

TOWN OF VERNON, CONNECTICUT

CONTRACT DOCUMENTS

for the

Repair and Resurfacing of Bridge No. 05240
Kelly Road Over the Hockanum River

Contract No. 2140

MAYOR

Daniel Champagne

TOWN ADMINISTRATOR

Michael J. Purcaro

DIRECTOR OF PUBLIC WORKS

Dwight Ryniewicz

TOWN ENGINEER

David Smith, P.E., L.S.



April 4, 2024

Affirmative Action/Equal Opportunity Employer
Minority/Women Business Enterprises are encouraged to apply

CONSULTING ENGINEERS

CARDINAL
ENGINEERING ASSOCIATES

180 Research Parkway
Meriden, Connecticut 06450

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LEGAL NOTICE
REQUEST FOR PROPOSALS
TOWN OF VERNON

CONTRACT # 2140
REPAIR AND RESURFACING OF BRIDGE No. 05240
KELLY ROAD OVER THE HOCKANUM RIVER

The Town of Vernon Connecticut is seeking sealed bids for furnishing all labor, tools, materials and equipment required for the Repair and Resurfacing of Bridge No. 05240 Kelly Road over the Hockanum River. The project consists of the rehabilitation of the bridge including removal of the existing pavement on the bridge, installing membrane waterproofing on the bridge deck and resurfacing of the bridge deck and approaches and also includes concrete repairs, sealing of joints, as well as other miscellaneous rehabilitation tasks.

Questions about this RFP should be emailed to David A. Smith, Vernon Town Engineer, at dsmith@vernon-ct.gov no later than Tuesday, April 30, 2024, at 3:30 pm. Answers to questions received will be posted by Tuesday, May 7, 2024, on the Town's website at <https://www.vernon-ct.gov/government/bid-opportunities> and at the Connecticut State Department of Administrative Services (DAS) at <https://portal.ct.gov/DAS/CTSource/CTSource> by referencing Contract# 2140. It is the sole responsibility of the respondent to review any or all addendum or question responses related to this RFP.

Three (3) copies of the proposal should be submitted in a sealed envelope, clearly marked "**BID DOCUMENT– DO NOT OPEN – CONTRACT #2140 – Repair and Resurfacing of Bridge No. 05240 Kelly Road over the Hockanum River**" on the outside of the envelope to Michael J. Purcaro, Town Administrator, Town of Vernon, Memorial Building, 14 Park Place, 3rd Floor, Vernon, Connecticut 06066 no later than **Tuesday, May 14, 2024, at 11:00 am**, at which time and place they will be publicly opened and read aloud. To receive consideration bids must be in the hands of the authorized representative, no later than the day and hour mentioned above. Emailed, faxed, or late bids will not be accepted. Bid results will be posted on the Town website.

Proposals shall be opened and read aloud publicly on **Tuesday, May 14, 2024, at 11:00 am**. Bid results will be posted on the Town website.

A certified check or bid bond in the amount of five percent (5%) of the total bid and insurance certificates must accompany each proposal. Electronic copies of the RFP/Bid Specs are available for review at the Connecticut State Department of Administrative Services website at <https://portal.ct.gov/DAS> or on the Town of Vernon website at <https://www.vernon-ct.gov/government/bid-opportunities> with reference to Contract #2140.

This is a prevailing wage job and certified payrolls must be provided to the owner's representative. CT Commission on Human Rights and Opportunities requirements for Affirmative Action Plans and Disadvantaged Business Enterprises set-asides are likewise part of this assignment. MBEs/WBEs/SBEs are encouraged to apply.

This contract is subject to state set-aside and contract compliance requirements. The selected firm must meet all municipal, state and federal AA and EEO practices and requirements. MBEs/WBEs/SBEs are encouraged to submit a bid. The Town reserves the right to reject any or all proposals in whole or part, to award any one service or group of services or all services, to negotiate with any or all companies submitting proposals, and to enter into an agreement with any company for any services mentioned in

this RFP; if it is deemed to be in the best interest of the Town.

Confidentiality - If Respondent believes that any information in its proposal should be treated as confidential that material shall be clearly marked. The Town shall endeavor to protect confidential material from disclosure to non-Town employees to the extent permitted by State or Federal law. In no event will the Town be responsible for the inadvertent disclosure of your response to this RFP.

Date: April 4, 2024 Michael J. Purcaro, Town Administrator

INFORMATION TO BIDDERS

1. USE OF SEPARATE BID FORMS

These Contract Documents include a complete set of bidding and agreement forms, which are for the convenience of Bidders and are not to be detached from the Contract Documents, filled out, or executed;

Separate copies of the Bid package are included by way of an Insert

2. INTERPRETATIONS OR ADDENDA

No oral interpretation will be made to any bidder as to the meaning of the Contract Documents or any part thereof. Every request for such an interpretation shall be made in writing to Cardinal Engineering Associates, Inc., 180 Research Parkway, Meriden, Connecticut 06450 with carbon copy to the Town Engineer. Any inquiry received seven (7) or more days prior to the date fixed for opening of bids will be given consideration. Every interpretation made to Bidders will be in the form of an Addendum to the Contract Documents and, when issued, will be on file at the Public Works Department at least five (5) days before Bids are opened. In addition, all Addenda will be mailed and/or faxed to each person to whom Contract Documents have been issued, but it shall be the Bidder's responsibility to make inquiry as to, and to obtain, the Addenda issued, if any. All such Addenda shall become part of the Contract and each Bidder shall be bound by such Addenda, whether or not received by the Bidder.

3. INSPECTION OF SITE

Each Bidder shall visit the site of the proposed work and fully acquaint itself with the existing conditions there relating to construction and labor and should fully inform itself as to the facilities involved, the difficulties and restrictions attending the performance of the Contract. The Bidder shall thoroughly examine and familiarize itself with the Drawings, Technical Specifications and all other Contract Documents. The bidders shall also examine all records on file with the Town of Vernon, "Call Before You Dig" and State Authorities regarding the Project, and the areas within the Project limits, so as to be apprised of all subsurface conditions and other relevant information. The Contractor, by the execution of the Contract, shall in no way be relieved of any obligation under it due to the failure to receive or examine any form or legal instrument or to visit the site and acquaint itself with the conditions there existing and the Town of Vernon will reject any claim based on the facts regarding which it should have been on notice.

4. ALTERNATE BIDS

No alternate bids will be considered unless alternate bids are specifically requested.

5. BIDS

a.) Each bid must be submitted on the prescribed, separately bound bid forms. All blank spaces must be filled in as noted in ink. Bids must give the prices proposed both in words and figures and no changes shall be made in the forms or in the items mentioned therein. Erasure and other changes in the bid must be explained or noted over the initials of the bidder. In the event of any discrepancy between the written amounts and the figures, the written amounts shall govern.

b.) The Bidder shall sign the bid in the blank space provided for this purpose. If the bid is made by a partnership or corporation, the name and address of the partnership or corporation shall be indicated, together with the names and addresses of the partners or officers. If the bid is made by a partnership, it must be acknowledged by one of the partners; if made by a corporation, by one of the officers.

Bidders shall furnish with their bids the following:

1. Bid Bond, Certificate as to Corporate Principal and Form of Surety Guaranty
2. Non-Collusion Affidavit of Prime Bidder (including notification of outstanding financial and other obligations to the Town of Vernon)
3. Affirmative Action Certification
4. Statement of Bidder's Qualifications
5. CHRO – Bidder Contract Compliance Monitoring Report
6. Contractor's Wage Certification Form

The information required under (1) to (6), inclusive, shall be furnished on the forms included in the separately bound Bid Insert and shall be subject to all requirements of the General Conditions, Special Conditions and the Specifications and Drawings.

c.) The successful Bidder is specifically advised that he/she, and any person, firm or other party to whom it is proposed to award a subcontract under this Contract, must submit a letter regarding compliance with the Equal Employment Opportunity requirements included in this Project. Approval of the contractor/subcontractor award cannot be given by the Owner unless and until the proposed contractor/subcontractor has submitted the certification and/or other evidence that it has fully complied with any reporting requirements to which it is or was subject.

Although the Bidder is not required to attach such certification of compliance to its bid, the Bidder is herein advised of this requirement so that appropriate action can be taken to prevent subsequent delay in contract and subcontract awards.

d.) The Owner will consider informal any bid not prepared and submitted in accordance with the provisions hereof and may, at its option, waive any informalities/irregularities or accept or reject any and all bids. Any bid received after the time, date and place specified shall not be considered. No Bidder may withdraw a bid within ninety (90) days after the actual date of the opening thereof.

6. **BID GUARANTY**

a.) The bid must be accompanied by a bid guaranty, which shall not be less than specified in the Advertisement for Bids. At the option of the Bidder, the guaranty may be a certified check, bank draft, negotiable U.S. Government Bond (at par value) or a bid bond in the form attached.

The bid bond shall be secured by a guaranty or Surety Company authorized and qualified to do business in the State of Connecticut and listed in the latest issue of the U.S. Treasury Circular 570. The amount of such bid bond shall be within the maximum amount specified for such company in said Circular 570. Bids will be considered non-responsive unless accompanied by the required guaranty. Certified check or bank draft must be made payable to the order of the Town

of Vernon. Cash deposits will not be accepted. The bid guaranty shall insure the execution of the Agreement and the furnishing of the surety bond or bonds by the successful Bidder, all as required by the Contract Documents.

b.) Revised bids submitted before the opening of the bids, whether forwarded by mail or telegram, if representing an increase in excess of two percent (2%) of the original bid, must have the bid guaranty adjusted accordingly; otherwise the Bid will not be considered.

c.) Certified checks or bank drafts, or the amount thereof, bid bonds and negotiable U.S. Government bonds of successful Bidders, will be returned as soon as practicable after the opening of the bids.

7. COLLUSIVE AGREEMENT

a.) Each Bidder submitting a bid to the Town of Vernon for any portion of the work contemplated by the documents on which bidding is based, shall execute, and attach thereto, an affidavit substantially in the form herein provided to the effect that it has not colluded with any other person, firm or corporation in regard to any bid submitted.

b.) Before executing any subcontract, the successful Bidder shall submit the name of any proposed subcontractor for prior approval and an affidavit substantially in the form herein provided in the section SUBCONTRACTS under the General Conditions.

8. STATEMENT OF BIDDER'S QUALIFICATIONS

Each Bidder shall, as noted in the Bid Package, submit on the form furnished for that purpose (a copy of which is included in the Contract Documents), a statement of the Bidder's qualifications, its experience record in constructing the type of improvements embraced in the Contract and its organization and equipment available for the work contemplated; and, when specifically requested by the Town, shall also submit a detailed financial statement. The Town shall have the right to take such steps as it deems necessary to determine the ability of the Bidder to perform the obligations under the Contract and the Bidder shall furnish the Town all such information and data for this purpose as it may request. The right is reserved to reject any bid where an investigation of the available evidence or information does not satisfy the Town that the Bidder is qualified to carry out properly the terms of the Contract.

9. UNIT PRICES

The unit prices for each of the several items in the proposal of each Bidder shall include the pro rata share of overhead, so that the sum of the products obtained by multiplying the quantity shown for each item by the unit price represents the total bid. Any bid not conforming to this requirement may be rejected as informal. The special attention of all Bidders is called to this provision for, should conditions make it necessary to revise the quantities, increase or decrease thereof may be made without limit and adjustment and compensation shall be made on the basis of the unit prices for such items.

10. CORRECTIONS

Erasures or other changes in the Bids must be noted over the signature of the Bidder.

11. TIME FOR RECEIVING BIDS

a.) Bids received prior to the advertised hour of opening will be kept securely sealed. The officer whose duty it is to open them will decide when the specified time has arrived and no bid received thereafter will be considered, except that, when a bid arrives in the mail after the time fixed for opening, but before the reading of all other bids is completed, and it is shown to the satisfaction of the Town that the non-arrival on time was due solely to delay in the mails for which the Bidder was not responsible, such bid will be received and considered.

b.) Bidders are cautioned that, while facsimile modification of bids may be received as provided above, such modifications, if not explicit and it in any sense subject to misrepresentations, shall make the bid so modified or amended, subject to rejection.

12. OPENING OF BIDS

At the time and place fixed for the opening of bids, the Town will cause to be opened and publicly read aloud every bid received within the time set for receiving bids, irrespective of any irregularities therein. Bidders and other persons properly interested may be present, in person or by a representative.

After the bid opening, the Town or Engineer shall evaluate each submitted bid for conformance to the bid submittal requirements and check each Bid Proposal for errors and agreement between unit prices in numbers and written words.

13. WITHDRAWAL OF BIDS

Bids may be withdrawn on written or facsimile request dispatched by the Bidder and received by the Town of Vernon in time for the bid opening; provided that the written confirmation of any facsimile withdrawal over the signature of the Bidder shall be placed in the mail and postmarked prior to the time set for bid opening. The bid guaranty of any Bidder withdrawing their bid in accordance with the foregoing conditions will be returned promptly.

14. AWARD OF CONTRACT; REJECTION OF BIDS

a.) The Contract will be awarded within ninety (90) days after the date of the bid opening to the responsible Bidder submitting the lowest bid complying with the conditions of the Advertisement for Bids. The Bidder to whom the award is made will be notified at the earliest possible date. The Town, however, reserves the right to reject any and all bids or to waive any informality in submitted bid documents whenever such rejection or waiver is in its interest.

b.) The Town reserves the right to consider as unqualified to do the work required by these Contract Documents any Bidder who does not habitually perform with their own forces the major portion of the work involved in construction of the improvements in these Contract Documents.

c.) The ability of any Bidder to obtain a performance bond will not be regarded as the sole test of such Bidder's competency or responsibility.

d.) The Town will not award the Contract to any Contractor who is, at the time of the award, ineligible for such Contract under the provisions of any applicable regulations issued by the Secretary of Labor, United States Department of Labor, or is not qualified under applicable State and local laws and regulations.

e.) If the Contract is awarded, it will be awarded by the Town to a responsible Bidder on the basis of the lowest Base Bid. The Contract will require the completion of work in accordance with the Contract Documents.

15. EXECUTION OF AGREEMENT, PERFORMANCE, LABOR AND MATERIAL BOND

a.) Subsequent to the notice of award and within ten (10) days after the prescribed forms are presented for signature, the successful Bidder shall execute and deliver, to the Town, the Agreement in the form included in the Contract Documents in such number of copies as the Town shall require.

b.) Having satisfied all conditions of award, as set forth elsewhere in these documents, the successful Bidder shall, within the period specified in Paragraph "a." above, furnish a surety bond in a penal sum not less than the amount of the Contract as awarded, as security for the faithful performance of the Contract and a labor and material bond for payment of all persons, firms or corporations to whom the Contractor may become legally indebted for labor, materials, tools, equipment or services of any nature, including utility and transportation services, employed or used by him in performing the work. Such bonds shall be in the same form as those included in the Contract Documents and shall bear the same date or a date subsequent to that of the Agreement. These bonds shall be signed and issued by a guaranty or surety company satisfactory to the Town, authorized and qualified to do business in the State of Connecticut and listed in the latest issue of the U.S. Treasury Circular 570 and the penal sum of any such bond shall be within the maximum specified for such company in said Circular 570. The current Power of Attorney for the person who signs for any surety company shall be attached to such bonds.

c.) The failure of the successful Bidder to execute such agreement and to supply the required bonds or submit the insurance policies required in the section INSURANCE of the GENERAL CONDITIONS within ten (10) days after the prescribed forms are presented for signature, or within such extended period as the Town grants, based upon reasons determined sufficient by the Town, shall constitute a default and the Bidder's bid bond or guaranty shall be forfeited to the Town of Vernon as liquidated damages. The Town may either award the Contract to the next lowest responsible Bidder or re-advertise for bids and may charge against the defaulting Bidder the difference between the amount of the bid and the amount for which a Contract for the work is subsequently executed, irrespective of whether the favorable bid is received by re-advertising, the defaulting Bidder shall have no claim against the Town for a refund.

16. NOTICE TO PROCEED

A notice to proceed will be issued by the Town of Vernon within thirty (30) calendar days after the execution of the Contract by the Town or the deposition of the required bonds and insurance policies, whichever is last.

17. WAGES AND SALARIES

a.) Attention of the Bidders is particularly directed to the requirements concerning the

payment of not less than the prevailing wage and salary rates specified in the Contract Documents and the classification of employees.

b.) The rate of pay set forth in the Contract Documents are the minimum to be paid during the life of the contract. It is, therefore, the responsibility of the Bidders to inform themselves as to local labor conditions, such as the length of work day and the work week, overtime compensation, health and welfare contributions, labor supply and prospective changes and adjustments of rates.

18. EQUAL EMPLOYMENT OPPORTUNITY

Attention of the Bidders is particularly called to the requirements for insuring that employees and applicants for employment are not discriminated against because of their race, creed, color or national origin or physical handicap.

19. TAXES

Bids should not include federal excise or state sales taxes (State Sales Tax exempt under Connecticut General State Statute Sec. 12-412 (1) as the Town is exempt from payment of any such taxes). The Town is also exempt from transportation taxes when goods are consigned to the Town. Tax exemption certificates will be furnished by the Supervisory Auditor-Accounts Payable upon satisfactory proof of delivery to the Town. Shipments should be consigned to the Town in care of the Contractor.

20. ALLOWANCES

The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Town may direct, but the Contractor shall not be required to employ persons or entities against which the Contractor makes reasonable objection.

Unless otherwise provided in the Contract Documents:

- a). Materials and equipment under an allowance shall be selected promptly by the Town to avoid delay in the Work;
- b). Allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- c). Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit and other expenses contemplated for stated allowance amounts shall be included in the allowances; and
- d). Whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order.

21. STATE SET-ASIDE AND CONTRACT COMPLIANCE REQUIREMENTS

The Contractor who is selected to perform this State project must comply with CONN. GEN. STAT. §§ 4a-60, 4a-60a, 4a-60g, and 46a-68b through 46a-68f, inclusive, as amended by June 2015 Special Session Public Act 15-5. An Affirmative Action Plan must be filed with and approved by the Commission on Human Rights and Opportunities prior to the commencement of construction.

State law requires a minimum of twenty-five (25%) percent of the state-funded portion (50%) of the Contract for award to subcontractors holding current certification from the Connecticut Department of Administrative Services (“DAS”) under the provisions of CONN. GEN. STAT. § 4a-60g, as amended. (25% of the work with DAS certified Small and Minority owned businesses and 25% of that work with DAS certified Minority, Woman and/or Disabled owned businesses.) The Contractor must demonstrate good faith effort to meet the 25% set-aside goals.

For municipal public works contracts and quasi-public agency projects, the Contractor must file a written or electronic non-discrimination certification with the Commission on Human Rights and Opportunities. Forms can be found at the following address:

<https://portal.ct.gov/OPM/Fin-PSA/Forms/Nondiscrimination-Certification>

22. NON-DISCRIMINATION AND AFFIRMATIVE ACTION PROVISIONS

(A)(1) The Contractor agrees and warrants that in the performance of the Contract such Contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, sexual orientation, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such Contractor that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the state of Connecticut. The Contractor further agrees to take affirmative action to insure that applicants with job-related qualifications are employed and that employees are treated when employed without regard to of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such Contractor that such disability prevents performance of the work involved; (2) the Contractor agrees, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, to state that it is an "affirmative action-equal opportunity employer" in accordance with regulations adopted by the commission; (3) the Contractor agrees to provide each labor union or representative of workers with which such Contractor has a collective bargaining agreement or other contract or understanding and each vendor with which such Contractor has a contract or understanding, a notice to be provided by the commission advising the labor union or workers' representative of the Contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment; (4) the Contractor agrees to comply with each provision of this section and sections 46a-68e and 46a-68f and with each regulation or relevant order issued by said commission pursuant to sections 46a-56, 46a-68e, 46a-68f and 46a-86; (5) the Contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the commission, and permit access to

pertinent books, records and accounts, concerning the employment practices and procedures of the Contractor as relate to the provisions of this section and section 46a-56.

(B) Any Contractor who is a party to a municipal public works contract or quasi-public agency project, where any such contract is valued at less than \$50,000 for each year of the contract, shall provide the Commission on Human Rights and Opportunities with a written or electronic representation that complies with the nondiscrimination agreement and warranty under subsection (A)(1) above, provided if there is any change in such representation, the Contractor shall provide the updated representation to the Commission not later than 30 days after such change. Any Contractor who is a party to a municipal public works contract or a quasi-public agency project, where any such contract is valued at \$50,000 or more for any year of the contract, shall provide the Commission with any one of the following: (1) Documentation in the form of a company or corporate policy adopted by resolution of the board of directors, shareholder, managers, members or other governing body of such Contractor that complies with the nondiscrimination agreement and warranty under subsection (A)(1) of this section; (2) Documentation in the form of a company or corporate policy adopted by a prior resolution of the board of directors, shareholders, managers, members or other governing body of such contractor if (a) the prior resolution is certified by a duly authorized corporate officer of such contractor to be in effect on the date the documentation is submitted, and the executive director of the Commission on Human Rights and Opportunities or designee certifies that the prior resolution complies with the nondiscrimination agreement and warranty under subdivision (A)(1) of this section; or (3) Documentation in the form of an affidavit signed under penalty of false statement by a chief executive officer, president, chairperson or other corporate officer duly authorized to adopt company or corporate policy that certifies that the company or corporate policy of the contractor complies with the nondiscrimination agreement and warranty under subdivision (A)(1) of this section and is in effect on the date the affidavit is signed..

(C) If the Contract is a municipal public works contract or a quasi-public agency project, the Contractor agrees and warrants that s/he will make good faith efforts to employ minority business enterprises as subcontractors and suppliers of materials on such public works project. The Contractor shall include the provisions of subdivision (A)(1) of this section in every subcontract or purchase order entered into to fulfill any obligation of a municipal public works contract or contract for a quasi-public agency project, and such provisions shall be binding on a subcontractor, vendor or manufacturer, unless exempted by regulations or orders of the Commission on Human Rights and Opportunities. The Contractor shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such provisions, including sanctions for noncompliance in accordance with section 46a-56; provided, if such Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Commission regarding a state contract, the contractor may request the state of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the state and the state may so enter.

(D) "Minority business enterprise" means any small contractor or supplier of materials fifty-one per cent or more of the capital stock, if any, or assets of which is owned by a person or persons: (1) Who are active in the daily affairs of the enterprise, (2) who have the power to direct the management and policies of the enterprise and (3) who are members of a minority, as such term is defined in subsection (a) of section 32-9n; and "good faith" means that degree of

diligence which a reasonable person would exercise in the performance of legal duties and obligations. "Good faith efforts" shall include, but not be limited to, those reasonable initial efforts necessary to comply with statutory or regulatory requirements and additional or substituted efforts when it is determined that such initial efforts will not be sufficient to comply with such requirements. Determination of the Contractor's good faith efforts shall include, but shall not be eliminated to, the following factors: The contractor's employment and subcontracting policies, patterns and practices; affirmative advertising recruitment and training; technical assistance activities and such other reasonable activities or efforts as the Commission on Human Rights and Opportunities may prescribe that are designed to ensure the participation of minority business enterprises in municipal public works contracts or quasi-public agency projects. "Municipal public works project" means that portion of an agreement entered into on or after October 1, 2015, between any individual, firm or corporation and a municipality for the construction, rehabilitation, conversion, extension, demolition or repair of a public building, highway or other changes or improvements in real property, which is financed in whole or in part by the state, including, but not limited to, matching expenditures, grants, loans, insurance or guarantees but excluding any project of an alliance district, as defined in section 10-262u, finance by the state funding in an amount equal to fifty thousand dollars or less. "Quasi-public agency project" means the construction, rehabilitation, conversion, extension, demolition or repair of a building or other changes or improvements in real property pursuant to a contract entered into on or after October 1, 2015, which is financed in whole or in part by a quasi-public agency using state funds, including, but not limited to, matching expenditures, grants, loans, insurance or guarantees.

23. TIME FOR COMMENCEMENT AND COMPLETION AND LIQUIDATED DAMAGES

The Contractor shall commence work under this Contract within ten (10) days of the date of "Notice to Proceed" issued by the Town of Vernon and shall fully complete all work stipulated in these Contract Documents within ninety (90) consecutive calendar days thereafter.

It is mutually agreed that, if the Contractor fails to complete all or a portion of its work within the time stipulated in the Contract Documents, the Owner will be damaged; and because the amount of the Owner's damages is difficult, if not impossible, to definitely ascertain and prove, it is hereby agreed that the amount of such damages shall be as follows: (1) One Thousand – Two Hundred Dollars (\$1,200.00) per day as liquidated damages for each and every day of delay in the completion of the work in accordance with the Contract Documents.

The Contractor agrees that said liquidated damages shall be deducted from monies due the Contractor under the Contract, or, if no money is due the Contractor, the Contractor hereby agrees to pay to the Owner as liquidated damages, and not by way of penalty, such total sum as shall be due for such delay.

TOWN OF VERNON
CONTRACTOR'S CHECK LIST

PROJECT: REPAIR AND RESURFACING OF BRIDGE NO. 05240
KELLY ROAD OVER THE HOCKNAUM RIVER

The following forms are required for submittal for the above referenced bid and shall be submitted with the bid proposal pages by the time and date specified. This checklist is provided for the Bidder's use and shall not be required for submittal.

The following forms shall be submitted in duplicate.

FORM DESCRIPTION

1. BID PROPOSAL PAGES
2. BID BOND
3. CERTIFICATE AS TO CORPORATE PRINCIPAL
4. FORM OF SURETY GUARANTY
5. NON-COLLUSION AFFIDAVIT OF PRIME BIDDER/PROPOSER
6. AFFIRMATIVE ACTION PROGRAM CERTIFICATION
7. STATEMENT OF BIDDER'S QUALIFICATIONS
8. CHRO – BIDDER CONTRACT COMPLIANCE MONITORING REPORT
9. CONTRACTOR'S WAGE CERTIFICATION FORM

BID

TOWN OF VERNON, CONNECTICUT

**REPAIR AND RESURFACING OF BRIDGE NO. 05240
KELLY ROAD OVER THE HOCKNAUM RIVER**

Bid Submitted by:

Company Name	
Street Address	
City, State and Zip Code	
Contact	
()	()
Telephone #	Fax #

Mr. Michael Purcaro
Town Administrator
14 Park Place
Vernon, Connecticut 06066

Dear Mr. Percaro:

The undersigned, having familiarized themselves with the existing conditions of the Project area affecting the cost of the work and with the Contract Documents (which includes Advertisement For Bids, Bid Form, Bid Bond, Instructions to Bidders, Non-Collusion Affidavit, Addenda, General Conditions, Special Conditions, Technical Specifications, Drawings as listed in the Schedule of Drawings and form of Surety Bond or Bonds as prepared by the Town of Vernon and on file at the Mayor's Office, Town Hall, 14 Park Place, Connecticut 06066, hereby proposes to furnish all machinery, tools, appurtenances, equipment and services, including utility and transportation services required to construct and complete the work, all in accordance with the above listed Documents and submits, herewith, in conformity with the Project Manual and subsequent addenda, the following bid:

BID FORM

BASE BID

(Show amount in both words and figures. In case of discrepancy, the amount shown in words will govern.)

ITEM	ITEM AND UNIT PRICE	Unit	Engineer's Estimate of Quantity	Computed Total
0406172	HMA S0.375 at the per Ton Price of	Ton	67	
	_____ Dollars			\$ _____
	and _____ Cents (\$ _____)			
0406173	HMA S0.25 at the per Ton Price of	Ton	47	
	_____ Dollars			\$ _____
	and _____ Cents (\$ _____)			
0406236	MATERIAL FOR TACK COAT at the per Gallon Price of	Gal	6	
	_____ Dollars			\$ _____
	and _____ Cents (\$ _____)			
0406310A	CLEAN AND RESEAL EXISTING FILLED BRIDGE JOINTS at the per Lineal Foot Price of	LF	73	
	_____ Dollars			\$ _____
	and _____ Cents (\$ _____)			
0409001	FINE MILLING OF BITUMINOUS CONCRETE (0 TO 4 INCHES) at the per Square Yard Price of	SY	80	
	_____ Dollars			\$ _____
	and _____ Cents (\$ _____)			

BID FORM

BASE BID

(Show amount in both words and figures. In case of discrepancy, the amount shown in words will govern.)

ITEM	ITEM AND UNIT PRICE	Unit	Engineer's Estimate of Quantity	Computed Total
0520036A	ASPHALTIC PLUG EXPANSION JOINT SYSTEM at the per Cubic Foot Price of _____ Dollars and _____ Cents (\$)	CF	66	\$ _____
0601270A	FULL DEPTH PATCH (HIGH EARLY STRENGTH CONCRETE) at the per Cubic Yard Price of _____ Dollars and _____ Cents (\$)	CY	1	\$ _____
0601318A	PARTIAL DEPTH PATCH at the per Cubic Foot Price of _____ Dollars and _____ Cents (\$)	CF	18	\$ _____
0601509A	REMOVE CONCRETE HEADERS at the per Lineal Foot Price of _____ Dollars and _____ Cents (\$)	LF	120	\$ _____
0601744.60	CLASS PCC04460 at the per Cubic Yard Price of _____ Dollars and _____ Cents (\$)	CY	1	\$ _____

BID FORM

BASE BID

(Show amount in both words and figures. In case of discrepancy, the amount shown in words will govern.)

ITEM	ITEM AND UNIT PRICE	Unit	Engineer's Estimate of Quantity	Computed Total
0602030	DEFORMED STEEL BARS - GALVANIZED at the per Pound Price of _____ Dollars and _____ Cents (\$)	LB	55	\$ _____
0602980A	CLEAN AND COAT EXPOSED REINFORCING STEEL at the per Lineal Foot Price of _____ Dollars and _____ Cents (\$)	LF	5	\$ _____
0707009A	MEMBRANE WATERPROOFING (COLD LIQUID ELASTOMERIC) at the per Square Yard Price of _____ Dollars and _____ Cents (\$)	SY	680	\$ _____
0819002A	PENETRATING SEALER PROTECTIVE COMPOUND at the per Square Yard Price of _____ Dollars and _____ Cents (\$)	SY	313	\$ _____
0904103A	REPAIR METAL BRIDGE RAIL at the per Lump Sum Price of _____ Dollars and _____ Cents (\$)	LS	1	\$ _____

BID FORM

BASE BID

(Show amount in both words and figures. In case of discrepancy, the amount shown in words will govern.)

