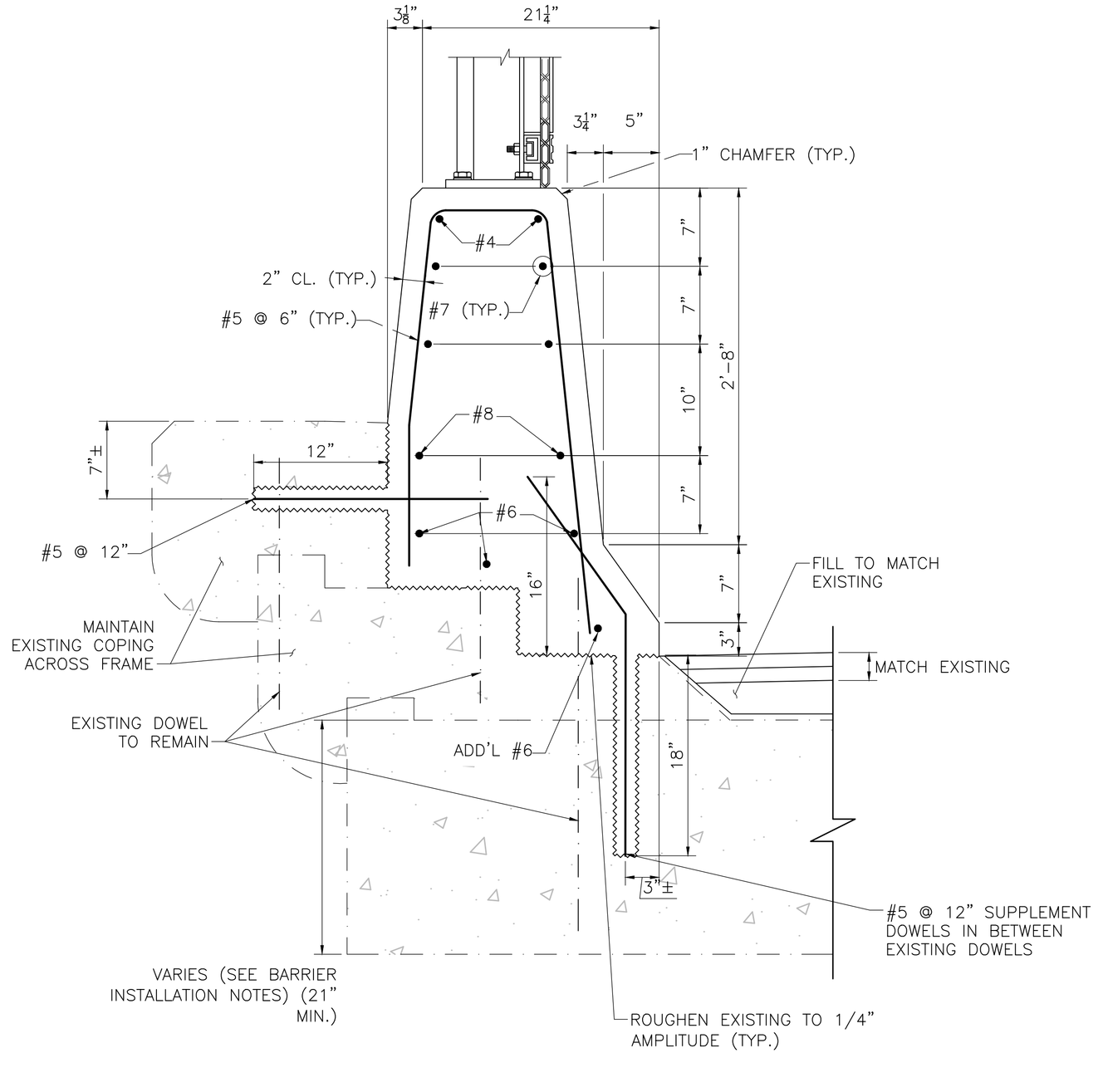
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MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

A00807 - 10
6-7-MODIFICATION DETAILS.DWG Plotted on 22-Oct-2025 11:58 AM
Proposal No. 613196-133292
24-October-2025
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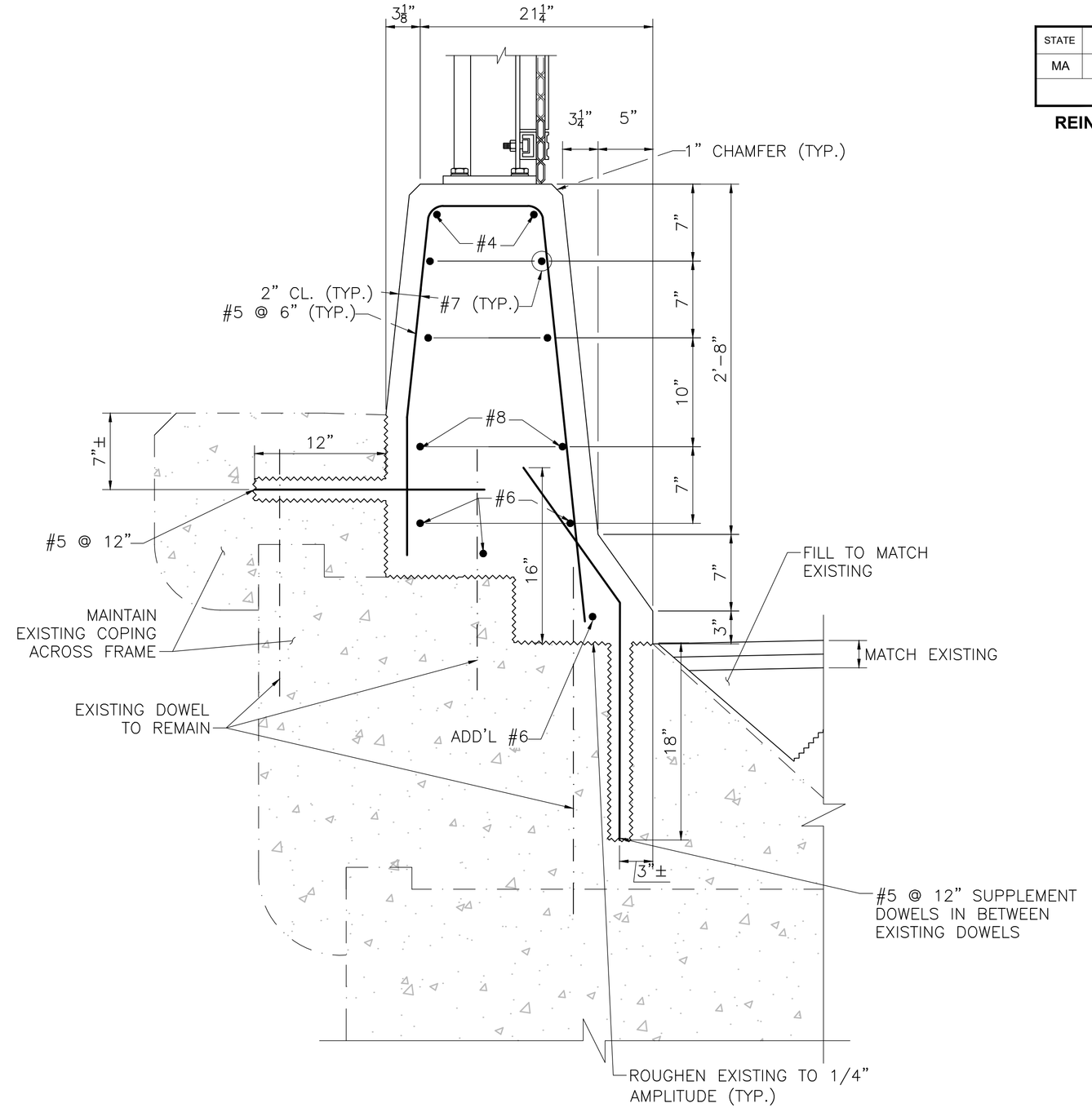
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	9	24
	PROJECT FILE NO.	613196	

REINFORCING DETAILS 1 OF 4



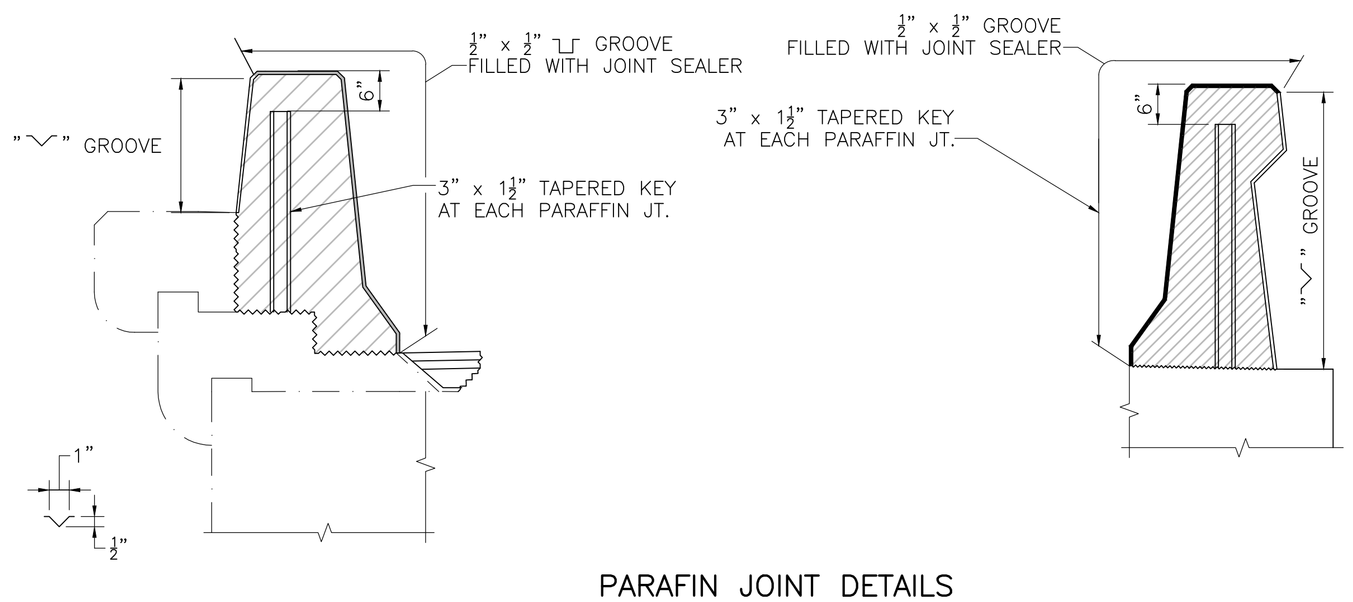
PROPOSED MODIFIED CF–MTL5 BARRIER REINFORCING DETAIL AT MIDSPAN (BOTH FASCIA)

SCALE: 1½" = 1'–0"



PROPOSED MODIFIED CF–MTL5 BARRIER REINFORCING DETAIL AT ABUTMENTS (BOTH FASCIA)

SCALE: 1½" = 1'–0"



PARAFIN JOINT DETAILS

SCALE: ¾" = 1'–0"

NOTES:

1. ALL CONCRETE ABOVE RIGID FRAMES SHALL BE POURED IN ALTERNATING SECTIONS WITH NOT LESS THAN 3 DAYS BETWEEN POURS.
2. DO NOT CARRY LONGITUDINAL BARS THROUGH THE PARAFFIN JOINTS. END THE REINFORCEMENT 2" CLEAR OF JOINT.
3. JOINT SHALL BE SQUARE TO FACE OF CURB OR COPING.

DRILL & GROUT NOTES:

1. LOCATIONS FOR DRILLING AND GROUTING SHALL BE CAREFULLY SELECTED TO AVOID EXISTING REINFORCING.
2. GROUT SHALL BE CHOSEN FROM MASSDOT QUALIFIED CONSTRUCTION MATERIALS LIST (QCML).

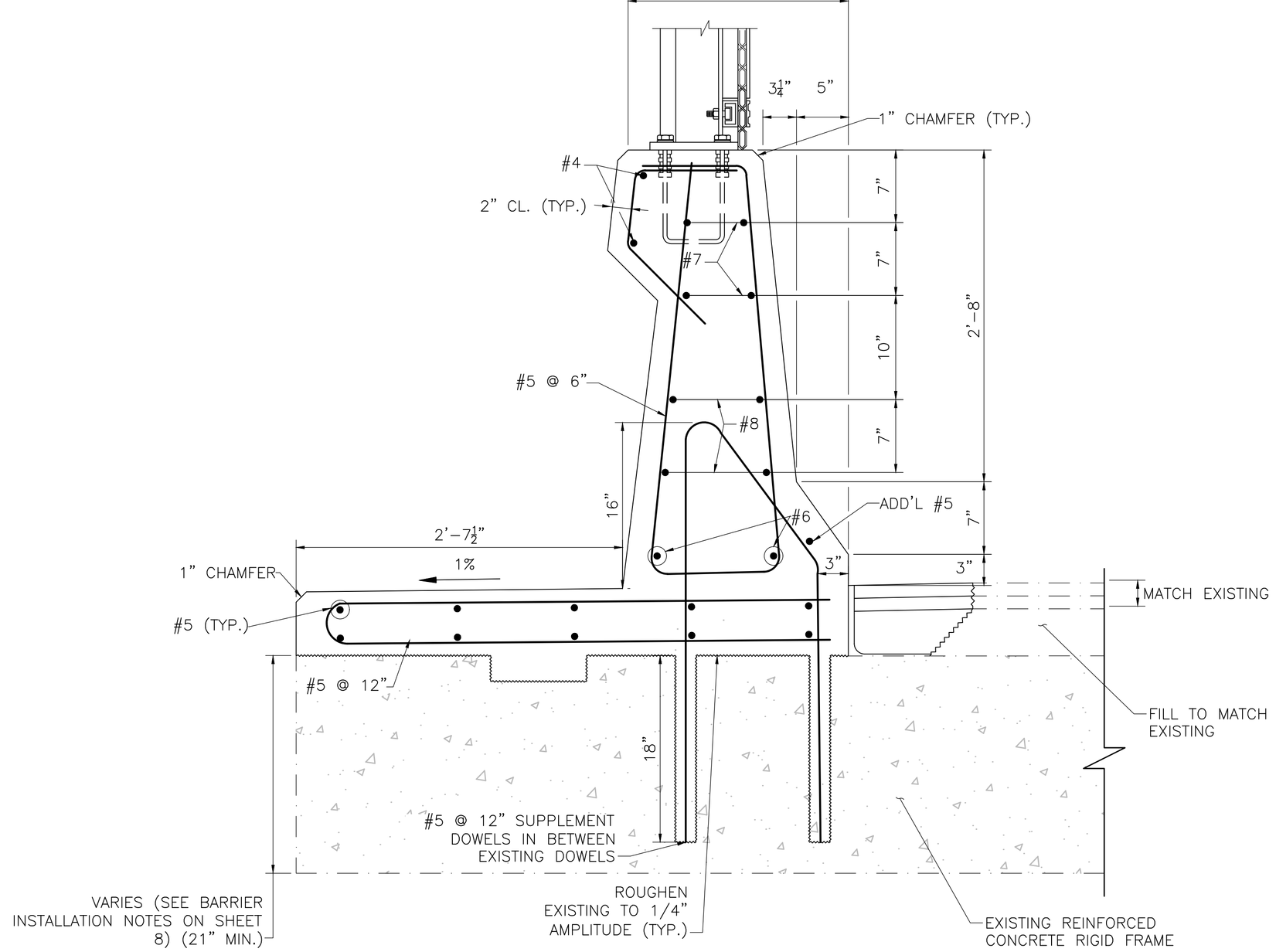
BARRIER INSTALLATION NOTES:

1. CONTRACTOR SHALL REMOVE EXISTING RAILING AND CONCRETE BASE TO LIMITS AS SHOWN ON THE PLANS AND AS DETERMINED BY THE ENGINEER. SEE NOTES ON SHEET 3 FOR CONCRETE REMOVAL.
2. DRILL AND GROUT DOWELS PRIOR TO POURING OF REPAIRED CONCRETE AREA AND BARRIER.
3. BARRIER AND REPAIRED AREA SHALL BE POURED SEPARATE WITH A CONSTRUCTION JOINT BETWEEN THE REPAIRED AREA AND THE BASE OF THE BARRIER (SEE SHEET 7).

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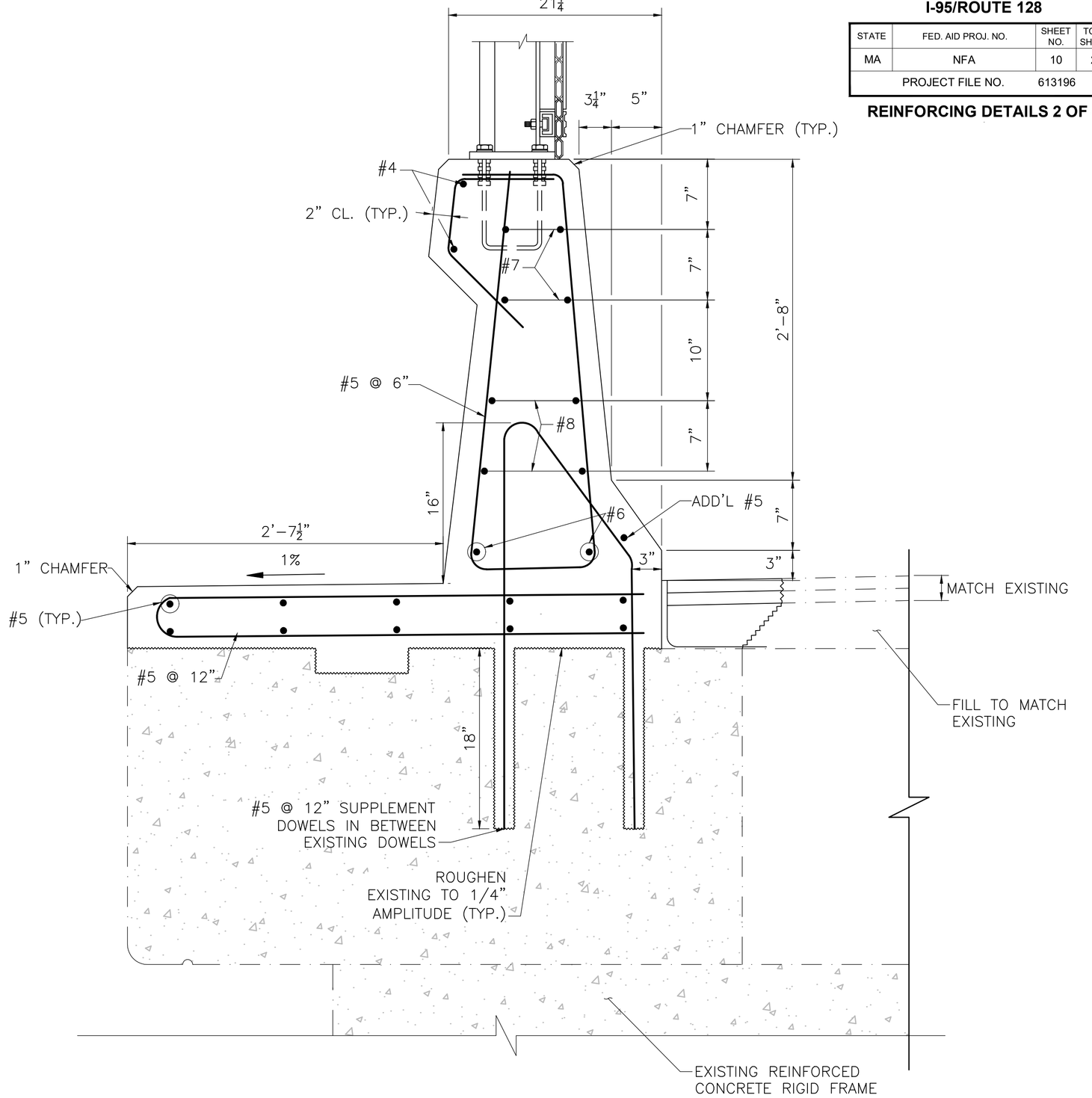
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
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USE ONLY PRINTS OF LATEST DATE	

8-11-REINFORCING DETAILS.DWG Plotted on 22-Oct-2025 11:57 AM
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PROPOSED MODIFIED CF–MTL5 BARRIER REINFORCING DETAIL AT MIDSPAN (BOTH MEDIAN BARRIERS)

SCALE: 1½" = 1'–0"



PROPOSED MODIFIED CF–MTL5 BARRIER REINFORCING DETAIL AT ABUTMENTS (BOTH MEDIAN BARRIERS)

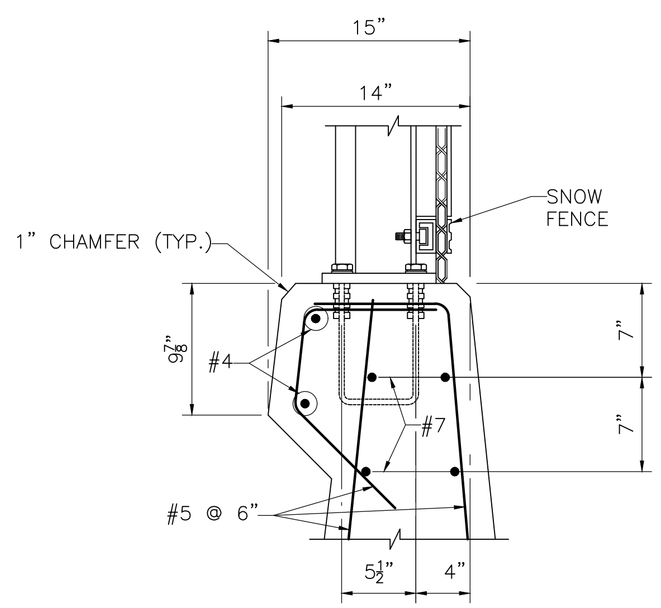
SCALE: 1½" = 1'–0"

DRILL & GROUT NOTES:

1. SEE SHEET 8 FOR DRILL & GROUT NOTES.

BARRIER INSTALLATION NOTES:

1. SEE SHEET 8 FOR BARRIER INSTALLATION NOTES.



SECTION THRU MODIFIED BARRIER

SCALE: 1½" = 1'–0"

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STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	10	24
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REINFORCING DETAILS 2 OF 4

8-11-REINFORCING DETAILS.DWG Plotted on 22-Oct-2025 11:57 AM

Proposal No. 613196-133292

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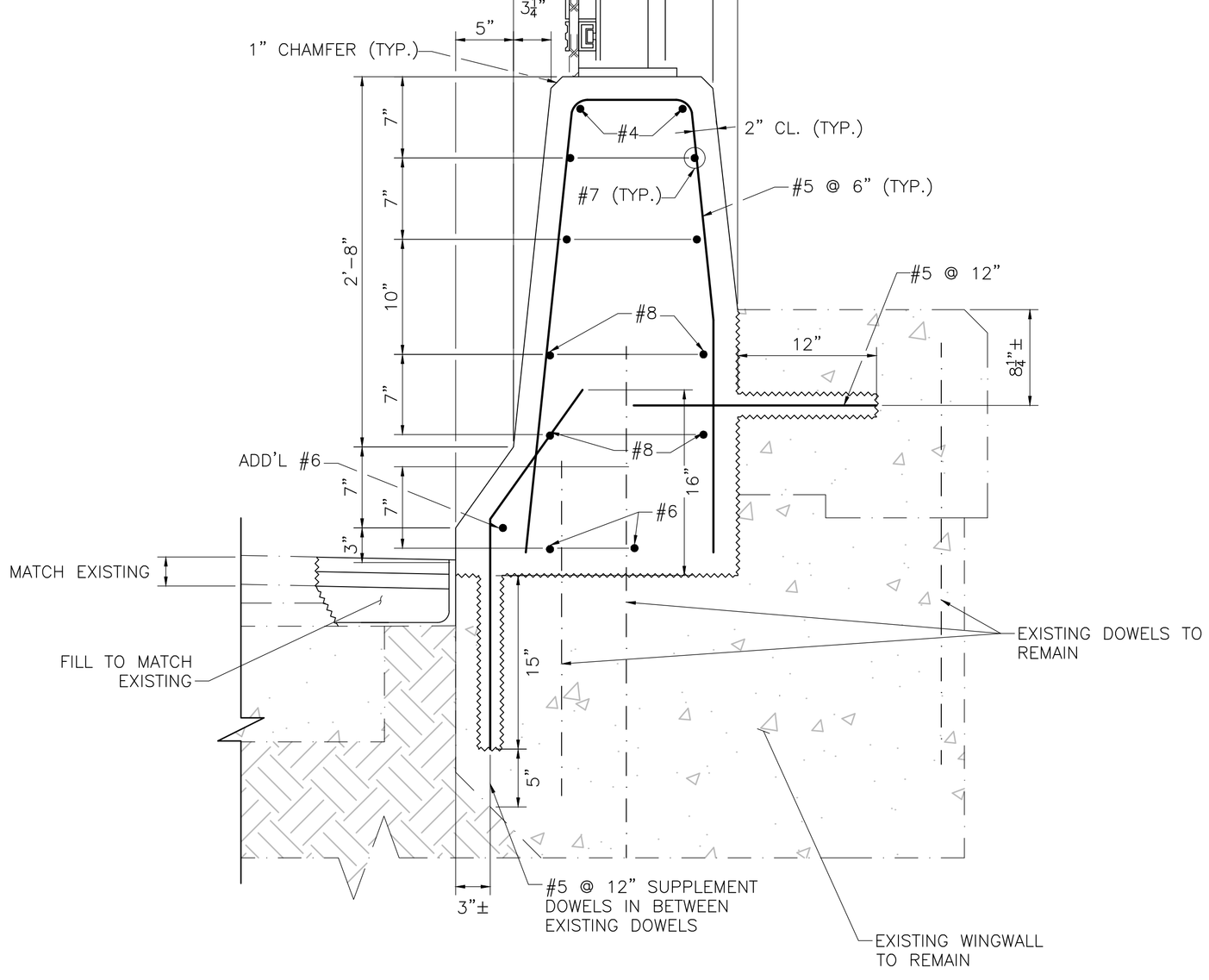
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DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

24-October-2025 PS&E Resubmission

WOBURN
I-95/ROUTE 128

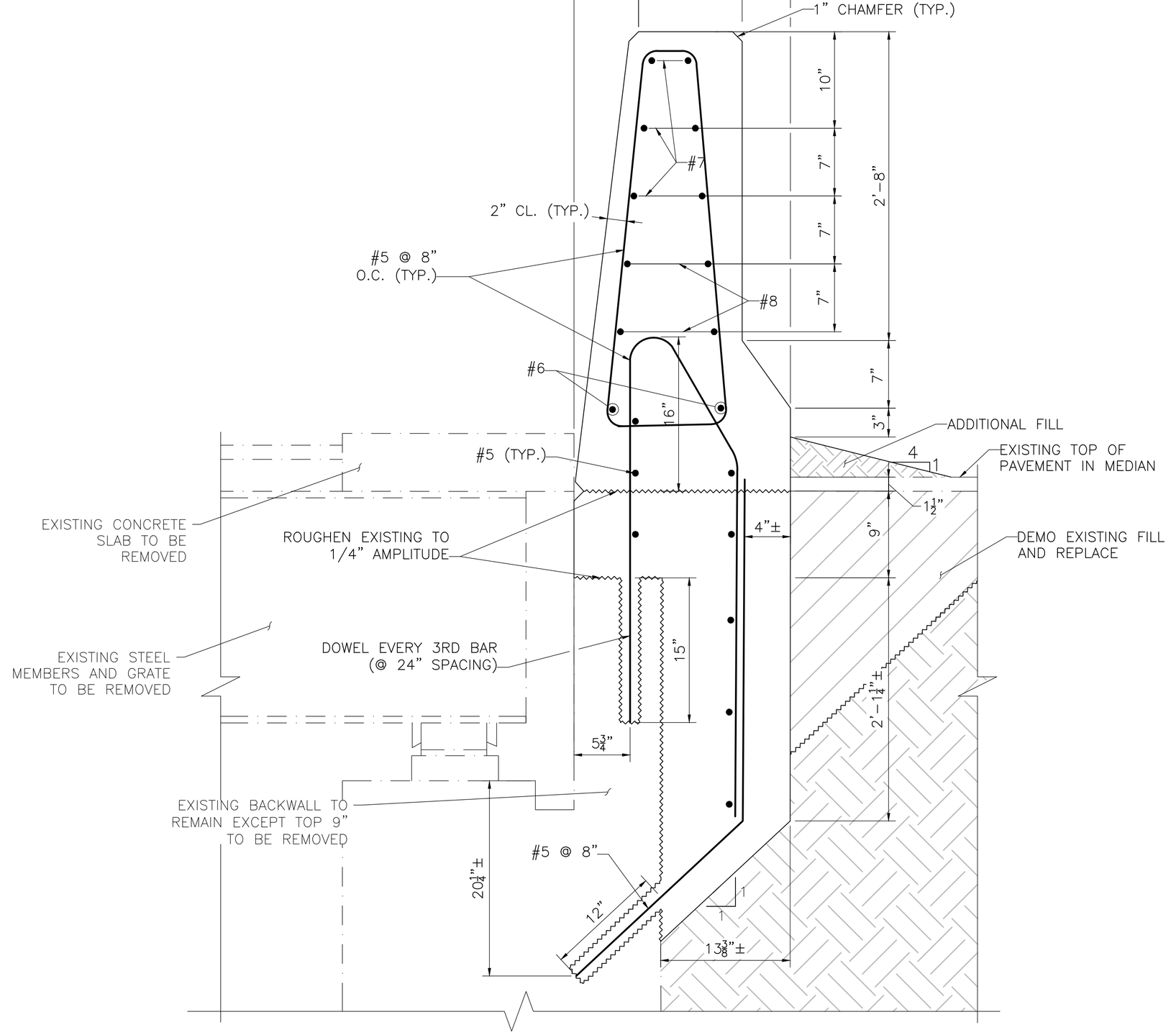
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	11	24
	PROJECT FILE NO. 613196		

REINFORCING DETAILS 3 OF 4



PROPOSED MODIFIED CF–MTL5 BARRIER REINFORCING DETAIL (AT WINGWALLS)

SCALE: 1½" = 1'–0"



PROPOSED BARRIER AT ABUTMENT BACKWALL

SCALE: 1½" = 1'–0"

NOTE:

CONTRACTOR TO DEMOLISH EXISTING FILL AND REPLACE TO MATCH EXISTING GRADE. SUBSURFACE CONDITIONS BASED ON EXISTING RECORD DRAWINGS AND SHOULD BE CONFIRMED BEFORE EXCAVATION.

DRILL & GROUT NOTES:

1. SEE SHEET 8 FOR DRILL & GROUT NOTES.

BARRIER INSTALLATION NOTES:

1. SEE SHEET 8 FOR BARRIER INSTALLATION NOTES.

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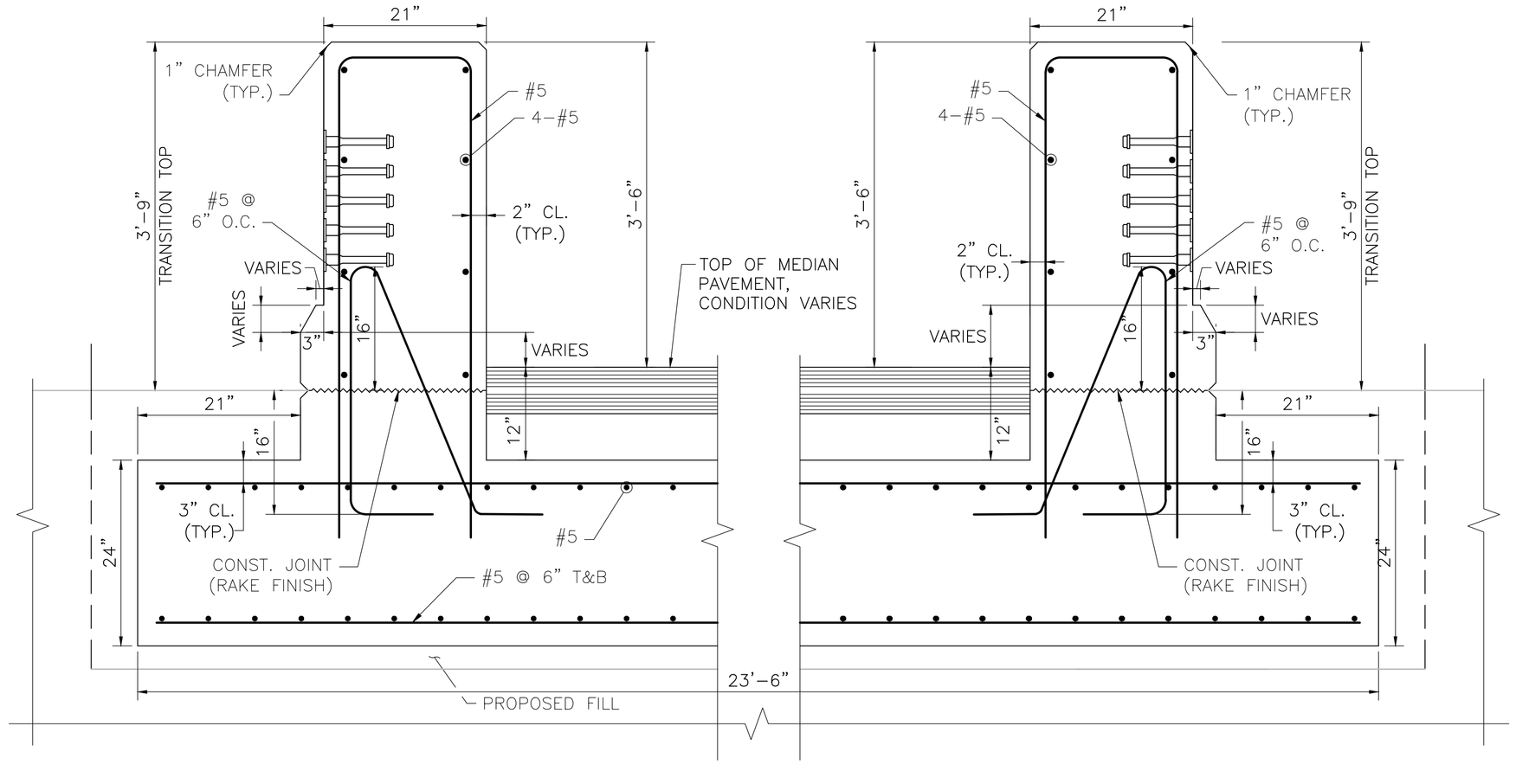
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

8-11-REINFORCING DETAILS.DWG Plotted on 24-Oct-2025 12:32 PM
Proposal No. 613196-133292
24-October-2025
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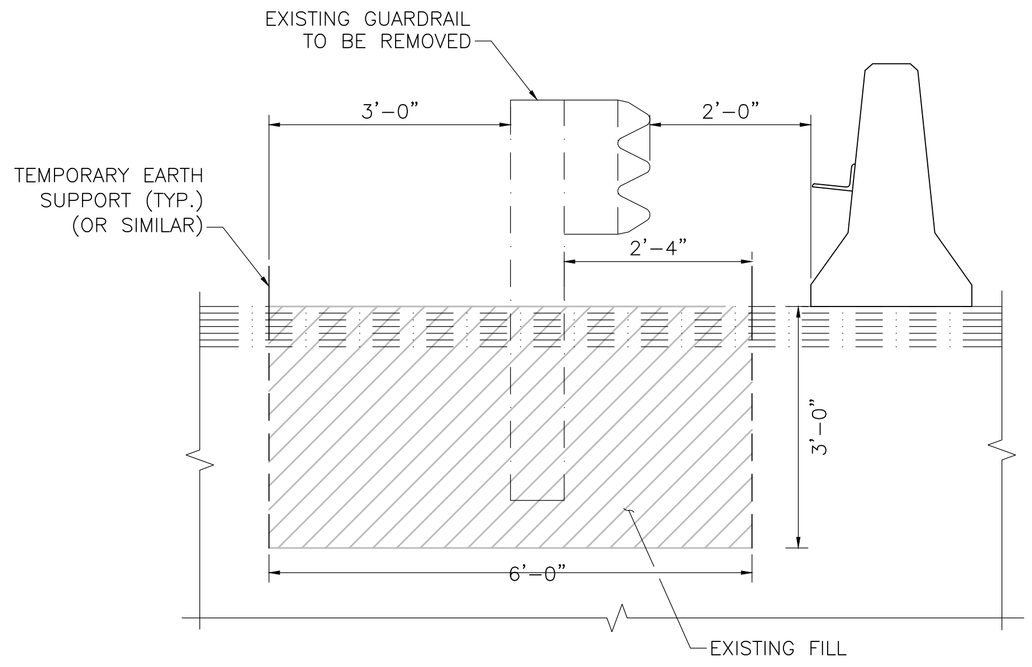
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	12	24
	PROJECT FILE NO. 613196		

REINFORCING DETAILS 4 OF 4



PROPOSED GUARDRAIL HIGHWAY TRANSITION AT MEDIAN

SCALE: 1" = 1'-0"



EXISTING GUARDRAIL HIGHWAY TRANSITION AT MEDIAN

SCALE: $\frac{3}{4}$" = 1'-0"

GUARDRAIL TRANSITION AT MEDIAN NOTES:

1. CONTRACTOR TO DESIGN TEMPORARY EARTH SUPPORT AT LOCATIONS AS REQUIRED. SHALL BE INCIDENTAL TO THE INSTALLATION OF THIS ITEM.

LIMITS OF DEMOLITION

DRILL & GROUT NOTES:

1. SEE SHEET 8 FOR DRILL & GROUT NOTES.

BARRIER INSTALLATION NOTES:

1. SEE SHEET 8 FOR BARRIER INSTALLATION NOTES.

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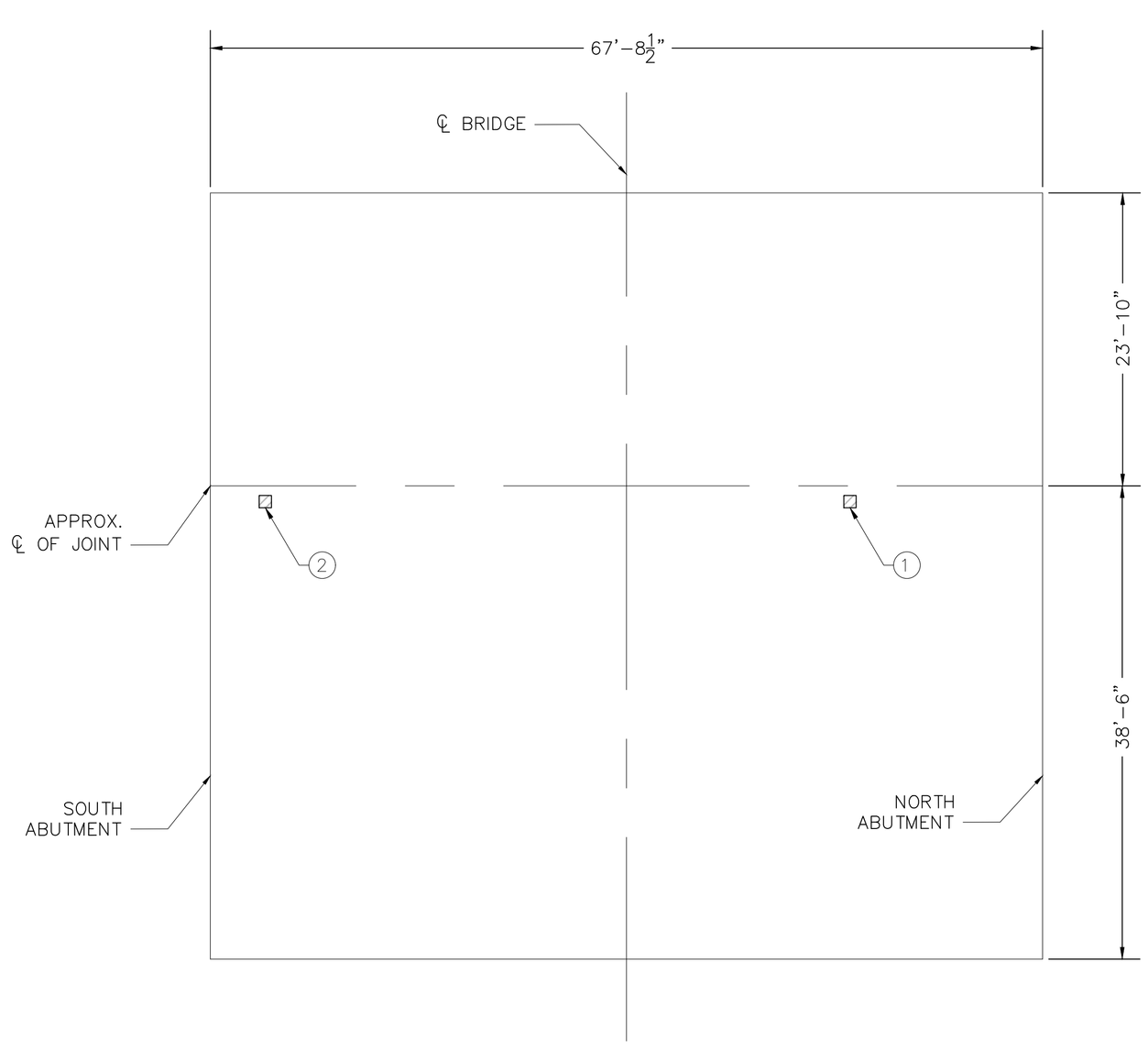
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

A00807 - 14
Proposal No. 613196-133292
8-11-REINFORCING DETAILS.DWG Plotted on 24-Oct-2025 12:36 PM
24-October-2025
PS&E Resubmission

12:14-CONCRETE REPAIRS.DWG Plotted on 22-Oct-2025 12:02 PM

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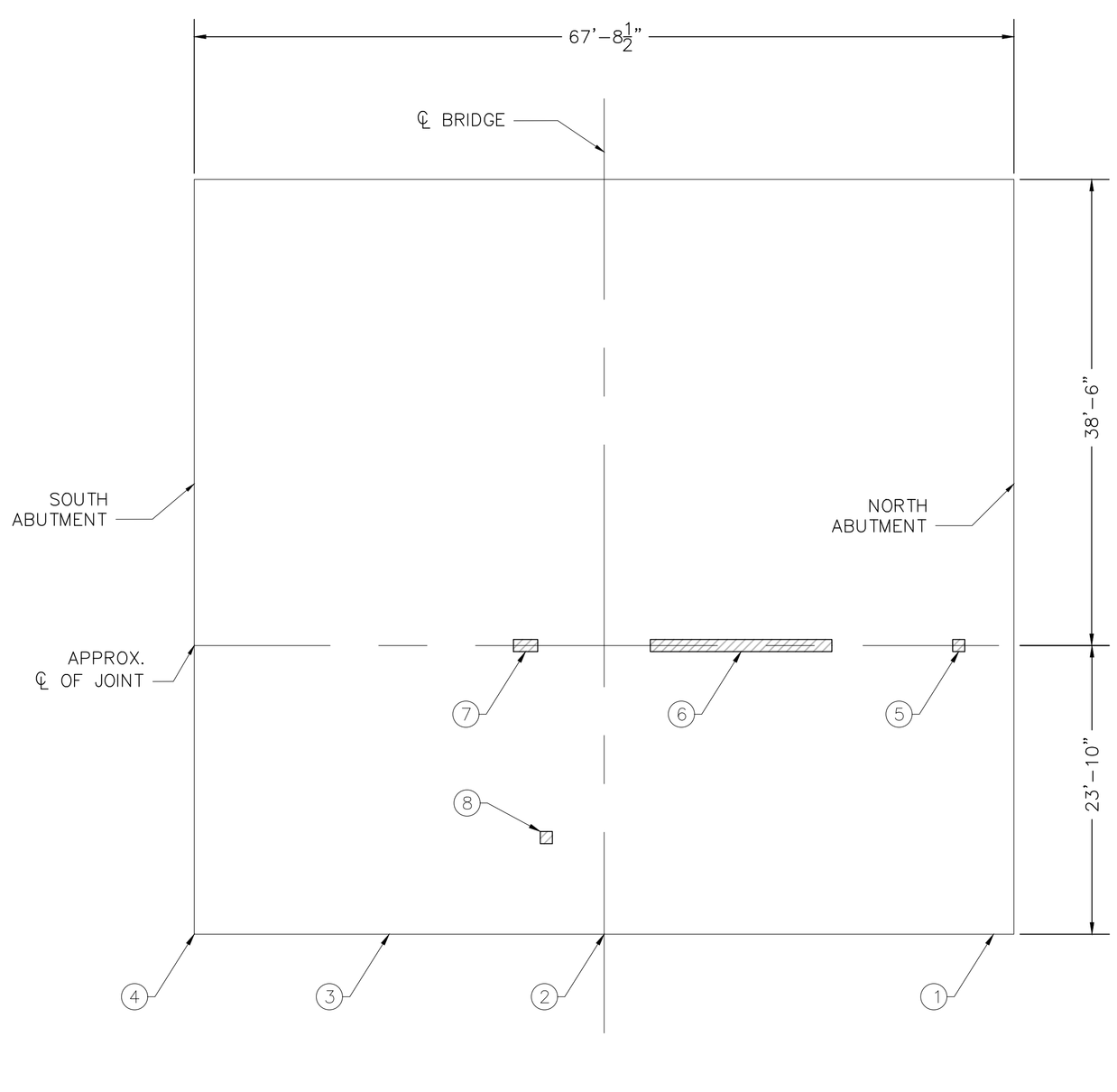
LEGEND:

SPALLED/DELAMINATED CONCRETE AREAS TO BE REPAIRED

UNDERSIDE OF DECK PLAN (2F7/I-95 SB)

SCALE: ⅛" = 1'-0"

REPAIR AREA #	LENGTH	WIDTH	DEPTH	DEFICIENCY
1	6"	2-1/2"	1/2"	SPALL WITH EXPOSED REBAR
2	8"	1"	1"	SPALL WITH EXPOSED REBAR



LEGEND:

SPALLED/DELAMINATED CONCRETE AREAS TO BE REPAIRED

UNDERSIDE OF DECK PLAN (2F6/I-95 NB)

SCALE: ⅛" = 1'-0"

REPAIR AREA #	LENGTH	WIDTH	DEPTH	DEFICIENCY
1	18"	10"	5"	SPALL WITH EXPOSED REBAR (COPING)
2	18"	10"	1-1/2"	SPALL (COPING)
3	2'-4"	10"	1"	SPALL/DELAMINATION (COPING)
4	9"	6"	N/A	DELAMINATION (COPING)
5	12"	3"	3"	SPALL
6	15'-0"	3"	4"	SPALL
7	2'-0"	3"	4-1/2"	SPALL
8	4"	9"	1"	SEVEN (7) SPALLS

CONCRETE REPAIR NOTES:

1. SEE SHEET 14 FOR CONCRETE REPAIR NOTES.

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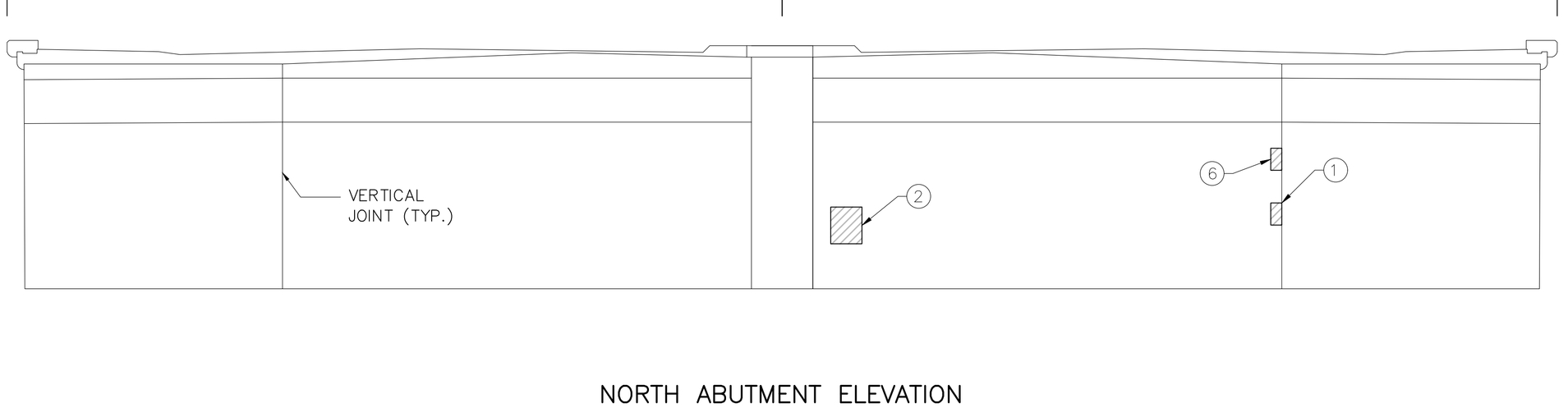
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

24-October-2025 PS&E Resubmission

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STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	14	24
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CONCRETE REPAIRS 2 OF 3

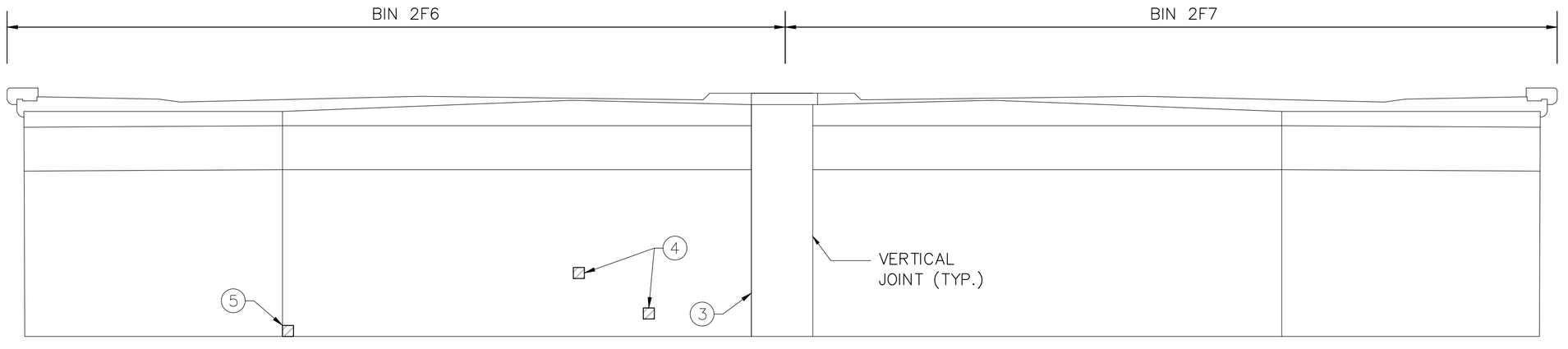


NORTH ABUTMENT ELEVATION
SCALE: $\frac{1}{8}$" = 1'–0"

CONCRETE REPAIR NOTES:

1. SEE SHEET 14 FOR CONCRETE REPAIR NOTES.

REPAIR AREA #	HEIGHT	WIDTH	DEPTH	DEFICIENCY
1	2'–0"	6"	1"	SPALL/DELAMINATION
2	3'–4"	2'–10"	1–1/2"	SPALL/DELAMINATION
3	UP TO 12"	UP TO 6"	UP TO 1"	TWO (2) SPALLS (WEST FACE)
4	UP TO 6" DIA.	N/A	UP TO 1"	TWO (2) SPALLS
5	6"	6"	1"	SPALL
6	2'–0"	12"	1"	SPALL/DELAMINATION



SOUTH ABUTMENT ELEVATION
SCALE: $\frac{1}{8}$" = 1'–0"

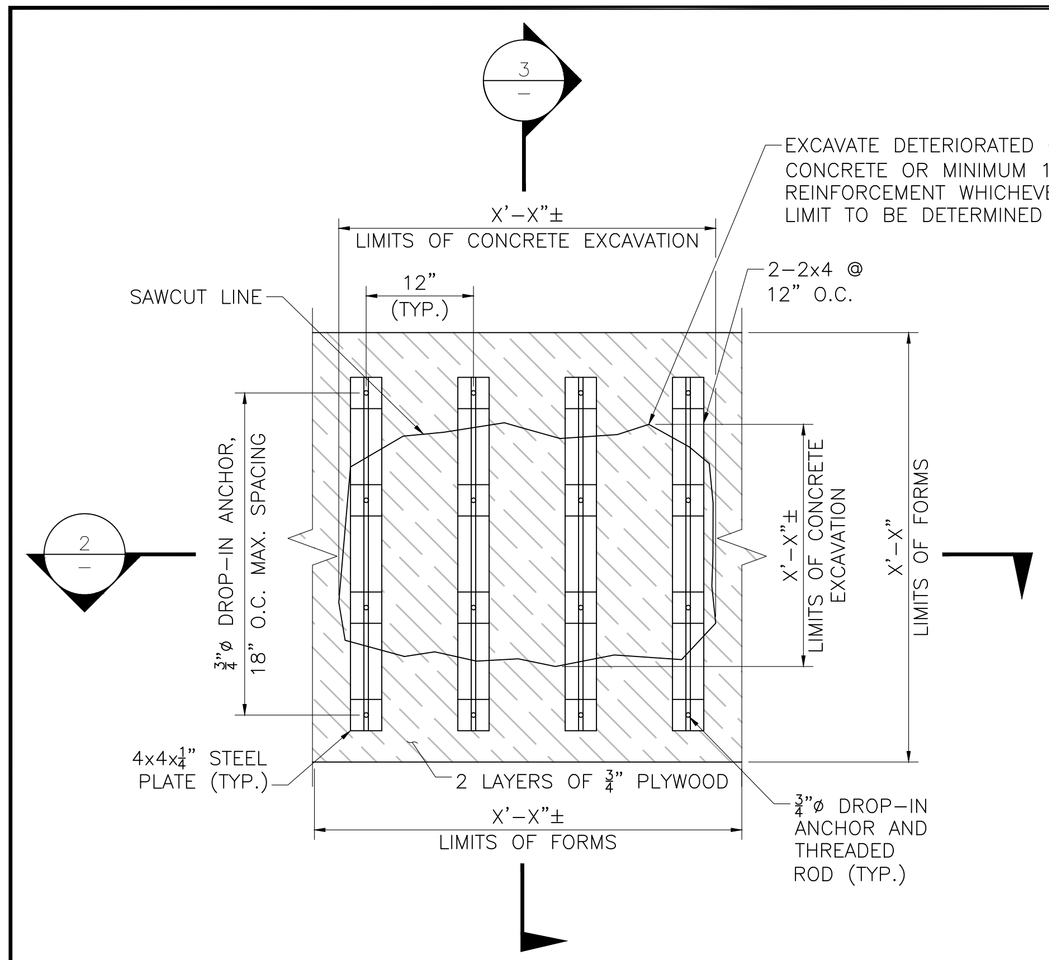
LEGEND:

SPALLED/DELAMINATED CONCRETE AREAS TO BE REPAIRED

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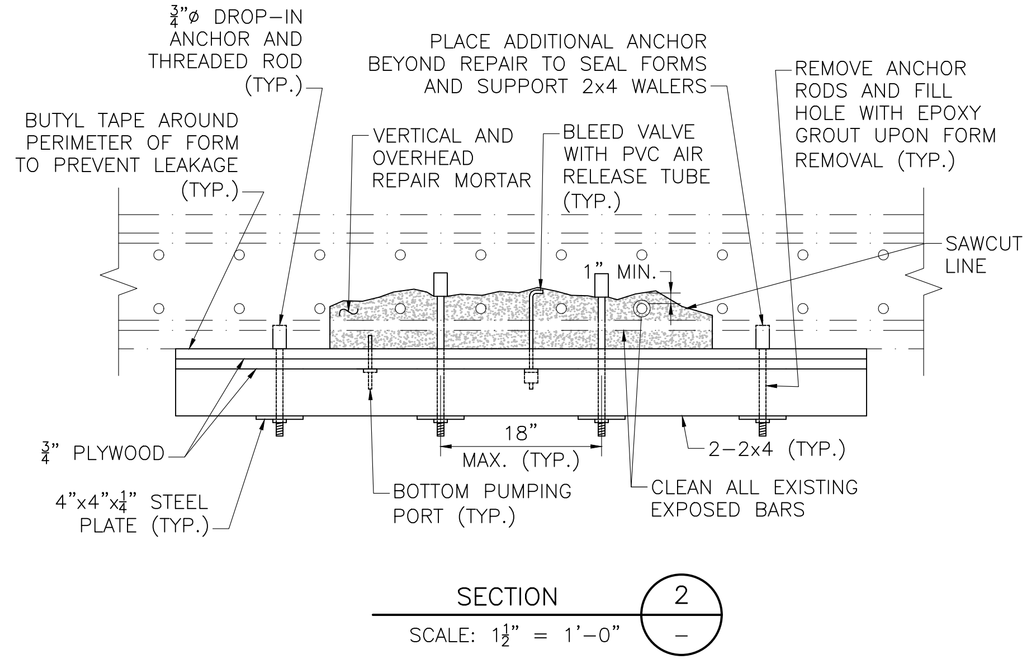
MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
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12:14-CONCRETE REPAIRS.DWG Plotted on 22-Oct-2025 12:02 PM
Proposal No. 613196-133292
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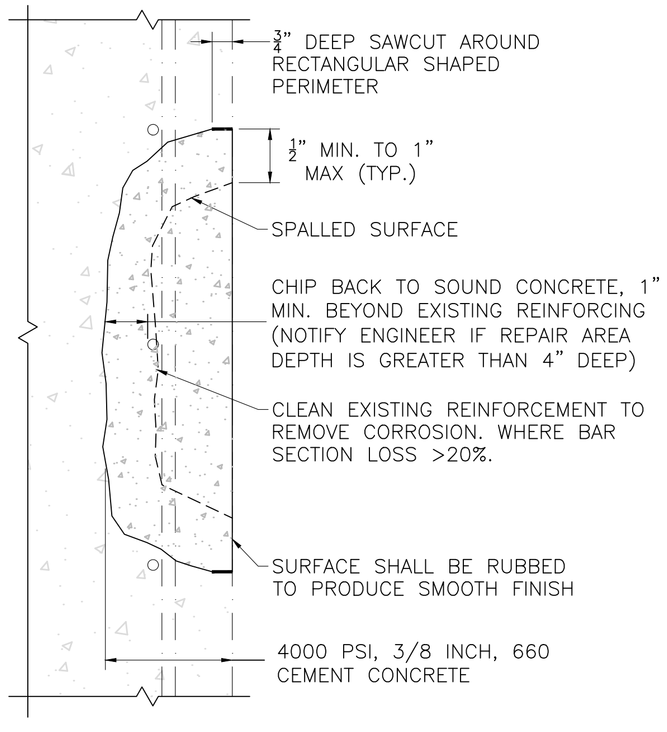
DECK UNDERSIDE FORM PLAN

SCALE: 1" = 1'-0"



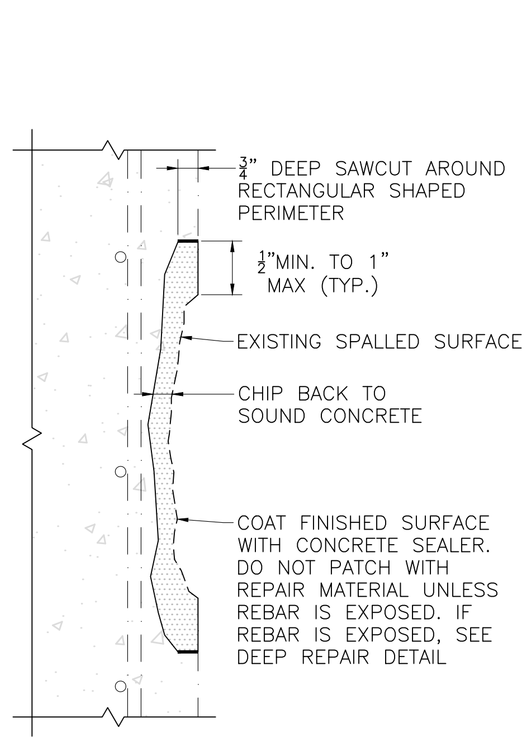
SECTION 2
SCALE: 1½" = 1'-0"

NOTE:
CONTRACTOR SHALL MAINTAIN EXISTING VERTICAL CLEARANCES AT BRIDGE WHILE FORMWORK IS IN PLACE. IF EXISTING VERTICAL CLEARANCES CANNOT BE MAINTAINED, CONTRACTOR SHALL PLACE TEMPORARY SIGNAGE AT BRIDGE AND IN ADVANCE OF BRIDGE TO ALERT VEHICLES AND TRUCKS OF THE REDUCED CLEARANCE. FORMWORK MAY NOT BE PLACED SUCH THAT THE TEMPORARY VERTICAL CLEARANCE IS REDUCED TO LESS THAN 13'-9". ENGINEER SHALL APPROVE AFTER FORM IS SET.



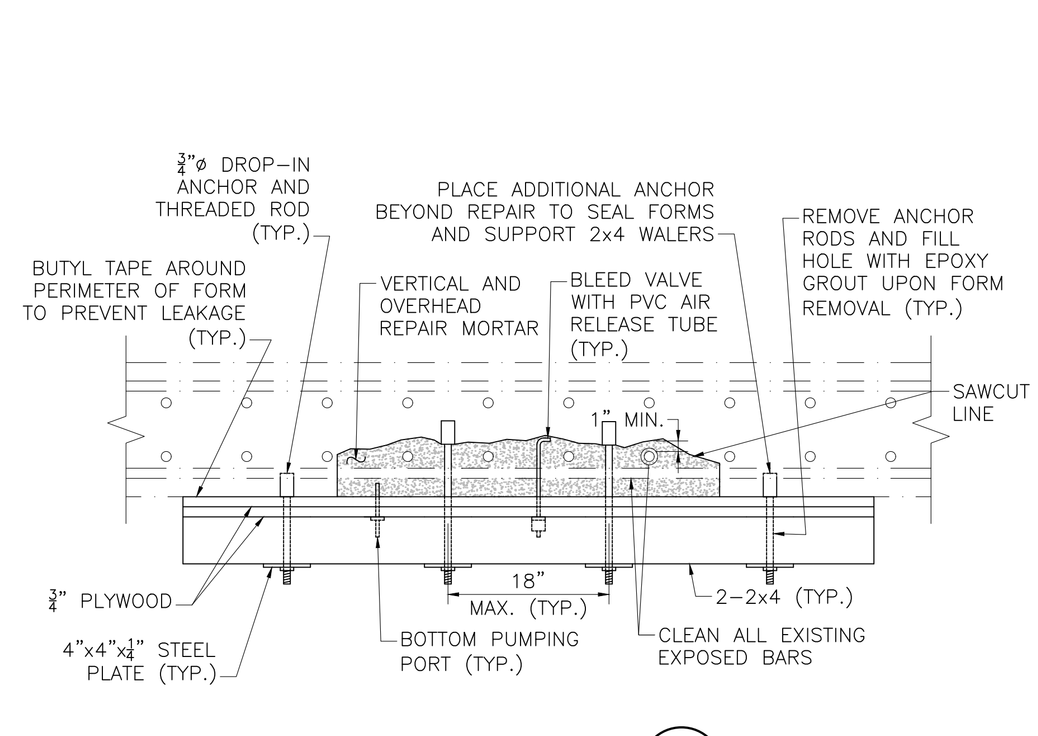
DEEP REPAIR WITH EXPOSED REBAR ALONG FRAME LEGS

(AVERAGE DEPTH OF SPALL IS GREATER THAN 2" OR SPALL WITH EXPOSED REBAR.)



CONCRETE REMOVAL OF SHALLOW SPALLS

(AVERAGE DEPTH OF SPALL IS LESS THAN 2" AND NO EXPOSED REBAR.)



SECTION 3
SCALE: 1½" = 1'-0"

NOTE:
CONTRACTOR SHALL MAINTAIN EXISTING VERTICAL CLEARANCES AT BRIDGE WHILE FORMWORK IS IN PLACE. IF EXISTING VERTICAL CLEARANCES CANNOT BE MAINTAINED, CONTRACTOR SHALL PLACE TEMPORARY SIGNAGE AT BRIDGE AND IN ADVANCE OF BRIDGE TO ALERT VEHICLES AND TRUCKS OF THE REDUCED CLEARANCE. FORMWORK MAY NOT BE PLACED SUCH THAT THE TEMPORARY VERTICAL CLEARANCE IS REDUCED TO LESS THAN 13'-9". ENGINEER SHALL APPROVE AFTER FORM IS SET.