ITEM	ITEM AND UNIT PRICE	Unit	Engineer's Estimate of Quantity	Computed Total
0912517A	REPAIR METAL BEAM RAIL at the per Linear Feet Price of _____ Dollars and _____ Cents (\$)	LF	127	\$ _____
0921002A	CONCRETE SIDEWALK - 8" THICK at the per Square Foot Price of _____ Dollars and _____ Cents (\$)	SF	285	\$ _____
0952001	SELECTIVE CLEARING AND THINNING at the per Lump Sum Price of _____ Dollars and _____ Cents (\$)	LS	1	\$ _____
0970006	TRAFFICPERSON (MUNICIPAL POLICE OFFICER) at the per Estimate Price of Six Thousand _____ Dollars and Zero _____ Cents (\$6,000.00)	EST	1	\$ <u>6,000.00</u>
0970007	TRAFFICPERSON (UNIFORMED FLAGGER) at the Per Hour Price of _____ Dollars and _____ Cents (\$)	HR	XX	\$ _____

BID FORM

BASE BID

(Show amount in both words and figures. In case of discrepancy, the amount shown in words will govern.)

ITEM	ITEM AND UNIT PRICE	Unit	Engineer's Estimate of Quantity	Computed Total
0971001A	MAINTENANCE & PROTECTION OF TRAFFIC at the Lump Sum Price of _____ Dollars and _____ Cents (\$)	LS	1	\$ _____
0974000A	REMOVAL OF EXISTING MASONRY at the per Cubic Foot Price of _____ Dollars and _____ Cents (\$)	CF	7	\$ _____
0975004	MOBILIZATION AND PROJECT CLOSEOUT at the Lump Sum Price of _____ Dollars and _____ Cents (\$)	LS	1	\$ _____
1210101	4" WHITE EPOXY RESIN PAVEMENT MARKINGS at the per Lineal Foot Price of _____ Dollars and _____ Cents (\$)	LF	213	\$ _____
1210102	4" YELLOW EPOXY RESIN PAVEMENT MARKINGS at the per Lineal Foot Price of _____ Dollars and _____ Cents (\$)	LF	268	\$ _____
TOTAL CONTRACT BASE BID PRICE				\$ _____

It is understood and agreed that the written Unit Prices bid for the quantities of work in the various items of work shall control the Contract award and that the quantities noted are approximate (estimated only for use in comparing bids); and that the sum obtained by multiplying the Unit Prices by the estimated quantities and, also, the total of these sums are inserted for the purpose of checking this Bid and for the convenience of the Bidder.

The Unit Prices are to be paid for the actual quantities of the several classes of work in the completed work or structures.

Notice to Bidders:

The Bidder's attention is called to Section 9 of the "Instructions to Bidders" regarding the significance of the as-bid unit prices for this Project.

The Bidder understands, by signing this Bid that the Town of Vernon shall REJECT any bid that has unit prices, which are, in the opinion of the Purchasing Agent, obviously unbalanced. The Bidder is required to calculate the value of the various bid items on the basis of reasonable labor, material, equipment, pro rata profit and pro rata overhead costs to perform the work described in the Contract Documents.

In submitting this Bid, the Bidder understands that the Town of Vernon reserves the right to reject any and all bids, or to waive any informality in the submitted bid documents. The Bidder also understands that the Town of Vernon reserves the right to accept any, all, or none of the Alternates, which may be listed above and may accept Alternates in any order at the Town's sole discretion. The Bidder agrees to perform the work of each accepted Alternate for the sum quoted for each and to include such accepted Alternates in the Contract for construction.

If written notice of the acceptance of this Bid and any or all of the Alternates is mailed, telegraphed or otherwise delivered to the undersigned within ninety (90) days after the opening of the Bid, or at any time thereafter before the Bid is withdrawn, the undersigned agrees to execute and deliver any Contract in the prescribed form and furnish the required bonds within ten (10) days after the Contract is presented to them for signature.

Bid Bond:

The undersigned herewith submits security equal to five percent (5%) of the Base Bid, the sum of:

_____ Dollars and No Cents

(\$_____)

This security shall be the sole and exclusive property of the Town of Vernon as liquidated damages to the Town, if the undersigned fails to execute a Contract in conformity with the accompanying forms, after due date notification therefore in the Contract Documents.

Other Conditions:

Attached hereto is an affidavit in proof that the undersigned has not colluded with any person with respect to this Bid, or any other bid, or in the submitting of this Bid.

The Bidder is enclosing a statement of their qualifications and is prepared to submit a financial statement upon request.

The acceptance of subcontractors shall rest with the Town and their decision shall be final.

Addenda:

The bidder hereby acknowledges receipt of the following Addenda. (Include signed copies of addenda with bid submittal)

Addendum Number	Date Received	Signature

Bidder's Official Name and Address:		
Company Name: _____		
Street Address _____		
City, State and Zip Code: _____		
Contact: _____		
Signature _____	Title _____	Date _____

BID BOND

KNOW ALL MEN BY THESE PRESENTS, THAT, we the undersigned,

_____ (Name of Principal)

as PRINCIPAL, and _____

as SURETY are held and firmly bound unto the Town of Vernon hereinafter called the "Town",
in the penal sum of _____ Dollars (\$_____)

lawful money of the Untied States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITIONS OF THE OBLIGATIONS IS SUCH THAT whereas the Principal has submitted the accompanying bid dated _____, 20__ for REPAIR AND RESURFACING OF BRIDGE NO. 05240 KELLY ROAD BRIDGE OVER HOCKANUM RIVER.

NOW THEREFORE, if the Principal shall not withdraw said bid within the period specified therein after the opening of same or if no period be specified within 180 days after the said opening and shall within the period specified therefore, or, if no period be specified within 10 days after the prescribed forms are presented to him for signature, enter into a written Contract with the Town of Vernon accordance with the bid as accepted and give bond with good and sufficient surety or sureties, as may be required for the faithful performance and proper fulfillment of such contract, or in the event of the withdrawal of said bid within the period specified, or the failure to enter into such Contract and give such bond within the time specified, if the Principal shall pay the Town of Vernon the difference between the amount specified in said Bid and the amount for which the Town of Vernon may procure the required work or supplies or both, if the latter amount be in excess of the former, than the above obligations shall be void and of no effect, otherwise to remain in full force and effect.

IN WITNESS WHEREOF, the above bounded parties have executed this instrument under their several seals this _____ day of _____, 20____, the name and Corporate Seal of each corporate party being hereto affixed and these presents duly signed by the undersigned representative pursuant to authority of the governing body.

*** For Sole Proprietor**

(Seal)

In Presence of:

_____ (Witness Signature)

_____ (Individual Principal)

_____ (Witness Signature)

_____ (Business Address)

For Partnership:

In Presence of:

(Seal)

(Witness Signature)

(Partnership)

By: _____

(Witness Signature)

(Business Address)

For Corporation:

Attest:

(Corporate Principal)

(Business Address)

(Affix
Corporate
Seal)

By: _____

Attest:

(Corporate Surety)

(Business Address)

(Affix
Corporate
Seal)

Countersigned:

By: _____

By: _____

Attorney-in-Fact, State of _____

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the Secretary of the Corporation named as Principal in the within bond, that _____ who signed the said bond on behalf of the Principal was then _____ of said Corporation; that I know the signature and the signature thereto is genuine and that said bond was duly signed, sealed and attested to for and in behalf of said Corporation by authority of the governing body.

(Title)

(Corporate
Seal)

(The Surety Company must append statement of their financial condition and a copy of the resolution authorizing the execution of bonds by officers of the company and the power-of-attorney of the surety company's attorney-in-fact, authorized to act within the State of Connecticut).

FORM OF SURETY GUARANTY

(To accompany Bid)

KNOW ALL MEN BY THESE PRESENTS, that for and in consideration of the sum of \$1.00, lawful money of the United States, the receipt whereof is hereby acknowledged, paid the undersigned corporation and for other valuable consideration, the

(Name of Surety Company)

a corporation organized and existing under the laws of the State of _____ and licensed to do business in the State of Connecticut, certified and agrees, that if Contract REPAIR AND RESURFACING OF BRIDGE NO. 05240 KELLY ROAD BRIDGE OVER HOCKANUM RIVER is awarded to

_____, the undersigned Corporation will execute the
(Name of Bidder)
bond or bonds as required by the Contract Documents and will become Surety in the full amount of the Contract Price for the faithful performance of the Contract and for payment of all persons supplying labor or furnishing materials in connection thencewith.

(Surety)

(To be accompanied by the usual proof of authority of officers of surety company to execute the same).

TOWN OF VERNON, CONNECTICUT

NON-COLLUSION AFFIDAVIT OF PRIME BIDDER/PROPOSER

(Including notification of outstanding financial and other obligations to the Town of Vernon

State of _____)
County of _____) ss:

_____, being first duly sworn, deposes and says that:

1. He/She is (owner, partner, officer, representative or agent) of _____ the Bidder/Proposer that has submitted the attached Bid/Proposal;
(Bidder/Proposer Name)
2. He/She is fully informed respecting the preparation and contents of the attached Bid/Proposal and of all pertinent circumstances respecting such Bid/Proposal;
3. Such Bid/Proposal is genuine and is not a Collusive or Sham Bid/Proposal;
4. Neither the said Bidder/Proposer, nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other bidder/proposer, firm or person to submit a collusive or sham Bid/Proposal in connection with the Contract for which the attached Bid/Proposal has Vernon submitted or to refrain from bidding/proposing in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other bidder/proposer, firm or person to fix the price or prices in the attached Bid/Proposal of any other bidder, or to fix any overhead, profit or cost element of the bid/proposal prices or the Bid/Proposal price of any other bidder/proposer, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the Town of Vernon or any person interested in the proposed Contract;
5. The price or prices quoted in the attached Bid/Proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the Bidder/Proposer or any of its agents, representatives, owners, employees or parties in interest, including this affiant; and
6. That no officer or employee or person whose salary is payable in whole or in part from the Town Treasury is directly or indirectly interested in the Bid/Proposal, or in the supplies, materials, equipment, work or labor to which it relates, or in any of the profits thereof.

7. **Check one:**

_____ That neither this Bidder/Proposer, nor any owner, partner, officer, representative, agent or affiliate of this Bidder/Proposer, has outstanding financial or other obligations to the Town of Vernon nor are they a party to any entity which has any such obligations.

_____ There are such outstanding obligations. (List all obligations on a separate sheet, indicate the nature of the obligation and the parties involved.)

8. That neither this Bidder/Proposer nor any owner, partner, officer, representative, agent or affiliate of this Bidder/Proposer, has failed to file a list of taxable personal property with the Town of Vernon as required by State law.

9. **Listing of owners, partners, officers, representatives, agents and/or affiliates**

Name	Title	Affiliated Company (if none, state NONE)
1.		
2.		
3.		
4.		
5.		
6.		
7.		

(Use additional sheet if necessary - must be on company letterhead and notarized)

(Signed) _____

(Title) _____

Subscribed and sworn to before me this _____ day of _____, 20_____.

_____ Title _____

My Commission Expires: _____

NOTE: THIS FORM MUST BE NOTARIZED

TO BE COMPLETED BY ORIGINATING DEPARTMENT

BID/PROPOSAL/AGREEMENT TITLE:	
DEPARTMENT:	
RETURN FORM TO:	
ADDRESS:	
ADDRESS:	

AFFIRMATIVE ACTION PROGRAM CERTIFICATION

CITY/TOWN OF: _____

FIRM NAME: _____

ADDRESS: _____

DESCRIPTION OF PROJECT: _____

BID AMOUNT: \$ _____

DATE: _____

I (Name of Person) _____ of

the (Name of Firm) _____

intend to honor our Affirmative Action Program on file with the Connecticut Department of Transportation, Office of Contract Compliance. I further certify that our Affirmative Action Program is current and that the last approval was on _____, 20 ____ and it expires on _____, 20 ____.

SIGNED BY: _____

TITLE: _____

EEO OFFICER

STATEMENT OF BIDDER'S QUALIFICATIONS

(To be submitted by the Bidder with the Bid)

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. If necessary, questions may be answered on separate attached sheets. The Bidder may submit any additional information they desire.

1. Name of Bidder: _____
2. Bidder's Tax Identification Number: _____
3. Permanent Main Office Address: _____
4. When Organized: _____ Date of Incorporation: _____
5. If a Corporation, where incorporated: _____
6. If other than a Corporation or Partnership, describe Organization and name Principals:

7. Number of years engaged in construction under present firm or trade name: _____ Number of years as General Contractor: _____

8. Contracts on hand:

<u>Project Name</u>	<u>Owner</u>	<u>Arch/Engr.</u>	<u>Contract Amount</u>	<u>Contract Date</u>	<u>Percent Complete</u>	<u>Scheduled Completion</u>
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

9. General character of work performed by your firm:

10. Percent of work normally performed with your own forces:

<u>Trade</u>	<u>Percent</u>	<u>Trade</u>	<u>PercentTrade</u>	<u>Percent</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

11. Have you ever failed to complete any work awarded to you? If so, where and why:

12. Have you ever defaulted on a Contract? If so, where and why:

13. List the more important contracts completed by you within the past 5 years:

<u>Project Name</u>	<u>Owner</u>	<u>Arch/Eng.</u>	<u>Contract Amount</u>	<u>Contract Date</u>	<u>Date Completed</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

14. List major equipment available for this Contract:

15. Experience in work similar in importance to this project:

16. Background and experience of the principal members of your organization, including the officers:

<u>Individual's Name</u>	<u>Construction Experience/Yrs.</u>	<u>Present Position Years Experience</u>	<u>Responsibility</u>	<u>Previous Position Years Experience</u>
--------------------------	-------------------------------------	--	-----------------------	---

17. Name and background of superintendent who will have principal on-site responsibility for this project:

<u>Individual's Name</u>	<u>Similar Project Experience</u>	<u>Dollar Value</u>	<u>Responsibility</u>

18. List States and Categories in which your organization is legally qualified to do business:

19. Give bank and trade references:

<u>Bank</u>	<u>Trade</u>

20. Name of Bonding and Insurance Companies and Names and Addresses of Agents:

21. Upon request by the Owner, the undersigned agrees to furnish, if being considered for award of Contract for the Project upon which a Bid Proposal has Vernon submitted, within 48 hours after the Bid Opening, a current Statement of Financial Conditions, including Contractor's latest regular dated financial statement or balance sheet, which must contain the following items:

Current Assets: (Cash, joint venture accounts, accounts receivable, notes receivable, accrued interest on notes, deposits and materials and prepaid expenses), net fixed assets and other assets.

Current Liabilities: (Accounts payable, notes payable, accrued interest on notes, provision for income taxes, advances received from owners, accrued salaries, accrued payroll taxes), other liabilities and capital (capital stock, authorized and outstanding shares par values, earned surplus).

22. The undersigned hereby authorizes and requests any persons, firm, or corporation to furnish any information requested by the Town of Vernon in verification of the recitals comprising this statement of the Bidder's qualifications.

Dated at _____ this _____ day of _____, 20 _____

(Name of Bidder)

By: _____ Title: _____

State of _____) ss.

County of _____)

_____, being duly sworn, deposes and says that he/she is _____

of _____ and that he/she answers to the foregoing questions and all statements therein are true and correct.

Subscribed and sworn to before me this _____ day of _____, 20 _____

Notary Public
My Commission Expires:

COMMISSION ON HUMAN RIGHTS AND OPPORTUNITIES
CONTRACT COMPLIANCE REGULATIONS
NOTIFICATION TO BIDDERS

(Revised 09/3/15)

The contract to be awarded is subject to contract compliance requirements mandated by [Sections 4a-60](#) and [4a-60a](#) of the Connecticut General Statutes; and, when the awarding agency is the State, [Sections 46a-71\(d\)](#) and [46a-81i\(d\)](#) of the Connecticut General Statutes. There are Contract Compliance Regulations codified at [Section 46a-68j-21 through 43](#) of the Regulations of Connecticut State Agencies, which establish a procedure for awarding all contracts covered by [Sections 4a-60](#) and [46a-71\(d\)](#) of the Connecticut General Statutes.

According to [Section 46a-68j-30\(9\)](#) of the Contract Compliance Regulations, every agency awarding a contract subject to the contract compliance requirements has an obligation to “aggressively solicit the participation of legitimate minority business enterprises as bidders, contractors, subcontractors and suppliers of materials.” “Minority business enterprise” is defined in [Section 4a-60](#) of the Connecticut General Statutes as a business wherein fifty-one percent or more of the capital stock, or assets belong to a person or persons: “(1) Who are active in daily affairs of the enterprise; (2) who have the power to direct the management and policies of the enterprise; and (3) who are members of a minority, as such term is defined in subsection (a) of [Section 32-9n](#).” “Minority” groups are defined in [Section 32-9n](#) of the Connecticut General Statutes as “(1) Black Americans . . . (2) Hispanic Americans . . . (3) persons who have origins in the Iberian Peninsula . . . (4) Women . . . (5) Asian Pacific Americans and Pacific Islanders; (6) American Indians . . .” An individual with a disability is also a minority business enterprise as provided by [Section 4a-60g](#) of the Connecticut General Statutes. The above definitions apply to the contract compliance requirements by virtue of [Section 46a-68j-21\(11\)](#) of the Contract Compliance Regulations.

The awarding agency will consider the following factors when reviewing the bidder’s qualifications under the contract compliance requirements:

- (a) the bidder’s success in implementing an affirmative action plan;
- (b) the bidder’s success in developing an apprenticeship program complying with [Sections 46a-68-1 to 46a-68-17](#) of the Administrative Regulations of Connecticut State Agencies, inclusive;
- (c) the bidder’s promise to develop and implement a successful affirmative action plan;
- (d) the bidder’s submission of employment statistics contained in the “Employment Information Form”, indicating that the composition of its workforce is at or near parity when compared to the racial and sexual composition of the workforce in the relevant labor market area; and
- (e) the bidder’s promise to set aside a portion of the contract for legitimate minority business enterprises. [See Section 46a-68j-30\(10\)\(E\)](#) of the Contract Compliance Regulations.

INSTRUCTIONS AND OTHER INFORMATION

The following [BIDDER CONTRACT COMPLIANCE MONITORING REPORT](#) must be completed in full, signed, and submitted with the bid for this contract. The contract awarding agency and the Commission on Human Rights and Opportunities will use the information contained thereon to determine the bidders compliance to [Sections 4a-60](#) and [4a-60a](#) CONN. GEN. STAT., and [Sections 46a-68j-23](#) of the Regulations of Connecticut State Agencies regarding equal employment opportunity, and the bidder’s good faith efforts to include minority business enterprises as subcontractors and suppliers for the work of the contract.

1) **Definition of Small Contractor**

[Section 4a-60g](#) CONN. GEN. STAT. defines a small contractor as a company that has been doing business under the same management and control and has maintained its principal place of business in Connecticut for a one year period immediately prior to its application for certification under this section, had gross revenues not exceeding fifteen million dollars in the most recently completed fiscal year, and at least fifty-one percent of the ownership of which is held by a person or persons who are active in the daily affairs of the company, and have the power to direct the management and policies of the company, except that a nonprofit corporation shall be construed to be a small contractor if such nonprofit corporation meets the requirements of subparagraphs (A) and (B) of subdivision [4a-60g](#) CONN. GEN. STAT.

2) Description of Job Categories (as used in Part IV Bidder Employment Information) (Page 2)

MANAGEMENT: Managers plan, organize, direct, and control the major functions of an organization through subordinates who are at the managerial or supervisory level. They make policy decisions and set objectives for the company or departments. They are not usually directly involved in production or providing services. Examples include top executives, public relations managers, managers of operations specialties (such as financial, human resources, or purchasing managers), and construction and engineering managers.

BUSINESS AND FINANCIAL OPERATIONS: These occupations include managers and professionals who work with the financial aspects of the business. These occupations include accountants and auditors, purchasing agents, management analysts, labor relations specialists, and budget, credit, and financial analysts.

MARKETING AND SALES: Occupations related to the act or process of buying and selling products and/or services such as sales engineer, retail sales workers and sales representatives including wholesale.

LEGAL OCCUPATIONS: In-House Counsel who is charged with providing legal advice and services in regards to legal issues that may arise during the course of standard business practices. This category also includes assistive legal occupations such as paralegals, legal assistants.

COMPUTER SPECIALISTS: Professionals responsible for the computer operations within a company are grouped in this category. Examples of job titles in this category include computer programmers, software engineers, database administrators, computer scientists, systems analysts, and computer support specialists

ARCHITECTURE AND ENGINEERING: Occupations related to architecture, surveying, engineering, and drafting are included in this category. Some of the job titles in this category include electrical and electronic engineers, surveyors, architects, drafters, mechanical engineers, materials engineers, mapping technicians, and civil engineers.

OFFICE AND ADMINISTRATIVE SUPPORT: All clerical-type work is included in this category. These jobs involve the preparing, transcribing, and preserving of written communications and records; collecting accounts; gathering and distributing information; operating office machines and electronic data processing equipment; and distributing mail. Job titles listed in this category include telephone operators, bill and account collectors, customer service representatives, dispatchers, secretaries and administrative assistants, computer operators and clerks (such as payroll, shipping, stock, mail and file).

BUILDING AND GROUNDS CLEANING AND MAINTENANCE: This category includes occupations involving landscaping, housekeeping, and janitorial services. Job titles found in this category include supervisors of landscaping or housekeeping, janitors, maids, grounds maintenance workers, and pest control workers.

CONSTRUCTION AND EXTRACTION: This category includes construction trades and related occupations. Job titles found in this category include boilermakers, masons (all types), carpenters, construction laborers, electricians, plumbers (and related trades), roofers, sheet metal workers, elevator installers, hazardous materials removal workers, paperhangers, and painters. Paving, surfacing, and tamping equipment operators; drywall and ceiling tile installers; and carpet, floor and tile installers and finishers are also included in this category. First line supervisors, foremen, and helpers in these trades are also grouped in this category.

INSTALLATION, MAINTENANCE AND REPAIR: Occupations involving the installation, maintenance, and repair of equipment are included in this group. Examples of job titles found here are heating, ac, and refrigeration mechanics and installers; telecommunication line installers and repairers; heavy vehicle and mobile equipment service technicians and mechanics; small engine mechanics; security and fire alarm systems installers; electric/electronic repair, industrial, utility and transportation equipment; millwrights; riggers; and manufactured building and mobile home installers. First line supervisors, foremen, and helpers for these jobs are also included in the category.

MATERIAL MOVING WORKERS: The job titles included in this group are Crane and tower operators; dredge, excavating, and lading machine operators; hoist and winch operators; industrial truck and tractor operators; cleaners of vehicles and equipment; laborers and freight, stock, and material movers, hand; machine feeders and offbearers; packers and packagers, hand; pumping station operators; refuse and recyclable material collectors; and miscellaneous material moving workers.

PRODUCTION WORKERS: The job titles included in this category are chemical production machine setters, operators and tenders; crushing/grinding workers; cutting workers; inspectors, testers sorters, samplers, weighers; precious stone/metal workers; painting workers; cementing/gluing machine operators and tenders; etchers/engravers; molders, shapers and casters except for metal and plastic; and production workers.

3) Definition of Racial and Ethnic Terms (as used in Part IV Bidder Employment Information) (Page 3)

<p><u>White</u> (not of Hispanic Origin)-All persons having origins in any of the original peoples of Europe, North Africa, or the Middle East.</p> <p><u>Black</u> (not of Hispanic Origin)-All persons having origins in any of the Black racial groups of Africa.</p> <p><u>Hispanic</u>- All persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.</p>	<p><u>Asian or Pacific Islander</u>- All persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes China, India, Japan, Korea, the Philippine Islands, and Samoa.</p> <p><u>American Indian or Alaskan Native</u>- All persons having origins in any of the original peoples of North America, and who maintain cultural identification through tribal affiliation or community recognition.</p>
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BIDDER CONTRACT COMPLIANCE MONITORING REPORT

PART 1 – Bidder Information

<p>Company Name: Street Address: City & State: Chief Executive:</p>	<p>Bidder Federal Employer Identification Number: Or Social Security Number:</p>
<p>Major Business Activity: (brief description)</p>	<p>Bidder Identification (response optional/definitions on page 1)</p> <p>-Bidder is a small contractor? Yes No -Bidder is a minority business enterprise? Yes No (If yes, check ownership category) Black Hispanic Asian American American Indian/Alaskan Native Iberian Peninsula Individual(s) with a Physical Disability Female -Bidder is certified as above by State of CT? Yes No</p>
<p>Bidder Parent Company: (If any)</p>	
<p>Other Locations in CT: (If any)</p>	

PART II - Bidder Nondiscrimination Policies and Procedures

<p>1. Does your company have a written Affirmative Action/Equal Employment Opportunity statement posted on company bulletin boards? Yes No</p>	<p>7. Do all of your company contracts and purchase orders contain non-discrimination statements as required by Sections 4a-60 & 4a-60a Conn. Gen. Stat.? Yes No</p>
<p>2. Does your company have the state-mandated sexual harassment prevention in the workplace policy posted on company bulletin boards? Yes No</p>	<p>8. Do you, upon request, provide reasonable accommodation to employees, or applicants for employment, who have physical or mental disability? Yes No</p>
<p>3. Do you notify all recruitment sources in writing of your company's Affirmative Action/Equal Employment Opportunity employment policy? Yes No</p>	<p>9. Does your company have a mandatory retirement age for all employees? Yes No</p>
<p>4. Do your company advertisements contain a written statement that you are an Affirmative Action/Equal Opportunity Employer? Yes No</p>	<p>10. If your company has 50 or more employees, have you provided at least two (2) hours of sexual harassment training to all of your supervisors? Yes No N/A</p>
<p>5. Do you notify the Ct. State Employment Service of all employment openings with your company? Yes No</p>	<p>11. If your company has apprenticeship programs, do they meet the Affirmative Action/Equal Employment Opportunity requirements of the apprenticeship standards of the Ct. Dept. of Labor? Yes No N/A</p>
<p>6. Does your company have a collective bargaining agreement with workers? Yes No</p> <p>6a. If yes, do the collective bargaining agreements contain non-discrimination clauses covering all workers? Yes No</p> <p>6b. Have you notified each union in writing of your commitments under the nondiscrimination requirements of contracts with the state of CT? Yes No</p>	<p>12. Does your company have a written affirmative action Plan? Yes No If no, please explain.</p> <p>13. Is there a person in your company who is responsible for equal employment opportunity? Yes No If yes, give name and phone number:</p>

1. Will the work of this contract include subcontractors or suppliers? Yes No

1a. If yes, please list all subcontractors and suppliers and report if they are a small contractor and/or a minority business enterprise. (defined on page 1 / use additional sheet if necessary)

1b. Will the work of this contract require additional subcontractors or suppliers other than those identified in 1a. above? Yes No

PART IV - Bidder Employment Information

Date:

JOB CATEGORY*	OVERALL TOTALS	WHITE (not of Hispanic origin)		BLACK (not of Hispanic origin)		HISPANIC		ASIAN or PACIFIC ISLANDER		AMERICAN INDIAN or ALASKAN NATIVE	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Management											
Business & Financial Ops											
Marketing & Sales											
Legal Occupations											
Computer Specialists											
Architecture/Engineering											
Office & Admin Support											
Bldg/ Grounds Cleaning/Maintenance											
Construction & Extraction											
Installation , Maintenance & Repair											
Material Moving Workers											
Production Occupations											
TOTALS ABOVE											
Total One Year Ago											
FORMAL ON THE JOB TRAINEES (ENTER FIGURES FOR THE SAME CATEGORIES AS ARE SHOWN ABOVE)											
Apprentices											
Trainees											

*NOTE: JOB CATEGORIES CAN BE CHANGED OR ADDED TO (EX. SALES CAN BE ADDED OR REPLACE A CATEGORY NOT USED IN YOUR COMPANY)

1. Which of the following recruitment sources are used by you? (Check yes or no, and report percent used)				2. Check (X) any of the below listed requirements that you use as a hiring qualification (X)	3. Describe below any other practices or actions that you take which show that you hire, train, and promote employees without discrimination
SOURCE	YES	NO	% of applicants provided by source		
State Employment Service				Work Experience	
Private Employment Agencies				Ability to Speak or Write English	
Schools and Colleges				Written Tests	
Newspaper Advertisement				High School Diploma	
Walk Ins				College Degree	
Present Employees				Union Membership	
Labor Organizations				Personal Recommendation	
Minority/Community Organizations				Height or Weight	
Others (please identify)				Car Ownership	
				Arrest Record	
				Wage Garnishments	

Certification (Read this form and check your statements on it CAREFULLY before signing). I certify that the statements made by me on this BIDDER CONTRACT COMPLIANCE MONITORING REPORT are complete and true to the best of my knowledge and belief, and are made in good faith. I understand that if I knowingly make any misstatements of facts, I am subject to be declared in non-compliance with Section 4a-60, 4a-60a, and related sections of the CONN. GEN. STAT.

(Signature)	(Title)	(Date Signed)	(Telephone)
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**STATE OF CONNECTICUT
LABOR DEPARTMENT**

REGULATION OF WAGES DIVISION

CONTRACTOR'S WAGE CERTIFICATION FORM

I, _____ of
(Officer, Owner, Authorized Rep. Company Name)

Do hereby certify that the firm of

Company Name

and all of its subcontractors will pay all workmen on the:

REPAIR AND RESURFACING OF
NO. 05240 KELLY ROAD
OVER THE HOCKANUM RIVER
VERNON, CONNECTICUT

The wages as listed in the schedule of prevailing rates required for such Project (a copy of which is attached hereto).

(Signature) (Date)

Subscribed and sworn to before me this _____ day of _____, 20_____.

Notary Public

My Commission Expires: _____

Prevailing Wage Rates for this Project are attached in Appendix B.

***It is the responsibility of the Contractor, before bid opening, to request, if necessary, any additional information on State Wage Rates for those trades people who are not covered by the applicable State Wage Determination, but who may be employed for the proposed work under this Contract.**

The successful bidder must submit satisfactory proof of insurance and a signed Indemnification Certificate.

INDEMNIFICATION CERTIFICATE

To the fullest extent permitted by law, the contractor shall indemnify and hold harmless the Town of Vernon, and agents and employees of said Town from and against claims, damages, losses and expenses, including but not limited to attorney's fees, arising out of or resulting from performance of the work, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) including loss or use resulting therefrom, but only to the extent caused in whole or in part by acts or omissions of the contractor, a subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder.

Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to the Town of Vernon. In claims against any person or entity indemnified under this paragraph by an employee of the contractor, a subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under this paragraph shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the contractor or a subcontractor under workers' or workmen's compensation acts, disability benefits acts or other employee benefits acts.

CONTRACTOR

BY:

Authorized Signature & Title

Address

Date

AGREEMENT

THIS AGREEMENT, made this _____ day of _____, 20____, by and between the TOWN OF VERNON, hereinafter called the "OWNER", acting through its TOWN ADMINISTRATOR,

and, _____ (a corporation)

of _____, County of _____ and

State of _____, hereinafter called the "CONTRACTOR".

WITNESSETH THAT: for in consideration of the payments and agreement hereinafter mentioned, to be made and performed by the OWNER, the CONTRACTOR hereby agrees with the OWNER to commence and complete the construction described as follows:

REPAIR & RESURFACING OF BRIDGE NO. 05240 KELLY ROAD BRIDGE OVER THE HOCKANUM RIVER including addenda thereto, dated _____

_____, being nos. _____ as further described in the Proposal for Construction submitted by the CONTRACTOR, dated _____ and all documents included therein by reference; hereinafter called the "Project" for the sum of _____ (\$ _____) and all extra work in connection therewith, under the terms as stated in the General, Special and Technical Conditions of the Contract, and at (his, her or their) own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurances and other accessories and services necessary to complete the said Project in accordance with the conditions and prices stated in the Contract.

The "Contract" shall consist of the following contract documents:

- a. The Advertisement for Bids.
- b. The Information for Bidders.
- c. Bid Proposal.
- d. The Contract Drawings, which include all maps, plates, prints and their drawings and printed or written explanatory matter thereof.
- e. The Specifications (including Notice to Contractor, Special Provisions, Technical Provisions, Permits) and Contract Documents (plans) thereof as prepared by Cardinal Engineering Associates, Inc., with offices located at 180 Research Parkway, Meriden, Connecticut 06450 herein entitled the ENGINEER.

all of which, including all Addenda thereto, are made a part hereof and collectively evidence and constitute the Contract. If there is any inconsistency between the provisions of this Agreement and any of the other contract documents, the provisions of this Agreement shall prevail.

The CONTRACTOR hereby agrees to commence work under this Contract on or before a date to be specified in a written "Notice to Proceed" of the OWNER and to fully complete the Project within the time limit specified in the Special Conditions. The CONTRACTOR further agrees to pay, as liquidated damages, the sum as specified in the Special Conditions and as herein provided in the General Conditions.

The OWNER agrees to pay the CONTRACTOR in current funds for the performance of the Contract, subject to additions and deductions, as provided in the General Conditions of the Contract and to make payments on account thereof as provided in the General Conditions.

The CONTRACTOR shall indemnify and save harmless the OWNER and the ENGINEER as specified in the Special Conditions.

Any claim between the OWNER and CONTRACTOR, shall be resolved as follows:

Prior to the initiation of formal dispute resolution proceedings, the claiming party shall submit a written demand for a conference to be attended by those parties involved in the Project that are reasonably necessary for the resolution of the dispute. Such meeting shall be held within fifteen (15) days of the demand at the offices of the OWNER. Each party requested to attend this conference shall send an authorized representative who has authority to make decisions necessary to resolve the dispute.

If the conference fails to lead to a resolution of the claim or dispute, then the OWNER may submit a written demand to proceed to mediation and the OWNER and CONTRACTOR agree to participate in good faith in the mediation process. Mediation shall commence within forty-five (45) days of the initial demand to mediate and shall be arranged through the American Arbitration Association or any other recognized dispute resolution organization in the State of Connecticut. The costs of mediation (excluding individual legal fees) shall be shared equally.

In the event the OWNER does not elect to proceed to mediation, then all claims, counter-claims, disputes and other matters in question between the OWNER and CONTRACTOR arising out of this Contract or the breach thereof will be decided by arbitration or in a court of competent jurisdiction within the district in which the OWNER is located, as determined by the OWNER. In any such action, the prevailing party shall be entitled to recover its costs and reasonable fees of experts and attorneys.

Notwithstanding the existence of a dispute, the CONTRACTOR shall continue to carry on the Work and maintain the progress schedule set forth in the Contract unless the OWNER elects to terminate the Work in accordance with the Contract or the parties mutually agree in writing to suspend Work while the dispute is pending.

IN WITNESS WHEREOF, the parties to these presents have executed this Contract in three (3) counterparts, each of which shall be deemed an original, in the year and day first above mentioned.

OWNER: _____ (Corporate Seal)

BY: _____ TITLE:

ATTEST:

CONTRACTOR: _____ (Corporate Seal)

BY: _____ TITLE:

ATTEST:

CERTIFICATION

I, the undersigned, _____, the duly authorized
and acting legal representative of the Town of Vernon, Connecticut

do hereby certify as follows:

I have examined the above Contract(s) and Surety Bonds and the manner of execution thereof, and I am of the opinion that each of the aforesaid Agreements has been duly executed by the proper parties thereto acting through their duly authorized representatives, have full power and authority to execute said Agreements on behalf the respective parties named thereon; and that the foregoing Agreements constitute valid and legally binding obligations upon the parties executing the same in accordance with the terms, conditions and provision thereof.

By _____

Date: _____

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

That we _____ a _____
(Name of Contractor) (Corporation, Partnership, Individual)

hereinafter called the "Principal" and _____
(Surety)

of _____ State of _____ hereinafter
called the "Surety", are held firmly bound unto the TOWN OF VERNON, Connecticut,
hereinafter called "OWNER", in the penal sum of

_____ DOLLARS

(\$ _____) in lawful money of the United States, for the payment of

which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and
successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, the Principal entered into a certain Contract with the Owner, dated the
day of _____, 20____, a copy of which is hereto attached and made a part hereof for the
construction of:

**REPAIR & RESURFACING OF BRIDGE NO. 05240 KELLY ROAD OVER THE
HOCKANUM RIVER**

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all
the undertakings, covenants, terms, conditions and agreements of said Contract during the original
term thereof, and any extensions thereof which may be granted by the Owner, with or
without notice to the Surety, and if it shall fully indemnify and save harmless the owner from all
costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay
the owner all outlay and expense which the Owner may incur in making good any
default, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees
that no change, extension of time, alteration or addition to the terms of the Contract or to the work
to be performed there under of the specifications accompanying the same shall in any wise affect
its obligation on this Bond, and it does hereby waive notice of any such change, extension of
time, alteration or addition to the terms of the Contractor or to work of the specifications.

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

IN WITNESS WHEREOF, this instrument is executed in three (3) counterparts, each one of which shall be deemed an original, this the _____ day of _____, 20__

ATTEST:

Principal

(Principal) Secretary

By: _____ (S)

(SEAL)

Address/Zip Code

Witness to Principal

ATTEST:

Surety

(Surety) Secretary

By: _____

(SEAL)

Attorney-in-Fact

Address/Zip Code

Witness to Surety

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

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS:

That we _____ a _____
(Name of Contractor) (Corporation, Partnership, Individual)
hereinafter called the "Principal" and _____
(Surety)
of _____, State of _____

hereinafter called the "Surety", are held firmly bound unto the TOWN OF VERNON,
Connecticut, hereinafter called "OWNER", in the penal sum of

_____ DOLLARS

(\$ _____) in lawful money of the United States, for the payment of

which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and
successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, the Principal entered into a certain Contract with the Owner, dated the
day of _____, 20____, a copy of which is hereto attached and made a part hereof for the
construction of:

**REPAIR & RESURFACING OF BRIDGE NO. 05240, KELLY ROAD OVER THE
HOCKANUM RIVER**

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

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and
agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the
work to be performed there under of the specifications accompanying the same shall in any wise
affect its obligation on this Bond, and it does hereby waive notice of any such change,
extension of time, alteration or addition to the terms of the Contractor or to work of the
specifications.

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

IN WITNESS WHEREOF, this instrument is executed in three (3) counterparts, each one of which shall be deemed an original, this the _____ day of _____, 20____.

ATTEST:

Principal

(Principal) Secretary

By: _____ (S)

(SEAL)

Address/Zip Code

Witness to Principal

ATTEST:

Surety

(Surety) Secretary

By: _____
Attorney-in-Fact

(SEAL)

Address/Zip Code

Witness to Surety

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

ACKNOWLEDGMENT OF SURETY COMPANY

State of _____)
) ss:
County of _____)

On this _____ day of _____, 20_____,

before me personally came _____ to me known to be the
person named in the above instrument and who being by me duly sworn, did depose and say (he/she)
resides in _____, that (he/she) is the _____ of the

corporation described in which is executed the above instrument; that (he/she) knows the seal of said
corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed
pursuant to a resolution of the Board of Directors of said corporation and that (he/she) signed
(his/her) name by like order.

Notary Public

My Commission Expires: _____

(The Surety Company must append statement of its financial condition and a copy of the resolution
authorizing the execution of bonds by officers of the company and the Power-of-Attorney of the
Surety Company’s Attorney-in-Fact, authorized to act within the State of Connecticut.)

The foregoing bond and sureties are hereby approved.

Dated, Vernon, Connecticut _____, 20_____

Corporation Counsel, Town of Vernon

Town Manager, Town of Vernon

TOWN OF VERNON CERTIFICATE
OF NON-ARREARAGE

STATE OF CONNECTICUT)

COUNTY OF

) ss:
)

_____ being duly sworn deposes and says that

1. He/She is the (Owner, Partner, Officer, Representative, or Agent) of
_____ the Bidder that has submitted the
attached Bid.
2. Neither the Bidder, nor their subcontractors are in arrears to the State of Connecticut Second
Injury Fund.

(Signed) _____

(Title) _____

Subscribed and sworn to before me this _____ day of _____, 20____

Notary Public
Commissioner of the Superior Court

CERTIFICATE OF WAIVER AND RELEASE OF CLAIMS

TO ALL TO WHOM THESE PRESENTS SHALL COME OR MAY CONCERN, KNOW THAT

(Subcontractor Name/Address)
a corporation/partnership, business organized under the laws of the State of Connecticut, in consideration of the sum of:

(Written Figures) (\$_____)
Received from

(General Contractor Name/Address)
receipt whereof is hereby acknowledged, hereby waives and relinquishes for itself, its heir, executors, administrators, successors and assigns, all rights to claim payment for work done and in place as of the date of this Release of the Project commonly known as the **REPAIR & RESURFACING OF BRIDGE NO. 05240 KELLY ROAD OVER THE HOCKANUM RIVER**

(Name of Subcontractor)
hereby indemnifies the Town of Vernon, Connecticut (Owner) against any and all claims for work performance and/or materials supplied by it/him/her/us under the above-mentioned Contract.

IN WITNESS WHEREOF:

(Subcontractor Name/Address)
has caused this Waiver and Release of Claims to be executed by its duly authorized officer this _____ day of _____, 20_____.

Executed and delivered in the presence of:

Witness By: _____

Witness

CONTRACTOR'S FINAL PAYMENT RELEASE

KNOW YE MEN BY THESE PRESENTS THAT:

_____ duly authorized to act on behalf of
(Contractor's Name and Address)_____ of

County and State of _____, for and in consideration of final payment is the sum of
_____ Dollars (\$_____), lawful money of the United
States of America, the receipt whereof is hereby acknowledged, in full satisfaction and payment of all sums of money
owing, payable and belonging to _____ (Contractor) by any means whatsoever,
for or on account of a certain agreement hereinafter called the Contract, between the Town of Vernon (Owner)
_____ and _____ (Contractor), dated _____.

NOW, THEREFORE, _____ duly authorized to act on behalf of said
_____ (Contractor), its successors, legal representative and assigns does hereby
release, acquit, agree to indemnify and hold harmless and forever discharge the said Town of Vernon (Owner), its
officers, agents, servants and employees from all claims, demands and causes of action and actions, suits, debts,
dues, duties, sum and sums of money, accounts, reckonings, bonds, bills, specialties, covenants, contracts,
agreements, promises, variances, trespasses, damages, judgments, extent, executions, claims and demands
_____ whatsoever in law or equity, or otherwise that
(Contractor), its successors, legal representative and assigns may now have or that might subsequently accrue
to _____ (Contractor) its successors, legal representatives and assigns out of or connected
_____ with, directly or indirectly, the Contract dated _____ between
(Contractor) and the Town of Vernon (Owner) and any and all other bid documents, agreements and Contract
modifications thereto.

Signed, Sealed and Delivered in the Presence of:
_____ (Witness)
_____ (Witness)

By: _____
Its duly Authorized _____

STATE OF CONNECTICUT)
) ss: _____ Dated:
COUNTY OF:)

Before me, on behalf of _____ personally appeared _____,
duly authorized, to me known, and known to me to be the person named in and who executed the above release, and
he/she acknowledges to me that he/she executed the same as his/her free act and deed.

Notary Public, Commission of Superior Court
My Commission Expires: _____

CONTRACTOR'S AFFIDAVIT

STATE OF: _____

COUNTY OF: _____

Before me, the undersigned, a _____ in and for said County and State
(NOTARY PUBLIC, JUSTICE OF THE PEACE, ALDERMAN)

personally appeared _____
(INDIVIDUAL, PARTNER OR DULY AUTHORIZED REPRESENTATIVE OF CORPORATE CONTRACTOR)

who, being duly sworn according to law, deposes and says that all labor, materials and outstanding claims and indebtedness of whatever nature arising out of the performance of the Contract of the Town of Vernon, Connecticut

with _____ have been paid in full.
(CONTRACTOR)

(Individual, Partner or duly Authorized Representative of Corp. Contractor)

Sworn to and subscribed before me this

_____ day of _____, 20 _____

NOTARY PUBLIC

My Commission Expires: _____

STATEMENT OF SURETY COMPANY

IN ACCORDANCE with the provisions of the Contract dated _____ between
the Town of Vernon, Connecticut and _____

(Contractor)

the _____ on the Material and Labor Payment Bond of
(Surety)

_____, after a careful examination of the books and
records

(Contractor)

of said Contractor or after receipt of an affidavit from Contractor, which examinations of affidavit satisfies
said Surety that all claims for labor and materials have been satisfactorily settled, hereby approved of the final
payment of the said _____, Contractor, and by these presents
witnesseth that payment to the Contractor of the final estimates shall not relieve Surety of any of its
obligations to the Town of Vernon as set forth in the said Surety Company's Bond.

IN WITNESS WHEREOF, SAID SURETY has hereunto set its hand and seal this _____ day
of _____, 20_____.

ATTEST:

(SEAL) _____ BY _____
(President)

NOTE: THIS STATEMENT, IF EXECUTED BY ANY PERSON OTHER THAN THE PRESIDENT OR
VICE PRESIDENT OF THE COMPANY, MUST BE ACCOMPANIED BY A CERTIFICATE OF
EVEN DATE SHOWING AUTHORITY CONFERRED UPON THE PERSON SO SIGNING TO
EXECUTE SUCH INSTRUMENTS ON BEHALF OF THE COMPANY REPRESENTED.

MAINTENANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned _____
(Contractor)

as Principal, and _____ as Surety, are held and firmly bound unto
the

Town of Vernon, Connecticut, hereinafter called the "Town" in the final sum* of
_____ Dollars
(\$_____) lawful monies of the United States for the payment of which sum will and truly
be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally,
firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the Principal has executed an
Agreement, dated _____, 20____, for REPAIR AND RESURFACING OF
BRIDGE NO. 05240 KELLY ROAD OVER HOCKANUM RIVER.

NOW THEREFORE, the Principal agrees to maintain the work completed in the Contract, stated above, for a
period of two (2) years from the date of final payment and issuance of a Certificate of Completion, without
additional cost to the Town. Failure to comply with such required work shall constitute a violation and
all monies covered by this Bond shall become payable to the Town.

ANY CHANGES MODIFICATIONS, AMENDMENTS AND/OR ALTERATIONS TO THIS
ORIGINAL BOND FORM SHALL BE HIGHLIGHTED AND THE TOWN SHALL BE ADVISED OF
SAME AND CONSENT TO SAME PRIOR TO ITS ACCEPTANCE OF THE BOND AS SO
CHANGED, MODIFIED, AMENDED AND/OR ALTERED.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument under several seals this
_____ day of _____, 20____, the name and corporate seal of each corporate
party being hereto affixed and these presents duly signed by its undersigned representative, pursuant
to authority of its governing body.

In the presence of: _____(Seal)
(Individual Principal)

(Business Address)

(Partnership)

(Business Address)

Attest: _____
(Corporate Principal)

(Business Address)

* Final sum shall be the actual final construction cost.
By: _____(Seal)

Attest:

(Corporate Surety)
Countersigned by:
_____ (Seal)

Power-of-Attorney for Persons signing for Surety Company must be attached to Bond.

NOTICE OF AWARD

TO: _____

PROJECT DESCRIPTION: REPAIR & RESURFACING OF Bridge No. 05240, KELLY ROAD OVER HOCKANUM RIVER, VERNON, CONNECTICUT

The Town of Vernon has selected your firm as the apparent low bidder to perform construction of the REPAIR & RESURFACING OF Bridge No. 05240 KELLY ROAD OVER HOCKANUM RIVER in Vernon, Connecticut in response to its advertisement for bids dated _____, 20__ You are hereby advised that your bid has been accepted for items in the amount of:

_____ (\$ _____)
(Written Figures)

_____ will be authorized to proceed with this work
or
(Firm Name)

service subject to the following: receipt and approval of the required insurance and bonds as specified in the Contract Documents; encumbrance of funds; and execution of the Agreement incorporating the Contract Documents by the First Selectman of the Town of Vernon.

You are required by the Information for Bidders to execute the Contract and furnish the required certificates of insurance(s) and bonds within ten (10) calendar days from the date of this Notice to you.

If you fail to execute the Contract and to furnish the required insurance certificate(s) and bond(s) within ten (10) calendar days of this Notice, the Town of Vernon will be entitled to consider all your rights arising out of the Town' acceptance of your Bid as abandoned and the Town will seek whatever remedies to which it is entitled by law and in equity.

You are required to return an acknowledged copy of this Notice of Award to the Town.

Dated this _____ day of _____, 20_____

TOWN OF VERNON, CONNECTICUT By:

Title: _____

ACCEPTANCE OF NOTICE

The receipt of the Notice of Award is hereby acknowledged by:

(Signature)

(Firm Name)

(Printed Name/Title)

on this the _____ day of _____, 20_____

NOTICE TO PROCEED
(Refer to Agreement)

TO: _____

Date: _____

PROJECT DESCRIPTION: REPAIR & RESURFACING OF Bridge No. 05240 KELLY ROAD OVER HOCKANUM RIVER, VERNON, CONNECTICUT

You are hereby notified to commence work in accordance with the Agreement dated _____ on or before _____, 20_____, and you are to complete the work within _____ consecutive calendar days thereafter.

The date of completion of work is therefore: _____, 20_____

You are required to return an acknowledged copy of this NOTICE TO PROCEED to the Owner.

Town of Vernon
Owner

By: _____

Title: _____

ACCEPTANCE OF NOTICE

Receipt of the above Notice to Proceed is hereby acknowledged by

this _____ day of _____, 20_____.

Contractor: _____

By: _____

Title: _____

TOWN OF VERNON
CHANGE ORDER

PROJECT: REPAIR & RESURFACING OF
Bridge No. 05240 KELLY ROAD
OVER THE HOCKANUM RIVER,
VERNON, CONNECTICUT

Contract Date _____
Change Order Date: _____
Change Order No. _____

CONTRACTOR: _____

TO: TOWN OF VERNON, CONNECTICUT
BOARD OF SELECTMAN
VERNON, CONNECTICUT

_____, the Contractor, agrees that this change order adjusts the contract price and time to reflect fairly all overhead, profit, charges costs, expenses, delays, damages and the payments that may be claimed due and owing to the Contractor as of the above stated date and agrees that the acceptance of this change order by the owner will constitute a complete and final accord and settlement of Contractor' claims against the Owner on account of this work through the date of the Contractor' signature below.

You are directed to make the following changes in this Contract:

Justification:

The Original Contract Sum was: \$ _____
Net Changes by previous Change Orders: \$ _____
The Contract Sum prior to this Change Order was: \$ _____
The Contract Sum will be (increased, decreased)
by this Change Order: \$ _____

The Contract Time will be (increased, decreased, unchanged) by _____ calendar days.
The Date for Completion as of the date of this Change Order therefore is _____

(Engineer) (Contractor) (Owner)

(Address) (Address) (Address)

By: _____ By: _____ By: _____

Date: _____ Date: _____ Date: _____

**REPAIR & RESURFACING OF BRIDGE
NO. 05240 KELLY ROAD
OVER THE POMPERAUG RIVER
VERNON, CONNECTICUT**

SPECIAL PROVISIONS

The State of Connecticut, Department of Transportation, Standard Specifications for Roads, Bridges, Facilities and Incidental Construction, Form 818, 2020, is hereby made part of this contract, as modified by the Special Provisions contained herein. Form 818 is available at the following DOT website link <http://www.ct.gov/dot/cwp/view.asp?a=3609&q=430362>.

CONTRACT TIME AND LIQUIDATED DAMAGES

Ninety (90) calendar days will be allowed for completion of the work on this Contract and the liquidated damages charge to apply will be One-Thousand Two Hundred Dollars (\$1,200.00) per calendar day.

NOTICE TO CONTRACTOR - APPLICABILITY OF CONNECTICUT DOT - FORM 818

Whenever and wherever "ConnDOT Form 818," "Form 818," "Standard Specifications" are referenced herein, this shall mean and refer to the "State of Connecticut, Department of Transportation, Standard Specifications for Roads, Bridges, Facilities and Incidental Construction, Form 818, 2020, as merged with Supplemental Specifications dated July 2023."

In Form 818 and other Contract Documents, where the word "State", "State of Connecticut" or "Department" appear, it shall be intended to mean "Town of Vernon" as if inserted therein.

The Town shall have the sole and absolute discretion to determine whether any provision of Form 818 shall be applied with respect to any issue which may arise between the parties.

Additionally, where there is a conflict between the terms and conditions set forth in the Town's bid specifications and those set forth in Form 818, the Town's bid specifications shall prevail.

NOTICE TO CONTRACTOR - BID REJECTION

Bidders are hereby notified that until the award of the Contract, the Municipality reserves to himself, the right to reject any or all bids for any reason whatsoever, and to waive technicalities as deemed to be in the best interests of the Municipality.

NOTICE TO CONTRACTOR - PROCUREMENT OF MATERIALS

Upon award, the Contractor shall proceed with shop drawings, working drawings, procurement of materials, and all other submittals required to complete the work in accordance with the contract documents.

NOTICE TO CONTRACTOR – SUPERVISION AND INSPECTION

This project will be supervised and inspected by the Municipality or its authorized agent. The "Notice to Proceed", stipulating the date on which the Contractor will begin the construction and from which date the contract time will be charged, will be issued by the Municipality.

NOTICE TO CONTRACTOR – PRE-CONSTRUCTION MEETING

A pre-Construction meeting will be held between the contractor and the engineer to further define the limits of construction as detailed in this document. The contractor shall be aware that the quantities shown on the bid sheet are approximate and actual amounts / limits will be set at this meeting.

NOTICE TO CONTRACTOR - VERIFICATION OF EXISTING CONDITIONS

Included in this contract is the modification, alteration and/or addition to existing structures. Contractors are cautioned that it is their responsibility to verify locations, conditions, and field dimensions of all existing features, as actual conditions may differ from information shown on the plans or contained elsewhere in the specifications.

NOTICE TO CONTRACTOR – UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES

If historic properties are unexpectedly encountered during Project construction, the contractor will immediately cease all construction activities in the immediate vicinity that may reasonably be assumed to affect the historic properties. Any historic property discoveries shall to the extent possible be protected in situ to allow for consultation among the Parties and the Tribes. The historic properties may be preserved in situ or mitigated on a case-by-case basis in consultation with the Parties and the Tribes. No artifacts are to be removed from the site unless approved by all parties. Notwithstanding anything to the contrary herein, the curation and disposition of any cultural resources shall be consistent with 36 C.F.R. Part 79 and other applicable law. If human remains are unexpectedly encountered during Project construction, the remains will be treated in a respectful manner and in accordance with the respective laws of the State of Connecticut (Connecticut General Statutes Chapter 184a Section 10-388) and State of Connecticut Department of Transportation, Standard Specifications for Roads, Bridges, Facilities and Incidental Construction, Form 818, 2020, Section 1.10.06.

NOTICE TO CONTRACTOR – FLOOD CONTINGENCY PLAN REQUIREMENTS

The Contractor is hereby made aware that under "Article 1.10.03 – Water Pollution Control" of Form 818, as amended by the Supplemental Specifications, the Contractor is required to submit a contingency plan for flood events, in writing, to the Municipality or its authorized agent for approval. The contingency plan must be submitted by the Contractor and approved by the Municipality or its authorized agent prior to the commencement of any Project construction in the waterway.

NOTICE TO CONTRACTOR – NO STORAGE OR STAGING OF MATERIALS WITHIN FLOODPLAIN WITHOUT REVIEW AND WRITTEN APPROVAL

The Contractor is hereby made aware that, in conformance with the approved environmental permits and with the Best Management Practices outlined under Section 1.10 – Environmental Compliance of Form 818, as amended by the Supplemental Specifications, the contractor shall not store or stage any materials or equipment within the Floodplain without prior review and written approval by the Engineer.

The Contractor shall submit a written plan detailing the materials and/or equipment to be stored or staged from within the floodplain, including such details as the presence of any materials that are potentially hazardous, buoyant, flammable, explosive, soluble, expansive, radioactive, or which could in the event of a flood be injurious to human, animal or plant life. No materials or equipment shall be stored or staged from within the Floodplain until the plan described above has been reviewed and approved by the Engineer.

NOTICE TO CONTRACTOR-NOISE POLLUTION

The contractor shall take measures to control the noise intensity caused by his construction operations and equipment, including but not limited to equipment used for drilling, pile driving, blasting, excavation or hauling.

All methods and devices employed to minimize noise shall be subject to the continuing approval of the Engineer. The maximum allowable level of noise at the nearest residence or occupied building shall be 90 decibels on the "A" weighted scale (dBA). Any operation that exceeds this

standard will cease until a different construction methodology is developed to allow work to proceed within the 90-dBA limit.

NOTICE TO CONTRACTOR - CALL BEFORE-YOU-DIG

The Contractor's attention is called to the fact that they are obligated, by State Law, to notify the Public Utilities Control Authority (1-800-922-4455 or dial 811) 48 hours prior to beginning any digging or discharging of explosives. This "Call Before-You-Dig" system will assure that each utility company will have marked its lines in the field before any digging activity commences. The Contractor assumes all responsibilities for any damage to the various utility services, and all liabilities arising there from.

The Contractor shall make the necessary arrangements with the respective Utility Companies and provide grades for the resetting and adjusting of private utility lines, if necessary. This coordination and/or field work required shall not be considered extra work or as a basis for extending the time for completion.

The Contractor is hereby notified that all utility specifications contained elsewhere herein shall be made a part of this contract, and that the contractor shall be bound to comply with all requirements of such specifications. The requirements and conditions set forth in the subject specifications shall be binding on the contractor just as any other specification would be.

NOTICE TO CONTRACTOR – PROTECTION OF EXISTING BRIDGE MOUNTED AND OVERHEAD UTILITIES

The Contractor’s attention is directed to the need for protection of the existing bridge mounted and overhead utilities during the rehabilitation of the existing structure. The Contractor is responsible for coordinating all protection of utilities with the appropriate utility company. A 10-foot minimum clearance is to be provided from any unprotected overhead electric lines. The Contractor may need to adjust means and methods in order to accommodate this requirement, at no additional cost to the Town.

Representatives of the various utility companies shall be allowed access to work.

The following utilities are known to exist within the project limits:

<p><u>Comcast of Connecticut, Inc.</u> Ryan Menard Construction Supervisor 222 New Park Drive Berlin, CT 06037 (860) 338-9778 ryan_menard@comcast.com</p>	<p><u>Crown Castle Fiber</u> Mark Bonanno, Manager, Network Construction 1800 West Park Dr., Suite 250 Westborough, MA 0158 (508) 616-7818 mark.bonanno@crowncastle.com</p>
<p><u>Southern New England Telephone Company</u> (dba Frontier Communications) Timothy Hickey Local Manager –Construction 441 Hazard Avenue Enfield, CT 06082 (860) 402-4280 timothy.s.hickey@ftr.com</p>	<p><u>The Connecticut Light & Power Company</u> (dba Eversource Energy – Electric Distribution) Jonathan Ferrigno Senior Specialist – Government Affairs & Community Relations 56 Prospect St. Hartford, CT 06103 (860) 716-5399 jonathan.ferrigno@eversource.com</p>

<p><u>The Connecticut Water Company</u> Christopher Wojciak, P.E. Manager, Distribution System Engineering 446 Smith Street Middletown, CT 06457 (860) 292-2840 (860) 712-8618 christopher.wojciak@ctwater.com</p>	<p><u>Yankee Gas Services Company</u> (dba Eversource Energy – Gas) Jonathan Ferrigno Senior Specialist – Government Affairs & Community Relations 56 Prospect St. Hartford, CT 06103 (860) 716-5399 jonathan.ferrigno@eversource.com</p>
<p><u>Town of Vernon Cable Network - Sertex</u> Russell Freeman Operations Manager 22 Center Parkway Plainfield, CT 06374 (860) 317-1006 x113 (860) 867-6404 (cell)</p>	<p><u>Public Sewer – Vernon Water Pollution Control</u> Robert Grasis Director 14 Park Place Vernon, CT 06066 (860) 870-3699 rgrasis@vernon-ct.gov</p>

The Contractor shall be liable for all damages or claims received or sustained by any persons, corporations or property in consequence of damages to the existing utilities, their appurtenances, or other facilities caused directly or indirectly by the operations of the Contractor.