CONCRETE REPAIR NOTES:

1. THE CONTRACTOR SHALL EXERCISE CARE WHEN REMOVING CONCRETE AROUND REINFORCEMENT TO ONLY REMOVE DETERIORATED CONCRETE AND TO LIMIT THE SOUND CONCRETE REMOVED TO THE MINIMUM NECESSARY TO PRODUCE A GOOD REPAIR.
2. THE CONTRACTOR SHALL ESTABLISH LIMITS OF VARIOUS REPAIRS AS SHOWN ON THE PLANS AND AT THE DIRECTION OF THE ENGINEER. THE LOCATIONS SHOWN ON THE PLANS ARE BASED UPON RECORDS OF BRIDGE INSPECTIONS AND OBSERVATIONS FROM THE GROUND ARE ARE NOT GUARANTEED. THE LOCATION AND EXTENT OF ALL CONCRETE REPAIRS ARE TO BE FIELD VERIFIED AND APPROVED BE THE ENGINEER AFTER THE CONTRACTOR HAS SOUNDED AND MARKED OUT THE REPAIR AREAS. REASONABLY FOLLOW OUTLINES OF DETERIORATION PREFERABLY WITH SQUARE CORNERS.
3. THE LIMITS OF THE REPAIRS SHALL BE SAWCUT ALONG NEAT LINES TO A DEPTH OF ¾" TO PRODUCE A CLEAN EDGE.
4. REMOVE DETERIORATED AND UNSOUND CONCRETE AS WELL AS SOUND CONCRETE WHERE NECESSARY TO A MINIMUM OF 1" BEYOND SURFACE REINFORCEMENT.
5. EXPOSED REINFORCEMENT TO BE CLEANED BY MECHANICAL CLEANING AND HIGH PRESSURE WASHING WITH WATER THAT CONTAINS NO DETERGENTS OF BOND INHIBITING CHEMICALS. WHERE ACTIVE CORROSION HAS OCCURRED (THAT WHICH WOULD INHIBIT BONDING) SANDBLAST STEEL TO WHITE METAL FINISH.
6. A NEW REINFORCEMENT BAR SHALL BE PLACED TO SUPPLEMENT AN EXISTING REINFORCEMENT BAR WHEN AN EXISTING BAR HAS A SECTION LOSS OF 20% OF MORE OF THE ORIGINAL CROSS SECTION, AS DETERMINED BY THE ENGINEER, OR THE EXISTING REINFORCEMENT IS BROKEN. IN LIEU OF SUPPLEMENTING A BAR ADJACENT TO A DETERIORATED BAR, THE CONTRACTOR MAY CUT OUT THE DETERIORATED BAR AND MECHANICALLY SPLICE THE NEW BAR TO EXISTING REINFORCEMENT.
7. AFTER REMOVAL AND EDGE PREPARATION ARE COMPLETE, REMOVE BOND INHIBITING MATERIALS (DIRT, GREASE, LOOSELY BONDED AGGREGATE) BY ABRASION BLASTING OR HIGH PRESSURE WATER BLASTING WITH WATER THAT CONTAINS NO DETERGENTS OR BOND INHIBITING CHEMICALS. CHECK THE CONCRETE SURFACES AFTER CLEANING TO INSURE THAT THE SURFACE IS FREE FROM ADDITIONAL LOOSE AGGREGATE OR THAT ADDITIONAL DELAMINATIONS ARE NOT PRESENT.
8. AT THE TIME THE REPAIR CONCRETE/MORTAR IS APPLIED, THE EXISTING CONCRETE SUBSTRATE SHOULD BE SATURATED SURFACE DRY.
9. WHERE CONCRETE REMOVAL AND REPLACEMENT NECESSITATES ADJACENT SEPARATE CONCRETE PLACEMENTS, CONCRETE REMOVAL SHALL NOT BE ALLOWED WITHIN 1 FOOT OF ADJACENT REPAIR AREAS. ADJACENT AREAS WHERE THIS 1 FOOT BUFFER IS NOT ATTAINABLE SHALL BE COMBINED INTO A SINGLE REPAIR AREA.
10. IN SEQUENCING WORK, THE CONTRACTOR SHALL NOT BEGIN CONCRETE REMOVAL AT A LOCATION ADJACENT TO A COMPLETED REPAIR UNTIL A MINIMUM OF 7 CURING DAYS HAVE PASSED.
11. ALL HORIZONTAL AND VERTICAL CONCRETE SURFACES IN CONTACT WITH REPAIR MATERIAL SHALL BE FREE OF OIL, GREASE, LAITANCE, AND OTHER CONTAMINANTS.
12. ALL HORIZONTAL AND VERTICAL CONCRETE SURFACES MUST BE CLEAN, SOUND AND ROUGH TO ENSURE A GOOD BOND.
13. THE CONTRACTOR SHALL MAINTAIN UNDERDECK LIGHTING AND COMMUNICATION CABLES. REMOVAL AND REATTACHMENT OF FIXTURES HOLDING COMMUNICATION LINES AND STREET LIGHTING SHALL BE INCIDENTAL TO CONCRETE REPAIRS.
14. REPAIR CONCRETE SHALL MEET THE REQUIREMENTS OF ITEM 905.001.

FORMWORK

1. FORMS DESIGNED FOR 12 PSI PRESSURE.
2. INSTALL FORMS ON THE FACE OF EACH REPAIR AREA. GROUT PORTS TO BE PLACED AT 4'-0" MAX. ON CENTER EACH WAY MAX. VENT TUBES TO BE PLACED AT 2'-0" MAX. ON CENTER EACH WAY.
3. FORMS ARE TO BE WATERTIGHT. PREFORMED FOAM GASKETS OR CAST IN PLACE FOAM SHALL BE USED TO MATCH SURFACES.
4. AT REPAIRS ADJACENT TO THE JOINTS IN THE RIGID FRAME, MAINTAIN THE EXISTING JOINT OPENING OF 1-1/2".

MIXING AND PUMPING

1. SATURATE HOST CONCRETE SUBSTRATE USING A WATER HOSE THROUGH FORM PORTS PRIOR TO PLACING GROUT. AT TIME OF GROUT PLACEMENT, SUBSTRATE SHALL BE SATURATED SURFACE DRY WITH NO STANDING WATER.
2. VERTICAL AND OVERHEAD REPAIR MORTAR SHALL BE USED TO MAKE THE REPAIRS AND SHALL BE MIXED ACCORDING TO THE MANUFACTURER SPECIFICATIONS AND IN ACCORDANCE WITH THE MASSDOT QCML.
3. THE PUMP MUST BE CAPABLE OF CONTINUOUS EVEN FLOW OF MATERIALS TO THE REPAIR AREA WITHOUT HAVING ANY LINE SURGE. LIVE SURGE WILL RESULT IN AIR VOIDS AND POSSIBLE AGGREGATE SEGREGATION.
4. PRIOR TO PUMPING MATERIALS, ALL HOSES MUST BE WET OUT WITH CLEAN WATER TO ENSURE INITIAL FLOW PROPERTIES ARE MAINTAINED.
5. THE PUMPING DISTANCE MUST BE KEPT TO A MINIMUM. THE PUMPING HOSE SHALL BE A MINIMUM 3 TIMES THE SIZE OF THE LARGEST AGGREGATE ON THE VERTICAL AND OVERHEAD REPAIR MORTAR (⅜"X3).
6. ADDITIONAL WATER BEYOND THE RECOMMENDED LEVEL WILL NOT INCREASE THE FLOW CHARACTERISTICS OF THE VERTICAL AND OVERHEAD REPAIR MORTAR. KEEP PUMPING PRESSURE TO A MINIMUM NECESSARY TO FILL CAVITY.

CURING

1. LEAVE THE FORM WORK IN PLACE UNTIL THE COMPRESSIVE STRENGTH OF THE VERTICAL AND OVERHEAD REPAIR MORTAR REACHES 2,500 PSI.
2. IF HAND PATCHING IS REQUIRED TO FILL THE PORT AREA, DRY-PACK WITH A NON-SAG MORTAR.
3. THE FORMS SHALL BE LEFT IN PLACE FOR A MINIMUM OF 5 DAYS. ONCE THE FORMS ARE STRIPPED CURING COMPOUND SHALL BE APPLIED TO THE REPAIR IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

CONCRETE SEALER

1. AT SHALLOW REPAIRS, NO REPAIR MORTAR OR REPAIR CONCRETE SHALL BE APPLIED. REMOVE LOOSE CONCRETE.

WOBURN
I-95/ROUTE 128

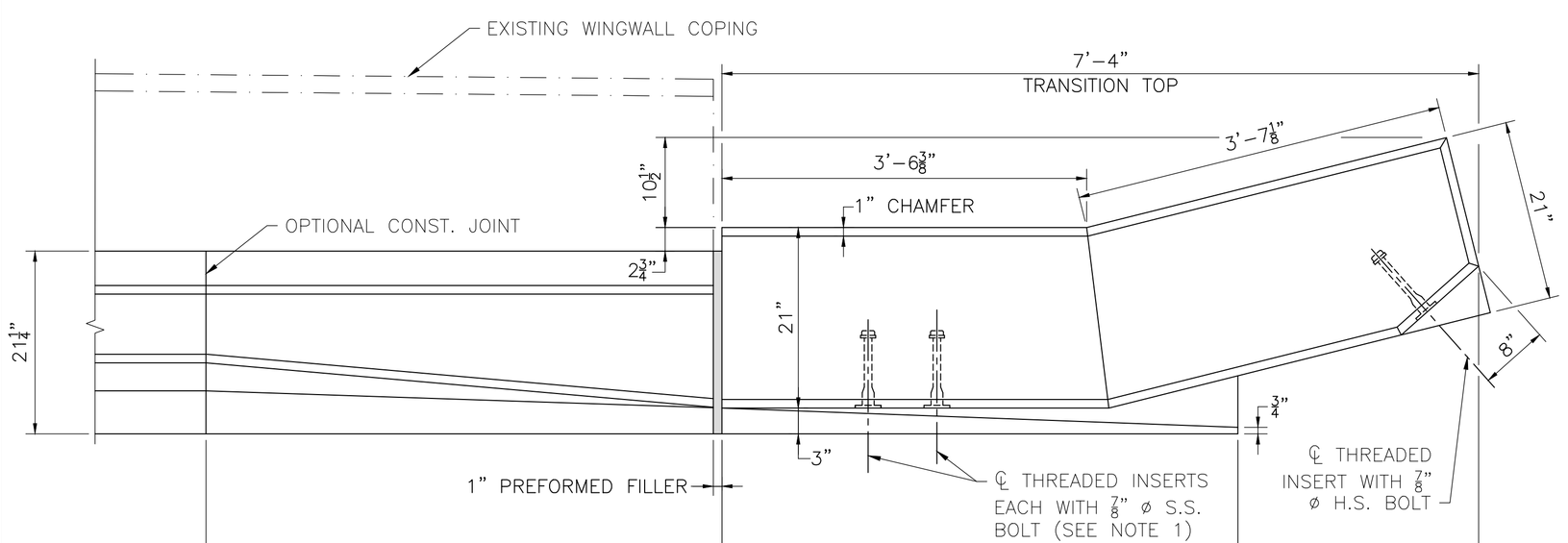
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	15	24
	PROJECT FILE NO. 613196		

CONCRETE REPAIRS 3 OF 3

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

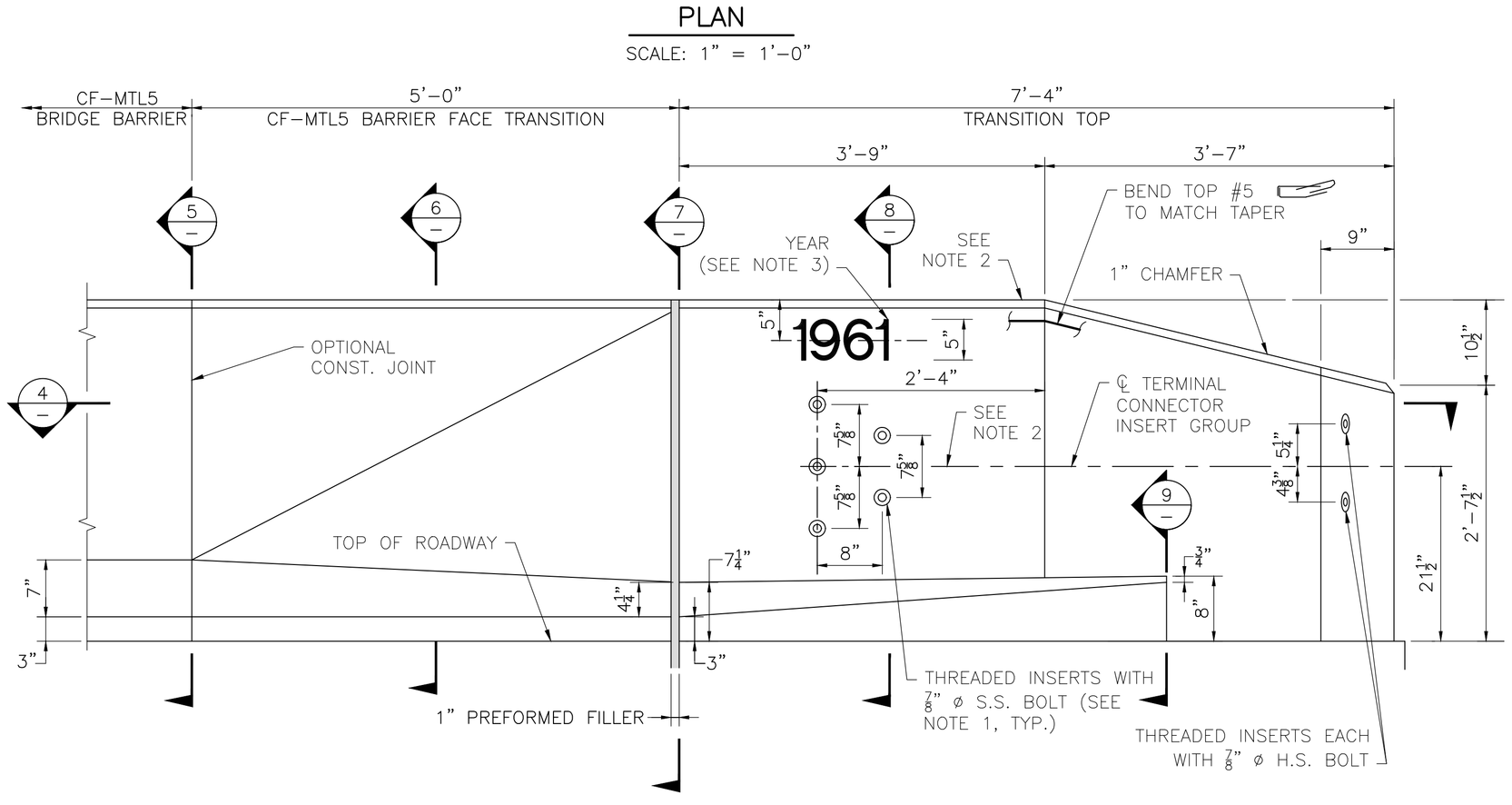
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2F6
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A00807 - 17
12:14-CONCRETE REPAIRS.DWG Plotted on 22-Oct-2025 12:02 PM
Proposal No. 613196-133292
24-October-2025
PS&E Resubmission



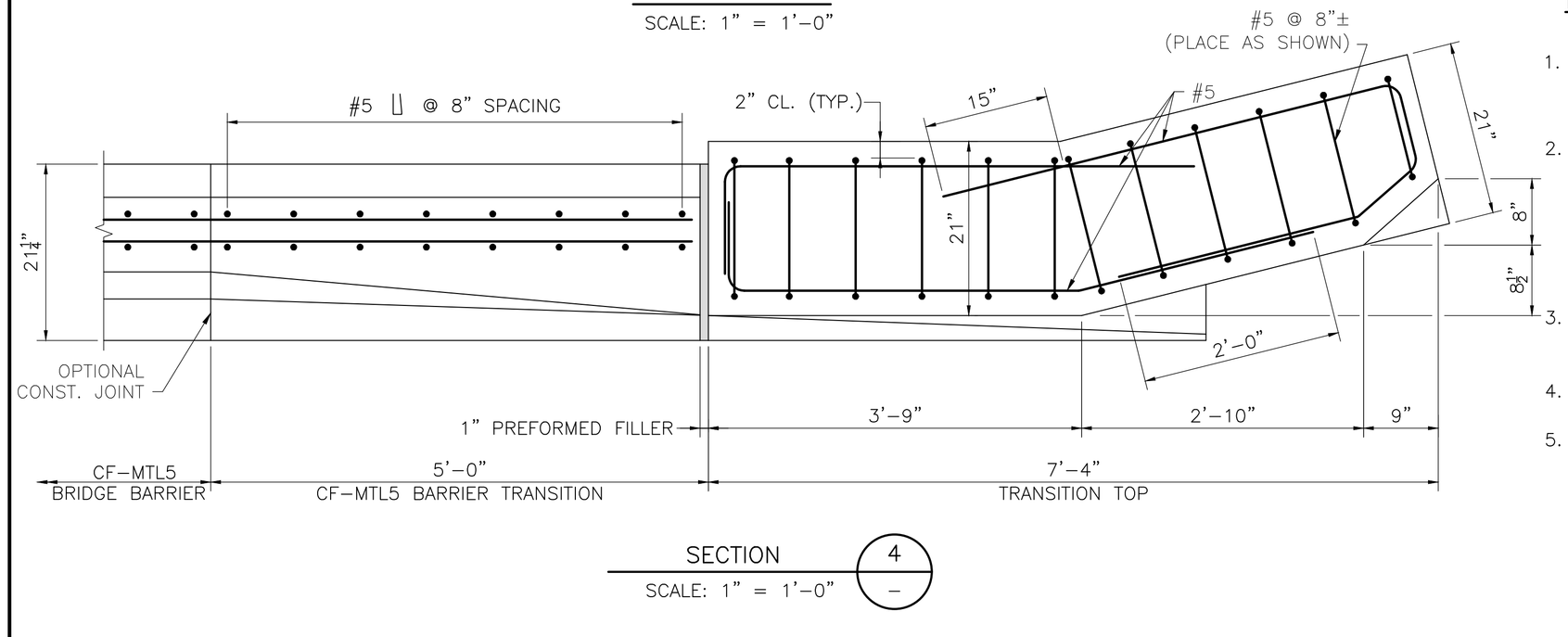
PLAN

SCALE: 1" = 1'–0"

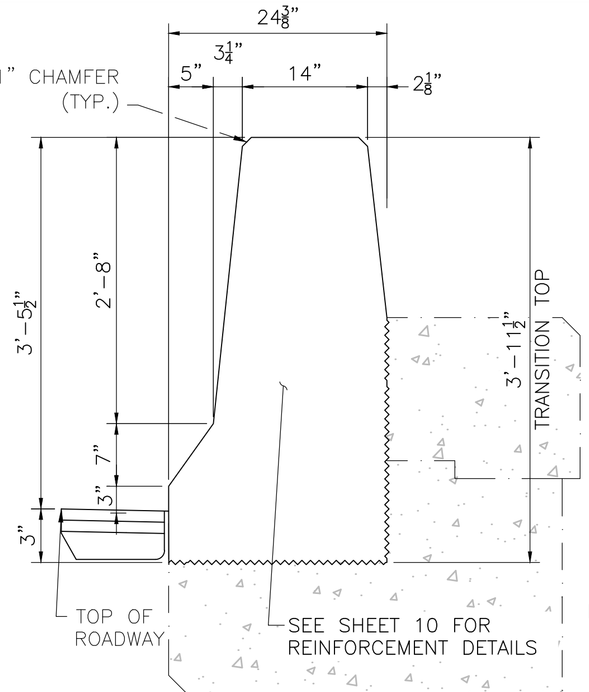


ELEVATION

SCALE: 1" = 1'–0"

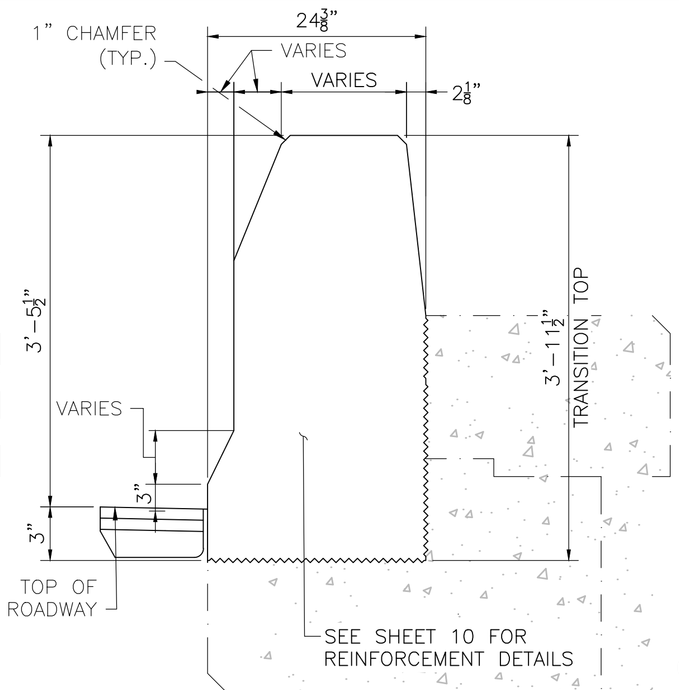


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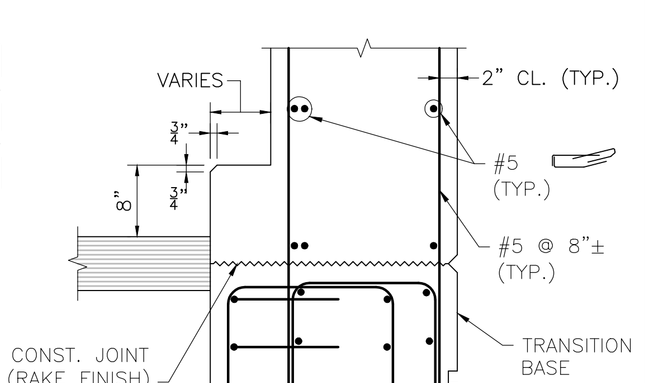


TYPICAL SECTION

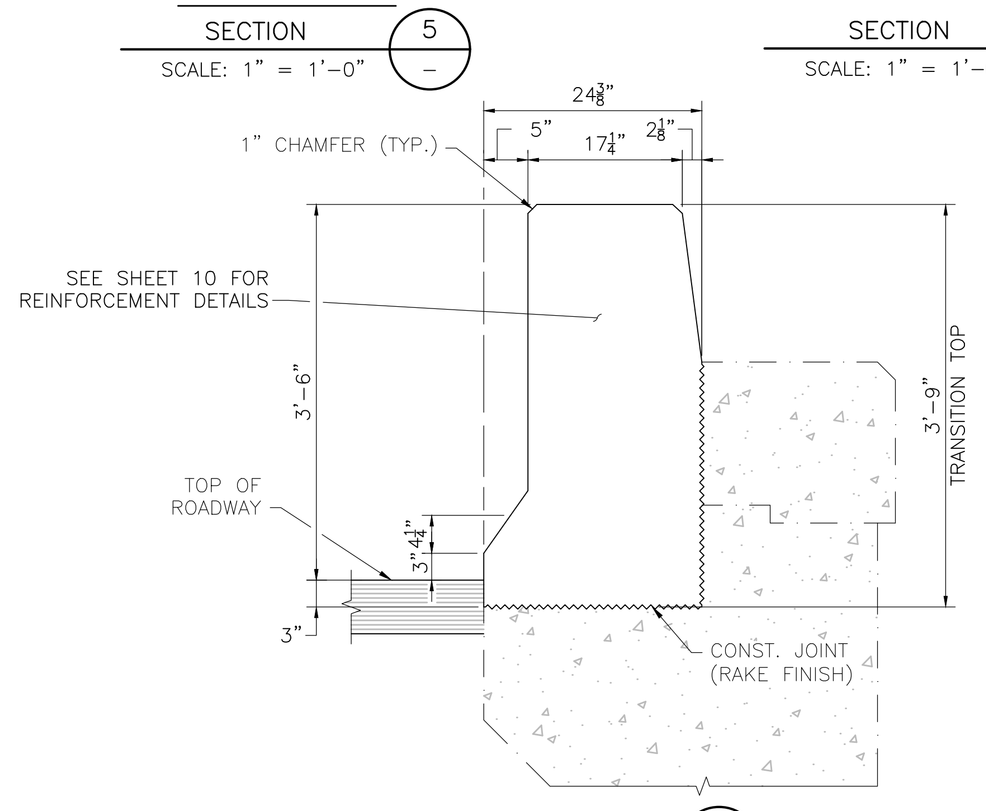
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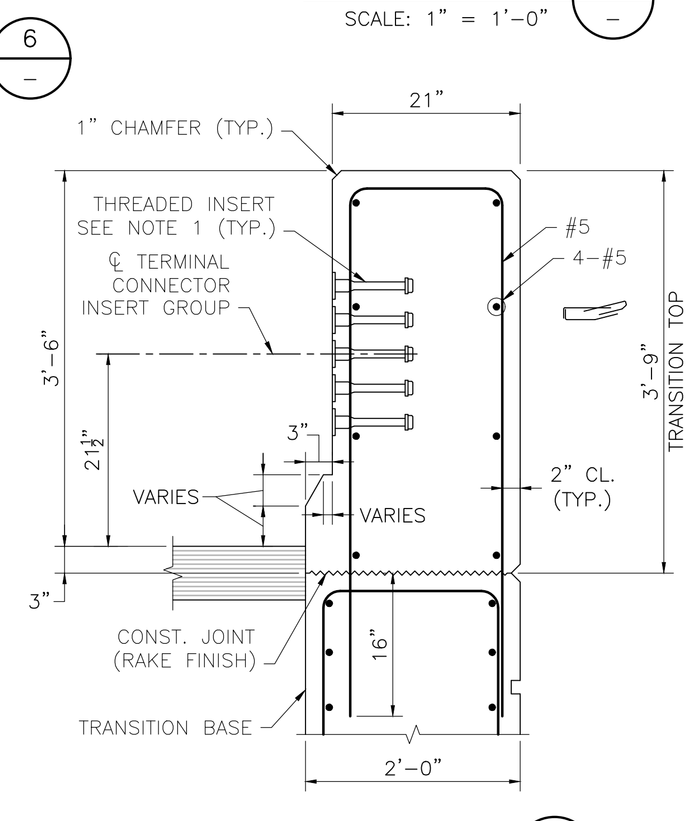
SECTION 6 / SCALE: 1" = 1'–0"



SECTION 9 / SCALE: 1" = 1'–0"



SECTION 7 / SCALE: 1" = 1'–0"



SECTION 8 / SCALE: 1" = 1'–0"

NOTES:

1. THREADED INSERTS SHALL BE PREQUALIFIED BY THE MANUFACTURER AS BEING CAPABLE OF DEVELOPING A NOMINAL SHEAR RESISTANCE OF 20 KIPS PER ⅞" ø S.S. BOLT. S.S. BOLTS SHALL BE ⅞" ø x 1½" LONG FULLY THREADED AISI TYPE 304N STAINLESS STEEL. INSERTS FOR ⅞" S.S. BOLTS SHALL BE GALVANIZED AND CAST INTO THE TRANSITION.
2. FOR AN APPROACH GRADE UP TO 3%, THE TRANSITION MAY BE CAST SQUARE AND SET PLUMB WITH THE MINIMUM EMBEDMENT DEPTH SHOWN. THE TERMINAL CONNECTOR INSERT GROUP SHALL BE SQUARE TO THE POST.

   FOR AN APPROACH GRADE IN EXCESS OF 3%, THE TRANSITION TOP AND THE TOP OF THE BRIDGE BARRIERS SHALL FOLLOW THE APPROACH GRADE. THE HEIGHT OF THE TRANSITION TOP SHALL VARY PROVIDED THAT THE MINIMUM DIMENSIONS SHOWN ON THE CONSTRUCTION DRAWINGS ARE MET. THE BOTTOM OF THE TRANSITION BASE SHALL BE SET LEVEL WITH THE MINIMUM EMBEDMENT DEPTH SHOWN. THE TERMINAL CONNECTOR INSERT GROUP SHALL BE SLOPED TO FOLLOW THE APPROACH GRADE.
3. USE THE YEAR 1961 (YEAR BRIDGE WAS REBUILT) WHEN THE FIRST GUARDRAIL TRANSITION IS CAST. USE THIS YEAR FOR THE NORTHEAST AND SOUTHWEST GUARDRAIL TRANSITIONS.
4. ALL CONCRETE FOR THE PRECAST HIGHWAY GUARDRAIL TRANSITION SHALL BE 5000 PSI, ¾", 685 HP CEMENT CONCRETE (ITEMS 992.19 AND 992.20).
5. LIFTING DEVICES (NOT SHOWN), INCLUDING THEIR NUMBER AND LOCATION, SHALL BE DESIGNED THREADED INSERTS SHALL BE PREQUALIFIED BY THE MANUFACTURER AS BEING CAPABLE OF DEVELOPING A NOMINAL SHEAR RESISTANCE OF 20 KIPS PER ⅞" ø S.S. BOLT. S.S. BOLTS SHALL BE ⅞" x 1–1/2" LONG FULLY THREADED AISI TYPE 304N STAINLESS STEEL. INSERTS FOR ⅞" S.S. BOLTS SHALL BE AND DETAILED BY THE PRECASTER. THEY SHALL BE GALVANIZED AND SHALL BE PLACED AND RECESSED IN POCKETS TO PROVIDE 1½" CLEAR COVER TO THE FACE OF THE TRANSITION CONCRETE. THESE DEVICES SHALL BE CLEARLY SHOWN ON THE SHOP DRAWINGS ALONG WITH ALL SUPPORTING CALCULATIONS AND/OR CATALOG CUTS. ONCE THE PRECAST TRANSITION IS SET IN PLACE, THE LIFTING DEVICE POCKETS SHALL BE FILLED WITH A NON–SHRINK GROUT THAT MATCHES THE COLOR OF THE TRANSITION CONCRETE WHEN CURED AND THE FILLED POCKETS SHALL BE RUBBED WITH A CORUNDUM STONE TO BLEND OUT THE JOINTS.

WOBURN
I-95/ROUTE 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	16	24
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GUARDRAIL TRANSITION DETAILS

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DATE	DESCRIPTION
	USE ONLY PRINTS OF LATEST DATE

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SHEET 15 OF 17 SHEETS BRIDGE NO. W–43–031 (*)

24-October-2025

P&E Resubmission

15-GUARDRAIL TRANSITION DETAILS.DWG Plotted on 22-Oct-2025 12:06 PM

Proposal No. 613196-133292

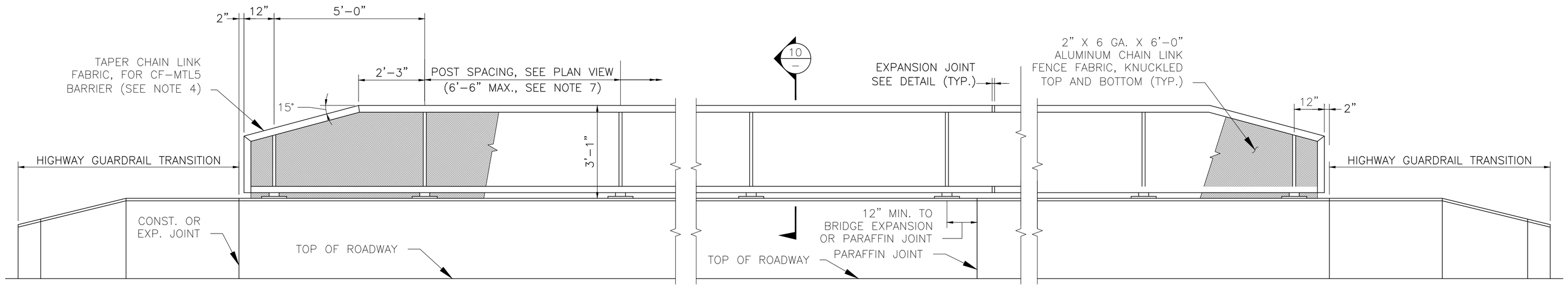
A00807 - 18

16-SNOW FENCE DETAILS.DWG Plotted on 22-Oct-2025 12:06 PM

WOBURN
I-95/ROUTE 128

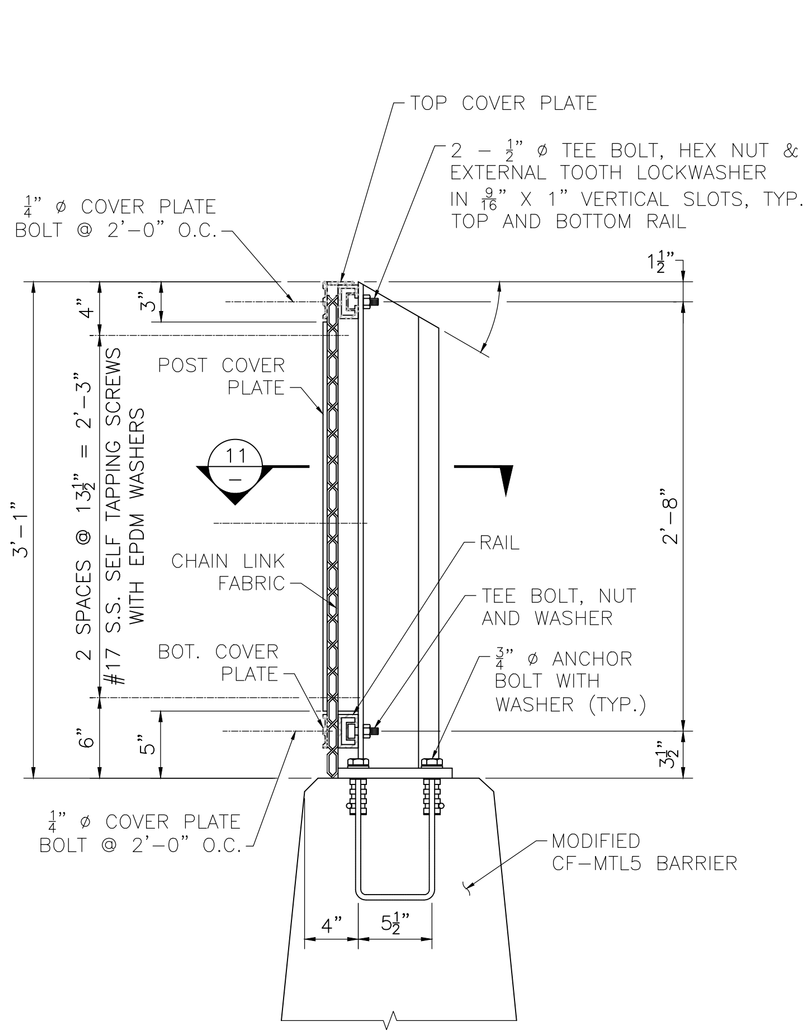
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	17	24
	PROJECT FILE NO. 613196		

SNOW FENCE DETAILS



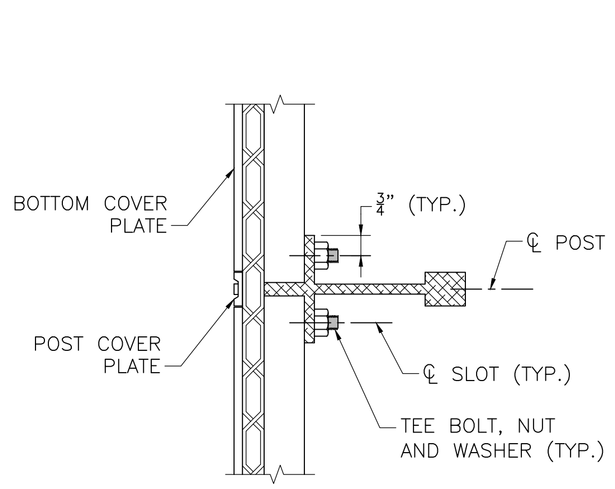
SNOW FENCE ELEVATION FOR CF–MTL5 BARRIERS

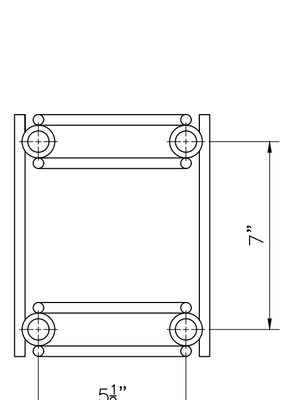
SCALE: $\frac{1}{2}$" = 1'–0"

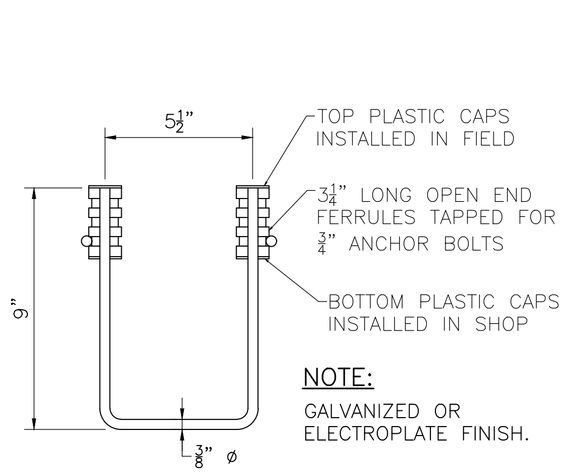


SECTION 11 / – SCALE: 3" = 1'–0"

SECTION 10 / – SCALE: $1\frac{1}{2}$" = 1'–0"

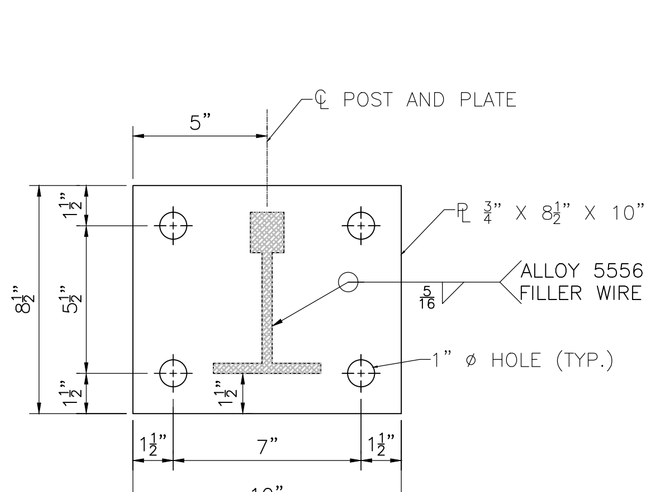




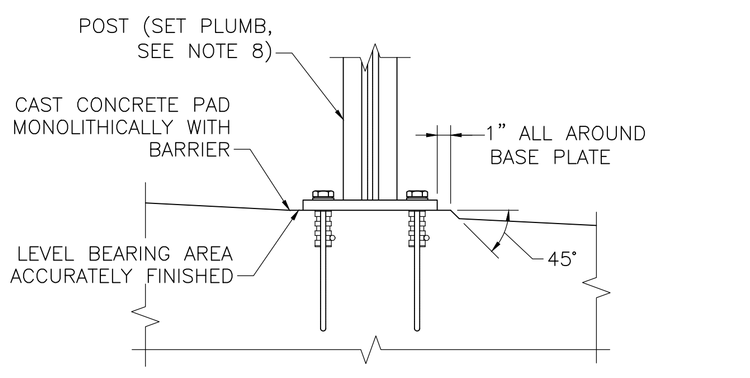


NOTE:
GALVANIZED OR ELECTROPLATE FINISH.

ANCHOR CAGE
SCALE: 3" = 1'–0"



BASE PLATE DETAIL
SCALE: 3" = 1'–0"



PROFILE GRADE OVER 3%

SETTING OF POSTS
SCALE: $1\frac{1}{2}$" = 1'–0"

GENERAL NOTES:

1. RAILS SHALL BE CONTINUOUS OVER A MINIMUM OF FOUR POSTS.
2. RAILS SHALL HAVE AN EXPANSION JOINT IN THE PANEL OVER A BRIDGE EXPANSION JOINT, IF ANY, AND AT 30 FOOT MAXIMUM SPACING ELSEWHERE.
3. BOTTOM OF POST BASE PLATE TO BE SET ON A ⅛" MOLDED FABRIC BEARING PAD (M9.16.2). THE THICKNESS OF THE PAD SHALL BE IGNORED BY THE DETAILER.
4. THE CHAIN LINK FABRIC SHALL BE SECURED BY KNUCKLING TOGETHER THE CUT ENDS OF THE FABRIC WIRE IN A MANNER SIMILAR TO THE ORIGINALLY MANUFACTURED END.
5. ALL SCREEN ENDS SHALL BE TAPERED.
6. POST SPACING SHALL BE UNIFORM BETWEEN TAPERED ENDS.
7. SET POSTS PERPENDICULAR TO GRADE FOR GRADES UP TO 1.5%. SET POSTS PLUMB FOR GRADES GREATER THAN 1.5%.

FINISHES:

1. POSTS, RAILS, COVER PLATES AND SPLICE PLATES SHALL RECEIVE A DARK BRONZE ANODIZED FINISH.
2. CHAIN LINK FABRIC SHALL RECEIVE A 4±1 MIL POLYESTER POWDER COAT FINISH. THE COLOR SHALL BE DARK BRONZE TO MATCH COLOR OF ANODIZED ALUMINUM FRAMEWORK.
3. #17 SELF TAPPING SCREWS AND ¼" ø COVER PLATE BOLTS TO BE COLORED TO MATCH THE ANODIZED EXTRUSIONS.

MATERIALS:

EXTRUSIONS & PLATES — ASTM B 221, ALLOY 6061–T6

CHAIN LINK FABRIC — AASHTO M 181 TYPE III (ALLOY 6061–T89 OR T94)

SELF TAPPING SCREWS — TYPE 304 STAINLESS STEEL WITH ¼" THICK EPDM (ETHYLENE PROPYLENE DIENE MONOMER) WASHERS

ANCHOR BOLTS — AASHTO M 164 GALVANIZED (ROTATION CAPACITY TEST NOT REQUIRED)

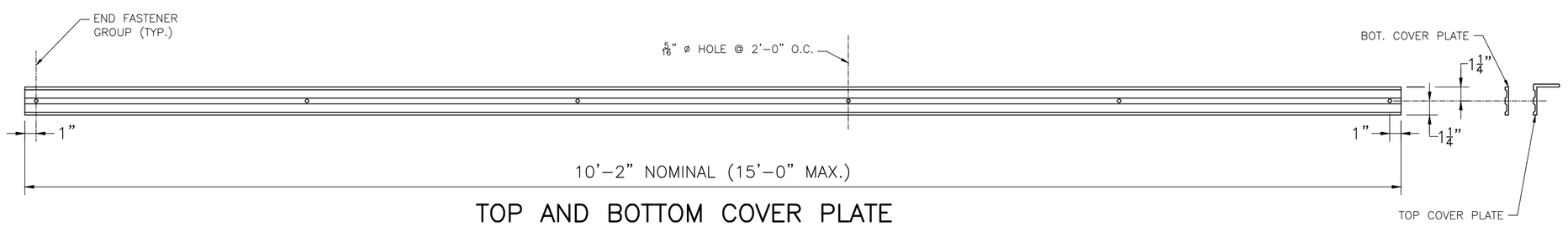
TEE BOLTS — ASTM A 307 GALVANIZED OR TYPE 304 STAINLESS STEEL

COVER PLATE BOLTS — TYPE 304 STAINLESS STEEL WITH OVERSIZED STAINLESS WASHER AND STAINLESS NUT WITH NYLON INSERT

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TOP AND BOTTOM COVER PLATE

SCALE: 1½" = 1'-0"

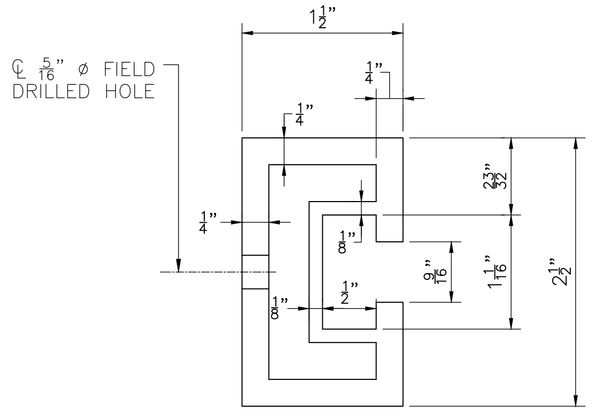
COVER PLATE NOTES:

1. COVER PLATES MAY BE CONTINUOUS OVER A RAIL EXPANSION JOINT SPLICE. COVER PLATES SHALL BE FIELD CUT AS REQUIRED TO CLEAR THE EXPANSION JOINT. SEE DETAIL AT EXPANSION JOINT.
2. FIELD DRILL 5/16" ø HOLE 1" FROM THE FIELD CUT END OF A COVER PLATE, UNLESS THERE IS AN EXISTING HOLE WITHIN 6" FROM THE COVER PLATE END.
3. FIELD PAINT THE FIELD CUT ENDS OF THE COVER PLATES TO MATCH THE ANODIZED COLOR.

WOBURN
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STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	18	24
	PROJECT FILE NO.	613196	

GUARDRAIL DETAILS

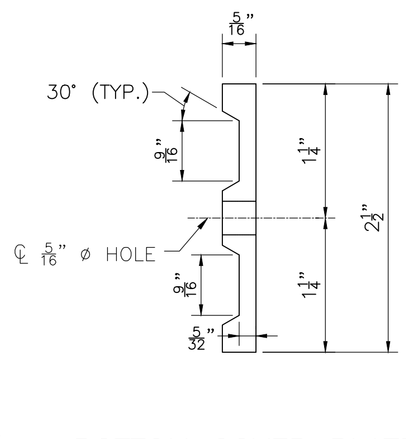


NOTE:

OTHER CONFIGURATIONS OF THE INTERNAL WALLS OF THE RAIL EXTRUSION MAY BE SUBMITTED FOR APPROVAL.

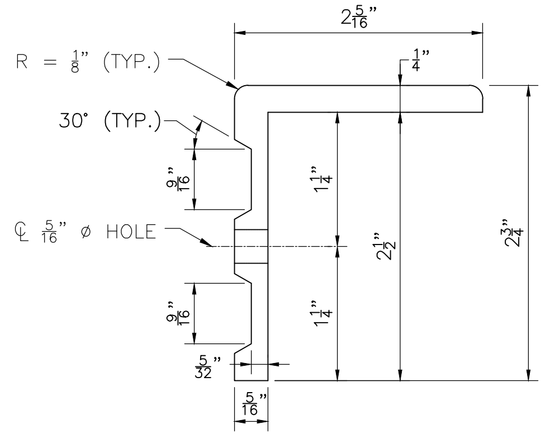
RAIL EXTRUSION

FULL SIZE



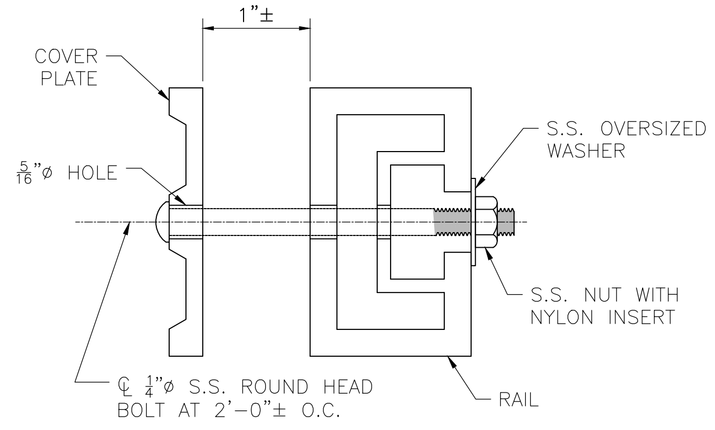
BOTTOM COVER PLATE EXTRUSION

FULL SIZE



TOP COVER PLATE EXTRUSION

FULL SIZE

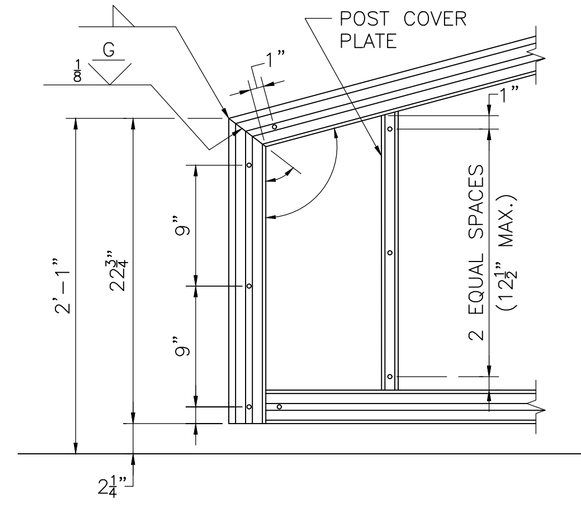


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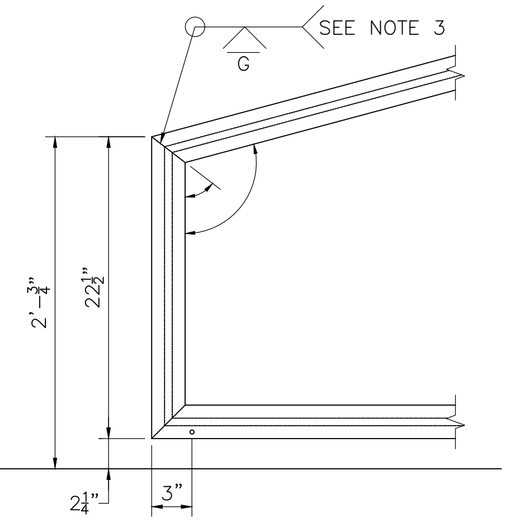
BOLTS SHALL BE TYPE 304 WITH A DRIVE HEAD TO BE COLORED TO MATCH ANODIZING.

RAIL & COVER PLATE DETAIL

FULL SIZE



COVER PLATE DETAILS



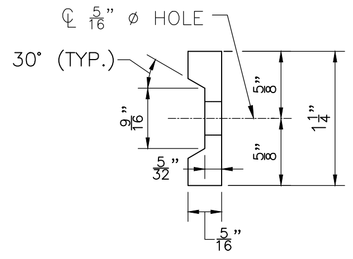
RAIL DETAILS

NOTES:

1. WELDING OF TOP COVER PLATE AND RAILS OF NON-TAPERED END IS SIMILAR.
2. WELDS AND MITERING TYPICAL FOR ALL ANGLED CORNERS.
3. WELD TYPICAL FOR TOP AND BOTTOM END CORNERS OF RAIL. INTERRUPT WELD AT SLOT IN BACK OF RAIL.

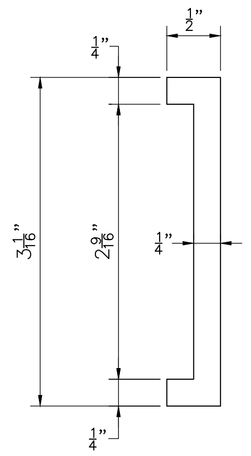
TAPERED END DETAILS

SCALE: 1½" = 1'-0"



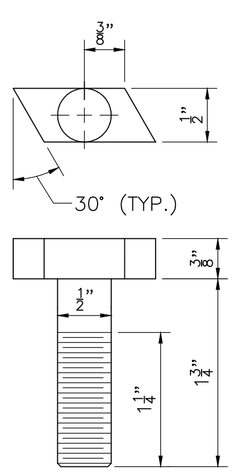
POST COVER PLATE EXTRUSION

FULL SIZE



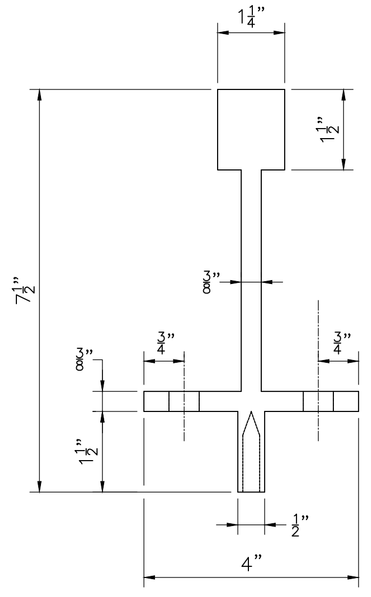
SPLICE PLATE EXTRUSION

FULL SIZE



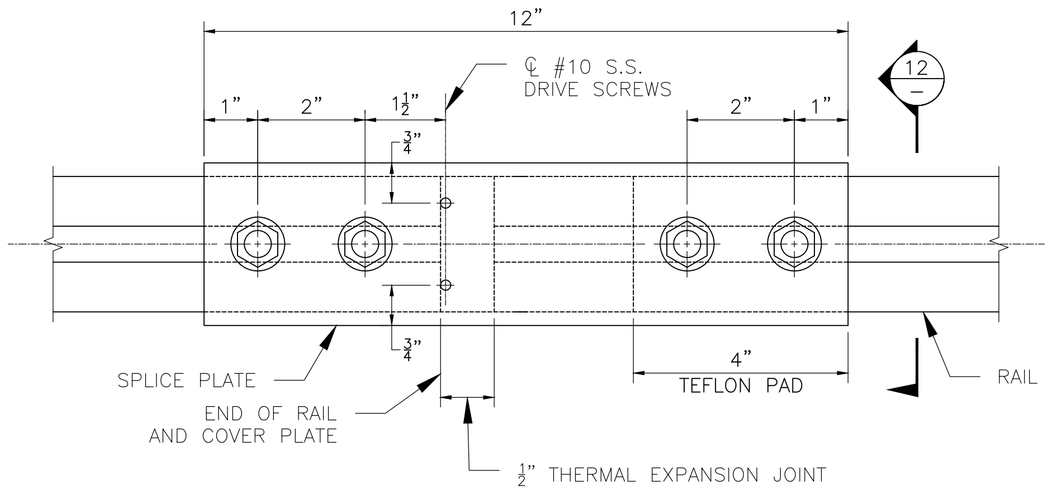
TEE BOLT

FULL SIZE



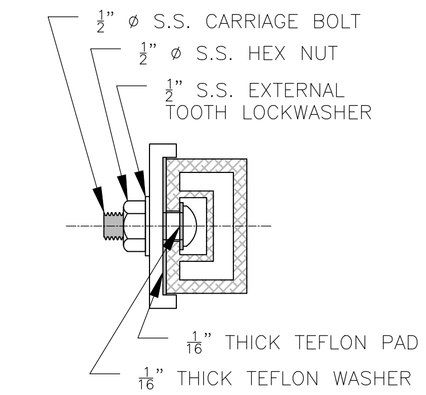
POST EXTRUSION

SCALE: 6" = 1'-0"



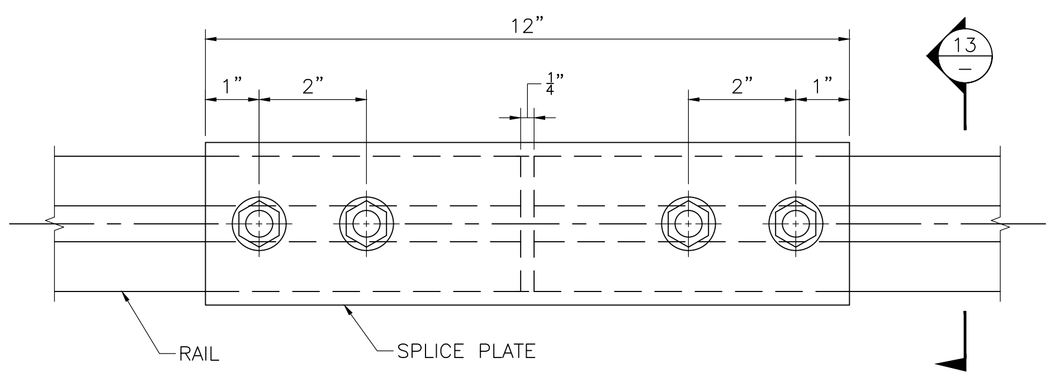
DETAIL AT RAIL EXPANSION JOINT SPLICE

SCALE: 6" = 1'-0"



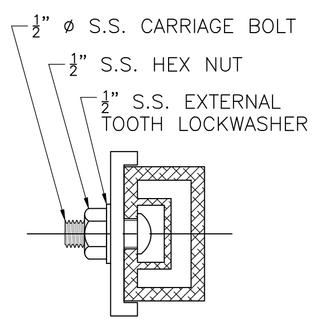
SECTION 12/–

SCALE: 6" = 1'-0"



DETAIL AT RAIL SPLICE JOINT

SCALE: 6" = 1'-0"



SECTION 13/–

SCALE: 6" = 1'-0"

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
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A00807 - 20
17-GUARDRAIL DETAILS.DWG Plotted on 22-Oct-2025 12:06 PM
Proposal No. 613196-133292
24-October-2025
PS&E Resubmission

NOTES:

1. ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND THE MASSACHUSETTS AMENDMENTS TO THE MUTCD.
2. TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
3. 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.
4. SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, CHANNELIZING DEVICES, BARRIERS, AND CRASH ATTENUATORS MUST PASS THE CRITERIA SET FORTH IN NCHRP REPORT 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES" AND/OR "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH).
5. CONTRACTORS SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT, AND SIMILAR OPERATIONS.
6. THE FIRST 10 REFLECTORIZED DRUMS OF A TAPER SHALL BE MOUNTED WITH SEQUENTIALLY FLASHING LIGHTS WHEN USED FOR NIGHT WORK BETWEEN DUSK AND DAWN.
7. DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
8. MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
9. MINIMUM LANE WIDTH IS TO BE 11 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF DRUMS OR MEDIAN BARRIER.
10. ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.
11. ANY WORK REQUIRING A SINGLE LANE CLOSURE ON INTERSTATE 95 SHALL BE LIMITED TO NIGHT WORK BETWEEN 9:00PM–5:00AM, PER THE SCHEDULE OF WORK DEFINED IN THE CONTRACT SPECIAL PROVISIONS.
12. ANY WORK REQUIRING CLOSURE OF MULTIPLE LANES ON INTERSTATE 95 SHALL BE LIMITED TO NIGHT WORK BETWEEN 12:00AM–5:00AM, PER THE SCHEDULE OF WORK DEFINED IN THE CONTRACT SPECIAL PROVISIONS.
13. ANY WORK REQUIRING A FULL ROAD CLOSURE OF ROUTE 38 SHALL BE LIMITED TO NIGHT WORK BETWEEN 11:00PM–5:00AM, PER THE SCHEDULE OF WORK DEFINED IN THE CONTRACT SPECIAL PROVISIONS.
14. ANY WORK REQUIRING ONE–LANE ALTERNATING TRAFFIC CONTROL SET UPS ON ROUTE 38 SHALL BE LIMITED TO NIGHT WORK BETWEEN 9:00PM–5:00AM, PER THE SCHEDULE OF WORK DEFINED IN THE CONTRACT SPECIAL PROVISIONS.

LEGEND:

- REFLECTORIZED PLASTIC DRUM OR 36" CONE
- P/F POLICE/FLAGGER DETAIL
- TYPE III BARRICADE
- CHANGEABLE MESSAGE SIGN
- ARROW BOARD
- WORK ZONE
- DIRECTION OF TRAFFIC
- IMPACT ATTENUATOR
- MEDIAN BARRIER
- MEDIAN BARRIER WITH WARNING LIGHTS
- WORK VEHICLE
- TRUCK MOUNTED ATTENUATOR
- TRAFFIC OR PEDESTRIAN SIGNAL
- SIGN
- TEMPORARY PORTABLE RUMBLE STRIP ARRAY

THE IDEAL CAPACITY OF A MAJOR HIGHWAY IS GENERALLY CONSIDERED TO BE 1900 PASSENGER CARS PER HOUR PER LANE (PCPHPL). IN WORK ZONES ON A MULTI–LANE DIVIDED HIGHWAY, THE FOLLOWING VOLUME GUIDELINES HAVE BEEN SUGGESTED:

MEASURED AVERAGE WORK ZONE CAPACITIES

NUMBER OF LANES		NUMBER OF STUDIES	AVERAGE CAPACITY	
NORMAL (EXISTING)	OPEN (TO TRAFFIC)		VPH	VPHPL
3	1	7	1,170	1,170
2	1	8	1,340	1,340
5	2	8	2,740	1,370
4	2	4	2,960	1,480
3	2	9	2,980	1,490
4	3	4	4,560	1,520

Source: Dudek, C., Notes on Work Zone Capacity and Level of Service. Texas Transportation Institute, Texas A&M University, College Station, Texas (1984)

BY OBTAINING HOURLY TRAFFIC COUNTS FOR A PARTICULAR ROADWAY (WITH A MINIMUM OF A 48–HOUR AUTOMATIC TRAFFIC RECORDER (ATR) COUNT), THIS WILL HELP TO DETERMINE AT WHAT TIMES OF THE DAY OR NIGHT A CERTAIN NUMBER OF LANES MAY BE CLOSED.

SUGGESTED WORK ZONE WARNING SIGN SPACING

ROAD TYPE*	DISTANCE BETWEEN SIGNS **			
	A	B	C	D
URBAN (30 MPH OR LESS)	100	100	100	100
URBAN (35 MPH OR GREATER)	350	350	350	350
RURAL	500	500	500	500
EXPRESSWAY/FREEWAY	1,000	1,500	2,640	500

* ROAD TYPE TO BE DETERMINED BY MASSDOT OFFICE OF TRANSPORTATION PLANNING.

** DISTANCES ARE SHOWN IN FEET. THE COLUMN HEADINGS A, B, AND C ARE THE DIMENSIONS SHOWN IN THE DETAIL/ TYPICAL SETUP FIGURES. THE A DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN. THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS. THE C DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE "THIRD" SIGN IS THE FIRST ONE TYPICALLY ENCOUNTERED BY A DRIVER APPROACHING A TEMPORARY TRAFFIC CONTROL (TTC) ZONE.)

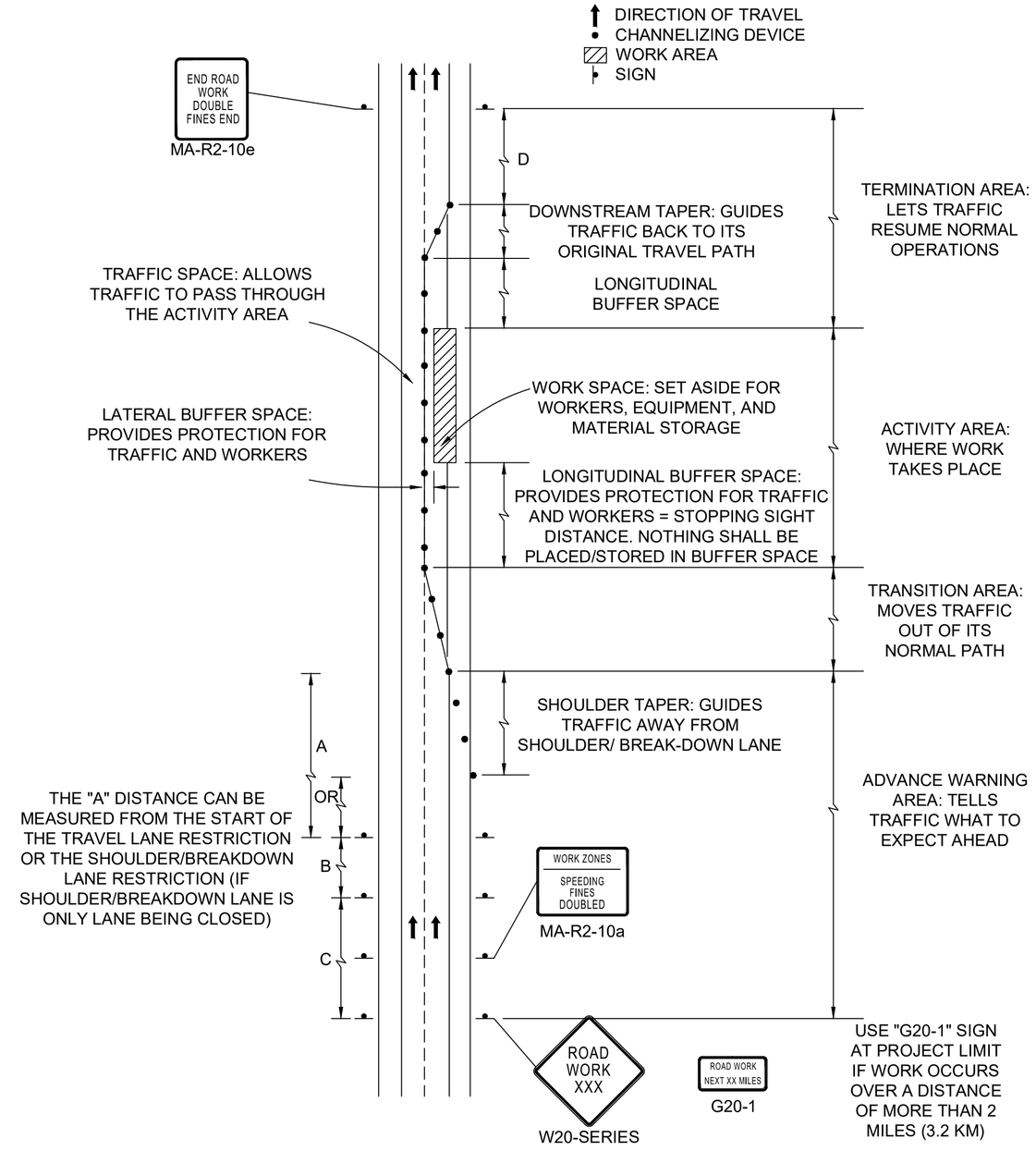
THE "THIRD" SIGN ABOVE IS TYPICALLY REFERRED TO AS AN "ADVANCE WARNING" SIGN ON THE TTCP SETUPS. THESE ADVANCE WARNING SIGNS ARE LOCATED PRIOR TO THE PROJECT LIMITS ON ALL APPROACHES (i.e. THE W20–1 SERIES (ROAD WORK XX FT) SIGNS), AND USUALLY REMAIN FOR THE DURATION OF THE PROJECT. ADDITIONAL SIGNS (i.e. "RIGHT LANE CLOSED 1 MILE" AND "LEFT LANE CLOSED 1 MILE") HAVE BEEN SHOWN IN SOME FIGURES AS EXAMPLES OF REINFORCEMENT SIGN PLACEMENT BUT ARE USED IN RARE OCCASIONS.