Any damage to any existing utility shall be repaired including all materials, labor, etc., to the engineer’s satisfaction at no cost to the Town.

NOTICE TO CONTRACTOR – CONTRACTOR TRAINING REQUIREMENT FOR 10-HOUR OSHA CONSTRUCTION SAFETY AND HEALTH COURSE

In accordance with Connecticut General Statute 31-53b and Public Act No. 08-83, the Contractor is required to furnish proof that any person performing the work of a mechanic, laborer or worker pursuant to the classifications of labor under section 31-53, has completed a course of at least ten hours in duration in construction safety and health approved by the Federal Occupational Safety and Health Administration or, has completed a new miner training program approved by the Federal Mine Safety and Health Administration in accordance with 30 CFR 48 or, in the case of telecommunications employees, has completed at least ten hours of training in accordance with 29 CFR 1910.268.

Proof of compliance with the provisions of the statute shall consist of a student course completion card issued by the federal Occupational Safety and Health Administration, or other such proof as deemed appropriate by the Commissioner of the Connecticut Department of Labor, dated no earlier than five years prior to the commencement of the project. Each employer shall affix a copy of the construction safety course completion card for each applicable employee to the first certified payroll submitted to the Department of Transportation on which the employee’s name first appears.

Any employee required to complete a construction safety and health course as required that has not completed the course, shall have a maximum of fourteen (14) days to complete the course. If the employee has not been brought into compliance, they shall be removed from the project until such time as they have completed the required training.

This section does not apply to employees of public service companies, as defined in section 16-1

of the 2008 supplement to the General Statutes, or drivers of commercial motor vehicles driving the vehicle on the public works project and delivering or picking up cargo from public works projects provided they perform no labor relating to the project other than the loading and unloading of their cargo.

The internet website for the federal Occupational Safety and Health Training Institute is <http://www.osha.gov/fso/ote/training/edcenters>.

Additional information regarding this statute can be found at the Connecticut Department of Labor website, <http://www.ctdol.state.ct.us/wgwkstnd/wgemenu.htm>.

Any costs associated with this notice shall be included in the general cost of the contract. In addition, there shall be no time granted to the contractor for compliance with this notice. The contractor's compliance with this notice and any associated regulations shall not be grounds for claims as outlined in Section 1.11 – "Claims".

NOTICE TO CONTRACTOR – PROJECT SPECIFIC TESTING REQUIREMENTS

All testing of products and materials utilized on this project shall be in conformance with the Connecticut Department of Transportation Standard Specifications for Roads, Bridges, Facilities and Incidental Construction, Form 818; with the latest Supplemental Specifications and the project's supplemental specifications unless otherwise noted or amended in the Table following page:

Chapter 7 - Suggested Minimum Schedule for Acceptance Testing (LOTICIP)

Local Transportation Capital Improvement Program (LOTICIP)

4/2/2019

ONLY Applies to Municipal Administered LOTICIP Projects not on National Highway System

Material Name	Unit	Test/Documentation	Frequency 1 per	Notes
Anchor Bolts	ea.	MC	project	1 per size
Asphalt Emulsions (CSS-1, RS-1 or SS-1)	gal	MC	10k	
Bituminous Concrete (HMA)	ton	D 2950 FLDT	day	See Note 3
Cement - Portland Type I/II	bag	FLDT	project	empty bag
Chemical Anchor	lb.	QPL MC	project	
Concrete-Ready Mixed	c.y.	T22 FLDT	75	4 cylinders
Construction Signing	ea.	MC	project	
Geotextile	s.y.	QPL MC	project	
Gravel (Bank Run or Crushed)	c.y.	T27 LABT	5k	
Grout, Non-shrink	bag	MC	project	
Masonry Brick & Block (Solid)	ea.	FLDT	project	See Note 1
Pipe - Reinforced Concrete	lf.	PC-1	project	See Note 1
Pipe (Metal & Plastic) All types	lf	MC	project	See Note 1
Pipe Arch - Aluminum	lf	MC	project	See Note 1
Precast Concrete Items (not pipe)	ea.	PC-1	Item type	
Prestressed Concrete Members	ea.	LABT	1	See Note 2 & 3
Reclaimed Misc. Aggregate	c.y.	T27/Chem Analysis	2500	See Note 5
Reclaimed Waste	c.y.	T180 LABT	50k	See Note 5
Sand (Masonry /Trenching & Backfilling)	c.y.	T27 LABT	2500	
Sheet Piling	lf.	MC	project	See Note 4
Sign Post	ea	MC	project	See Note 1
Span Pole - Steel or Wood	ea.	MC	project	See Note 3
Steel Reinforcing Bars (Plain or Epoxy)	lb.	T244 MC	200t	
Stone (Broken/Crushed)	c.y.	T27 LABT	20k	
Structural Steel	cw	Shop Drawings	project	Notes 2, 3 & 4
Traffic Signal Equipment	ea.	MC	project	NA

Notes

1	Material should be inspected on the project site prior to use. Suspect material should be physically tested to determine conformance.
2	QC Inspection should be provided and documented during fabrication.
3	Contact the Department of Transportation Division of Materials Testing to determine vendor qualifications and QA inspection availability.
4	Documentation should be provided to determine conformance to Buy America requirements.
5	FORM MAT-212 should be completed and provided by the Contractor prior to use of material.

Test Method/Test Type

LABT	Laboratory Test
FLDT	Test performed in the field
QPL	ConnDOT Qualified Products List (http://www.ct.gov/dot/lib/dot/documents/dresearch/conndot_qpl.pdf)
PC-1	MAT-308 Required from producer with shipment
MC*	Materials Certificate

*Should comply with ConnDOT Standard Specification Section 1.06.07

NOTICE TO CONTRACTOR – FINAL PAVING CONDITIONS

The Contractor is hereby notified that the final paving conditions shall include sufficient cross slope and longitudinal slope to allow for proper drainage.

SECTION 1.01
DEFINITIONS OF TERMS AND PERMISSIBLE ABBREVIATIONS

1.01.01—Definitions: is amended and supplemented as follows:

Substitute the word "Municipality" or "Municipal" for "Department" wherever "Department" appears in the definitions for each of the following terms: Award, Contract, Highway, Plans, and Project.

Substitute the word "Engineer" for "Commissioner" wherever "Commissioner" appears in the definitions for each of the following terms: Subcontractor and Sub-subcontractor.

Engineer: Delete the definition in its entirety and replace with the following:

The Municipality's Chief Elected Official acting directly or through a duly authorized representative.

Add the following:

Municipal: Of or relating to the Municipality.

Municipal Liaison: That individual identified by the Municipality to act as liaison with the State of Connecticut, Department of Transportation.

Municipality: Town of Vernon, Connecticut

SECTION 1.02 PROPOSAL REQUIREMENTS AND CONDITIONS

Section 1.02 is supplemented and amended as follows:

Throughout this Section, make the following substitutions for all occurrences of the word(s) identified below for substitution:

Substitute "Engineer" for "Commissioner" and for "Division of Contracts."

Substitute "Municipality" or "Municipal" for "Department" and for "Contract Section".

1.02.01—Contract Bidding and Awards: is amended as follows:

Add the following two (2) paragraphs to the end of the first paragraph.

Should the Municipality NOT allow electronically submitted bids, then each paper bid proposal must be submitted in a sealed envelope large enough to hold the proposal documents (recommended size 10-1/2 x 13). **The envelope must clearly state the name and address of the firm submitting the bid, the name of the Town and Project Number for the bid.** The envelope must be delivered to the Municipality on or before the hour and date, and to the location, set forth in the bid advertisement for the opening of proposals, unless the bidder is otherwise directed.

On the date and at the time and place designated in the bid advertisement and in the related Notice to Contractors or addendum notice, the sealed paper bid proposals shall be publicly opened and read out loud. At the time that paper bid proposal is opened, it shall be checked for "responsiveness" in various respects, to determine if it complies with applicable statutes, regulations, and the Municipality's Specifications, including Connecticut DOT's Standard Specifications. Each bidder is required to include with its paper bid proposal the following documents: the completed paper bid proposal form (incl. the schedule of prices), the required bid bond, a non-collusion affidavit, and any other information required by the bid documents or by the bid advertisement. Each paper bid proposal shall be governed by the terms and conditions, as applicable that are stipulated in the Connecticut DOT's Construction Bidding and Award Manual, for electronically submitted bids.

1.02.03—Examination of Plans, Specifications, Special Provisions, and Site of Work:

Delete the last paragraph and replace with the following:

"Bidders must inform the Municipality's Designer, at the earliest opportunity, in writing, of any and all omissions, errors, and/or discrepancies that the bidder discovers within or among the plans, specifications, and bidding documents. Information and inquiries concerning such matters, and any other information or inquiry concerning the conditions of bidding or award or the interpretation of contract documents must be transmitted in writing to:

Mr. Joseph Cermola, P.E.
Cardinal Engineering Associates
180 Research Parkway
Meriden, Connecticut 06450
Tel: (203) 238-1969
Email: jac3@cardinal-engineering.com

The Municipality and/or the Municipality's Designer cannot ensure a response to inquiries received later than ten (10) days prior to the scheduled bid opening of the related bid. When deemed warranted by the Municipality and/or the Municipality's Designer, responses to such inquiries that relate to changes in or interpretations of the Project documents (plans and specifications) will be issued to all bidders in the form of addenda and made a part of the Contract. Bidders are responsible for ensuring that they are aware of all addenda. Failure by the Municipality, Municipality's Designer or postal or other courier services to deliver addenda or other information regarding a Contract being bid does not release the bidder from any obligations under said addenda or the conditions of the bid."

SECTION 1.03
AWARD AND EXECUTION OF CONTRACT

Section 1.03 is supplemented and amended as follows:

Throughout this Section, except for Article 1.03.07, make the following substitutions for all occurrences of the word(s) identified below for substitution:

Substitute "Engineer" for "Commissioner," for "Manager of Contracts" and for "Transportation Manager of Contracts".

Substitute "Municipality" for "Department" and "State".

1.03.07—Insurance: is amended as follows:

Substitute "State and Municipality" for "Department" and "State".

It is the intent of this Article to designate the State and Municipality as additional insured, as applicable.

SECTION 1.04 SCOPE OF WORK

Section 1.04 is supplemented and amended as follows:

Throughout this Section, make the following substitutions for all occurrences of the word(s) identified below for substitution:

Substitute "Engineer" for "Department's Assistant District Engineer".

Substitute "Municipality" for "Department" and for "State".

1.04.01 – Scope of Work: is amended as follows:

Add the following to this section:

This project consists of the rehabilitation work to the Kelly Road Bridge (Bridge No. 05240) over the Hockanum River in the Town of Vernon. The purpose of the project is to preserve the bridge by initiating repairs to address current deficiencies and conditions to prevent further deterioration of the structures and increase the service length of the bridge. Some safety improvements are also included in the project.

Kelly Road Bridge is a Single Span Prestressed Concrete Box Multi-Beam superstructure on full height concrete abutments. The overall bridge length is 100-foot center to center of bearings. The concrete superstructure consists of 8 – AASHTO Type V Pretensioned Stringers. The structure has a skew of 30 degrees to the Hockanum River. A composite concrete sidewalk is on both sides and steel “H” posts with channel rails and metal beam guide rail provides barrier protection. The bridge carries two-way traffic. The abutments & wingwalls are reinforced concrete.

For reference, the latest Routine Inspection Report dated October 17, 2023 (Bridge No. 05240), issued by The Connecticut Department of Transportation is attached in Appendix A of this document.

Final quantities and extent of repairs will be determined in the field with the approval of the engineer. All work shall be verified and confirmed by the Engineer.

The repair and resurfacing of Kelly Road Bridge over the Hockanum River will progress in a manner consistent with the contract specifications and drawings. Detailed construction sequencing is the responsibility of the Contractor. For the purposes of this plan, the project shall proceed in a general manner consistent with the following:

1. Mobilization.
2. Modification of existing concrete headers at expansion joints.
3. Removal of existing bituminous wearing surface and membrane waterproofing.
4. Deck patching.
5. Installation of new membrane waterproofing and bituminous wearing surface.
6. Installation of asphaltic plug expansion joint.
7. Installation of pavement markings.
8. Cleaning & resealing joints & sidewalks.
9. Construction completion.

No work within the Hockanum River is required. Maintenance and protection of traffic will be required.

1.04.05 – Extra Work: is amended as follows:

Add the following at the end of second paragraph:

Bonding costs shall not be included in the contractor's compensation request. However, if the contractor incurs or will incur increased bonding costs related to the extra work, the contractor shall request separate compensation for such costs. The contractor's request shall be itemized and include a certified statement from the bonding company stating that the value of the work will require an increase in bonding coverage and shall detail the additional costs (within allowable contract amount limitations). If satisfactory substantiation is provided, a new item for increased bonding costs will be incorporated into the contract by means of a construction order.

Insert the following immediately following "Department's Assistant District Engineer" in the third paragraph: "and/or the Municipality's authorized representative".

SECTION 1.05 CONTROL OF THE WORK

Section 1.05 is supplemented and amended as follows:

Substitute "Municipality" for "Department" and/or "State" and "Engineer" for "Department's Assistant District Engineer".

1.05.02-1. Plans: Substitute "Municipality" for "Department".

Add the following sentence to the end of the Subarticle: "The Working Drawings, Shop Drawings and Product Data shall be submitted to the Designer as hereinafter noted; copies of transmittal letters shall be sent to the Municipality.

Designer

Mr. Joseph Cermola, P.E.
Cardinal Engineering Associates
180 Research Parkway
Meriden, Connecticut 06450
Tel: (203) 238-1969
Email: jac3@cardinal-engineering.com

Municipality

Mr. David A. Smith, P.E., L.S.
Town Engineer
55 West Main Street
Vernon, Connecticut 06066
Tel: (860) 870-3663
Email: dsmith@vernon-ct.gov

1.05.02-2. Working Drawings: Substitute "Municipality" for "Assistant District Engineer".

1.05.02-5. Submittal Preparation and Processing – Review Timeframes: Substitute "Designer" for "Department".

Add the following paragraphs:

"Prior to the submission of any working, shop or erection drawings, the Contractor shall prepare and submit to the Engineer, for approval, a schedule for all proposed working and shop drawings. This initial schedule should be submitted within thirty (30) days of contract award and must be submitted before the Notice to Proceed. The Contractor shall coordinate, schedule and control all submittals of working and shop drawings including those of his various subcontractors, suppliers and engineers to provide for an orderly and balanced distribution of the work.

Each Shop Drawing shall include the name and telephone number of the fabricator's contact person who is familiar with the drawing and who will be available to answer questions by the Engineer or Designer should any arise during the review process.

In addition, each shop drawing submittal shall be identified as to the following, and stamped by the Contractor as being in complete compliance with all requirements of the Contract Drawings and Specifications:

1. Project Name and Contract Number
2. Specification Section number(s) and subparagraph(s)
3. Contract Drawing sheet number(s)

The General Contractor shall check all shop drawings for conformance with the Contract Documents and particularly against field measurements and proper fit with adjoining work prior to submitting same. A certification shall appear on each shop drawing stating that the General Contractor has made this check.

Any and all deviations from the requirements of the Drawings and/or Specifications shall be called to the attention of the Engineer in writing at the time of first submission of shop drawings, equipment data, and other drawings for approval.

It is incumbent upon the Contractor to submit his shop drawings in accordance with the approved working and shop drawing schedule to facilitate expeditious review. Voluminous submittals of shop drawings at one time are discouraged and may result in increased review time. In no case will the Municipality accept liability for resulting delays, added costs and related damages when the time required for approval extends beyond the approximate times shown herein when the shop drawings are not submitted in conformance with the approved schedule."

Add the following paragraphs:

"Prior to the submission of any working, shop or erection drawings, the Contractor shall prepare and submit to the Engineer, for approval, a schedule for all proposed working and shop drawings. This initial schedule should be submitted within thirty (30) days of contract award and must be submitted before the Notice to Proceed. The Contractor shall coordinate, schedule and control all

submittals of working and shop drawings including those of his various subcontractors, suppliers and engineers to provide for an orderly and balanced distribution of the work.

Each Shop Drawing shall include the name and telephone number of the fabricator's contact person who is familiar with the drawing and who will be available to answer questions by the Engineer or Designer should any arise during the review process.

It is incumbent upon the Contractor to submit his shop drawings in accordance with the approved working and shop drawing schedule to facilitate expeditious review. Voluminous submittals of shop drawings at one time are discouraged and may result in increased review time. In no case will the Municipality accept liability for resulting delays, added costs and related damages when the time required for approval extends beyond the approximate times shown herein when the shop drawings are not submitted in conformance with the approved schedule."

1.05.02-5(a). Submissions: Substitute "oversight" for "administering" when citing the Construction District and add "and Municipality" to the end of the sentence.

1.05.02-5(b). Submissions: Substitute "Designer" for "Assistant District Engineer of the administering Construction District".

1.05.02-5(c). Submissions: Substitute "Designer" for "administering Construction District".

1.05.06 – Cooperation with Utilities (including railroads):

Add the following:

Within the project, there may be public utility structures; and, notwithstanding any other clause or clauses of this Contract, the Contractor cannot proceed with his work until he has made diligent inquiry with the utility companies, municipal authorities or other utility owners to determine their exact location, and until he has notified "Call Before You Dig". The Contractor shall notify, in writing, the utility companies, municipalities or other owners involved, of the nature and scope of the project and of his operations that may affect their facilities or property. Copies of such notices shall be sent to the Engineer.

SECTION 1.06 CONTROL OF MATERIALS

Section 1.06 is supplemented and amended as follows:

Throughout this Section, make the following substitutions for all occurrences of the word(s) identified below for substitution:

Substitute "Department/Municipality" or "Municipal" for "Department".

Article 1.06.07 - Certified Test Reports and Materials Certificates:

Add the following:

All materials used on this project shall require a Certified Test Report or Material Certificate.

Following is a partial list of items that may be included in the project.

1. For the materials in the following items, a Certificate Test Report will be required confirming their conformance to the requirements set forth in the plans, these Specifications or both. Should the consignee noted on a Certified Test Report be other than the Prime Contractor, then Materials Certificates shall be required to identify the shipment.

Subbase	Granular Fill	Class A Concrete
Pervious Structure Backfill	Processed Aggregate Base	Class F Concrete
Topsoil	Joint Sealer	Riprap
Bedding Material	Cement	#8 Stone
#6 Stone	Anchoring Cement	#67 Stone
Sand	Chemical Anchors	Deformed Steel Bars
Threaded Steel Bars		

2. For the material in the following items, a Materials Certificate will be required confirming their conformance to the requirements set forth in the plans or these specifications if it is from a Connecticut Department of transportation approved plant/supplier. Otherwise, testing is required.

Bituminous Concrete	Portland Cement Concrete	Footing Concrete
Portland Cement	Abutment and Wall Concrete	Pavement Marking
Signs	Sanitary Manhole Brick (for invert)	Joint Sealer
Concrete Building Brick	Masonry Concrete Units	Deformed Steel Bars
Reinforcing Steel	Wire & Welded Wire Fabric	Threaded Steel Bars
Anchor Bolts	Structural Steel	Membrane Waterproofing
Dowel Bars	Galvanizing	* Membrane
Paint	Damp Proofing	* Glass Fabric
Metal Beam Rail Elements	Grass Seed	* Primer
Precast Concrete Units	Fertilizer	* Mastic
	Wetland Seed Mix	

SECTION 1.07
LEGAL RELATIONS AND RESPONSIBILITIES

1.07.01—Laws to be Observed: is amended as follows:

In the second sentence of the first paragraph, after the word "State" add the words "and Municipality".

1.07.03—Proprietary Devices, Materials and Processes: is amended as follows:

After the word "State" add the words "and Municipality" throughout this Article.

1.07.04—Restoration of Surfaces Opened Pursuant to Permit or Contract: is amended as follows:

Replace the word "Department" with "Municipality" throughout this Article.

1.07.07—Safety and Public Convenience: is amended as follows:

In the penultimate paragraph, after the word "State," add the words "or Municipality".

1.07.09—Protection and Restoration of Property: is supplemented and amended as follows:

Add the words "or Municipality" after the word "State" wherever the word "State" appears in this Article.

Add the phrase "or Municipality, as applicable" after the word "Department" wherever the word "Department" appears in this Article.

Add the following:

The Contractor shall notify the Tree Warden of the Municipality in which the bridge project is located, five (5) days prior to flagging so that the Tree Warden may be present during the flagging.

All trees scheduled to be removed outside of the proposed gutter or curb lines of the highway shall be visibly marked or flagged by the Contractor at least five (5) days prior to cutting of such trees.

The Engineer will inspect the identified trees and verify the limits of tree removal prior to the Contractor proceeding with his cutting operation, should such an operation be required elsewhere in this contract.

1.07.10—Contractor's Duty to Indemnify the State Against Claims for Injury or Damage: is amended as follows:

Revise the title of this Article to read "Contractor's Duty to Indemnify the State and/or Municipality Against Claims for Injury or Damage."

In the first sentence, delete the words "the Department".

Replace the word "State" with "State and/or Municipality" throughout this Article.

Replace the word "Commissioner" with "Engineer" throughout this Article.

Add the following paragraph after the only paragraph:

"It is further understood and agreed by the parties hereto, that the Contractor shall not use the defense of Sovereign Immunity in the adjustment of claims or in the defense of any suit, including any suit between the State and/or Municipality and the Contractor, unless requested to do so by the State and/or Municipality."

1.07.11—Opening of Section of Project to Traffic or Occupancy: is amended as follows:

Replace the word "State" with "Municipality" or "Municipal" throughout this Article.

1.07.13—Contractor's Responsibility for Adjacent Property and Services: is supplemented with the following:

The Contractor's attention is directed to the fact that overhead utilities (including utility poles, pole guys and overhead wires) exist in the immediate vicinity of the project.

The Contractor shall be liable for all damages and claims received or sustained by any persons, corporations or property in consequence of damage to the existing utilities, their appurtenances, or other facilities caused directly or indirectly by the operations of the Contractor.

1.07.14—Personal Liability of Representatives of the State: is amended as follows:

Add the words "and Municipality" after the word "State".

1.07.15—No Waiver of Legal Rights: is amended as follows:

Replace the words "Commissioner" and "Department" with "Municipality" or "Municipal" throughout this Article.

1.07.16—Unauthorized Use of Area(s) within the Project Site: is amended as follows:

Replace the words "Commissioner" and "State" with "Municipality" throughout this Article.

Add the following new Subarticle:

1.07.19—Personal Liability of Representatives of the Municipality

In carrying out any of the provisions of these specifications, or in exercising any power or authority granted to them by or within the scope of the Contract, the Engineer and his authorized representatives, including consultant engineering firms and their employees, shall be subject to no liability, either personally or as officials of the Municipality, it being understood that in all such matters they act solely as agents and representatives of the Municipality.

**SECTION 1.08
PROSECUTION AND PROGRESS**

Section 1.08 is supplemented and amended as follows:

Throughout this Section, make the following substitutions for all occurrences of the word(s) identified below for substitution:

Substitute "Municipality" or "Municipal" for "Department" and for "State".
Substitute "Engineer" for "Commissioner".

1.08.04—Limitation of Operations: is amended as follows:

TIME RESTRICTIONS

In order to provide for traffic operations as outlined in the Special Provision "Maintenance and Protection of Traffic," the Contractor will not be allowed to perform any work that will interfere with existing traffic operations on all project roadways as follows:

On the following State observed Legal Holidays:

New Year's Day
Good Friday, Easter
Memorial Day
Independence Day
Labor Day
Columbus Day
Thanksgiving Day
Christmas Day

During all other times:

The Contractor will not be allowed to perform any work that will interfere with the existing number of lanes of traffic, except as follows:

1. Monday through Friday between 7:00 am to 4:00 pm, for a period not to exceed five consecutive days, and a total of 10 working days, the Contractor will be allowed to close a maximum of two travel lanes for removal of existing bituminous overlay, repairs of the existing bridge deck, repair of expansion joints, installation of membrane waterproofing, and installation of new bituminous overlay. During that time, the Contractor will be required to maintain and protect a minimum of one lane of through traffic in each direction.

The Contractor shall schedule his operations so that no hazards remain within the roadway at the end of the workday. The Contractor shall schedule his operations so that deck patches which have been started shall be completed by the end of the workday. All transverse height differentials on all roadway surfaces shall be tapered to negate any "bump" to traffic as specified under the Item "Maintenance & Protection of Traffic".

2. Monday through Friday between 7:00 am and 4:00 pm, the Contractor will be allowed to close a maximum of one travel lane to allow for sealing of sidewalk surfaces, cleaning & resealing of existing filled bridge joints, line striping operations, and installation of Asphaltic Plug expansion joint system. During that time, the Contractor will be required to maintain and protect a minimum of one lane of through traffic in one direction, and one lane of through traffic in the opposite direction.

Night Work

The contractor will not be allowed to perform any work between 7:00 p.m. and 7:00 a.m. on all roadways, on weekdays or weekends, unless the Contractor obtains approval from the Town. The Contractor must submit a request in advance of the implementation of a night work period.

Additional Lane Closure Restrictions

The Contractor shall be aware that coordination will be required to maintain proper traffic flow at all times on all project roadways, in a manner consistent with these specifications and acceptable to the Engineer.

The Contractor will not be allowed to perform any work that will interfere with traffic operations on a roadway when traffic operations are being restricted on that same roadway, unless there is at least a one-mile clear area length where the entire roadway is open to traffic or the closures have been coordinated and are acceptable to the Engineer. The one-mile clear area length shall be measured from the end of the first work area to the beginning of the signing pattern for the next work area.

Additional Requirements

Prior to construction, particularly as it will affect traffic operations, the Contractor shall submit, for the review and approval of the Engineer, a detailed Progress Schedule. It shall show all fundamental work items and operations as a function of estimated time periods. This submittal shall also include a listing of shop drawings and other required submittals keyed to the Progress Schedule activities. It shall reflect realistic processing, delivery and construction periods.

The Contractor shall schedule his construction operations so as to cause minimal inconvenience to adjoining property owners. The Contractor shall meet with the owner(s) or his/her agent and discuss their access requirements. The Contractor shall provide temporary access to all properties whose access is disturbed by his construction operations.

All temporary concrete barriers, other protective systems and traffic control devices as called for by the contract or ordered by the Engineer must be on hand and available in sufficient quantity for immediate installation prior to any stage change. Temporary concrete barrier may be salvaged, but must meet all applicable specifications for its item.

All temporary concrete barriers, other protective systems and traffic control devices shall be maintained in a "like new" condition, otherwise they must be replaced.

In order to provide for traffic operations as outlined in the special provisions "Maintenance and Protection of Traffic," the Contractor shall progress his construction activities in accordance with

the "Sequence of Operations" as outlined herein or as shown on the plans for Maintenance and Protection of Traffic. Any revisions shall require the written approval of the Municipality.

SECTION 1.09 MEASUREMENT AND PAYMENT

Section 1.09 is supplemented and amended as follows:

Throughout this Section, make the following substitutions for all occurrences of the word(s) identified below for substitution:

"Municipality" or "Municipal" for "Department" and for "State".

Substitute "Engineer" for "Commissioner".

1.09.06–Partial Payments: is amended as follows:

In the first paragraph under **A. Monthly and Semi-monthly Estimates:** delete "Retainage will not be held" and replace with **"five percent (5%) of the total amount determined by the Engineer will be deducted from the estimate and retained by the Municipality until the Engineer accepts the Project "**. The balance, less all previous payments, will be certified for payment. When work equaling the original contract value has been accomplished, no additional retainage will be withheld.

SECTION 1.10
ENVIRONMENTAL COMPLIANCE

1.10.02—Compliance with Laws and Regulations: is amended as follows:

Replace the word "Department" with "Municipality" throughout this Article.

In the last sentence of the last paragraph of this Article, add the phrase "under any other State contract".

1.10.03—Water Pollution Control: is amended as follows:

Replace the word "Department" with "Municipality" throughout this Article.

Add the following sentence after the second sentence of the third paragraph:

The following items may also be superseded by specific permits from the Connecticut Department of Energy and Environmental Protection (DEEP) and/or the appropriate local wetlands and watercourses regulatory authority.

In the REQUIRED BEST MANAGEMENT PRACTICES No. 13, replace "State right-of-way" with "State or Municipal right-of-way."

1.10.07—Controlled and Hazardous Materials: is amended as follows:

Replace the word "Department" with "Municipality" throughout this Article.

SECTION 1.11 CLAIMS

Section 1.11 is supplemented and amended as follows:

Throughout this Section make the following substitutions for all occurrences of the word(s) identified below for substitution:

Substitute "Chief Administrative Official of the Municipality" for "Commissioner".

Substitute "Municipality" or "Municipal" for "Department".

DIVISION II
CONSTRUCTION DETAILS

Throughout all the various Sections contained in Division II, substitute the word "Municipality" or "Municipal" for "Department" wherever "Department" appears, except in those instances here the word "Department" is used to identify a state agency.