THE FIRST AND SECOND WARNING SIGNS ABOVE ARE REFERRED TO AS THE OPERATIONAL (DAY–TO–DAY) WORK ZONE SIGNS AND MAY BE MOVED DEPENDING ON WHERE THE SPECIFIC ROADWAY WORK FOR THAT DAY IS LOCATED.

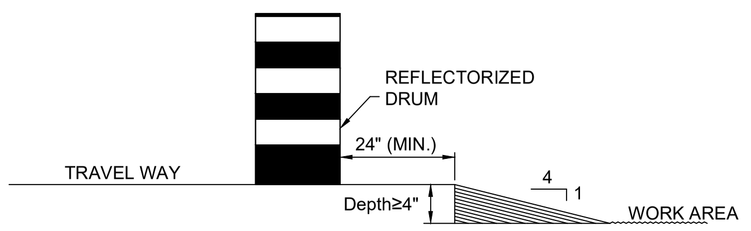
MA R2–10a SIGNS SHALL BE PLACED BETWEEN THE SECOND AND THIRD SIGNS AS DESCRIBED ABOVE.

MA R2–10a, MA R2–10e, AND W20–1 SERIES SIGNS ARE TO BE INCLUDED ON ALL DETAILS/TYPICAL SETUPS.

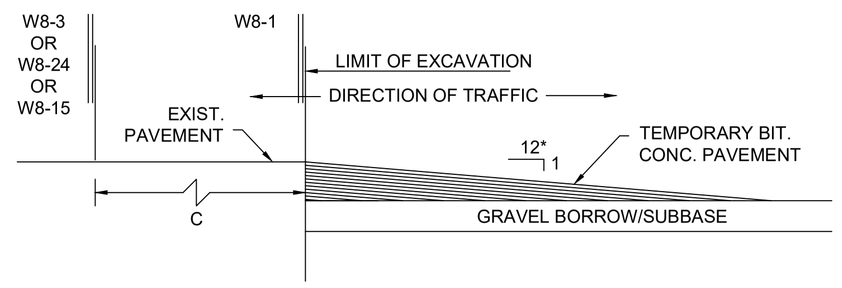
Based on: Table 6C–1 MUTCD LATEST EDITION



COMPONENT PARTS OF A TEMPORARY TRAFFIC CONTROL (TTC) ZONE
NOT TO SCALE



LATERAL DROP-OFF DETAIL
NOT TO SCALE

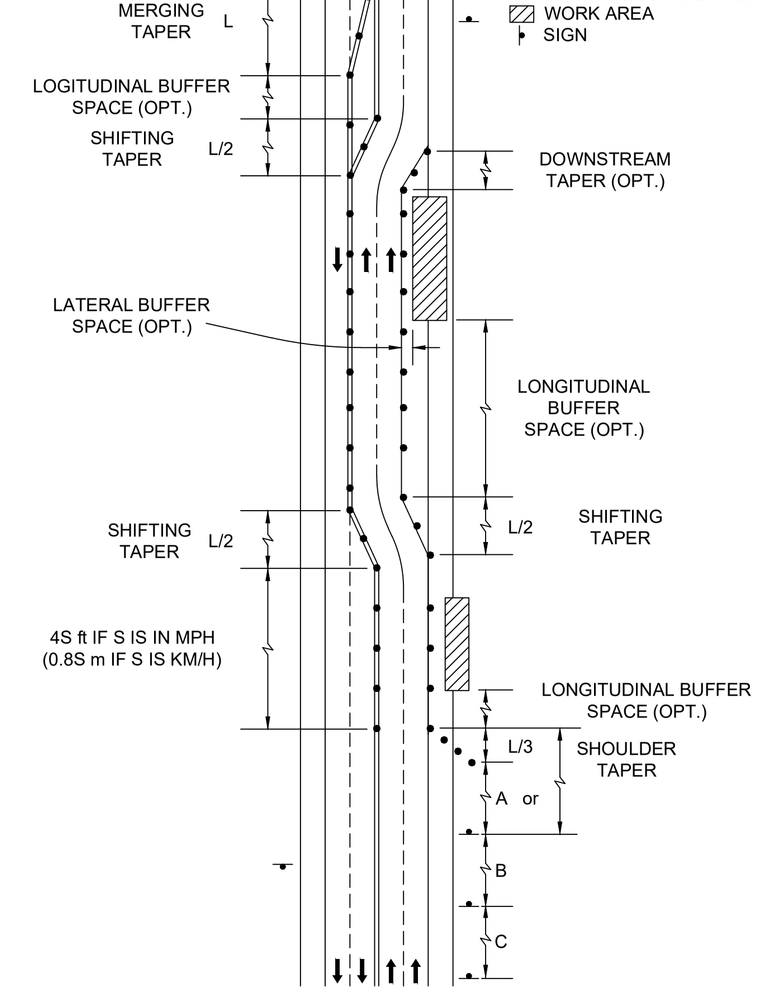


LONGITUDINAL DROP-OFF DETAIL
NOT TO SCALE
* - INCREASE SLOPE RATIO FOR HIGHER SPEEDS (50:1)

WOBURN
I-95/ROUTE 128 OVER STATE ROUTE 38

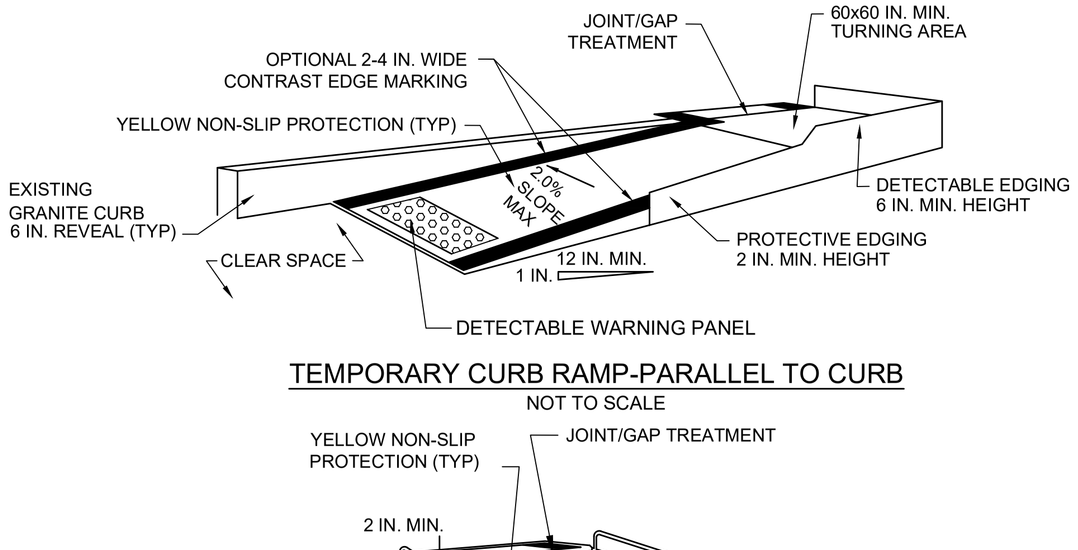
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	19	24
PROJECT FILE NO.	613196		

TEMPORARY TRAFFIC CONTROL PLANS - SHEET 1



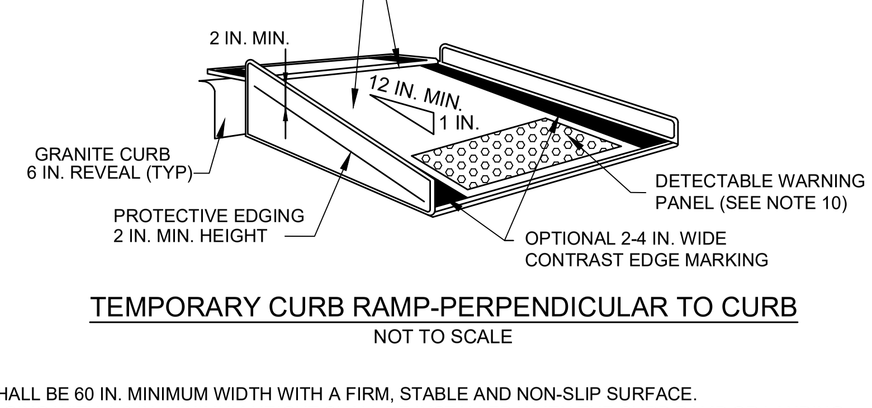
TAPER AND BUFFER DETAILS
NOT TO SCALE

Plotted on 16-Dec-2025 3:45 PM
MASSDOT 10 BRIDGES_TTCP_RTE 38.DWG
Proposal No. 613196-133292
A00807 - 21



TEMPORARY CURB RAMP-PARALLEL TO CURB

NOT TO SCALE



TEMPORARY CURB RAMP-PERPENDICULAR TO CURB

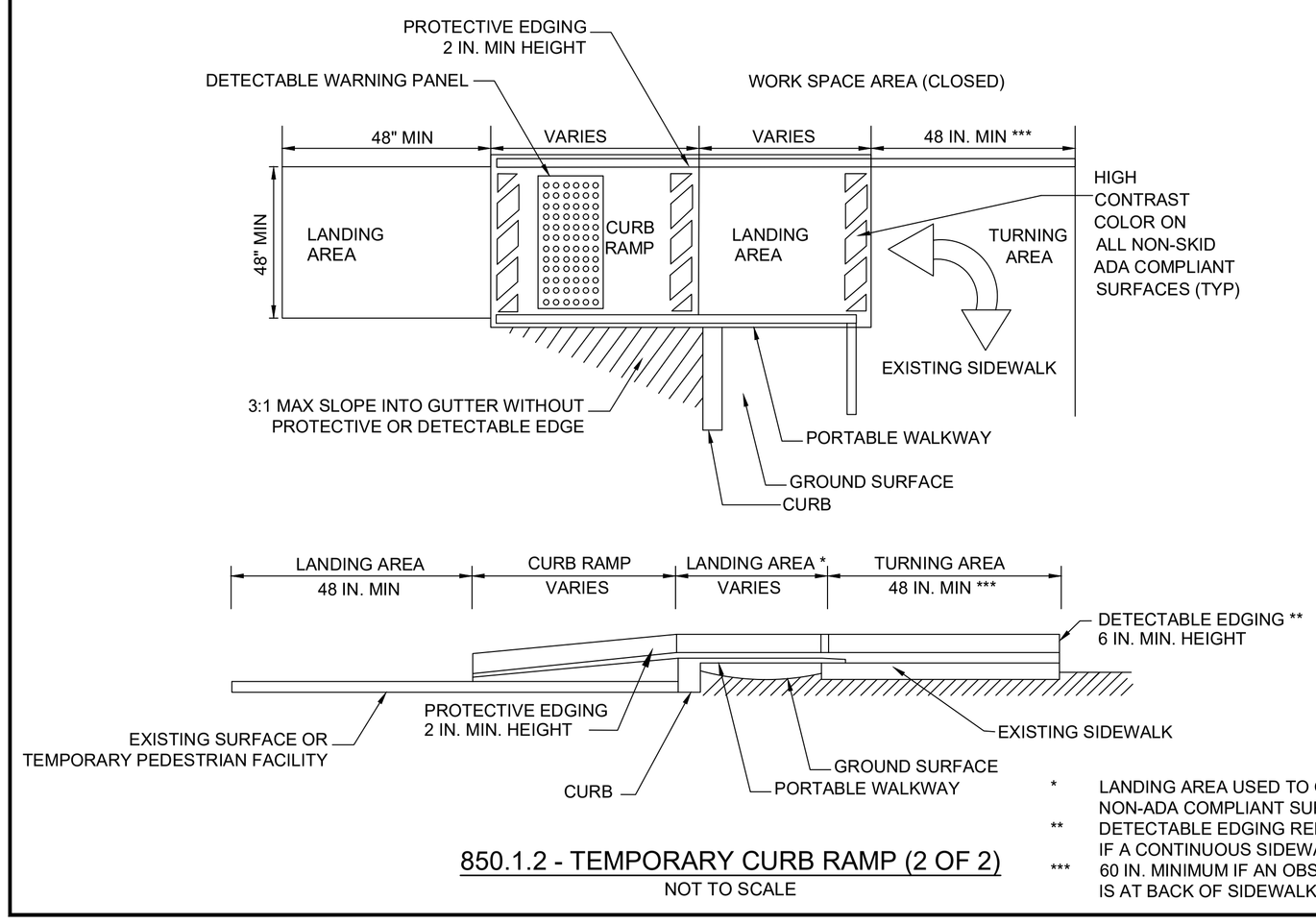
NOT TO SCALE

NOTES:

1. CURB RAMPS SHALL BE 60 IN. MINIMUM WIDTH WITH A FIRM, STABLE AND NON-SLIP SURFACE.
2. 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 SLOP 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.
3. DETECTABLE EDGING WITH 6 IN. MINIMUM HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
4. THE CURB RAMP WALKWAY AND LANDING AREA SURFACE SHALL BE OF A SOLID CONTINUOUS CONTRASTING COLOR ABUTTING UP TO THE EXISTING SIDEWALK.
5. CURB RAMPS AND LANDINGS SHOULD HAVE A 1:50 (2%) MAX CROSS-SLOPE.
6. CLEAR SPACE OF 48x48 IN. MINIMUM SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
7. WATER FLOW IN THE GUTTER SYSTEM SHALL HAVE MINIMAL RESTRICTION.
8. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 0.5 IN. WIDTH.
9. 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.
10. 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 DETECTABLE WARNING PANEL SHALL NOT BE INSTALLED ON THE RAMP.

850.1.1 - TEMPORARY CURB RAMP (1 OF 2)

NOT TO SCALE



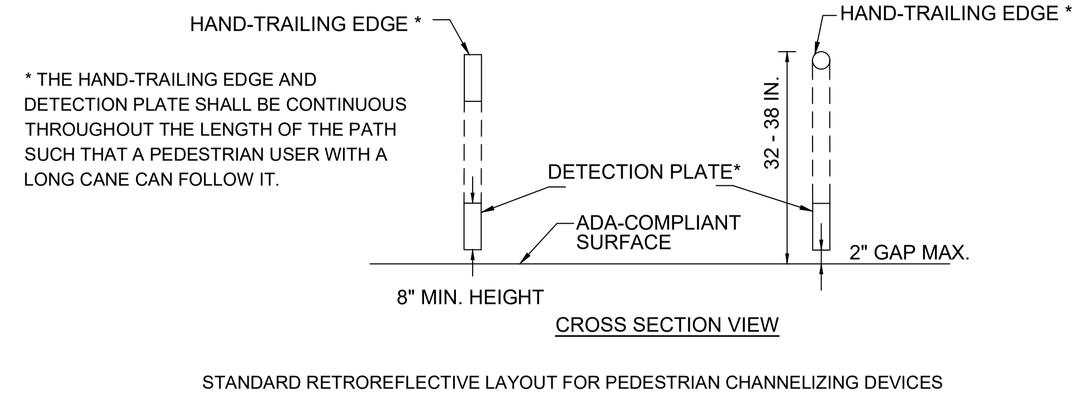
* LANDING AREA USED TO OVERLAP NON-ADA COMPLIANT SURFACES.

** DETECTABLE EDGING REMOVED IF A CONTINUOUS SIDEWALK.

*** 60 IN. MINIMUM IF AN OBSTRUCTION IS AT BACK OF SIDEWALK.

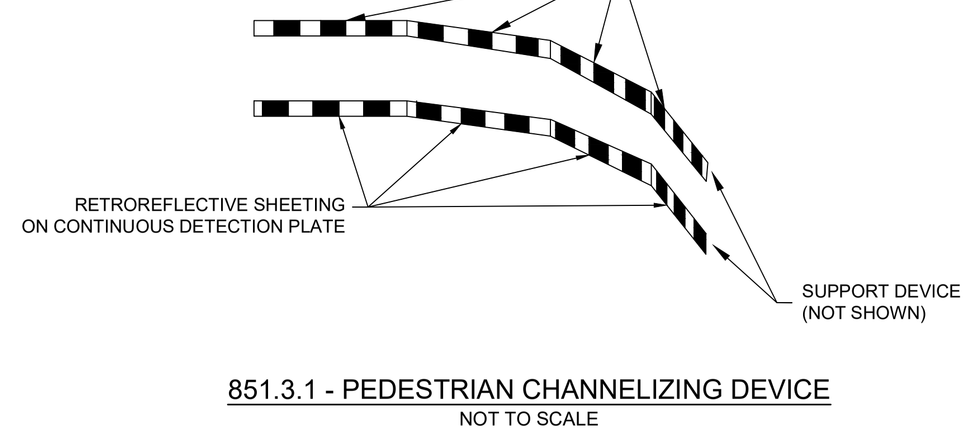
850.1.2 - TEMPORARY CURB RAMP (2 OF 2)

NOT TO SCALE



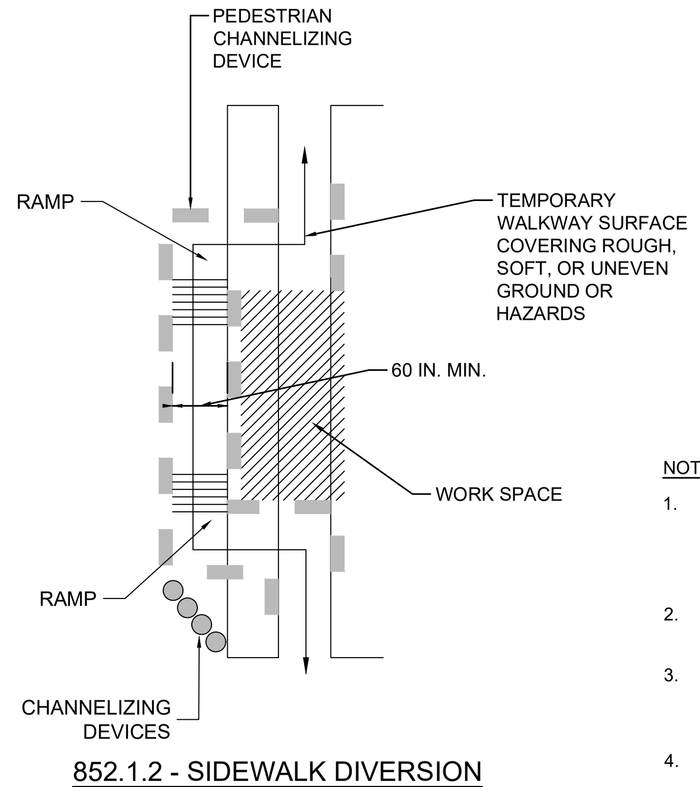
CROSS SECTION VIEW

STANDARD RETROREFLECTIVE LAYOUT FOR PEDESTRIAN CHANNELIZING DEVICES



851.3.1 - PEDESTRIAN CHANNELIZING DEVICE

NOT TO SCALE



852.1.2 - SIDEWALK DIVERSION

NOT TO SCALE

NOTES:

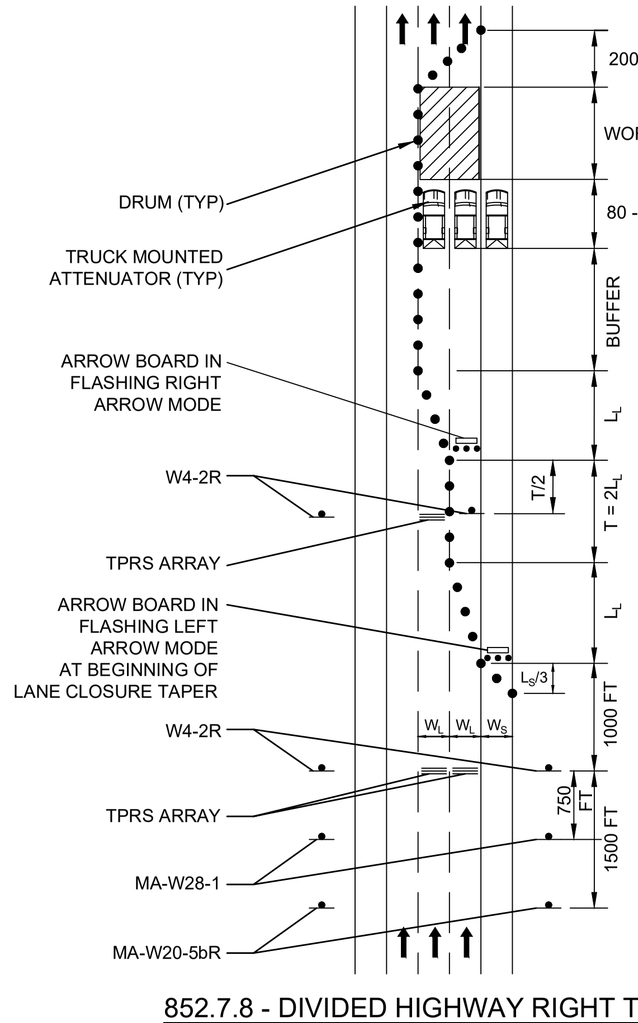
1. A MAXIMUM 2-INCH GAP BETWEEN THE BOTTOM OF THE CONTINUOUS DETECTION PLATE AND THE WALKWAY SURFACE MAY BE USED TO PROVIDE DRAINAGE.
2. HAND-TRAILING EDGE AND DETECTION PLATE ARE OPTIONAL FOR CONTINUOUS WALLS.
3. SUPPORT DEVICE FOR CONTINUOUS DETECTION PLATE AND CONTINUOUS HAND-TRAILING EDGE NOT SHOWN ON THE PLAN.
4. STRIPING ON SHEETING PANELS MAY BE EITHER VERTICAL OR AT A 45-DEGREE ANGLE.
5. RETROREFLECTIVE AREAS CAN BE DISTRIBUTED IN A MANNER THAT ENSURES VISIBILITY AND DETECTION WITHOUT NECESSITATING A SINGLE CONTINUOUS APPLICATION.

WOBURN
I-95/ROUTE 128 OVER STATE ROUTE 38

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	20	24
PROJECT FILE NO.	613196		

TEMPORARY TRAFFIC CONTROL PLANS - SHEET 2

MASSDOT 10 BRIDGES_TTCP_RTE 38.DWG Plotted on 24-Oct-2025 12:38 PM
Proposal No. 613196-133292
A00807 - 22



852.7.8 - DIVIDED HIGHWAY RIGHT TWO LANES CLOSURE (SHORT TERM)
NOT TO SCALE

TEMPORARY PORTABLE RUMBLE STRIP (TPRS)
A TPRS ARRAY SHALL HAVE THEE RUMBLE STRIPS. SPACING SHALL BE AS FOLLOWS:

POSTED REGULATORY OR WORK ZONE SPEED

60 MPH AND ABOVE — 20'

40 MPH TO 55 MPH — 15'

NOTE: TPRS SHALL BE DEPLOYED ONLY FOR SETUPS OF 12 HOURS OR LESS

TYPICAL TAPER LENGTHS (L_L,L_R,L_S) IN FEET

SPEED LIMIT (S) IN MPH	WIDTH OF OFFSET (W_L, W_S OR W_R) IN FEET		
	10	11	12
40	400	440	480
45	450	495	540
50	500	550	600
55	550	605	660
60	600	660	720
65	650	715	780

NOTE: FOR OFFSET WIDTHS NOT LISTED IN TABLE, USE L=WS.

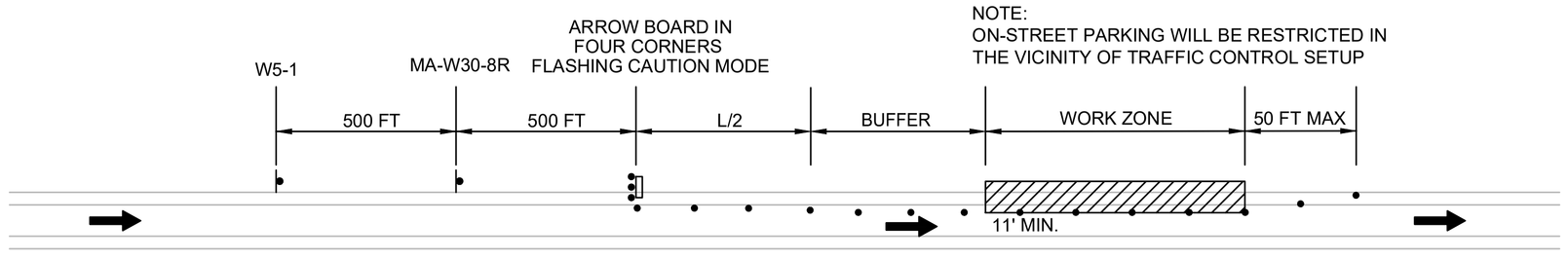
STOPPING SIGHT DISTANCE	
SPEED (MPH)	DISTANCE (FT)
35	250
40	305
45	360
50	425
55	495
60	570
65	645

MINIMUM LENGTH OF LONGITUDINAL BUFFER IS EQUAL TO THE STOPPING SIGHT DISTANCE AT THE POSTED SPEED AND CAN DETERMINED FROM THE FOLLOWING TABLE

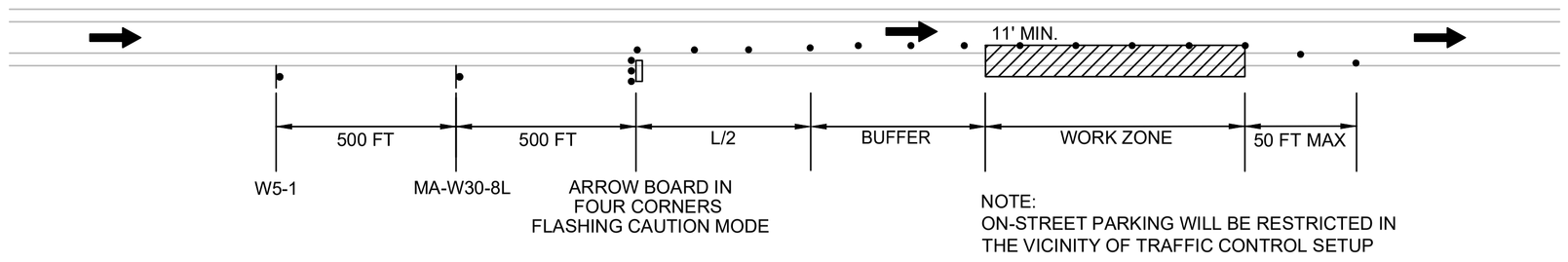
NOTES:

1. THE FIRST TEN DRUMS OF EACH LANE CLOSURE TAPER SHALL BE MOUNTED WITH SEQUENTIALLY FLASHING LIGHTS IF DEPLOYED BETWEEN DUSK AND DAWN.
2. MAXIMUM DRUM SPACING IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH. IN TANGENT SECTIONS, MAXIMUM SPACING IN FEET IS EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH.
3. THIS SETUP ALSO APPLIES TO 3 OR 4 LANE SECTIONS.

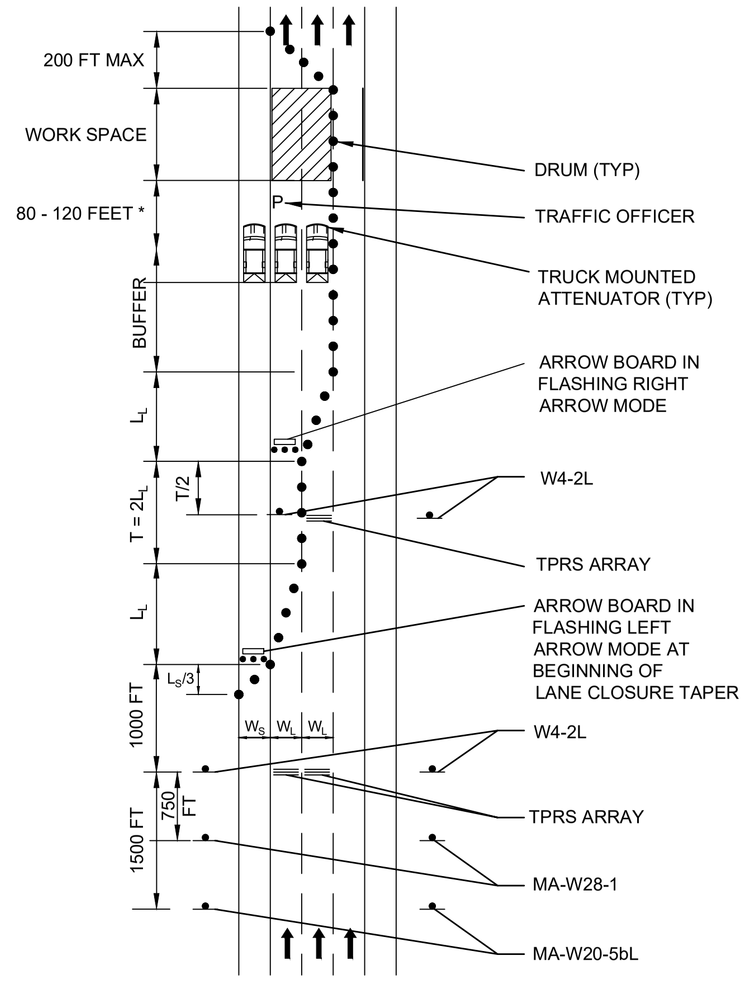
* DISTANCE MAY BE INCREASED IF ADDITIONAL ROLL-AHEAD ALLOWANCE IS NEEDED. REFER TO MANUFACTURER'S SPECIFICATIONS.



ONE-WAY SINGLE LANE ROAD - PARTIAL LANE CLOSURE (LEFT SIDE)
N.T.S.

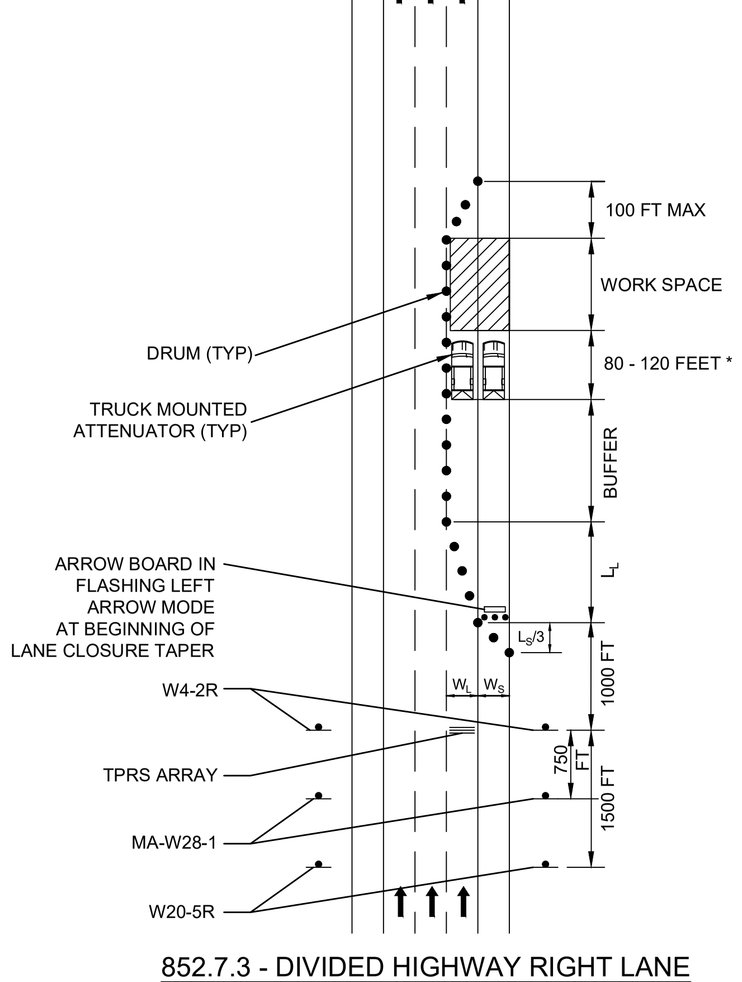


ONE-WAY SINGLE LANE ROAD - PARTIAL LANE CLOSURE (RIGHT SIDE)
N.T.S.



852.7.9 - DIVIDED HIGHWAY LEFT TWO LANES CLOSURE (SHORT TERM)
NOT TO SCALE

MASSDOT 10 BRIDGES_TTCP_RTE 38.DWG Plotted on 24-Oct-2025 12:38 PM
Proposal No. 613196-133292
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852.7.3 - DIVIDED HIGHWAY RIGHT LANE CLOSURE (SHORT TERM)
NOT TO SCALE

TEMPORARY PORTABLE RUMBLE STRIP (TPRS)
A TPRS ARRAY SHALL HAVE THEE RUMBLE STRIPS. SPACING SHALL BE AS FOLLOWS:

POSTED REGULATORY OR WORK ZONE SPEED

60 MPH AND ABOVE — 20'

40 MPH TO 55 MPH — 15'

NOTE: TPRS SHALL BE DEPLOYED ONLY FOR SETUPS OF 12 HOURS OR LESS

TYPICAL TAPER LENGTHS (L, L_L, L_S) IN FEET			
SPEED LIMIT (S) IN MPH	WIDTH OF OFFSET (W_L OR W_S) IN FEET		
	10	11	12
50	500	550	600
55	550	605	660
60	600	660	720
65	650	715	780

NOTE: FOR OFFSET WIDTHS NOT LISTED IN TABLE, USE L=WS.

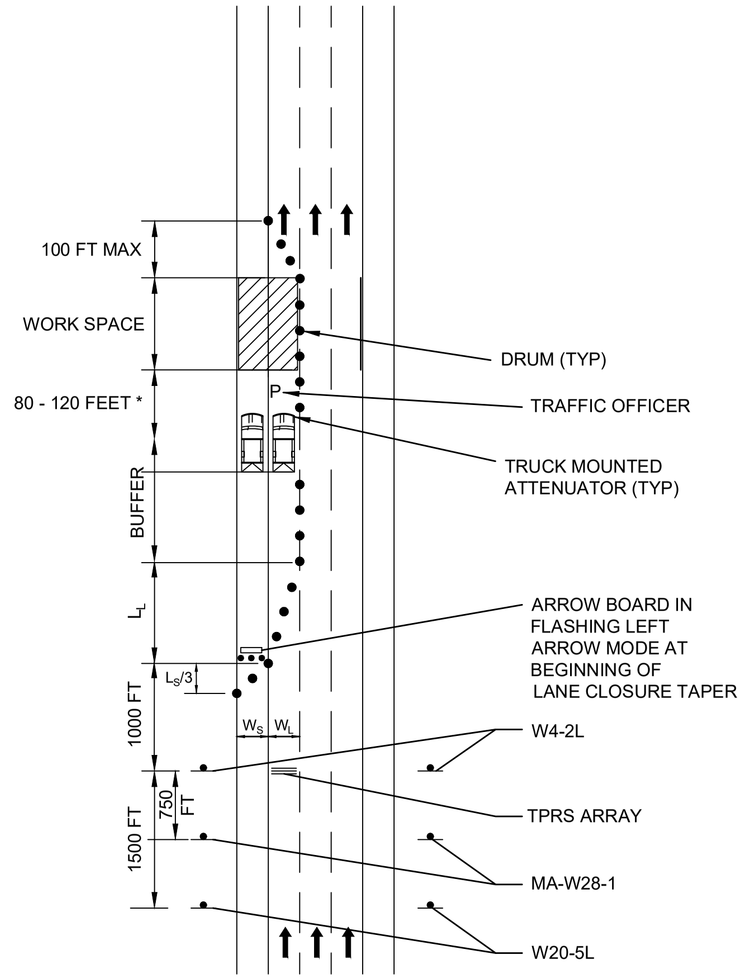
STOPPING SIGHT DISTANCE	
SPEED (MPH)	DISTANCE (FT)
35	250
40	305
45	360
50	425
55	495
60	570
65	645

MINIMUM LENGTH OF LONGITUDINAL BUFFER IS EQUAL TO THE STOPPING SIGHT DISTANCE AT THE POSTED SPEED AND CAN DETERMINED FROM THE FOLLOWING TABLE

NOTES:

1. THE FIRST TEN DRUMS OF EACH LANE CLOSURE TAPER SHALL BE MOUNTED WITH SEQUENTIALLY FLASHING LIGHTS IF DEPLOYED BETWEEN DUSK AND DAWN.
2. MAXIMUM DRUM SPACING IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH. IN TANGENT SECTIONS, MAXIMUM SPACING IN FEET IS EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH.
3. THIS SETUP ALSO APPLIES TO 3 OR 4 LANE SECTIONS.

* DISTANCE MAY BE INCREASED IF ADDITIONAL ROLL-AHEAD ALLOWANCE IS NEEDED. REFER TO MANUFACTURER'S SPECIFICATIONS.



852.7.4 - DIVIDED HIGHWAY LEFT LANE CLOSURE (SHORT TERM)
NOT TO SCALE

DIVIDED HIGHWAY - LEFT SHOULDER CLOSURE (LONG TERM)
NOT TO SCALE

MASSDOT 10 BRIDGES_TTCP_RTE 38.DWG Plotted on 24-Oct-2025 12:38 PM
Proposal No. 613196-133292
A00807 - 24

TRAFFIC DEVICE LEGEND:

- CONSTRUCTION AREA
- TEMPORARY ROADSIDE SIGN
- MAIN ST (RTE 38) NB DETOUR ROUTE
- MAIN ST (RTE 38) SB DETOUR ROUTE
- DIRECTIONAL TRAFFIC FLOW
- TYPE III BARRICADE
- REFLECTORIZED DRUM
- P POLICE DETAIL
- ARROW BOARD
- TRUCK MOUNTED ATTENUATOR
- TEMPORARY PORTATBLE RUMBLE STRIP (TPRS)

PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

IF USED, PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) AS AMENDED AND SHOULD BE PLACED ON THE SHOULDER OF THE ROADWAY OR IF PRACTICAL SET WELL AWAY FROM THE TRAVEL LANE. MESSAGE SIGNS SHOULD BE PROTECTED WITH RETROREFLECTIVE TEMPORARY TRAFFIC CONTROL DEVICES WHEN PLACED WITHIN THE AVAILABLE CLEAR ZONE OR ELSE SHIELDED WITH A BARRIER OR CRASH CUSHION. THE FINAL LOCATION AND USE OF THE PCMS SHALL BE DETERMINED BY THE ENGINEER.

*ALTERNATIVE MESSAGES MAY BE DETERMINED BY THE ENGINEER IN THE FIELD.

*EXACT LOCATION OF PCMS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

TWO (2) WEEKS PRIOR TO ROAD CLOSURE, PCMS 1 & 2, SHALL BE INSTALLED WITH THE SUGGESTED MESSAGES.

MESSAGE 1A:

ROUTE 38
CLOSED

MESSAGE 1B:

MMM/DD
TO
MMM/DD

WHILE ROAD CLOSURE IS IN EFFECT, PCMS 1 & 2, WILL DISPLAY THE FOLLOWING SUGGESTED MESSAGE UNTIL BRIDGE IS AGAIN OPEN FOR TRAFFIC:

MESSAGE 2A:

ROUTE 38
CLOSED
11PM-5AM

MESSAGE 2B:

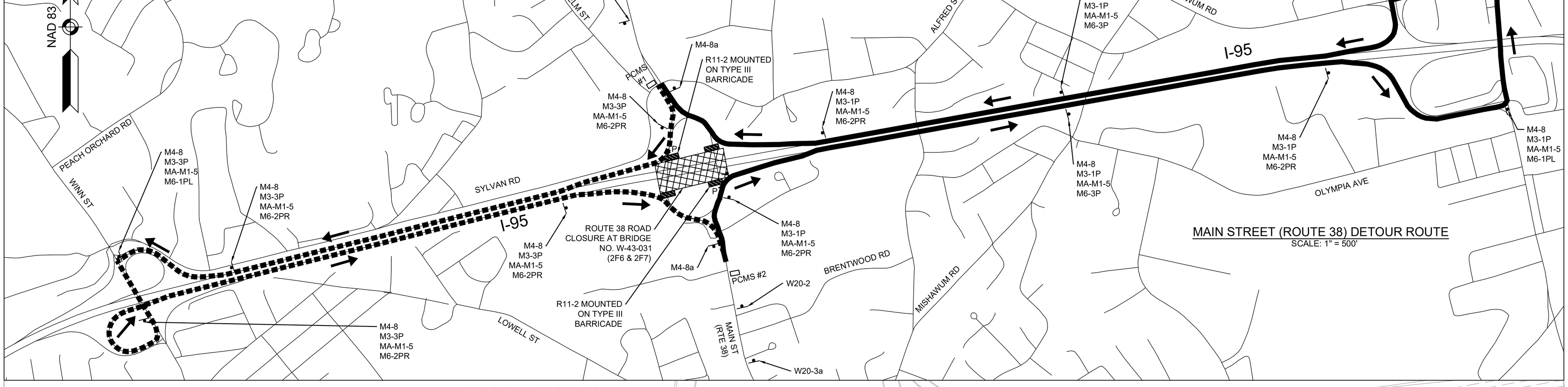
FOLLOW
DETOUR

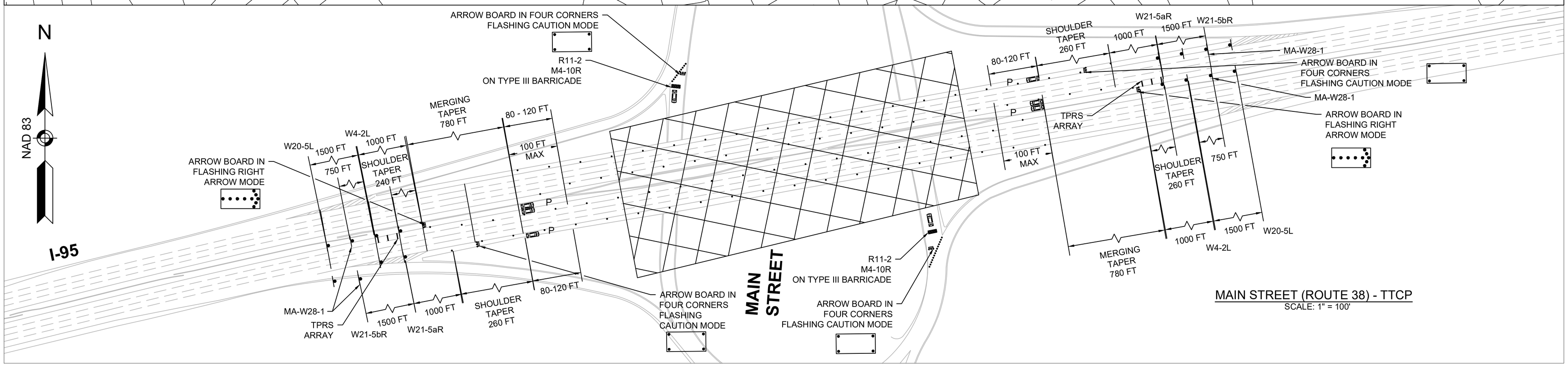
NOTE:
ALL LANE AND ROAD CLOSURES WILL HAVE POLICE DETAILS PRESENT TO MANAGE TRAFFIC AND OVERRIDE SIGNALS AS NECESSARY TO ENSURE SAFETY AND PROPER OPERATIONS.

WOBURN
I-95/ROUTE 128 OVER STATE ROUTE 38

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	23	24
PROJECT FILE NO.	613196		

DETOUR PLAN &TTCP





MAIN STREET (ROUTE 38) - TTCP
SCALE: 1" = 100'

MASSDOT 10 BRIDGES_DET.DWG Plotted on 23-Dec-2025 11:21 AM
Proposal No. 613196-133292
A00807 - 25

CONSTRUCTION SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE WIDTH (IN)	SIZE HEIGHT (IN)	TEXT	DIMENSIONS (IN) LETTER HEIGHT	DIMENSIONS (IN) VERTICAL SPACING	DIMENSIONS (IN) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACK-GROUND	COLOR LEGEND	COLOR BORDER	UNIT AREA (S.F.)	TOTAL AREA (S.F.)
M3-1P	36"	18"	NORTH	(1)	(1)	(1)	8	FLUOR. ORANGE	BLACK	BLACK	4.50	36.00
M3-3P	36"	18"	SOUTH				5	FLUOR. ORANGE	BLACK	BLACK	4.50	22.50
M4-8	30"	15"	DETOUR				13	FLUOR. ORANGE	BLACK	BLACK	3.13	40.69
M4-8a	24"	18"	END DETOUR				2	FLUOR. ORANGE	BLACK	BLACK	3.00	6.00
M6-1PL	30"	21"	←				4	FLUOR. ORANGE	BLACK	BLACK	4.38	17.52
M6-2PR	30"	21"	↗				7	FLUOR. ORANGE	BLACK	BLACK	4.38	30.66
M6-3P	30"	21"	↑				2	FLUOR. ORANGE	BLACK	BLACK	4.38	8.76
MA-M1-5	36"	36"	38	(2)	(2)	(2)	13	WHITE	BLACK	BLACK	9.00	117.00
MA-R2-10a	48"	36"	WORK ZONES / SPEEDING FINES DOUBLED				2	FLUOR. ORANGE & WHITE	BLACK	BLACK	12.00	24.00
	60"	48"					4				20.00	80.00
MA-R2-10e	36"	48"	END ROAD WORK DOUBLE FINES END				2	FLUOR. ORANGE & WHITE	BLACK	BLACK	12.00	24.00
	48"	60"					4				20.00	80.00
MA-W20-5bL	48"	48"	LEFT TWO LANES CLOSED XX FT				2	FLUOR. ORANGE	BLACK	BLACK	16.00	32.00
MA-W20-5bR	48"	48"	RIGHT TWO LANES CLOSED XX FT				2	FLUOR. ORANGE	BLACK	BLACK	16.00	32.00
MA-W30-8L	36"	36"	SQUEEZE LEFT				2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
MA-W30-8R	36"	36"	SQUEEZE RIGHT				2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
R9-11aL	24"	12"	SIDEWALK CLOSED ← CROSS HERE	(1)	(1)	(1)	1	WHITE	BLACK	BLACK	2.00	2.00
R9-11aR	24"	12"	SIDEWALK CLOSED → CROSS HERE				1	WHITE	BLACK	BLACK	2.00	2.00

NOTES:

1. RETROREFLECTIVE SHEETING FOR ALL GUIDE AND TRAFFIC SIGNS SHALL CONFORM TO MASSDOT STANDARD SPECIFICATION SECTION M9.30.0. FLUORESCENT SHEETING SHALL BE USED FOR ALL ORANGE BACKGROUND SIGNS.

(1) SEE THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND "STANDARD HIGHWAY SIGNS" BY FEDERAL HIGHWAY ADMINISTRATION (LATEST EDITIONS) FOR TEXT DIMENSIONS AND COLORS. SEE ALSO THE "MASSACHUSETTS MUTCD AMENDMENTS".

(2) SEE THE MASSDOT "STANDARD SIGNS" LATEST EDITION.

WOBURN
I-95/ROUTE 128 OVER STATE ROUTE 38

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	24	24
PROJECT FILE NO.	613196		

TEMPORARY TRAFFIC SIGN SUMMARY 01

CONSTRUCTION SIGN SUMMARY (CONTINUED)

IDENTIFICATION NUMBER	SIZE WIDTH (IN)	SIZE HEIGHT (IN)	TEXT	DIMENSIONS (IN) LETTER HEIGHT	DIMENSIONS (IN) VERTICAL SPACING	DIMENSIONS (IN) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACK-GROUND	COLOR LEGEND	COLOR BORDER	UNIT AREA (S.F.)	TOTAL AREA (S.F.)
R11-2	48"	30"	ROAD CLOSED	(1)	(1)	(1)	2	WHITE	BLACK	BLACK	10.00	20.00
W4-2L	48"	48"					4	FLUOR. ORANGE	BLACK	BLACK	16.00	64.00
W4-2R	48"	48"					4	FLUOR. ORANGE	BLACK	BLACK	16.00	64.00
W5-1	36"	36"	ROAD NARROWS				2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W11-2	36"	36"					4	FLUOR. YELLOW GREEN	BLACK	BLACK	9.00	36.00
W13-1p	30"	30"	XX MPH				4	FLUOR. ORANGE	BLACK	BLACK	6.25	25.00
W16-7pL	24"	12"					4	FLUOR. YELLOW GREEN	BLACK	BLACK	2.00	8.00
W20-1	36"	36"	ROAD WORK AHEAD				2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
	48"	48"					5				16.00	80.00
W20-2a	36"	36"	DETOUR AHEAD				2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W20-3a	36"	36"	DETOUR AHEAD				2	FLUOR. ORANGE	BLACK	BLACK	9.00	18.00
W20-5L	48"	48"	LEFT LANE CLOSED AHEAD				4	FLUOR. ORANGE	BLACK	BLACK	16.00	64.00
W20-5R	48"	48"	RIGHT LANE CLOSED AHEAD				2	FLUOR. ORANGE	BLACK	BLACK	16.00	32.00
W21-5aL	48"	48"	LEFT SHOULDER CLOSED				4	FLUOR. ORANGE	BLACK	BLACK	16.00	64.00
W21-5bL	48"	48"	LEFT SHOULDER CLOSED AHEAD				4	FLUOR. ORANGE	BLACK	BLACK	16.00	64.00
M4-10R	48"	18"	DETOUR →					FLUOR. ORANGE	BLACK	BLACK	6.00	12.00

MASSDOT 10 BRIDGES_TTCP_RTE 38.DWG Plotted on 24-Oct-2025 12:39 PM

Proposal No. 613196-133292

DOCUMENT A00808

PROJECT UTILITY COORDINATION FORM

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Project Utilities Coordination (PUC) Form

CONTACTS AND GENERAL UTILITY INFORMATION

11/5/2025
Revision Date:

11/5/2025
PRINTED

City/Town:	Project File #:	PUC Completed by:	Utility Pole Set:		
Burlington, Lynnfield, Wakefiled, Woburn	613196	Ghita Ridadarajat	Eversource		
Route/Street:	**Asst. Dist Const /Dist Utility Reimb. Eng**	**Mass DOT PM:**	**Scheduled Ad Date:**	**Total Poles Relocated:**	
Bridge Preser 10 Bridges on I-95(Rte 128)	Michael.Winnick@dot.state.ma.us 857 368 4000 Richard.DeSantis@dot.state.ma.us 857 368 4074 Peter.Tramontozzi@dot.state.ma.us 857 368 4085	Genesis PozDiaz	12/6/2025	None	
	Amanda.Klemm@dot.state.ma.us/781-570-1154	(857) 202-9141			
Consultant:	**Contact:**	**Office #**	**Cell #**	**Email**	
MassDOT Consultant - Jacobs Engineering Group, Inc	Anthony Richardson			Anthony.Richardson@jacobs.com	

Utility Company	Contact	Office #	Cell #	Email	Scope, Budget, Duration Submitted		Reimbursement			Potential for District Initiated Early Relocation *		Utilities On Bridge/Structure		Utilities Underground (UG) /Aerial (OH)	
					Yes	No	Agreement	Non-Reimb'le	Notes	YES	NO	YES	NO	UG	OH
AT&T	Erica Hudson	(781) 221-8400		erica.hudson@sienaengineeringgroup.com		x			AT&T has a conduit near the rail road. No work is being done on the bridge .		x		x	x	
Peabody Municipal Light Plant	Roy Simoes Brian Abcunas William Cardello	(978) 531-5975 x230 (978) 531-5975 x234 (978) 573-1233	* * (978) 587-4489	rsimoes@pmlp.com babcunas@pmlp.com WCardello@pmlp.com		x			PLMP have overhead lines going over one of thE bridges and close to another bridges. Notify PLMP when wotking appoximitly near their lines.		x	x			x
ITS MassDot / Lighting	Lamoureux, Louis Hagoss, Abraham Tony Wade			Louis.Lamoureux@dot.state.ma.us Abraham.E.Hagoss@dot.state.ma.us Tony.Wade@dot.state.ma.us		x			Its/ lighting under bridge BIN_2EW_2EX at Winn st Woburn. Contractor will need to protect in place the conduits. Review General Notes		x	x		x	
National Grid Electric	Casey Silva		(617) 429-7797	casey.silva@nationalgrid.com											
National Grid Gas	Melissa Owens	(781) 907-2845	(617) 592-7850	Melissa.Owens@nationalgrid.com											
Wakefield Municipal Gas & Light Dept	David Polson	(781) 812-8128		dpolson@wmgld.com											
Verizon	Paul Diamantopoulos	(978) 382-2855	(508) 245-5522	paul.e.diamantopoulos@verizon.com											
Astound	Alex Ortiz	(781) 316-8878	(617) 839-2845	alex.ortiz@astound.com											
Comcast Cable Corporation	Wendy Brown	(978) 848-5163	(978) 399-5871	Wendy_Brown@comcast.com											
MCI-Verizon Business	Stephen Parretti	(508) 248-1305	(508) 892-3381	stephen.parretti@verizon.com											
Eversource Fiber	Bechir Khoury	(781) 441-3864		bechir.khoury@eversource.com											
FirstLight	Heather Araujo	(207) 432-2045	(978) 302-9334	FirstLight_MA@firstlight.net											
Lightpath - Burlington	Jeff Harrington		(617) 999-5371	jeff.harrington@lightpathfiber.com											
Woburn Fire Alarm	Andy Simonds	(781) 897-1380	(781) 460-9233	asimonds@woburnfd.com											
Burlington Fire Alarm	Michael Hanafin	(781) 270-1925		mhanafin@burlington.org											
Wakefield Fire Alarm	Michael Sullivan	(781) 246-6345		msullivan@wakefield.ma.us											
Lynnfield Fire Alarm	Ted Cohen	(781) 710-1103		tcohen@town.lynnfield.ma.us											
Lynnfield DPW-Engineering	John Scenna	(781) 334-9500		scennaj@lcwd.us											
Lynnfield Water District	James Finegan	(781) 598-4223		jfinegan@lwdma.us											
Lynnfield Central Water District	John Scenna	(781) 334-3901		scennaj@lcwd.us											
Wakefield DPW Engineer	Joseph Conway	(781) 246-6301		jconway@wakefield.ma.us											
MBTA Document Control Group	Connor Campbell			ccampbell2@mbta.com											
Burlington DPW Engineer	Thomas Hayes	(781) 270-1640		thayes@burlington.org											
Woburn City Engineer	Alex Rozycki	(781) 897-5880		arozycki@cityofwoburn.com											
Woburn DPW	Jay Duran	(781) 897-5980		jfduran@cityofwoburn.com											
MWRA Water - Woburn-Wakefield	Ralph Francesconi	(617) 305-5827		Ralph.Francesconi@mwra.com											
MWRA Sewer - Woburn-Wakefield	Kevin McKenna	(617) 305-5956		Kevin.McKenna@mwra.com											
Burlington DPW- Water & Sewer	Brian White	(781) 270-1670		Bwhite@burlington.org											
Wakefield DPW- Water & Sewer	Steven Fitzpatrick	(781) 246-6318		sfitzpatrick@wakefield.ma.us											
Zayo Group	Richard Moran	(978) 844-7525		richard.moran@zayo.com											
Raytheon Technologies	Doug Flynn	(978) 436-8554	(781) 603-5812	flynn@rtx.com											

No Facilities or No Conflicts

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Eversource Electric	Terence Doonan Ned Sadowski	(617) 541-5714 *	* (413) 537-6594	terence.doonan1@eversource.com ned.sadowski@eversource.com					Eversource has fiber assets within the project bounds but they run along transmission structures across the highway and will not conflict with the project.								
Tennessee Gas Pipeline Company	David Wood	(860) 763-6005	(413) 530-7117	KMEncroachmentsNorth@kindermorgan.com					No facility								
Crown Castle	Mark Bonanno	(508) 616-7818	(617) 828-1415	mark.bonanno@crowncastle.com					No anticipated impact								
Verizon Wireless Small Cell	Liz Glidden		(508) 245-8832	elizabeth.glidden@verizonwireless.com					Boston Facilities only								

Utility Relocation Notes for MassDOT Contractor

Unless otherwise noted by Contract, the MassDOT Contractor is to provide the District Construction Office with 7 Calendar Days advance notification in order to validate the current progress and provide the required 30 Days advance notice-to-proceed for the first Utility - and each subsequent Utility. These advance notifications are to be identified in the Contractor's Schedules (Pre-Con preparation, Baseline, Subnets, and Updated/Monthly Schedules) as specified in Subsection 8.02 (for DBB Contracts) and/or Section 9 (of DB Contracts). Note: The durations included below do not include these lead-times. See Additional 'Important Basis notes for Contractor' - on last PUC Form page.

Additional notes:

The Lynnfield Water District has water mains located in Summer Street and Walnut Street which are under the bridges to be repaired in this contract. If the contractors doing the work on these two bridges need access to a water supply, they should contact the Lynnfield Water District at 781-598-4223 for the appropriate temporary meters and backflow devices.

Suggested Sequence of Relocation (Based on Consultant proposed construction staging)

The sequence as detailed on the following pages is based on the consultants proposed staging plan. This information was compiled through meetings that included all of the utilities listed below along with the designer and the Town of Burlington Wakefield Woburn,and Lynnfield. The information provided is the best available information prior to project advertisement.

DOCUMENT A00809

TOWN OF BURLINGTON BRIDGES – INSPECTION REPORTS

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STRUCTURES INSPECTION FIELD REPORT

ROUTINE INSPECTION

2-DIST	B.I.N.	BR. DEPT. NO.
04	2EW	B-29-011

CITY/TOWN	8.-STRUCTURE NO.	11-Kilo. POINT	41-STATUS	90-ROUTINE INSP. DATE
BURLINGTON	B29011-2EW-DOT-NBI	084.392	A:OPEN	JUL 7, 2025

07-FACILITY CARRIED	MEMORIAL NAME/LOCAL NAME	27-YR BUILT	106-YR REBUILT	YR REHAB'D (NON 106)
I 95 NB/ST128 NB		1949	1961	0000

06-FEATURES INTERSECTED	26-FUNCTIONAL CLASS	DIST. BRIDGE INSPECTION ENGINEER J. Dideo
HWY WINN ST	Urban Minor Arterial	

43-STRUCTURE TYPE	22-OWNER	21-MAINTAINER	TEAM LEADER O. Moustafa
107 : Concrete Frame	State Highway Agency	State Highway Agency	

107-DECK TYPE	WEATHER	TEMP. (air)	TEAM MEMBERS
N : Not applicable	Clear	25°C	T. LEIPER

ITEM 58 — DECK: N

		DEF
1.Wearing Surface	7	-
2.Deck Condition	N	-
3.Stay in Place Forms	N	-
4.Curbs	7	-
5.Median	6	M-P
6.Sidewalks	N	-
7.Copings	5	S-A
8.Railing	6	M-P
9.Anti Missile Fence	N	-
10.Drainage System	N	-
11.Lighting Standards	7	-
12.Utilities	8	-
13.Deck Joints	N	-
14.Safetywalks	6	M-P
15.	N	-
16.	N	-

CURB REVEAL (In millimeters)	N	S
	100	100

APPROACHES

		DEF
a. Appr. Pavement Condition	7	-
b. Appr. Roadway Settlement	8	-
c. Appr. Sidewalk Settlement	N	-
d.	N	-

OVERHEAD SIGNS (Attached to bridge) (Y/N): N

		DEF
a. Condition of Welds	N	-
b. Condition of Bolts	N	-
c. Condition of Signs	N	-

ITEM 59 — SUPERSTRUCTURE: 5

			DEF
1.Frame Slab		5	S-A
2.Floorbeams		N	-
3.Floor System Bracing		N	-
4.Girders or Beams		N	-
5.Trusses - General		N	-
a. Upper Chords	N		-
b. Lower Chords	N		-
c. Web Members	N		-
d. Lateral Bracing	N		-
e. Sway Bracings	N		-
f. Portals	N		-
g. End Posts	N		-
6.Pin & Hangers		N	-
7.Conn Plt's, Gussets & Angles		N	-
8.Cover Plates		N	-
9.Bearing Devices		N	-
10.Diaphragms/Cross Frames		N	-
11.Rivets & Bolts		5	M-P
12.Welds		N	-
13.Member Alignment		N	-
14.Paint/Coating		N	-
15.Median Beams		5	M-P

Year Painted	N

COLLISION DAMAGE: *Please explain*
None (X) Minor ( ) Moderate ( ) Severe ( )

LOAD DEFLECTION: *Please explain*
None (X) Minor ( ) Moderate ( ) Severe ( )

LOAD VIBRATION: *Please explain*
None (X) Minor ( ) Moderate ( ) Severe ( )

Any Fracture Critical Member: (Y/N) N

Any Cracks: (Y/N) N

ITEM 60 — SUBSTRUCTURE: 5

	Dive	Cur		DEF
1. Abutments			5	
a. Pedestals	N	N		-
b. Bridge Seats	N	N		-
c. Backwalls	N	N		-
d. Breastwalls/Legs	N	5		M-P
e. Wingwalls	N	6		M-P
f. Slope Paving/Rip-Rap	N	N		-
g. Pointing	N	N		-
h. Footings	N	H		-
i. Piles	N	N		-
j. Scour	N	N		-
k. Settlement	N	7		-
l.	N	N		-
m.	N	N		-
2. Piers or Bents			N	
a. Pedestals	N	N		-
b. Caps	N	N		-
c. Columns	N	N		-
d. Stems/Webs/Pierwalls	N	N		-
e. Pointing	N	N		-
f. Footing	N	N		-
g. Piles	N	N		-
h. Scour	N	N		-
i. Settlement	N	N		-
j.	N	N		-
k.	N	N		-
3. Pile Bents			N	
a. Pile Caps	N	N		-
b. Piles	N	N		-
c. Diagonal Bracing	N	N		-
d. Horizontal Bracing	N	N		-
e. Fasteners	N	N		-

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):* 5

93B-U/W (DIVE) Insp 00/00/0000

X=UNKNOWN N=NOT APPLICABLE H=HIDDEN/INACCESSIBLE R=REMOVED

RTN(1)7-96

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EW**	**B-29-011**	**B29011-2EW-DOT-NBI**	**JUL 7, 2025**

ITEM 61 — CHANNEL & CHANNEL PROTECTION

N

	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	-

STREAM FLOW VELOCITY:

Tidal ( ) High ( ) Moderate ( ) Low ( ) None ( )

ITEM 61 (Dive Report): **N** ***ITEM 61 (This Report):*** **N**

93b-U/W INSP. DATE: 00/00/0000

ITEM 36 — *TRAFFIC SAFETY*

	36	COND	DEF
A. Bridge Railing	1	6	M-P
B. Transitions	1	7	-
C. Approach Guardrail	1	7	-
D. Approach Guardrail Ends	1	7	-

WEIGHT POSTING

Not Applicable **X**

	H	3	3S2	Single
Actual Posting	N	N	N	N
Recommended Posting	N	N	N	N

Waived Date: 00/00/0000 **EJDMT Date:** 00/00/0000

Signs In Place (Y=Yes,N=No, NR=NotRequired) **Legibility/ Visibility**	At bridge E	At bridge W	Other Advance E	Other Advance W

CLEARANCE POSTING

Not ☐

	N ft	N in	S ft	S in	meter
Actual Field Measurement	16	1	14	4	4.36
Posted Clearance	14	2	14	2	

Signs In Place (Y=Yes,N=No, NR=Not Required) **Legibility/ Visibility**	At bridge N	At bridge S	Advance N	Advance S
	Y	Y	NR	NR
	7 / 7	7 / 7	/	/

ACCESSIBILITY (Y/N/P)

	Needed	Used
Lift Bucket	Y	Y
Ladder	N	N
Boat	N	N
Waders	N	N
Inspector 50	N	N
Rigging	N	N
Staging	N	N
Traffic Control	Y	Y
RR Flagger	N	N
Police	Y	Y
Other:		
	N	N

TOTAL HOURS 20

PLANS (Y/N): **Y**

(V.C.R.) (Y/N): **N**

TAPE#: _____

List of field tests performed:
Visual & Hands-on

RATING

Rating Report (Y/N): **Y**

Date: 10/01/2008

Inspection data at time of existing rating

I 58: **-** I 59: **5** I 60: **5** Date : 07/21/2007

Recommend for Rating or Rerating (Y/N): **N**

If YES please give priority: HIGH ( ) MEDIUM ( ) LOW ( )

REASON: _____

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 stablility. 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	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EW**	**B-29-011**	**B29011-2EW-DOT-NBI**	**JUL 7, 2025**

REMARKS

BRIDGE ORIENTATION
Bridge No. B-29-011 (2EW) carries Route (I-95NB/STNB) over Winn Street in the Town of Burlington. This is a single span reinforced concrete rigid frame. According to the design plans, the abutments are labeled East and west and the elevations are labeled north and south.