ITEM # 0406310A CLEAN AND RESEAL EXISTING FILLED BRIDGE JOINTS

Description: This item shall consist of cleaning existing filled bridge joints of defective sealer and other foreign materials within the limits shown on the plans and as designated by the Engineer. The cleaned joint shall be resealed in accordance with this specification.

Materials: The sealant material shall conform to the requirements of Form 818, Section M.03.08-5(a). A Certified Test Report and Materials Certificate will be required in accordance with Form 818 Article 1.06.07.

Construction Methods: The joint shall be thoroughly cleaned and resealed as shown on the plans and in accordance with Form 818 Article 6.01.03.II--11 (c). A foam form shall be placed in the joint to hold the sealant material in areas where necessary as directed by the Engineer.

Method of Measurement: This work will be measured for payment by the number of linear feet of completed and accepted cleaned and resealed bridge joint measured along the centerline of the completed joint.

Basis of Payment: This work will be paid for at the contract unit price per linear foot for "Clean and Reseal Existing Filled Bridge Joints", completed and accepted, which price shall include joint seal, foam form and other materials, equipment, tools, labor and work incidental thereto.

Pay Item	Pay Unit
Clean and Reseal Existing Filled Bridge Joints	l.f.

ITEM #0520036A - ASPHALTIC PLUG EXPANSION JOINT SYSTEM

Description: Work under this item shall consist of furnishing and installing an asphaltic plug expansion joint system (APJ) in conformance with ASTM D6297, as shown on the plans, and as specified herein.

Work under this item shall also consist of the removal and disposal of bituminous concrete, membrane waterproofing, existing joint components and sealing elements, cleaning and sealing median barrier joints, parapet joints, and sidewalk joints.

Work under this item excludes the removal of Portland cement concrete headers.

Materials: The APJ component materials shall conform to ASTM D6297 and the following:

Aggregate: The aggregate shall meet the following requirements:

- a) Loss on abrasion: The material shall show a loss on abrasion of not more than 25% using AASHTO Method T96.
- b) Soundness: The material shall not have a loss of more than 10% at the end of five cycles when tested with a magnesium sulfate solution for soundness using AASHTO Method T 104.
- c) Gradation: The aggregate shall meet the requirements of Table A below:
- d) Dust: aggregate shall not exceed 0.5% of dust passing the #200 sieve when tested in accordance with AASHTO T-11.

Table A

<u>Square Mesh Sieves</u>	1" (25.0 mm)	¾" (19.0 mm)	½" (12.5 mm)	⅜" (9.5 mm)	No. 4 (4.75 mm)
% passing	100	90 - 100	20 - 55	0 - 15	0 - 5

A sample of the aggregate shall be submitted to the Department with a Certified Test Report in accordance with Article 1.06.07 for each 20 tons of loose material or its equivalent number of bags delivered to the job site. The Certified Test report must include a gradation analysis resulting from a physical test performed on the actual material that accompanies the report.

Anti-Tacking Material: This material shall be a fine graded granular material with 100% passing the 3/16" sieve and no more than 5% passing the #200 when tested in accordance with AASHTO T-27.

Backer Rod: All backer rods shall satisfy the requirements of ASTM D5249, Type 1.

Bridging Plate: The bridging plates shall be steel conforming to the requirements of ASTM A36 and be a minimum ¼" thick and 8" wide. For joint openings in excess of 3" the minimum plate dimensions shall be ⅜" thick by 12" wide. Individual sections of plate shall

not exceed 4' in length. Steel locating pins for securing the plates shall be size 16d minimum, hot-dip galvanized, and spaced no more than 12" apart.

Concrete Leveling Material: Shall be a cementitious-based material that conforms to ASTM C928 Standard Specification for Packaged, Dry, Rapid-Hardening Cementitious Materials for Concrete Repair, for R3 performance requirements in Table 1 and achieve the following:

- a. Final set in 45 Minutes
- b. 2500 psi compressive strength in 24 hours
- c. 5000 psi compressive strength in 7 days

Parapet Sealant: The sealant used in parapet joint openings shall be a single component non-sag silicone sealant that conforms to the requirements of ASTM D5893.

Sidewalk Sealant: The sealant used in sidewalk joint openings shall be a rapid cure, self-leveling, cold applied, two-component silicone sealant. The silicone sealant shall conform to the requirements listed in Table B:

Table B

Properties - As Supplied	Test Method	Requirement
Extrusion Rate	ASTM C1183	200-600 grams/min
Leveling	ASTM C639	Self-Leveling
Specific Gravity	ASTM D792	1.20 to 1.40
Properties - Mixed	Test Method	Requirement
Tack Free Time	ASTM C679	60 min. max.
Joint Elongation – Adhesion to concrete	ASTM D5329 ^{1,2,3}	600% min
Joint Modulus @ 100% elongation	ASTM D5329 ^{1,2,3}	15 psi max
Cure Evaluation	ASTM D5893	Pass @ 5 hours

1. Specimens cured at $77 \pm 3^{\circ}\text{F}$ and $50 \pm 5\%$ relative humidity for 7 days
2. Specimens size: 1/2" wide by 1/2" thick by 2" long
3. Tensile Adhesion test only

The date of manufacture shall be provided with each lot. No sealant shall be used beyond its maximum shelf-life date.

The two-part silicone sealants shown in Table C are known to have met the specified requirements:

Table C

Product	Supplier
Dow Corning 902RCS	Dow Corning Corporation 2200 W Salzburg Road Auburn, Michigan 48611
Wabo SiliconeSeal	BASF/Watson Bowman Acme Corporation 95 Pineview Drive Amherst, New York 14228

Other two-component silicone joint sealants expressly manufactured for use with concrete that conform to the aforementioned ASTM requirements will be considered for use provided they are submitted in advance for approval to the Engineer. Other joint sealants will be considered for use only if a complete product description is submitted, as well as documentation describing at least five installations of the product. These documented installations must demonstrate that the product has performed successfully for at least three years on similar bridge expansion joint applications.

A Materials Certificate and Certified Test Report for the asphaltic binder shall be submitted by the Contractor in accordance with the requirements of Article 1.06.07 certifying that the asphaltic binder satisfies the requirements of the most current version of ASTM D6297.

A Materials Certificate for all other components of the APJ, leveling material, backer rod and sealant used in sealing parapet and sidewalk joint openings, shall be submitted by the Contractor in accordance with the requirements of Article 1.06.07

Construction Methods: The APJ shall be installed at the locations shown on the plans and in stages in accordance with the traffic requirements in the special provisions “Maintenance and Protection of Traffic” and “Prosecution and Progress”.

At least 30 days prior to start of the work, the Contractor shall submit to the Engineer for approval a detailed Quality Control Plan for the installation of the APJ. The submittal shall include:

- a) A list of all manufactured materials and their properties to be incorporated in the joint system, including, but not limited to the asphaltic binder, anti-tack material, backer rod, sealant, leveling material, as well as the aggregate’s source.
- b) A detailed step by step installation procedure and a list of the specific equipment to be used for the installation. The Quality Control Plan must fully comply with the specifications and address all anticipated field conditions, including periods of inclement weather.

The APJ shall not be installed when bituminous concrete overlay or joint cutout is wet. The APJ shall only be installed when the bridge superstructure surface temperature is within the limits specified in Table D and when the ambient air temperature is within the range of 45⁰F to 95⁰F.

The bridge superstructure surface temperature range is determined using the thermal movement range provided on the contract plans for the proposed APJ deck installation location and the selected APJ product.

Table D

Installation Restrictions	
Designed Deck Joint Thermal Movement Range²	Bridge Superstructure Surface Temperature¹
0" to 1"	45° F to 95° F
1-1/8"	45° F to 90° F
1-1/4"	45° F to 80° F
1-3/8"	45° F to 70° F
1-1/2"	45° F to 65° F

- 1. The superstructure surface temperature shall be determined from the average of three or more surface temperature readings taken at different locations on the interior girder surfaces by the Contractor as directed by the Engineer. Temperature measurements of the superstructure shall be taken by the contractor with a calibrated hand held digital infrared laser-sighted thermometer on the surfaces of an interior steel girder, or interior concrete girder protected from direct sunlight. The infrared thermometer to be supplied by the Contractor for this purpose shall meet certification requirements of EN61326-1, EN61010-1, and EN60825-1 maintained by the European Committee for Electrotechnical Standardization (CENELEC). The thermometer shall have a minimum distance-to-spot ratio of 50:1 and shall have adjustable emissivity control. The thermometer shall have a minimum accuracy value of $\pm 1\%$ of reading or $\pm 2^{\circ}\text{F}$, whichever is greater. The thermometer shall be used in strict accordance with the manufacturer's written directions. An additional infrared thermometer satisfying the same standards to be used in this application shall also be provided to the Engineer for quality assurance purposes.*
- 2. Linear interpolation may be used to determine an allowable surface temperature range for thermal movement ranges in between values shown in the table, as approved by the Engineer.*

Prior to installing the APJ, the Contractor shall determine the exact location of the deck joint beneath the bituminous concrete overly.

The APJ shall be installed symmetrically about the deck joint opening to the dimensions shown on the plans or as directed by the Engineer; not to exceed 24 inches measured perpendicular to the deck joint. The proposed saw cut lines shall be marked on the bituminous concrete overlay by the Contractor and approved by the Engineer, prior to saw-cutting. The saw-cuts delineating the edges of the APJ shall extend full depth of the bituminous concrete overlay.

The existing bituminous concrete overlay, waterproofing membrane and/or existing expansion joint material, within the saw cut limits shall be removed and disposed of by the Contractor to create the joint cutout.

Concrete surfaces that will support the bridging plates shall be smooth and form a plane along and across the deck joint. Rough or damaged concrete surfaces shall be repaired with a leveling compound meeting the requirements of this specification. Deteriorated concrete areas within the joint limits shall be repaired as directed by the Engineer: such repairs, when deemed necessary by the Engineer, shall be compensated for under the applicable concrete deck repair items in the Contract. The existing and repaired concrete surfaces shall provide continuous uniform support for the bridging plate and prevent the plate from rocking and deflecting.

Prior to the installation of the backer rod, all horizontal and vertical surfaces of the joint cutout shall be abrasive blast cleaned using an oil-free, compressed air supply. The entire cutout shall then be cleared of all loose blast media, dust, debris and moisture using an oil-free, hot air lance capable of producing an air stream at 3,000°F with a velocity of 3,000 feet per second.

A single backer rod, with a diameter at least 25% greater than the existing joint opening at the time of installation, shall be installed at an inch below the bridging plate in the existing deck joint opening between the concrete edges.

Asphaltic binder shall be heated to a temperature within the manufacturer's recommended application temperature range which shall be provided in the Quality Control Plan. During application, the temperature of the binder shall be maintained within this range. In no case shall the temperature of the binder go below 350° F nor exceed the manufacturer's recommended maximum heating temperature.

Asphaltic binder shall then be poured into the joint opening until it completely fills the gap above the backer rod. A thin layer of binder shall next be applied to the all horizontal and vertical surfaces of the joint cutout.

Bridging plates shall be abrasive blast-cleaned on-site prior to installation and then placed over the deck joint opening in the joint cutout. The plates shall be centered over the joint opening and secured with locating pins along its centerline. The plates shall be placed end to end, without overlap, such that the gap between plates does not exceed ¼". The plates shall extend to the gutter line and be cut to match the joint's skew angle, where concrete support exists on both sides of the joint. Within APJ installation limits, where concrete support does not exist at both sides of the joint opening (such as where a bridge deck end abuts a bituminous concrete roadway shoulder), bridging plates shall not be installed. Installed bridging plates shall not rock or deflect

in any way. After installation of bridging plates, a thin layer of asphaltic binder shall be applied to all exposed surfaces of the plates.

The remainder of the joint cutout shall then be filled with a mixture of hot asphaltic binder and aggregate prepared in accordance with the submitted Quality Control Plan and the following requirements:

- The aggregate shall be heated in a vented, rotating drum mixer by the use of a hot-compressed air lance to a temperature of between 370° F. to 380° F. This drum mixer shall be dedicated solely for the heating and, if necessary, supplemental cleaning of the aggregate. Venting of the gas and loose dust particles shall be accomplished through ¼” drilled holes spaced no more than 3” on center in any direction along the entire outside surface of the drum
- Once the aggregate has been heated, it shall then be transferred to a secondary drum mixer where it shall be fully coated with asphaltic binder. A minimum of two gallons of binder per 100lbs of stone is required.
- The temperature of the aggregate and binder shall be monitored by the contractor with a calibrated digital infrared thermometer.
- The coated aggregate shall be loosely placed in the joint cutout in lifts not to exceed 2 inches.
- Each lift shall be leveled, compacted and then flooded with hot asphaltic binder to the level of the aggregate to fill all voids in the coated aggregate layer. The surface of each lift shall be flooded until only the tips of the aggregate protrude out of the surface.
- The final lift shall be placed such that no stones shall project above the level of the adjacent overlay surface following compaction of the coated aggregate.
- Following installation of the final lift, sufficient time and material shall be provided to allow all voids in the mixture to fill. This step may be repeated as needed.
- The joint shall then be top-dressed by heating the entire area with a hot-compressed air lance and applying binder. The final joint surface must be smooth with no protruding stones and be absent of voids.
- Once top-dressed, the joint shall have an anti-tack material spread evenly over the entire surface to prevent tracking.

The Contractor shall be responsible for removing all binder material that leaks through the joint and is deposited on any bridge component, including underside of decks, headers, beams, diaphragms, bearings, abutments and piers.

Traffic shall not be permitted over the joint until it has cooled to 130° F when measured with a digital infrared thermometer. Use of water to cool the completed joint is permitted.

Sidewalk, parapet, and/or curb joint openings

Before placement of any sealing materials in parapets, curbs, or sidewalks, the joints shall be thoroughly cleaned of all scale, loose concrete, dirt, dust, or other foreign matter by abrasive blast cleaning. Residual dust and moisture shall then be removed by blasting with oil free

compressed air using a hot air lance. Projections of concrete into the joint space shall also be removed. The backer rod shall be installed in the joint as shown on the plans. The joint shall be clean and dry before the joint sealant is applied. Under no circumstances is the binder material to be used as a substitute for the joint sealant.

Whenever abrasive blast cleaning is performed under this specification, the Contractor shall take adequate measures to ensure that the abrasive blast cleaning will not cause damage to adjacent traffic or other facilities.

The joint sealant shall be prepared and placed in accordance with the manufacturer's instructions and with the equipment prescribed by the manufacturer. Extreme care shall be taken to ensure that the sealant is placed in accordance with the manufacturer's recommended thickness requirements.

The joint sealant shall be tooled, if required, in accordance with the manufacturer's instructions.

Primer, if required, shall be supplied by the sealant manufacturer and applied in accordance with the manufacturer's instructions.

When the sealing operations are completed, the joints shall be effectively sealed against infiltration of water. Any sealant which does not effectively seal against water shall be removed and replaced at the Contractor's expense.

Any installed joint that exhibits evidence of failure, as determined by the Engineer, such as debonding, cracking, rutting, or shoving of the APJ mixture shall be removed and replaced full-width and full-depth to a length determined by the Engineer at no additional cost to the State.

Method of Measurement: This work will be measured for payment by the number of cubic feet of "Asphaltic Plug Expansion Joint System" installed and accepted within approved horizontal limits. No additional measurement will be made for furnishing and installing backer rod and joint sealant in the parapets, concrete medians, curbs and/or sidewalks.

Basis of Payment: This work will be paid for at the contract unit price per cubic foot for "Asphaltic Plug Expansion Joint System," complete in place, which price shall include the saw-cutting, removal and disposal of bituminous concrete, membrane waterproofing, existing joint components and sealing elements, the furnishing and placement of the leveling compound, cleaning of the joint surfaces, furnishing and installing bridging plates, the furnishing and installing of the asphaltic plug joint mixture, the cost of furnishing and installing joint sealant in the parapets, concrete medians, curbs and sidewalks, and all other materials, equipment including, but not limited to, portable lighting, tools, and labor incidental thereto. No additional payment shall be made for the 12" wide bridging plates that are required for deck joint openings with widths in excess of 3".

If directed by the Engineer, additional deck repairs will be addressed and paid for under the applicable concrete deck repair items in the Contract.

ITEM #0601270A - FULL DEPTH PATCH (HIGH EARLY STRENGTH CONCRETE)

Description: This item shall consist of the saw cutting concrete, removal of all deteriorated concrete for the full depth of the deck slab, furnishing and installing galvanized steel reinforcing bars, and reconstructing the slab with new concrete, where directed by the Engineer and as hereinafter specified.

Work under this item shall also include the providing of a safe access to the structure for the delineation of the repair locations and review of the performed work. The Contractor shall not perform any repair work without prior approval of the Engineer for location, limits and types of repairs.

Materials: The materials shall conform to the following requirements:

1. High Early Strength Concrete – The high early strength concrete shall conform to one of the following:
 - A. The Contractor shall design and submit to the Engineer for approval a high early strength concrete mix. This mix shall be air-entrained, and shall be composed of Portland cement, fine and coarse aggregates, approved admixtures and additives, and water. The mix shall contain between 4% and 7% entrained air, and shall attain a 6-hour compressive strength of 2,500 psi. Additionally, the mix shall contain shrinkage compensating additives such that there will be no separation of the patched area from the parent concrete. This shrinkage-compensating additive shall be utilized so as to produce expansion in the high early strength concrete of no more than 0.3%.
 - B. In lieu of the above high early strength concrete mix, the Contractor may propose the use of a proprietary type mix that will meet the same physical requirements as those stated above. A mix design shall be submitted for this material, stating the percentage of each component to be utilized.
2. Regardless of the type of high early strength concrete proposed by the Contractor, substantive data that demonstrates the ability of the material to meet the specification requirements shall be submitted with the proposed mix design at least 2 weeks prior to its use.
3. Deformed Steel Bars - Galvanized: Galvanized steel reinforcing bars shall meet the requirements of Section 6.02.

Construction Methods: Construction methods shall conform to the following requirements:

1. Inspection of the Structural Slab: Before any existing concrete is removed from the structural slab, the Contractor will provide the Engineer clear access to the bridge deck. During this time, the Engineer will perform an inspection of the structural slab and designate areas where concrete removal will be required. Due to the nature of the operations, the inspection can be performed only after some existing materials, notably overlays and waterproofing systems, have first been removed from the structural slab. It shall be the responsibility of the Contractor to arrange the construction schedule so that the required operations may be performed without causing delay to the work.

No operations will be performed by the Engineer until after the following construction work has been completed:

- a) The existing bituminous overlay or concrete wearing course, if present, has been removed.
- b) The existing waterproofing system, if present, has been removed.

The removal of these materials will be paid for under other applicable items.

It shall be the responsibility of the Contractor to inform the Engineer, in writing, of the date that a structure will be available for inspection operations. Notification shall be given to the Engineer at least 7 days prior to the date that the area in question will be in a condition acceptable to the Engineer.

The Contractor is hereby informed that the following time period will be necessary to perform the required inspection operations:

One (1) working day with suitable weather conditions per each 6,000 square feet, or portion thereof, of structural slab area.

The Contractor will not be allowed to do any further work to the structural slab, until all necessary inspection operations have been performed, unless given permission by the Engineer. The Contractor shall include any costs related to the allowance for this inspection in the general cost of the work.

2. Removal of Deteriorated Concrete: All deteriorated concrete shall be removed within the limits shown on the plans and where ordered by the Engineer. The lateral limits of each area to be repaired will be delineated by the Engineer and suitably marked. Where several areas to be repaired are very close together, the Engineer may combine these individual patches into a large area. The outlines of each such area shall first be cut to a depth of 1/2 inch with an approved power-saw capable of making straight cuts. In the event that reinforcing steel is encountered within the upper 1/2 inch depth during sawing operations, the depth of saw-cut shall immediately be adjusted to a shallower depth so as not to damage the steel bars. If so directed by the Engineer, saw cutting shall again be carried down to the 1/2 inch depth at other locations of repair provided reinforcing steel is not again encountered. Where over-breakage occurs resulting in a featheredge, the featheredge be squared up to a vertical edge in an approved manner. Where sawing is impractical, the areas shall be outlined by chisel or other approved means.

The removal of concrete shall be by hydro-demolition or pneumatic hammer methods and shall be governed by the requirements set forth in the special provision Item "Partial Depth Patch" and as directed by the Engineer.

The Contractor shall take adequate measures to prevent concrete debris from falling to any area below the structure and onto adjacent roadway lanes. All debris shall be promptly cleaned up and removed from the site. All material removed shall be satisfactorily disposed of by the Contractor.

Where existing reinforcing steel is damaged or has insufficient cover as determined by the Engineer, it shall be cut out and replaced with new reinforcing steel the same size, with a minimum length for lap splices as indicated on the plans or as directed by the Engineer.

3. Surface Preparation: Sound reinforcing steel which is in the proper position in the slab shall be left in place and cleaned of all concrete. The smaller fragments shall be removed with hand tools or by water blast cleaning.

The newly exposed reinforcing steel and concrete faces shall be cleaned of loose or powder-like rust, oil solvent, grease, dirt, dust, bitumen, loose particles, and foreign matter just prior to patching.

Existing concrete surfaces against which the new patch will be placed shall be dampened. All free water shall be removed from the surface.

Forms shall conform to the pertinent requirements of Subarticle 6.01.03-1.

The cleaned concrete surface area to receive patching material shall be wetted for a 1 hour period immediately prior to placement of the concrete patch. Any standing water shall be blown out with compressed air prior to application of binding grout and patch material.

After wetting of the deck patch area to receive patching, and removal of the standing water, cement binding grout shall be scrubbed into the concrete patch bonding surface with stiff bristled brushes. All bonding surfaces in the patch area shall receive a coating of bonding grout within a time period not to exceed 5 minutes prior to placement of the concrete patch material.

4. Mixing, Placing, and Finishing: Mixing and placing concrete shall be done in accordance with the applicable portions of Article 6.01.03. Mixing and placing shall not be executed unless the ambient temperature is above 40 °F and rising.

The concrete mix shall be properly placed to insure complete contact around all reinforcing steel and against existing concrete at patch edges and compacted to a level slightly above the surrounding deck surface. Vibrators of the appropriate size shall be used for all consolidation of the concrete, regardless of the size of the patch area, with no hand tamping or rodding allowed. Concrete may be moved horizontally with the aid of hand tools, but not with the use of vibrators (excess vibration shall be avoided).

Vibrating plates or vibrating screed shall be used on the surface of all patches for strike off and consolidation. After the concrete has been spread evenly and compacted to a level slightly above the adjacent concrete surface, the vibrating plate or screed shall be drawn over the surface at a uniform speed without stopping, in order to finish the surface smooth and even with adjacent concrete. The surface shall be float finished. Finishing operations shall be completed before initial set takes place.

5. Curing: Immediately after finishing of the patch area, a sheet of 4 mil polyethylene shall be placed over the repair area, in conjunction with insulating curing material. This material shall be a minimum of 2-inch thick closed cell extruded polystyrene insulation board that conforms with the requirements of ASTM C578. It shall have a minimum certified R-value of 10. The insulating material shall extend a minimum of 12 inches beyond the limits of the patch area, and shall be kept in intimate contact with the surrounding payment surface to prevent lifting of the material. It shall be weighted down with sandbags that weight at least 15 pounds each. The sandbags shall be placed a minimum of 2 feet on center around the patch area.

Cured patches, having a hollow sound when chain dragged or tapped (indicating delamination), shall be replaced by the Contractor at its expense until a patch acceptable to the Engineer is in place.

6. Tolerances in Finished Patch Surfaces: The surface profile of the patched area shall not vary more than 1/8 inch in a distance of 10 feet, when a 10 foot long straightedge is placed on the surface at any angle relative to the centerline of the bridge. Humps in the patch that exceed the 1/8 inch tolerance shall be ground down by approved machinery. Sags or depressions in the surface of the patch area that exceed 1/8 inch tolerance as determined by the Engineer shall be

repaired by removal of the concrete in the depression to a depth of 1 inch and repaired in the previously described manner.

7. **Testing:** The Contractor shall form, cure and test all concrete test cylinders under supervision of a representative of the Department. The dimensions, type of cylinder mold, number of cylinders, and method of curing shall be as directed by the Engineer.

The Contractor shall provide a portable compressive testing machine, on Site, for the purpose of testing all compressive strength cylinders. All testing shall be in accordance with the requirements of ASTM C39. NOTE: This compressive testing machine must be calibrated in accordance with the provisions of Section 5, ASTM C39.

8. **Time Schedule:** Traffic will not be allowed on any areas where the Contractor has placed and finished concrete until the material has properly cured as specified, and has developed the required strength of 2,500 psi as determined by the compressive strength test, or until the Engineer authorizes its opening to traffic.

All work shall proceed as required by the “Maintenance and Protection of Traffic” and “Prosecution and Progress” specifications elsewhere within the Contract.

Method of Measurement: This work will be measured for payment by the actual volume in cubic yards of replacement concrete, complete and accepted. No deduction will be made for the volume of reinforcing steel. Removal of concrete will not be measured for payment.

Basis of Payment: This work will be paid for at the Contract unit price per cubic yard for “Full Depth Patch (High Early Strength Concrete)” complete in place, which price shall include sawcutting and removal of concrete, surface preparation, furnishing and installing galvanized steel reinforcing bars, concrete replacement, all equipment, tools, labor and work incidental thereto.

Pay Item	Pay Unit
Full Depth Patch (High Early Strength Concrete)	c.y.

ITEM #0601318A - PARTIAL DEPTH PATCH

Description: Work under this item shall consist of the removal of spalled, delaminated or otherwise deteriorated concrete from existing bridge decks, approach slabs and headers by pneumatic hammers or hydro-demolition methods, and replacement with fast setting patching material as shown on the plans, as directed by the Engineer and specified herein.

Where ordered by the Engineer, work under this item shall also include inspecting the underside of the deck concrete for popouts caused by the removal of deteriorated concrete.

Work under this item shall also include the furnishing and installation of wire ties for reinforcing bar and vertical supports on inadequately supported or vibrating reinforcing steel within deck patch areas, as ordered by the Engineer.

Materials: The materials shall meet the following requirements:

- 1) **Patching Material:** The patching material shall be a concrete composed of a quick setting cement, fine aggregate, coarse aggregate and water. This concrete shall harden within 40 minutes, and develop minimum compressive strengths of 1,000 psi within 1 hour after set and 3,000 psi within 3 hours.

The Contractor shall design and submit a quick setting mix to the Engineer for acceptance. Said mix design shall meet the strength requirements noted above and shall attain a minimum of 2500 psi prior to allowing traffic on patched surfaces. The mix proportions and method of application shall be in accordance with the manufacturer's recommendations. Sources of supply of all the materials shall be clearly indicated.

Fine aggregate shall meet the requirements of Subarticle M.03.01-2.

The coarse aggregate shall meet the requirements of Subarticle M.03.01-1. The required grading shall be obtained by using 100% of No. 8 size coarse aggregate. Grading of the aggregate shall conform to the gradation for No. 8 stone in Article M.01.01.

Water shall meet the requirements of Subarticle M.03.01-4.

The quick setting cement shall be one of the following materials:

HD-50
Dayton Superior Corporation
1125 Byers Road
Miamisburg, OH 45342
877-266-7732
www.daytonsuperior.com

Rapid Set DOT Cement
CTS Cement Manufacturing Corp.
12442 Knott Street
Garden Grove, CA 92841
800-929-3030 ext. 188
www.ctscement.com

Speed Crete Green Line
Tamms Industries
730 Casey Ave.
Wilkes-Barre, PA 18702
800-218-2667
www.dpproducts.com/products/tamms.html

Fastcrete
Silpro Corporation
2 New England Way
Ayer, MA 01432
800-343-1501
www.silpro.com/products/fastcrete.shtml

Gypsum Based Materials will not be allowed.

Construction Methods:

Removal of concrete for partial depth patch will be performed by one of two methods: Hammer Demolition or Hydro-demolition. Prior to beginning any work, the Contractor shall provide submittals outlining intended method, as defined herein.

- 1) **Inspection of the Deck:** Before any existing concrete is removed, the Contractor shall provide the Engineer clear access to the bridge deck. During this time, the Engineer will perform an inspection of the structural slab and will designate areas where concrete removal shall be required. It shall be the responsibility of the Contractor to arrange the construction schedule so that the required operations may be performed without causing delay to the work.

No operations will be performed by the Engineer until after the following construction work has been completed:

- a) The existing bituminous overlay or concrete wearing course, if present, has been removed.
- b) The existing waterproofing system, if present, has been removed.

Note: The removal of this material will be paid for under other applicable items.

It shall be the responsibility of the Contractor to inform the Engineer, in writing, of the date that a structure will be available for inspection operations. Notification shall be given to the Engineer at least 7 days prior to the date that the area in question will be in a condition acceptable to the Engineer.

The Contractor is hereby informed that the following time period will be necessary to perform the required inspection operations:

One working day with suitable weather conditions per each six thousand (6,000) square feet, or portion thereof, of deck area.

The Contractor will not be allowed to do any further work to the structure, until all necessary inspection operations have been performed, unless given permission by the Engineer.

The Contractor shall include any costs related to the allowance for this inspection in the general cost of the work.

- 2) **Hammer Demolition:** The maximum allowable noise level caused by equipment used for the removal of deck concrete shall not exceed 90 decibels on the “A” weighted scale, as measured at the nearest residence or occupied building. The Contractor shall demonstrate, to the satisfaction of the Engineer, that the equipment will meet this requirement before the use of such equipment will be allowed.

The weight of pneumatic hammers when used shall not exceed 30 pounds for concrete removal above the top reinforcing steel nor 15 pounds for concrete removal below the top reinforcing steel.

- 3) **Hydro-Demolition Water and Equipment:** All hydro-demolition equipment shall be capable of selectively removing spalled, delaminated or otherwise deteriorated concrete and cleaning the existing reinforcing steel of all rust and corrosion products by use of high-velocity water jets acting under continuous automatic control.

The hydro-demolition equipment shall consist of filtering and pumping units operating in conjunction with a remote-controlled robotics device.

All hydro-demolition equipment shall be equipped with an angled and rotating water nozzle to prevent interference of the existing reinforcing steel with the removal of concrete.

The maximum allowable noise level caused by equipment used for the removal of deck concrete shall not exceed ninety (90) decibels on the "A" weighted scale, as measured at the nearest residence or occupied building. The Contractor shall demonstrate, to the satisfaction of the Engineer, that the equipment will meet this requirement before the use of such equipment will be allowed.

The make and model numbers of hydro-demolition equipment shall be submitted for acceptance by the Engineer. No hydro-demolition work shall be initiated until this acceptance is granted.

The Contractor shall provide structurally adequate shields approved by the Engineer for protection of adjacent traffic lanes in the vicinity of the removal and cleanup operations.

Water used for the hydro-demolition shall be potable.

The Contractor is advised that the withdrawal of more than 50,000 gallons of water per day from a single source other than from a municipal water system shall require a diversion permit issued by the Department of Energy and Environmental Protection, Water Resources Unit, in accordance with the Connecticut Water Diversion Policy Act PA 84-402, CGS Sections 22a-365 through 22a-378.

- 4) Hydro-Demolition Drainage Runoff Control: At least 2 weeks prior to the planned initiation of hydro-demolition operations, the Contractor shall submit to the Engineer for acceptance a comprehensive plan for the hydro-demolition operation. This Hydro-Demolition Plan shall include the following:
- a) Equipment
 - b) Containment
 - c) Filtration
 - d) Location of trial areas
 - e) Disposal of hydro-demolition runoff and concrete debris in conformance with these specifications

The Plan shall ensure that all concrete debris and particulate matter will be removed from hydro-demolition runoff water prior to its release to the environment.

The Plan shall include provision for the concurrent vacuuming of all runoff water at the immediate vicinity of the hydro-demolition operation. Runoff water shall be completely contained and vacuumed into a suitably sized water tight mobile tank for transport to a disposal site sedimentation basin acceptable to the Engineer.

Hydro-demolition operations shall proceed only with the simultaneous operation of a runoff water vacuum pickup in the immediate area of the hydro-demolition operation. Runoff water shall not be allowed to flow across adjacent travel lanes, across bridge joints nor through any existing bridge drainage system.

The size and location of the disposal site sedimentation basin shall be detailed in the Hydro-Demolition Plan. The sedimentation basin shall be properly sized so that uncontrolled overflow does not occur. At the conclusion of hydro-demolition operations, the sedimentation basin and all concrete debris shall be removed and the area restored to its original condition.

The Plan shall additionally conform to all applicable requirements of Section 1.10 Environmental Compliance of the Standard Specifications.

The acceptance by the Engineer of the Hydro-Demolition Plan shall in no way relieve the Contractor of any responsibility for its safe and effective performance.

- 5) Calibration and Testing of Hydro-Demolition Equipment: A trial area will be designated by the Engineer to demonstrate that the equipment, personnel and methods of operation are capable of producing satisfactory results. The trial area will consist of 2 patches, each of approximately 20 square feet, one area of deteriorated or defective concrete and one area of “sound” concrete as determined by the Engineer.

Area of sound concrete is defined as: An area free from chemical defects, delamination, spalling, cracks, etc.

In the “sound area of concrete,” the equipment shall be programmed to remove concrete to a depth 1 inch \pm 1/4 inch below the top reinforcing steel mat.

After completion of the sound concrete test area, the equipment shall be located over the deteriorated or defective concrete and, using the same parameters as for sound concrete removal, shall remove all deteriorated or defective concrete. If a satisfactory result is obtained, these parameters may be used as a basis for production removal.

If, after calibrating the hydro-demolition equipment and beginning removal operations in a particular zone or area, insufficient removal of concrete is observed, in the opinion of the Engineer, the Contractor shall recalibrate the hydro-demolition equipment for that zone or area to the satisfaction of the Engineer.

- 6) Removal of Deteriorated Concrete: All deteriorated concrete designated for removal under this construction item shall be removed within the limits shown on the plans and where ordered by the Engineer. The lateral limits of each area to be repaired will be delineated by the Engineer and suitably marked. Where several areas to be repaired are very close together, the Engineer may combine these individual patches into a large area. The outlines of each such area shall first be cut to a depth of 1/2 inch with a powersaw capable of making straight cuts prior to pneumatic demolition. In the event that reinforcing steel is encountered within the upper 1/2 inch depth during sawing operations, the depth of saw-cut shall immediately be adjusted to a shallower depth so as not to damage the steel bars. If so directed by the Engineer, saw cutting shall again be carried down to the 1/2 inch 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 acceptable manner. Where sawing is impractical, the area shall be outlined by chisel or other acceptable means.

All deteriorated concrete shall be removed by pneumatic hammers or hydro-demolition methods.

The depth of concrete removal shall be at least 1 inch below the top reinforcing steel mat but shall be such as to include all spalled, delaminated, or otherwise deteriorated concrete. The Engineer will be the sole determiner of what constitutes deteriorated concrete, using sounding methods or other evaluation measures.

Within 1 hour following the initiation of a concrete removal operation in any patch area, all loose concrete debris shall be removed, followed by water flushing of the existing concrete bonding surface to completely remove all traces of concrete debris and cement residue so that rebonding to the surface of the remaining sound concrete will be prevented. If it is not convenient to clean and flush the patch area within this time frame, all steel reinforcing and concrete bonding surfaces shall be cleaned subsequently by high pressure water blasting at a

nozzle pressure not less than 3,000 psi with a sufficient volume to completely remove all rebonded debris and laitance.

Where the existing reinforcing steel is damaged or corroded, it shall be cut out and replaced with new reinforcing steel of the same size. Any sound reinforcing steel damaged during the concrete removal operations, shall be repaired or replaced by the Contractor at its expense, as directed by the Engineer. New steel shall be attached beneath or beside existing steel with a minimum splice length as indicated on the plans, or as directed by the Engineer. The concrete shall be removed to a minimum depth of 1 inch below the new steel.

- 7) Surface Preparation: Sound reinforcing steel which is in the proper position in the slab shall be left in place and cleaned of all concrete, the smaller fragments to be removed with hand tools in patch areas where pneumatic hammers were used.

Reinforcing bar wire ties and vertical supports shall be installed on inadequately supported or vibrating reinforcing steel, as directed by the Engineer.

The concrete surface and reinforcing steel to receive patching material shall be either sandblasted or water blasted, followed by air blasting in order to remove all loose particles and dust. All blasting operations shall be performed using techniques acceptable to the Engineer, taking care to protect all pedestrians, traffic, and adjacent property. All compressed air sources shall have properly sized and designed oil separators attached and functional to allow delivered air at the nozzle to be oil-free. The patch area shall be cleaned of all additional loose or powder-like rust, oil, solvent, grease, dirt, dust, bitumen, loose particles, and foreign matter just prior to patching.

If the patch area was not cleaned and flushed with clean water immediately following hydro-demolition, or if run-off from a nearby hydro-demolition operation was allowed to travel through the previously cleaned and flushed patch surface, all affected concrete and steel reinforcing bonding surfaces shall be water blast cleaned at a nozzle pressure not less than 3,000 psi as directed by the Engineer, to assure that all remaining bond inhibiting laitance is completely removed.

The entire concrete surface to be patched shall be dampened. All excess free water shall be removed from the patch area.

- 8) Mixing, Placing, and Finishing: Unless a winter operations plan has been submitted to the Engineer by the Contractor, mixing and placing concrete shall only take place when the ambient temperature is above 35°F or per manufacturer's recommendations, whichever is higher. All mixing shall be accomplished by means of a standard drum-type portable mixer. A continuous type mobile mixer may be used if permitted by the Engineer. The Contractor shall calibrate the mobile mixer under supervision of the Engineer. Calibration shall be in accordance with the applicable sections of ASTM method C685. The total mix shall be limited to the quantity that can be mixed and placed in 15 minutes. The concrete mix shall be spread evenly and compacted to a level slightly above the pavement surface. Vibration, spading or rodding shall be used to thoroughly compact concrete and fill the entire patch area. Where practical, internal vibration shall be used in cases where concrete has been removed below the reinforcing steel. Hand tamping shall be used to consolidate concrete in smaller patches, including popouts.

Vibrating plates or vibrating screeds shall be used on the surface of all patches for strike off and consolidation. After the concrete has been spread evenly and compacted to a level slightly above the pavement surface, the vibrating plate or screed shall be drawn over the

surface at a uniform speed without stopping, in order to finish the surface smooth and even with adjacent concrete.

The surface shall be float finished.

Finishing operations shall be completed before initial set takes place.

Cured patches, having a hollow sound when chain dragged or tapped, (indicating delamination), shall be replaced by the Contractor at its expense until a patch acceptable to the Engineer is in place.

- 9) Tolerances in Finished Patched Surfaces: The surface profile of the patched area shall not vary more than 1/8 inch in a distance of 10 feet, when a 10 foot long straightedge is placed on the surface at any angle relative to the centerline of the bridge. Humps in the patch that exceed the 1/8 inch tolerance shall be ground down by acceptable machinery. Sags or depressions in the surface of the patch area that exceed the 1/8 inch tolerance shall be repaired by removal of the concrete in the depression over an area determined by the Engineer to a depth of 1 inch and repaired in the previously described manner.
- 10) Underside of Bridge Deck Treatment: The Engineer will examine the underside of the bridge deck for popouts caused by the removal of deteriorated concrete. The exposed reinforcing steel shall be coated with a zinc-rich coating where ordered by the Engineer and in accordance with accepted written procedures and working drawings for "Clean and Coat Exposed Reinforcing Steel."

If the popouts extend beyond the bottom layer of reinforcing steel, the popouts shall be repaired as ordered by the Engineer.

- 11) Test Cylinders: The Contractor shall make and perform compressive strength tests on representative cylinders under the supervision of the Engineer in accordance with ACI requirements. The dimensions, type of cylinder mold and number of cylinders will be specified by the Engineer. Traffic shall not be permitted on patched surfaces until the patch material attains a strength of 2500 psi, as determined by breaks of the test cylinders.

A portable compression testing machine shall be provided by the Contractor and available on site for cylinder testing. All testing and equipment shall conform to ASTM C39.

Note: The compression machine must be calibrated in accordance with the provisions of Section 5, ASTM C39.

- 12) Time Schedule: Work under this item begun on any specific bridge during a construction season shall be completed, at least, to include this item, membrane waterproofing and placing of first course of wearing surface as soon as possible and specifically before the beginning of the construction season's winter shutdown.

All work shall proceed as required by the "Maintenance and Protection of Traffic" and "Prosecution and Progress" specifications elsewhere within the Contract.

Method of Measurement: This work will be measured for payment by the actual volume in cubic feet of patching material used in acceptable concrete deck patches, except where the Engineer determines that the Contractor has unnecessarily removed sound concrete. Where sound concrete has been unnecessarily removed, the replacement concrete will not be measured for payment. Providing safe access for delineation and inspection of the performed repairs will not be measured for payment.

Replacement of deteriorated rebar and coating of rebar at popouts, if required, will be measured for payment under other Contract items.

Basis of Payment: This work will be paid for at the Contract unit price per cubic foot of deck concrete repaired under "Partial Depth Patch," complete and accepted in place, which price shall include removal of deteriorated concrete, surface preparation of patch areas, concrete replacement, the furnishing and installation of reinforcing bar wire ties and vertical supports for inadequately supported existing reinforcing steel, inspection access, all materials, equipment, including the portable compression testing machine required for the testing of the repair material, tools, labor and work incidental thereto.

Replacement of deteriorated rebar, if required, will be paid for under the item "Deformed Steel Bars – Galvanized."

Coating of exposed rebar at the underside of the deck, if required, will be paid for under the item "Clean and Coat Exposed Reinforcing Steel."

Pay Item	Pay Unit
Partial Depth Patch	c.f.

ITEM #0601509A - REMOVE CONCRETE HEADERS

Description: Work under this item shall consist of removing concrete headers and elastomeric compression seals at applicable bridge joints as shown of the plans.

Work under this item shall also consist of placing and compacting hot bituminous concrete over unfinished header areas for the purpose of maintaining traffic.

Work under this item also shall consist of reconstruction the slab ends at expansion joints, as detailed on the plans.

Materials: Patching material used for reconstructing slab ends shall conform to the following:

The patching material shall be a concrete composed of a quick setting cement, fine aggregate, coarse aggregate and water. This concrete shall harden within 40 minutes, and develop minimum compressive strengths of 1,000 psi within one hour after set and 3,000 psi within three days.

The Contractor shall design and submit a quick setting mix to the engineer for approval. The mix proportions and method of application shall be in accordance with the manufacturer's recommendations. Sources of supply of all the materials shall be clearly indicated.

Fine aggregate shall conform to the requirements of Form 818, Subarticle M.03.01-2.

Coarse aggregate shall conform to the requirements of Form 818 Subarticle M.03.01-1. The required grading shall be obtained by using 100 percent of No. 67 size coarse aggregate. Grading of the aggregate shall conform to the gradation table of Form 818 Article M.01.01.

Water shall conform to the requirements of Form 818 Subarticle M.03.01-4.

Unless otherwise approved by the Engineer, the quick setting cement shall be one of the following materials:

Gypsum Based Materials:

Duracal
United States Gypsum Co.
Chicago, IL 60680
800-296-6770

Five Star Concrete Patch
U.S. Grout Corporation
Fairfield, CT 06430
203-336-7900

FOX 928
Fox Industries, Inc.
Baltimore, MD 21211
410-243-8856

IFSCEM 110
American Stone Mix, Inc.
8320 Bellona Avenue
Towson, MD 21204
410-296-6770

Cementitious Based Materials:

Emaco T-415
Master Builders, Inc.
23700 Chagrin Blvd.
Cleveland, OH 44122
800-628-7378

Perma-Patch
Dayton Superior Corporation
PO Box 355
Oregon, IL 61061
800-745-3707

Rapid Set DOT Cement
CTS Cement Manufacturing
1023 Dogwood Lane
West Chester, PA 19382
215-429-4956

Speed Crete Green Line
Tamms Industries
730 Casey Ave.
Wilkes-Barre, PA 18702
800-218-2667

Fasterrete
Silpro Corporation
2 New England Way
Ayer, MA 01432
508-772-4444

The following pre-mixed patching materials shall also be approved to be used for reconstruction of ends of slabs and tops of backwall:

Five Star Highway Patch
U.S. Grout Corporation
Fairfield, CT 06430
203-336-7900

Day-Chem Perma Patch
Dayton Superior Specialty Chemical Corp.
Kansas City, KS 66106
(913) 233-1750

Construction Methods: The existing concrete headers shall be removed in accordance with the plans. Sawcutting shall be performed with an approved power saw capable of making straight cuts. Removal operations shall be conducted such that damage is minimized to those portions of the deck slab which are to remain. The maximum weight of the jackhammers used shall be 30# for concrete removed above the top deck reinforcing steel, and 15# for concrete removed below the top deck reinforcing steel.

Temporary Bituminous Concrete for Traffic: Shall be placed as necessary to maintain traffic over those portions of the headers which cannot be completed in time to satisfy the traffic restrictions. Methods of placement and compaction shall conform to Form 818, Section 4.06.03 of the Standard Specifications, as ordered by the Engineer, and in accordance with the plans.

Surface Preparation: Sound reinforcing steel which is in the proper position in the slab shall be left in place and cleaned of all concrete, the smaller fragments to be removed with hand tools in patch areas where pneumatic hammers were used.

Reinforcing bar wire ties and vertical supports shall be installed on inadequately supported and/or vibrating reinforcing steel, as directed by the Engineer.

The concrete surface and reinforcing steel to receive patching material shall be either sandblasted or water blasted, followed by air blasting in order to remove all loose particles and dust. All blasting operations shall be performed using techniques approved by the Engineer, taking care to protect all pedestrians, traffic, and adjacent property. All compressed air sources shall have properly sized and designed oil separators, attached and functional, to allow delivered air at the nozzle to be oil-free. The patch area shall be cleaned of all additional loose or powder-like rust, oil, solvent, grease, dirt, dust, bitumen, loose particles, and foreign matter just prior to patching.

The entire concrete surface to be patched shall be dampened. All free water shall be removed from the patch area.

Mixing, Placing, and Finishing:

In addition to the requirements described below, mixing, placing and finishing of pre-mixed patching materials shall be done in accordance with Manufacturer's instructions.

Mixing and placing concrete should not be done unless the ambient temperature is above 35°F. All mixing shall be accomplished by means of a standard drum-type portable mixer. A continuous type mobile mixer may be used if permitted by the Engineer. The Contractor shall calibrate the mobile mixer under supervision of the Engineer. Calibration shall be in accordance with the applicable sections of ASTM method C685. The total mix shall be limited to the quantity that can be mixed and placed in 15 minutes. The concrete mix shall be spread evenly and compacted to a level slightly above the pavement surface. Vibration, spading or rodding shall be used to thoroughly compact concrete and fill the entire patch area. Where practical, internal vibration shall be used in cases where concrete has been removed below the reinforcing steel. Hand tamping shall be used to consolidate concrete in smaller patches, including popouts.

Vibrating plates or vibrating screeds shall be used on the surface of all patches for strike off and consolidation. After the concrete has been spread evenly and compacted to a level slightly above the pavement surface, the vibrating plate or screed shall be drawn over the surface at a uniform speed without stopping, in order to finish the surface smooth and even with adjacent concrete.

The surface shall be float finished.

Finishing operations shall be completed before initial set takes place.

Curing: Immediately after finishing of the patch area, a sheet of 100 micrometer polyethylene shall be placed over the concrete area, in conjunction with the insulating curing material. This material shall be a minimum of 2" thick closed cell extruded insulation board that conforms with the requirements of ASTM C578. It shall have a minimum certified R-value of ten (10). The insulating material shall extend a minimum of 1' beyond the limits of the newly poured concrete, and shall be kept in intimate contact with the surrounding pavement surface to prevent lifting of the material. It shall be weighted down with sandbags that weigh at least 10# each. The sandbags shall be placed a minimum of 2' on center.

Cured areas, which have a hollow sound when a chain dragged or tapped (indicating delamination), shall be replaced by the Contractor at his expense.

Tolerances in Finished Concrete: The surface profile of the finished concrete shall not vary more than 1/8" over a distance of 10', when a 10' long straightedge is placed on the surface at any angle relative to the joint. Humps in the concrete that exceed the 1/8" tolerance shall be ground down by approved machinery. Sags or depressions in the surface of the concrete that exceed 1/8" tolerance shall be repaired by removal of the concrete in the depression to a depth of 1" and repaired in the previously described manner.

Testing: The Contractor shall form, cure, and test all concrete test cylinders under supervision of a the Engineer. The dimensions, type of cylinder mold, number of cylinders, and method of curing shall be as directed by the Engineer.

The Contractor shall provide a portable compressive testing machine, on site, for the purpose of testing all compressive strength cylinders. All testing shall be in accordance with the requirements of ASTM C39. NOTE: This compressive testing machine must be calibrated in accordance with the provisions of Section 5, ASTM C39.

The Contractor shall be permitted to test the concrete cylinders at an approved independent testing laboratory off-site, provided that initial testing can be completed within three hours of the initial set.

Time Schedule: Traffic will not be allowed on any areas where the Contractor has placed and finished concrete until the material has properly cured as specified, and has developed the

required strength of 2,000 psi as determined by the compressive strength test or until the Engineer authorizes its opening to traffic.

All work shall proceed as required by the “Maintenance and Protection of Traffic” and “Prosecution and Progress” specifications elsewhere within the contract documents.

Method of Measurement: The work will be measured for payment along the centerline of the open joint whose headers are being removed, by the actual number of linear feet removed, such removal to include all joint components and concrete on both sides of the joint.

Basis of Payment: This work will be paid for at the contract unit price per linear foot of header removal, complete in place, and accepted, which price shall include sawcutting, removal of concrete, removal of elastomeric compression seal, surface preparation of concrete surfaces, and furnishing, placing, finishing, and curing the patching material, and all other materials, tools, and labor incidental thereto, including the cost of placing and compacting hot applied bituminous concrete over unfinished headers for the purpose of maintaining traffic over said headers.

ITEM #0602980A - CLEAN AND COAT EXPOSED REINFORCING STEEL

Description: Work under this item shall consist of the removal of loose or delaminated concrete from the underside of existing bridge decks or stay-in-place forms by mechanical methods and the cleaning and coating of exposed reinforcing steel with epoxy resin, as directed by the Engineer.

Materials:

1. Epoxy Resin: The epoxy resin shall be a 2 component, moisture tolerant system with a minimum solids content of 65%, which meets the following requirements:
 - a) Physical Requirements of (Mixed) Epoxy Resin System: A mixture of both components in the proportions recommended by the manufacturer shall have the following properties and meet the following test requirements:
 - Viscosity – approximately 2000 centipoises
 - Pot life – approximately 30 minutes
 - Modulus of Elasticity – 190 ksi (ASTM D638)
 - Resistance to Abrasion – 0.03 gm loss after 1000 cycles (Taber Abrader)
 - Resistance to Cracking – No splitting or loss of bond of a 2.5 mil thickness with 1/8 in mandrel (ASTM D522)
 - b) Packaging and Marking: The 2 components of the epoxy resin system furnished under these specifications shall be supplied in separate containers, which are non-reactive with the materials contained therein. The size of the container shall be such that the recommended proportions of the final mixture can be obtained by combining 1 container of 1 component with 1 or more whole containers of the other component.
 - Containers shall be identified as base polymer and reacting system, and shall show the mixing directions and usable temperature range as defined by these specifications. Each container shall be marked with the name of the manufacturer, the lot or batch number, the date of packaging, pigmentation if any, and the quantity contained therein in pounds and gallons.
 - Printed instructions from the manufacturer for mixing and applying the material shall be included.
 - Potential hazards shall be so stated on the package in accordance with the Federal Hazardous Products Labeling Act.
2. Sampling: A representative sample of each component sufficient for the test specified shall be taken by a Department representative either from a well-blended bulk lot prior to packaging or by withdrawing 3 fluid ounce samples from no less than 5% by random selection of the containers comprising the lot or shipment. Unless the samples of the same component taken from containers show evidence of variability, they may be blended into a single composite sample to represent that component. The entire lot of both components may be rejected if samples submitted for testing fail to meet any requirements of this specification.
3. Control of Materials: A Materials Certificate will be required in accordance with Article 1.06.07, certifying the conformance of the epoxy resin to the requirements set forth in this specification.

Construction Methods:

1. Inspection of the Deck Underside: Before any existing concrete is removed from the underside of the deck, the Contractor will provide the Engineer clear access to the underside of the deck. During this time, the Engineer will perform an inspection of the deck and designate areas where concrete removal is required. The inspection will utilize visual assessment as well as sounding for delamination (hammer tapping).

The Contractor must inform the Engineer, in writing, of the date that the bridge deck will be available for inspection operations and the method which will be used for access. Notification shall be given to the Engineer at least 7 days prior to the date so that the Engineer can plan accordingly and verify that the proposed method of access is acceptable.

The Contractor will not perform any work to the deck, until all necessary inspection operations have been performed, unless given permission in writing by the Engineer. The Contractor shall include the time required for inspection in its overall construction schedule and shall include all costs associated with providing access for the Engineer in the bid unit price.
2. Removal of Deteriorated Concrete: All deteriorated concrete designated for removal under this item, shall be removed within the limits shown on the plans and where ordered by the Engineer. The lateral limits of each area of concrete to be removed will be delineated by the Engineer and suitably marked. The Engineer will be sole determiner of what constitutes deteriorated concrete, using sounding methods or other evaluation measures at his discretion.

Hand tools shall be used first to remove loose and hollow sounding concrete. If the concrete cannot be removed with hand tools, the Engineer may authorize the use of pneumatic hammers. The weight of pneumatic hammers, when used shall not exceed 15 pounds. The Contractor shall provide structurally adequate shields approved by the Engineer for protection of waterways, railways, roadways, sidewalks, parking lots or any other areas accessible to the public, which are in the vicinity of the removal operations.
3. Cleaning Exposed Reinforcing Steel: All exposed reinforcing steel on the underside of the deck shall be cleaned and coated, regardless of whether the Contractor exposed it or it was already exposed at the beginning of the Project. The exposed reinforcing steel shall be cleaned of all concrete fragments, loose or powder-like rust, oil, dust, dirt, loose particles, and other bond inhibiting matter. Cleaning methods shall utilize wire brushing at a minimum, but may require more aggressive methods as recommended by the coating manufacturer or as directed by the Engineer. Cleaning shall be done just prior to coating and shall finish with the cleaned surfaces being wiped down to remove the remaining dust.
4. Coating Exposed Reinforcing Steel: The epoxy resin shall be mixed and applied in accordance with the Manufacturer's instructions. Only the reinforcing steel shall be coated. The surrounding concrete shall not be coated. Care shall be taken to coat all exposed portions of each bar's perimeter and all exposed surfaces where bars overlap or are in contact with each other.

Method of Measurement: This work will be measured for payment by the actual number of linear feet of reinforcing steel cleaned and coated with epoxy resin material and approved by the Engineer. The length of coated reinforcing steel shall be measured along the exposed face of the bar. Where bars are adjacent to each other, the length of each bar shall be measured. No deduction in length shall be made where bars overlap.

Basis of Payment: This work will be paid for at the Contract unit price per linear foot for "Clean and Coat Exposed Reinforcing Steel," complete and accepted, which price shall include all materials, equipment, tools and labor incidental thereto.

Pay Item	Pay Unit
Clean and Coat Exposed Reinforcing Steel	l.f.

ITEM #0707009A - MEMBRANE WATERPROOFING (COLD LIQUID ELASTOMERIC)

Description: Work under this item consists of furnishing and installing a seamless elastomeric waterproofing membrane system applied to a concrete or steel surface as shown on the plans, in accordance with this specification and as directed by the Engineer. Work shall also include conditioning of the surface to be coated and all quality-control testing noted herein.

The completed membrane system shall be comprised of a primer coat, two layers of the membrane coating (minimum total thickness of 80 mil and maximum total thickness not to exceed 120 mil), an additional 40 mil membrane layer with aggregate broadcast into the material while still wet, reinforcing material at deck panel joints and two applications of asphalt emulsion (tack coat) at a rate of 0.05-0.07 gal/s.y. each, allowing the first application to break prior to applying the second.

Materials: The Contractor shall select a waterproofing membrane system from the Department's current Qualified Product List (QPL) for Spray-Applied Membrane Waterproofing System. All materials incorporated in the works shall meet the Manufacturer's specification for the chosen system. The Engineer will reject any system that is not on the QPL.

Reinforcing material shall be as recommended by the manufacturer.

Materials Certificate: The Contractor shall submit to the Engineer a Materials Certificate for the primer, membrane and aggregate in accordance with the requirements of Article 1.06.07.

Construction Methods: At least 30 days prior to installation of the membrane system, the Contractor shall submit to the Engineer a Site-specific Installation Plan that includes the manufacturer's recommended procedure for preparing the deck surface, pre-treatment or preparing at cracks and gaps, treatment at curbs, vertical surfaces or discontinuities, applying the primer and membrane, placing of aggregated coat and all Quality Control (QC Plan) testing operations to be performed during the membrane system's installation. Procedures shall also include recommended repairs of system non-compliant issues identified during application. The system shall be applied to the prepared area(s) as defined or shown in the plans, strictly in accordance with the Installation Plan.

A technical representative, in the direct employ of the manufacturer, shall be present on-Site immediately prior to and during application of the membrane. The representative shall inspect and approve the surface prior to priming, and provide guidance on the handling, mixing and addition of components and observe application of the primer and membrane. The technical representative shall perform all required QC testing and remain on the Project site until the membrane has fully cured.

All QC testing, including verbal direction or observations at the time of installation, shall be recorded and submitted to the Engineer for inclusion in the Project records. The QC testing data

shall be received by the Department's project personnel prior to any paving over the finished membrane, or within 24 hours following completion of any staged portion of the work.

1. **Applicator Approval:** The Contractor's membrane Applicator shall be fully trained and licensed by the membrane manufacturer and shall have successfully completed at least three spray membrane projects in the past five years. The Contractor shall furnish references from those projects, including names of contact persons and the names, addresses and phone numbers of persons who supervised the projects. This information shall be submitted to the Engineer prior to the submittal of the Installation Plan. The Engineer shall have sole authority to determine the adequacy and compliance of the submitted information. Inadequate proof of ability to perform the work will be grounds to reject proposed applicators.

2. **Job Conditions:**

(a) **Environmental Requirements:** Air and substrate temperatures shall be between 32°F and 104°F and the substrate shall be above the dew point. Outside of this range, the Manufacturer shall be consulted.

The Applicator shall be provided with adequate disposal facilities for nonhazardous waste generated during installation of the membrane system. The applicator shall follow safety instructions regarding respirators and safety equipment.

(b) **Safety Requirements:** All open flames and spark producing equipment shall be removed from the work area prior to commencement of application.

"No Smoking" signs shall be visibly posted at the Site during application of the membrane waterproofing.

Personnel not involved in membrane application shall be kept out of the work area.

3. **Delivery, Storage and Handling:**

(a) **Packaging and Shipping:** All components of the membrane system shall be delivered to the Site in the Manufacturer's packaging, clearly identified with the product type and batch number.

(b) **Storage and Protection:** The Applicator shall be provided with a storage area for all components. The area shall be cool, dry and out of direct sunlight and shall be in accordance with the Manufacturer's recommendations and relevant health and safety regulations.

Copies of Material Safety Data Sheets (MSDS) for all components shall be kept on Site for review by the Engineer or other personnel.

- (c) Shelf Life - Membrane Components: Packaging of all membrane components shall include a shelf life date sealed by the Manufacturer. No membrane components whose shelf life has expired shall be used.