GENERAL REMARKS
The steel median beams rest on the edge of this structure and the adjoining bridge, B-29-011 (2EX). The median beams between this bridge and the adjacent bridge will be part of the adjacent bridge inspection reports.

Vertical Clearance:
The minimum vertical under-clearance for the Winn Street northbound roadway was taken at the right edge line and measured (14'- 04"). The minimum vertical under-clearance for the Winn Street southbound roadway was taken at the right edge line and measured (16'-14"). Both B-29-011 (2EW) and (2EX) are posted with a vertical clearance of (14'- 02") **(See Sketch 1 and Photos 1 & 2).**

ITEM 58 - DECK

Item 58.1 - Wearing Surface
There is slight wheel rutting in all travel lanes **(See Photo 3)**.

Item 58.4 - Curbs
The steel plate median curbs are moderately rusted throughout the span **(See Photo 4).**

Item 58.5 - Median
The open grid metal grate is moderately rusted throughout with several broken and bent bars, a few areas with broken welds that have allowed the grate to pop up and minor accumulation of debris throughout **(See Photo 5).**

Item 58.7 - Copings
The south coping is the portion of the structure below the rail base. The coping exhibits several spalls with exposed areas up to full height x 10' long x full depth with adjacent hollow sounding areas throughout. Specific deficiencies are as follows:

- Near the west abutment, there is a spall with exposed rebar over the west sidewalk, 8' long x 11" high x 2" deep and adjacent area of secure delamination, 3.5' long x 10" high **(See Photo 6).**

- At mid-span, there is a spall with exposed rebar, 1.5' long x 9" high x 2" deep **(See Photo 7).**

- Over the northbound right lane, there is a spall with exposed rebar, 9' long x full height (1' high) x 5" deep **(See Photo 8).**

Item 58.8 - Railing
The original three rail metal bridge rail exhibits moderate to heavy rust throughout with a bent lower rail near the west abutment **(See Photo 12).**

There is now a galvanized steel thrie beam guardrail with steel posts and plastic spacer blocks mounted to the south safetywalk (in front of the original railing) which now acts as the south bridge railing.

South Concrete Rail Base:

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EW**	**B-29-011**	**B29011-2EW-DOT-NBI**	**JUL 7, 2025**

REMARKS

- Over the southbound lanes, there is a spall with exposed rebar to the underside of the base rail, 8' long x 5" high x full width **(See Photo 9).**

- Over the southbound lanes, at the top of the rail base, there is a spall with exposed rebar, 3.5' long x 8" high x 6" deep **(See Photo 10).**

- At the top of the rail base, over the two southbound lanes, there is a spall with exposed rebar, up to 10' long x 9" high x 7" deep **(See Photo 11).**

- The rail base exhibits several edge spalls with exposed rebar throughout the full span length and over all lanes, up to 2.5' long x 1' wide x 1' high **(See Photo 12).**

Item 58.14 - Safetywalks
The concrete safetywalk areas are moderately scaled with areas of minor spalling behind the curbs. There is moderate debris and vegetation throughout **(See Photo 13).**

APPROACHES

Approaches a - Appr. Pavement Condition
In the east approach, there is an area of bituminous patch in the right lane, approximately 12' long x 4' wide **(See Photo 14).**

ITEM 59 - SUPERSTRUCTURE

Item 59.1 - Frame Slab
The fascias and soffit portions of the frame slab show numerous hollow areas, spalls, areas of cracking, staining and pop-outs throughout. Specific deficiencies are as follows:

- At the north end, near the west abutment and over the sidewalk and right southbound lane, there is a spall with exposed rebar, 9' long x 2' wide x 3" deep and adjacent 4' long x 2' wide area of secure delamination **(See Photo 15).**

- There is a spall with exposed and de-bonded rebar on the north section at the east quarter point, over the southbound right lane, measuring 1' diameter x 2" deep **(See Photo 16).**

- At mid-span, over the two center lanes, there is a large spall along the construction joint with exposed rebar, up to 11' long x 4' wide x 7" deep **(See Photo 17).**

- Over the two northbound lanes, along along the construction joint, there is up to 9' long x 3.5' wide x 8" deep spall with exposed rebar **(See Photo 18).**

- Starting at the east abutment and along the construction joint, There is up to 7' long x 14" wide x 3.5" deep spall with exposed rebar to the south portion. On the north portion, near the east abutment, there is 5' long x 2' wide area of secure delamination **(See Photo 19).**

- There are several minor spalls throughout the south section over the northbound left lane, up to 4" diameter x 3" deep with exposed rebar.

- The south section exhibits a large area of hairline map cracking throughout mid-span **(See Photo 20).**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EW**	**B-29-011**	**B29011-2EW-DOT-NBI**	**JUL 7, 2025**

REMARKS

Item 59.11 - Rivets & Bolts
Several of the bolts and nuts for the median beam connections show moderate to heavy rusting and steel delamination. The connection bolt heads at the web have completely corroded (100% loss) at the north end, for Beam 12 from the west. Refer to the most recent Inspection report of the adjacent bridge BIN# (2EX) for details**.**

Item 59.15 - Median Beams
There is moderate rusting at the bottom flanges and random light rusting in the webs and top flanges, and bridge debris throughout the beam seats**.** Refer to the most recent Inspection report of the adjacent bridge BIN# (2EX) for details**.**

ITEM 60 - SUBSTRUCTURE

Item 60.1 - Abutments
Item 60.1.d - Breastwalls/Legs
The east and west breastwalls (legs) are separated into south and north sections. There are numerous spalls and hollow areas throughout the breastwalls especially along the bottom 2.0' to 6.0' and at the construction joint areas. Specific deficiencies areas follows:

East Breastwall:

- There is a full height x 1/2'' wide vertical crack extending from the top of the breastwall, near the north side **(See Photo 21).**

- There is a hollow area with cracking and incipient spalls along the bottom of the north section of the wall, measuring up to 2.0' high.

- There is a hollow, north side of the construction joint, at the top of the breastwall measuring 24" high x 10" wide; spall, north side of the construction joint, near the top of breastwall measuring 6.0' high x 19" wide x 4" deep; Spall, south side of the construction joint near the top of the breastwall measuring 37" high x up to 16" wide x 2" deep; hollow area near the top of breastwall, south side of the construction joint, measuring 24" high x 20" wide; hollow area adjacent to the construction joint, south side, measuring 10.0' long x 8" wide; spall adjacent to the construction joint extending from the bottom and measuring 10.0' high x 15" wide x 2" deep **(See Photo 22).**

- There is a hollow area with cracking and incipient spalling along the bottom of the south section of the breastwall, extending up to 6.0' high.

- There is a spall near the center at the bottom of the south section of the wall, measuring 3.0' high x 12" wide x 2" deep **(See Photo 23).**

- There is a spall at the top south corner of the wall measuring 9" high x 12" wide x 1" deep.

West Breastwall:

- There is hollow area with cracking and incipient spalls along the bottom of the south section of the wall, up to 6.0' high **(See Photo 24).**

- There is hollow area starting at the south face, top of the wall and extending downward 6' high with two spalls with exposed rebar at the top, up to 11" diameter x 2" deep and two spalls with exposed rebar at mid-height, up to 1.5' wide x 1' high x 2" deep **(See Photos 25 & 26).**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
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REMARKS

- There is an 8' high vertical hairline crack at the south corner, x 1/16" wide.

Item 60.1.e - Wingwalls
Both south wingwalls exhibit random cracks, efflorescence, rust staining and incipient and/or shallow spalls. There is also heavy vegetation along both wingwalls. For location and description of specific deficiencies they are noted as follows:

Southwest Wingwall:
- There is a spall at the top, adjacent to the breastwall, with exposed rebar, 2' high x 4" wide x 1.5" deep **(See Photo 27).**

- A few scattered hairline random cracks, some with efflorescence.

Southeast Wingwall:
- There is a few shallow spalls at mid-height of the wall near the abutment with exposed rebar, up to 1.5' wide x 1' high x 1.5" deep **(See Photo 28).**

TRAFFIC SAFETY

Item 36a - Bridge Railing
The south bridge rail consists of a thrie beam highway guardrail system mounted to the south safetywalk (in front of the original bridge railing). The thrie beam guardrail has minor collision damage at the east end**.**

The north rail is a thrie beam guardrail system with steel posts and plastic spacers which continues across the bridge.

Item 36b - Transitions
At the northwest corner, the bridge thri-beam is mounted on the concrete barrier wall.
At the northeast corner, there is no transition since the bridge thri-beam ends with boxing glove.

Item 36c - Approach Guardrail
Southwest Approach-Type "ss" highway guardrail
Northwest Approach-Concrete Barrier Wall
Southeast Approach-Type "ss" highway guardrail
Northeast Approach-Concrete Barrier Wall

The approach guardrail and concrete barriers exhibit minor scrapes, chips, scratches and rub marks throughout.

Item 36d - Approach Guardrail Ends
The northeast terminal (trailing end) is a boxing glove type end. All other terminals are continuous with (I95NB/ST128NB).

Sketch / Photo Log
Sketch 1 : Clearance signs location.
Photo 1 : Clearance sign, north of the bridge.
Photo 2 : Clearance sign, south of the bridge.
Photo 3 : Wearing surface: slight wheel rutting in all travel lanes.
Photo 4 : Steel plate median curb moderately rusted throughout the span.

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BURLINGTON	**2EW**	**B-29-011**	**B29011-2EW-DOT-NBI**	**JUL 7, 2025**

REMARKS

Photo 5 : Open grid metal grate is moderately rusted throughout with several broken and bent bars, a few areas with broken welds.

Photo 6 : South coping, near west abutment: spall with exposed rebar over the west sidewalk, 8' L x 11" H x 2" D and adjacent delamination, 3.5' L x 10" H.

Photo 7 : South coping, at mid-span: spall with exposed rebar, 1.5' L x 9" H x 2" D.

Photo 8 : South coping, over northbound right lane: spall with exposed rebar, 9' L x full height (1' high) x 5" D.

Photo 9 : South rail base, over the southbound lanes: spall with exposed rebar to the underside, 8' L x 5" H x full width.

Photo 10 : South rail base, over the southbound lanes, at the top: spall with exposed, 3.5' long x 8" high x 6" deep.

Photo 11 : South rail base, at the top, over the two southbound lanes: spall with exposed rebar, up to 10' L x 9" H x 7" D.

Photo 12 : South rail base: several edge spalls with exposed rebar throughout the span length, up to 2.5' L x 1' W x 1' H. Also note moderate/heavy rust to the original rails.

Photo 13 : Concrete safetywalk: moderate scaling with areas of minor spalling behind the curbs with moderate debris and vegetation throughout.

Photo 14 : East approach: area of bituminous patch in the right lane, approximately 12' long x 4' wide.

Photo 15 : Frame slab, north end, over sidewalk and right southbound lane: spall with exposed rebar, 9' L x 2' W x 3" D and adjacent 4' L x 2' W area of delamination.

Photo 16 : Frame slab, spall with exposed rebar on the north section, over the southbound right lane, 1' Diam x 2" D.

Photo 17 : Frame slab, at mid-span, over the two center lanes: large spall along the construction joint with exposed rebar, up to 11' L x 4' W x 7" D.

Photo 18 : Frame slab, over the two northbound lanes, along the construction joint: up to 9' L x 3.5' W x 8" D spall with exposed rebar.

Photo 19 : Frame slab, near east abutment, along the construction joint: up to 7' L x 14" W x 3.5" D spall with exposed rebar to the south portion. Also note 5' L x 2' W area of delamination.

Photo 20 : Frame slab, south section large area of hairline map cracking throughout mid-span. (Looking North).

Photo 21 : East Breastwall: full height x 1/2" W vertical crack extending from the top of the breastwall, near the north side.

Photo 22 : East breastwall: spalls with exposed rebar and adjacent hollow areas at the construction joint.

Photo 23 : East breastwall: spall near the center at the bottom of the south section, 3.0' H x 12" W x 2" D.

Photo 24 : West Breastwall: hollow area with cracking and incipient spalls along the bottom of the south section of the wall, up to 6.0' high.

Photo 25 : West Breastwall, hollow area at the south face and two spalls with exposed rebar at the top, up to 11" Diam x 2" D.

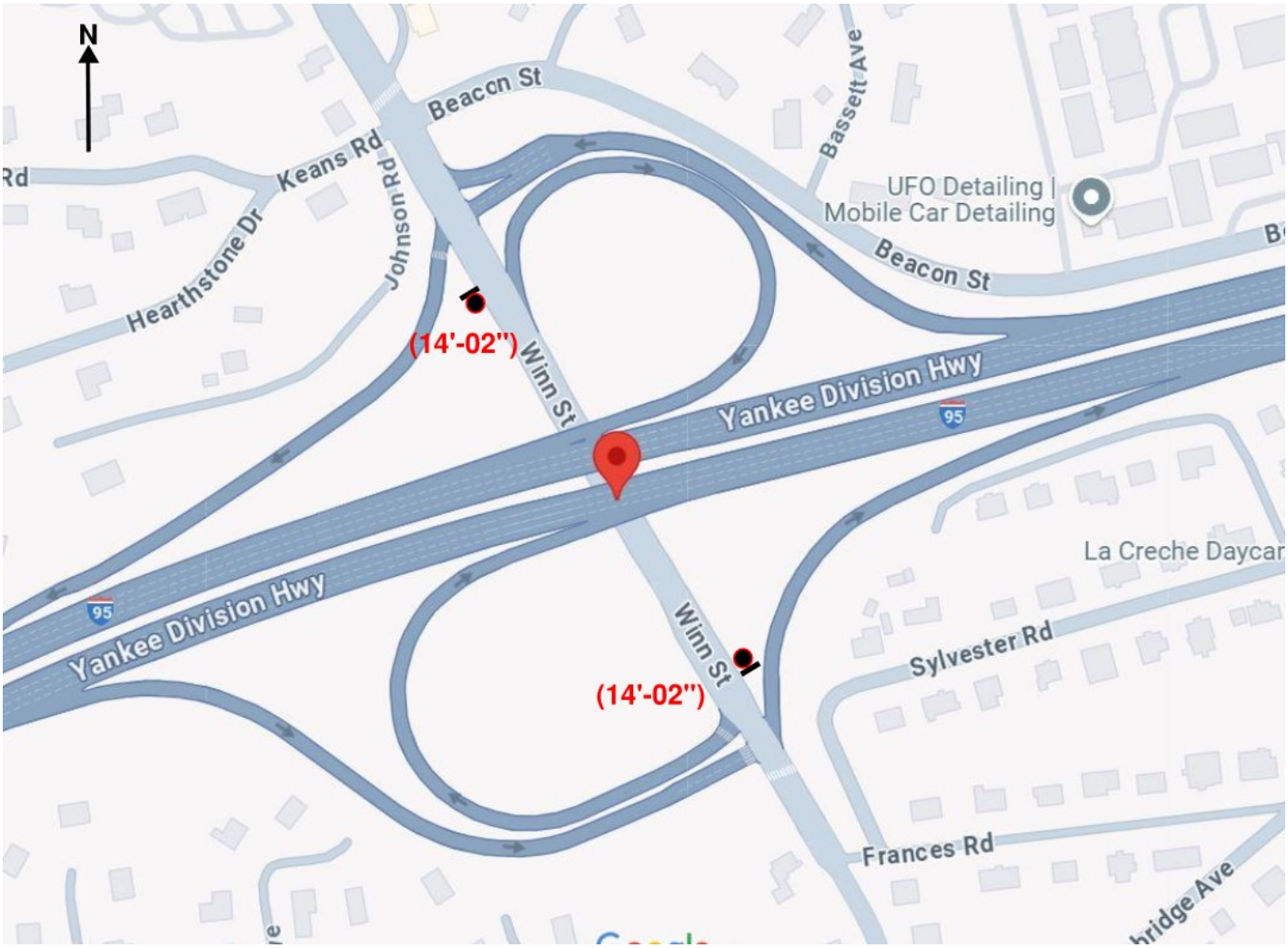
Photo 26 : West Breastwall, south face: hollow area and two spalls with exposed rebar at mid-height, up to 1.5' W x 1' H x 2" D.

Photo 27 : Southwest Wingwall: spall at the top, adjacent to the breastwall, with exposed rebar, 2' H x 4" W x 1.5" D.

Photo 28 : Southeast Wingwall: few shallow spalls at mid-height of the wall near the abutment with exposed rebar, up to 1.5' W x 1' H x 1.5" D.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EW**	**B-29-011**	**B29011-2EW-DOT-NBI**	**JUL 7, 2025**

SKETCHES



Sketch 1: Clearance signs location.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EW**	**B-29-011**	**B29011-2EW-DOT-NBI**	**JUL 7, 2025**

PHOTOS



Photo 1: **Clearance sign, north of the bridge.**



Photo 2: **Clearance sign, south of the bridge.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EW**	**B-29-011**	**B29011-2EW-DOT-NBI**	**JUL 7, 2025**

PHOTOS



Photo 3: Wearing surface: slight wheel rutting in all travel lanes.



Photo 4: Steel plate median curb moderately rusted throughout the span.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EW**	**B-29-011**	**B29011-2EW-DOT-NBI**	**JUL 7, 2025**

PHOTOS



Photo 5: **Open grid metal grate is moderately rusted throughout with several broken and bent bars, a few areas with broken welds.**



Photo 6: **South coping, near west abutment: spall with exposed rebar over the west sidewalk, 8' L x 11" H x 2" D and adjacent delamination, 3.5' L x 10" H.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EW**	**B-29-011**	**B29011-2EW-DOT-NBI**	**JUL 7, 2025**

PHOTOS



Photo 7: **South coping, at mid-span: spall with exposed rebar, 1.5' L x 9" H x 2" D.**



Photo 8: **South coping, over northbound right lane: spall with exposed rebar, 9' L x full height (1' high) x 5" D.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EW**	**B-29-011**	**B29011-2EW-DOT-NBI**	**JUL 7, 2025**

PHOTOS



Photo 9: **South rail base, over the southbound lanes: spall with exposed rebar to the underside, 8' L x 5" H x full width.**



Photo 10: **South rail base, over the southbound lanes, at the top: spall with exposed, 3.5' long x 8" high x 6" deep.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	2EW	B-29-011	B29011-2EW-DOT-NBI	JUL 7, 2025

PHOTOS



Photo 11: South rail base, at the top, over the two southbound lanes: spall with exposed rebar, up to 10' L x 9" H x 7" D.



Photo 12: South rail base: several edge spalls with exposed rebar throughout the span length, up to 2.5' L x 1' W x 1' H. Also note moderate/heavy rust to the original rails.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EW**	**B-29-011**	**B29011-2EW-DOT-NBI**	**JUL 7, 2025**

PHOTOS



Photo 13: Concrete safetywalk: moderate scaling with areas of minor spalling behind the curbs with moderate debris and vegetation throughout.

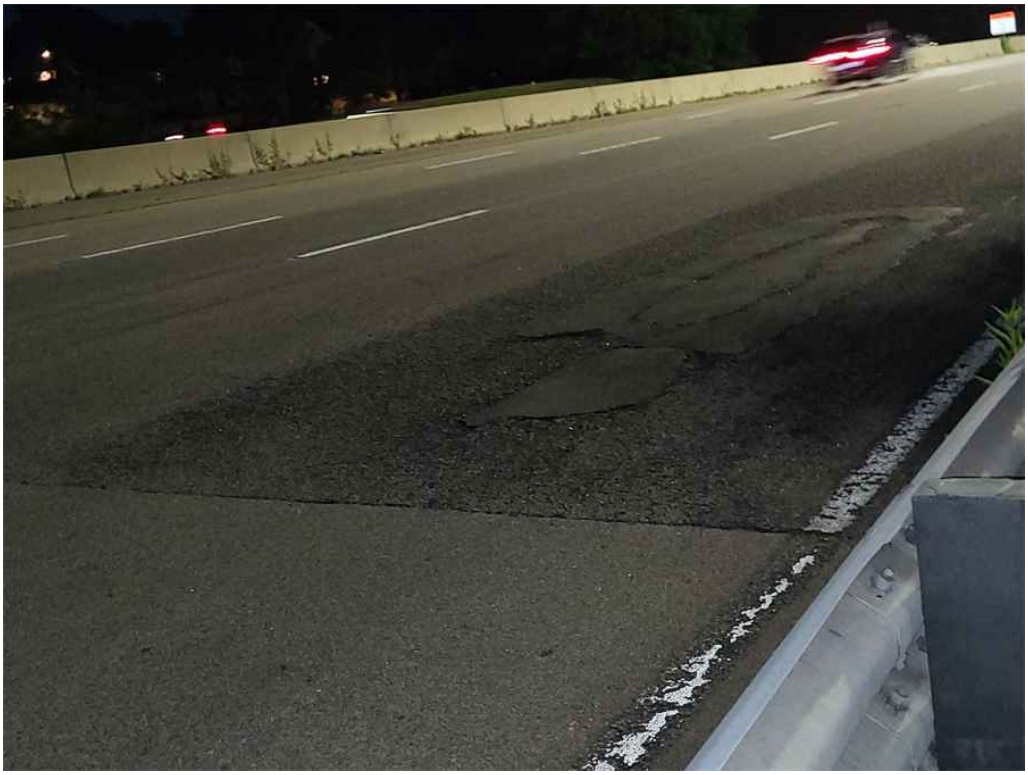


Photo 14: East approach: area of bituminous patch in the right lane, approximately 12' long x 4' wide.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EW**	**B-29-011**	**B29011-2EW-DOT-NBI**	**JUL 7, 2025**

PHOTOS



Photo 15: **Frame slab, north end, over sidewalk and right southbound lane: spall with exposed rebar, 9' L x 2' W x 3" D and adjacent 4' L x 2' W area of delamination.**



Photo 16: **Frame slab, spall with exposed rebar on the north section, over the southbound right lane, 1' Diam x 2" D.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EW**	**B-29-011**	**B29011-2EW-DOT-NBI**	**JUL 7, 2025**

PHOTOS



Photo 17: **Frame slab, at mid-span, over the two center lanes: large spall along the construction joint with exposed rebar, up to 11' L x 4' W x 7" D.**



Photo 18: **Frame slab, over the two northbound lanes, along the construction joint: up to 9' L x 3.5' W x 8" D spall with exposed rebar.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EW**	**B-29-011**	**B29011-2EW-DOT-NBI**	**JUL 7, 2025**

PHOTOS



Photo 19: **Frame slab, near east abutment, along the construction joint: up to 7' L x 14" W x 3.5" D spall with exposed rebar to the south portion. Also note 5' L x 2' W area of delamination.**



Photo 20: **Frame slab, south section large area of hairline map cracking throughout mid-span. (Looking North).**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EW**	**B-29-011**	**B29011-2EW-DOT-NBI**	**JUL 7, 2025**

PHOTOS



Photo 21: **East Breastwall: full height x 1/2" W vertical crack extending from the top of the breastwall, near the north side.**



Photo 22: **East breastwall: spalls with exposed rebar and adjacent hollow areas at the construction joint.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EW**	**B-29-011**	**B29011-2EW-DOT-NBI**	**JUL 7, 2025**

PHOTOS



Photo 23: East breastwall: spall near the center at the bottom of the south section, 3.0' H x 12" W x 2" D.



Photo 24: West Breastwall: hollow area with cracking and incipient spalls along the bottom of the south section of the wall, up to 6.0' high.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EW**	**B-29-011**	**B29011-2EW-DOT-NBI**	**JUL 7, 2025**

PHOTOS



Photo 25: West Breastwall, hollow area at the south face and two spalls with exposed rebar at the top, up to 11" Diam x 2" D.



Photo 26: West Breastwall, south face: hollow area and two spalls with exposed rebar at mid-height, up to 1.5' W x 1' H x 2" D.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EW**	**B-29-011**	**B29011-2EW-DOT-NBI**	**JUL 7, 2025**

PHOTOS



Photo 27: Southwest Wingwall: spall at the top, adjacent to the breastwall, with exposed rebar, 2' H x 4" W x 1.5" D.



Photo 28: Southeast Wingwall: few shallow spalls at mid-height of the wall near the abutment with exposed rebar, up to 1.5' W x 1' H x 1.5" D.

National Bridge Element Inspection

BDEPT# **B-29-011**
B.I.N. **2EW**
Item 8 **B29011-2EW-DOT-NBI**
Span Group **1**
Town **Burlington**
District **4**

Date **07/07/2025**
District Bridge Inspection Eng'r **Joseph Dideo**
Inspecting Agency **Mass. Highway Dept.**
Team Leader **Osama Moustafa**
Team Member(s) **Thomas Leiper**

El #	Element Name	Units	Env.	Total Q.	% or Q	State 1	State 2	State 3	State 4
38	**Re Concrete Slab**	sq feet	2	4,865.287	☐ %	4,025.187	595.000	245.100	
Notes :									
> 1080	*Delamination/Spall/Patched Area*	sq feet	2	795.000	☐ %		595.000	200.000	
Notes :									
> 1090	*Exposed Rebar*	sq feet	2	45.100	☐ %			45.100	
Notes :									
> 1120	*Efflorescence/Rust Staining*	sq feet	2	1.000	☐ %	1.000			
Notes :									
> 510	Wearing Surfaces	sq feet	2	4,865.287	☐ %	4,865.287			
Notes :									
215	**Re Conc Abutment**	feet	2	164.045	☐ %	82.045	25.000	57.000	
Notes :									
> 1080	*Delamination/Spall/Patched Area*	feet	2	54.000	☐ %		25.000	29.000	
Notes :									
> 1090	*Exposed Rebar*	feet	2	28.000	☐ %			28.000	
Notes :									
321	**Re Conc Approach Slab**	sq feet	2	900.000	☐ %	900.000			
Notes :									
330	**Metal Bridge Railing**	feet	2	137.795	☐ %	0.005	132.790		5.000
Notes :									
> 1000	*Corrosion*	feet	2	5.000	☐ %				5.000
Notes :									
> 515	Steel Protective Coating	sq feet	2	520.000	☐ %		425.000	95.000	
Notes :									

National Bridge Element Inspection

BDEPT#	**B-29-011**	Date	**07/07/2025**
B.I.N.	**2EW**	District Bridge Inspection Eng'r	**Joseph Dideo**
Item 8	**B29011-2EW-DOT-NBI**	Inspecting Agency	**Mass. Highway Dept.**
Span Group	**1**	Team Leader	**Osama Moustafa**
Town	**Burlington**	Team Member(s)	**Thomas Leiper**
District	**4**		

El #	Element Name	Units	Env.	Total Q.	% or Q	State 1	State 2	State 3	State 4
> > 3410	*Chalk(Steel Protect Coatings)*	sq feet	2	170.000	☐ %		75.000	95.000	
Notes :									
> > 3420	*Peel/Bub/Crack(Stl Protect Coat)*	sq feet	2	350.000	☐ %		350.000		
Notes :									

STRUCTURES INSPECTION FIELD REPORT

ROUTINE INSPECTION

2-DIST	B.I.N.	BR. DEPT. NO.
04	2EX	B-29-011

CITY/TOWN	8.-STRUCTURE NO.	11-Kilo. POINT	41-STATUS	90-ROUTINE INSP. DATE
BURLINGTON	B29011-2EX-DOT-NBI	084.392	A:OPEN	JUL 7, 2025

07-FACILITY CARRIED	MEMORIAL NAME/LOCAL NAME	27-YR BUILT	106-YR REBUILT	YR REHAB'D (NON 106)
I 95 SB/ST128 SB		1949	1961	0000

06-FEATURES INTERSECTED	26-FUNCTIONAL CLASS	DIST. BRIDGE INSPECTION ENGINEER J. Dideo
HWY WINN ST	Urban Minor Arterial	

43-STRUCTURE TYPE	22-OWNER	21-MAINTAINER	TEAM LEADER R. Jones
107 : Concrete Frame	State Highway Agency	State Highway Agency	

107-DECK TYPE	WEATHER	TEMP. (air)	TEAM MEMBERS
N : Not applicable	Clear	30°C	D. BORGELORME

ITEM 58 — DECK: N

		DEF
1.Wearing Surface	7	-
2.Deck Condition	N	-
3.Stay in Place Forms	N	-
4.Curbs	6	M-P
5.Median	6	M-P
6.Sidewalks	N	-
7.Copings	6	M-P
8.Railing	6	M-P
9.Anti Missile Fence	N	-
10.Drainage System	N	-
11.Lighting Standard	7	-
12.Utilities	7	-
13.Deck Joints	N	-
14.Safetywalk	6	M-P
15.	N	-
16.	N	-

CURB REVEAL (In millimeters)	N	S
	50	50

APPROACHES

		DEF
a. Appr. Pavement Condition	7	-
b. Appr. Roadway Settlement	8	-
c. Appr. Sidewalk Settlement	N	-
d.	N	-

OVERHEAD SIGNS (Attached to bridge) (Y/N): N

		DEF
a. Condition of Welds	N	-
b. Condition of Bolts	N	-
c. Condition of Signs	N	-

ITEM 59 — SUPERSTRUCTURE: 5

			DEF
1.Frame Slab		5	S-A
2.Floorbeams		N	-
3.Floor System Bracing		N	-
4.Girders or Beams		N	-
5.Trusses - General		N	-
a. Upper Chords	N		-
b. Lower Chords	N		-
c. Web Members	N		-
d. Lateral Bracing	N		-
e. Sway Bracings	N		-
f. Portals	N		-
g. End Posts	N		-
6.Pin & Hangers		N	-
7.Conn Plt's, Gussets & Angles		N	-
8.Cover Plates		N	-
9.Bearing Devices		N	-
10.Diaphragms/Cross Frames		N	-
11. Rivets & Bolts		N	-
12.Welds		N	-
13.Member Alignment		7	-
14.Paint/Coating		N	-
15.Median Beams		5	M-P

Year Painted	N

COLLISION DAMAGE: *Please explain*
None (X) Minor ( ) Moderate ( ) Severe ( )

LOAD DEFLECTION: *Please explain*
None (X) Minor ( ) Moderate ( ) Severe ( )

LOAD VIBRATION: *Please explain*
None (X) Minor ( ) Moderate ( ) Severe ( )

Any Fracture Critical Member: **(Y/N)** N

Any Cracks: **(Y/N)** N

ITEM 60 — SUBSTRUCTURE: 5

	Dive	Cur		DEF
1. Abutments			5	
a. Pedestals	N	N		-
b. Bridge Seats	N	N		-
c. Backwalls	N	N		-
d. Breastwalls/Legs	N	5		S-P
e. Wingwalls	N	6		M-P
f. Slope Paving/Rip-Rap	N	N		-
g. Pointing	N	N		-
h. Footings	N	H		-
i. Piles	N	N		-
j. Scour	N	N		-
k. Settlement	N	7		-
l.	N	N		-
m.	N	N		-
2. Piers or Bents			N	
a. Pedestals	N	N		-
b. Caps	N	N		-
c. Columns	N	N		-
d. Stems/Webs/Pierwalls	N	N		-
e. Pointing	N	N		-
f. Footing	N	N		-
g. Piles	N	N		-
h. Scour	N	N		-
i. Settlement	N	N		-
j.	N	N		-
k.	N	N		-
3. Pile Bents			N	
a. Pile Caps	N	N		-
b. Piles	N	N		-
c. Diagonal Bracing	N	N		-
d. Horizontal Bracing	N	N		-
e. Fasteners	N	N		-

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):* 5

93B-U/W (DIVE) Insp 00/00/0000

X=UNKNOWN N=NOT APPLICABLE H=HIDDEN/INACCESSIBLE R=REMOVED

RTN(1)7-96

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EX**	**B-29-011**	**B29011-2EX-DOT-NBI**	**JUL 7, 2025**

ITEM 61 — CHANNEL & CHANNEL PROTECTION

N

	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	-

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

ITEM 36 *TRAFFIC SAFETY*

	36	COND	DEF
A. Bridge Railing	1	6	M-P
B. Transitions	0	7	-
C. Approach Guardrail	0	6	M-P
D. Approach Guardrail Ends	0	6	M-P

WEIGHT POSTING

Not Applicable **X**

	H	3	3S2	Single
Actual Posting	N	N	N	N
Recommended Posting	N	N	N	N

Waived Date: 00/00/0000 **EJDMT Date:** 00/00/0000

Signs In Place (Y=Yes,N=No, NR=NotRequired) Legibility/ Visibility	At bridge E	At bridge W	Other Advance E	Other Advance W

CLEARANCE POSTING

Not **X**

	N ft	N in	S ft	S in	meter
Actual Field Measurement	17	3	15	11	4.85
Posted Clearance		0		0	

Signs In Place (Y=Yes,N=No, NR=Not Required) Legibility/ Visibility	At bridge N	At bridge S	Advance N	Advance S

ACCESSIBILITY (Y/N/P)

	Needed	Used
Lift Bucket	Y	Y
Ladder	N	N
Boat	N	N
Waders	N	N
Inspector 50	N	N
Rigging	N	N
Staging	N	N
Traffic Control	Y	Y
RR Flagger	N	N
Police	Y	Y
Other:		
	N	N

TOTAL HOURS 20

PLANS (Y/N): **Y**

(V.C.R.) (Y/N): **N**

TAPE#: _____

List of field tests performed:

RATING

Rating Report (Y/N): **Y**

Date: 05/01/2018

Inspection data at time of existing rating

I 58: **-** I 59: **5** I 60: **5** Date : 07/22/2017

Recommend for Rating or Rerating (Y/N): **N**

If YES please give priority: HIGH ( ) MEDIUM ( ) LOW ( )

REASON: _____

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 stablility. 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	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EX**	**B-29-011**	**B29011-2EX-DOT-NBI**	**JUL 7, 2025**

REMARKS

BRIDGE ORIENTATION

Bridge No. B-29-011 (2EX) carries Route (I-95 SB/ST128 SB) over Winn Street. This is a single span reinforced concrete rigid frame. According to the design plans, the abutments are labeled East and West and the elevations are north and south.

GENERAL REMARKS

Vertical Clearance: The minimum vertical underclearance for the Winn Street northbound roadway was taken at the right edge line and measured 15' 11". The minimum vertical underclearance for the Winn Street southbound roadway was taken at the center line and measured 17' 3".

ITEM 58 - DECK

Item 58.1 - Wearing Surface

There is slight wheel rutting present in all travel lanes **(Photo 1)**.

Item 58.4 - Curbs

The curbs for the approaches and along the bridge have minor accumulation debris and vegetation growth along the top and several curb sections are slightly misaligned. The steel plate median curbs are moderately rusted throughout the span.

Item 58.5 - Median

The open grid metal grate is moderately rusted throughout with several broken and bent bars, a few areas with broken welds that have allowed the grate to pop up and minor accumulation of debris throughout. The concrete safetywalk areas are moderately scaled with areas of spalling behind the curbs **(Photo 2)**.

Item 58.7 - Copings

The north coping is the portion of the structure below the rail base. For location and description of specific deficiencies they are noted as follows:

The concrete coping is light to moderately scaled with rust staining throughout.

- Hollow area measuring 12" long x 8" wide at the quarter point, secure at the time of inspection.
- There is a hollow area measuring 12" long x 6" wide, located and 9' from the West Abutment, secure at the time of inspection.
- There are three (3) up to 9" diameter x 2" deep spalls with exposed rusted rebar 10' from the West Abutment **(Photo 3)**.
- Hollow area measuring 2.5' long x 12" wide 6.0' from the West Abutment, secure at the time of inspection.
- Hollow area measuring 15" long x 9" wide 18" from the West Abutment, secure at the time of inspection.

Item 58.8 - Railing

The three rail metal bridge rail is moderately rusted throughout.

There is a galvanized steel thrie beam guardrail with steel posts and plastic spacer blocks mounted to the north safetywalk (in front of the original railing) which now acts as the north bridge railing.

Concrete Rail Base:

- Two vertical hairline cracks that extend the length of the rail base with efflorescence.
- Hairline crack measuring 12" long with efflorescence 10.0' from the east abutment.
- At midspan there are two spalls, up to 10" long x 8" wide x 1" deep **(Photo 4)**.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EX**	**B-29-011**	**B29011-2EX-DOT-NBI**	**JUL 7, 2025**

REMARKS

Item 58.12 - Utilities
The utility conduit at the northeast corner is missing a cap exposing wires **(Photo 5)**.

Item 58.14 - Safetywalk
The concrete safetywalk areas are moderately scaled with areas of spalling behind the curbs and at thee median **(Photo 2)**.

ITEM 59 - SUPERSTRUCTURE

Item 59.1 - Frame Slab
The fascias and soffit portions of the frame slab show numerous hollow areas, spalls, areas of cracking, staining and pop-outs throughout. All hollow areas were secure at the time of inspection. For location and description of specific deficiencies they are noted as follows:

North Fascia:
- Three shallow pop outs measuring 3" high x 2" wide x 1/2" deep spaced a foot apart from each other that are 8' from the West Abutment **(Photo 6)**.

South Fascia:
- Hairline crack 3' in length 5.0' from the West Abutment.
- Spall measuring 12" long x 3" wide x 3" deep 15.0' from the West Abutment **(Photo 7)**.
- There are random areas of honey combing throughout.

Soffit:
- There are transverse hairline cracks at the north end from quarter point to quarter point.
- Shallow pop-out measuring 2" x 3" located 15.0' from the West Abutment and 30.0' from the north fascia.
- Hollow area 18" long x 7" wide 32.0' from north fascia and 17.0' from the West Abutment, secure at the time of inspection.
- Narrow map cracks and longitudinal cracks on the north side of the soffit between the quarter points.
- Hairline crack measuring 7.0' long that extends from the West Abutment and 27.0' from the north fascia.
- Shallow pop-out 2" high x 3" wide in size that is located 15.0' from the West Abutment and 25.0' from the north fascia.
- Hairline crack with efflorescence 13.0' from the north fascia and adjacent to the west abutment measuring 2.5' long.
- Shallow pop out showing rebar measuring 1" in diameter that is located 12" from the north fascia and 7.0' from the West Abutment.
- Shallow pop out located 12" from the West Abutment and 12.0' from the north fascia measuring 2" in diameter.
- Exposed rebar measuring 12" long x 0.5" wide located 18" from the West Abutment and 8.0' from the south fascia.
- Spall with exposed rebar at the construction joint that measures up to : 10' long x 5' wide x up to 6" deep **(Photo 8)**.
- Spall with exposed rusted rebar that measures 5' long x 18" wide x 6.5" deep located adjacent to the construction joint in the north section, 5.0' from the east breastwall **(Photo 9)**.
- Spall with exposed rusted rebar at the south fascia that is 16' from the east breastwall measuring 5.0' long x 6.0' wide x up to 6" deep **(Photo 10)**.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EX**	**B-29-011**	**B29011-2EX-DOT-NBI**	**JUL 7, 2025**

REMARKS

Item 59.15 - Median Beams
There is moderate rusting at the bottom flanges and random light rusting in the webs and top flanges, and bridge debris throughout the beam seats**.**

- Beam 1 from the west: At the south end there is heavy rusting with steel delamination with section loss to the bottom of the web measuring up to 3/16" thick for a length of 1'-0" long x 9" high, and a 1/8" diameter area of 100% section loss located 3" below the top flange and 3" from the south end **(Photo 11)**.
- Beams 5-7 from the west: The north bearing web connection angle has completely corroded (100% loss) around the lower bolt **(Photo 12)**.
- Several of the north bearings for Beams 1 to 15, from the west, show moderate to heavy steel delamination.
- Beam 1 from the east: The north end has a 2" high x 1" wide area of 100% section loss situated 2" above the bottom flange and 2" south of the north end, with 1/8" remaining for the full height x 7" long starting at the north end then returns to original thickness **(Photo 13)**.

ITEM 60 - SUBSTRUCTURE

Item 60.1 - Abutments
Item 60.1.d - Breastwalls/Legs
The east and west breastwalls (legs) are separated into south and north sections. There are numerous spalls and hollow areas throughout the breastwalls especially along the bottom 4.0' to 5.0' and at the construction joint areas. For location and description of specific deficiencies they are noted as follows:

East Breastwall
- There is moderate honeycombing along the full length of the bottom of the south section which extends up to 6' high.
- On the south side there is honeycombing 6.0' long x 2.5' wide 6.0' from the soffit.
- For the south section there are hollow areas with delamination throughout the entire width up to 5.0' high with minor scaling and honeycombing.
- At the south end there is a hollow area measuring 2.5' wide x full height of wall with vertical narrow cracks.
- Within the north section of the breastwall there are hollow areas with delamination covering the full width and up to 3.5' high **(Photo 14)**.
- There is a moderate spall with exposed rusted rebar at the south end of the south section measuring 2' high x 8" wide x 6" deep at the base **(Photo 15)**.

West Breastwall
- There is a 1/8" wide vertical crack at the north end of the bridge starting from the bottom and extending 4' up the wall, this crack is located 8" from the north end.
- There is minor edge spalling throughout the bottom 6' of the south end of the south section.
- Hairline crack from the ground to 9.0' high 20.0' from the north face.
- Four shallow pop-outs 3" long x 2" wide x 1" deep, 20.0' to 23.0' from the south fascia and 10.0' to 12.0' off the ground **(Photo 16)**.
- Hollow area 24" long x 8" wide 12.0' off the ground. located 25' off the north end of the bridge.
- Cracking with hollow areas and incipient spalls throughout the center of the south section up to 3.2' high and 3.2' wide.
- Two hollow areas at bottom of wall measuring 17" in diameter and 15" high x 17" wide.
- In the north section the majority of the lower wall has cracking, hollow areas and incipient spalls up to 6.0' high.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EX**	**B-29-011**	**B29011-2EX-DOT-NBI**	**JUL 7, 2025**

REMARKS

- From quarter point to quarter point along the wall there are some additional areas of staining and longitudinal cracking.
- There is a 6' long vertical hairline located at the south end of the north section starting at the bottom of the breastwall.

Item 60.1.e - Wingwalls
At the northeast corner, there is a gap between the wingwall and concrete frame, measuring 2" at the top and 1-1/4" gap at the base **(Photo 17)**.

TRAFFIC SAFETY

Item 36a - Bridge Railing
The north bridge rail now consists of a thrie beam highway guardrail system mounted to the north safetywalk in front of the original bridge railing.

The south rail is a thrie beam guardrail system with steel posts and plastic spacers which continues across the bridge. There is damage to the guardrail with a twisted post at the east end.

Item 36b - Transitions
Northwest transition-Does not exist.
Northeast transition-Thrie beam highway guardrail
Southwest transition-Does not exist **(Photo 18)**.
Southeast transition-Concrete barrier wall**.**

Item 36c - Approach Guardrail
Northwest Approach-Does not exist, trailing end.
Northeast Approach-Type "ss" highway guardrail.
Southwest Approach-Type "ss" highway guardrail.
Southeast Approach-Concrete barrier wall.

The approach guardrail and concrete barriers exhibit minor scrapes, chips, scratches and rub marks throughout.

Item 36d - Approach Guardrail Ends
The northeast, southeast, and northwest ends are continuous with (I95SB/128SB).
The southwest end is a boxing glove.

At the southwest end has minor damage **(Photo 19)**.

Photo Log

Photo 1 :	Wearing surface overview, slight wheel rutting in all travel lanes.
Photo 2 :	Median metal grate at the south end, debris with rusting and bent bars. Note: Concrete safetywalk has moderate scaling throughout.
Photo 3 :	Copings along the north fascia at 10' from the West Abutment, spalls with exposed rusted rebar.
Photo 4 :	North rail base at midspan, spalls.
Photo 5 :	Utility conduit along the east breastwall at the north end, missing cap.
Photo 6 :	Frame slab at the north fascia at 8' from the West Abutment, shallow pop-out spalls.
Photo 7 :	Frame slab at the south fascia at 15' from the West Abutment, spall.
Photo 8 :	Frame slab soffit at the construction joint, spall with exposed rebar.
Photo 9 :	Frame slab soffit in the north section at the construction joint, spall with exposed rusted rebar.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EX**	**B-29-011**	**B29011-2EX-DOT-NBI**	**JUL 7, 2025**

REMARKS

Photo 10 : Frame slab soffit at the south fascia at 16' from the east breastwall, spall with exposed rusted rebar.
Photo 11 : Beam 1 from the west at the south end, 100% section loss with adjacent section loss.
Photo 12 : Beam 7 from the west at the north end, web connection angle has 100% section loss along the lower bolt.
Photo 13 : Beam 1 from the east at the north end, 100% section loss with adjacent section loss.
Photo 14 : East breastwall typical condition (north section shown), delaminations covering the full width near the bottom.
Photo 15 : East breastwall at the south end, spall with exposed rusted rebar.
Photo 16 : West breastwall at 20'-23' from the south fascia, shallow pop-out spalls.
Photo 17 : Northeast wingwall, gap up to 2" at the top and 1-1/4" at the bottom.
Photo 18 : Southwest transition, does not exist.
Photo 19 : Southwest guardrail end, minor damage.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EX**	**B-29-011**	**B29011-2EX-DOT-NBI**	**JUL 7, 2025**

PHOTOS



Photo 1: **Wearing surface overview, slight wheel rutting in all travel lanes.**



Photo 2: **Median metal grate at the south end, debris with rusting and bent bars. Note: Concrete safetywalk has moderate scaling throughout.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EX**	**B-29-011**	**B29011-2EX-DOT-NBI**	**JUL 7, 2025**

PHOTOS



Photo 3: **Copings along the north fascia at 10' from the West Abutment, spalls with exposed rusted rebar.**



Photo 4: **North rail base at midspan, spalls.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EX**	**B-29-011**	**B29011-2EX-DOT-NBI**	**JUL 7, 2025**

PHOTOS



Photo 5: **Utility conduit along the east breastwall at the north end, missing cap.**



Photo 6: **Frame slab at the north fascia at 8' from the West Abutment, shallow pop-out spalls.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
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PHOTOS



Photo 7: **Frame slab at the south fascia at 15' from the West Abutment, spall.**



Photo 8: **Frame slab soffit at the construction joint, spall with exposed rebar.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EX**	**B-29-011**	**B29011-2EX-DOT-NBI**	**JUL 7, 2025**

PHOTOS



Photo 9: **Frame slab soffit in the north section at the construction joint, spall with exposed rusted rebar.**



Photo 10: **Frame slab soffit at the south fascia at 16' from the east breastwall, spall with exposed rusted rebar.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EX**	**B-29-011**	**B29011-2EX-DOT-NBI**	**JUL 7, 2025**

PHOTOS



Photo 11: Beam 1 from the west at the south end, 100% section loss with adjacent section loss.



Photo 12: Beam 7 from the west at the north end, web connection angle has 100% section loss along the lower bolt.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EX**	**B-29-011**	**B29011-2EX-DOT-NBI**	**JUL 7, 2025**

PHOTOS



Photo 13: **Beam 1 from the east at the north end, 100% section loss with adjacent section loss.**



Photo 14: **East breastwall typical condition (north section shown), delaminations covering the full width near the bottom.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EX**	**B-29-011**	**B29011-2EX-DOT-NBI**	**JUL 7, 2025**

PHOTOS



Photo 15: East breastwall at the south end, spall with exposed rusted rebar.



Photo 16: West breastwall at 20'-23' from the south fascia, shallow pop-out spalls.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EX**	**B-29-011**	**B29011-2EX-DOT-NBI**	**JUL 7, 2025**

PHOTOS



Photo 17: Northeast wingwall, gap up to 2" at the top and 1-1/4" at the bottom.



Photo 18: Southwest transition, does not exist.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
BURLINGTON	**2EX**	**B-29-011**	**B29011-2EX-DOT-NBI**	**JUL 7, 2025**

PHOTOS



Photo 19: Southwest guardrail end, minor damage.

National Bridge Element Inspection

BDEPT# **B-29-011**
B.I.N. **2EX**
Item 8 **B29011-2EX-DOT-NBI**
Span Group **1**
Town **Burlington**
District **4**

Date **07/07/2025**
District Bridge Inspection Eng'r **Joseph Dideo**
Inspecting Agency **Mass. Highway Dept.**
Team Leader **Ryan Jones**
Team Member(s) **Davidson Borgelorme**

El #	Element Name	Units	Env.	Total Q.	% or Q	State 1	State 2	State 3	State 4
38	**Re Concrete Slab**	sq feet	2	4,865.287	☐ %	4,168.287	272.000	425.000	
Notes :									
> 1080	*Delamination/Spall/Patched Area*	sq feet	2	450.000	☐ %		225.000	225.000	
Notes :									
> 1090	*Exposed Rebar*	sq feet	2	145.000	☐ %		45.000	100.000	
Notes :									
> 1120	*Efflorescence/Rust Staining*	sq feet	2	2.000	☐ %		2.000		
Notes :									
> 1130	*Cracking (RC and Other)*	sq feet	2	100.000	☐ %			100.000	
Notes :									
> 510	Wearing Surfaces	sq feet	2	4,865.287	☐ %	4,865.287			
Notes :									
215	**Re Conc Abutment**	feet	2	164.000	☐ %	145.000	19.000		
Notes :									
> 1130	*Cracking (RC and Other)*	feet	2	19.000	☐ %		19.000		
Notes :									
321	**Re Conc Approach Slab**	sq feet	2	900.000	☐ %	900.000			
Notes :									
330	**Metal Bridge Railing**	feet	2	144.357	☐ %	44.357	100.000		
Notes :									
> 1000	*Corrosion*	feet	2	100.000	☐ %		100.000		
Notes :									
> 515	Steel Protective Coating	sq feet	2	535.000	☐ %		95.000	140.000	300.000
Notes :									

National Bridge Element Inspection

BDEPT#	**B-29-011**	Date	**07/07/2025**
B.I.N.	**2EX**	District Bridge Inspection Eng'r	**Joseph Dideo**
Item 8	**B29011-2EX-DOT-NBI**	Inspecting Agency	**Mass. Highway Dept.**
Span Group	**1**	Team Leader	**Ryan Jones**
Town	**Burlington**	Team Member(s)	**Davidson Borgelorme**
District	**4**		

El #	Element Name	Units	Env.	Total Q.	% or Q	State 1	State 2	State 3	State 4
> > *3410*	*Chalk(Steel Protect Coatings)*	sq feet	2	165.000	☐ %		65.000	100.000	
Notes :									
> > *3420*	*Peel/Bub/Crack(Stl Protect Coat)*	sq feet	2	370.000	☐ %		30.000	40.000	300.000
Notes :									

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DOCUMENT A00810

TOWN OF LYNNFIELD BRIDGES – INSPECTION REPORTS

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MASSACHUSETTS DEPARTMENT OF TRANSPORTATION

STRUCTURES INSPECTION FIELD REPORT

ROUTINE ARCH INSPECTION

2-DIST	B.I.N.	BR. DEPT. NO.
04	2W5	L-19-004

CITY/TOWN	8.-STRUCTURE NO.	11-Kilo. POINT	41-STATUS	90-ROUTINE INSP. DATE
LYNNFIELD	L19004-2W5-DOT-NBI	098.681	A:OPEN	MAY 12, 2025

07-FACILITY CARRIED	MEMORIAL NAME/LOCAL NAME	27-YR BUILT	106-YR REBUILT	YR REHAB'D (NON 106)
I 95 SB/ST128 SB		1940	1960	0000

06-FEATURES INTERSECTED	26-FUNCTIONAL CLASS	DIST. BRIDGE INSPECTION ENGINEER J. Dideo
HWY WALNUT ST	Urban Minor Arterial	

43-STRUCTURE TYPE	22-OWNER	21-MAINTAINER	TEAM LEADER P. Burke
107 : Concrete Frame	State Highway Agency	State Highway Agency	

107-DECK TYPE	WEATHER	TEMP. (air)	TEAM MEMBERS
N : Not applicable	Sunny	16°C	J. HEDLUND

ITEM 58 — DECK: N

		DEF
1. Wearing Surface	8	-
2. Deck Condition	N	-
3. Spandrel Fill	H	-
4. Curbs	N	-
5. Median	5	M-P
6. Coping/Rail Base	6	M-P
7. Parapets	5	M-P
8. Railing	5	M-P
9. Anti Missile Fence	N	-
10 Drainage System	N	-
11. Lighting Standards	N	-
12 Utilities	N	-
13 Deck Joints	N	-
14	N	-
15	N	-
16	N	-

CURB REVEAL (In millimeters)	N	S
	90	40

APPROACHES

		DEF
a. Appr. pavement condition	8	-
b. Appr. Roadway Settlement	8	-
c. Appr. Sidewalk Settlement	N	-
d.	N	-

OVERHEAD SIGNS (Attached to bridge) (Y/N): N

		DEF
a. Condition of Welds	N	-
b. Condition of Bolts	N	-
c. Condition of Signs	N	-

ITEM 59 — SUPERSTRUCTURE: 6

		DEF
1. Rigid Frame	6	M-P
2. Keystone Area	N	-
3. Stringers	N	-
4. Floorbeams	N	-
5. Spandrel Walls	6	M-P
6. Spring Lines	7	-
7. Diaphragms/Cross Frames	N	-
8. Conn Plt's, Gussets & Angles	N	-
9. Pin & Hangers	N	-
10 Masonry Joints	N	-
11.Rivets & Bolts	N	-
12 Welds	N	-
13 Deformation/Flattening	7	-
14 Member Alignment	7	-
15 Paint/Coating	N	-
16	N	-

Year Painted	N

COLLISION DAMAGE: *Please explain*
None (X) Minor ( ) Moderate ( ) Severe ( )

LOAD DEFLECTION: *Please explain*
None (X) Minor ( ) Moderate ( ) Severe ( )

LOAD VIBRATION: *Please explain*
None (X) Minor ( ) Moderate ( ) Severe ( )

Any Fracture Critical Member: **(Y/N): N**

Any Cracks: **(Y/N): N**

ITEM 60 — SUBSTRUCTURE: 6

	Dive	Cur		DEF
1. Abutments			6	
a. Pedestals	N	N		-
b. Bridge Seats	N	N		-
c. Backwalls	N	N		-
d. Breastwalls	N	6		M-P
e. Wingwalls	N	7		-
f. Slope Paving/Rip-Rap	N	N		-
g. Pointing	N	N		-
h. Footings	N	H		-
i. Piles	N	N		-
j. Scour	N	N		-
k. Settlement	N	7		-
l.	N	N		-
m.	N	N		-
2. Piers or Bents			N	
a. Pedestals	N	N		-
b. Caps	N	N		-
c. Columns	N	N		-
d. Stems/Webs/Pierwalls	N	N		-
e. Pointing	N	N		-
f. Footing	N	N		-
g. Piles	N	N		-
h. Scour	N	N		-
i. Settlement	N	N		-
j.	N	N		-
k.	N	N		-
3. Pile Bents			N	
a. Pile Caps	N	N		-
b. Piles	N	N		-
c. Diagonal Bracing	N	N		-
d. Horizontal Bracing	N	N		-
e. Fasteners	N	N		-

UNDERMINING (Y/N) If YES please explain: **N**

COLLISION DAMAGE:
None (X) Minor ( ) Moderate ( ) Severe ( )

I-60 (Dive Report): **N** ***I-60 (This Report):*** **6**

93B-U/W (DIVE) Insp **00/00/0000**

X=UNKNOWN N=NOT APPLICABLE H=HIDDEN/INACCESSIBLE R=REMOVED

RTN(1)7-96

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
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ITEM 61 — CHANNEL & CHANNEL PROTECTION: N

	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	-

STREAM FLOW VELOCITY:
Tidal ( ) High ( ) Moderate ( ) Low ( ) None ( )

ITEM 61 (Dive Report): N *ITEM 61 (This Report):* N

93b-U/W INSP. DATE: 00/00/0000

ITEM 36 — *TRAFFIC SAFETY*

	36	COND	DEF
A. Bridge Railing	0	5	M-P
B. Transitions	0	6	M-P
C. Approach Guardrail	0	6	M-P
D. Approach Guardrail Ends	1	N	-

WEIGHT POSTING — *Not Applicable* X

	H	3	3S2	Single
Actual Posting	N	N	N	N
Recommended Posting	N	N	N	N

Waived Date: 00/00/0000 EJDMT Date: 00/00/0000

Signs In Place (Y=Yes,N=No, NR=NotRequired) Legibility/ Visibility	At bridge E	At bridge W	Other Advance E	Other Advance W

CLEARANCE POSTING — *Not* X

	N ft	N in	S ft	S in	meter
Actual Field Measurement	14	9	14	9	4.49
Posted Clearance		0		0	

Signs In Place (Y=Yes,N=No, NR=Not Required) Legibility/ Visibility	At bridge N	At bridge S	Advance N	Advance S

ACCESSIBILITY (Y/N/P)

	Needed	Used
Lift Bucket	Y	Y
Ladder	N	N
Boat	N	N
Waders	N	N
Inspector 50	N	N
Rigging	N	N
Staging	N	N
Traffic Control	Y	Y
RR Flagger	N	N
Police	Y	Y
Other:		
	N	N

TOTAL HOURS 24

PLANS (Y/N): Y

(V.C.R.) (Y/N): N

TAPE#: _____

List of field tests performed:
Visual & Hands-On

RATING

Rating Report (Y/N): Y

Date: 09/01/2008

Inspection data at time of existing rating
I 58: - I 59: 7 I 60: 6 Date : 05/07/2007

Recommend for Rating or Rerating (Y/N): N

If YES please give priority: HIGH ( ) MEDIUM ( ) LOW ( )

REASON: _____

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 stablility. 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].

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LYNNFIELD	**2W5**	**L-19-004**	**L19004-2W5-DOT-NBI**	**MAY 12, 2025**

REMARKS

BRIDGE ORIENTATION

Bridge L-19-004 (2W5) is a single span structure with a west to east orientation that carries Interstate 95/ST 128 Southbound over Walnut Street in the Town of Lynnfield. Based on the bridge elevations being designated as southerly and northerly on the drawings, the abutments/frame legs and approaches are labeled as west and east which is also consistent with the previous inspection report. Oncoming I-95 Southbound traffic approaches from the west towards the east. This bridge is located at mile marker 61.319 (ID is on the west endpost). For general orientation, **refer to Sketches 1 through 4.**

The bridge is a reinforced concrete rigid frame supported by concrete abutments/frame legs on spread footings which was widened along the north fascia in 1960. The deck is slightly arched (intrados and extrados) and there is spandrel fill between the wearing surface and the deck extrados. All nomenclature is consistent with previous inspection reports and original design plans.

GENERAL REMARKS

Vertical Clearance

There are overhead power lines spanning the I-95/ST128 southbound roadway directly over this bridge. The minimum vertical over-clearance was measured to be 21'-1" in the left lane and to be 22'-1" in the right lane.

ITEM 58 - DECK

Item 58.1 - Wearing Surface

There is a new bituminous concrete wearing surface since the last inspection **(Photo 1)**.

Item 58.5 - Median

Median Grating:

The painted open steel grating typically has light rust covering approximately 50% of the painted surfaces . Additionally, between Beams 2 and 3 at the East Abutment, there are a total of four fractured longitudinal bars (two in BIN 2W4 and two in BIN 2W5).

Median Steel Beams:

The median beams for this bridge (BIN 2W5) consist of Beams 1 and 2. The painted rolled steel beams typically have flaking paint to the bottom and top flanges, and laminated rust to the webs throughout **(Photo 2)**.

Median Concrete Abutments:

Below the median, there are reinforced concrete abutment breastwalls with bridge seats and backwalls that are located between the reinforced concrete rigid frames of BINs 2W4 and 2W5. The bridge seats have a minor accumulation of dirt, debris, and pigeons roosting. From the centerline between Beams 2 and 3 to BIN 2W5, the backwalls have an isolated spall and hollow sounding area as follows:

- East Abutment Backwall, Behind Median Beam 1: There is a spall measuring 6" long x full height x 1" deep.
- West Abutment Backwall, Behind Median Beam 1: There is a hollow sounding area measuring 6" long x full height with a full height 1/4" wide vertical cracks.

Item 58.6 - Coping/Rail Base

There is a concrete coping under the Type B painted steel railing along the north side of the bridge. Only the top and exterior surfaces of the coping are visible for direct inspection.

The exterior face of the coping has scattered cracking and scaling up to 1/4" deep.

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REMARKS

Item 58.7 - Parapets
There are 2'-8" high safety shaped reinforced concrete parapets along both sides of the roadway that also act as the bridge railings. The parapets have random vertical and horizontal hairline cracks, with isolated areas of spalling with and without exposed rebar. Specific deficiencies beyond typical follow:

- South Parapet at the East Abutment: There is a spall measuring 6" in diameter x 1/2" deep.
- South Parapet, near mid-span at the base: There are two spalls measuring up to 8" in diameter x 1" deep with exposed rebar.
- South Parapet at the west end: There is a corner spall measuring 7" long x 1' high x full width x 3" deep.
- North Parapet near mid-span: There is a spall measuring 12'-6" long x 1'-6" high x 3" deep with exposed rusted rebar **(Photo 3)**.
- North Parapet at the West Abutment: There is a spall measuring 8" in diameter x 1/2" deep.

Item 58.8 - Railing
In addition to the reinforced concrete parapets, there is a Type B painted steel railing mounted on top of the coping along the north side of the bridge.

The railing typically has moderate to heavy rust throughout with locations of laminated rust on the posts and base plates **(Photo 4)**.

At the northwest wingwall, the upper middle channel is bent 2" upward over a 4' length.

ITEM 59 - SUPERSTRUCTURE

Item 59.1 - Rigid Frame
The frame consists of two sections, the south section built in 1940 and the north extended section built in 1960. The underside of the frame slab has moisture staining along the longitudinal joint near both abutments. There are scattered areas of minor cracking with isolated hollow sounding areas and minor spalls. Specific deficiencies beyond typical follow:

North Section (Widened Portion):
- At the West Abutment: There are two longitudinal hairline cracks measuring 8'-0" and 5'-0" long.
- Near Midspan, over the Walnut Street Northbound Lane: There is a hollow sounding area measuring 7'-3" long x 2'-8" wide. Within this area, there are several hairline cracks and a spall measuring 8" long x 3" wide x 3/4" deep.
- Along Approximately 70% of the Longitudinal Joint: The north edge of the frame slab (widened section) is 1/2" lower than the south side edge (original section). This condition has not changed since it was first documented in 4D on the 2007 routine report. It is unknown if this is an as-built condition.

South Section (Original Portion):
- Near Midspan, Over the Walnut Street Northbound Lane, Adjacent to the Longitudinal Joint: There is a hollow sounding area measuring 3'-6" long x up to 9" wide. Within the hollow area, there are several transverse hairline cracks measuring up to 2'-0" long and a spall measuring 1'-3" long x 4" wide x 1 1/2" deep **(Photo 5)**.
- Near West Abutment, about 10'-0" from the South Fascia: There is a spall measuring 3" in diameter x 1/4" deep.

Item 59.5 - Spandrel Walls
The spandrel walls have isolated areas of spalling and hairline map cracking. Specific deficiencies beyond typical follow:

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REMARKS

South Spandrel Wall:
- East End on the South Face: There is an area of light efflorescence measuring 6'-0" long x 1'-0" high.
- West End on the South Face: There is an area of light efflorescence measuring 12'-0" long x 2'-0" high

North Spandrel Wall:
- 15'-0" from West Abutment/Frame Leg: The wall has five spalls measuring up to 1'-2" in diameter x 1 1/4" deep **(Photos 6 and 7)**.
- 9'-0" from the East Abutment/Frame Leg over the Walnut Street Northbound Lane: There are two minor spalls measuring up to 3" in diameter x 1/2" deep **(Photo 6).**
- 17'-0" from the East Abutment/Frame Leg over the Walnut Street Northbound Lane: There is a spall measuring 6" in diameter x 1 1/2" deep **(Photo 6).**

Item 59.6 - Spring Lines
The spring line is the intersection/cold joint between the frame slab and the abutments/frame legs.

Near the West Abutment/frame leg springline, adjacent to the north fascia, at the top of the frame leg, there are three minor pop-out spalls.

Item 59.13 - Deformation/Flattening
Along approximately 70% of the longitudinal joint the north edge of the frame slab (widened section) is 1/2" lower than the south edge (original section). It is unknown if this is an as-built condition.

Refer to Item 59.1 - Rigid Frame for specific comments.

Item 59.14 - Member Alignment
Refer to Item 59.1 - Rigid Frame for specific comments.

ITEM 60 - SUBSTRUCTURE

Item 60.1 - Abutments
Item 60.1.d - Breastwalls
The abutment breastwalls/frame legs typically have random hairline cracks and minor spalls with exposed rebar. Specific deficiencies beyond typical follow:

West Abutment (Widened/North Section):
- At the north end, there are three spalls measuring 3" high x 2" wide x 1/2" deep with exposed rebar **(Photo 8)**.
- 6'-0" from the North End, Within the Architectural Striations Below the Horizontal Groove: There is a spall measuring 9" high x 2" wide x 1 1/2" deep.
- Between the Architectural Striations and the Joint, Near the Sidewalk: There is a spall measuring 6" high x 1'-0" wide x 1" deep with exposed rebar. There are two adjacent hollow sounding areas, one measuring 8" high x 5' wide, and the other measuring 10" in diameter.

West Abutment (Original/South Section):
- Adjacent to the South Fascia at the Sidewalk: There is an area of minor honeycombing measuring 7' high x 6' wide at the bottom.

East Abutment (Widened/North Section):

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REMARKS

- Between the Architectural Striations and the Joint, At the Sidewalk: There is a hollow sounding area measuring 1'-3" high x 9' wide. Within the hollow sounding area, there are three minor spalls measuring 2" high x up to 6' wide x 1/4" deep.
- Between the Architectural Striations and the Joint, at the Sidewalk, Below the Horizontal Groove: There is a spall measuring 8" diameter x 1/2" deep with exposed rebar.
- 9'-0" from the North Fascia, at the Sidewalk: There is a spall measuring 6" in diameter x 1 1/2" deep with an adjacent hollow sounding area measuring 1'-3" high x 1' wide.
- 5'-0" from the North Fascia, at the Sidewalk: There is a spall measuring 4" high x 8" wide x 3/4" deep.

East Abutment (Original/South Section):

- Between the Architectural Striations and the Joint, Above the Horizontal Grove: There is an area of hairline map cracking measuring 1'-6" high x 3'-0" wide.
- Below the Center Architectural Striation, at the Sidewalk: There is an area of honeycombing measuring 2'-6" high x 10'-0" wide x up to 1 1/2" deep, with a hollow sounding area measuring 2'-6" high x 2' wide **(Photo 9)**.
- 14'-0" from the South Fascia, at the Sidewalk: There is a hollow sounding area measuring 1'-0" high x 1' wide.
- At the South Fascia, at the Sidewalk, Below the Longitudinal Grove: There is an area of minor honeycombing measuring 3' high x 4' wide x 1/4" deep with one horizontal hairline crack.

Item 60.1.e - Wingwalls

There is a reinforced concrete wingwall at the north end of both abutments/frame legs. The wingwalls have isolated areas of spalling and scattered vegetation growth. Specific deficiencies beyond typical follow:

- Northeast Wingwall, Near the Abutment/Frame Leg: The top of the wall has a spall measuring 1'-0" high x 8" long x 1/2" deep. There are two spalls near the base of the wall, one measuring 5" in diameter x 1/2" deep, and the other measuring 1'-0" wide x 3" high x 1" deep.
- Northwest Wingwall, Near the Abutment/Frame Leg: There is moderate vine growth.

Item 60.1.k - Settlement

Refer to Item 59.1 - Rigid Frame for specific comments.

TRAFFIC SAFETY

Item 36a - Bridge Railing

The traffic safety features for this bridge consists of the 2'-8" high reinforced concrete parapets on both sides of the bridge and the Type B steel bridge railing on a concrete coping/rail base along the north side of the bridge. The traffic safety features conform to MASH criteria.

For specific deficiencies, refer to Items 58.7 - Parapets and 58.8 - Railing.

Item 36b - Transitions

The transitions consist of the following:

- The northeast and northwest transitions consist of a thrie-beam guardrail with Schedule 40 crush tubes, timber posts, and timber blockouts. The thrie-beams and crush tubes are anchored to the face of the parapets. These conform to MASH criteria.
- The southeast transition consit of a continuation of the bridge parapet, however the transition area approach parapet is 2'-5" high and is too low to comply with MASH criteria.
- There is no southwest transition as the south bridge parapet abruptly ends at the west abutment. This is at the trailing end. It should be noted that the adjacent bridge, BIN 2W4, has a parapet beyond the median area.

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REMARKS

Specific deficiencies with each transition area follows:

Northeast Transition:

- Concrete End Post, at the Base: There are two minor spalls measuring up to 10" long x 2" high x 1" deep.

Southeast Transition:

- Adjacent to the Bridge Parapet: The approach barrier has settled 2 1/2" and has scattered hairline cracks.

Item 36c - Approach Guardrail

The approach guardrails consist of the following:

- The northeast and northwest approach guardrails consist of a Type SS guardrail with steel posts and plastic blockouts. These conform to MASH criteria.
- The southeast approach barrier consist of a continuation of the bridge parapets, however the approach barriers beyond the transition area are 2'-5" high and are too low to conform with MASH criteria.
- There is no southwest approach barrier as the south bridge parapet abruptly ends at the west abutment. This is at the trailing end. It should be noted that the adjacent bridge, BIN 2W4, has a parapet beyond the median area.

The Type SS guardrail posts have isolated areas of spalled plastic spacers. The southeast concrete barrier typically has map cracking throughout the lower half of the barrier. Specific deficiencies beyond typical follow:

- Northwest Guardrail, 3rd Post from the Transition Area: There are minor dents and a tear measuring 2" high x 6" long.
- Northwest Guardrail, 6th Post from the Transition Area: The steel post is twisted and the plastic spacer at the top has a spall measuring full length x full width x 6" deep **(Photo 10).**
- Northeast Guardrail, 6th Post from the Transition: The plastic spacer at the top has a spall measuring full length x full width x 1" deep.

Item 36d - Approach Guardrail Ends

The guardrail and median barrier continue well past the approach limits.

Sketch / Photo Log

Sketch 1 : Location Map
Sketch 2 : Orientation Plan
Sketch 3 : South Elevation
Sketch 4 : Median Framing Plan
Photo 1 : New wearing surface since the last insspection.
Photo 2 : Median beams typically have flaking paint to the bottom and top flanges and laminated rust to the web throughout
Photo 3 : North Parapet near mid-span, spall with exposed rusted rebar
Photo 4 : Railing typically has moderate to heavy rust throughout and random areas of minor damage.
Photo 5 : Adjacent to the longitudinal joint of the frame, hollow sounding area with several transverse hairline cracks and a spall
Photo 6 : North spandrel wall, throughout, minor pop-off spalls.
Photo 7 : North spandrel wall, west end, five spalls
Photo 8 : West Abutment, north end, three spalls with exposed rebar
Photo 9 : East Abutment, area of honeycombing with a hollow sounding area

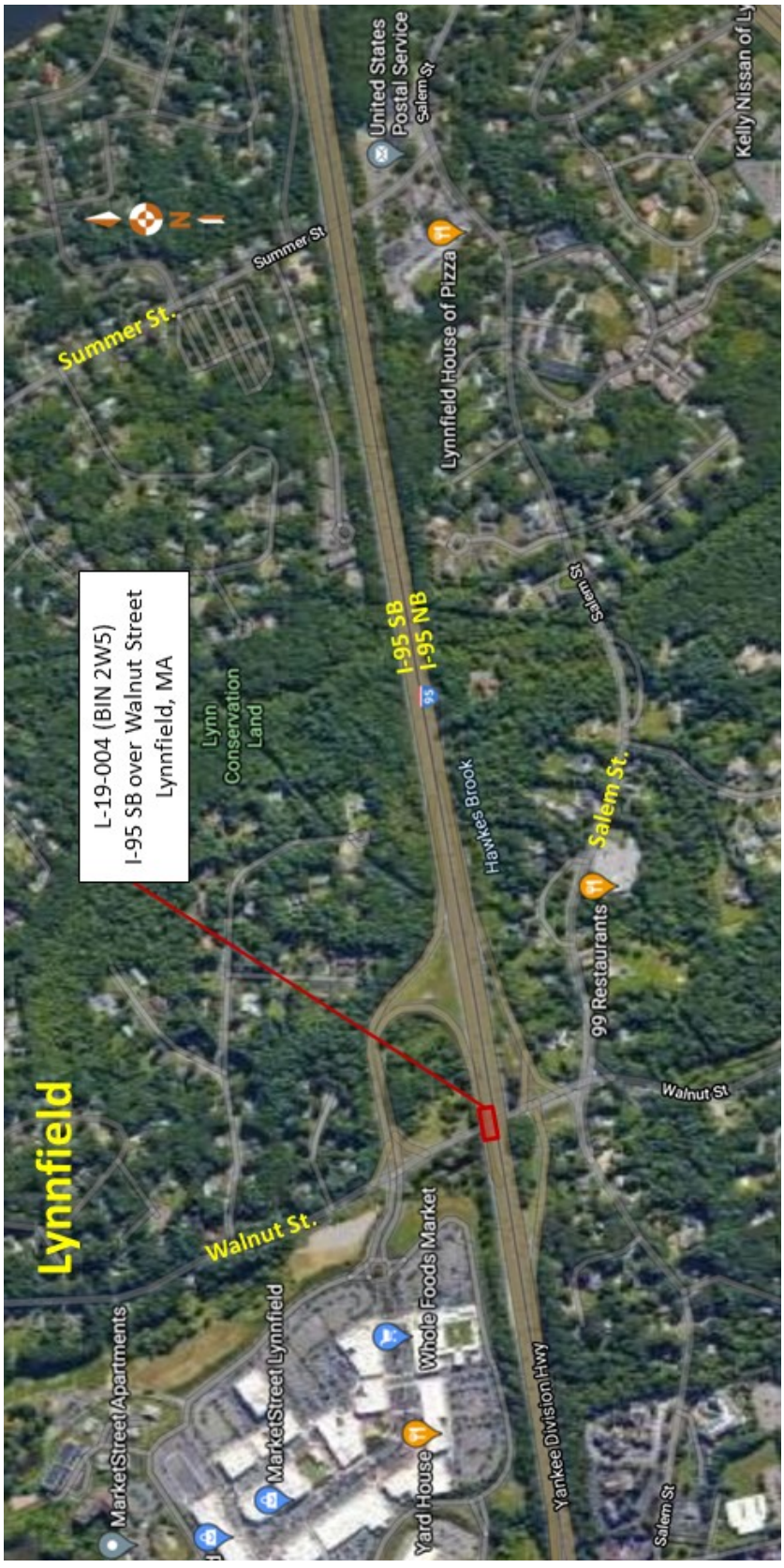
CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
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REMARKS

Photo 10 : Northwest approach guardrail with damaged post and dented rail.

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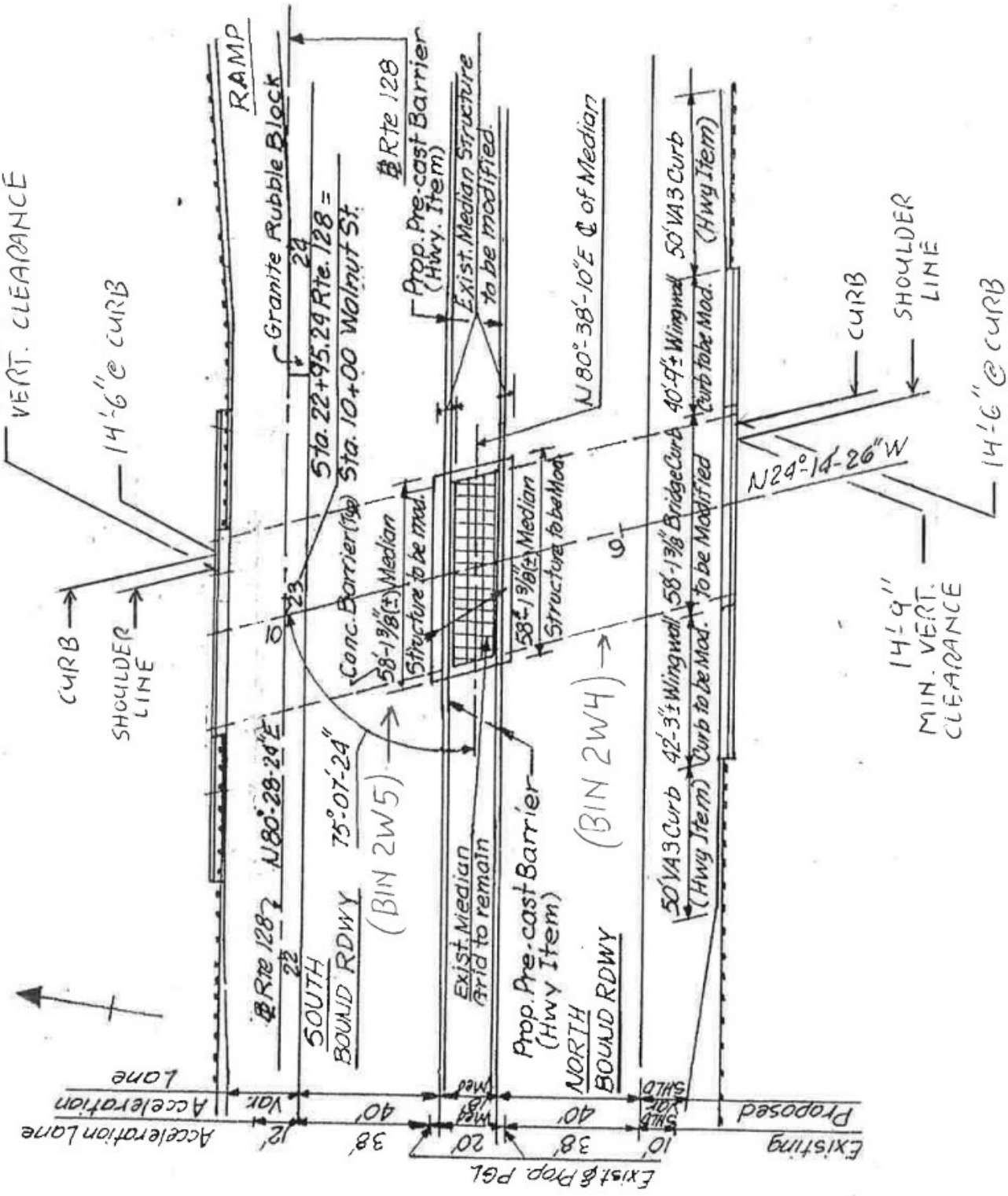
SKETCHES



Sketch 1: Location Map

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LYNNFIELD	**2W5**	**L-19-004**	**L19004-2W5-DOT-NBI**	**MAY 12, 2025**

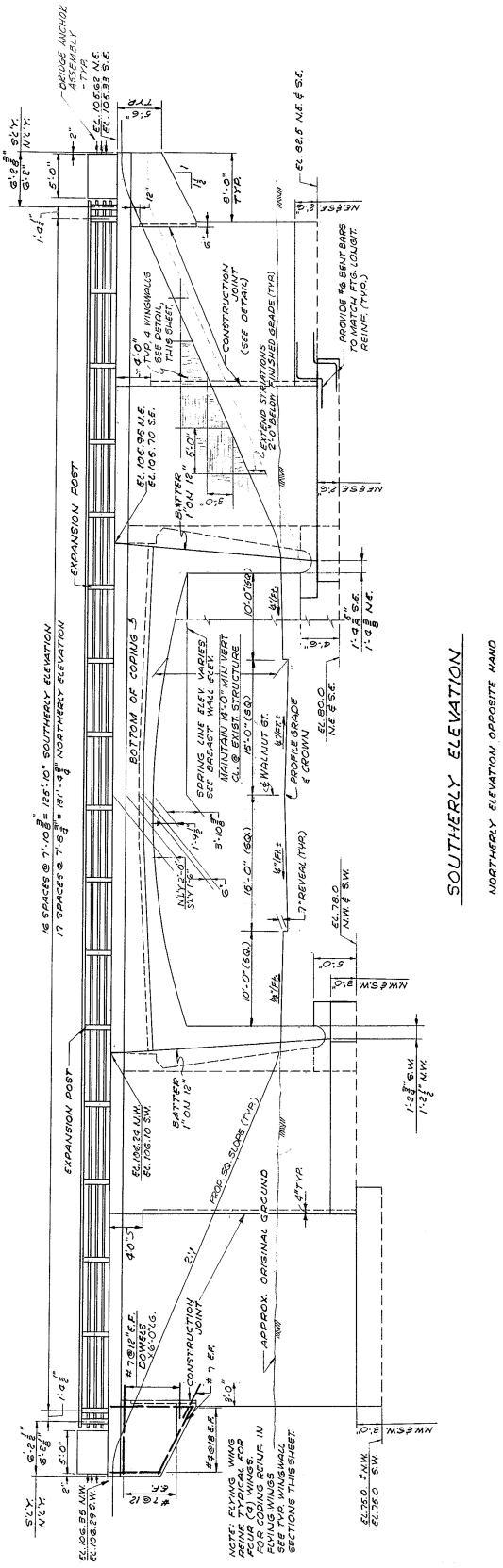
SKETCHES



Sketch 2: Orientation Plan

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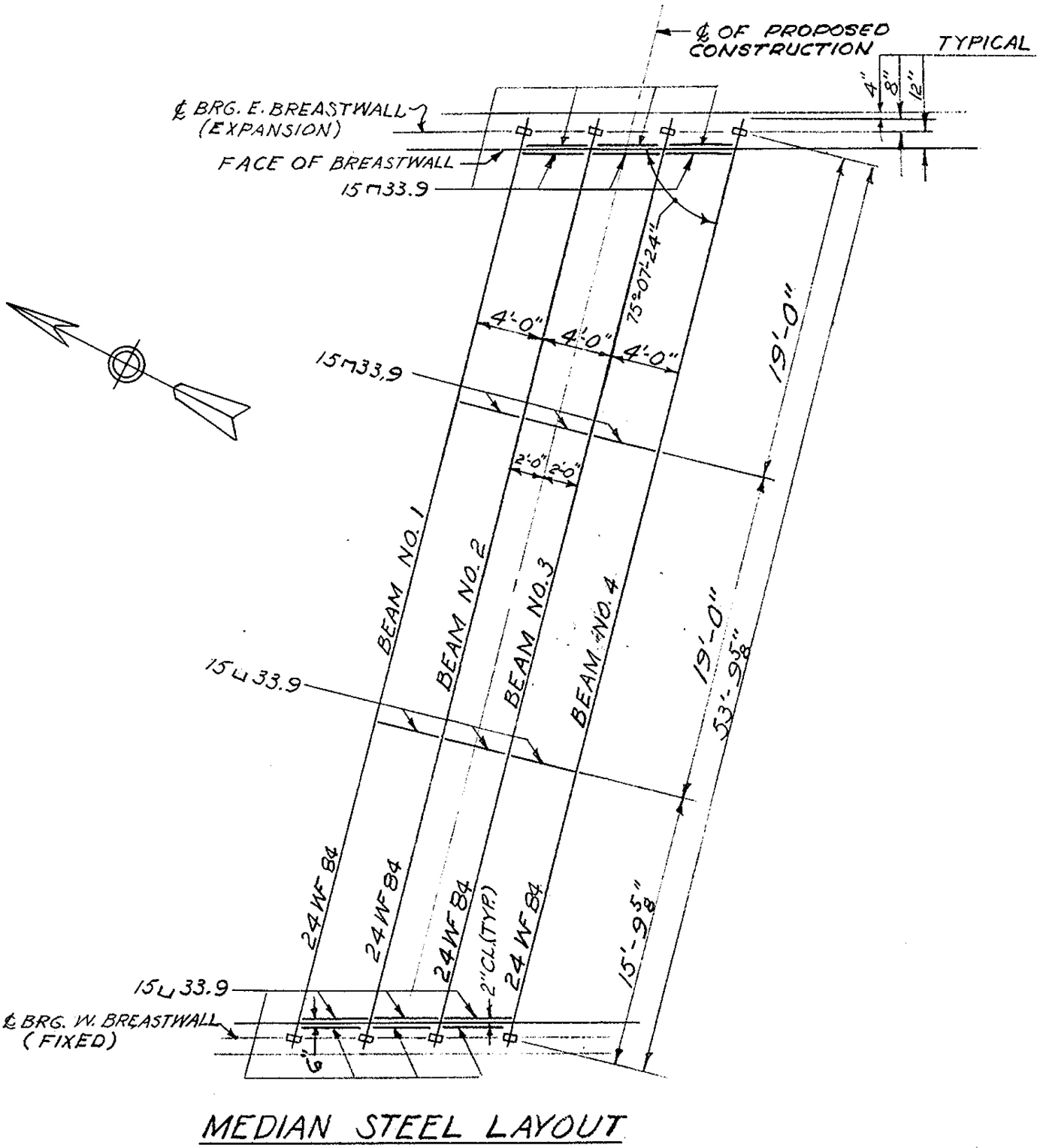
SKETCHES



Sketch 3: South Elevation

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SKETCHES



MEDIAN STEEL LAYOUT

Sketch 4: Median Framing Plan

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PHOTOS



Photo 1: **New wearing surface since the last insspection.**



Photo 2: **Median beams typically have flaking paint to the bottom and top flanges and laminated rust to the web throughout**

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LYNNFIELD	**2W5**	**L-19-004**	**L19004-2W5-DOT-NBI**	**MAY 12, 2025**

PHOTOS



Photo 3: **North Parapet near mid-span, spall with exposed rusted rebar**



Photo 4: **Railing typically has moderate to heavy rust throughout and random areas of minor damage.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W5**	**L-19-004**	**L19004-2W5-DOT-NBI**	**MAY 12, 2025**

PHOTOS



Photo 5: **Adjacent to the longitudinal joint of the frame, hollow sounding area with several transverse hairline cracks and a spall**



Photo 6: **North spandrel wall, throughout, minor pop-off spalls.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W5**	**L-19-004**	**L19004-2W5-DOT-NBI**	**MAY 12, 2025**

PHOTOS



Photo 7: **North spandrel wall, west end, five spalls**



Photo 8: **West Abutment, north end, three spalls with exposed rebar**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2W5	L-19-004	L19004-2W5-DOT-NBI	MAY 12, 2025

PHOTOS



Photo 9: East Abutment, area of honeycombing with a hollow sounding area



Photo 10: Northwest approach guardrail with damaged post and dented rail.

National Bridge Element Inspection

BDEPT# **L-19-004**
B.I.N. **2W5**
Item 8 **L19004-2W5-DOT-NBI**
Span Group **1**
Town **Lynnfield**
District **4**

Date **05/12/2025**
District Bridge Inspection Eng'r **Joseph Dideo**
Inspecting Agency **Mass. Highway Dept.**
Team Leader **Patrick Burke**
Team Member(s) **Jared Hedlund**

El #	Element Name	Units	Env.	Total Q.	% or Q	State 1	State 2	State 3	State 4
38	**Re Concrete Slab**	sq feet	2	3,957.000	☐ %	3,793.000	164.000		
Notes :									
> 1080	*Delamination/Spall/Patched Area*	sq feet	2	23.000	☐ %		23.000		
Notes :									
> 1090	*Exposed Rebar*	sq feet	2	3.000	☐ %		3.000		
Notes :									
> 1120	*Efflorescence/Rust Staining*	sq feet	2	138.000	☐ %		138.000		
Notes :									
> 510	Wearing Surfaces	sq feet	2	3,604.000	☐ %	3,481.000	121.000	2.000	
Notes :									
> > 3210	*Del/Spall/Patch/Pot(Wear Surf)*	sq feet	2	7.000	☐ %		5.000	2.000	
Notes :									
> > 3220	*Crack (Wearing Surface)*	sq feet	2	116.000	☐ %		116.000		
Notes :									
215	**Re Conc Abutment**	feet	2	139.000	☐ %	109.000	30.000		
Notes :									
> 1080	*Delamination/Spall/Patched Area*	feet	2	30.000	☐ %		30.000		
Notes :									
330	**Metal Bridge Railing**	feet	2	62.000	☐ %			62.000	
Notes :									
> 1000	*Corrosion*	feet	2	62.000	☐ %			62.000	
Notes :									
331	**Re Conc Bridge Railing**	feet	2	124.000	☐ %	100.000	11.000	13.000	
Notes :									

National Bridge Element Inspection

BDEPT#	**L-19-004**	Date	**05/12/2025**
B.I.N.	**2W5**	District Bridge Inspection Eng'r	**Joseph Dideo**
Item 8	**L19004-2W5-DOT-NBI**	Inspecting Agency	**Mass. Highway Dept.**
Span Group	**1**	Team Leader	**Patrick Burke**
Town	**Lynnfield**	Team Member(s)	**Jared Hedlund**
District	**4**		

El #	Element Name	Units	Env.	Total Q.	% or Q	State 1	State 2	State 3	State 4
> 1080	*Delamination/Spall/Patched Area*	feet	2	24.000	☐ %		11.000	13.000	
Notes :									

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Proposal No. 613196-133292

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION PAGE 1 OF 21

STRUCTURES INSPECTION FIELD REPORT

ROUTINE ARCH INSPECTION

2-DIST	B.I.N.	BR. DEPT. NO.
04	2W6	L-19-007

CITY/TOWN	8.-STRUCTURE NO.	11-Kilo. POINT	41-STATUS	90-ROUTINE INSP. DATE
LYNNFIELD	L19007-2W6-DOT-NBI	099.975	A:OPEN	MAY 27, 2025

07-FACILITY CARRIED	MEMORIAL NAME/LOCAL NAME	27-YR BUILT	106-YR REBUILT	YR REHAB'D (NON 106)
I 95 NB/ST128 NB		1940	1960	0000

06-FEATURES INTERSECTED	26-FUNCTIONAL CLASS	DIST. BRIDGE INSPECTION ENGINEER J. Dideo
HWY SUMMER ST	Urban Interstate	

43-STRUCTURE TYPE	22-OWNER	21-MAINTAINER	TEAM LEADER D. Suarez
107 : Concrete Frame	State Highway Agency	State Highway Agency	

107-DECK TYPE	WEATHER	TEMP. (air)	TEAM MEMBERS
N : Not applicable	Clear	13°C	T. P. DURGIN

ITEM 58 — DECK: N

		DEF
1. Wearing Surface	6	M-P
2. Deck Condition	N	-
3. Spandrel Fill	H	-
4. Curbs	N	-
5. Median	5	M-P
6. Coping	5	S-A
7. Parapets	6	M-P
8. Railing	5	S-P
9. Anti Missile Fence	N	-
10 Drainage System	N	-
11. Lighting Standards	N	-
12 Utilities	R	-
13 Deck Joints	N	-
14	N	-
15	N	-
16	N	-

CURB REVEAL (In millimeters)	N	S
	10	10

APPROACHES

		DEF
a. Appr. Pavement Condition	6	M-P
b. Appr. Roadway Settlement	6	M-P
c. Appr. Sidewalk Settlement	N	-
d.	N	-

OVERHEAD SIGNS (Attached to bridge) (Y/N): N

		DEF
a. Condition of Welds	N	-
b. Condition of Bolts	N	-
c. Condition of Signs	N	-

ITEM 59 — SUPERSTRUCTURE: 5

		DEF
1. Rigid Frame	5	S-P
2. Keystone Area	N	-
3. Stringers	N	-
4. Floorbeams	N	-
5. Spandrel Walls	6	M-P
6. Spring Lines	7	-
7. Diaphragms/Cross Frames	N	-
8. Conn Plt's, Gussets & Angles	N	-
9. Pin & Hangers	N	-
10 Masonry Joints	N	-
11. Rivets & Bolts	N	-
12 Welds	N	-
13 Deformation/Flattening	8	-
14 Member Alignment	8	-
15 Paint/Coating	N	-
16	N	-

Year Painted	N

COLLISION DAMAGE: *Please explain*
None (X) Minor ( ) Moderate ( ) Severe ( )

LOAD DEFLECTION: *Please explain*
None (X) Minor ( ) Moderate ( ) Severe ( )

LOAD VIBRATION: *Please explain*
None (X) Minor ( ) Moderate ( ) Severe ( )

Any Fracture Critical Member: **(Y/N): N**

Any Cracks: **(Y/N): N**

ITEM 60 — SUBSTRUCTURE: 6

	Dive	Cur		DEF
1. Abutments			6	
a. Pedestals	N	N		-
b. Bridge Seats	N	N		-
c. Backwalls	N	N		-
d. Breastwalls	N	6		M-P
e. Wingwalls	N	6		M-P
f. Slope Paving/Rip-Rap	N	N		-
g. Pointing	N	N		-
h. Footings	N	H		-
i. Piles	N	N		-
j. Scour	N	N		-
k. Settlement	N	8		-
l.	N	N		-
m.	N	N		-
2. Piers or Bents			N	
a. Pedestals	N	N		-
b. Caps	N	N		-
c. Columns	N	N		-
d. Stems/Webs/Pierwalls	N	N		-
e. Pointing	N	N		-
f. Footing	N	N		-
g. Piles	N	N		-
h. Scour	N	N		-
i. Settlement	N	N		-
j.	N	N		-
k.	N	N		-
3. Pile Bents			N	
a. Pile Caps	N	N		-
b. Piles	N	N		-
c. Diagonal Bracing	N	N		-
d. Horizontal Bracing	N	N		-
e. Fasteners	N	N		-

UNDERMINING (Y/N) If YES please explain: N

COLLISION DAMAGE:
None (X) Minor ( ) Moderate ( ) Severe ( )

I-60 (Dive Report): N *I-60 (This Report):* 6

93B-U/W (DIVE) Insp 00/00/0000

X=UNKNOWN N=NOT APPLICABLE H=HIDDEN/INACCESSIBLE R=REMOVED

RTN(1)7-96

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2W6	L-19-007	L19007-2W6-DOT-NBI	MAY 27, 2025

ITEM 61 N

CHANNEL & CHANNEL PROTECTION

	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	-

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

ITEM 36 ***TRAFFIC SAFETY***

	36	COND	DEF
A. Bridge Railing	1	6	M-P
B. Transitions	0	5	S-A
C. Approach Guardrail	0	5	S-A
D. Approach Guardrail Ends	1	N	-

WEIGHT POSTING *Not Applicable* X

	H	3	3S2	Single
Actual Posting	N	N	N	N
Recommended Posting	N	N	N	N

Waived Date: 00/00/0000 **EJDMT Date:** 00/00/0000

Signs In Place (Y=Yes,N=No, NR=NotRequired) Legibility/ Visibility	At bridge E	At bridge W	Other Advance E	Other Advance W

CLEARANCE POSTING *Not* ☐

	N ft	N in	S ft	S in	meter
Actual Field Measurement	14	0	14	0	4.26
Posted Clearance	13	10	13	10	

Signs In Place (Y=Yes,N=No, NR=Not Required) Legibility/ Visibility	At bridge N	At bridge S	Advance N	Advance S
	Y	Y	NR	NR
	7 / 7	7 / 7		

ACCESSIBILITY (Y/N/P)

	Needed	Used
Lift Bucket	Y	Y
Ladder	N	N
Boat	N	N
Waders	N	N
Inspector 50	N	N
Rigging	N	N
Staging	N	N
Traffic Control	P	N
RR Flagger	N	N
Police	Y	Y
Other:		
	N	N

TOTAL HOURS 24

PLANS (Y/N): Y

(V.C.R.) (Y/N): N

TAPE#: _____

List of field tests performed:

RATING
Rating Report (Y/N): Y
Date: 10/01/2008
Inspection data at time of existing rating
I 58: - I 59: 6 I 60: 7 Date : 05/07/2007

Recommend for Rating or Rerating (Y/N): N

If YES please give priority: HIGH ( ) MEDIUM ( ) LOW ( )

REASON: _____

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 stablility. 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].

RTB(2)04-07

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W6**	**L-19-007**	**L19007-2W6-DOT-NBI**	**MAY 27, 2025**

REMARKS

BRIDGE ORIENTATION
Bridge L-19-007 (2W6) is a single span reinforced concrete frame structure that carries I-95/ST-128 Northbound over Summer Street in the Town of Lynnfield. According to the plans, the abutments/frame legs and approaches are labeled as West and East **(Sketches 1 through 5)**.

The bridge was widened along the south fascia in 1960.

GENERAL REMARKS
Vertical Clearance:
The minimum vertical clearance of 14'-0" is located under the south fascia along the east edge of Summer Street.

ITEM 58 - DECK

Item 58.1 - Wearing Surface
The bituminous concrete wearing surface has minor rutting in the travel lanes and minor vegetation growth along both parapets **(Photo 1)**.

Item 58.3 - Spandrel Fill
The spandrel fill is hidden by design.

Item 58.5 - Median
There is a median between this bridge and the adjacent bridge, Structure L-19-007 (BIN 2W7), that consists of open steel grating supported by three rolled steel beams and bearings supported by reinforced concrete abutments. There are also steel diaphragms between the beams. The beams are numbered 1 - 3 from north to south. Any comments related to the median components from the centerline between Beams 2 & 3 and BIN 2W7 are included in the BIN 2W7 inspection report. All other median components are discussed below:

Median Grating:
The painted open steel grating typically has light rust throughout.

Median Steel Beams:
Beam 3 has scattered areas of minor surface rust throughout. At both abutments, the bottom end of the web has a 3' long x 4" high x up to 1/8" deep area of section loss **(Photo 2)**.

Median Steel Bearings:
The bearing plates have moderate to heavy surface rust. The keeper angles and anchor nuts have heavy laminar rust **(Photo 2)**.

Median Steel Diaphragms:
Where the diaphragms are supported by the concrete frame, the bottom of the web has a 6" long x 3" high area of minor to moderate laminar rust and pitting.

Median Concrete Abutments:
At the frame interface, both spandrel wall extensions along the median backwalls have full height x full width cracking and spalling, up to 3" deep **(Photo 3)**.

Item 58.6 - Coping
There is a concrete coping under the rail base along the south side of the bridge.

The south coping has full length x up to full height delamination cracking and rust staining throughout.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W6**	**L-19-007**	**L19007-2W6-DOT-NBI**	**MAY 27, 2025**

REMARKS

Over the northbound lane of Summer Street: There is a 7' long x full height x up to 3" deep spall with exposed rusted rebar **(Photo 4)**.

Over the center-line of Summer Street: There is a 3'-6" long x up to full height x up to 3" deep spall with exposed rusted rebar **(Photo 4)**.

Item 58.7 - Parapets
There is a reinforced concrete parapet along the south edge of the roadway that continues into both approaches, and a reinforced concrete median barrier on the north edge of the roadway that extends for the length of the bridge. Both parapets have several random minor spalls and hollow areas measuring up to 6" diameter x 1" deep. Specific deficiencies beyond typical follow:

South Parapet:

At the east end, there is a 1' long x up to full height x up to 3" deep area of delamination and spalling with moderate vegetation **(Photo 5)**.

Median Barrier:

At the west end, there is a 1' high x 1' wide x up to 2" deep area of minor spalling and scaling with an adjacent 1'-6" long by 9" high area of delamination **(Photo 6)**.

Item 58.8 - Railing
There is a Type B painted steel railing along the south side of the bridge (no longer relevant for safety purposes due to the concrete parapet along the south edge of the roadway). As such, Item 36a is rated in accordance with Item 58.7 - Parapets.

The rail has moderate to heavy surface rust and locations of laminar rust on the posts and base plates.

There is heavy vegetation growth through the rail above the southeast wingwall.

At the 4th post from the west end, the bottom rail channel has a 3" wide x 1/2" long area of 100% section loss **(Photo 7)**.

At the 5th post from the west end, the anchor plate is undermined 4" wide by 4" long x 2-1/2" deep due to a 1'-6" long x 1' wide x 3" deep spall in the rail base, exposing one anchor bolt **(Photo 8)**.

At the 3rd post from the east end, the bottom two rails are disconnected due to a 5" wide x 1" long area of 100% section loss.

At the 2nd post from the east end, the bottom rail is disconnected due to a 4" long by 1" high area of 100% section loss **(Photo 9)**.

At the east end, the top rail channel is bent upward 1" over a 4" long area and has a 4-1/2" long x 1/8" high tear **(Photo 10)**.

Item 58.12 - Utilities
The meter box at the south end of the East Breastwall/Frame Leg has been removed.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W6**	**L-19-007**	**L19007-2W6-DOT-NBI**	**MAY 27, 2025**

REMARKS

APPROACHES

Approaches a - Appr. Pavement Condition
Both approaches have scattered transverse cracks, up to 1/2" wide.

Approaches b - Appr. Roadway Settlement
Both approaches have minor rutting in the travel lanes.

ITEM 59 - SUPERSTRUCTURE

Item 59.1 - Rigid Frame
The frame consists of two sections, the north section built in 1940 and the south extension built in 1960. Specific deficiencies beyond typical follow:

South Section (Widened Section):
- At 2' in from the south end, near mid-span, there is a 1'-3" diameter x 2" deep spall.

- Along the longitudinal joint between sections, there are many areas of water staining and delamination, mostly near the west end.

- The west 20' of the longitudinal joint between sections has several areas of delamination and spalling, up to 4' long x 16" wide x 5" deep with exposed rusted rebar **(Photo 11)**.

- Over the Northbound lane of Summer Street, there is a 7' long x up to 1.5' wide x 3" deep area of delamination and spalling **(Photo 12)**.

North Section (Original Section):
- Near mid-span, adjacent to the north face: The slab has a 15' long x 15' wide area of transverse hairline cracking with an adjacent 8' long x 20' wide area of moisture staining. There are also three spalls in this area measuring up to 4" wide by 8" long by 1/2" deep with exposed rusted rebar **(Photo 13)**.

Item 59.5 - Spandrel Walls
The north spandrel wall has several full height hairline cracks and areas of hairline map cracking with efflorescence **(Photo 14)**.

Near mid-span, there are longitudinal hairline cracks with moisture staining and efflorescence.

ITEM 60 - SUBSTRUCTURE

Item 60.1 - Abutments
Item 60.1.d - Breastwalls
The breastwalls/frame legs have random vertical hairline cracks throughout and scattered spalls and hollow areas. Specific deficiencies are noted as follows:

West Breastwall/Frame Leg:

- At the longitudinal joint, there is a 2'-8" high x 1' wide area of delamination and scaling at the bottom.

- At 27' from the south end, there is a 6' high by 2' wide area of delamination at the bottom.

- East Breastwall/Frame Leg:

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W6**	**L-19-007**	**L19007-2W6-DOT-NBI**	**MAY 27, 2025**

REMARKS

- At 30' from the south end, there is a 2' high by 1'-6" wide area of delamination at the bottom.

Item 60.1.e - Wingwalls
The southeast and southwest wingwalls have minor scaling throughout.

TRAFFIC SAFETY

Item 36a - Bridge Railing
The bridge railing consists of a reinforced concrete parapet along the south edge of the roadway and a reinforced concrete median barrier along the north edge of the bridge. The parapets conform to current MASH criteria.

Refer to Items 58.7 - Parapets for condition remarks.

Item 36b - Transitions
Both south transitions consist of thrie-beam guardrail with timber posts and spacers bolted to the face of the parapet.

The northwest approach guardrail / transition consists of a continuous concrete median barrier. The concrete median barrier ends at the east end of the bridge (there is another concrete barrier along the ST-128 SB side of the median. The transitions do not conform to MASH standards. Specific deficiencies are as follows:

- Southeast Transition, at the East Abutment: At the parapet connection, 2 of the 5 connection bolts are slightly backed off.
- Southwest Transition, 6th post: There is a broken timber post and spacer **(Photo 15)**.

Item 36c - Approach Guardrail
Both south approach guardrails consist of w-beam guardrail with steel posts and plastic spacers.

The northwest approach guardrail / transition consists of a continuous concrete median barrier. The concrete median barrier ends at the east end of the bridge (there is another concrete barrier along the ST-128 SB side of the median).

The approach guardrails do not meet current MASH criteria. Specific deficiencies beyond typical follow:

- Southwest Guardrail, 5th Post from the transition: There is a detached post **(Photo 16)**.

- Southwest Guardrail: There are several minor dents throughout.

- Southeast Guardrail, between the 8th and 13th post from the parapet: The guardrail has moderate collision damage and is bent up to 6" out of plane **(Photo 17)**.

- Northwest Concrete Median Barrier: The bottom half of the barrier typically has minor hairline map cracking throughout.

Item 36d - Approach Guardrail Ends
The approach guardrails and median barrier continue well past the approach limits. As such, no guardrail ends are necessary.

Sketch / Photo Log
Sketch 1 : Location Map.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W6**	**L-19-007**	**L19007-2W6-DOT-NBI**	**MAY 27, 2025**

REMARKS

Sketch 2 : Orientation Plan.
Sketch 3 : Bridge Elevation.
Sketch 4 : Median Framing Plan.
Sketch 5 : Location of clearance posting signs
Photo 1 : Wearing surface has minor rutting in the travel lanes
Photo 2 : Median Beam 3, east end, bottom end of the web has an area of section loss
Photo 3 : West spandrel wall extensions along the median backwall have full height x full width cracking and spalling
Photo 4 : South coping, spalling and cracking with exposed rusted rebar
Photo 5 : South parapet, east end, area of delamination and spalling with moderate vegetation
Photo 6 : Median, west end, area of minor spalling and scaling with an area of delamination
Photo 7 : South railing, 4th post from the west end, bottom rail channel has an area of 100% section loss
Photo 8 : South railing, 5th post from the west end, anchor plate is undermined due to a spall in the rail base
Photo 9 : South railing, 2nd post from the east end, bottom rail is disconnected
Photo 10 : South railing, east end, top rail channel is bent upward and has a tear
Photo 11 : South section of frame, over the southbound lane of Summer Street, several areas of delamination and spalling with exposed rusted rebar
Photo 12 : South section of frame, over the northbound lane of Summer Street, area of delamination and spalling
Photo 13 : North section of frame, three spalls with exposed rusted rebar
Photo 14 : North spandrel wall, several full height hairline cracks and areas of hairline map cracking with efflorescence
Photo 15 : Southwest Transition, 6th post, broken timber post and spacer
Photo 16 : Southwest approach guardrail, 5th Post from the transition, detached post
Photo 17 : Southeast approach guardrail, guardrail has moderate collision damage and is bent out of plane

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W6**	**L-19-007**	**L19007-2W6-DOT-NBI**	**MAY 27, 2025**

SKETCHES

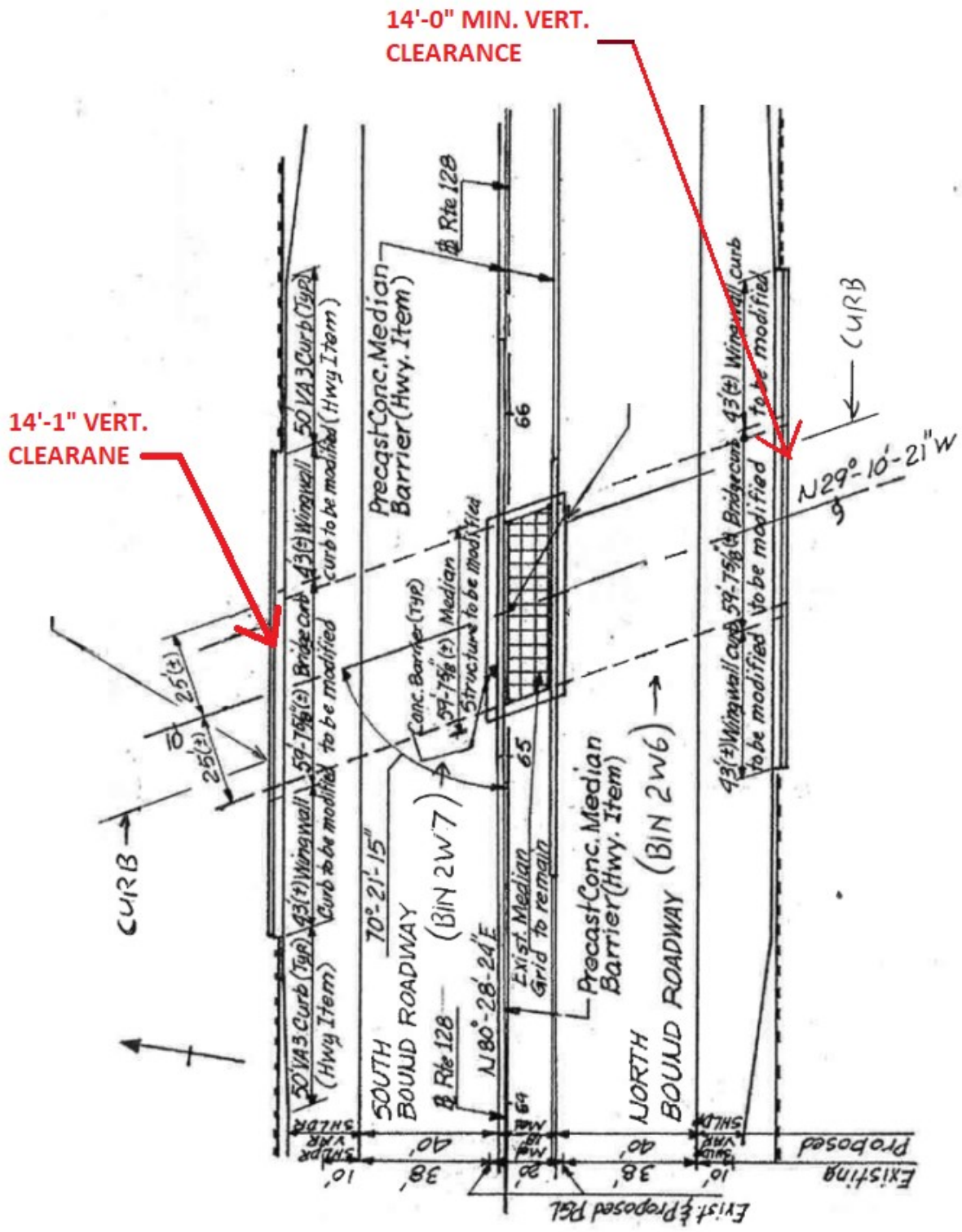


Sketch 1: Location Map.

REM.(2)7-96

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2W6	L-19-007	L19007-2W6-DOT-NBI	MAY 27, 2025

SKETCHES

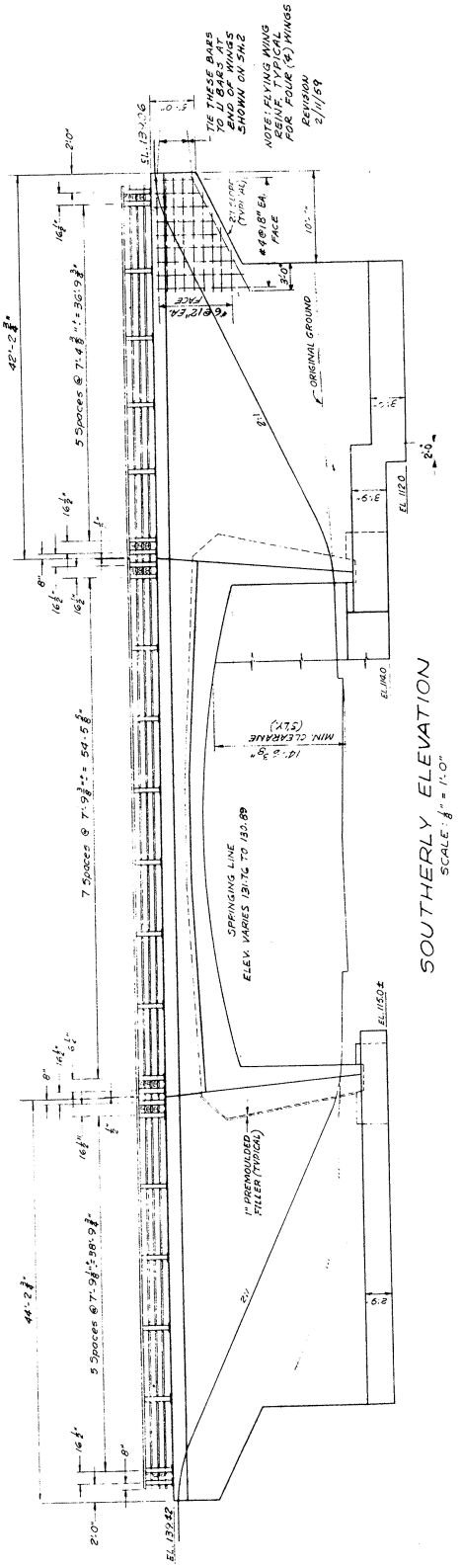


Sketch 2: Orientation Plan.

REM.(2)7-96

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W6**	**L-19-007**	**L19007-2W6-DOT-NBI**	**MAY 27, 2025**

SKETCHES

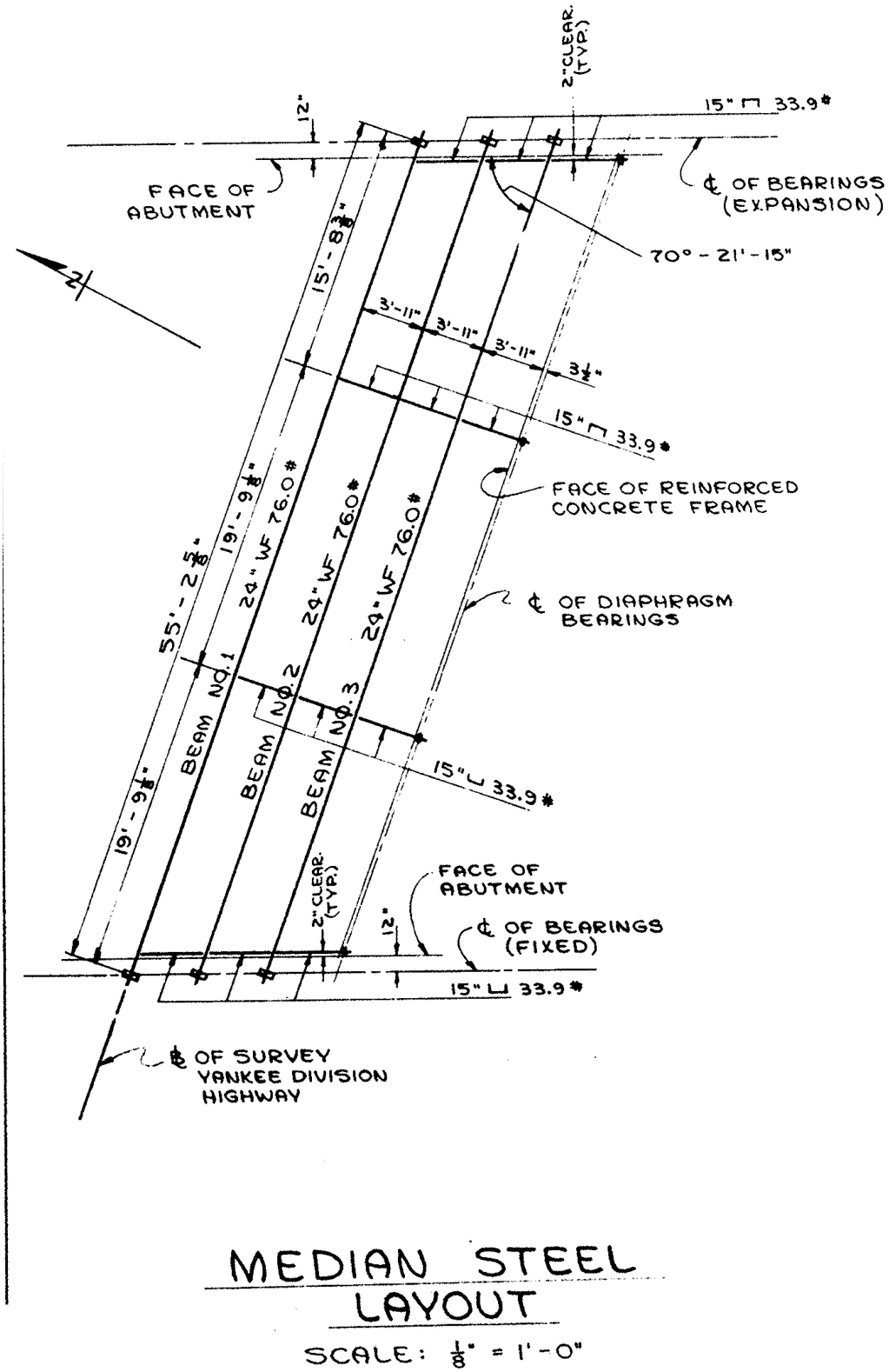


Sketch 3: Bridge Elevation.

REM.(2)7-96

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
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SKETCHES



Sketch 4: Median Framing Plan.

REM.(2)7-96

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SKETCHES







Sketch 5: Location of clearance posting signs

REM.(2)7-96

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PHOTOS



Photo 1: **Wearing surface has minor rutting in the travel lanes**



Photo 2: **Median Beam 3, east end, bottom end of the web has an area of section loss**

REM.(2)7-96

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
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PHOTOS



Photo 3: **West spandrel wall extensions along the median backwall have full height x full width cracking and spalling**



Photo 4: **South coping, spalling and cracking with exposed rusted rebar**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
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PHOTOS



Photo 5: South parapet, east end, area of delamination and spalling with moderate vegetation



Photo 6: Median, west end, area of minor spalling and scaling with an area of delamination

REM.(2)7-96

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
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PHOTOS



Photo 7: **South railing, 4th post from the west end, bottom rail channel has an area of 100% section loss**



Photo 8: **South railing, 5th post from the west end, anchor plate is undermined due to a spall in the rail base**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
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PHOTOS



Photo 9: South railing, 2nd post from the east end, bottom rail is disconnected



Photo 10: South railing, east end, top rail channel is bent upward and has a tear

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W6**	**L-19-007**	**L19007-2W6-DOT-NBI**	**MAY 27, 2025**

PHOTOS



Photo 11: **South section of frame, over the southbound lane of Summer Street, several areas of delamination and spalling with exposed rusted rebar**



Photo 12: **South section of frame, over the northbound lane of Summer Street, area of delamination and spalling**

REM.(2)7-96

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
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PHOTOS



Photo 13: North section of frame, three spalls with exposed rusted rebar



Photo 14: North spandrel wall, several full height hairline cracks and areas of hairline map cracking with efflorescence

REM.(2)7-96

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
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PHOTOS



Photo 15: Southwest Transition, 6th post, broken timber post and spacer



Photo 16: Southwest approach guardrail, 5th Post from the transition, detached post

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W6**	**L-19-007**	**L19007-2W6-DOT-NBI**	**MAY 27, 2025**

PHOTOS



Photo 17: Southeast approach guardrail, guardrail has moderate collision damage and is bent out of plane

National Bridge Element Inspection

BDEPT#	**L-19-007**	Date	**05/27/2025**
B.I.N.	**2W6**	District Bridge Inspection Eng'r	**Joseph Dideo**
Item 8	**L19007-2W6-DOT-NBI**	Inspecting Agency	**Mass. Highway Dept.**
Span Group	**1**	Team Leader	**Daniel Suarez**
Town	**Lynnfield**	Team Member(s)	**Timothy P. Durgin**
District	**4**		

El #	Element Name	Units	Env.	Total Q.	% or Q	State 1	State 2	State 3	State 4
38	**Re Concrete Slab**	sq feet	2	4,238.000	☐ %	4,178.000	55.000	5.000	
Notes :									
> 1080	*Delamination/Spall/Patched Area*	sq feet	2	5.000	☐ %			5.000	
Notes :									
> 1090	*Exposed Rebar*	sq feet	2	5.000	☐ %		5.000		
Notes :									
> 1130	*Cracking (RC and Other)*	sq feet	2	50.000	☐ %		50.000		
Notes :									
> 510	Wearing Surfaces	sq feet	2	3,698.000	☐ %	3,698.000			
Notes :									
215	**Re Conc Abutment**	feet	2	142.000	☐ %	140.000	2.000		
Notes :									
> 1080	*Delamination/Spall/Patched Area*	feet	2	2.000	☐ %		2.000		
Notes :									
330	**Metal Bridge Railing**	feet	2	64.000	☐ %			64.000	
Notes :									
> 1000	*Corrosion*	feet	2	64.000	☐ %			64.000	
Notes :									
331	**Re Conc Bridge Railing**	feet	2	127.000	☐ %	125.000		2.000	
Notes :									
> 1080	*Delamination/Spall/Patched Area*	feet	2	2.000	☐ %			2.000	
Notes :									

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION

STRUCTURES INSPECTION FIELD REPORT

ROUTINE ARCH INSPECTION

2-DIST	B.I.N.	BR. DEPT. NO.
04	2W7	L-19-007

CITY/TOWN	8.-STRUCTURE NO.	11-Kilo. POINT	41-STATUS	90-ROUTINE INSP. DATE
LYNNFIELD	L19007-2W7-DOT-NBI	099.975	A:OPEN	MAY 27, 2025

07-FACILITY CARRIED	MEMORIAL NAME/LOCAL NAME	27-YR BUILT	106-YR REBUILT	YR REHAB'D (NON 106)
I 95 SB/ST128 SB		1940	1960	0000

06-FEATURES INTERSECTED	26-FUNCTIONAL CLASS	DIST. BRIDGE INSPECTION ENGINEER J. Dideo
HWY SUMMER ST	Urban Interstate	

43-STRUCTURE TYPE	22-OWNER	21-MAINTAINER	TEAM LEADER D. Suarez
107 : Concrete Frame	State Highway Agency	State Highway Agency	

107-DECK TYPE	WEATHER	TEMP. (air)	TEAM MEMBERS
N : Not applicable	Clear	13°C	T. P. DURGIN

ITEM 58 — DECK: N

		DEF
1. Wearing Surface	7	-
2. Deck Condition	N	-
3. Spandrel Fill	H	-
4. Curbs	N	-
5. Median	5	S-A
6. Coping	5	S-A
7. Parapets	6	M-P
8. Railing	6	M-P
9. Sound Barriers	6	M-P
10 Drainage System	N	-
11. Lighting Standards	N	-
12 Utilities	R	-
13 Deck Joints	N	-
14	N	-
15	N	-
16	N	-

CURB REVEAL (In millimeters)	N	S
	10	10

APPROACHES

		DEF
a. Appr. Pavement Condition	6	M-P
b. Appr. Roadway Settlement	7	-
c. Appr. Sidewalk Settlement	N	-
d.	N	-

OVERHEAD SIGNS (Attached to bridge) (Y/N): N

		DEF
a. Condition of Welds	N	-
b. Condition of Bolts	N	-
c. Condition of Signs	N	-

ITEM 59 — SUPERSTRUCTURE: 6

		DEF
1. Rigid Frame	6	M-P
2. Keystone Area	N	-
3. Stringers	N	-
4. Floorbeams	N	-
5. Spandrel Walls	6	M-P
6. Spring Lines	7	-
7. Diaphragms/Cross Frames	N	-
8. Conn Plt's, Gussets & Angles	N	-
9. Pin & Hangers	N	-
10 Masonry Joints	N	-
11. Rivets & Bolts	N	-
12 Welds	N	-
13 Deformation/Flattening	8	-
14 Member Alignment	6	M-P
15 Paint/Coating	N	-
16	N	-

Year Painted	N

COLLISION DAMAGE: *Please explain*
None ( ) Minor (X) Moderate ( ) Severe ( )

LOAD DEFLECTION: *Please explain*
None (X) Minor ( ) Moderate ( ) Severe ( )

LOAD VIBRATION: *Please explain*
None (X) Minor ( ) Moderate ( ) Severe ( )

Any Fracture Critical Member: (Y/N) N

Any Cracks: (Y/N) N

ITEM 60 — SUBSTRUCTURE: 6

	Dive	Cur		DEF
1. Abutments			6	
a. Pedestals	N	N		-
b. Bridge Seats	N	N		-
c. Backwalls	N	N		-
d. Breastwalls	N	6		M-P
e. Wingwalls	N	6		M-P
f. Slope Paving/Rip-Rap	N	N		-
g. Pointing	N	N		-
h. Footings	N	H		-
i. Piles	N	N		-
j. Scour	N	N		-
k. Settlement	N	7		-
l.	N	N		-
m.	N	N		-
2. Piers or Bents			N	
a. Pedestals	N	N		-
b. Caps	N	N		-
c. Columns	N	N		-
d. Stems/Webs/Pierwalls	N	N		-
e. Pointing	N	N		-
f. Footing	N	N		-
g. Piles	N	N		-
h. Scour	N	N		-
i. Settlement	N	N		-
j.	N	N		-
k.	N	N		-
3. Pile Bents			N	
a. Pile Caps	N	N		-
b. Piles	N	N		-
c. Diagonal Bracing	N	N		-
d. Horizontal Bracing	N	N		-
e. Fasteners	N	N		-

UNDERMINING (Y/N) If YES please explain: N

COLLISION DAMAGE:
None (X) Minor ( ) Moderate ( ) Severe ( )

I-60 (Dive Report): N *I-60 (This Report):* 6

93B-U/W (DIVE) Insp 00/00/0000

X=UNKNOWN N=NOT APPLICABLE H=HIDDEN/INACCESSIBLE R=REMOVED

RTN(1)7-96

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2W7	L-19-007	L19007-2W7-DOT-NBI	MAY 27, 2025

ITEM 61 — CHANNEL & CHANNEL PROTECTION

N

	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	-

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

ITEM 36 — *TRAFFIC SAFETY*

	36	COND	DEF
A. Bridge Railing	0	6	M-P
B. Transitions	0	6	M-P
C. Approach Guardrail	0	6	M-P
D. Approach Guardrail Ends	1	N	-

WEIGHT POSTING

Not Applicable X

	H	3	3S2	Single
Actual Posting	N	N	N	N
Recommended Posting	N	N	N	N

Waived Date: 00/00/0000 EJDMT Date: 00/00/0000

Signs In Place (Y=Yes,N=No, NR=NotRequired) Legibility/ Visibility	At bridge E	At bridge W	Other Advance E	Other Advance W

CLEARANCE POSTING

Not ☐

	N ft	N in	S ft	S in	meter
Actual Field Measurement	14	1	14	0	4.26
Posted Clearance	13	10	13	10	

Signs In Place (Y=Yes,N=No, NR=Not Required) Legibility/ Visibility	At bridge N	At bridge S	Advance N	Advance S
	Y	Y	NR	NR
	7 / 7	7 / 7	/	/

ACCESSIBILITY (Y/N/P)

	Needed	Used
Lift Bucket	Y	Y
Ladder	N	N
Boat	N	N
Waders	N	N
Inspector 50	N	N
Rigging	N	N
Staging	N	N
Traffic Control	P	N
RR Flagger	N	N
Police	Y	Y
Other:		
	N	N

TOTAL HOURS 24

PLANS (Y/N): Y

(V.C.R.) (Y/N): N

TAPE#: _____

List of field tests performed:

RATING

Rating Report (Y/N): Y

Date: 01/01/2009

Inspection data at time of existing rating

I 58: - I 59: 7 I 60: 7 Date : 05/07/2007

Recommend for Rating or Rerating (Y/N): Y

If YES please give priority: HIGH (X) MEDIUM ( ) LOW ( )

REASON: Addition of dead load

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 stablility. 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	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W7**	**L-19-007**	**L19007-2W7-DOT-NBI**	**MAY 27, 2025**

REMARKS

BRIDGE ORIENTATION

Bridge L-19-007 (2W6) is a single span reinforced concrete frame structure that carries I-95/ST-128 Southbound over Summer Street in the Town of Lynnfield. According to the plans, the abutments/frame legs and approaches are labeled as West and East **(Sketches 1 through 4)**.