4. Surface Preparation:

- (a) Protection: The Applicator shall be responsible for the protection of equipment and adjacent areas from over spray or other contamination. Parapets and bridge joints shall be masked prior to application of the materials.
- (b) Surface Preparation: Sharp peaks and discontinuities shall be ground smooth. Any peak greater than ¼ inch above the surface profile of the prepared substrate shall be ground to the surrounding elevation. Any valley or minor surface deterioration of ½ inch or greater shall also be repaired. The extent and location of surface patches require the approval of the Engineer before the membrane system is applied.

Surfaces shall be free of oil, grease, curing compounds, loose particles, moss, algae, growth, laitance, friable matter, dirt, bituminous products, and previous waterproofing materials. If required, degreasing shall be done by detergent washing in accordance with ASTM D4258.

The surface shall be abrasively cleaned, in accordance with ASTM D4259, to provide a sound substrate free from laitance.

Voids, honeycombed areas, and blow holes on vertical surfaces shall be repaired as indicated in the Installation Plan.

All steel components to receive membrane waterproofing shall be blast cleaned in accordance with SSPC SP6 and shall be coated with the membrane waterproofing system within the same work shift.

- 5. Inspection and Testing: Prior to priming of the surface, the Engineer, Applicator and Manufacturer's technical representative shall inspect and approve the prepared substrate.

- (a) Random tests for deck moisture content shall be conducted on the substrate by the Contractor at the Site using a "Sovereign Portable Electronic Moisture Master Meter," a "Tramex CMEXpertII Concrete Moisture Meter" or approved equal. The minimum frequency shall be one test per 1000 s.f. but not less than three tests per shift for each contiguous section worked on during that shift. Additional tests may be required if atmospheric conditions change and retesting of the substrate moisture content is warranted.

The membrane system shall not be installed on substrate with a moisture content greater than 6%, or at a moisture content above the amount recommended by the system's Manufacturer, whichever is less.

- (b) Random tests for adequate tensile bond strength shall be conducted by the Contractor on the substrate using an adhesion tester in accordance with the requirements of ASTM D4541. The minimum frequency shall be one test per 5,000 s.f. but not less than three adhesion tests per shift for each contiguous section worked on during that shift. The locations of the pull tests shall be at least a distance from each other equal to or greater than 1/3 of the width or length (whichever is greater) of the area being worked in that section. The location of the pull tests shall be located in accordance with ASTM D3665 or a statistically-based procedure of stratified random sampling approved by the Engineer.

Adequate surface preparation will be indicated by tensile bond strengths of primer to the substrate greater than or equal to 150 psi or failure in a concrete surface and greater than or equal to 300 psi for steel surfaces.

If the tensile bond strength is lower than the minimum specified, the Engineer may request additional substrate preparation. Any primer not adequately applied shall be removed and new primer applied at the Contractor's expense, as directed by Engineer.

- (c) Grouted joints, materials that the membrane cannot bond to, and cracks or discontinuities that cannot be bridged over by the membrane material shall be covered by a reinforcing material recommended by the membrane system's Manufacturer prior to application of membrane layers as approved or directed by the Engineer.

6. Application:

- (a) The System shall be applied in the following distinct steps as follows:
- 1) Substrate preparation
 - 2) Priming
 - 3) Reinforcing material application over grouted joints, cracks, etc.
 - 4) Membrane application (minimum 2 layers)
 - 5) Membrane with aggregate
- (b) Immediately prior to the application of any components of the System, the surface shall be adequately dry (see Section 5(a) of this specification) and any remaining dust or loose particles shall be removed using clean, dry, oil-free compressed air or industrial vacuum.
- (c) Where the area to be treated is bound by a vertical surface (e.g. curb or wall), the membrane system shall be continued up the vertical, if shown on the plans or directed by the Engineer.
- (d) The handling, mixing and addition of components shall be performed in a safe manner to achieve the desired results, in accordance with the Manufacturer's recommendations or as approved or directed by the Engineer.

- (e) A neat finish with well defined boundaries and straight edges shall be provided by the Applicator.
- (f) Primer: The primer shall consist of one coat with an overall coverage rate of 125 to 175 s.f./gal unless otherwise recommended in the Manufacturer's written instructions.

All components shall be measured and mixed in accordance with the Manufacturer's recommendations.

The primer shall be spray applied using a single component spray system approved for use by the Manufacturer. If required by Site conditions and allowed by the manufacturer brush, squeegee or roller application will be allowed.

The primer shall be allowed to cure tack-free for a minimum of 30 minutes or as required by the Manufacturer's instructions, whichever time is greater, prior to application of the first lift of waterproofing membrane.

Porous concrete (brick) may require a second coat of primer should the first coat be absorbed.

- (g) Membrane and Reinforcing Material: Application of the membrane on the primed surface shall not commence until the primer is cured as described in Section 6(f) of this specification and the adhesion pull tests are completed in accordance with Section 5(b) of this specification.

The waterproofing membrane shall consist of two coats for a total dry film thickness of a minimum 80 mils but not to exceed 120 mils. Adjacent coats shall be of a contrasting color to aid in Quality Assurance and inspection. Any reinforcing material shall be applied immediately before the first coat of membrane in accordance with the Manufacturer's recommendations.

The membrane shall be comprised of Components A and B and a hardener powder which is to be added to Component B in accordance with the Manufacturer's recommendations.

The substrate shall be coated in a methodical manner.

Thickness checks: For each layer, checks for wet film thickness using a gauge pin or standard comb-type thickness gauge shall be carried out once every 100 s.f. Where rapid set time of the membrane does not allow for wet film thickness checks, ultrasonic testing (steel surfaces only), calibrated point-penetrating (destructive) testing, in-situ sampling (cutout of small sections for measuring thicknesses), or other methods approved by the Engineer shall be employed for determination of dry film

thickness. The measured thickness of each and every individual test of the membrane shall be greater than or equal to the required thickness.

Bond Strength: Random tests for adequate tensile bond strength shall be conducted on the membrane in accordance with the requirements of ASTM D4541. The minimum test frequency shall be one test per 5,000 s.f. but no less than three adhesion tests per bridge. Adequate adhesion will be indicated by tensile bond strengths of the membrane to the substrate of greater than or equal to 150 psi or failure in a concrete surface, and greater than or equal to 300 psi for steel surfaces.

Repair the membrane system following destructive testing and correct any deficiencies in the membrane system or substrate noted during QC testing in accordance with the Manufacturer's recommendations to the satisfaction of the Engineer at no additional cost to the State.

- (h) Repairs: If an area is left untreated or the membrane becomes damaged, a patch repair shall be carried out to restore the integrity of the system. The damaged areas shall be cut back to sound materials and wiped with solvent (e.g. acetone) up to a width of at least four inches on the periphery, removing any contaminants unless otherwise recommended by the Manufacturer. The substrate shall be primed as necessary, followed by the membrane layers. A continuous layer shall be obtained over the substrate with a four-inch overlap onto existing membrane.

Where the membrane is to be joined to existing cured material, the new application shall overlap the existing by at least four inches. Cleaning and surface preparation on areas to be lapped shall be as recommended in the Manufacturer's written instructions.

- (i) Aggregated Finish:
 - 1) Apply an additional 40 mil thick layer of the membrane material immediately followed by an aggregate coating, before the membrane cures, at a rate to fully cover the coated area to a point where no membrane material is visible. The membrane and aggregate shall be fully integrated after the aggregate has been applied and the membrane cured.
 - 2) Localized areas not fully coated shall be touched-up with additional membrane and aggregate as needed.
 - 3) Using motorized mechanical sweepers or a vacuum sweeper apparatus, remove all loose and excess aggregate from the surface to the satisfaction of the Engineer and dispose of properly after application prior to allowing traffic onto finished surface or application of tack coat. Any areas not fully coated after sweeping shall be touched up with additional membrane and aggregate as needed.

7. Final Review: The Engineer and the Applicator shall jointly review the area(s) over which the completed system has been installed. Any irregularities or other criteria that do not meet the requirements of the Engineer shall be addressed at this time.

Method of Measurement: This item shall be measured by the number of square yards of waterproofed surface completed and accepted.

Basis of Payment: This item will be paid for at the Contract unit price per square yard of “Membrane Waterproofing (Cold Liquid Elastomeric),” complete and accepted in place, which price shall include all surface preparation, furnishing, storing and applying the system, technical representative and Quality Control testing, and any necessary repairs and remediation work as well as all materials, equipment, tools, labor incidental to this work.

Pay Item	Pay Unit
Membrane Waterproofing (Cold Liquid Elastomeric)	s.y.

ITEM #0819002A - PENETRATING SEALER PROTECTIVE COMPOUND

Description: Work under this item shall consist of cleaning concrete surfaces of dirt, dust, and debris, and furnishing and applying a clear, penetrating sealer to concrete surfaces where shown on the plans, to provide a barrier against the intrusion of moisture and chlorides. This work also includes furnishing, installing, and removing platforms, scaffolding, ladders, and other means of access as well as shields, as required, to protect adjacent areas and traffic from overspray.

Materials: The penetrating sealer shall conform to Article M.03.09. A Materials Certificate shall be submitted for the penetrating sealer in accordance with Article 1.06.07. A product not listed on the Qualified Products List (QPL) may be considered for approval. A Certified Test Report shall be submitted in accordance with Article 1.06.07 indicating that the product being considered conforms to the Test Requirements listed on the QPL.

Construction Methods:

Submittals: The Contractor shall submit to the Engineer Safety Data Sheets (SDS), Technical Data Sheets and product literature for the approved sealer. The literature shall include written instructions how to apply the sealer to vertical and horizontal surfaces, and where required, overhead surfaces. Application rate and number of applications of sealer shall be addressed.

The Contractor shall submit to the Engineer, in accordance with Article 1.05.02, written procedures for cleaning the concrete surfaces prior to sealer application. The submittal shall include proposed equipment and materials and shall address how adjacent traffic and other areas shall be protected from dust, debris and overspray during the cleaning and application processes. Where the sealer is to be applied to parapets before pavement is placed, the submittal shall address protection of the deck and curb to which membrane waterproofing will be applied. Should the membrane already be present, the submittal shall address shielding of the membrane. It shall also indicate how vegetation and regulated areas shall be protected from overspray. The submittal shall address the conditions under which work may proceed, including wind speed, temperature and precipitation. It shall also include procedures to be followed to protect the work should unfavorable weather conditions occur before the product has been absorbed.

The Contractor shall inspect the surfaces to be sealed to identify surface cleaning needs before submitting the procedures. The Contractor shall identify concrete surfaces that:

- Need repair
- Require special attention or cleaning procedures
- Have been previously treated with coatings or curing compounds that would hinder penetration of the sealer into the concrete
- Will be new or newly repaired

Written procedures shall include observations listed above. Application of penetrating sealer to new concrete shall be addressed in the application procedures. Forms for surfaces of new concrete to receive penetrating sealer shall not be treated using form release oil, which can inhibit or prevent penetration of the sealer into the concrete.

Surface Preparation: Concrete surfaces to which penetrating sealer will be applied shall be clean and free of grease, oil, and other surface contaminants, including biological growth. Dry surfaces may be cleaned by sweeping with brushes or brooms, and blowing clean with oil-free, compressed air. The Contractor shall take care not to damage the concrete surface finish during cleaning operations. Care shall be taken so that cleaning methods do not damage joint sealant or other components of the structure that are to remain.

Application: Application of the sealer may begin only after the Engineer evaluates the concrete surfaces and determines that conditions for installation comply with the accepted written application procedures.

The sealer shall be applied in accordance with the accepted application procedures at the rate specified by the manufacturer. The Contractor shall monitor and record the number of square feet of concrete surface sealed and the number of gallons of sealer applied over that surface area to verify that the required application rate is being met. A minimum of three applications of sealer shall be assumed to be needed. After the first application of the sealer, curing time shall be recorded and submitted to the Engineer. Additional applications of sealer shall be applied as specified in the application instructions, provided adequate time between applications and appropriate curing of the sealer have occurred. For each application, the Contractor shall record the area and number of gallons of sealer applied as well as the curing time for that application. The Contractor may be directed to apply sealer in up to three separate applications if concrete surfaces readily absorb the previous application.

If the Contractor is directed to apply more than three applications of sealer, the additional applications will be compensated as extra work. Should salts, oil or other visually undesirable materials be evacuated from the concrete by the penetrating sealer and remain on the surface after sufficient rain events have occurred, the Engineer may order surface cleaning of the concrete as extra work.

The Engineer shall be provided access to inspect the concrete surface during application and after the sealer has had adequate time to cure.

Method of Measurement: This work will be measured for payment by the actual number of square yards of concrete, sealed and accepted, within the designated limits. The area will be measured once, regardless of the number of applications required.

Basis of Payment: This work will be paid for at the Contract unit price per square yard for “Penetrating Sealer Protective Compound,” complete, which price shall include all equipment tools, labor and materials, incidental thereto, including the preparation of the concrete surfaces and proper disposal of debris.

The following are not included in the cost of this item and will be considered Extra Work:

- Special cleaning procedures ordered by the Engineer to properly prepare the concrete surface for application of the penetrating sealer (such as removal of tightly adherent biological growth, graffiti, or other difficult-to-remove surface contaminants)

- Additional applications of sealer as noted in the Construction Methods
- Cleaning of evacuated material from sealed surfaces as ordered by the Engineer.

Pay Item	Pay Unit
Penetrating Sealer Protective Compound	s.y.

ITEM #0904103A – REPAIR METAL BRIDGE RAIL

Description: Work under this item shall consist of cutting, removing, and disposing of broken elements of the existing metal bridge rail in accordance with details, and at the locations shown on the plans.

Construction Methods: The Contractor shall identify and mark the location of the proposed limits of removal of damaged metal bridge rail section. Cutting shall be done in a manner that will not damage existing rail elements that are to remain, and will not damage the existing anodized aluminum finish on exposed rail surfaces. Ends of cut rail elements shall be ground smooth, and shall have no gouges, burrs, or other imperfections. Removed elements of the bridge rail shall be removed and properly disposed by the Contractor.

Method of Measurement: This work will not be measured for payment and will be paid at the contract lump sum price.

Basis of Payment: This work shall be paid for at the contract lump sum price for “Repair Metal Bridge Rail”, which price shall include cutting, removing, and disposing of damaged bridge rail elements as indicated on the plans, and all materials, equipment, tools, and labor incidental thereto.

Pay Item
Repair Metal Bridge Rail

Pay Unit
LS

END OF SECTION

ITEM #0912517A REPAIR METAL BEAM RAIL

Description: This work shall consist of removing and replacing damaged sections of the existing metal beam rail at the locations shown on drawings or as directed by the engineer.

Materials: Contractor may reuse any undamaged existing rail elements, appropriate posts, delineators, and lap bolts within the Project limits, as approved by the Engineer. Replaced rail elements shall meet the requirements of M.10.02 and the following:

1. Adhesive bonding material shall meet the requirements of 6.10.02.
2. Metal beam rail delineators shall meet the requirements of M.18.09 and M.18.13.

Construction Methods: The Construction Methods for Section 9.10 and 9.11 shall apply to the repair of existing rail systems. Prior to commencement of work, the Contractor and Engineer shall inventory the existing rail systems within the Project limits to determine which materials are suitable for reuse.

The Contractor must complete the reassembly of any bridge rail segment designated for repair by the end of each day's work

Method of Measurement: The length of repaired rail measured for payment shall be the number of linear feet of completed rail. Measurement for rail repair, where W-Beam replacement is not required shall be measured between the nearest undamaged posts on each side of the repair location. Measurement for rail repair, where W-Beam replacement is required shall be the length of the replaced W-Beam rail.

Basis of Payment: This work will be paid for at the Contract unit price per linear foot for "Repair Metal Beam Rail," complete in place. This price shall include the complete removal, and replacement of damaged rail elements, and all equipment, tools and labor incidental thereto.

Pay Item	Pay Unit
Repair Metal Beam Rail	LF

END OF SECTION

ITEM #921002A - CONCRETE SIDEWALK - 8" THICK

Work under this item shall conform to the requirements of Section 9.21 of the Standard Specifications amended as follows:

9.21.01 -Description: *Add the following:*

This work shall include the removal, replacement and disposal of the existing concrete sidewalks on the approaches to the bridge as shown on Plans.

9.21.02 –Materials: *Add the following:*

Expansion Joint Filler and Joint Sealer shall comply with the requirements of Article M.03.08.

9.74.04—Method of Measurement: *Delete entire Paragraph and replace with the following:*

This work will be measured for payment by the volume in cubic feet in place prior to removal, to the limits shown on the plans or as directed by the Engineer.

9.74.05—Basis of Payment: *Delete entire Paragraph and replace with the following:*

Construction of a concrete sidewalk will be paid for at the Contract unit price per square foot for "Concrete Sidewalk – 8" Thick" complete and accepted in place, which price shall include removal of existing sidewalk, all excavation as specified above, backfill, disposal of surplus material, granular fill or reclaimed miscellaneous aggregate base, furnishing and placing concrete, joint filler, joint seal, curing compound, equipment, tools, materials and labor incidental thereto.

Pay Item	Pay Unit
Concrete Sidewalk – 8" Thick	s.f

ITEM NO. 0971001A - MAINTENANCE AND PROTECTION OF TRAFFIC

Section 9.71 is amended as follows:

9.71.01 - Description: Add the following:

The Contractor shall maintain and protect traffic, including incorporating the stage operations and sequences called for on the plans or specified herein, in accordance with the following and as limited by the specification section "Prosecution and Progress"

At no time shall the Contractor close or cause to be closed any portion of the roadway beyond what is stipulated herein, or on the plans, as necessary to perform the work. The Contractor's work operations shall be performed in the protected construction zones and shall not encroach upon, or be performed from the protected vehicular travelway.

The Contractor shall maintain and protect the existing number of lanes of traffic, each lane on a paved travelpath not less than 12 feet in width.

Excepted therefrom will be those periods, during the allowable periods, at which time the Contractor will be allowed to maintain and protect at least one lane of through traffic in each direction, each lane on a paved travelpath not less than 11 feet in width.

9.71.02 – Materials:

All materials used shall comply with the requirements of Form 818, and further described herein:

- Flagmen shall be in accordance with Article 9.70.1 – Uniformed Flagger
- Barricade Warning Lights shall comply with Article 9.76.02
- Traffic Drums shall comply with Article 9.78.02
- Construction Barricades shall comply with Article 9.79.02
- Traffic Cones shall comply with Article 9.81.02
- Temporary Plastic Pavement Marking Tape shall comply with Article 12.12.02
- Construction Signs shall comply with Article 12.20.02

9.71.03 – Construction Methods: Add the following:

The Contractor shall maintain access to and egress from all commercial and residential driveways throughout the project limits, as well as from the I-84 WB ramp to Kelly Road.

The Contractor shall erect and maintain all signing patterns in accordance with the traffic control plans contained herein, with the following changes:

Provide additional signage to include one sign 31-1906 (Road Work Ahead - Lanes Doubled) and one sign 80-9604 (Road Work Ahead) on each side of the I-84 WB exit ramp to Kelly Road.

Maintain all pavement markings on paved surfaces on all roadways throughout the limits of the Project. Temporary pavement markings shall be installed on each intermediate course of bituminous concrete pavement and on any milled surface by the end of the work shift. Permanent Epoxy Resin Pavement Markings shall be installed on the final course of bituminous concrete pavement within 10 calendar days of the final pavement installation.

Temporary pavement markings that will be in place for less than 72 continuous hours may consist of temporary plastic pavement marking tape at the Contractor's expense. Additionally;

1. These temporary pavement markings shall include centerlines, lane lines (solid and broken), and stop bars.
2. Centerlines shall consist of two 4 inch wide yellow markings, 2 feet in length, side by side, 4 inches apart, at 40 foot intervals.
3. Lane lines shall consist of 4 inch wide white markings, 2 feet in length, at 40 foot intervals.
4. No passing zones shall be posted with signs in those areas where the final centerlines have not been established on two-way roadways.
5. Stop bars may consist of two 6 inch wide white markings or three 4 inch wide white markings placed side by side.
6. The temporary plastic pavement marking tape shall be installed in accordance with Section 12.12.
7. The Contractor shall remove and dispose of the temporary plastic pavement marking tape prior to another course of bituminous concrete pavement being installed.

Temporary pavement markings that will be in place for 72 continuous hours or more should consist of temporary painted pavement markings and shall be installed in accordance with Section 12.09. The markings shall include centerlines, edge lines, lane lines (solid and broken), lane-use arrows, and stop bars on each intermediate course of bituminous concrete pavement and on any milled surface by the end of the work shift. Edge lines and lane-use arrows are not required if the next course of bituminous concrete pavement will be placed within 10 calendar days.

Provide taper material at all locations where there is a transverse height differential in the roadway surface. The taper material shall be installed at a minimum 20 (horizontal):1(vertical) taper distance, and shall be adequate to negate any "bump" to traffic. Material for this taper shall be approved by the Engineer. Provide "BUMP" warning signs at all taper locations (W8-1, 30"x30" min.) with Barricade Warning Lights (Type B)

All advanced warning signs shall be mounted to metal posts. Barricade Warning Lights (Type B) shall be mounted to the advanced warning signs in accordance with Article 9.76.03.

Traffic control patterns shall be uniform, neat and orderly so as to command respect from the motorist. Construction signs, traffic drums and traffic cones shall be installed in accordance with Article 12.20.3, Article 9.78.03, and Article 9.81.03, respectively. Installation and removal of temporary plastic pavement marking tape, where required, shall comply with Article 12.12.03.

In the case of a horizontal or vertical sight restriction in advance of the work area, the traffic control pattern shall be extended to provide adequate sight distance for approaching traffic. If a lane reduction taper is required to shift traffic, the entire length of the taper should be installed on a tangent section of roadway so that the entire taper area can be seen by the motorist.

Any existing signs that are in conflict with the traffic control patterns shall be removed, covered, or turned so that they are not readable by oncoming traffic.

When installing a traffic control pattern, a Buffer Area should be provided and this area shall be free of equipment, workers, materials and parked vehicles.

Flagmen shall be used during installation and removal of a traffic control pattern.

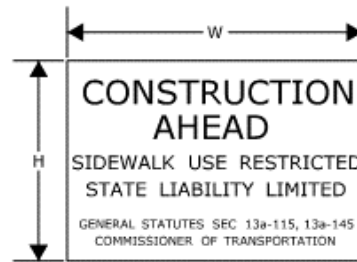
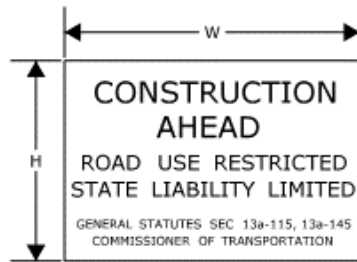
9.71.05 Basis of Payment: Delete existing paragraph and replace with the following:

This work will be paid for at the Contract Lump Sum Price for “Maintenance & Protection of Traffic”. This price shall include all costs for labor, equipment and services involved in the erection, maintenance, moving, adjusting, cleaning, relocating and storing of all signs, barricades, drums, traffic cones and delineators furnished by the Contractor, as well as costs of labor and equipment involved in the maintenance of traffic lanes and detours.

Maintenance & Protection of Traffic shall also include the cost of furnishing, installing, maintaining, resetting and removing all signs, barricades, traffic drums and barrels, warning lights, flares, lanterns, temporary pavement markings, pavement taper material, etc, and all material, labor and equipment necessary for the Maintenance and Protection of Traffic as specified herein.

Flagmen shall not be paid for under this Item, but shall be paid for under the Item for Trafficperson (Uniformed Flagger) and Trafficperson (Municipal Police Officer).

SERIES 16 SIGNS



		W	H
16-E	80-1605	84" x 60"	
16-H	80-1608	60" x 42"	
16-M	80-1613	30" x 24"	

		W	H
16-S	80-1619	48" x 30"	

SIGN 16-S SHALL BE USED ON ALL PROJECTS THAT REQUIRE SIDEWALK RECONSTRUCTION OR RESTRICT PEDESTRIAN TRAVEL ON AN EXISTING SIDEWALK.

SERIES 16 SIGNS SHALL BE INSTALLED IN ADVANCE OF THE TRAFFIC CONTROL PATTERNS. SERIES 16 SIGNS SHOULD BE LOCATED TO ALLOW MOTORISTS THE OPPORTUNITY TO AVOID A WORK ZONE. SERIES 16 SIGNS SHOULD BE INSTALLED ON MAJOR INTERSECTING ROADWAYS THAT APPROACH THE WORK ZONE. ON LIMITED-ACCESS HIGHWAYS, THESE SIGNS SHOULD BE LOCATED IN ADVANCE OF THE NEAREST UPSTREAM EXIT RAMP AND ON ANY ENTRANCE RAMP PRIOR TO OR WITHIN THE WORK ZONE LIMITS.

SIGNS 16-E AND 16-H SHALL BE POST-MOUNTED.

SIGN 16-E SHALL BE USED ON ALL FREEWAYS AND EXPRESSWAYS.

SIGN 16-H SHALL BE USED ON ALL RAMPS, OTHER STATE ROADWAYS AND MAJOR TOWN/CITY ROADWAYS.

SIGN 16-M SHALL BE USED ON OTHER TOWN ROADWAYS.

CONSTRUCTION TRAFFIC CONTROL PLAN
SERIES 16 SIGNS

SCALE: NONE

CONNECTICUT DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING & CONSTRUCTION

APPROVED

Tracy L. Fogarty
PRINCIPAL ENGINEER

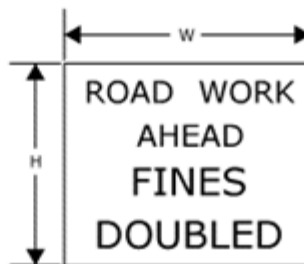
Tracy L. Fogarty, P.E.
2013.10.09 16:30:32-0402

REGULATORY SIGN "ROAD WORK AHEAD, FINES DOUBLED"

THE REGULATORY SIGN "ROAD WORK AHEAD FINES DOUBLED" SHALL BE INSTALLED FOR ALL WORK ZONES THAT OCCUR ON ANY STATE HIGHWAY AND MUNICIPAL ROAD IN CONNECTICUT WHERE THERE ARE WORKERS PRESENT ON THE HIGHWAY.

THE "ROAD WORK AHEAD FINES DOUBLED" REGULATORY SIGN SHALL BE PLACED AFTER THE SERIES 16 SIGN AND IN ADVANCE OF THE "ROAD WORK AHEAD" SIGN.

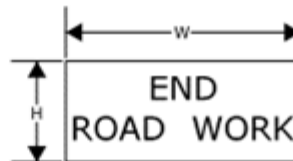
	W	H
31-1906	48"	42"
31-1907	60"	54"



"END ROAD WORK" SIGN

THE LAST SIGN IN THE PATTERN SHALL BE THE "END ROAD WORK" SIGN.

	W	H
80-9606	36"	18"
80-9612	48"	24"



CONSTRUCTION TRAFFIC CONTROL PLAN
ROAD WORK AHEAD
SIGNS

SCALE: NONE

CONNECTICUT DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING & CONSTRUCTION

APPROVED

Tracy L. Poparty
PRINCIPAL ENGINEER

Tracy L. Poparty, P.E.
2013.06.12 15:58:44 0400

NOTES FOR TRAFFIC CONTROL PLANS

1. IF A TRAFFIC STOPPAGE OCCURS IN ADVANCE OF SIGN (A), THEN AN ADDITIONAL SIGN (A) SHALL BE INSTALLED IN ADVANCE OF THE STOPPAGE.
2. SIGNS (AA), (A), AND (D) SHOULD BE OMITTED WHEN THESE SIGNS HAVE ALREADY BEEN INSTALLED IN ADVANCE TO DESIGNATE A LARGER WORK ZONE THAN THE WORK ZONE THAT IS ENCOMPASSED ON THIS PLAN.
3. SEE TABLE 1 FOR ADJUSTMENT OF TAPERS IF NECESSARY.
4. TRAFFIC CONES AND PORTABLE CONSTRUCTION SIGNS SHALL NOT BE LEFT UNATTENDED.
5. ALL CONFLICTING SIGNS WITHIN THE LIMITS OF A ROADWAY / LANE CLOSURE AREA SHALL BE COVERED WITH AN OPAQUE MATERIAL WHILE THE CLOSURE IS IN EFFECT, AND UNCOVERED WHEN THE ROADWAY / LANE CLOSURE IS RE-OPENED TO ALL LANES OF TRAFFIC.
6. IF THIS PLAN REMAINS IN CONTINUOUS OPERATION FOR MORE THAN 48 HOURS, THEN ANY EXISTING CONFLICTING PAVEMENT MARKINGS SHALL BE ERADICATED OR COVERED, AND TEMPORARY PAVEMENT MARKINGS THAT DELINEATE THE PROPER TRAVELPATHS SHALL BE INSTALLED.
7. DISTANCES BETWEEN SIGNS IN THE ADVANCE WARNING AREA MAY BE REDUCED TO 100' ON LOW-SPEED URBAN ROADS (SPEED LIMIT \leq 40 MPH).
8. IF THIS PLAN IS TO REMAIN IN OPERATION FROM SUNSET TO SUNRISE, INSTALL BARRICADE WARNING LIGHTS - HIGH INTENSITY ON ALL POST-MOUNTED DIAMOND SIGNS IN THE ADVANCE WARNING AREA.
9. A PORTABLE CHANGEABLE MESSAGE SIGN SHALL BE INSTALLED ONE HALF MILE TO ONE MILE IN ADVANCE OF THE LANE CLOSURE TAPER.
- 10 SIGN (P) SHALL BE MOUNTED A MINIMUM OF 7 FEET FROM THE PAVEMENT SURFACE TO THE BOTTOM OF THE SIGN.