The bridge was widened along the north fascia in 1960.

GENERAL REMARKS

Vertical Clearance:

The minimum vertical clearance of 14'-0" is located under the north fascia along the west edge of Summer Street **(Sketch 2)**.

ITEM 58 - DECK

Item 58.3 - Spandrel Fill

The spandrel fill is hidden by design.

Item 58.5 - Median

There is a median between this bridge and the adjacent bridge, Structure L-19-007 (BIN 2W6), that consists of open steel grating supported by three rolled steel beams and bearings supported by reinforced concrete abutments. There are also steel diaphragms between the beams. The beams are numbered 1 - 3 from north to south. Any comments related to the median components from the centerline between Beams 2 & 3 and BIN 2W6 are included in the BIN 2W6 inspection report.

Median Grating:

The painted open steel grating typically has light rust throughout. Over Beam 2, 9'-5" from the West Abutment there is one fractured transverse bar.

Median Steel Beams:

The median beams for this bridge consist of Beams 1 & 2.

Beam 1 has scattered areas of minor surface rust throughout. At both abutments, the bottom end of the web has a 3' long x 4" high x up to 1/8" deep area of section loss.

Beam 2 at the West Abutment: The bottom end of the web has a 10" long x 1-1/2" high area of 100% section loss. The beam section returns to original thickness at 4" high and at 30" from the end **(Photo 1)**.

Median Steel Bearings:

The bearing plates have moderate to heavy surface rust. The keeper angles and anchor nuts have heavy laminar rust.

Median Steel Diaphragms:

Where the diaphragms are supported by the concrete frame, the bottom of the web has a 6" long x 3" high area of minor to moderate laminar rust and pitting.

Median Concrete Abutments:

The East Abutment backwall, behind Beam 1, has a 6" long x full height x up to 3" deep spall.

The West Abutment backwall, behind Beam 1, has a 6" long x full height x up to 5" deep spall **(Photo 2)**.

Median Concrete Headers:

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REMARKS

The east header has an 8' long x up to full width x up to 3" deep area of scaling / concrete deterioration.

Item 58.6 - Coping
The coping along the north side of the bridge has full length x up to full height delamination cracking with areas of rust staining.

Over the Northbound lane of Summer Street, there is a 4' long x 1' high x 1" deep spall with exposed rusted rebar.

Near mid-span, there is a 6' long x up to full height x up to 3" deep spall with exposed rusted rebar **(Photo 3)**.

Item 58.7 - Parapets
There is a 2'-4" high reinforced concrete parapet along the north side of the bridge and there is a 2'-8" high reinforced concrete median barrier along the south side of the bridge. The parapet and median barrier have random hairline cracking and scattered hollow sounding areas throughout. Specific deficiencies follow:

- The north parapet above the Northwest Wingwall, has a 15' long x 6" high area of delamination to the top face.

- The reinforced concrete median barrier, near the east end, has a 4.5' long x 10" high x up to 3" deep spall with exposed rebar along the bottom **(Photo 4)**.

Item 58.8 - Railing
There is a Type B painted steel railing along the north side of the bridge (no longer relevant for safety purposes due to the concrete parapet along the north edge of the roadway). As such, Item 36a is rated in accordance with Item 58.7 - Parapets.

The railing has several areas of moderate to heavy surface rust **(Photo 5)**.

Item 58.9 - Sound Barriers
There is a precast sound barrier mounted to the parapet along the north side of the bridge.

The anchor bolts typically have light rust to the top of the bolt.

APPROACHES

Approaches a - Appr. Pavement Condition
Both approaches have several transverse cracks throughout, up to 1/8" wide.

ITEM 59 - SUPERSTRUCTURE

Item 59.1 - Rigid Frame
The frame consists of two sections; the south section built in 1940 and the north extended section built in 1960. The underside of the frame slab has isolated areas of vehicular surface scrapes and random hairline cracks. There are several random pop-outs; up to 3" in diameter by 1/4" deep. Along the longitudinal construction joint, there is evidence of leakage, rust staining and efflorescence. Specific deficiencies are noted below:

North Section (Widened Section):
- Adjacent to the longitudinal joint over the Northbound lane of Summer Street, there is a 7' long x up to 10" wide area of delamination with minor edge spalling (up to 1" deep), dampness and rust staining **(Photo 6)**.

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REMARKS

- The north fascia has a 3" diameter x 1/2" deep collision chip-out above the Southbound lane of Summer Street **(Photo 7)**.

South Section (Original Section):
- The underside of the south deck overhang has several areas of delamination and minor spalling, up to 6" diameter x 1" deep with exposed rusted rebar **(Photo 8)**.

- The south fascia, near the West Abutment/Frame Leg, has a 6' long x full height area of horizontal hairline cracking with efflorescence.

Item 59.5 - Spandrel Walls
The south spandrel wall has random areas of minor honeycombing over the northbound lane.

Near the abutment/frame legs, there are a few random horizontal hairline cracks with efflorescence.

Item 59.14 - Member Alignment
Along the north longitudinal joint, near mid-span, the north section of the frame slab (widened section) is 1" lower than the south section **(Photo 9)**.

SuperStructure Collision Notes
See Item 59.1 - Rigid Frame.

ITEM 60 - SUBSTRUCTURE

Item 60.1 - Abutments
Item 60.1.d - Breastwalls
The breastwalls/frame legs have a few random vertical hairline cracks some spalls/pop outs, hollow sounding areas, and map cracking. Specific deficiencies for each abutment follow:

West Abutment:

South Section (Original Section):
- There are scattered pop-outs, up to 3" in diameter by 1/4" deep.

North Section (Widened Section):
- In the architectural striations near the joint, there are two spalls measuring 2' high x 3" long x 2" deep and 5' high x 3" long x 2" deep; both with exposed rebar **(Photo 10)**.

- At the striations near the north end, there are two 1' high x up to 2" wide x 1" deep spalls.

- At 14' from the north end, there is a full height x up to 1/16" wide vertical crack.

East Abutment:

South Section (Original Section):
- Between the architectural striations and the longitudinal joint, there is an 8" high x 2" long x 1" deep spall.

North Section (Widened Section):
- Between the architectural striations and the joint, above the horizontal groove, there is a 2' diameter area of hairline map cracking.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W7**	**L-19-007**	**L19007-2W7-DOT-NBI**	**MAY 27, 2025**

REMARKS

Item 60.1.e - Wingwalls
Both wingwalls exhibit several random vertical hairline cracks with efflorescence.

The northeast wingwall, near the top, has a 1' diameter x up to 4" deep spall.

TRAFFIC SAFETY

Item 36a - Bridge Railing
The bridge railing consists of a reinforced concrete parapet along the north edge of the roadway and a reinforced concrete median barrier along the south edge of the bridge. The parapets do not conform to current MASH criteria.

Refer to Items 58.7 - Parapets for condition remarks.

Item 36b - Transitions
Both north transitions consist of thrie-beam guardrail with timber posts and spacers bolted to the face of the parapet.

The southeast approach guardrail / transition consists of a continuous concrete median barrier. The concrete median barrier ends at the west end of the bridge (there is another concrete barrier along the ST-128 NB side of the median. The transitions do not conform to MASH standards.

The southeast approach median barrier is settled 2-1/2" adjacent to the bridge.

Item 36c - Approach Guardrail
Both north approach guardrails consist of w-beam guardrail with steel posts and plastic spacers.

The southeast approach guardrail / transition consists of a continuous concrete median barrier. The concrete median barrier ends at the west end of the bridge (there is another concrete barrier along the ST-128 NB side of the median).

Specific deficiencies are noted below:

- The southeast approach median barrier is settled up to 2-1/2".

Item 36d - Approach Guardrail Ends
The approach guardrails and median barrier continue well past the approach limits. As such, no guardrail ends are necessary.

Sketch / Photo Log
Sketch 1 : Location Map.
Sketch 2 : Orientation Plan.
Sketch 3 : Bridge Elevation.
Sketch 4 : Median Framing Plan.
Photo 1 : Beam 2 at West Abutment, bottom end of the web has an area of 100% section loss
Photo 2 : West Abutment backwall, behind Beam 1, spall
Photo 3 : North coping, mid-span, spall with exposed rusted rebar
Photo 4 : Median barrier, near the east end, has a spall with exposed rebar along the bottom
Photo 5 : North railing, areas of moderate to heavy surface rust
Photo 6 : Longitudinal joint over the Northbound lane, area of delamination with minor edge spalling, dampness and rust staining

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W7**	**L-19-007**	**L19007-2W7-DOT-NBI**	**MAY 27, 2025**

REMARKS

Photo 7 : North fascia has a collision chip-out above the southbound lane

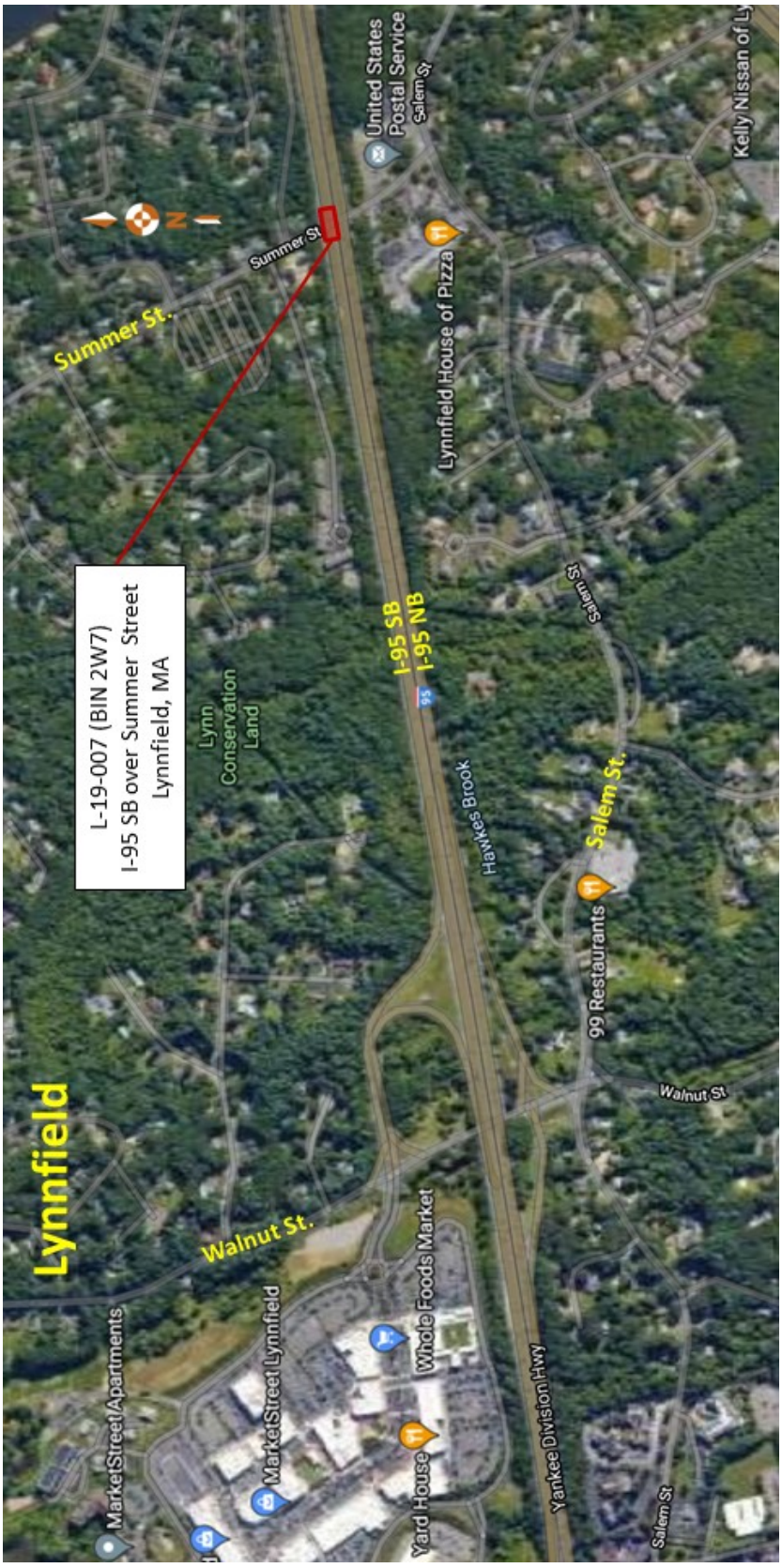
Photo 8 : South deck overhang, several areas of delamination and minor spalling with exposed rusted rebar

Photo 9 : Along the north longitudinal joint, near mid-span, the north section of the frame slab (widened section) is lower than the south section

Photo 10 : West Abutment, two spalls both with exposed rebar

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2W7	L-19-007	L19007-2W7-DOT-NBI	MAY 27, 2025

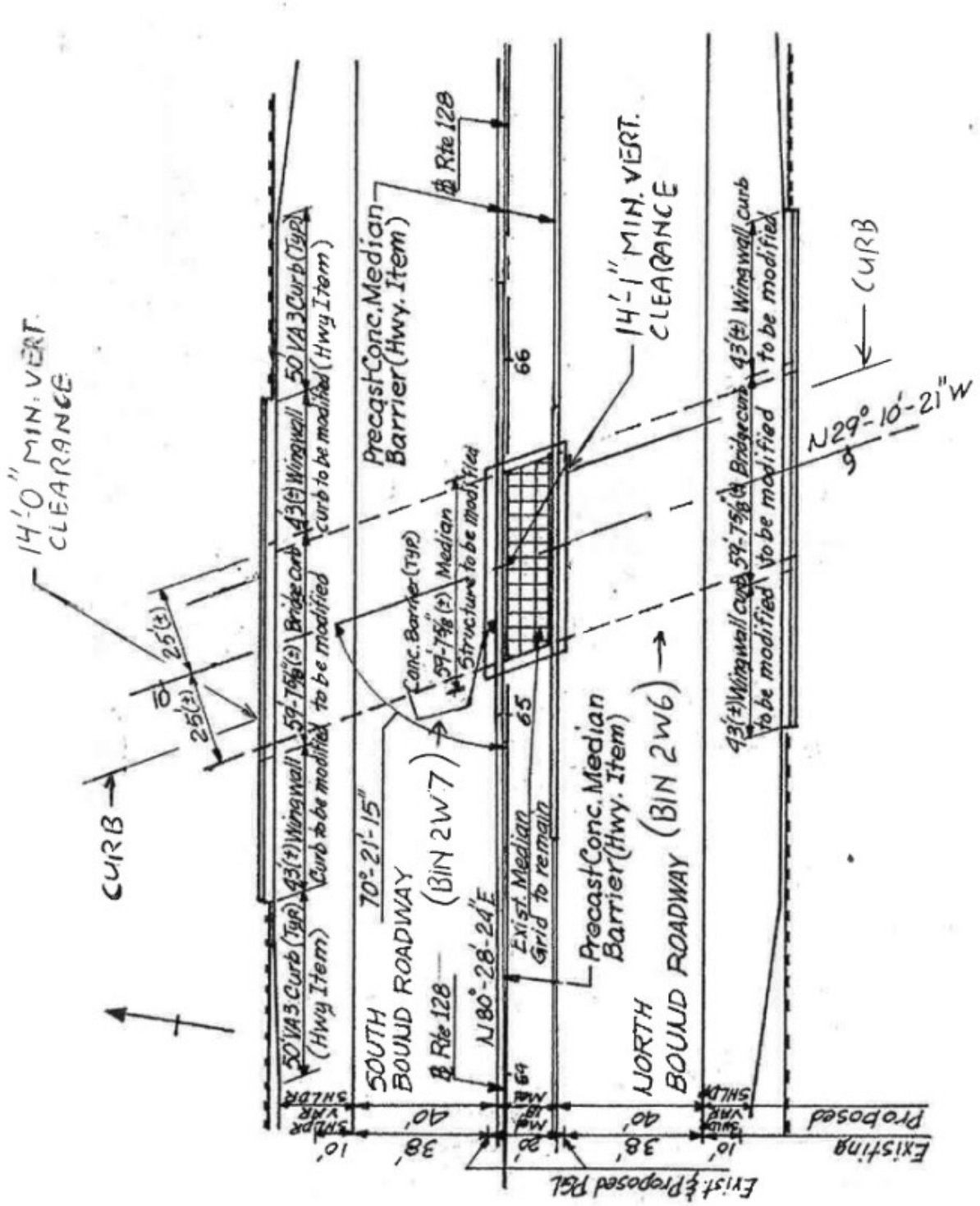
SKETCHES



Sketch 1: Location Map.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2W7	L-19-007	L19007-2W7-DOT-NBI	MAY 27, 2025

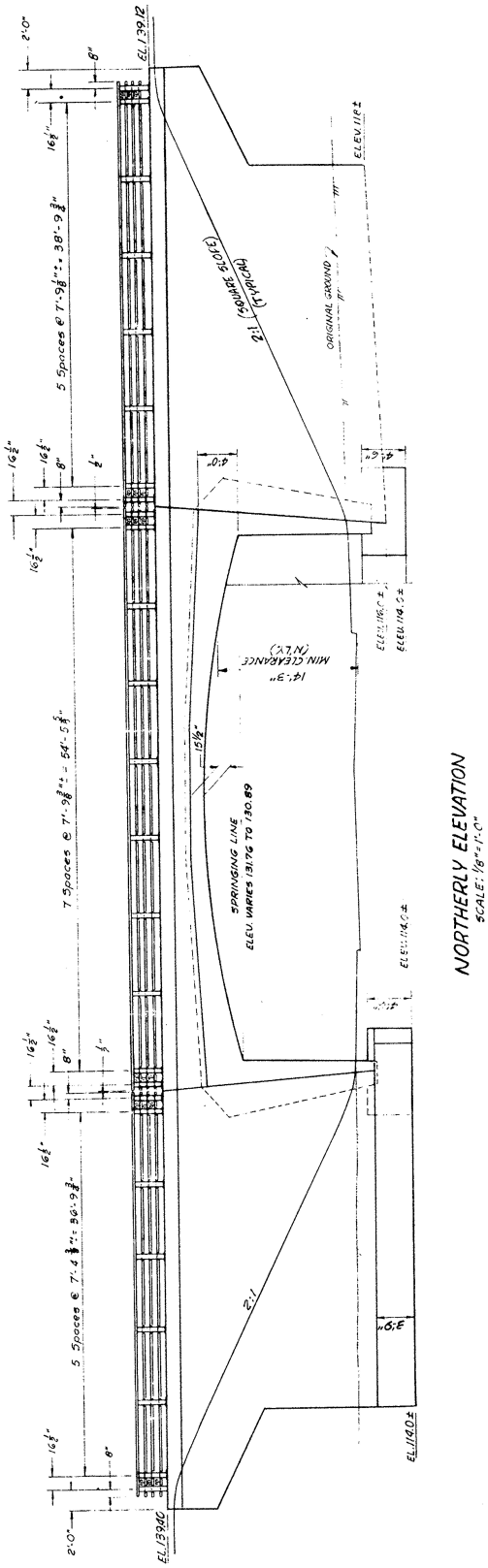
SKETCHES



Sketch 2: Orientation Plan.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W7**	**L-19-007**	**L19007-2W7-DOT-NBI**	**MAY 27, 2025**

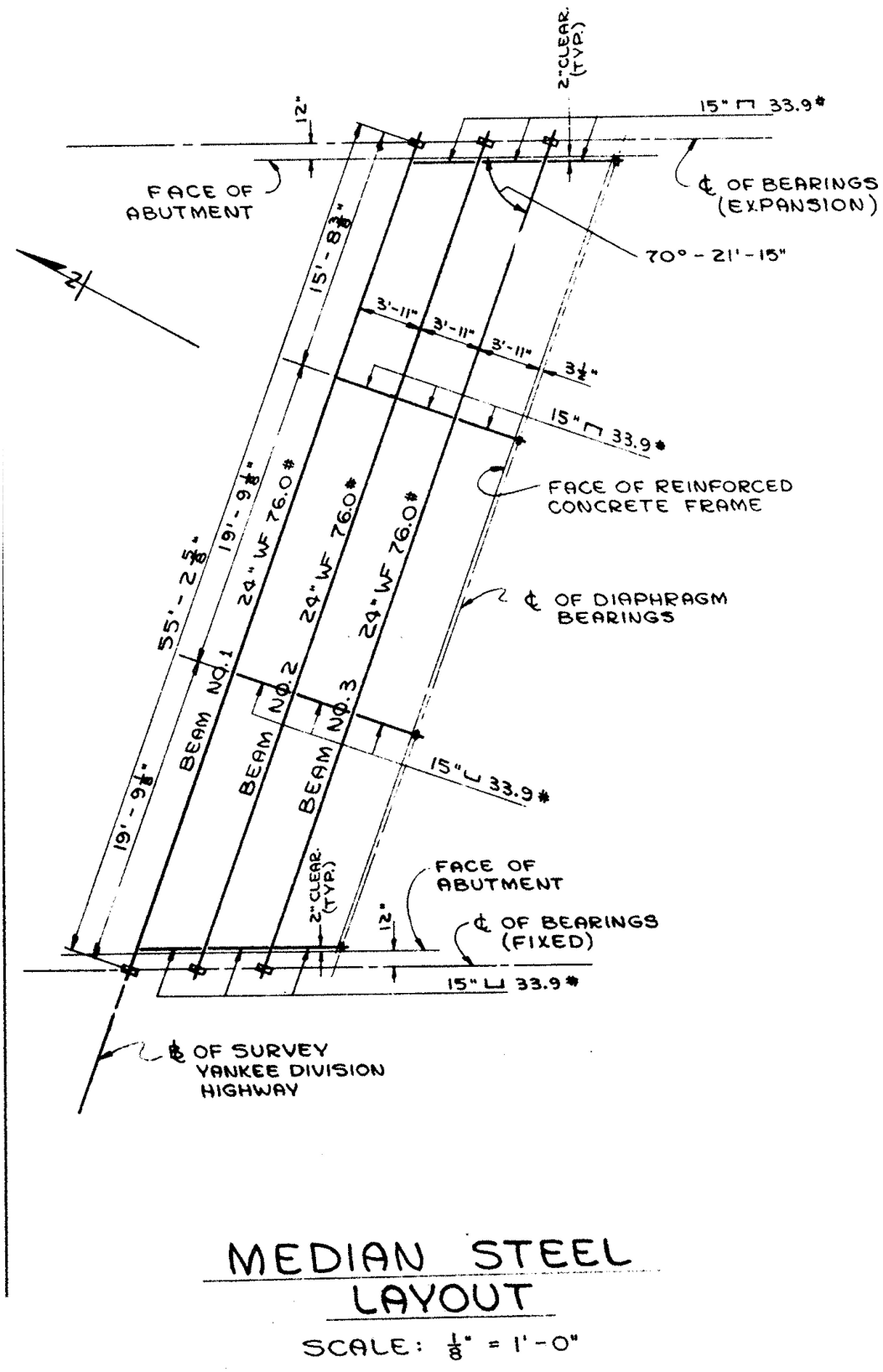
SKETCHES



Sketch 3: Bridge Elevation.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2W7	L-19-007	L19007-2W7-DOT-NBI	MAY 27, 2025

SKETCHES



Sketch 4: Median Framing Plan.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2W7	L-19-007	L19007-2W7-DOT-NBI	MAY 27, 2025

PHOTOS



Photo 1: **Beam 2 at West Abutment, bottom end of the web has an area of 100% section loss**



Photo 2: **West Abutment backwall, behind Beam 1, spall**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2W7	L-19-007	L19007-2W7-DOT-NBI	MAY 27, 2025

PHOTOS



Photo 3: North coping, mid-span, spall with exposed rusted rebar



Photo 4: Median barrier, near the east end, has a spall with exposed rebar along the bottom

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2W7	L-19-007	L19007-2W7-DOT-NBI	MAY 27, 2025

PHOTOS



Photo 5: North railing, areas of moderate to heavy surface rust

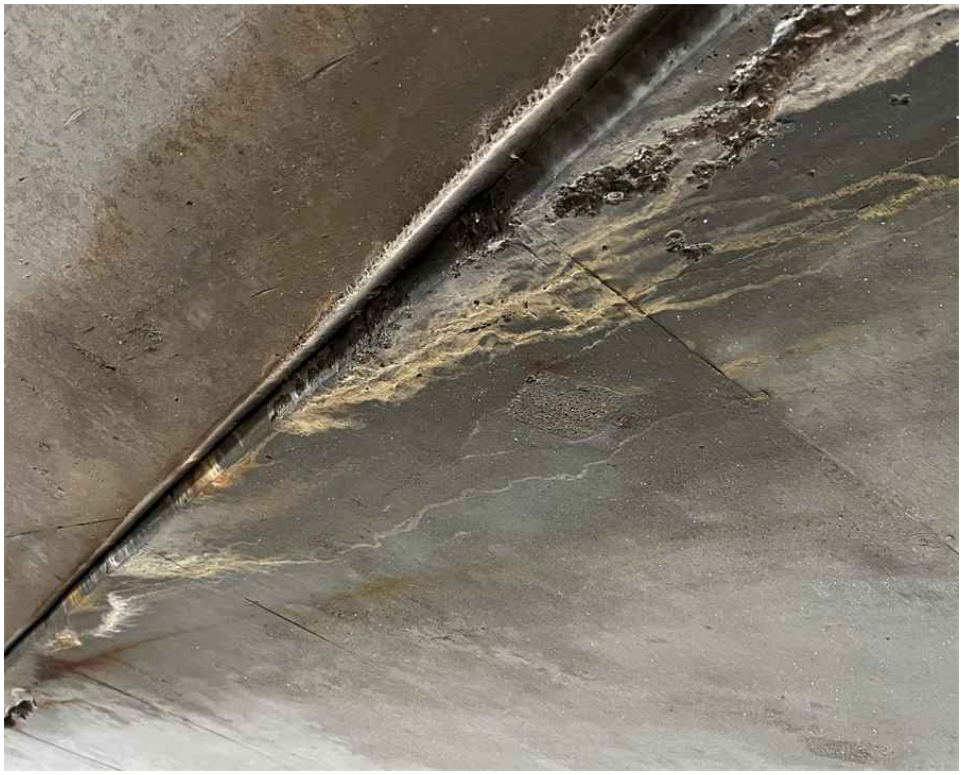


Photo 6: Longitudinal joint over the Northbound lane, area of delamination with minor edge spalling, dampness and rust staining

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W7**	**L-19-007**	**L19007-2W7-DOT-NBI**	**MAY 27, 2025**

PHOTOS



Photo 7: **North fascia has a collision chip-out above the southbound lane**



Photo 8: **South deck overhang, several areas of delamination and minor spalling with exposed rusted rebar**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2W7	L-19-007	L19007-2W7-DOT-NBI	MAY 27, 2025

PHOTOS



Photo 9: **Along the north longitudinal joint, near mid-span, the north section of the frame slab (widened section) is lower than the south section**



Photo 10: **West Abutment, two spalls both with exposed rebar**

National Bridge Element Inspection

BDEPT# **L-19-007**
B.I.N. **2W7**
Item 8 **L19007-2W7-DOT-NBI**
Span Group **1**
Town **Lynnfield**
District **4**

Date **05/27/2025**
District Bridge Inspection Eng'r **Joseph Dideo**
Inspecting Agency **Mass. Highway Dept.**
Team Leader **Daniel Suarez**
Team Member(s) **Timothy P. Durgin**

El #	Element Name	Units	Env.	Total Q.	% or Q	State 1	State 2	State 3	State 4
38	**Re Concrete Slab**	sq feet	2	4,063.000	☐ %	4,043.000	20.000		
Notes :									
> 1080	*Delamination/Spall/Patched Area*	sq feet	2	10.000	☐ %		10.000		
Notes :									
> 1120	*Efflorescence/Rust Staining*	sq feet	2	10.000	☐ %		10.000		
Notes :									
> 510	Wearing Surfaces	sq feet	2	3,698.000	☐ %	3,668.000	30.000		
Notes :									
215	**Re Conc Abutment**	feet	2	136.000	☐ %	108.000	28.000		
Notes :									
> 1080	*Delamination/Spall/Patched Area*	feet	2	10.000	☐ %		10.000		
Notes :									
> 1120	*Efflorescence/Rust Staining*	feet	2	6.000	☐ %		6.000		
Notes :									
> 1130	*Cracking (RC and Other)*	feet	2	12.000	☐ %		12.000		
Notes :									
330	**Metal Bridge Railing**	feet	2	64.000	☐ %			64.000	
Notes :									
> 1000	*Corrosion*	feet	2	64.000	☐ %			64.000	
Notes :									
331	**Re Conc Bridge Railing**	feet	2	127.000	☐ %	112.000	10.000	5.000	
Notes :									
> 1080	*Delamination/Spall/Patched Area*	feet	2	15.000	☐ %		10.000	5.000	
Notes :									

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STRUCTURES INSPECTION FIELD REPORT

ROUTINE INSPECTION

2-DIST	B.I.N.	BR. DEPT. NO.
04	2FD	L-19-011

CITY/TOWN	8.-STRUCTURE NO.	11-Kilo. POINT	41-STATUS	90-ROUTINE INSP. DATE
LYNNFIELD	L19011-2FD-DOT-NBI	095.126	A:OPEN	DEC 16, 2024

07-FACILITY CARRIED	MEMORIAL NAME/LOCAL NAME	27-YR BUILT	106-YR REBUILT	YR REHAB'D (NON 106)
I 95 /ST128		1948	1959	0000

06-FEATURES INTERSECTED	26-FUNCTIONAL CLASS	DIST. BRIDGE INSPECTION ENGINEER J. Dideo
HWY MAIN ST	Urban Interstate	

43-STRUCTURE TYPE	22-OWNER	21-MAINTAINER	TEAM LEADER P. Burke
107 : Concrete Frame	State Highway Agency	State Highway Agency	

107-DECK TYPE	WEATHER	TEMP. (air)	TEAM MEMBERS
N : Not applicable	Cloudy	3°C	B. RAJBHANDARI

ITEM 58 — DECK: N

		DEF
1.Wearing Surface	7	-
2.Deck Condition	N	-
3.Stay in Place Forms	N	-
4.Curbs	7	-
5.Median	7	-
6.Sidewalks	N	-
7.Parapets	6	M-P
8.Railing	6	M-P
9.Anti Missile Fence	N	-
10.Drainage System	N	-
11.Lighting Standards	N	-
12.Utilities	N	-
13.Deck Joints	N	-
14.	N	-
15.	N	-
16.	N	-

CURB REVEAL (In millimeters)	N	S
	25	50

APPROACHES

		DEF
a. Appr. Pavement Condition	7	-
b. Appr. Roadway Settlement	8	-
c. Appr. Sidewalk Settlement	N	-
d.	N	-

OVERHEAD SIGNS (Attached to bridge) (Y/N): N

		DEF
a. Condition of Welds	N	-
b. Condition of Bolts	N	-
c. Condition of Signs	N	-

ITEM 59 — SUPERSTRUCTURE: 6

			DEF
1.Stringers		N	-
2.Floorbeams		N	-
3.Floor System Bracing		N	-
4.Girders or Beams		N	-
5.Trusses - General		N	-
a. Upper Chords	N		-
b. Lower Chords	N		-
c. Web Members	N		-
d. Lateral Bracing	N		-
e. Sway Bracings	N		-
f. Portals	N		-
g. End Posts	N		-
6.Pin & Hangers		N	-
7.Conn Plt's, Gussets & Angles		N	-
8.Cover Plates		N	-
9.Bearing Devices		N	-
10.Diaphragms/Cross Frames		N	-
11.Rivets & Bolts		N	-
12.Welds		N	-
13.Member Alignment		8	-
14.Paint/Coating		N	-
15.Concrete Frame		6	M-P

Year Painted	N

COLLISION DAMAGE: *Please explain*
None ( ) Minor (X) Moderate ( ) Severe ( )

LOAD DEFLECTION: *Please explain*
None (X) Minor ( ) Moderate ( ) Severe ( )

LOAD VIBRATION: *Please explain*
None (X) Minor ( ) Moderate ( ) Severe ( )

Any Fracture Critical Member: **(Y/N)** N

Any Cracks: **(Y/N)** N

ITEM 60 — SUBSTRUCTURE: 6

	Dive	Cur		DEF
1. Abutments			6	
a. Pedestals	N	N		-
b. Bridge Seats	N	N		-
c. Backwalls	N	N		-
d. Breastwalls	N	6		M-P
e. Wingwalls	N	6		M-P
f. Slope Paving/Rip-Rap	N	N		-
g. Pointing	N	N		-
h. Footings	N	H		-
i. Piles	N	N		-
j. Scour	N	N		-
k. Settlement	N	8		-
l.	N	N		-
m.	N	N		-
2. Piers or Bents			N	
a. Pedestals	N	N		-
b. Caps	N	N		-
c. Columns	N	N		-
d. Stems/Webs/Pierwalls	N	N		-
e. Pointing	N	N		-
f. Footing	N	N		-
g. Piles	N	N		-
h. Scour	N	N		-
i. Settlement	N	N		-
j.	N	N		-
k.	N	N		-
3. Pile Bents			N	
a. Pile Caps	N	N		-
b. Piles	N	N		-
c. Diagonal Bracing	N	N		-
d. Horizontal Bracing	N	N		-
e. Fasteners	N	N		-

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

X=UNKNOWN N=NOT APPLICABLE H=HIDDEN/INACCESSIBLE R=REMOVED

RTN(1)7-96

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2FD	L-19-011	L19011-2FD-DOT-NBI	DEC 16, 2024

ITEM 61 — CHANNEL & CHANNEL PROTECTION

N

	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	-

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

ITEM 36 — *TRAFFIC SAFETY*

	36	COND	DEF
A. Bridge Railing	0	6	M-P
B. Transitions	1	6	M-P
C. Approach Guardrail	1	5	S-A
D. Approach Guardrail Ends	1	N	-

WEIGHT POSTING

Not Applicable X

	H	3	3S2	Single
Actual Posting	N	N	N	N
Recommended Posting	N	N	N	N

Waived Date: 06/16/2009 **EJDMT Date:** 00/00/0000

Signs In Place (Y=Yes,N=No, NR=NotRequired) Legibility/ Visibility	At bridge E	At bridge W	Other Advance E	Other Advance W

CLEARANCE POSTING

Not ☐

	N ft	N in	S ft	S in	meter
Actual Field Measurement	14	5	14	5	4.39
Posted Clearance	13	6	13	6	

Signs In Place (Y=Yes,N=No, NR=Not Required) Legibility/ Visibility	At bridge N	At bridge S	Advance N	Advance S
	Y	Y	NR	NR
	7 / 7	7 / 7	/	/

ACCESSIBILITY (Y/N/P)

	Needed	Used
Lift Bucket	Y	Y
Ladder	N	N
Boat	N	N
Waders	N	N
Inspector 50	N	N
Rigging	N	N
Staging	N	N
Traffic Control	Y	Y
RR Flagger	N	N
Police	P	N
Other:		
	N	N

TOTAL HOURS 12

PLANS (Y/N): N

(V.C.R.) (Y/N): N

TAPE#: _____

List of field tests performed:

RATING

Rating Report (Y/N): Y

Date: 09/01/2008

Inspection data at time of existing rating

I 58: - I 59: **5** I 60: **7** Date : 12/09/2006

Recommend for Rating or Rerating (Y/N): N

If YES please give priority: HIGH ( ) MEDIUM ( ) LOW ( )

REASON: _____

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 stablility. 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].

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LYNNFIELD	**2FD**	**L-19-011**	**L19011-2FD-DOT-NBI**	**DEC 16, 2024**

REMARKS

BRIDGE ORIENTATION

This structure is a single span concrete rigid frame. According to the bridge plans, the approaches are west and east and the elevations are north and south. There are six concrete frame sections that are numbered from north to south **(Sketch 1).**

GENERAL REMARKS

Vertical Clearance

The minimum vertical clearance of 14'-6" was measured at the north end along the west curb **(Sketch 1).** There are two "at bridge" signs that read 13'-6" on either side of the bridge **(Sketch 2 and Photos 1 and 2).**

ITEM 58 - DECK

Item 58.1 - Wearing Surface

There is full width transverse cracking in the wearing surface at both abutments, up to 1/8" wide.

In the middle of the I-93 southbound on-ramp, there is a full length x 1/8" wide longitudinal crack **(Photo 3).**

Item 58.7 - Parapets

The east end of the south parapet has a 1' long x 9" high x 3" deep pop-off spall to the top corner.

The north parapet has minor horizontal hairline cracking and light scaling with efflorescence throughout the inside face **(Photo 4).**

The center median parapet has random hairline vertical cracking, up to full height. The south face has minor scrapes from collision damage.

Item 58.8 - Railing

Both original steel bridge rails have heavy paint peeling with moderate to heavy rust throughout.

North Rail:

The east panel is tilted approximately 1" away from the roadway. The anchor nuts are backed off up to 1/2". There is heavy vine growth throughout the west half.

South Rail:

The east three panels are tilted approximately 3" away from the roadway. The base plates are lifted up to 1" off of the rail base and the anchor nuts are backed off up to 2" **(Photo 5).**

ITEM 59 - SUPERSTRUCTURE

Item 59.15 - Concrete Frame

-There are many repairs throughout the underside of the frame.

-There are several minor scrapes to the underside of the frame near the north end over the southbound lane **(Photo 6).**

-The north coping at the top of the frame has several small shallow spalls with exposed rusted rebar, up to 6" diameter x 1" deep.

-2' from the north edge of frame, there is a spall near midspan, measuring: 1' diameter x 4" deep with exposed rusted rebar **(Photo 7).**

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REMARKS

-20' from the north end over the southbound lane, there is a 1' long x 4" wide x 2" deep pop-off spall with an adjacent hairline crack extending to the west abutment.

-20' from the north end over the northbound lane, there is a 1' diameter x 2" deep pop-off spall.

-24' from the north end over the northbound lane, there is a 1' diameter x 2" deep pop-off spall.

-At the 1st construction joint, there is minor spalling over the west sidewalk, 15' long x up to 3" wide x up to 1" deep **(Photo 8).**

-At the 3rd construction joint, there is heavy leakage and rust staining over both sidewalks **(Photo 9).**

-There are four pop off spalls just north of the 5th construction joint over the northbound lane, 6" diameter x 1" deep with exposed rebar **(Photo 10).**

SuperStructure Collision Notes
See Item 59.15.

ITEM 60 - SUBSTRUCTURE

Item 60.1 - Abutments
Item 60.1.d - Breastwalls
Both breastwalls have areas of minor hairline cracks, efflorescence, and rust stains.

The west wall, at the south end, has an 8" high x 5" wide x 2" deep chip-out near the base.

Item 60.1.e - Wingwalls
All four wingwalls have random hairline vertical cracks, up to full height, some with minor efflorescence **(Photo 11).**

The Northwest wingwall is leaning outward up to 2" at the top with vegetation growth.

TRAFFIC SAFETY

Item 36a - Bridge Railing
There are Jersey barrier parapets in front of the original steel bridge rails. The condition rating of Item 36a is based on Item 58.7. See Items 58.7 and 58.8.

Item 36b - Transitions
All transitions consist of thrie-beam guardrail, flush mounted to the parapets with wooden posts and spacers.

The southwest transition has impact damage with bent thrie-beam and tilted post **(Photo 12).**

The southeast transition has impact damage at the leading end with damaged connection **(Photo 13).**

Item 36c - Approach Guardrail
There is WS beam guardrail at all approaches with steel posts and plastic spacers. There are numerous minor dents at all four corners.

The southeast approach guardrail has impact damage with bend WS beam and one tilted and disconnected post **(Photo 14).**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2FD**	**L-19-011**	**L19011-2FD-DOT-NBI**	**DEC 16, 2024**

REMARKS

Item 36d - Approach Guardrail Ends

The approach guardrail is continuous with (I-95 / ST-128) at all four corners.

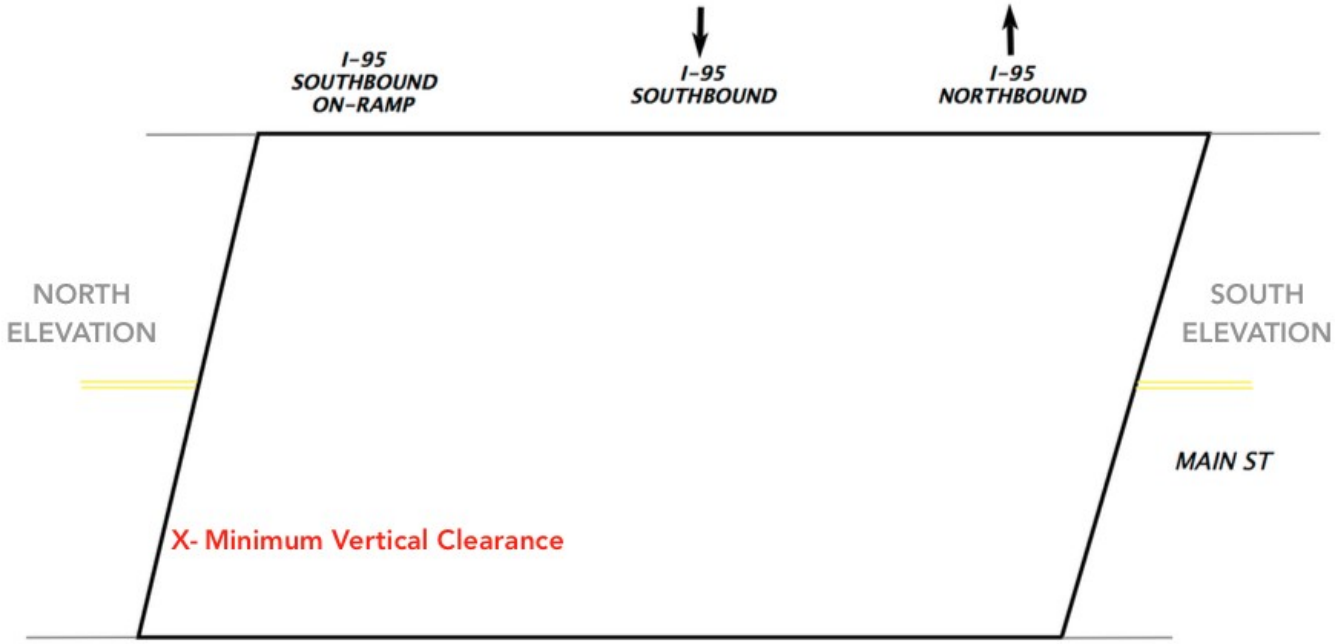
Sketch / Photo Log

Sketch 1 : Plan view with minimum vertical clearance location.
Sketch 2 : Location Map showing location of clearance signs
Photo 1 : South "At Bridge" clearance sign (#1 on Sketch 2).
Photo 2 : North "At Bridge" clearance sign (#2 on Sketch 2).
Photo 3 : Wearing surface with longitudinal crack in the I-95 southbound on-ramp.
Photo 4 : North parapet with minor cracking and light scaling.
Photo 5 : South railing, east end with backed off anchor nuts.
Photo 6 : There are several minor scrapes to the underside of the frame near the north end over the southbound lane.
Photo 7 : Pop-off spall near the north end over the southbound lane.
Photo 8 : Spalling along the 1st joint over the west sidewalk.
Photo 9 : Leakage through the 3rd joint.
Photo 10 : Just north of the 5th construction joint over the northbound roadway with four pop-off spalls.
Photo 11 : Southeast wingwall, full height hairline vertical crack with minor efflorescence.
Photo 12 : Southwest guardrail transition with impact damage and tilted post.
Photo 13 : Southeast guardrail transition with damage.
Photo 14 : Southeast approach guardrail with damage.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2FD	L-19-011	L19011-2FD-DOT-NBI	DEC 16, 2024

SKETCHES

L-19-011 (2FD)
I-95/ST128 OVER MAIN ST
FRAMING PLAN - RIGID FRAME

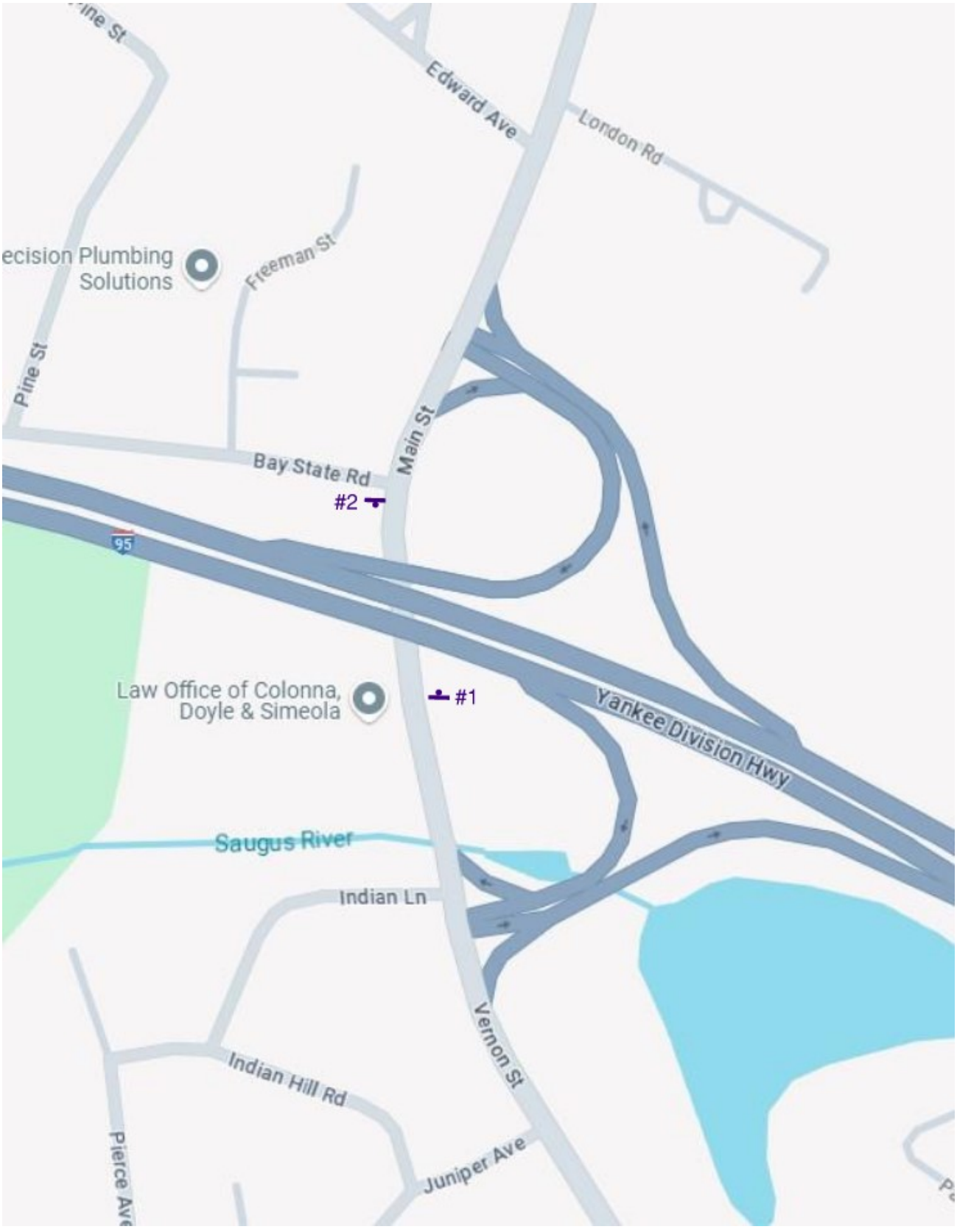


Sketch 1: Plan view with minimum vertical clearance location.

REM.(2)7-96

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2FD	L-19-011	L19011-2FD-DOT-NBI	DEC 16, 2024

SKETCHES



Sketch 2: Location Map showing location of clearance signs

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2FD	L-19-011	L19011-2FD-DOT-NBI	DEC 16, 2024

PHOTOS



Photo 1: South "At Bridge" clearance sign (#1 on Sketch 2).



Photo 2: North "At Bridge" clearance sign (#2 on Sketch 2).

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2FD	L-19-011	L19011-2FD-DOT-NBI	DEC 16, 2024

PHOTOS



Photo 3: **Wearing surface with longitudinal crack in the I-95 southbound on-ramp.**



Photo 4: **North parapet with minor cracking and light scaling.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2FD	L-19-011	L19011-2FD-DOT-NBI	DEC 16, 2024

PHOTOS



Photo 5: **South railing, east end with backed off anchor nuts.**

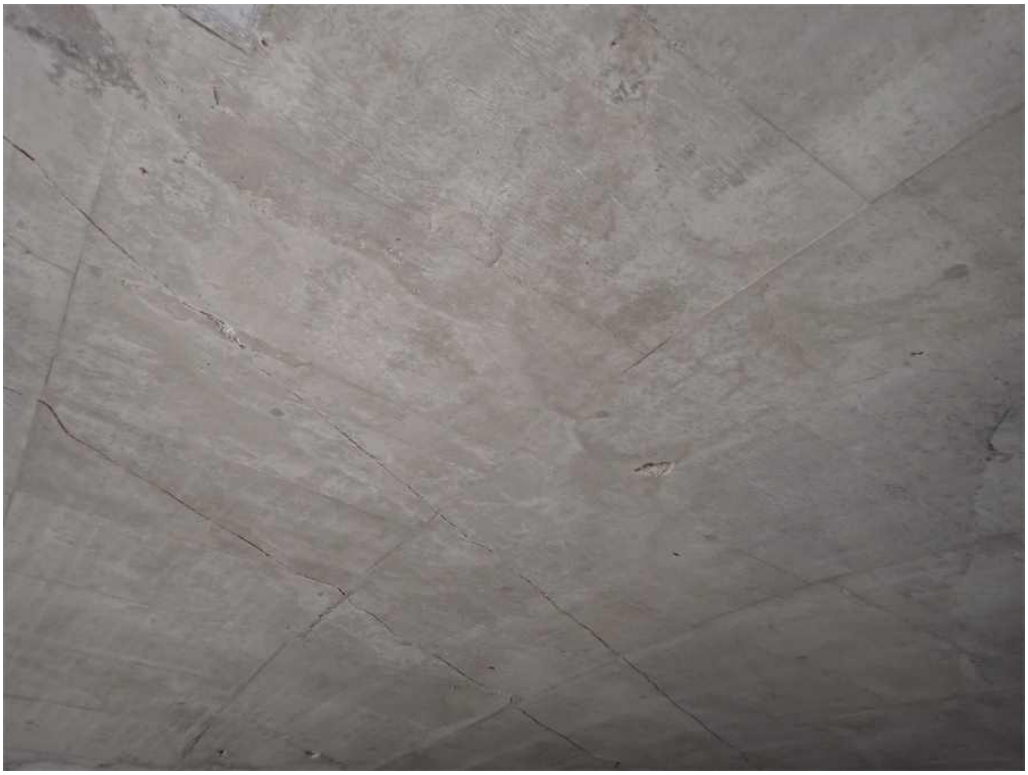


Photo 6: **There are several minor scrapes to the underside of the frame near the north end over the southbound lane.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2FD	L-19-011	L19011-2FD-DOT-NBI	DEC 16, 2024

PHOTOS



Photo 7: **Pop-off spall near the north end over the southbound lane.**



Photo 8: **Spalling along the 1st joint over the west sidewalk.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2FD	L-19-011	L19011-2FD-DOT-NBI	DEC 16, 2024

PHOTOS



Photo 9: **Leakage through the 3rd joint.**



Photo 10: **Just north of the 5th construction joint over the northbound roadway with four pop-off spalls.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2FD	L-19-011	L19011-2FD-DOT-NBI	DEC 16, 2024

PHOTOS



Photo 11: **Southeast wingwall, full height hairline vertical crack with minor efflorescence.**



Photo 12: **Southwest guardrail transition with impact damage and tilted post.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2FD	L-19-011	L19011-2FD-DOT-NBI	DEC 16, 2024

PHOTOS



Photo 13: Southeast guardrail transition with damage.



Photo 14: Southeast approach guardrail with damage.

National Bridge Element Inspection

BDEPT# **L-19-011**
B.I.N. **2FD**
Item 8 **L19011-2FD-DOT-NBI**
Span Group **1**
Town **Lynnfield**
District **4**

Date **12/16/2024**
District Bridge Inspection Eng'r **Joseph Dideo**
Inspecting Agency **Mass. Highway Dept.**
Team Leader **Patrick Burke**
Team Member(s) **Baibhav Rajbhandari**

El #	Element Name	Units	Env.	Total Q.	% or Q	State 1	State 2	State 3	State 4
38	**Re Concrete Slab**	sq feet	2	9,020.000	☐ %	8,624.000	333.000	63.000	
Notes :									
> 1080	*Delamination/Spall/Patched Area*	sq feet	2	369.000	☐ %		328.000	41.000	
Notes :									
> 1120	*Efflorescence/Rust Staining*	sq feet	2	22.000	☐ %			22.000	
Notes :									
> 1130	*Cracking (RC and Other)*	sq feet	2	5.000	☐ %		5.000		
Notes :									
> 7000	*Damage*	sq feet	2	328.000	☐ %		328.000		
Notes :									
> 510	Wearing Surfaces	sq feet	2	7,150.000	☐ %	7,150.000			
Notes :									
215	**Re Conc Abutment**	feet	2	328.000	☐ %	280.000	41.000	7.000	
Notes :									
> 1120	*Efflorescence/Rust Staining*	feet	2	6.000	☐ %			6.000	
Notes :									
> 1130	*Cracking (RC and Other)*	feet	2	41.000	☐ %		41.000		
Notes :									
> 4000	*Settlement*	feet	2	1.000	☐ %			1.000	
Notes :									
321	**Re Conc Approach Slab**	sq feet	2	3,300.000	☐ %	3,300.000			
Notes :									
331	**Re Conc Bridge Railing**	feet	2	165.000	☐ %	158.000		7.000	
Notes :									

National Bridge Element Inspection

BDEPT#	**L-19-011**	Date	**12/16/2024**
B.I.N.	**2FD**	District Bridge Inspection Eng'r	**Joseph Dideo**
Item 8	**L19011-2FD-DOT-NBI**	Inspecting Agency	**Mass. Highway Dept.**
Span Group	**1**	Team Leader	**Patrick Burke**
Town	**Lynnfield**	Team Member(s)	**Baibhav Rajbhandari**
District	**4**		

El #	Element Name	Units	Env.	Total Q.	% or Q	State 1	State 2	State 3	State 4
> 1080	*Delamination/Spall/Patched Area*	feet	2	7.000	☐ %			7.000	
Notes :									

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION

STRUCTURES INSPECTION FIELD REPORT

ROUTINE ARCH INSPECTION

2-DIST	B.I.N.	BR. DEPT. NO.
04	2W4	L-19-004

CITY/TOWN	8.-STRUCTURE NO.	11-Kilo. POINT	41-STATUS	90-ROUTINE INSP. DATE
LYNNFIELD	L19004-2W4-DOT-NBI	098.681	A:OPEN	MAY 12, 2025

07-FACILITY CARRIED	MEMORIAL NAME/LOCAL NAME	27-YR BUILT	106-YR REBUILT	YR REHAB'D (NON 106)
I 95 NB/ST128 NB		1940	1960	0000

06-FEATURES INTERSECTED	26-FUNCTIONAL CLASS	DIST. BRIDGE INSPECTION ENGINEER J. Dideo
HWY WALNUT ST	Urban Interstate	

43-STRUCTURE TYPE	22-OWNER	21-MAINTAINER	TEAM LEADER P. Burke
107 : Concrete Frame	State Highway Agency	State Highway Agency	

107-DECK TYPE	WEATHER	TEMP. (air)	TEAM MEMBERS
N : Not applicable	Clear	16°C	J. HEDLUND

ITEM 58 — DECK: N

		DEF
1. Wearing surface	8	-
2. Deck Condition	N	-
3. Spandrel Fill	H	-
4. Curbs	N	-
5. Median	5	M-P
6. Coping/Rail Base	6	M-P
7. Parapets	6	M-P
8. Railing	6	M-P
9. Anti Missile Fence	N	-
10 Drainage System	N	-
11. Lighting Standards	N	-
12 Utilities	N	-
13 Deck Joints	N	-
14	N	-
15	N	-
16	N	-

CURB REVEAL (In millimeters)	N	S
	85	45

APPROACHES

		DEF
a. Appr. pavement condition	6	M-P
b. Appr. Roadway Settlement	7	-
c. Appr. Sidewalk Settlement	N	-
d.	N	-

OVERHEAD SIGNS (Attached to bridge) (Y/N): N

		DEF
a. Condition of Welds	N	-
b. Condition of Bolts	N	-
c. Condition of Signs	N	-

ITEM 59 — SUPERSTRUCTURE: 6

		DEF
1. Rigid Frame	6	M-P
2. Keystone Area	N	-
3. Stringers	N	-
4. Floorbeams	N	-
5. Spandrel	7	-
6. Spring Lines	7	-
7. Diaphragms/Cross Frames	N	-
8. Conn Plt's, Gussets & Angles	N	-
9. Pin & Hangers	N	-
10 Masonry Joints	N	-
11.Rivets & Bolts	N	-
12 Welds	N	-
13 Deformation/Flattening	7	-
14 Member Alignment	7	-
15 Paint/Coating	N	-
16	N	-

Year Painted	N

COLLISION DAMAGE: *Please explain*
None ( ) Minor (X) Moderate ( ) Severe ( )

LOAD DEFLECTION: *Please explain*
None (X) Minor ( ) Moderate ( ) Severe ( )

LOAD VIBRATION: *Please explain*
None (X) Minor ( ) Moderate ( ) Severe ( )

Any Fracture Critical Member: (Y/N): N

Any Cracks: (Y/N): N

ITEM 60 — SUBSTRUCTURE: 6

	Dive	Cur		DEF
1. Abutments			6	
a. Pedestals	N	N		-
b. Bridge Seats	N	N		-
c. Backwalls	N	N		-
d. Breastwalls	N	6		M-P
e. Wingwalls	N	6		M-P
f. Slope Paving/Rip-Rap	N	N		-
g. Pointing	N	N		-
h. Footings	N	H		-
i. Piles	N	N		-
j. Scour	N	N		-
k. Settlement	N	7		-
l.	N	N		-
m.	N	N		-
2. Piers or Bents			N	
a. Pedestals	N	N		-
b. Caps	N	N		-
c. Columns	N	N		-
d. Stems/Webs/Pierwalls	N	N		-
e. Pointing	N	N		-
f. Footing	N	N		-
g. Piles	N	N		-
h. Scour	N	N		-
i. Settlement	N	N		-
j.	N	N		-
k.	N	N		-
3. Pile Bents			N	
a. Pile Caps	N	N		-
b. Piles	N	N		-
c. Diagonal Bracing	N	N		-
d. Horizontal Bracing	N	N		-
e. Fasteners	N	N		-

UNDERMINING (Y/N) If YES please explain: N

COLLISION DAMAGE:
None (X) Minor ( ) Moderate ( ) Severe ( )

I-60 (Dive Report): N *I-60 (This Report):* 6

93B-U/W (DIVE) Insp 00/00/0000

X=UNKNOWN N=NOT APPLICABLE H=HIDDEN/INACCESSIBLE R=REMOVED

RTN(1)7-96

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2W4	L-19-004	L19004-2W4-DOT-NBI	MAY 12, 2025

ITEM 61 — CHANNEL & CHANNEL PROTECTION

N

	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	-

STREAM FLOW VELOCITY:

Tidal ( ) High ( ) Moderate ( ) Low ( ) None ( )

ITEM 61 (Dive Report): N *ITEM 61 (This Report):* N

93b-U/W INSP. DATE: 00/00/0000

ITEM 36 — *TRAFFIC SAFETY*

	36	COND	DEF
A. Bridge Railing	0	6	M-P
B. Transitions	0	6	M-P
C. Approach Guardrail	0	7	-
D. Approach Guardrail Ends	1	N	-

WEIGHT POSTING

Not Applicable X

	H	3	3S2	Single
Actual Posting	N	N	N	N
Recommended Posting	N	N	N	N

Waived Date: 00/00/0000 EJDMT Date: 00/00/0000

Signs In Place (Y=Yes,N=No, NR=NotRequired) Legibility/ Visibility	At bridge E	At bridge W	Other Advance E	Other Advance W

CLEARANCE POSTING

Not X

	N ft	N in	S ft	S in	meter
Actual Field Measurement	14	9	14	11	4.49
Posted Clearance		0		0	

Signs In Place (Y=Yes,N=No, NR=Not Required) Legibility/ Visibility	At bridge N	At bridge S	Advance N	Advance S

ACCESSIBILITY (Y/N/P)

	Needed	Used
Lift Bucket	Y	Y
Ladder	N	N
Boat	N	N
Waders	N	N
Inspector 50	N	N
Rigging	N	N
Staging	N	N
Traffic Control	Y	Y
RR Flagger	N	N
Police	Y	Y
Other:		
	N	N

TOTAL HOURS 40

PLANS (Y/N): Y

(V.C.R.) (Y/N): N

TAPE#: _____

List of field tests performed:
Visual & Hands-On

RATING

Rating Report (Y/N): Y

Date: 08/01/2008

Inspection data at time of existing rating

I 58: - I 59: 6 I 60: 6 Date : 05/07/2007

Recommend for Rating or Rerating (Y/N): N

If YES please give priority: HIGH ( ) MEDIUM ( ) LOW ( )

REASON: _____

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 stablility. 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	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W4**	**L-19-004**	**L19004-2W4-DOT-NBI**	**MAY 12, 2025**

REMARKS

BRIDGE ORIENTATION

Bridge L-19-004 (2W4) is a single span structure with a west to east orientation that carries Interstate 95/ST 128 Northbound over Walnut Street in the Town of Lynnfield. Based on the bridge elevations being designated as southerly and northerly on the drawings the abutments/frame legs and approaches are labeled as west and east which is also consistent with previous inspection reports. This bridge is located at mile marker 61.319. For general orientation, **refer to Sketches 1 through 4.**

The bridge is a reinforced concrete rigid frame supported by concrete abutments/frame legs on spread footings which was widened along the south fascia in 1960. All nomenclature is consistent with previous inspection reports and the original design plans.

GENERAL REMARKS

VERTICAL CLEARANCE

There are overhead power lines spanning the I-95/ST128 northbound roadway directly over this bridge. The minimum vertical over-clearance was measured to be 21'-6" in the left lane and to be 23'-11" in the right lane.

The minimum vertical clearance was measured as 14'-9" under both bridge fascias at the shoulder line in front of the East Abutment/Frame Leg **(Sketch 2)**.

ITEM 58 - DECK

Item 58.1 - Wearing surface

There is a new bituminous concrete wearing surface since the last inspection **(Photo 1).**

Item 58.5 - Median

There is a median between this bridge and the adjacent bridge, Structure L-19-004 (BIN 2W5), that consists of a painted open steel grating supported by four painted rolled steel beams with painted steel bearings seated on reinforced concrete abutments. The beams are numbered 1 to 4 from north to south **(refer to Sketch 4)**.

Median Grating:

The painted open steel grating typically has light rust throughout approximately 50% of its painted surface. Additionally, between Beams 2 & 3, at the East Abutment there are a total of four fractured longitudinal bars (two in BIN 2W4 and two in BIN 2W5).

Median Steel Beams:

The median beams for this bridge (BIN 2W4) consists of Beams 3 & 4. The painted rolled steel beams typically have flaking paint to the bottom and top flanges and areas of laminated rust throughout the webs **(Photo 2)**.

Median Steel Bearings:

There are painted steel median bearings at both ends of the median beams. The bearings for median Beams 3 & 4 typically have flaking paint with moderate to heavy rust throughout.

Item 58.6 - Coping/Rail Base

There is a concrete coping under the Type B painted steel railing along the south side of the bridge.

The top face of the coping has scattered small areas of moderate scaling. The exterior of the coping has scattered areas of minor honeycombing up to 1/4" deep, minor scaling, and some random hairline cracking.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W4**	**L-19-004**	**L19004-2W4-DOT-NBI**	**MAY 12, 2025**

REMARKS

Item 58.7 - Parapets
The parapets have random vertical hairline cracks, some with light efflorescence **(Photo 3)**. There is scattered minor vegetation growth along the parapet bases. Specific comments follow:

- North Parapet, at the West Abutment, south face: at the base there is a minor spall that is 5" diameter x 1/2" deep.
- North Parapet, at the East Abutment, south face: at the base there is a hollow sounding area that is 4" high x 1'-6" long with minor edge spalling up to 2" deep.
- South Parapet, at the west end, north face: at the base there is a scrape that is 8'-0" long.
- South Parapet, at the east 1/4 point, north face: there are several minor pop-outs that are up to 2" long x 8" high by 3/8" deep.

Item 58.8 - Railing
The steel railing typically has a failed paint surface to approximately 90% of the surface area with exposed bare metal. The railing typically has moderate to heavy rust throughout with some areas of laminated rust on the posts **(Photo 4)**. Additionally, scattered anchor bolts and nuts have mushrooming with 10% section loss. Specific deficiencies beyond typical follow:

- South Rail, at the west 1/4 Point (4th Post from the west end): the post has a dent that is 4" high x 1/2" out of plane.
- South Rail, at the 2nd Post from the east end: the post has a tear that is 3" long at the top.
- South Rail, at the 1st Post from the east end: the upper middle rail is bent upwards to the end 4 1/2" length.

APPROACHES

Approaches a - Appr. pavement condition
In the travel lanes along both approaches, there are random up to 1/8" wide transverse and longitudinal cracks.

Approaches b - Appr. Roadway Settlement
Both approach wearing surfaces have some minor wheel rutting in the travel lanes.

ITEM 59 - SUPERSTRUCTURE

Item 59.1 - Rigid Frame
The frame consists of two sections, the north section built in 1940 and the south extended section built in 1960.

South Section (Widened Section):
- Adjacent to the south fascia, at mid-span: there is an area of hairline map cracks that is 15' long x 25' wide.
- Adjacent to the south fascia, between 6' and 12' from the East Abutment/frame leg (over Walnut St. northbound lane & shoulder): there are several vehicular collision scrapes over a 30' length **(Photo 5)**.
- At 6' from the south fascia, over Walnut St. northbound lane: there is a minor pop out that is 1" long x 4" wide x 1/4" deep.
- Along the full length of the longitudinal joint: the south edge of the frame slab (widened section) is 1/2" lower than the north edge (original section).

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W4**	**L-19-004**	**L19004-2W4-DOT-NBI**	**MAY 12, 2025**

REMARKS

- Along the longitudinal joint, at 9' from the West Abutment/frame leg: there are two areas of shallow rebar exposed that are up to 3" diameter x 1/4" deep.
- Along the longitudinal joint, at mid-span: there is an area of hairline map cracks that is 20' long x 5' wide.

North Section (Original Section):

- Adjacent to the north fascia, near mid-span (over Walnut St. southbound left turn lane): there is a spall that is 1' diameter x 3" deep **(Photo 6)**.
- Adjacent to the north fascia, over Walnut St. northbound lane & shoulder: there are two minor pop outs that are up to 4" diameter x 1/2" deep.
- Near the north fascia, at 7' from the West Abutment/frame leg (over Walnut St. southbound travel lane): there are two vehicular collision scrapes over a 14' length **(Photo 7)**.
- At 20' from the north fascia, near mid-span (over Walnut St. southbound left turn lane): there is a spall that is 5" long x 10" wide x 1" deep with exposed rebar.

Item 59.5 - Spandrel
The south spandrel wall has some random hairline cracks.

Item 59.6 - Spring Lines
The spring line is the intersection/cold joint between the frame slab and the abutments/frame legs. There is an isolated spall and a hollow sounding area along the spring line as follows:

South Section (Widened Section):

- West Abutment/frame leg spring line, adjacent to the longitudinal joint, at the end of the frame slab: there is a minor spall that is 4" diameter x 1/2" deep.
- East Abutment/frame leg spring line, adjacent to the longitudinal joint, at the top of the frame leg: there is a hollow sounding area that is 1'-5" long x 3'-10" high **(Photo 8)**.

Item 59.13 - Deformation/Flattening
Refer to Item 59.1 - Rigid Frame for specific comments.

Item 59.14 - Member Alignment
Refer to Item 59.1 - Rigid Frame for specific comments.

SuperStructure Collision Notes
The underside of the frame slab has isolated locations of vehicular collision scrapes over Walnut St. northbound & southbound travel lanes.

For specific comments, refer to Item 59.1 - Rigid Frame.

ITEM 60 - SUBSTRUCTURE

Item 60.1 - Abutments
Item 60.1.d - Breastwalls
The abutment breastwalls/frame legs have random vertical hairline cracks, some spalls/pop outs, hollow sounding areas, and map cracking. Specific deficiencies for each abutment follow:

WEST ABUTMENT:

South Section (Widened Section):

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W4**	**L-19-004**	**L19004-2W4-DOT-NBI**	**MAY 12, 2025**

REMARKS

- At 10' from the south fascia, between the Architectural Striations, below the horizontal groove: there is a minor spall that is 8" diameter x 3/4" deep.
- At 15' from the south fascia, between the Architectural Striations, below the horizontal groove: there is a hollow sounding area that is 8' long x 3' high.

North Section (Original Section):

- At 16' from the Longitudinal Joint, at mid-height: there is a pop out that is 4" diameter x 1 1/2" deep.

EAST ABUTMENT:

South Section (Widened Section):

- At the south fascia, between the south face of the abutment/frame leg and the southeast wingwall: there is minor vine growth that is full height.
- Adjacent to the south fascia, above the sidewalk: there is a spall that is 2' long x 10" high x 1" deep with exposed rebar and an adjacent hollow sounding area that is 10" long x 6" high **(Photo 9)**.
- Between the South Architectural Striation and the Longitudinal Joint, above the sidewalk: there is a hollow sounding area that is 23' long x 1'-3" high with edge spalling that is 10' long x 2" high x 1" deep.

North Section (Original Section):

- At 6' from the Longitudinal Joint, at mid-height: there is a pop out that is 3" diameter x 1 1/2" deep.
- At 8' from the Longitudinal Joint: at mid-height there is a pop out that is 3" diameter x 1 1/2" deep. Additionally, above the sidewalk there is a minor pop out that is 3" diameter x 1" deep.
- At 16' from the Longitudinal Joint, at mid-height: there is a pop out that is 3" diameter x 1 1/2" deep.

Item 60.1.e - Wingwalls

There is a reinforced concrete wingwall at the south end of both abutments/frame legs. Specific deficiencies follow:

SOUTHWEST WINGWALL:

- There is heavy vegetation growth adjacent to the wingwall.
- Near the abutment/frame leg, at mid-height: there is a minor spall that is 4" long x 2' high x 1/2" deep with exposed rebar.

SOUTHEAST WINGWALL:

- Near the abutment/frame leg: below mid-height there are five minor pop-out spalls that are up to 6" long x 2" high x 1/4" deep with exposed rebar **(Photo 10)**.

Item 60.1.k - Settlement

Refer to Item 59.1 - Rigid Frame for specific comments.

TRAFFIC SAFETY

Item 36a - Bridge Railing

The traffic safety features for this bridge consists of the 2'-8" high safety shaped reinforced concrete parapets on both sides of the bridge and the Type B steel bridge railing on a concrete coping/rail base along the south side of the bridge. The bridge parapet barriers conform to MASH criteria.

For specific deficiencies, refer to Items 58.7 and 58.8.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W4**	**L-19-004**	**L19004-2W4-DOT-NBI**	**MAY 12, 2025**

REMARKS

Item 36b - Transitions

The transitions consist of the following:

- The Southwest and Southeast transitions consist of a thrie-beam guardrail with Schedule 40 crush tubes, timber posts, and timber blockouts. The thrie-beams and crush tubes are anchored to the face of the parapets. These conform to MASH criteria.
- The Northwest transition consist of a continuation of the bridge parapets, however, the transition area approach parapets are 2'-5" high and are too low to conform with MASH criteria.
- There is no Northeast transition as the north bridge parapet abruptly ends at the east abutment. This is at the trailing end. It should be noted that the adjacent bridge, BIN 2W5, has a parapet beyond the median area.

Specific deficiencies with each transition area follows:

SOUTHEAST TRANSITION:

- At the 4th post from the bridge parapet, the thrie-beam guardrail has a tear that is 4" long by 1" high at the top.

Item 36c - Approach Guardrail

The approach guardrails consist of the following:

- The Southwest and Southeast approach guardrails consist of a Type SS guardrail with steel posts and plastic blockouts. These conform to MASH criteria.
- The Northwest approach barrier consist of a continuation of the bridge parapets, however, the approach barriers beyond the transition area are 2'-5" high and are too low to conform with MASH criteria.
- There is no Northeast approach barrier as the north bridge parapet abruptly ends at the east abutment. This is at the trailing end. It should be noted that the adjacent bridge, BIN 2W5, has a parapet beyond the median area.

Specific deficiencies with each transition area follows:

SOUTHWEST APPROACH:

- At the transition, the guardrail has heavy collision damage for 25' long with four bent post **(Photo 11).**

Item 36d - Approach Guardrail Ends

The guardrails and median barrier continue well past the approach limits.

Sketch / Photo Log

Sketch 1 : Location Map
Sketch 2 : Orientation Plan
Sketch 3 : Bridge Elevation
Sketch 4 : Median Framing Plan
Photo 1 : New wearing surface since the last routine.
Photo 2 : Median beams typically have flaking paint to the bottom and top flanges with laminating rust throughout the webs.
Photo 3 : Parapets have random vertical hairline cracks, some with light efflorescence
Photo 4 : The railing typically has moderate to heavy rust throughout with some areas of laminated rust on the posts.
Photo 5 : Near East Abutment/frame leg (over Walnut St. northbound lane & shoulder): there are several vehicular collision scrapes

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W4**	**L-19-004**	**L19004-2W4-DOT-NBI**	**MAY 12, 2025**

REMARKS

Photo 6 : Adjacent to the north fascia, near mid-span (over Walnut St. southbound left turn lane): there is a spall

Photo 7 : Near the West Abutment/frame leg (over Walnut St. southbound travel lane): there are two vehicular collision scrapes

Photo 8 : East Abutment/frame leg spring line, adjacent to the longitudinal joint, there is a hollow sounding area

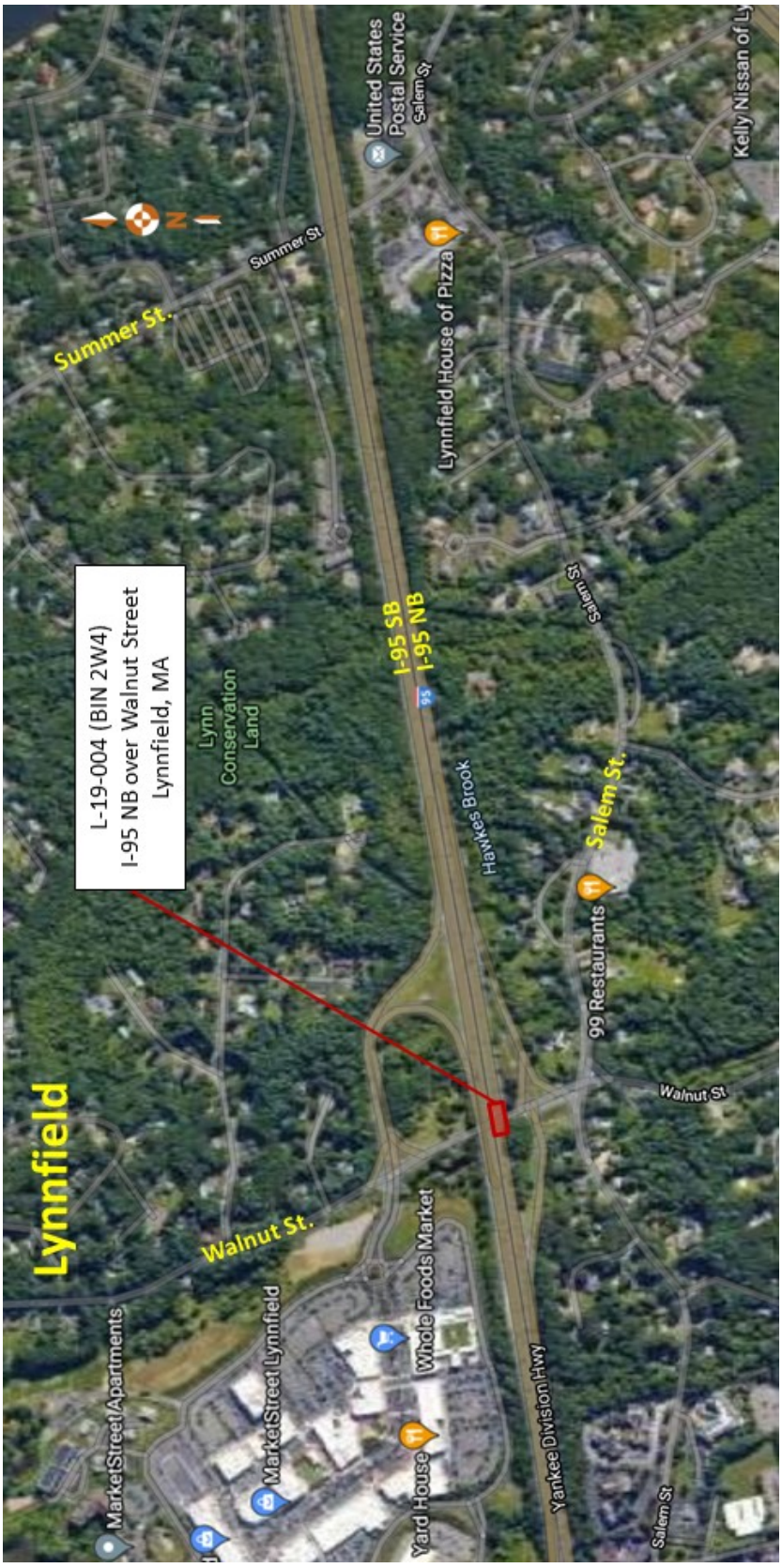
Photo 9 : East Abutment, adjacent to the south fascia, spall with exposed rebar and an adjacent hollow sounding area

Photo 10 : Southeast wingwall, below mid-height there are five minor pop-out spalls with exposed rebar

Photo 11 : Southwest transition and approach guardrail with damaged rail and four bent posts.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2W4	L-19-004	L19004-2W4-DOT-NBI	MAY 12, 2025

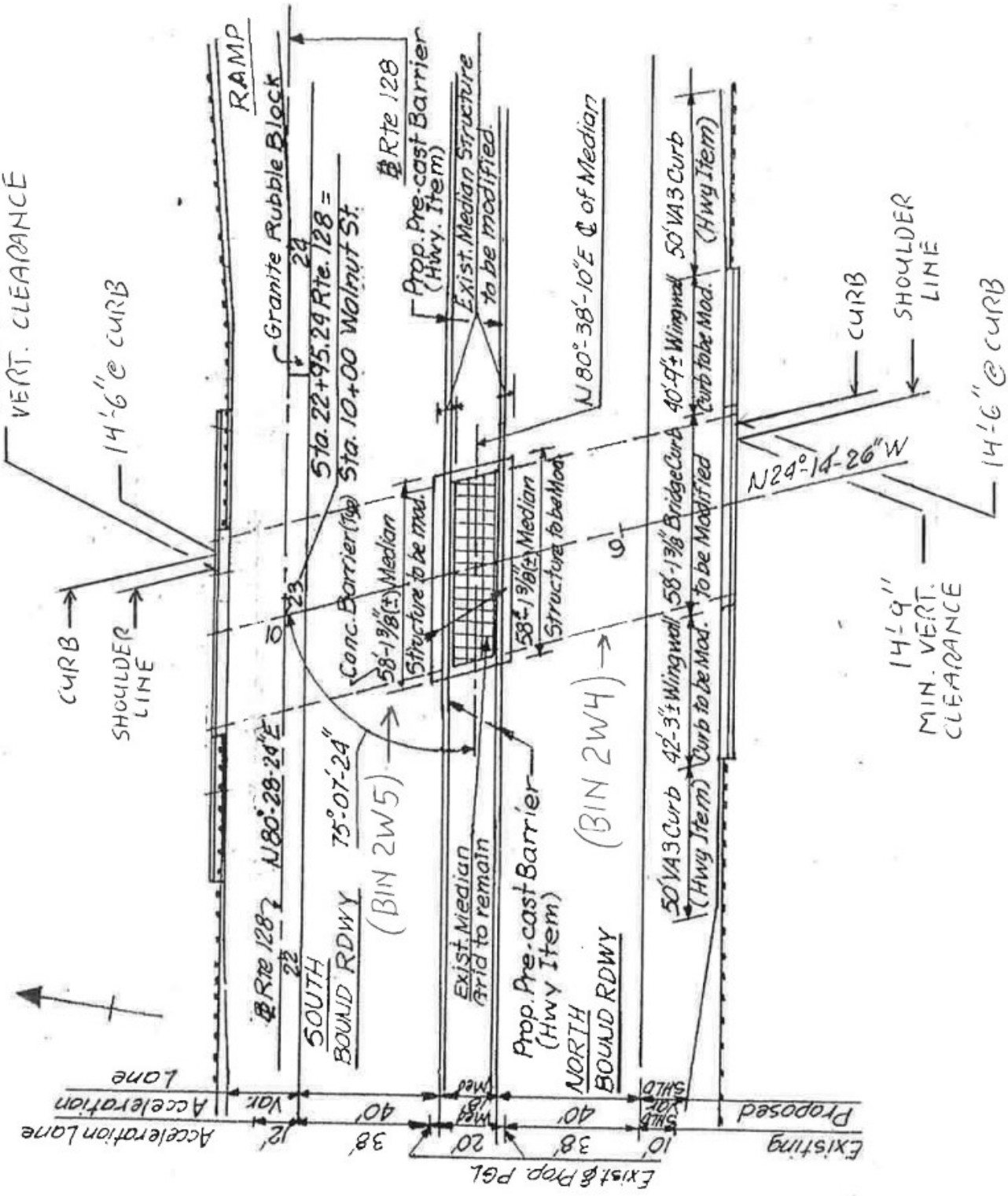
SKETCHES



Sketch 1: Location Map

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W4**	**L-19-004**	**L19004-2W4-DOT-NBI**	**MAY 12, 2025**

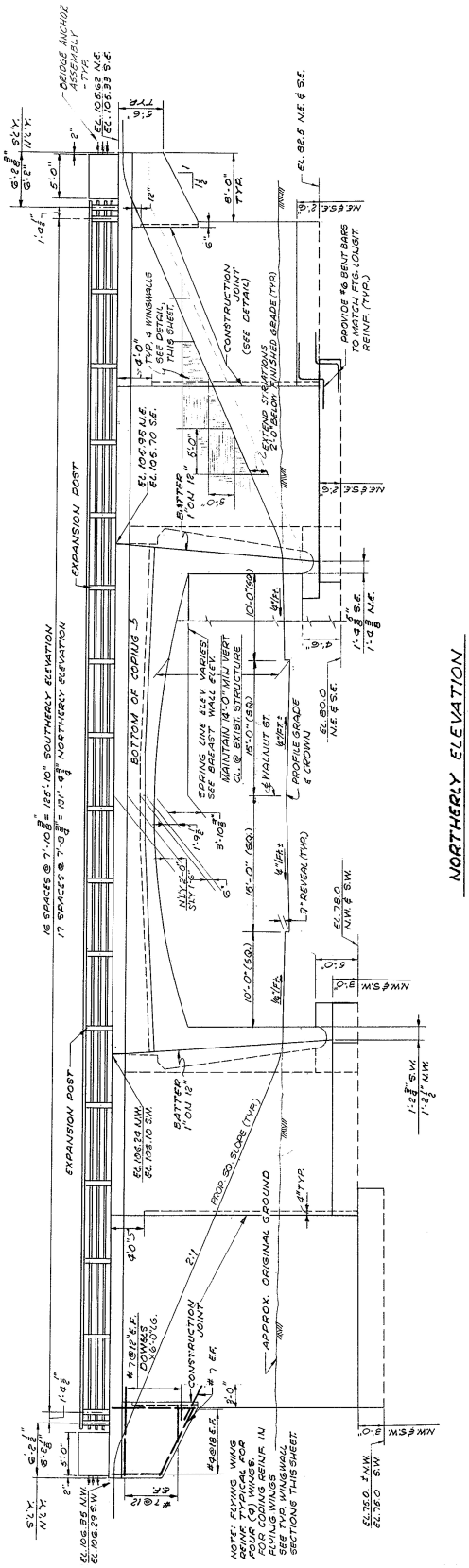
SKETCHES



Sketch 2: Orientation Plan

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W4**	**L-19-004**	**L19004-2W4-DOT-NBI**	**MAY 12, 2025**

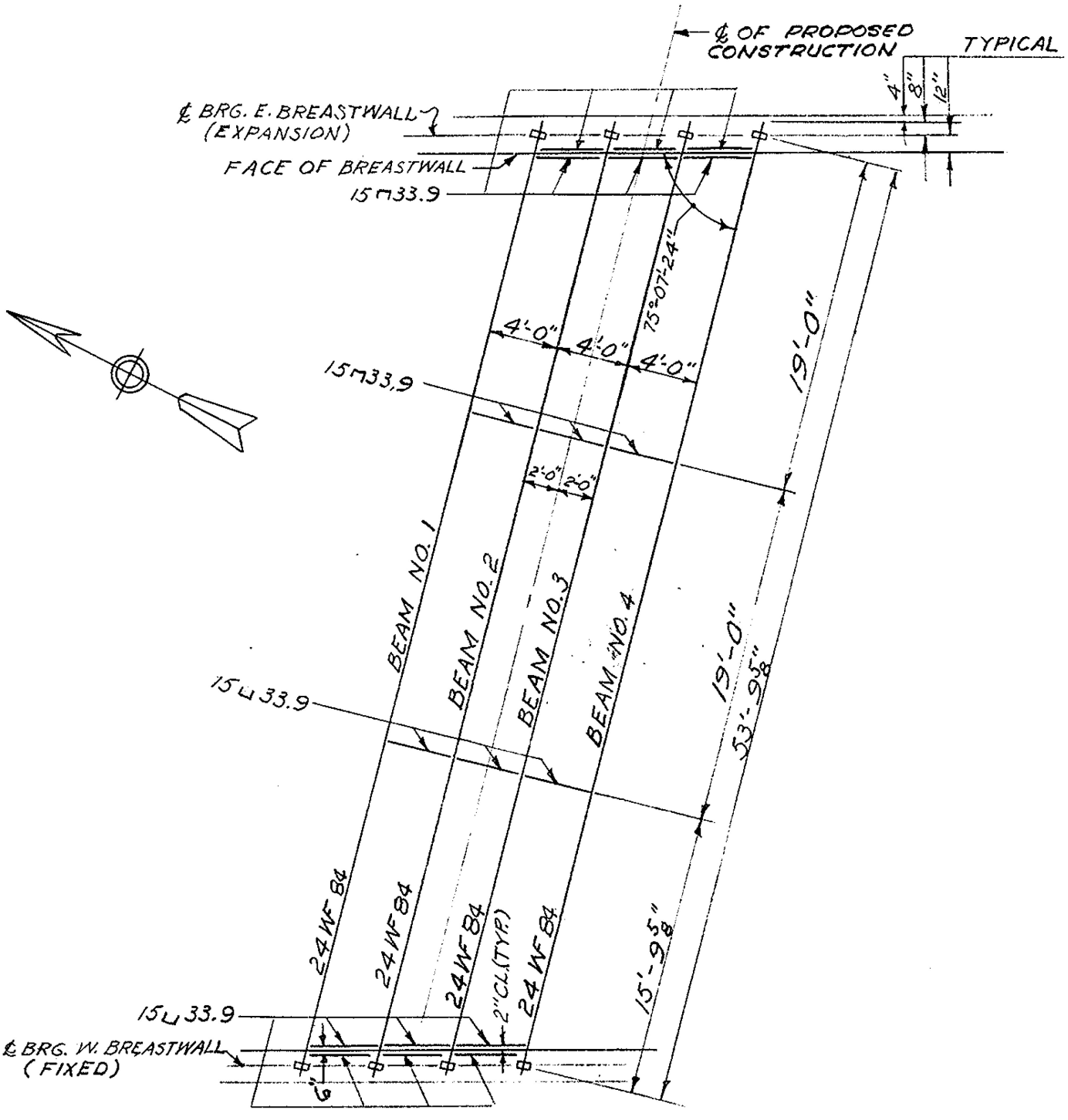
SKETCHES



Sketch 3: Bridge Elevation

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2W4	L-19-004	L19004-2W4-DOT-NBI	MAY 12, 2025

SKETCHES



MEDIAN STEEL LAYOUT

Sketch 4: Median Framing Plan

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2W4	L-19-004	L19004-2W4-DOT-NBI	MAY 12, 2025

PHOTOS



Photo 1: **New wearing surface since the last routine.**



Photo 2: **Median beams typically have flaking paint to the bottom and top flanges with laminating rust throughout the webs.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2W4	L-19-004	L19004-2W4-DOT-NBI	MAY 12, 2025

PHOTOS



Photo 3: **Parapets have random vertical hairline cracks, some with light efflorescence**



Photo 4: **The railing typically has moderate to heavy rust throughout with some areas of laminated rust on the posts.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W4**	**L-19-004**	**L19004-2W4-DOT-NBI**	**MAY 12, 2025**

PHOTOS



Photo 5: **Near East Abutment/frame leg (over Walnut St. northbound lane & shoulder): there are several vehicular collision scrapes**



Photo 6: **Adjacent to the north fascia, near mid-span (over Walnut St. southbound left turn lane): there is a spall**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W4**	**L-19-004**	**L19004-2W4-DOT-NBI**	**MAY 12, 2025**

PHOTOS



Photo 7: **Near the West Abutment/frame leg (over Walnut St. southbound travel lane): there are two vehicular collision scrapes**

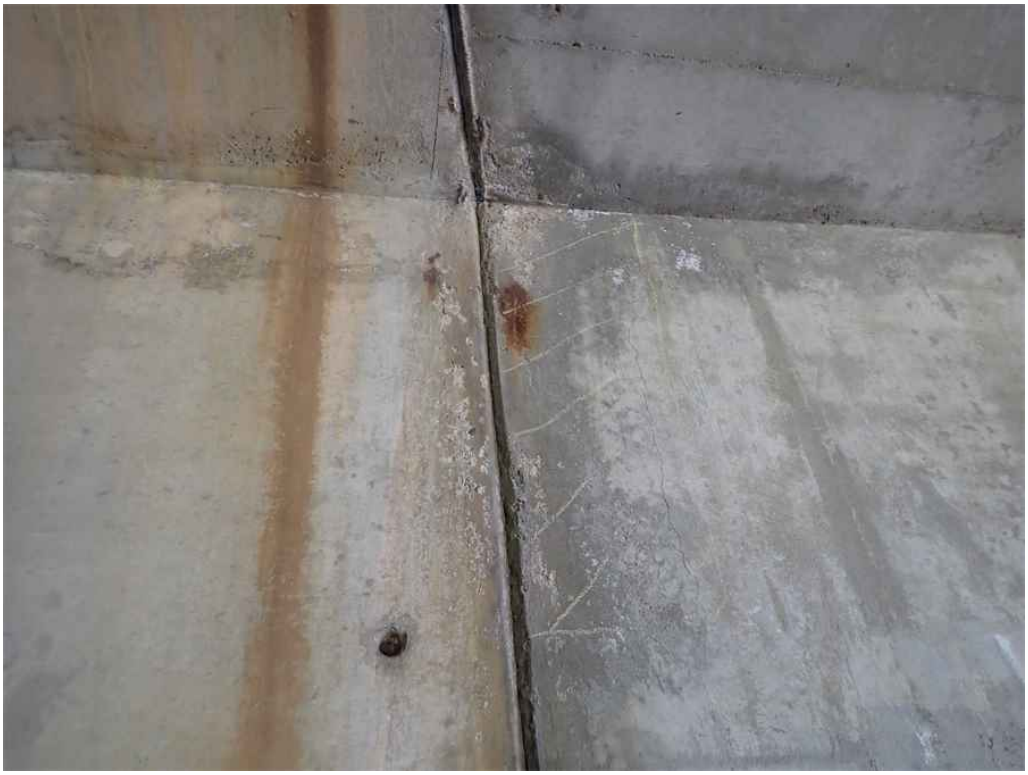


Photo 8: **East Abutment/frame leg spring line, adjacent to the longitudinal joint, there is a hollow sounding area**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	2W4	L-19-004	L19004-2W4-DOT-NBI	MAY 12, 2025

PHOTOS



Photo 9: East Abutment, adjacent to the south fascia, spall with exposed rebar and an adjacent hollow sounding area



Photo 10: Southeast wingwall, below mid-height there are five minor pop-out spalls with exposed rebar

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
LYNNFIELD	**2W4**	**L-19-004**	**L19004-2W4-DOT-NBI**	**MAY 12, 2025**

PHOTOS



Photo 11: Southwest transition and approach guardrail with damaged rail and four bent posts.

National Bridge Element Inspection

BDEPT# **L-19-004**
B.I.N. **2W4**
Item 8 **L19004-2W4-DOT-NBI**
Span Group **1**
Town **Lynnfield**
District **4**

Date **05/12/2025**
District Bridge Inspection Eng'r **Joseph Dideo**
Inspecting Agency **Mass. Highway Dept.**
Team Leader **Patrick Burke**
Team Member(s) **Jared Hedlund**

El #	Element Name	Units	Env.	Total Q.	% or Q	State 1	State 2	State 3	State 4
38	**Re Concrete Slab**	sq feet	2	3,957.000	☐ %	3,462.000	485.000	10.000	
Notes :									
> 1080	*Delamination/Spall/Patched Area*	sq feet	2	8.000	☐ %		6.000	2.000	
Notes :									
> 1090	*Exposed Rebar*	sq feet	2	2.000	☐ %		2.000		
Notes :									
> 1120	*Efflorescence/Rust Staining*	sq feet	2	10.000	☐ %		2.000	8.000	
Notes :									
> 1130	*Cracking (RC and Other)*	sq feet	2	475.000	☐ %		475.000		
Notes :									
> 510	Wearing Surfaces	sq feet	2	3,488.000	☐ %	3,370.000	118.000		
Notes :									
> > 3210	*Del/Spall/Patch/Pot(Wear Surf)*	sq feet	2	2.000	☐ %		2.000		
Notes :									
> > 3220	*Crack (Wearing Surface)*	sq feet	2	116.000	☐ %		116.000		
Notes :									
215	**Re Conc Abutment**	feet	2	134.000	☐ %	85.000	37.000	12.000	
Notes :									
> 1080	*Delamination/Spall/Patched Area*	feet	2	49.000	☐ %		37.000	12.000	
Notes :									
330	**Metal Bridge Railing**	feet	2	62.000	☐ %			62.000	
Notes :									
> 1000	*Corrosion*	feet	2	61.000	☐ %			61.000	
Notes :									

National Bridge Element Inspection

BDEPT# **L-19-004**
B.I.N. **2W4**
Item 8 **L19004-2W4-DOT-NBI**
Span Group **1**
Town **Lynnfield**
District **4**

Date **05/12/2025**
District Bridge Inspection Eng'r **Joseph Dideo**
Inspecting Agency **Mass. Highway Dept.**
Team Leader **Patrick Burke**
Team Member(s) **Jared Hedlund**

El #	Element Name	Units	Env.	Total Q.	% or Q	State 1	State 2	State 3	State 4
> 1010	*Cracking*	feet	2	1.000	☐ %			1.000	
Notes :									
> 515	Steel Protective Coating	sq feet	2	620.000	☐ %			70.000	550.000
Notes :	Assume 5SF of paint per LF of steel railing								
331	**Re Conc Bridge Railing**	feet	2	124.000	☐ %	81.000	34.000	9.000	
Notes :									
> 1080	*Delamination/Spall/Patched Area*	feet	2	5.000	☐ %		5.000		
Notes :									
> 1120	*Efflorescence/Rust Staining*	feet	2	5.000	☐ %		5.000		
Notes :									
> 1130	*Cracking (RC and Other)*	feet	2	33.000	☐ %		24.000	9.000	
Notes :									

DOCUMENT A00811

TOWN OF WAKEFIELD BRIDGES – INSPECTION REPORTS

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STRUCTURES INSPECTION FIELD REPORT

ROUTINE INSPECTION

2-DIST	B.I.N.	BR. DEPT. NO.
04	2FJ	W-01-008

CITY/TOWN	8.-STRUCTURE NO.	11-Kilo. POINT	41-STATUS	90-ROUTINE INSP. DATE
WAKEFIELD	W01008-2FJ-DOT-NBI	091.928	A:OPEN	JAN 18, 2024

07-FACILITY CARRIED	MEMORIAL NAME/LOCAL NAME	27-YR BUILT	106-YR REBUILT	YR REHAB'D (NON 106)
I 95 /ST128		1948	1960	0000

06-FEATURES INTERSECTED	26-FUNCTIONAL CLASS	DIST. BRIDGE INSPECTION ENGINEER
HWY PLEASURE ISLAND RD	Urban Interstate	J. Dideo

43-STRUCTURE TYPE	22-OWNER	21-MAINTAINER	TEAM LEADER	PROJ MGR
107 : Concrete Frame	State Highway Agency	State Highway Agency	V. Buonomano	Jacobs Engineering Group

107-DECK TYPE	WEATHER	TEMP. (air)	TEAM MEMBERS
N : Not applicable	Clear	-7°C	J. KERAS, B. HERRIDGE

ITEM 58 — N

DECK

		DEF
1.Wearing Surface	7	M-P
2.Deck Condition	N	-
3.Stay in Place Forms	N	-
4.Curbs	N	-
5.Median	7	M-P
6.Sidewalks	N	-
7.Parapets	5	S-P
8.Railing	5	S-A
9.Anti Missile Fence	N	-
10.Drainage System	N	-
11.Lighting Standards	N	-
12.Utilities	N	-
13.Deck Joints	N	-
14.	N	-
15.	N	-
16.	N	-

CURB REVEAL (In millimeters)	N	S
	25	50

APPROACHES

		DEF
a. Appr. Pavement Condition	7	M-P
b. Appr. Roadway Settlement	7	-
c. Appr. Sidewalk Settlement	N	-
d.	N	-

OVERHEAD SIGNS (Attached to bridge) (Y/N) N

		DEF
a. Condition of Welds	N	-
b. Condition of Bolts	N	-
c. Condition of Signs	N	-

ITEM 59 — 6

SUPERSTRUCTURE

			DEF
1.Concrete Rigid Frame		6	M-P
2.Floorbeams		N	-
3.Floor System Bracing		N	-
4.Girders or Beams		N	-
5.Trusses - General		N	-
a. Upper Chords	N		-
b. Lower Chords	N		-
c. Web Members	N		-
d. Lateral Bracing	N		-
e. Sway Bracings	N		-
f. Portals	N		-
g. End Posts	N		-
6.Pin & Hangers		N	-
7.Conn Plt's, Gussets & Angles		N	-
8.Cover Plates		N	-
9.Bearing Devices		N	-
10.Diaphragms/Cross Frames		N	-
11.Rivets & Bolts		N	-
12.Welds		N	-
13.Member Alignment		7	-
14.Paint/Coating		N	-
15.Spandrel Walls		6	M-P

Year Painted	N

COLLISION DAMAGE: *Please explain*
None ( ) Minor (X) Moderate ( ) Severe ( )

LOAD DEFLECTION: *Please explain*
None (X) Minor ( ) Moderate ( ) Severe ( )

LOAD VIBRATION: *Please explain*
None (X) Minor ( ) Moderate ( ) Severe ( )

Any Fracture Critical Member: (Y/N) N

Any Cracks: (Y/N) N

ITEM 60 — 6

SUBSTRUCTURE

1. Abutments	Dive	Cur	6	DEF
a. Pedestals	N	N		-
b. Bridge Seats	N	N		-
c. Backwalls	N	N		-
d. Breastwalls	N	6		M-P
e. Wingwalls	N	6		M-P
f. Slope Paving/Rip-Rap	N	N		-
g. Pointing	N	N		-
h. Footings	N	H		-
i. Piles	N	H		-
j. Scour	N	N		-
k. Settlement	N	7		-
l.	N	N		-
m.	N	N		-
2. Piers or Bents			N	
a. Pedestals	N	N		-
b. Caps	N	N		-
c. Columns	N	N		-
d. Stems/Webs/Pierwalls	N	N		-
e. Pointing	N	N		-
f. Footing	N	N		-
g. Piles	N	N		-
h. Scour	N	N		-
i. Settlement	N	N		-
j.	N	N		-
k.	N	N		-
3. Pile Bents			N	
a. Pile Caps	N	N		-
b. Piles	N	N		-
c. Diagonal Bracing	N	N		-
d. Horizontal Bracing	N	N		-
e. Fasteners	N	N		-

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

X=UNKNOWN N=NOT APPLICABLE H=HIDDEN/INACCESSIBLE R=REMOVED

RTN(1)7-96

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
WAKEFIELD	**2FJ**	**W-01-008**	**W01008-2FJ-DOT-NBI**	**JAN 18, 2024**

ITEM 61 — CHANNEL & CHANNEL PROTECTION

N

	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	-

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

ITEM 36 — *TRAFFIC SAFETY*

	36	COND	DEF
A. Bridge Railing	1	5	S-A
B. Transitions	1	7	-
C. Approach Guardrail	1	6	M-P
D. Approach Guardrail Ends	1	N	-

WEIGHT POSTING

Not Applicable **X**

	H	3	3S2	Single
Actual Posting	N	N	N	N
Recommended Posting	N	N	N	N

Waived Date: 00/00/0000 **EJDMT Date:** 00/00/0000

Signs In Place (Y=Yes,N=No, NR=NotRequired) Legibility/ Visibility	At bridge E	At bridge W	Other Advance E	Other Advance W

CLEARANCE POSTING

Not ☐

	N ft	N in	S ft	S in	meter
Actual Field Measurement	14	8	14	8	4.47
Posted Clearance	14	6	14	6	

Signs In Place (Y=Yes,N=No, NR=Not Required) Legibility/ Visibility	At bridge N	At bridge S	Advance N	Advance S
	Y	Y	NR	NR
	7 / 7	7 / 7	/	/

ACCESSIBILITY (Y/N/P)

	Needed	Used
Lift Bucket	Y	Y
Ladder	N	N
Boat	N	N
Waders	N	N
Inspector 50	N	N
Rigging	N	N
Staging	N	N
Traffic Control	Y	Y
RR Flagger	N	N
Police	Y	Y
Other:		
	N	N

TOTAL HOURS 74

PLANS (Y/N): **Y**

(V.C.R.) (Y/N): **N**

TAPE#: _____

List of field tests performed:

RATING

Rating Report (Y/N): **Y**

Date: 06/01/1992

Inspection data at time of existing rating

I 58: **6** I 59: **7** I 60: **7** Date : 05/01/1990

Recommend for Rating or Rerating (Y/N): **N**

If YES please give priority: HIGH ( ) MEDIUM ( ) LOW ( )

REASON: _____

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 stablility. 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	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
WAKEFIELD	**2FJ**	**W-01-008**	**W01008-2FJ-DOT-NBI**	**JAN 18, 2024**

REMARKS

BRIDGE ORIENTATION
The one span structure carries I-95/ST128 over Pleasure Island Road. According to the design plans, the approaches and abutments are labeled West and East. The elevations are labeled South and North. The joints and bays are numbered from South to North. **See Sketch 1 for elevation.**

GENERAL REMARKS
The structure is composed of a single simple span. The superstructure and substructure consists of a rigid frame which is integral with the concrete deck.

ACCESS NOTES
The underside of the structure was inspected with a 30-foot bucket truck with alternating lane closures between 8:30AM and 3:00PM on Pleasure Island Road with traffic control and a local police detail. The top of deck inspection was completed from the right lane/shoulder of I-95 between 10:00AM and 2:00PM with traffic control and a state police detail.

VERTICAL CLEARANCE
The minimum vertical clearance for Pleasure Island Road is 14'-8" measure from the North Fascia. The posted clearance is 14'-6" in both travel directions.

ITEM 58 - DECK

Item 58.1 - Wearing Surface
The Northbound and Southbound roadways each exhibit scattered random cracking and mapcracking **(see Photo 1)**.

Item 58.5 - Median
The median consists of concrete Jersey barriers, both faces of which typically exhibit scattered hairline cracking throughout.

The South Face of the median at the East end exhibits several full height vertical hairline cracks spaced 3'-0" on center.

The South Face of the median at the West end exhibits horizontal cracking with areas of rust staining and exposed rebar at the bottom chamfer of the median **(see Photo 2).**

The North Face of the median at the East end exhibits collision scrapes and snow accumulation.

Item 58.7 - Parapets
Both parapets consist of concrete Jersey Barrier installed in front of the original bridge rails. See Item 58.8 -Railing for condition of original bridge rails.

Both parapets exhibit abandoned, cut and corroded anchor bolts at the East and West ends **(see Photo 3)**.

The South parapet exhibits deficiencies as follows:

- Between First and Second joints from the East end:
  - 12'-0" long x up to 1/8" wide crack.
  - Three (3) shallow spalls up to 10" high x 7" wide x 1" deep.

- Between Second and Third joints from the East end:
  - Full width hairline crack.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
WAKEFIELD	**2FJ**	**W-01-008**	**W01008-2FJ-DOT-NBI**	**JAN 18, 2024**

REMARKS

- 4" diameter popout.
- 8'-6" long x 1'-6" high area of delamination and six (6) spalls with nine (9) exposed rebar **(see Photo 4)**.
- 6" diameter area of delamination adjacent to a 10" high x 5" wide x 1/4" deep popout.

- Between Third and Fourth joints from East end:
  - 2'-6" long x up to 1'-6" high x up to 1-1/2" deep spall with exposed rebar **(see Photo 5)**.
  - 8" long x 5" high x 3/4" deep spall with exposed rebar **(see Photo 5)**.
  - Up to 3" long x 10" high hollow area containing a shallow spall **(see Photo 5)**.

The North parapet exhibits full height vertical hairline cracks, spaced 5'-0" on center throughout the parapet.

Item 58.8 - Railing

The bridge railing consists of metal posts and rails with concrete endposts over a concrete rail base.

The metal railings and posts typically exhibit failed paint and minor corrosion throughout. The metal rails exhibit isolated areas of distortion. The posts typically exhibit underthreaded anchor bolts.

The South railing exhibits the following deficiencies:

- At the second section of rails from the East end:
  - Second rail from top is bent 3" upwards over the full length of rail **(see Photo 6)**.

- At the fifth section of rails from the East end, over the Southeast wingwall:
  - Spall with exposed rebar on the rail base, 7'-4" long x 10" high x full width of rail base, undermining the base plates of the railing **(see Photo 7)**.

- At the eighth section of rails from the East end:
  - **DEF=S/A: Bottom rail exhibits 100% section loss and is fully corroded, resting on the rail base (see Photo 8)**.

- At the ninth section of rails from the East end:
  - The East end of the bottom rail exhibits a rust hole 1" long x 2-1/2" wide.

- At the tenth section of rails from the East end:
  - The exterior of the rail base exhibits a spall, 8" long x 4" high x 1/2" deep **(see Photo 9)**.

- At the eleventh section of rails from the East end:
  - The exterior of the rail base exhibits a spall, 6" diameter x 1" deep **(see Photo 9)**.

- At the thirteenth and fourteenth sections of rails from the East end:
  - Vegetation growth between the bridge railing and parapet.
  - The top rail is bent 6'-8" long x 1" high.

- The Southwest endpost exhibits spalls up to 6" diameter x 1" deep on the edges.

The North railing exhibits the following deficiencies:

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WAKEFIELD	**2FJ**	**W-01-008**	**W01008-2FJ-DOT-NBI**	**JAN 18, 2024**

REMARKS

- At the Northwest endpost:
  - Three (3) spalls up to 4" diameter x 1-1/2" deep **(see Photo 10)**.

- At the fourth and fifth sections of rails from the West end:
  - Heavy vegetation growth.

- At the twelfth section of rails from the West end:
  - Exterior of the rail base exterior exhibits a spall up to 5" long x up to 11" high x 3/4" deep.

APPROACHES

Approaches a - Appr. Pavement Condition
The approach roadways exhibit areas of random cracking up to 1/4" wide, most notably at the Southwest Approach, which exhibits transverse and longitudinal cracks up to 21'-0" long **(see Photo 11)**.

ITEM 59 - SUPERSTRUCTURE

Item 59.1 - Concrete Rigid Frame
The concrete frame exhibits delaminations, spalling with and without exposed rebar, hairline cracking, and areas of honeycombing throughout. There are exposed and unpatched grout pockets throughout the frame **(see Photo 12)**.

Specific deficiencies to the frame are as follows:

- In Bay 1:
  - Over the West lane, there are three (3) longitudinal cracks up to 0.35" wide.
  - Adjacent to Joint 1, at midspan, there is a 2'-0" long x 1'-0" wide x 3" deep spall **(see Photo 13).**
  - Adjacent to Joint 1, at East end, there is a 4" long x 2'-0" wide x 1" deep spall with adjacent areas of shallow spalling with exposed rebar and an adjacent hollow area 4" long x 1'-0" wide.
  - Near Joint 1, over the East lane, there is a spall 5-1/2" diameter with exposed rebar.
  - Over the East lane, there is a longitudinal crack up to 0.55" wide **(see Photo 14)**.

- At Joint 1:
  - There are repair areas long the joint, with scattered hairline cracking **(see Photo 13)**.
  - There is evidence of leakage at the joint (icicles), which were removed at the time of inspection.
  - Near the East Abutment, there is a crack through a repair area with efflorescence **(see Photo 15)**.

- In Bay 2:
  - Adjacent to Joint 1, at West end, there is a 3'-4" long x 1'-7" wide hollow sounding patch with a spall up to 1'-3" long x up to 4" wide x 1" deep.
  - Above West lane, there is a transverse crack up to 0.3" wide.

- At Joint 2:
  - Over West lane, there is a spall along the joint, 7" long x 2" wide x 2" deep.

- In Bay 3:
  - Adjacent to Joint 3, at midspan, there is a spall with exposed rebar, 3'-6" wide x 2'-0" long x up to 3" deep, with an adjacent hollow area 3'-0" long x 3'-0" wide **(see Photo 16)**.
  - At Joint 3, cracking with efflorescence along length of joint **(see Photo 17)**.

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WAKEFIELD	**2FJ**	**W-01-008**	**W01008-2FJ-DOT-NBI**	**JAN 18, 2024**

REMARKS

- At Joint 3:
  - There are repair areas along the joint, with scattered hairline cracking **(see Photo 17)**.
  - There is evidence of leakage at the joint (icicles), which were removed at the time of inspection **(see Photo 18)**.
  - At the West Abutment, there is missing joint filler up to 1'-0" deep, causing a gap up to 1/2" wide between Bays 3 and 4 and 1/4" horizontal misalignment **(see Photo 19)**.

- In Bay 4:
  - Adjacent to Joint 3, at the West end, there is a spall, 4'-5" long x 9" wide x 2" deep with an adjacent delamination, 5'-4" long x up to 1'-6" wide **(see Photo 20)**.
  - Adjacent to Joint 3, over the West lane, there is a spall 1'-1-1/2" long x 6" wide x 1-1/2" deep with adjacent hollow area up to 1'-7" long x up to 1'-4" wide.
  - Adjacent to Joint 3, over the East lane, there is a hollow area 2'-10" wide x up to 2'-3" long with a spall 1'-1" wide x up to 9" long x 1-1/2" deep.
  - Adjacent to Joint 3, over the East sidewalk, there is an area of honeycombing **(see Photo 21)**.
  - Midspan, over center lane there are two spalls with exposed rebar, 4" long x 9" wide x 1/2" deep and 3-1/2" diameter x 4" deep.
  - Midspan, near the crown, there is a spall with exposed rebar, 1'-0" long x 8" wide x 1" deep.
  - Midspan, over the East fence, there is a spall, 7" diameter x 2-1/2" deep with exposed rebar.

- In Bay 5:
  - Midspan, East end, there is a longitudinal and a diagonal hairline crack.
  - Near Joint 5, above the West lane line, there is a spall, 6" long x 2-1/2" wide x 1/4" deep with exposed wire mesh.

- At Joint 5:
  - At the crown, there is an area of missing joint mortar, 4'-0" long x 4" wide x up to 1" deep **(see Photo 22)**.
  - Over the West lane, there is an area of missing joint mortar, 2'-6" long x 3" wide x 3/4" deep.

- In Bay 6:
  - Adjacent to Joint 5, at the East Abutment, there is a rebar popout with adjacent spall, 3'-6" long x 2'-2" wide x up to 1/2" deep **(see Photo 23)**.
  - Adjacent to Joint 5, over the middle lane, there is a spall 3'-0" long x 1'-0" wide x 3" deep.
  - Midspan, there is a transverse crack up to 0.4" wide.
  - At crown, there is moisture staining, moss growth and collision scrapes **(see Photo 24)**.

Item 59.15 - Spandrel Walls

The spandrel walls and copings exhibit areas of scaling and delamination throughout.

Specific deficiencies to the spandrel walls and copings are as follows:

- South Coping
  - At the midsection, there is a 30'-0" x full height x up to 4" deep spall with exposed rebar with an adjacent hollow area, 5'-10" wide x up to 1'-2" high with scattered spalling up to 1" deep **(see Photo 25)**.

- North Coping

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REMARKS

- Adjacent to the Northwest wingwall, there is a spall with exposed and rusted rebar behind vegetation growth, 1'-4" long x up to 1'-0" high x up to 8" deep **(see Photo 26)**.
- At the West end, there are two (2) spalls, 3-1/2" diameter x 1/2" deep and 3" diameter x 3/4" deep **(see Photo 27)**.

SuperStructure Collision Notes
See Item 59.1 - Concrete Rigid Frame.

ITEM 60 - SUBSTRUCTURE

Item 60.1 - Abutments
Item 60.1.d - Breastwalls
Both breastwalls exhibit random hairline cracks, mostly along the frame joints.

Specific deficiencies to the West breastwall are as follows:

- Below Bay 1:
  - Mid-height, there is a spall with exposed rebar, 4" wide x 5" high x 1/2" deep.
  - Near top, adjacent to Joint 1, there is a spall with exposed rebar, 2'-7" wide x up to 1'-4" high x 2" deep with adjacent delamination, up to 2'-3" wide x up to 2'-9" wide **(see Photo 28)**.
  - Mid-height, adjacent to Joint 1, there is a spall with exposed rebar, 10" wide x 7" high x 2" deep **(see Photo 28)**.
  - Near bottom, adjacent to Joint 1, there is a spall, 1'-0" wide x up to 11" high x up to 1" deep with adjacent delamination, up to 4'-5" wide x up to 2'-11" wide **(see Photo 28)**.

- Below Bay 2:
  - Near Joint 1, there are three (3) spalls up to 3" diameter x 1/4" deep.

- Below Bay 6:
  - Mid-height, near Joint 5, there is a spall with exposed rebar, 5" wide x 3" wide x 1/4" deep.
  - Near top, near Joint 5, there is a spall, 2" diameter x 1/4" deep.
  - At the bottom, there is a spall, 1'-4" high x 5-1/2" wide x 3/4" deep **(see Photo 29)**.
  - Near the bottom, there is a spall with exposed rebar, 6" wide x 3" high x 1/2" deep **(see Photo 29)**.

Specific deficiencies to the East breastwall are as follows:

- Below Bay 1:
  - At base, there is a hollow area up to 5'-0" wide x up to 2'-4" high **(see Photo 30)**.
  - At Joint 1, at the top of the wall, there is a concrete patch with hairline cracking.

- Below Bays 2 and 3:
  - There are two (2) rebar popouts, 2" diameter x 1/4" wide.

- Below Bays 5 and 6:
  - Near Joint 5, there are several shallow spalls with exposed rebar, up to 3" diameter x 1/2" deep **(see Photo 31)**.

Item 60.1.e - Wingwalls
All wingwalls exhibit areas of minor scaling and hairline map cracking throughout, with efflorescence.

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WAKEFIELD	**2FJ**	**W-01-008**	**W01008-2FJ-DOT-NBI**	**JAN 18, 2024**

REMARKS

Joint filler material between the wingwalls and spandrel walls is typically missing, resulting in gaps up to 1-3/4" wide **(see Photo 32)**.

TRAFFIC SAFETY

Item 36a - Bridge Railing
There are concrete barriers installed in front of the original rails. See Item 58.7 - Parapets.

The original bridge railing consists of Type B metal rails.

Item 36b - Transitions
All four transitions consist of thrie-beam highway guardrail mounted on timber posts and spacers, 18" spacing for the first four posts. The guardrails tie into the concrete parapet.

Specific deficiencies at the guardrail transitions are as follows:

- Southeast transition:
  - The last line of bolts are bent and misaligned, resulting in a gap between guardrail and parapet, 1-1/4" wide.

- Southwest transition:
  - The last line of bolts are sheared off and the top bolt in the second to last line of bolts is misaligned, resulting in a gap between guardrail and parapet, 1" wide.

- Northeast transition:
  - Three of five nuts in the last line of bolts are loose, one bolt is underthreaded and one bolt is corroded, resulting in a gap between guardrail and parapet, 1-1/2" wide.
  - At the sixth post from the East end, there is a loose spacer block with a 1" wide gap **(see Photo 33)**.

- Northwest transition:
  - There are three loose nuts and one loose anchor bolt, resulting in a gap between guardrail and parapet, 2" wide, with signs of collision damage **(see Photo 34)**.

Item 36c - Approach Guardrail
All four corners consist of Type W-beam highway guardrail panels mounted on steel posts with steel spacers.

All four corners exhibit minor collision scrapes.

Item 36d - Approach Guardrail Ends
All corners are continuous with the roadway continue past the bridge limits.

Sketch / Photo Log

Sketch 1 :	South Elevation
Photo 1 :	Typical map cracking on roadway and snow accumulation, shown at Southbound Roadway shoulder.
Photo 2 :	Median, South face, at the East end - Horizontal cracking with areas of rust staining and exposed rebar at the bottom chamfer.
Photo 3 :	Typical abandoned, cut and corroded anchor bolts (shown at West end of South parapet).
Photo 4 :	South parapet, between Second and Third joints from the East - Delaminated area containing six (6) spalls with nine (9) exposed rebar.

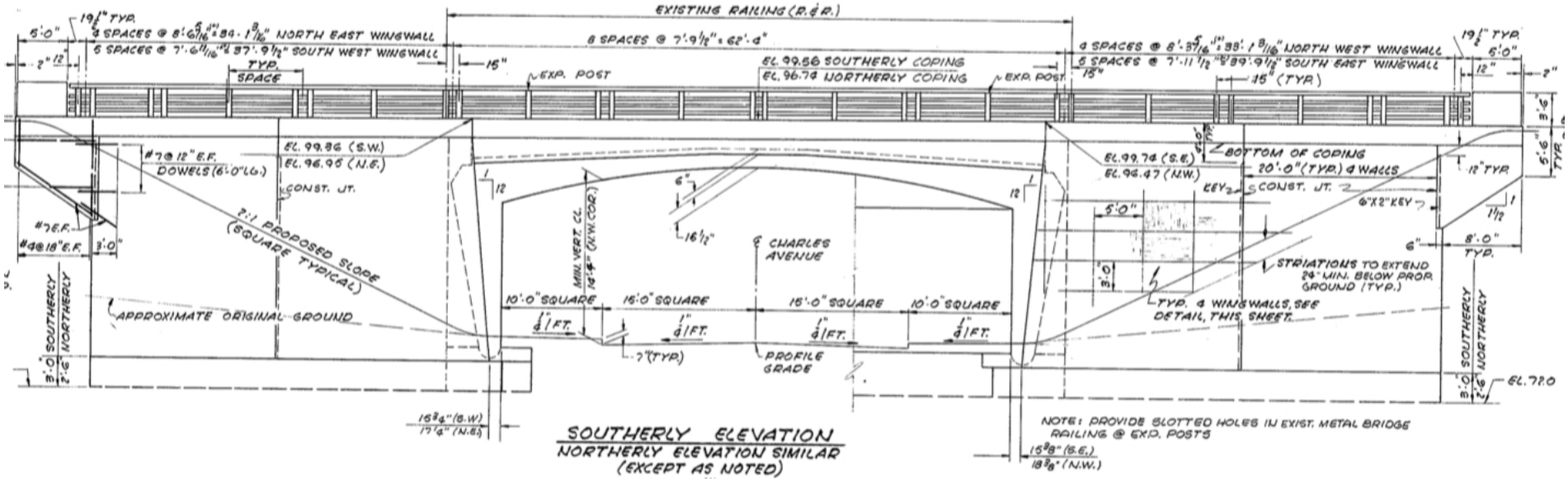
CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
WAKEFIELD	**2FJ**	**W-01-008**	**W01008-2FJ-DOT-NBI**	**JAN 18, 2024**

REMARKS

Photo 5 : South parapet, between Third and Fourth joints from East side - Hollow area and two (2) spalls with exposed rebar.
Photo 6 : South railing, second section of rails from East end - Second rail from top is bent upward along full length.
Photo 7 : South railing base, at fifth section of rails from East end - Spall with exposed rebar.
Photo 8 : DEF=S/A: South railing, at eighth section of rails from East end - 100% section loss to bottom rail.
Photo 9 : South rail base, at tenth and eleventh sections of rails from East end - Two (2) spalls.
Photo 10 : Northwest endpost, West face - Three (3) spalls.
Photo 11 : Typical approach roadway transverse and longitudinal cracking (shown at Southwest Approach).
Photo 12 : Typical exposed and unpatched grout pocket, shown at Bay 2.
Photo 13 : Bay 1, adjacent to Joint 1, at midspan - Spall with exposed rebar and adjacent hollow area.
Photo 14 : Bay 1, over East lane - Longitudinal crack.
Photo 15 : At Joint 1, near East breastwall - Crack through a repair area with efflorescence.
Photo 16 : Bay 3, adjacent to Joint 3, at midspan - Spall with exposed rebar with adjacent hollow area.
Photo 17 : Bay 3, adjacent to Joint 3, at West end - Cracking with efflorescence.
Photo 18 : Joint 3, at West end - Evidence of leakage (removed at time of inspection).
Photo 19 : Joint 3, at West breastwall - Missing joint filler and horizontal misalignment, resulting in gap between Bays 3 and 4.
Photo 20 : Bay 4, adjacent to Joint 3, West end - Spall with adjacent delamination.
Photo 21 : Bay 4, adjacent to Joint 3, over East sidewalk - Area of honeycombing.
Photo 22 : Joint 5, at crown - Area of missing joint mortar.
Photo 23 : Bay 6, adjacent to Joint 5, at East breastwall - Rebar poput and adjacent spall.
Photo 24 : Bay 6, at crown - Moisture staining, moss growth and collision scrapes.
Photo 25 : South coping, midsection - Full height spall with exposed rebar and adjacent hollow area with scattered spalling.
Photo 26 : North coping, adjacent to Northwest wingwall - Spall with exposed and rusted rebar behind vegetation growth.
Photo 27 : North coping, at West end - Two (2) spalls.
Photo 28 : West breastwall, below Bay 1, adjacent to Joint 1 - Three (3) spalls with exposed rebar with adjacent delaminated areas.
Photo 29 : West breastwall, below Bay 6, at bottom - Two (2) spalls, one (1) with exposed rebar.
Photo 30 : East breastwall, below Bay 1, at bottom - Hollow area.
Photo 31 : East breastwall, below Bays 5 and 6, near Joint 5 - Several shallow spalls with exposed rebar.
Photo 32 : Typical missing joint filler material between spandrel walls and wingwalls, shown at Southwest wingwall.
Photo 33 : Northeast guardrail transition, sixth post from East end - Loose spacer block with gap.
Photo 34 : Northwest guardrail transition - Loose nuts and anchor bolts, with gap and signs of collision damage.

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WAKEFIELD	2FJ	W-01-008	W01008-2FJ-DOT-NBI	JAN 18, 2024

SKETCHES



SOUTHERLY ELEVATION
NORTHERLY ELEVATION SIMILAR (EXCEPT AS NOTED)

Sketch 1: South Elevation

A00811 - 12

Proposal No. 613196-133292

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WAKEFIELD	**2FJ**	**W-01-008**	**W01008-2FJ-DOT-NBI**	**JAN 18, 2024**

PHOTOS



Photo 1: **Typical map cracking on roadway and snow accumulation, shown at Southbound Roadway shoulder.**



Photo 2: **Median, South face, at the East end - Horizontal cracking with areas of rust staining and exposed rebar at the bottom chamfer.**

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WAKEFIELD	**2FJ**	**W-01-008**	**W01008-2FJ-DOT-NBI**	**JAN 18, 2024**

PHOTOS



Photo 3: **Typical abandoned, cut and corroded anchor bolts (shown at West end of South parapet).**



Photo 4: **South parapet, between Second and Third joints from the East - Delaminated area containing six (6) spalls with nine (9) exposed rebar.**

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PHOTOS



Photo 5: **South parapet, between Third and Fourth joints from East side - Hollow area and two (2) spalls with exposed rebar.**



Photo 6: **South railing, second section of rails from East end - Second rail from top is bent upward along full length.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
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PHOTOS



Photo 7: **South railing base, at fifth section of rails from East end - Spall with exposed rebar.**



Photo 8: **DEF=S/A: South railing, at eighth section of rails from East end - 100% section loss to bottom rail.**

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PHOTOS



Photo 9: **South rail base, at tenth and eleventh sections of rails from East end - Two (2) spalls.**



Photo 10: **Northwest endpost, West face - Three (3) spalls.**

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PHOTOS



Photo 11: **Typical approach roadway transverse and longitudinal cracking (shown at Southwest Approach).**



Photo 12: **Typical exposed and unpatched grout pocket, shown at Bay 2.**

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PHOTOS



Photo 13: **Bay 1, adjacent to Joint 1, at midspan - Spall with exposed rebar and adjacent hollow area.**



Photo 14: **Bay 1, over East lane - Longitudinal crack.**

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PHOTOS



Photo 15: **At Joint 1, near East breastwall - Crack through a repair area with efflorescence.**



Photo 16: **Bay 3, adjacent to Joint 3, at midspan - Spall with exposed rebar with adjacent hollow area.**

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PHOTOS



Photo 17: **Bay 3, adjacent to Joint 3, at West end - Cracking with efflorescence.**



Photo 18: **Joint 3, at West end - Evidence of leakage (removed at time of inspection).**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
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PHOTOS



Photo 19: **Joint 3, at West breastwall - Missing joint filler and horizontal misalignment, resulting in gap between Bays 3 and 4.**



Photo 20: **Bay 4, adjacent to Joint 3, West end - Spall with adjacent delamination.**

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WAKEFIELD	2FJ	W-01-008	W01008-2FJ-DOT-NBI	JAN 18, 2024

PHOTOS



Photo 21: Bay 4, adjacent to Joint 3, over East sidewalk - Area of honeycombing.



Photo 22: Joint 5, at crown - Area of missing joint mortar.

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WAKEFIELD	**2FJ**	**W-01-008**	**W01008-2FJ-DOT-NBI**	**JAN 18, 2024**

PHOTOS



Photo 23: **Bay 6, adjacent to Joint 5, at East breastwall - Rebar poput and adjacent spall.**



Photo 24: **Bay 6, at crown - Moisture staining, moss growth and collision scrapes.**

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WAKEFIELD	2FJ	W-01-008	W01008-2FJ-DOT-NBI	JAN 18, 2024

PHOTOS



Photo 25: South coping, midsection - Full height spall with exposed rebar and adjacent hollow area with scattered spalling.



Photo 26: North coping, adjacent to Northwest wingwall - Spall with exposed and rusted rebar behind vegetation growth.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
WAKEFIELD	**2FJ**	**W-01-008**	**W01008-2FJ-DOT-NBI**	**JAN 18, 2024**

PHOTOS



Photo 27: **North coping, at West end - Two (2) spalls.**



Photo 28: **West breastwall, below Bay 1, adjacent to Joint 1 - Three (3) spalls with exposed rebar with adjacent delaminated areas.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
WAKEFIELD	**2FJ**	**W-01-008**	**W01008-2FJ-DOT-NBI**	**JAN 18, 2024**

PHOTOS



Photo 29: West breastwall, below Bay 6, at bottom - Two (2) spalls, one (1) with exposed rebar.



Photo 30: East breastwall, below Bay 1, at bottom - Hollow area.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
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PHOTOS



Photo 31: **East breastwall, below Bays 5 and 6, near Joint 5 - Several shallow spalls with exposed rebar.**



Photo 32: **Typical missing joint filler material between spandrel walls and wingwalls, shown at Southwest wingwall.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
WAKEFIELD	**2FJ**	**W-01-008**	**W01008-2FJ-DOT-NBI**	**JAN 18, 2024**

PHOTOS



Photo 33: **Northeast guardrail transition, sixth post from East end - Loose spacer block with gap.**



Photo 34: **Northwest guardrail transition - Loose nuts and anchor bolts, with gap and signs of collision damage.**

National Bridge Element Inspection

BDEPT# **W-01-008**
B.I.N. **2FJ**
Item 8 **W01008-2FJ-DOT-NBI**
Span Group **1**
Town **Wakefield**
District **4**

Date **01/18/2024**
District Bridge Inspection Eng'r **Joseph Dideo**
Inspecting Agency **Jacobs Engineering Group**
Team Leader **Vanessa Buonomano**
Team Member(s) **Jack Keras, Brendan Herridge**

El #	Element Name	Units	Env.	Total Q.	% or Q	State 1	State 2	State 3	State 4
144	**Re Conc Arch**	feet	2	50.000	☐ %	4.000	29.000	17.000	
Notes :									
> 1080	*Delamination/Spall/Patched Area*	feet	2	42.000	☐ %		25.000	17.000	
Notes :									
> 1130	*Cracking (RC and Other)*	feet	2	4.000	☐ %		4.000		
Notes :									
> 510	Wearing Surfaces	sq feet	2	7,983.000	☐ %	7,983.000			
Notes :									
215	**Re Conc Abutment**	feet	2	100.000	☐ %	100.000			
Notes :									
321	**Re Conc Approach Slab**	sq feet	2	4,500.000	☐ %	4,500.000			
Notes :									
330	**Metal Bridge Railing**	feet	2	103.000	☐ %	98.000			5.000
Notes :									
> 1000	*Corrosion*	feet	2	5.000	☐ %				5.000
Notes :	- South Railing, eighth section from East End - 100% section loss, causing disconnected bottom rail.								
> 515	Steel Protective Coating	sq feet	2	1,306.000	☐ %		1,306.000		
Notes :									
> > 3430	*Ox Flm/Txt Adhr(Stl Prot Coat)*	sq feet	2	1,306.000	☐ %		1,306.000		
Notes :									
331	**Re Conc Bridge Railing**	feet	2	155.000	☐ %	95.000	53.000	7.000	
Notes :									
> 1080	*Delamination/Spall/Patched Area*	feet	2	10.000	☐ %		3.000	7.000	
Notes :									

National Bridge Element Inspection

BDEPT#	**W-01-008**	Date	**01/18/2024**
B.I.N.	**2FJ**	District Bridge Inspection Eng'r	**Joseph Dideo**
Item 8	**W01008-2FJ-DOT-NBI**	Inspecting Agency	**Jacobs Engineering Group**
Span Group	**1**	Team Leader	**Vanessa Buonomano**
Town	**Wakefield**	Team Member(s)	**Jack Keras, Brendan Herridge**
District	**4**		

El #	Element Name	Units	Env.	Total Q.	% or Q	State 1	State 2	State 3	State 4
> 1130	*Cracking (RC and Other)*	feet	2	50.000	☐ %		50.000		
Notes :									

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DOCUMENT A00812

CITY OF WOBURN BRIDGES – INSPECTION REPORTS

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STRUCTURES INSPECTION FIELD REPORT

ROUTINE INSPECTION

2-DIST	B.I.N.	BR. DEPT. NO.
04	2F6	W-43-031

CITY/TOWN	8.-STRUCTURE NO.	11-Kilo. POINT	41-STATUS	90-ROUTINE INSP. DATE
WOBURN	W43031-2F6-DOT-NBI	086.228	A:OPEN	JAN 22, 2024

07-FACILITY CARRIED	MEMORIAL NAME/LOCAL NAME	27-YR BUILT	106-YR REBUILT	YR REHAB'D (NON 106)
I 95 NB/ST128 NB		1949	1961	1961

06-FEATURES INTERSECTED	26-FUNCTIONAL CLASS	DIST. BRIDGE INSPECTION ENGINEER J. Dideo
ST 38 WB/MAIN ST	Urban Interstate	

43-STRUCTURE TYPE	22-OWNER	21-MAINTAINER	TEAM LEADER B. Herridge	PROJ MGR Jacobs Engineering Group
107 : Concrete Frame	State Highway Agency	State Highway Agency		

107-DECK TYPE	WEATHER	TEMP. (air)	TEAM MEMBERS
N : Not applicable	Clear	0°C	Y. GARCIA RUIZ, V. BUONOMANO, R. C. MCCORMICK

ITEM 58 — DECK: N

		DEF
1.Wearing surface	7	M-P
2.Deck Condition	N	-
3.Stay in Place Forms	N	-
4.Curbs	7	-
5.Median	6	M-P
6.Sidewalks	N	-
7.Parapets	N	-
8.Railing	4	S-A
9.Anti Missile Fence	N	-
10.Drainage System	N	-
11.Lighting Standards	N	-
12.Utilities	7	-
13.Deck Joints	7	-
14.Safety Walk	6	M-P
15.Coping	5	M-P
16.	N	-

CURB REVEAL (In millimeters)	E	W
	203	203

APPROACHES

		DEF
a. Appr. pavement condition	7	-
b. Appr. Roadway Settlement	7	-
c. Appr. Sidewalk Settlement	N	-
d.	N	-

OVERHEAD SIGNS (Attached to bridge) (Y/N): N

		DEF
a. Condition of Welds	N	-
b. Condition of Bolts	N	-
c. Condition of Signs	N	-

ITEM 59 — SUPERSTRUCTURE: 6

			DEF
1.Rigid Frame		6	M-P
2.Floorbeams		N	-
3.Floor System Bracing		N	-
4.Girders or Beams		N	-
5.Trusses - General		N	-
a. Upper Chords	N		-
b. Lower Chords	N		-
c. Web Members	N		-
d. Lateral Bracing	N		-
e. Sway Bracings	N		-
f. Portals	N		-
g. End Posts	N		-
6.Pin & Hangers		N	-
7.Conn Plt's, Gussets & Angles		N	-
8.Cover Plates		N	-
9.Bearing Devices		N	-
10.Diaphragms/Cross Frames		N	-
11. Rivets & Bolts		N	-
12.Welds		N	-
13.Member Alignment		8	-
14.Paint/Coating		N	-
15.Purlins		4	S-A

Year Painted: N

COLLISION DAMAGE: *Please explain*
None (X) Minor ( ) Moderate ( ) Severe ( )

LOAD DEFLECTION: *Please explain*
None (X) Minor ( ) Moderate ( ) Severe ( )

LOAD VIBRATION: *Please explain*
None (X) Minor ( ) Moderate ( ) Severe ( )

Any Fracture Critical Member: (Y/N) N

Any Cracks: (Y/N) N

ITEM 60 — SUBSTRUCTURE: 6

	Dive	Cur		DEF
1. Abutments			6	
a. Pedestals	N	N		-
b. Bridge Seats	N	N		-
c. Backwalls	N	N		-
d. Breastwalls	N	6		M-P
e. Wingwalls	N	7		M-P
f. Slope Paving/Rip-Rap	N	N		-
g. Pointing	N	N		-
h. Footings	N	H		-
i. Piles	N	N		-
j. Scour	N	N		-
k. Settlement	N	7		-
l.	N	N		-
m.	N	N		-
2. Piers or Bents			N	
a. Pedestals	N	N		-
b. Caps	N	N		-
c. Columns	N	N		-
d. Stems/Webs/Pierwalls	N	N		-
e. Pointing	N	N		-
f. Footing	N	N		-
g. Piles	N	N		-
h. Scour	N	N		-
i. Settlement	N	N		-
j.	N	N		-
k.	N	N		-
3. Pile Bents			N	
a. Pile Caps	N	N		-
b. Piles	N	N		-
c. Diagonal Bracing	N	N		-
d. Horizontal Bracing	N	N		-
e. Fasteners	N	N		-

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

X=UNKNOWN N=NOT APPLICABLE H=HIDDEN/INACCESSIBLE R=REMOVED

RTN(1)7-96

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
WOBURN	**2F6**	**W-43-031**	**W43031-2F6-DOT-NBI**	**JAN 22, 2024**

ITEM 61 — CHANNEL & CHANNEL PROTECTION

N

	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	-

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

ITEM 36 — *TRAFFIC SAFETY*

	36	COND	DEF
A. Bridge Railing	0	4	S-A
B. Transitions	0	6	M-P
C. Approach Guardrail	1	6	M-P
D. Approach Guardrail Ends	1	N	-

WEIGHT POSTING

Not Applicable **X**

	H	3	3S2	Single
Actual Posting	N	N	N	N
Recommended Posting	N	N	N	N

Waived Date: 00/00/0000 **EJDMT Date:** 00/00/0000

Signs In Place (Y=Yes,N=No, NR=NotRequired) Legibility/ Visibility	At bridge N	At bridge S	Other Advance N	Other Advance S

CLEARANCE POSTING

Not **X**

	E ft	E in	W ft	W in	meter
Actual Field Measurement		0	18	4	5.58
Posted Clearance		0		0	

Signs In Place (Y=Yes,N=No, NR=Not Required) Legibility/ Visibility	At bridge E	At bridge W	Advance E	Advance W

ACCESSIBILITY (Y/N/P)

	Needed	Used
Lift Bucket	Y	Y
Ladder	N	N
Boat	N	N
Waders	N	N
Inspector 50	N	N
Rigging	N	N
Staging	N	N
Traffic Control	Y	Y
RR Flagger	N	N
Police	Y	Y
Other:		
	N	N

TOTAL HOURS 74

PLANS (Y/N): **Y**

(V.C.R.) (Y/N): **N**

TAPE#: _____

List of field tests performed:

RATING

Rating Report (Y/N): **Y**

Date: 09/01/2008

Inspection data at time of existing rating

I 58: **-** I 59: **7** I 60: **7** Date : 01/03/2008

Recommend for Rating or Rerating (Y/N): **N**

If YES please give priority: HIGH ( ) MEDIUM ( ) LOW ( )

REASON: _____

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 stablility. 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	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
WOBURN	**2F6**	**W-43-031**	**W43031-2F6-DOT-NBI**	**JAN 22, 2024**

REMARKS

BRIDGE ORIENTATION
Bridge W-43-031 (2F6) is a single span structure that carries I-95/ST128 Northbound over ST38 Westbound/ Main Street in the city of Woburn, MA. The abutments/frame legs are labeled south and north along the direction of I-95/ST128 and the elevations are labeled east and west.

GENERAL REMARKS
The bridge is a reinforced concrete rigid frame supported by concrete abutments/frame legs on spread footings. There are steel median purlins that rest on the edge of this structure and the adjoining bridge, W-43-031 (2F7). The median purlins between this bridge and the adjacent bridge are included in both bridge inspection reports to match previous inspection report formatting. All nomenclature is consistent with previous inspection reports and the original design plans.

ACCESS NOTES
The topside was inspected on foot during the daytime hours on 1/23/24 within a right shoulder closure on I-95/ST128 Northbound in conjunction with local traffic control and a state police detail.

The underside of the bridge was inspected during the daytime hours on 1/22/24 within left and right lane closure on ST38 Westbound/Main Street in conjunction with local traffic control and a state police detail. The underside was accessed utilizing a 30’ bucket truck.

The bridge was inspected alongside BIN 2F7.

VERTICAL CLEARANCE
The minimum vertical clearance for ST38 Westbound/Main Street is 18'-4" which was measured at the east fascia along the north curb line.

ITEM 58 - DECK

Item 58.1 - Wearing surface
The wearing surface exhibits scattered hairline longitudinal and transverse cracks and minor wheel line rutting throughout. **(see Photo 1)**.

Item 58.4 - Curbs
The granite curb along the east safety walk exhibits minor vegetation growth between the curb and safety walk (inaccessible due to snow coverage at time of inspection).

Item 58.5 - Median
The median consists of a 2-1/2" steel grid flooring that sits on purlins that span between BIN 2F6 and BIN 2F7.

The steel grid flooring exhibits areas of minor surface rust throughout **(see Photo 2)**.

For purlin deficiencies, refer to Item 59.15 - Purlins.

Item 58.8 - Railing
The east bridge rail consists of three steel pipes running between steel posts. The east bridge railing exhibits heavy rust with areas of up to 100% section loss throughout. Specific deficiencies to the railing are as follows:

- 4th post from the south end, south face, at bottom rail - Full height x 3" wide rust hole **(see Photo 3)**.
- 5th post from the south end, south face, at top - Two (2) up to 1" diameter rust holes.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
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REMARKS

- Between the 6th and 7th posts from the south end, middle horizontal rail - Bent 5" out of plane **(see Photo 4)**.
- 8th post from the south end, top face - 6-1/2" long x 4-1/2" wide rust hole.
- 8th post from the south end, at top rail - Two (2) up to 1-3/4" long x 3/4" wide rust holes.
- 9th post from the south end, north face, at top rail - 1" diameter rust hole.
- 9th post from the south end, south face, at top rail - 1" diameter rust hole.
- 11th post from the south end, north face, at top rail - Two (2) up to 1-1/4" diameter rust holes.
- 11th post from the south end, south face, at bottom rail - Two (2) up to 1” high x 1/4” wide rust holes.
- 12th post from the south end, top face - 6" long x 2" wide rust hole.
- 12th post from the south end, south face, at top rail - 1" diameter rust hole.
- 12th post from the south end, south face, at bottom rail - 1” long x 4” wide rust hole.
- 14th post from the south end, south face, at top rail - 4-1/2” long x 1-1/4” high rust hole **(see Photo 5)**.
- 14th post from the south end, north face, at top rail - Two (2) up to 1" diameter rust holes.
- 15th post from the south end, south face, at top rail - 1" diameter rust hole.
- 17th post from the south end, north face, between the middle and bottom rail - 5" high x 1-3/4" wide rust hole **(see Photo 6)**.
- 17th post from the south end, north face, at top rail - 1-1/2” high x 1-1/4” wide rust hole **(see Photo 6)**.
- 17th post from the south end, south face, at bottom rail - 3/4" long x 1/2” high rust hole.
- 17th post from the south end, south face, at top rail - 1-1/2” long x 1” high rust hole.
- All three (3) horizontal rails between the 17th and 18th posts from the south end exhibit disconnected rail splices (As-Built) **(see Photo 6)**.
- 19th post from the south end, north face, at top rail - 1" diameter rust hole.
- 19th post from the south end, top face - 6" wide x 8" long rust hole **(see Photo 7)**.
- 19th post from the south end, at bottom rail - 1/2" high x 1 wide rust hole.
- 21st post from the south, south face, at bottom rail - 7" high x 1-1/2” wide rust hole.

The west bridge rail consists of three steel pipes running between steel posts.

Item 58.12 - Utilities
There are two boxed lighting fixtures attached to both abutments with metal conduits that have been replaced since the previous inspection.

Item 58.14 - Safety Walk
The safety walk exhibits rust staining and scattered vertical hairline cracks that extend to the top face. The majority of the safety walk was inaccessible due to snow coverage at time of inspection.

Item 58.15 - Coping
The east coping exhibits scattered vertical and horizontal hairline cracks, some with efflorescence. Specific deficiencies to the east coping are as follows:

- North end - 1'-6” long x 1'-0” high x 10” wide x 5" deep corner spall with exposed rebar **(see Photo 8)**.
- At Crown - 1’-6” long x 8” high x 1-1/2” deep spall.
- Over the left lane - 1’-0” long x 8” high x 1” deep spall with two (2) adjacent up to 8” long x 8” high hollow areas **(see Photo 9)**.
- South end - 9” long x 9” high hollow area with rust staining.

APPROACHES

Approaches a - Appr. pavement condition
Both approach roadways exhibit scattered hairline cracks.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
WOBURN	**2F6**	**W-43-031**	**W43031-2F6-DOT-NBI**	**JAN 22, 2024**

REMARKS

ITEM 59 - SUPERSTRUCTURE

Item 59.1 - Rigid Frame

The underside and both faces of the frame exhibits scattered hairline cracks, some with efflorescence. The frame underside exhibits scattered 4” long x 4” wide grout pockets with spalling up to 1” deep. The frame west face exhibits areas of rust staining due to active leakage from the median. Specific deficiencies to the frame underside are as follows:

- North end along the construction joint - 1'-0” long x 3" wide x 3" deep spall **(see Photo 10)**.
- Over right lane along the construction joint - 15'-0” long x 3" wide x up to 4" deep spall **(see Photo 10)**.
- Over left lane along the construction joint - 2'-0” long x 3" wide x 4-1/2" deep spall **(see Photo 10)**.
- At the top of the west face below purlin connections near the north end - Four (4) up to 10” long x 3” high x 3” deep spalls **(see Photo 11)**.

Item 59.15 - Purlins

All median beams/purlins exhibit moderate rust, heavy efflorescence, and steel delamination throughout **(see Photos 2, 11 and 12)**. The purlins exhibit up to 25% section loss at the connections throughout **(see Photos 11 and 12)**. The 15th median purlin from the north end exhibits up to 2" diameter area of 100% section loss at the connection **(see Photo 2)**.

ITEM 60 - SUBSTRUCTURE

Item 60.1 - Abutments

Item 60.1.d - Breastwalls

Both abutments exhibit scattered vertical hairline cracks measuring up to full height. The joint sealant between the east wingwalls and the abutment are missing along the full height. Specific deficiencies to the abutments are as follows:

North Leg/Abutment:

- Adjacent to the construction joint near mid height - 2’-0” high x 6” wide x 1” deep spall/hollow area **(see Photo 13)**.
- Near the west end at mid height - 1’-2” high x 2'-0” wide x 1-1/2" deep spall with an adjacent 3’-4” high x 2’-10” wide hollow area **(see Photo 14)**.

South Leg/Abutment:

- West face near the base - 6” high x 6” wide x 1” deep spall with rust staining and an adjacent 6” in diameter x 1” deep popout spall **(see Photo 15)**.
- Near the west end at the base - Two (2) up to 6” in diameter x 1” deep popout spalls.
- Adjacent to the construction joint at the base - 6” high x 6” wide x 1” deep spall.

Item 60.1.e - Wingwalls

The northeast wingwall exhibits five (5) spalls with exposed rebar at the south end measuring up to 6” high x 1'-0” wide x 1" deep **(see Photo 16)**.

TRAFFIC SAFETY

Item 36a - Bridge Railing

The east bridge railing is constructed of three horizontal steel rails connecting into steel posts that are anchored into the safety walk. See Item 58.8 - Railing.

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REMARKS

The west bridge rail and median railing consists of thrie beam panels mounted onto steel posts and plastic spacers.

Item 36b - Transitions

The transitions at the southeast and northeast consists of thrie beam guardrails mounted on steel posts and spacers which are bolted to the concrete end posts.

The southwest and northwest transition is a continuous thrie beam rail that transitions to a jersey barrier well beyond the structure.

The southeast transition exhibits minor collision damage to the guardrail and spacer block. The southeast concrete endpost exhibits a corner spall with exposed rebar at the top measuring 10” long x 8" high x 11" wide with an adjacent spall measuring 5” long x 3” wide x 1” deep **(see Photo 17)**.

Item 36c - Approach Guardrail

The southeast and northeast approach guardrail consists of W-beam guardrails mounted on steel posts and spacers. The southeast approach guardrail exhibits minor collision damage approximately 20’-0” from the southeast endpost. The northeast approach guardrail exhibits extensive collision damage 25’-0” from the northeast endpost **(see Photo 18)**.

The southwest and northwest approach guardrail consists of thrie-beam guardrails mounted on steel posts and spacers.

The southwest approach guardrail exhibits minor collision damage.

Item 36d - Approach Guardrail Ends

All four corners are continuous with the roadway.

Photo Log

Photo 1 : Typical, wearing surface exhibits hairline longitudinal and transverse cracks and minor wheel line rutting (shown at midspan).
Photo 2 : 15th median purlin from the north end - Area of 100% section loss at the connection. Note rusted steel grid.
Photo 3 : East railing, 4th post from the south, south face, at bottom rail - Rust hole.
Photo 4 : East railing, between the 6th and 7th posts from the south end, middle horizontal rail - Bent out of plane.
Photo 5 : East railing, 14th post from the south end, south face, at top rail - Rust hole.
Photo 6 : East railing, 17th post from the south end, north face - Two (2) rust holes and disconnected rail splices.
Photo 7 : East railing, 19th post from the south end, top face - Rust hole.
Photo 8 : East coping, north end - Corner spall with exposed rebar
Photo 9 : East coping, over the left lane - Spall with two (2) adjacent hollow areas.
Photo 10 : Frame underside along the construction joint - Several spalls along joint.
Photo 11 : Frame west face near the north end - Four (4) spalls.
Photo 12 : Typical, median purlins exhibit moderate rust and steel delamination (shown at north end looking south).
Photo 13 : North Abutment, adjacent to the construction joint, near mid height - Spall/hollow area.
Photo 14 : North Abutment, near the west end, at mid height - Spall and a hollow area.
Photo 15 : South Abutment, west face, near base - Spall with rust staining and a popout spall.
Photo 16 : Northeast wingwall, at south end - Spalls with exposed rebar.
Photo 17 : Southeast concrete endpost, at top - Corner spall with exposed rebar.

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REMARKS

Photo 18 : Northeast approach guardrail, 25’-0” from northeast endpost - Collision damage.

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PHOTOS



Photo 1: **Typical, wearing surface exhibits hairline longitudinal and transverse cracks and minor wheel line rutting (shown at midspan).**



Photo 2: **15th median purlin from the north end - Area of 100% section loss at the connection. Note rusted steel grid.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
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PHOTOS



Photo 3: **East railing, 4th post from the south, south face, at bottom rail - Rust hole.**



Photo 4: **East railing, between the 6th and 7th posts from the south end, middle horizontal rail - Bent out of plane.**

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PHOTOS



Photo 5: **East railing, 14th post from the south end, south face, at top rail - Rust hole.**



Photo 6: **East railing, 17th post from the south end, north face - Two (2) rust holes and disconnected rail splices.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
WOBURN	**2F6**	**W-43-031**	**W43031-2F6-DOT-NBI**	**JAN 22, 2024**

PHOTOS



Photo 7: **East railing, 19th post from the south end, top face - Rust hole.**



Photo 8: **East coping, north end - Corner spall with exposed rebar**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
WOBURN	**2F6**	**W-43-031**	**W43031-2F6-DOT-NBI**	**JAN 22, 2024**

PHOTOS



Photo 9: **East coping, over the left lane - Spall with two (2) adjacent hollow areas.**



Photo 10: **Frame underside along the construction joint - Several spalls along joint.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
WOBURN	**2F6**	**W-43-031**	**W43031-2F6-DOT-NBI**	**JAN 22, 2024**

PHOTOS



Photo 11: Frame west face near the north end - Four (4) spalls.



Photo 12: Typical, median purlins exhibit moderate rust and steel delamination (shown at north end looking south).

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
WOBURN	**2F6**	**W-43-031**	**W43031-2F6-DOT-NBI**	**JAN 22, 2024**

PHOTOS



Photo 13: **North Abutment, adjacent to the construction joint, near mid height - Spall/hollow area.**



Photo 14: **North Abutment, near the west end, at mid height - Spall and a hollow area.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
WOBURN	**2F6**	**W-43-031**	**W43031-2F6-DOT-NBI**	**JAN 22, 2024**

PHOTOS



Photo 15: **South Abutment, west face, near base - Spall with rust staining and a popout spall.**



Photo 16: **Northeast wingwall, at south end - Spalls with exposed rebar.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
WOBURN	**2F6**	**W-43-031**	**W43031-2F6-DOT-NBI**	**JAN 22, 2024**

PHOTOS



Photo 17: Southeast concrete endpost, at top - Corner spall with exposed rebar.



Photo 18: Northeast approach guardrail, 25'-0" from northeast endpost - Collision damage.

National Bridge Element Inspection

BDEPT# **W-43-031**
B.I.N. **2F6**
Item 8 **W43031-2F6-DOT-NBI**
Span Group **1**
Town **Woburn**
District **4**

Date **01/22/2024**
District Bridge Inspection Eng'r **Joseph Dideo**
Inspecting Agency **Jacobs Engineering Group**
Team Leader **Brendan Herridge**
Team Member(s) **Yaneliz Garcia Ruiz, Vanessa Buonomano, Ryan C. McCormick**

El #	Element Name	Units	Env.	Total Q.	% or Q	State 1	State 2	State 3	State 4
12	**Re Concrete Deck**	sq feet	2	4,524.000	☐ %	4,471.000	50.000	3.000	
Notes :									
> 1080	*Delamination/Spall/Patched Area*	sq feet	2	3.000	☐ %			3.000	
Notes :									
> 1130	*Cracking (RC and Other)*	sq feet	2	150.000	☐ %	100.000	50.000		
Notes :									
> 510	Wearing Surfaces	sq feet	2	4,093.000	☐ %	4,093.000			
Notes :									
144	**Re Conc Arch**	feet	2	67.708	☐ %	60.208	7.500		
Notes :									
> 1120	*Efflorescence/Rust Staining*	feet	2	7.500	☐ %		7.500		
Notes :									
215	**Re Conc Abutment**	feet	2	148.000	☐ %	132.000	16.000		
Notes :									
> 1080	*Delamination/Spall/Patched Area*	feet	2	9.000	☐ %		9.000		
Notes :									
> 1130	*Cracking (RC and Other)*	feet	2	7.000	☐ %		7.000		
Notes :									
301	**Pourable Joint Seal**	feet	2	120.000	☐ %	120.000			
Notes :									
321	**Re Conc Approach Slab**	sq feet	2	1,665.000	☐ %	1,665.000			
Notes :									
330	**Metal Bridge Railing**	feet	2	152.875	☐ %	22.875	110.000	10.000	10.000
Notes :	CS4 corrosion at several locations along the steel railings.								

National Bridge Element Inspection

BDEPT#	**W-43-031**	Date	**01/22/2024**
B.I.N.	**2F6**	District Bridge Inspection Eng'r	**Joseph Dideo**
Item 8	**W43031-2F6-DOT-NBI**	Inspecting Agency	**Jacobs Engineering Group**
Span Group	**1**	Team Leader	**Brendan Herridge**
Town	**Woburn**	Team Member(s)	**Yaneliz Garcia Ruiz, Vanessa Buonomano, Ryan C. McCormick**
District	**4**		

El #	Element Name	Units	Env.	Total Q.	% or Q	State 1	State 2	State 3	State 4
> 1000	*Corrosion*	feet	2	116.000	☐ %		96.000	10.000	10.000
Notes :	CS4 corrosion ;lat several locations along steel railings.								
> 515	Steel Protective Coating	sq feet	2	590.000	☐ %			430.000	160.000
Notes :									
> > 3440	*Eff (Stl Protect Coat)*	sq feet	2	590.000	☐ %			430.000	160.000
Notes :									

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION

STRUCTURES INSPECTION FIELD REPORT

ROUTINE INSPECTION

2-DIST	B.I.N.	BR. DEPT. NO.
04	2F7	W-43-031

CITY/TOWN	8.-STRUCTURE NO.	11-Kilo. POINT	41-STATUS	90-ROUTINE INSP. DATE
WOBURN	W43031-2F7-DOT-NBI	086.228	A:OPEN	JAN 22, 2024

07-FACILITY CARRIED	MEMORIAL NAME/LOCAL NAME	27-YR BUILT	106-YR REBUILT	YR REHAB'D (NON 106)
I 95 SB/ST128 SB		1949	1961	0000

06-FEATURES INTERSECTED	26-FUNCTIONAL CLASS	DIST. BRIDGE INSPECTION ENGINEER J. Dideo
ST 38 WB/MAIN ST	Urban Interstate	

43-STRUCTURE TYPE	22-OWNER	21-MAINTAINER	TEAM LEADER B. Briselli	PROJ MGR Jacobs Engineering Group
107 : Concrete Frame	State Highway Agency	State Highway Agency		

107-DECK TYPE	WEATHER	TEMP. (air)	TEAM MEMBERS
N : Not applicable	Clear	0°C	Y. GARCIA RUIZ, V. BUONOMANO

ITEM 58 — DECK: N

		DEF
1.Wearing surface	7	M-P
2.Deck Condition	N	-
3.Stay in Place Forms	N	-
4.Curbs	7	-
5.Median	6	M-P
6.Sidewalks	N	-
7.Parapets	N	-
8.Railing	5	S-A
9.Anti Missile Fence	N	-
10.Drainage System	N	-
11.Lighting Standards	N	-
12.Utilities	7	-
13.Deck Joints	7	-
14.Safety Walk	6	M-P
15.Coping	6	M-P
16.	N	-

CURB REVEAL (In millimeters)	E	W
	225	225

APPROACHES

		DEF
a. Appr. pavement condition	7	M-P
b. Appr. Roadway Settlement	7	-
c. Appr. Sidewalk Settlement	N	-
d.	N	-

OVERHEAD SIGNS (Attached to bridge) (Y/N): N

		DEF
a. Condition of Welds	N	-
b. Condition of Bolts	N	-
c. Condition of Signs	N	-

ITEM 59 — SUPERSTRUCTURE: 7

			DEF
1.Rigid Frame		7	M-P
2.Floorbeams		N	-
3.Floor System Bracing		N	-
4.Girders or Beams		N	-
5.Trusses - General		N	-
a. Upper Chords	N		-
b. Lower Chords	N		-
c. Web Members	N		-
d. Lateral Bracing	N		-
e. Sway Bracings	N		-
f. Portals	N		-
g. End Posts	N		-
6.Pin & Hangers		N	-
7.Conn Plt's, Gussets & Angles		N	-
8.Cover Plates		N	-
9.Bearing Devices		N	-
10.Diaphragms/Cross Frames		N	-
11. Rivets & Bolts		N	-
12.Welds		N	-
13. Member Alignment		7	-
14. Paint/Coating		N	-
15. Purlins		4	S-A

Year Painted	N

COLLISION DAMAGE: *Please explain*
None (X) Minor ( ) Moderate ( ) Severe ( )

LOAD DEFLECTION: *Please explain*
None (X) Minor ( ) Moderate ( ) Severe ( )

LOAD VIBRATION: *Please explain*
None (X) Minor ( ) Moderate ( ) Severe ( )

Any Fracture Critical Member: **(Y/N)** N

Any Cracks: **(Y/N)** N

ITEM 60 — SUBSTRUCTURE: 7

	Dive	Cur		DEF
1. Abutments			7	
a. Pedestals	N	N		-
b. Bridge Seats	N	N		-
c. Backwalls	N	N		-
d. Breastwalls	N	7		M-P
e. Wingwalls	N	6		M-P
f. Slope Paving/Rip-Rap	N	N		-
g. Pointing	N	N		-
h. Footings	N	H		-
i. Piles	N	N		-
j. Scour	N	N		-
k. Settlement	N	7		-
l.	N	N		-
m.	N	N		-
2. Piers or Bents			N	
a. Pedestals	N	N		-
b. Caps	N	N		-
c. Columns	N	N		-
d. Stems/Webs/Pierwalls	N	N		-
e. Pointing	N	N		-
f. Footing	N	N		-
g. Piles	N	N		-
h. Scour	N	N		-
i. Settlement	N	N		-
j.	N	N		-
k.	N	N		-
3. Pile Bents			N	
a. Pile Caps	N	N		-
b. Piles	N	N		-
c. Diagonal Bracing	N	N		-
d. Horizontal Bracing	N	N		-
e. Fasteners	N	N		-

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):* 7

93B-U/W (DIVE) Insp 00/00/0000

X=UNKNOWN N=NOT APPLICABLE H=HIDDEN/INACCESSIBLE R=REMOVED

RTN(1)7-96

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
WOBURN	**2F7**	**W-43-031**	**W43031-2F7-DOT-NBI**	**JAN 22, 2024**

ITEM 61 — CHANNEL & CHANNEL PROTECTION

N

	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	-

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

ITEM 36 — *TRAFFIC SAFETY*

	36	COND	DEF
A. Bridge Railing	0	5	S-A
B. Transitions	1	6	M-P
C. Approach Guardrail	1	7	-
D. Approach Guardrail Ends	1	N	-

WEIGHT POSTING

Not Applicable **X**

	H	3	3S2	Single
Actual Posting	N	N	N	N
Recommended Posting	N	N	N	N

Waived Date: 00/00/0000 **EJDMT Date:** 00/00/0000

Signs In Place (Y=Yes,N=No, NR=NotRequired) Legibility/ Visibility	At bridge N	At bridge S	Other Advance N	Other Advance S

CLEARANCE POSTING

Not **X**

	E ft	E in	W ft	W in	meter
Actual Field Measurement		0	19	0	5.79
Posted Clearance		0		0	

Signs In Place (Y=Yes,N=No, NR=Not Required) Legibility/ Visibility	At bridge E	At bridge W	Advance E	Advance W

ACCESSIBILITY (Y/N/P)

	Needed	Used
Lift Bucket	Y	Y
Ladder	N	N
Boat	N	N
Waders	N	N
Inspector 50	N	N
Rigging	N	N
Staging	N	N
Traffic Control	Y	Y
RR Flagger	N	N
Police	Y	Y
Other:		
	N	N

TOTAL HOURS 74

PLANS (Y/N): **Y**

(V.C.R.) (Y/N): **N**

TAPE#: _____

List of field tests performed:

RATING

Rating Report (Y/N): **Y**

Date: 10/01/2008

Inspection data at time of existing rating

I 58: **-** I 59: **7** I 60: **7** Date : 01/03/2008

Recommend for Rating or Rerating (Y/N): **N**

If YES please give priority: HIGH ( ) MEDIUM ( ) LOW ( )

REASON: _____

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 stablility. 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	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
WOBURN	**2F7**	**W-43-031**	**W43031-2F7-DOT-NBI**	**JAN 22, 2024**

REMARKS

BRIDGE ORIENTATION

Bridge No. W-43-031 (2F7) is a single span structure that carries I-95/ST128 Southbound over ST38 Westbound/ Main Street in the city of Woburn, MA. The abutments/frame legs are labeled south and north along the direction of I-95/ST128 and the elevations are labeled east and west. This labeling is consistent with the previous inspection reports.

GENERAL REMARKS

The bridge is a reinforced concrete rigid frame supported by concrete abutments/frame legs on spread footings. There are steel median purlins that rest on the edge of this structure and the adjoining bridge, Bridge No. W-43-031 (2F6). The median purlins between this bridge and the adjacent bridge are included in both bridge inspection reports to match previous inspection report formatting. All nomenclature is consistent with previous inspection reports and the original design plans.

ACCESS NOTES

The topside was inspected on foot during the daytime hours on 1/23/24 within a right shoulder closure on I-95/ST128 Northbound in conjunction with local traffic control and a state police detail.

The underside of the bridge was inspected during the daytime hours on 1/22/24 within left and right lane closure on ST38 Westbound/Main Street in conjunction with local traffic control and a state police detail. The underside was accessed utilizing a 30’ bucket truck.

The bridge was inspected alongside BIN 2F6.

VERTICAL CLEARANCE

The minimum vertical clearance for ST38 Westbound/Main Street is 19'-0" located at the East fascia near the North curb-line.

ITEM 58 - DECK

Item 58.1 - Wearing surface

There are random minor cracks throughout the wearing surface.

There is minor wheel rutting throughout the wearing surface **(see Photo 1).**

Item 58.4 - Curbs

The granite curb along the West safety walk has vegetation growth between the curb and safety walk. Snow accumulation at the time of inspection limited full visibility of each curb.

The South Abutment on the North end, second and forth post, exhibit two (2) minor gouges to the top of the curb measuring 12" long x 5" wide x 1/2" deep and 6" long x 5" wide x 1/2" deep, respectively.

At the North Abutment joint, looking West, there is broken curb up to 2" long x 3" wide x 7" high.

Item 58.5 - Median

The median consists of a 2-1/2" steel grid flooring sitting on purlins spanning between BIN 2F6 and BIN 2F7. There are areas of heavy rust throughout the steel grid. For purlin deficiencies, refer to Item 59.15 - Purlins.

Item 58.8 - Railing

The West bridge railing, posts, and anchor bolts/nuts exhibit heavy rusting and peeling paint throughout **(see Photos 2 and 3).**

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WOBURN	**2F7**	**W-43-031**	**W43031-2F7-DOT-NBI**	**JAN 22, 2024**

REMARKS

The top surfaces of most posts typically exhibit small areas of 100% section loss **(see Photo 2).**

The South end of the West railing, between the seventh and eighth posts, exhibits heavy vegetation growth on the railing and throughout the bridge joint.

DEF=S-A: The North end of the West railing, eighth post exhibits a disconnected railing at the bottom and the top rail broken (see Photo 3).

The guardrail at the median exhibits a few minor bends **(see Photo 1).**

Item 58.12 - Utilities
There are two boxed lights attached to both walls, which are connected by metal conduits.

The metal conduits have areas of rust throughout the full length **(see Photo 4).**

Item 58.14 - Safety Walk
The Safety walk topside, exhibits up to 1'-6" long x up to 12" wide x 1/2" deep scattered surface spalls and areas of minor scaling throughout.

The Northwest corner of the West safety walk exhibits vertical cracking.

The North end of the West railing, sixth post, exhibits 3'-4" long x 1'-6" wide x up to 2" deep spalling with exposed rusted rebar and a 11'-6" long adjacent crack **(see Photo 5).**

Item 58.15 - Coping
The West coping, South end, exhibits horizontal cracking, up to 1/4" wide, full height vertical hairline cracks, with efflorescence, and areas of minor delamination along the full length **(see Photo 6).**

APPROACHES

Approaches a - Appr. pavement condition
The North and South approach roadways have scattered minor cracking and wheel rutting.

ITEM 59 - SUPERSTRUCTURE

Item 59.1 - Rigid Frame
The underside and both frame legs exhibit scattered hairline cracks with and without efflorescence **(see Photo 7).** The frame underside exhibits scattered 4" long x 4" wide grout pockets with spalling up to 1" deep **(see Photo 8).** The frame East fascia exhibits areas of rust staining and heavy efflorescence due to active leakage from the median **(see Photo 9).** Specific deficiencies to the frame underside are as follows:

- Underside, South end - 6" long x 2-1/2" wide x 1/2" deep spall with exposed rebar **(see Photo 10).**
- Underside, South end - 8" long x 1" wide x 1" deep spall with exposed rebar **(see Photo 11).**
- Underside, South end - Up to 1" vertical misalignment of frame underside adjacent to construction joint **(see Photo 12).**

Item 59.15 - Purlins
All median beams/purlins exhibit moderate to heavy rust and steel delamination throughout with scattered missing connection bolts. The purlins ends bearing on each rigid frame exhibit scattered areas up to 100% section loss **(see Photos 13 to 16).** Specific deficiencies to the purlin ends are as follows:

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REMARKS

- **DEF=S-A: First purlin from the South - up to 1'-3" long x full height x 1/8" web section loss and a 3" wide x 5" high web rust hole (see Photo 13).**
- **DEF=S-A: Sixth purlin from the South - 8" wide x 6" high web rust hole (see Photo 14).**
- **DEF=S-A: Seventh and Eight purlins from the North - multiple web rust holes (see Photo 15).**
- **DEF=S-A: First and Second purlins from the North - multiple web rust holes (see Photo 16).**

ITEM 60 - SUBSTRUCTURE

Item 60.1 - Abutments
Item 60.1.d - Breastwalls
Both frame legs exhibit scattered vertical hairline cracks, small spalls, painted over graffiti, missing joint sealant, and vine growth. Specific frame leg deficiencies are as follows:

West end, South frame leg:
- 4'-0" diameter map cracking **(see Photo 17).**
- Full height vine growth.

North frame leg:
- 12'-0" high vertical crack at the midpoint.
- East end - full height vertical hairline crack.

Item 60.1.e - Wingwalls
Both wingwalls exhibit scattered hairline cracking with and without efflorescence, and vine growth throughout the walls.

- Northwest wingwall, top of embankment - 7'-0" long x 1/16" wide hairline crack.
- Northwest wingwall - missing sealant adjacent to frame **(see Photo 18).**
- Southwest wingwall - vertical hairline crack with efflorescence, as well as vine growth **(see Photo 19).**

TRAFFIC SAFETY

Item 36a - Bridge Railing
The west bridge railing is constructed of three horizontal steel rails connecting into steel posts that are anchored into the safety walk. See Item 58.8 - Railing for deficiencies.

The east median railing consists of thrie beam panels mounted onto steel posts and plastic spacers.

Item 36b - Transitions
The transitions at the southwest and northwest consists of thrie-beam guardrails mounted on steel posts and spacers which are bolted to concrete end posts.

The Northwest transition exhibits a 6" long x 6" high x 4-1/2" wide, 1" deep corner spall**.**

The Southeast and northeast transition is a continuous thrie beam rail.

The Northwest transition has minor collision damage with dented guardrail and a minor tear **(see Photo 20).**

Item 36c - Approach Guardrail
The Southwest and Northwest approach guardrail consists of w-beam guardrails mounted on steel posts and

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REMARKS

spacers.

The Southeast and Northeast approach guardrail consists of thrie-beam guardrails mounted on steel posts and spacers.

The Northwest guardrail exhibits minor collision damage **(see Photo 20).**

Item 36d - Approach Guardrail Ends
All four corners are continuous with the roadway.

Photo Log

Photo 1 : Typical, wearing surface exhibits minor wheel line rutting and minor bends to median guardrail (shown looking South).
Photo 2 : Typical, scattered 100% section loss to top of railing posts (shown at West railing, second post from North end).
Photo 3 : DEF=S-A: North end of the West railing, Eighth Post - missing and broken railing splice connections.
Photo 4 : South frame leg, East end - rusted conduit, vertical hairline crack, and rust staining from open median above.
Photo 5 : North end of the West railing at Sixth Post - Safety walk exhibits spalling with exposed rebar and an adjacent crack.
Photo 6 : West coping, near South end - Cracking with rust staining and scattered areas of minor delamination.
Photo 7 : Underside face, looking West - Scattered hairline cracks throughout.
Photo 8 : Underside, West end - grout pockets with shallow spalling.
Photo 9 : Frame, East face - areas of rust staining and efflorescence due to active leakage from open median.
Photo 10 : Underside, adjacent to Construction joint, above Westbound travel lane - spall with exposed rebar.
Photo 11 : Underside, adjacent to construction joint, near South end - spall with exposed rebar.
Photo 12 : Typical vertical misalignment of frame underside adjacent to construction joint.
Photo 13 : DEF=S-A: First purlin from the South, West end - section loss and web rust hole.
Photo 14 : DEF=S-A: Sixth purlin from the South, West end - web rust hole.
Photo 15 : DEF=S-A: Seventh and Eighth purlins from the North, West end - multiple web rust holes.
Photo 16 : DEF=S-A: First and Second purlins from North, West end - multiple web rust holes.
Photo 17 : West end, South frame leg - map cracking.
Photo 18 : Northwest wingwall - Missing sealant.
Photo 19 : Top of Southwest wingwall - Vertical hairline crack with efflorescence, and vine growth.
Photo 20 : Northwest guardrail transition - Minor collision damage.

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PHOTOS



Photo 1: **Typical, wearing surface exhibits minor wheel line rutting and minor bends to median guardrail (shown looking South).**



Photo 2: **Typical, scattered 100% section loss to top of railing posts (shown at West railing, second post from North end).**

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PHOTOS



Photo 3: **DEF=S-A: North end of the West railing, Eighth Post - missing and broken railing splice connections.**



Photo 4: **South frame leg, East end - rusted conduit, vertical hairline crack, and rust staining from open median above.**

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PHOTOS



Photo 5: **North end of the West railing at Sixth Post - Safety walk exhibits spalling with exposed rebar and an adjacent crack.**



Photo 6: **West coping, near South end - Cracking with rust staining and scattered areas of minor delamination.**

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PHOTOS



Photo 7: **Underside face, looking West - Scattered hairline cracks throughout.**



Photo 8: **Underside, West end - grout pockets with shallow spalling.**

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WOBURN	**2F7**	**W-43-031**	**W43031-2F7-DOT-NBI**	**JAN 22, 2024**

PHOTOS



Photo 9: **Frame, East face - areas of rust staining and efflorescence due to active leakage from open median.**



Photo 10: **Underside, adjacent to Construction joint, above Westbound travel lane - spall with exposed rebar.**

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PHOTOS



Photo 11: **Underside, adjacent to construction joint, near South end - spall with exposed rebar.**



Photo 12: **Typical vertical misalignment of frame underside adjacent to construction joint.**

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PHOTOS



Photo 13: **DEF=S-A: First purlin from the South, West end - section loss and web rust hole.**



Photo 14: **DEF=S-A: Sixth purlin from the South, West end - web rust hole.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
WOBURN	2F7	W-43-031	W43031-2F7-DOT-NBI	JAN 22, 2024

PHOTOS



Photo 15: **DEF=S-A: Seventh and Eighth purlins from the North, West end - multiple web rust holes.**

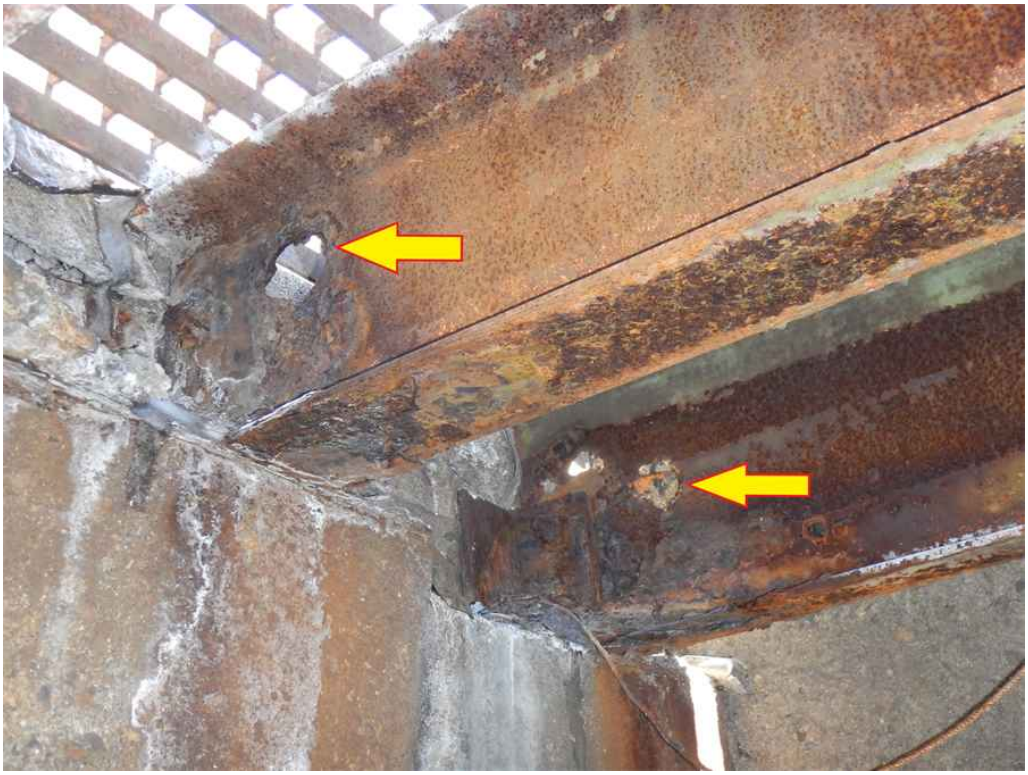


Photo 16: **DEF=S-A: First and Second purlins from North, West end - multiple web rust holes.**

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
WOBURN	2F7	W-43-031	W43031-2F7-DOT-NBI	JAN 22, 2024

PHOTOS



Photo 17: West end, South frame leg - map cracking.



Photo 18: Northwest wingwall - Missing sealant.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8.-STRUCTURE NO.	INSPECTION DATE
WOBURN	**2F7**	**W-43-031**	**W43031-2F7-DOT-NBI**	**JAN 22, 2024**

PHOTOS



Photo 19: **Top of Southwest wingwall - Vertical hairline crack with efflorescence, and vine growth.**



Photo 20: **Northwest guardrail transition - Minor collision damage.**

National Bridge Element Inspection

BDEPT# **W-43-031**
B.I.N. **2F7**
Item 8 **W43031-2F7-DOT-NBI**
Span Group **1**
Town **Woburn**
District **4**

Date **01/22/2024**
District Bridge Inspection Eng'r **Joseph Dideo**
Inspecting Agency **Jacobs Engineering Group**
Team Leader **Brian Briselli**
Team Member(s) **Yaneliz Garcia Ruiz, Vanessa Buonomano**

El #	Element Name	Units	Env.	Total Q.	% or Q	State 1	State 2	State 3	State 4
144	**Re Conc Arch**	feet	2	68.208	☐ %	64.208	4.000		
Notes :									
> 1080	*Delamination/Spall/Patched Area*	feet	2	2.000	☐ %		2.000		
Notes :									
> 1090	*Exposed Rebar*	feet	2	2.000	☐ %		2.000		
Notes :									
> 1130	*Cracking (RC and Other)*	feet	2	64.200	☐ %	64.200			
Notes :									
> 510	Wearing Surfaces	sq feet	2	4,093.000	☐ %	4,093.000			
Notes :									
215	**Re Conc Abutment**	feet	2	148.000	☐ %	148.000			
Notes :									
> 1130	*Cracking (RC and Other)*	feet	2	12.000	☐ %	12.000			
Notes :									
301	**Pourable Joint Seal**	feet	2	120.000	☐ %	120.000			
Notes :									
321	**Re Conc Approach Slab**	sq feet	2	1,665.000	☐ %	1,665.000			
Notes :									
330	**Metal Bridge Railing**	feet	2	160.375	☐ %		156.375		4.000
Notes :									
> 1000	*Corrosion*	feet	2	160.375	☐ %		156.375		4.000
Notes :	CS4 at disconnected rails.								
> 515	Steel Protective Coating	sq feet	2	607.000	☐ %			607.000	
Notes :									

National Bridge Element Inspection

BDEPT#	**W-43-031**	Date	**01/22/2024**
B.I.N.	**2F7**	District Bridge Inspection Eng'r	**Joseph Dideo**
Item 8	**W43031-2F7-DOT-NBI**	Inspecting Agency	**Jacobs Engineering Group**
Span Group	**1**	Team Leader	**Brian Briselli**
Town	**Woburn**	Team Member(s)	**Yaneliz Garcia Ruiz, Vanessa Buonomano**
District	**4**		

El #	Element Name	Units	Env.	Total Q.	% or Q	State 1	State 2	State 3	State 4
> > 3440	*Eff (Stl Protect Coat)*	sq feet	2	607.000	☐ %			607.000	
Notes :									

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: BURLINGTON-LYNNFIELD-WAKEFIELD-WOBURN Project File Number: 613196

Contract Number: 133292

Project Description: Bridge Preservation of 10 Bridges carrying I-95

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 A00875

POLICY DIRECTIVE P-22-001
AND
POLICY DIRECTIVE P-22-002

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massDOT Massachusetts Department of Transportation Highway Division

Number: P-22-001
Date: 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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massDOT
Massachusetts Department of Transportation
Highway Division

Number: P-22-002
Date: 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

BURLINGTON-LYNNFIELD-WAKEFIELD-WOBURN

For: **Bridge Preservation of 10 Bridges Carrying I-95**

COMMONWEALTH OF MASSACHUSETTS

LOCATION

The work referred to herein is in the municipalities of **BURLINGTON, LYNNFIELD, WAKEFIELD**, and **WOBURN**, in Middlesex 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:

Route I-95

Bridge No. B-29-011 (2EW)	I-95 NB over Winn St.	Burlington
Bridge No. B-29-011 (2EX)	I-95 SB over Winn St.	Burlington
Bridge No. W-43-031 (2F6)	I-95 NB over S.R. 38 WB / Main St.	Woburn
Bridge No. W-43-031 (2F7)	I-95 SB over S.R. 38 WB / Main St.	Woburn
Bridge No. L-19-011 (2FD)	I-95 over Main St.	Lynnfield
Bridge No. L-19-004 (2W4)	I-95 NB over Walnut St.	Lynnfield
Bridge No. L-19-004 (2W5)	I-95 SB over Walnut St.	Lynnfield
Bridge No. L-19-007 (2W6)	I-95 NB over Summer St.	Lynnfield
Bridge No. L-19-007 (2W7)	I-95 SB over Summer St.	Lynnfield
Bridge No. W-01-008 (2FJ)	I-95 over Pleasure Island Rd.	Wakefield

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 **845 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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massDOT Massachusetts Department of Transportation Highway Division

CMS Contract Management System

Project # 613196	Contract # 133292			
Location : BURLINGTON - LYNNFIELD - WAKEFIELD - WOBURN				
Description : Bridge Preservation of 10 Bridges carrying I-95				
ITEM #	**QUANTITY**	**ITEM WITH UNIT BID PRICE WRITTEN IN WORDS**	**UNIT PRICE**	**AMOUNT**
102.11	1,150	SELECTIVE CLEARING AND THINNING AT BRIDGES AT _____ PER SQUARE YARD		
114.01	1	DEMOLITION OF MEDIAN SUPERSTRUCTURE OF BRIDGE NO. B-29-011 AT _____ LUMP SUM		
114.02	1	DEMOLITION OF MEDIAN SUPERSTRUCTURE OF BRIDGE NO. L-19-004 AT _____ LUMP SUM		
114.03	1	DEMOLITION OF MEDIAN SUPERSTRUCTURE OF BRIDGE NO. L-19-007 AT _____ LUMP SUM		
114.04	1	DEMOLITION OF MEDIAN SUPERSTRUCTURE OF BRIDGE NO. W-43-031 AT _____ LUMP SUM		
120.	540	EARTH EXCAVATION AT _____ PER CUBIC YARD		
127.1	25	REINFORCED CONCRETE EXCAVATION AT _____ PER CUBIC YARD		
140.11	1	BRIDGE EXCAVATION ALONG RAILING BRIDGE NO. B-29-011 (BIN 2EW) AT _____ LUMP SUM		
140.12	1	BRIDGE EXCAVATION ALONG RAILING BRIDGE NO. B-29-011 (BIN 2EX) AT _____ LUMP SUM		

Project # 613196	Contract # 133292			
Location : BURLINGTON - LYNNFIELD - WAKEFIELD - WOBURN				
Description : Bridge Preservation of 10 Bridges carrying I-95				
ITEM #	**QUANTITY**	**ITEM WITH UNIT BID PRICE WRITTEN IN WORDS**	**UNIT PRICE**	**AMOUNT**
140.13	1	BRIDGE EXCAVATION ALONG RAILING BRIDGE NO. L-19-004 (BIN 2W4) AT _____ LUMP SUM		
140.14	1	BRIDGE EXCAVATION ALONG RAILING BRIDGE NO. L-19-004 (BIN 2W5) AT _____ LUMP SUM		
140.15	1	BRIDGE EXCAVATION ALONG RAILING BRIDGE NO. L-19-007 (BIN 2W6) AT _____ LUMP SUM		
140.16	1	BRIDGE EXCAVATION ALONG RAILING BRIDGE NO. L-19-007 (BIN 2W7) AT _____ LUMP SUM		
140.17	1	BRIDGE EXCAVATION ALONG RAILING BRIDGE NO. L-19-011 (BIN 2FD) AT _____ LUMP SUM		
140.18	1	BRIDGE EXCAVATION ALONG RAILING BRIDGE NO. W-01-008 (BIN 2FJ) AT _____ LUMP SUM		
140.19	1	BRIDGE EXCAVATION ALONG RAILING BRIDGE NO. W-43-031 (BIN 2F6) AT _____ LUMP SUM		
140.20	1	BRIDGE EXCAVATION ALONG RAILING BRIDGE NO. W-43-031 (BIN 2F7) AT _____ LUMP SUM		
151.2	580	GRAVEL BORROW FOR BACKFILLING STRUCTURES AND PIPES AT _____ PER CUBIC YARD		

Project # 613196	Contract # 133292			
Location : BURLINGTON - LYNNFIELD - WAKEFIELD - WOBURN				
Description : Bridge Preservation of 10 Bridges carrying I-95				
ITEM #	**QUANTITY**	**ITEM WITH UNIT BID PRICE WRITTEN IN WORDS**	**UNIT PRICE**	**AMOUNT**
160.3	95	CONTROLLED LOW-STRENGTH MATERIAL (> 300 PSI) AT _____ PER CUBIC YARD		
184.1	10	DISPOSAL OF TREATED WOOD PRODUCTS AT _____ PER TON		
451.	370	HMA FOR PATCHING AT _____ PER TON		
594.	700	CURB REMOVED AND DISCARDED AT _____ PER FOOT		
628.24	29	TRANSITION TO BRIDGE RAIL AT _____ EACH		
629.3	70	CAST-IN-PLACE CONCRETE BARRIER - SINGLE FACED AT _____ PER FOOT		
697.1	24	SILT SACK AT _____ EACH		
722.3	1	SCHEDULE OF OPERATIONS (TYPE C) - FIXED PRICE $80000 AT Eighty Thousand Dollars LUMP SUM	$80,000.00	$80,000.00
740.	28	ENGINEER'S FIELD OFFICE AND EQUIPMENT (TYPE A) AT _____ PER MONTH		

Project # 613196	Contract # 133292			
Location : BURLINGTON - LYNNFIELD - WAKEFIELD - WOBURN				
Description : Bridge Preservation of 10 Bridges carrying I-95				
ITEM #	**QUANTITY**	**ITEM WITH UNIT BID PRICE WRITTEN IN WORDS**	**UNIT PRICE**	**AMOUNT**
748.	1	MOBILIZATION AT _____ LUMP SUM		
765.411	2,400	SHORT GRASSLAND SEED MIX AT _____ PER SQUARE YARD		
769.	900	PAVEMENT MILLING MULCH UNDER GUARD RAIL AT _____ PER FOOT		
833.7	27	DELINEATION FOR GUARD RAIL TERMINI AT _____ EACH		
851.1	200	TRAFFIC CONES FOR TRAFFIC MANAGEMENT AT _____ PER DAY		
852.	3,840	SAFETY SIGNING FOR TRAFFIC MANAGEMENT AT _____ PER SQUARE FOOT		
852.11	400	TEMPORARY PEDESTRIAN BARRICADE AT _____ PER FOOT		
852.12	8	TEMPORARY PEDESTRIAN CURB RAMP AT _____ EACH		
853.1	20	PORTABLE BREAKAWAY BARRICADE TYPE III AT _____ EACH		

Project # 613196	Contract # 133292			
Location : BURLINGTON - LYNNFIELD - WAKEFIELD - WOBURN				
Description : Bridge Preservation of 10 Bridges carrying I-95				
ITEM #	**QUANTITY**	**ITEM WITH UNIT BID PRICE WRITTEN IN WORDS**	**UNIT PRICE**	**AMOUNT**
853.21	3,000	TEMPORARY BARRIER REMOVED AND RESET AT _____ PER FOOT		
853.33	1,700	TEMPORARY BARRIER - LIMITED DEFLECTION (TL-3) AT _____ PER FOOT		
853.403	2,000	TRUCK MOUNTED ATTENUATOR AT _____ PER DAY		
853.8	1,600	TEMPORARY ILLUMINATION FOR WORK ZONE AT _____ PER DAY		
854.016	5,500	TEMPORARY PAVING MARKINGS - 6 INCH (PAINTED) AT _____ PER FOOT		
854.1	5,500	PAVEMENT MARKING REMOVAL AT _____ PER SQUARE FOOT		
854.6	1,600	TEMPORARY PORTABLE RUMBLE STRIP AT _____ PER DAY		
856.	1,600	ARROW BOARD AT _____ PER DAY		
856.12	1,600	PORTABLE CHANGEABLE MESSAGE SIGN AT _____ PER DAY		

Project # 613196	Contract # 133292			
Location : BURLINGTON - LYNNFIELD - WAKEFIELD - WOBURN				
Description : Bridge Preservation of 10 Bridges carrying I-95				
ITEM #	**QUANTITY**	**ITEM WITH UNIT BID PRICE WRITTEN IN WORDS**	**UNIT PRICE**	**AMOUNT**
859.	54,000	REFLECTORIZED DRUM AT _____ PER DAY		
859.1	2,400	REFLECTORIZED DRUMS WITH SEQUENTIAL FLASHING WARNING LIGHTS AT _____ PER DAY		
866.106	4,400	6 INCH REFLECTORIZED WHITE LINE (THERMOPLASTIC) AT _____ PER FOOT		
867.106	1,100	6 INCH REFLECTORIZED YELLOW LINE (THERMOPLASTIC) AT _____ PER FOOT		
905.	20	4000 PSI, 3/8 INCH, 660 CEMENT CONCRETE AT _____ PER CUBIC YARD		
905.001	1,760	REPAIRS TO UNDERSIDE OF REINFORCED CONCRETE RIGID FRAMES AT _____ PER SQUARE FOOT		
992.11	1	ALTERATION TO BRIDGE NO. B-29-011 (BIN 2EW) AT _____ LUMP SUM		
992.12	1	ALTERATION TO BRIDGE NO. B-29-011 (BIN 2EX) AT _____ LUMP SUM		
992.13	1	ALTERATION TO BRIDGE NO. L-19-004 (BIN 2W4) AT _____ LUMP SUM		

Project # 613196	Contract # 133292			
Location : BURLINGTON - LYNNFIELD - WAKEFIELD - WOBURN				
Description : Bridge Preservation of 10 Bridges carrying I-95				
ITEM #	**QUANTITY**	**ITEM WITH UNIT BID PRICE WRITTEN IN WORDS**	**UNIT PRICE**	**AMOUNT**
992.14	1	ALTERATION TO BRIDGE NO. L-19-004 (BIN 2W5) AT _____ LUMP SUM		
992.15	1	ALTERATION TO BRIDGE NO. L-19-007 (BIN 2W6) AT _____ LUMP SUM		
992.16	1	ALTERATION TO BRIDGE NO. L-19-007 (BIN 2W7) AT _____ LUMP SUM		
992.17	1	ALTERATION TO BRIDGE NO. L-19-011 (BIN 2FD) AT _____ LUMP SUM		
992.18	1	ALTERATION TO BRIDGE NO. W-01-008 (BIN 2FJ) AT _____ LUMP SUM		
992.19	1	ALTERATION TO BRIDGE NO. W-43-031 (BIN 2F6) AT _____ LUMP SUM		
992.20	1	ALTERATION TO BRIDGE NO. W-43-031 (BIN 2F7) AT _____ LUMP SUM		
Total Qty:	99,222			

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DOCUMENT B00842

SCHEDULE OF PARTICIPATION
BY MINORITY OR WOMEN BUSINESS ENTERPRISES (M/WBE)

MASSDOT PROJECT NUMBER: 613196

PROJECT LOCATION: BURLINGTON-LYNNFIELD-WAKEFIELD-WOBURN

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: 613196

PROJECT LOCATION: BURLINGTON-LYNNFIELD-WAKEFIELD-WOBURN

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

MASSDOT PROJECT NUMBER: 613196

PROJECT LOCATION: BURLINGTON-LYNNFIELD-WAKEFIELD-WOBURN

DATE OF BID OPENING: _____

NAME OF PRIME BIDDER: _____

Item number if applicable	Description of Activity with notations such as Installation Only, Material Only, or Complete	Quantity	Unit Price	Amount
		TOTAL AMOUNT:		

M/WBE COMPANY NAME: _____

M/WBE AUTHORIZED SIGNATURE: _____

NAME AND TITLE (PRINT): _____

TELEPHONE NUMBER: _____ FAX NUMBER: _____

Rev'd 9/20/19

*** END OF DOCUMENT ***

DOCUMENT B00846

M/WBE OR SDVOBE JOINT CHECK ARRANGEMENT APPROVAL FORM

(to be submitted by Prime Contractor)

Contract No: 133292 **Project No.** 613196

Location: BURLINGTON-LYNNFIELD-WAKEFIELD-WOBURN **Bid Opening Date:** _____

Project Description: Bridge Preservation of 10 Bridges carrying I-95

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 ***