TABLE 1 - MINIMUM TAPER LENGTHS

POSTED SPEED LIMIT (MILES PER HOUR)	MINIMUM TAPER LENGTH FOR A SINGLE LANE CLOSURE
30 OR LESS	180'
35	245'
40	320'
45	540'
50	600'
55	660'
65	780'

CONSTRUCTION TRAFFIC CONTROL PLAN

NOTES

SCALE: NONE

CONNECTICUT DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING & CONSTRUCTION

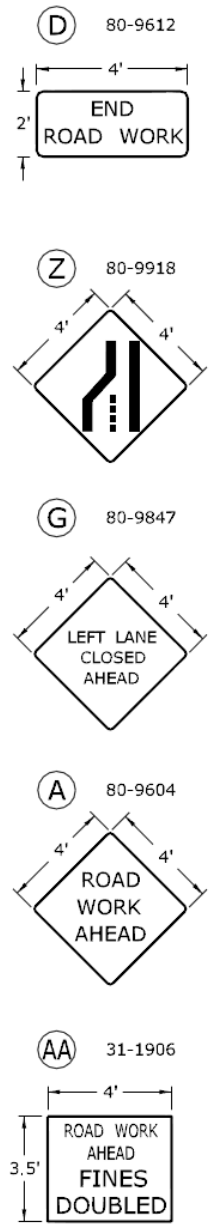
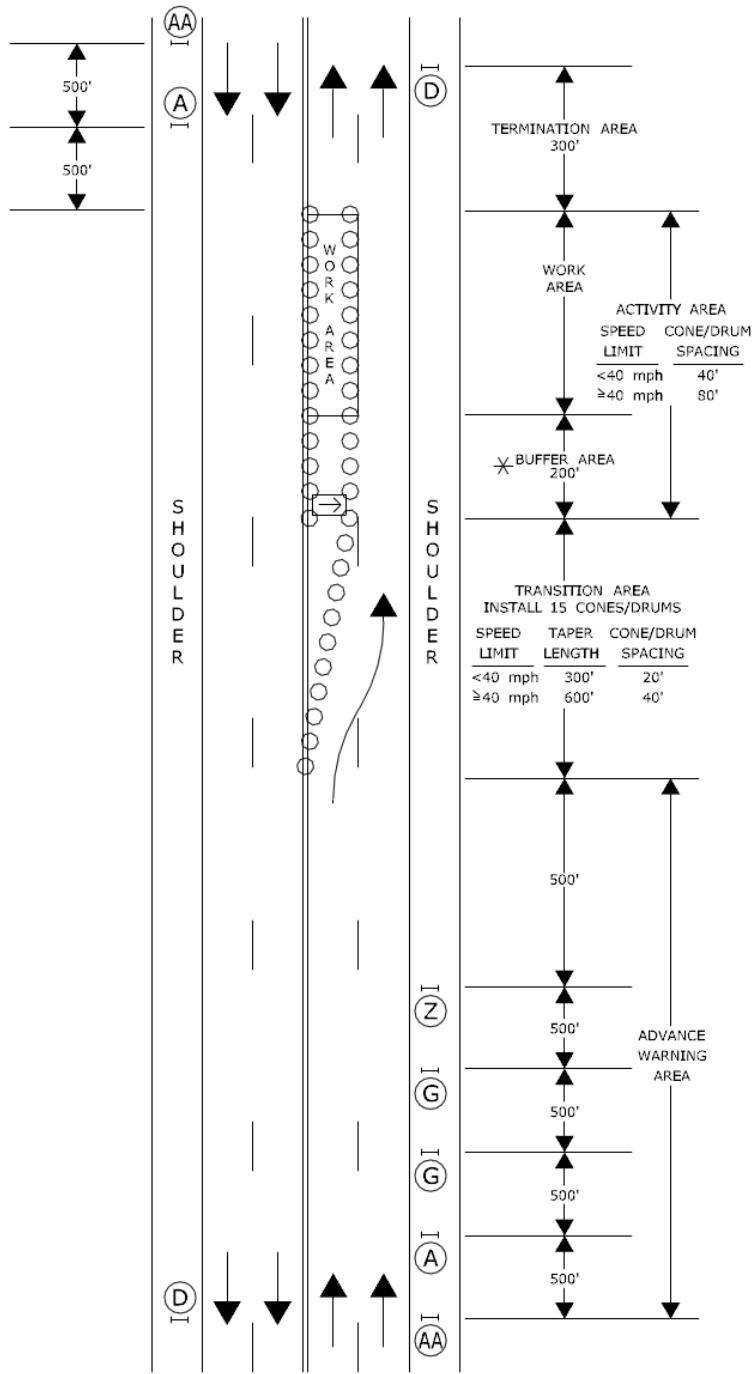
APPROVED

Tracy L. Fogarty
PRINCIPAL ENGINEER

Tracy L. Fogarty, P.E.
2019.05.13 06:47:47-04107

WORK IN LEFT LANE - 4 LANE UNDIVIDED HIGHWAY

SIGN FACE
124 SQ. FT (MIN.)



- TRAFFIC CONE **OR** TRAFFIC DRUM
- ✱ OPTIONAL ⊗ TRAFFIC DRUM — PORTABLE SIGN SUPPORT
- ← HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW



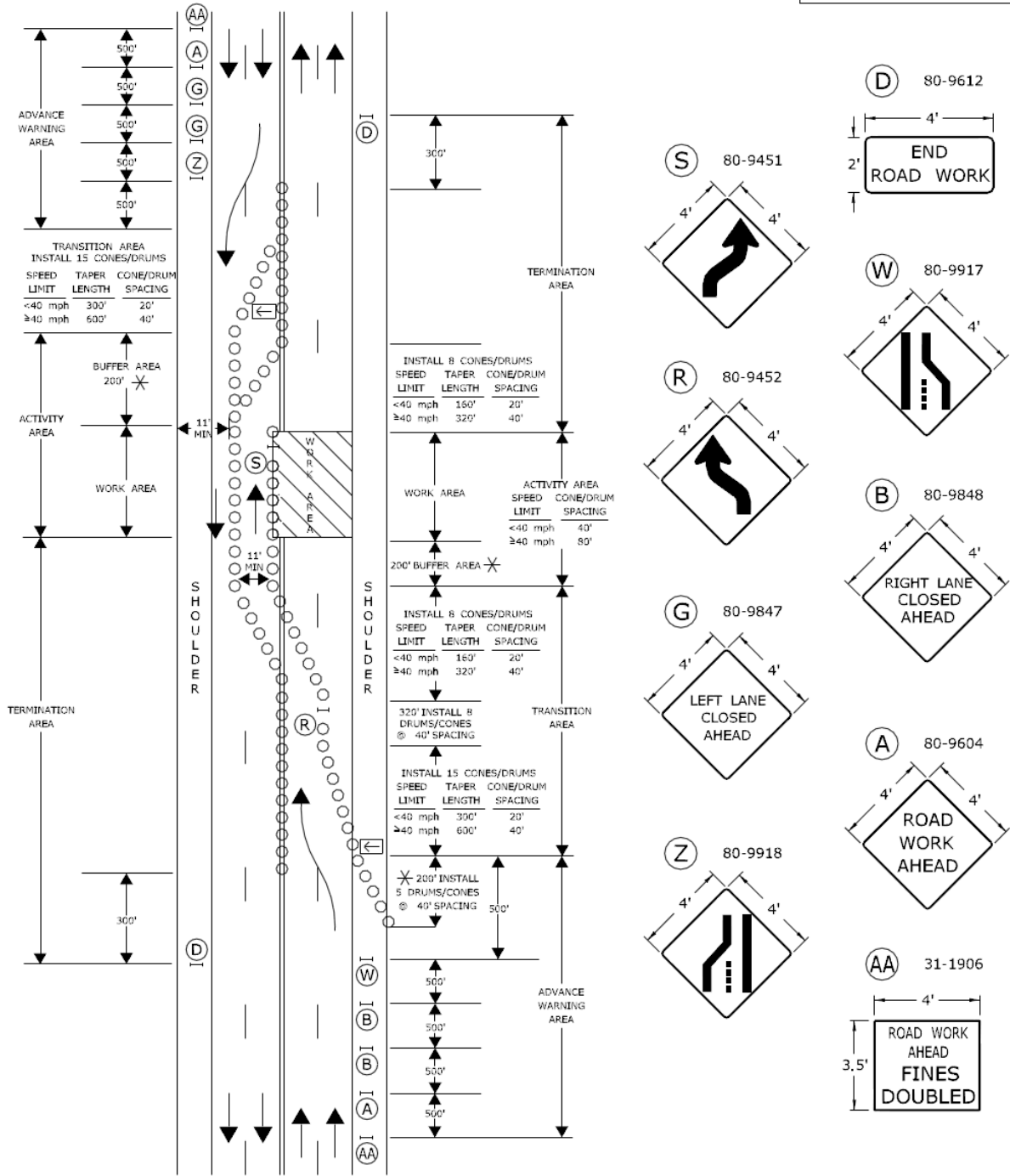
CONSTRUCTION TRAFFIC CONTROL PLAN
PLAN 11
SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8

CONNECTICUT DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING & CONSTRUCTION

APPROVED *Charles S. Harlow* Charles S. Harlow
2012.06.05 15:54:36-0400
PRINCIPAL ENGINEER

WORK IN BOTH LANES - 4 LANE UNDIVIDED HIGHWAY

SIGN FACE
204 SQ. FT (MIN.)



- TRAFFIC CONE OR TRAFFIC DRUM
- ✱ OPTIONAL ✕ TRAFFIC DRUM — PORTABLE SIGN SUPPORT
- ← HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW



CONSTRUCTION TRAFFIC CONTROL PLAN
PLAN 12
SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8

CONNECTICUT DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING & CONSTRUCTION

APPROVED *Charles S. Harlow* Charles S. Harlow
2012.06.05 15:55:01-0400
PRINCIPAL ENGINEER

ITEM #974000A - REMOVAL OF EXISTING MASONRY

Work under this item shall conform to the requirements of Section 9.74 of the Standard Specifications amended as follows:

9.74.01 -Description: *Add the following:*

This work shall include the removal and disposal of the existing parapet mounted end block at the location shown on Plans.

9.74.04—Method of Measurement: *Delete entire Paragraph and replace with the following:*

This work will be measured for payment by the volume in cubic feet in place prior to removal, to the limits shown on the plans or as directed by the Engineer.

9.74.05—Basis of Payment: *Delete entire Paragraph and replace with the following:*

Payment for “Removal of Existing Masonry” will be made at the Contract unit price per cubic foot, which price shall include all equipment, tools and labor incidental to the removal and shall include the proper disposal thereof.

APPENDIX A

Routine Inspection Report - Bridge No. 05240



BRIDGE NO.05240

78250 - VERNON
KELLY ROAD
over
HOCKANUM RIVER

Routine Inspection

10/17/2023

Inspected by: Team 3



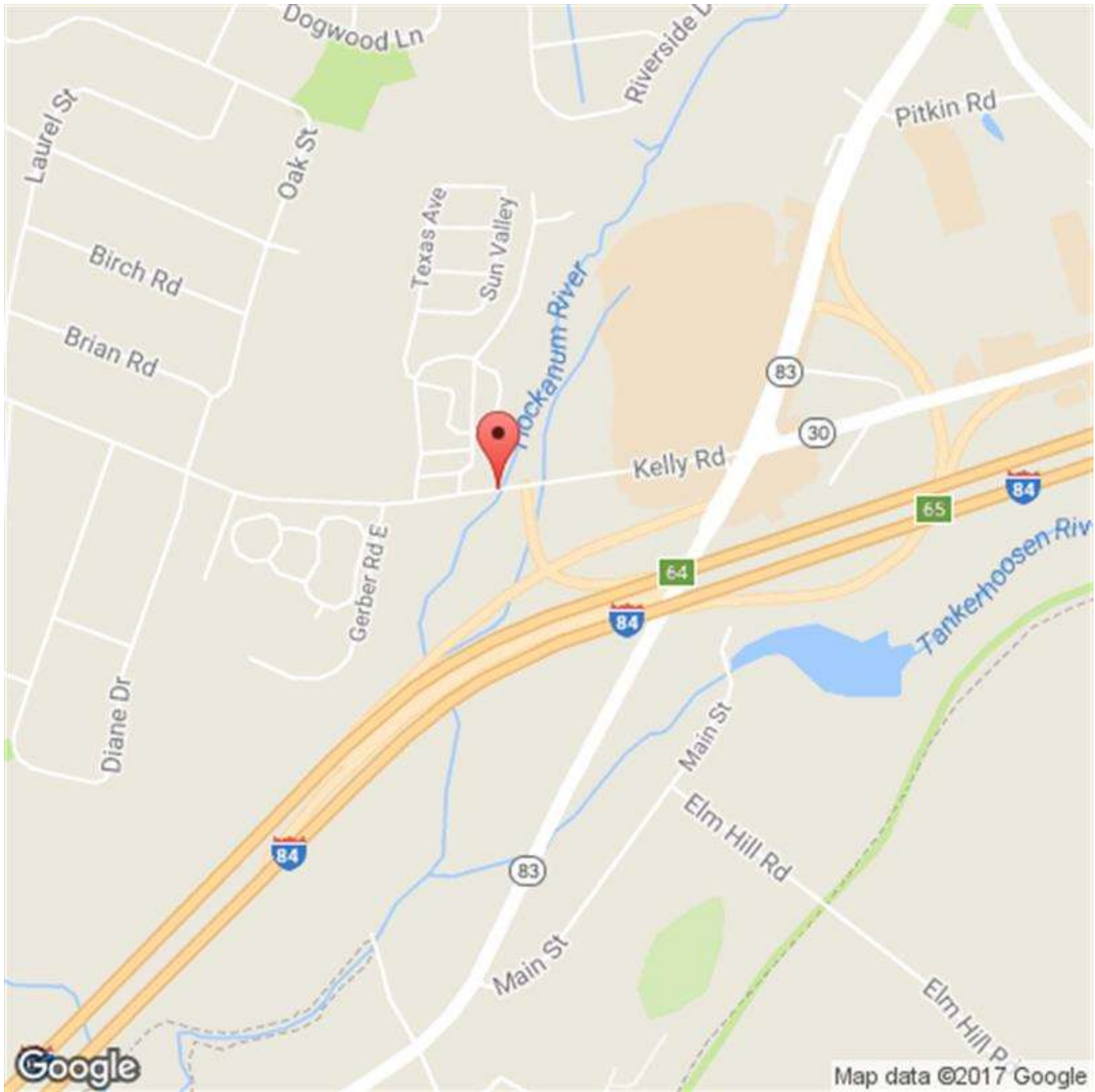
TABLE OF CONTENTS

<u>Section</u>	<u>Page Number</u>
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In-Depth Components	2
Structure Inventory and Appraisal (BRI-19)	3
Inspection Data (BRI-18)	7
National Bridge Elements	13
Sketches	14
Pictures	23

Form: Location
Inspection type: Routine
Inspection Date: 10/17/2023
Inspected by: Team 3

:Bridge No 05240

Town: VERNON
Carried: KELLY ROAD
Crossed: HOCKANUM RIVER
Inventory Route: Non-NHS



Location Map # 1

In-Depth Components

Bridge: 05240

Town: 78250 - VERNON



Carried: KELLY ROAD

Crossed: HOCKANUM RIVER

In-Depth - 1

Component: Concrete Deck

Comments: Cast in place concrete deck

Access Requirements: Ladders/Waders

Last Inspected: Frequency: Inspection Due Date:

Form: BRI-19, Rev. 2/15
Inspection type: Routine
Inspection Date: 10/17/2023
Inspected by: Team 3

:Bridge No 05240

Town: VERNON
Carried: KELLY ROAD
Crossed: HOCKANUM RIVER
Inventory Route: Non-NHS

STRUCTURE INVENTORY & APPRAISAL

INSPECTION

Structurally Deficient Functionally Obsolete
Sufficiency Rating
(90) Inspection Date (91) Frequency
Indepth Insp Proposed next Indepth Year
Deck Survey Date Class
Access Flagman

	Frequency	Date	Type
Fracture	<input type="text"/>	<input type="text"/>	<input type="text"/>
Underwater	<input type="text"/>	<input type="text"/>	<input type="text"/>
Special	<input type="text"/>	<input type="text"/>	<input type="text"/>

IDENTIFICATION

Bridge Name
Town Code - Name
(5) Inventory Route
(A) Record Type
(B) Signing Prefix
(C) Level of Service
(D) Route Number.
(E) Dir Suffix
(6A) Featured Intersected
(6B) Critical Facility Indicator
(7) Facility Carried
(9) Location
(11) Mile Post Miles
(16) Latitude Deg. Min. Sec.
(17) Longitude Deg. Min. Sec.
(98) Border Bridge
(A) State Code (B) Percent Responsibility %
(C) Border Town Name
(99) Border Bridge Structure No.

STRUCTURE TYPE & MATERIALS

(43) Structure Type, Main
A) Material
B) Design Type
(44) Structure Type, Approach
A) Material
B) Design Type
(45) Number of Spans, Main Unit
(46) Number of Approach Spans
(107) Deck Structure Type
(108) Wearing Surface/Protection Systems
A) Type of Wearing Surface
B) Type of Membrane
C) Type of Deck Protection
Substructure
A) Material
B) Design Type
Paint
Type
Year
Comment

GEOMETRIC DATA

(48) Length of Maximum Span ft.
(49) Structure Length ft.
(50) Curb or Sidewalk Widths
A) Left ft. in. B) Right ft. in.
(51) Bridge Roadway Width Curb to Curb ft. in.
(52) Deck Width, Out to Out ft. in.
(32) Approach Roadway Width ft.

Form: BRI-19, Rev. 2/15
Inspection type: Routine
Inspection Date: 10/17/2023
Inspected by: Team 3

:Bridge No 05240

Town: VERNON
Carried: KELLY ROAD
Crossed: HOCKANUM RIVER
Inventory Route: Non-NHS

(33) Bridge Median
Deck Area sq. ft.
(34) Skew Angle deg.
(35) Structure Flared
(10) Inv. Rte. Min. Vert. Clearance ft. in.
(47) Inv. Rte. Total Horiz. Clr. ft. in.
Log Inv. Rte. Total Horiz. Clr. ft. in.
RLog Inv. Rte. Total Horiz. Clr. ft. in.
(53) Min. Vert. Clearance Over Bridge ft. in.
(54) Log-Min. Vert. Underclearance ref. ft. in.
(55) Min. Lat Underclearance on Right ref. ft. in.
(56) Min. Lat Underclearance on Left ft. in.

CONDITION

(58) Deck
(59) Superstructure
(60) Substructure
(61) Channel & Channel Protections
(62) Culverts
(36) Traffic Safety Features
A) Bridge Railings
B) Transitions
C) Approach Guardrail
D) Approach Guardrail Ends

WATERWAY

Drainage Basin Waterway
(38) Navigation Control
(39) Navigation Vertical Clearance ft.
(40) Navigation Horiz. Clr. ft.
(111) Pier/Abutment Navigation
(116) Vert-Lift Brg Nav Min ft. in.

AGE AND SERVICE

Year Built (106) Year Reconstructed
(42) Type of Service
A) On
B) Under
(28) Number of Lanes
A) On B) Under
(29) Average Daily Traffic
Is Above Half ADT?
(109) Percent Truck %
(30) Years of ADT
(19) Bypass, Detour Length Miles

APPRAISALS

(67) Structural Evaluation
(68) Deck Geometry
(69) Underclearances, Vert. & Horiz.
(71) Waterway Adequacy
(72) Approach Roadway Alignment
(113) Scour Critical

COMMENTS

Item 29 was from the Traffic Monitoring Station Viewer, Station ID VERN-172. EF

CLASSIFICATION

(112) NBIS Bridge Length
(104) Highway System
(26) Functional Class
(100) Defense Highway
(101) Parallel Structure
(102) Direction of Traffic

Form: BRI-19, Rev. 2/15
Inspection type: Routine
Inspection Date: 10/17/2023
Inspected by: Team 3

:Bridge No 05240

Town: VERNON
Carried: KELLY ROAD
Crossed: HOCKANUM RIVER
Inventory Route: Non-NHS

(103) Temporary Structure
(110) Designated National Network
(20) Toll
(21) Maintain
(22) Owner
Report Class
(37) Historical Significance

POSTED SIGNS

Other Posted Sign 1
Other Posted Sign 2

	Actual	Recomended	
Posted Load Single Unit Truck	<input type="text"/>	<input type="text"/>	tons
Posted Load Semi-Trailer Truck	<input type="text"/>	<input type="text"/>	tons
Posted Load 4 Axle Truck	<input type="text"/>	<input type="text"/>	tons
Posted Load 3S2 Truck	<input type="text"/>	<input type="text"/>	tons
All Vehicles	<input type="text"/>	<input type="text"/>	tons
Posted Vert. Clearance on Bridge	<input type="text"/> ft.	<input type="text"/> in.	
Posted Vert. Underclearance	<input type="text"/> ft.	<input type="text"/> in.	
Posted Speed Limit on Bridge	<input type="text"/> m.p.h.		

OTHER FEATURES

Fence Required
Fence Present
Fence Type
Fence Height
Fence Material
Fence Top Type
Barrel Ladders
Stand Pipes
Catwalks
Moveable Inspection System
Haunches Present over Roadway
Utilities

1 Gas
2 Water
3 Electric

PROPOSED IMPROVEMENTS

(75A) Type of Work Proposed
(75B) Work Done By
(76) Length of Structure Improvement ft.
(94) Bridge Improvement Cost \$
(95) Roadway Improvement Cost \$
(96) Total Project Cost \$
(97) Year of Improvement Estimate
(114) Future ADT
(115) Year of Future ADT
DOT Bridge Program List No
Project No
Advertised Date

LOAD RATING & POSTING

(31) Design Load
(63) Operating Rating Type
(64) Operating Rating
(65) Inventory Rating Type
(66) Inventory Rating
Evaluation Code
Year of Evaluation
(70) Bridge Posting
(41) Structure Status

Form: BRI-19, Rev. 2/15
Inspection type: Routine
Inspection Date: 10/17/2023
Inspected by: Team 3

:Bridge No 05240

Town: VERNON
Carried: KELLY ROAD
Crossed: HOCKANUM RIVER
Inventory Route: Non-NHS

INSPECTOR'S SIGNATURES:

1) _____ Date: 12/11/2023



P.E. SIGNATURE: _____ Date: _____

2) _____ Date: 12/14/2023



Brandon Morales

P.E. # _____

3) _____ Date: _____

Reviewed By: _____



Date: 12/27/2023

4) _____ Date: _____

Form: BRI-18, Rev. 1/14
 Inspection type: Routine
 Inspection Date: 10/17/2023
 Inspected by: Team 3

:Bridge No 05240

Town: VERNON
 Carried: KELLY ROAD
 Crossed: HOCKANUM RIVER
 Inventory Route: Non-NHS

FIELD INSPECTION REPORT

Location:	0.3 MILES WEST OF RT.83	Year Built:	1981	Snooper Required:	<input type="checkbox"/>
Main Material:	5 - Prestressed concrete	Year Rebuilt		Snooper Used:	<input type="checkbox"/>
Main Design:	02 - Stringer/Multi-beam or				

<u>Inspectors:</u>			<u>Visits:</u>			
Lead Inspector:	Eric Finn		Visit Date:	Temp:	Start Time:	End Time:
Inspector:	Task:		10/17/2023	63	01:00 PM	02:45 PM
Area,03	BSE - Inspector					
Morales,Brandon	BSE - Inspector					

58. DECK:

Inspected west to east, north inlet	Overall Rating: <input style="width: 20px; text-align: center;" type="text" value="6"/>
-------------------------------------	---

<u>Rating</u>		
Overlay:	<input style="width: 20px;" type="text" value="7"/>	Bituminous overlay- Newer overlay this inspection. Slightly open paving seam.
Deck - Str. Condition:	<input style="width: 20px;" type="text" value="6"/>	Deck Underside exhibits- Isolated transverse cracks open up to hairline. Map cracking open up to hairline, almost thru out deck. There are transverse hairline cracks and hollow areas up to 7' W x 1' L in the deck end over abutments, mainly over abutment 1.
Curbs:	<input style="width: 20px;" type="text" value="7"/>	The granite curbs along each sidewalk have mortar joint with cracks and minor scrapes from collision damage throughout.
Median:	<input style="width: 20px;" type="text" value="N"/>	
Sidewalks:	<input style="width: 20px;" type="text" value="6"/>	The sidewalks have random transverse hairline cracks and light scaling. Approach sidewalks at transitions to structure sidewalk have settled up to 1-3/4".
Parapet:	<input style="width: 20px;" type="text" value="7"/>	Both parapets have random hairline vertical cracks some exhibit efflorescence, areas of light honeycombing and scaling. The expansion joints are not sealed. The outside fascia of the south parapet has a heavy vine growth at the southwest.
Railing:	<input style="width: 20px;" type="text" value="6"/>	Both bridge rails are composed of the double aluminum tube railing, mounted on aluminum T-post stanchions. The southwest bridge rail end has broken off. Note The horizontal rail at broke off turn down has sharp edges. North side has minor scrapes. Northwest approach top rails have a dent.
Paint:	<input style="width: 20px;" type="text" value="N"/>	

Form: BRI-18, Rev. 1/14
 Inspection type: Routine
 Inspection Date: 10/17/2023
 Inspected by: Team 3

:Bridge No 05240

Town: VERNON
 Carried: KELLY ROAD
 Crossed: HOCKANUM RIVER
 Inventory Route: Non-NHS

Fence:	N
Drains:	N
Lighting Standard:	N
Overall Utility Condition Rating	7 - Good

Utility Type/Size	
1 Gas	Bay 6: a single 8" diameter wrapped gas main
2 Water	Bay 1: a single insulated 18" diameter water main At Abutment 1 in Bay 1, the utility is missing a portion of insulation. At Abutment 2 in Bay 1, there is minor leakage under the utility at the backwall.
3 Electric	Bay 7: four 6" diameter electrical ducts.

Construction Joints:	N
Expansion Joint:	3 There are concrete headers with compression seals along each joint. - The concrete headers for both deck joints have random transverse and longitudinal hairline to slightly open cracks and hollow areas. - Both seals have some damage and seal failure due to spalls in concrete headers. Abutment 1 joint: - Headers have random bituminous patches with adjacent hollow areas - Deck side header has spall with exposed rebar along opening edge for 35' x up to 5" W x up to 1" D with some deteriorating bituminous patch in the spall area. Abutment 2 joint: - Concrete header on the deck side along the opening has spalled for almost full length x up to 5" wide x up to 2" deep with (4) areas of exposed rebar. - Westbound lane has a 12' and a 9' piece of rebar exposed, (1) in each lane. Note both have free ends in the left wheel path. - Eastbound lane has a 2' and a 10' piece of rebar exposed, (1) in each lane. Note both have free ends in right wheel path. During this inspection a phone call and pictures of the exposed rebar were sent to the Town. SM 10/17/2023

Haunches Present over travelway?

APPROACH CONDITION: Overall Rating:

Rating	
Approach Slab:	N
Relief Joints:	N
Approach Guide Rail:	6 Metal beam railing, mounted on H posts is noted along all approach shoulders. The southwest, southeast and northeast guide rails have minor collision damage with a few disconnected posts. Southeast rail has a tear 8" L x 3" W.

Form: BRI-18, Rev. 1/14
 Inspection type: Routine
 Inspection Date: 10/17/2023
 Inspected by: Team 3

:Bridge No 05240

Town: VERNON
 Carried: KELLY ROAD
 Crossed: HOCKANUM RIVER
 Inventory Route: Non-NHS

	Northeast rail has a tear 1" dia.
	There are gaps up to 2" between the transition and end block interface.
Approach Pavement: 8	Approach overlay- Newer overlay.
Approach Embankment: 9	There are slightly open paving seams.

Traffic Safety Features

Bridge Railings: 1	Non -NHS >32".
Transitions: 0	Not R-B 350 compliant, fingershoe attachment.
Approach Guardrails: 0	Not R-B 350 compliant.
Approach Guardrail Ends: 1	

59. SUPERSTRUCTURE:

Prestressed concrete I -Beams. Overall Rating: 7

Rating

Bearing Devices: 7	The bearings show signs of slight lateral and expansion movement.
Stringers: N	
Girders: 7	(8) Prestressed Concrete Beams- The girder webs & flanges have superficial map cracking, light honeycombing and minor chipping along the edges. The strand ends are exposed up to 1/8" at the girder ends and show light to moderate rusting. There is heavy vine growth on the Girder 8 fascia. Diaphragms: the concrete diaphragms have isolated vertical hairline cracks and areas of map cracking.
Floor Beams: N	
Trusses - General: N	
Trusses - Portals: N	
Trusses - Bracing: N	
Paint: N	
Rust: N	
Machinery Movable Span: N	
Rivets & Bolts: N	
Welds - Cracks: N	
Timber Decay: N	
Concrete Cracking: 7	See Girders above.
Collision Damage: 9	No collision damage.
Member Alignment: 9	
Deflection Under Load: N	
Vibration Under Load: N	
Stand Pipes: N	
Catwalks:	

Form: BRI-18, Rev. 1/14
 Inspection type: Routine
 Inspection Date: 10/17/2023
 Inspected by: Team 3

:Bridge No 05240

Town: VERNON
 Carried: KELLY ROAD
 Crossed: HOCKANUM RIVER
 Inventory Route: Non-NHS

Movable Inspection System:	
Barrel Ladders:	N
Are Barrel Ladders OSHA Compliant?	NA

60. SUBSTRUCTURE:

	Overall Rating: 7
--	-------------------

Rating

Abutments - Stem:	7	Both abutments have random vertical hairline cracks up to full height and isolated horizontal hairline cracks. Evidence of past leakage along both abutments.
Abutments - Backwall:	7	Both backwalls have random vertical hairline cracks up to full height and areas of active leakage. The Abutment 1 backwall has map cracking full height x full width of bays 1 & 2 and bay 2 map has small rust stains. Bay 5 at construction joint is a vertical crack with an hollow area 15" x 5". Bay 6 has rust stain from the utility.
Abutments - Footings:	N	Not visible.
Abutments - Settlement:	9	
Abutments - Wingwalls:	7	The wingwalls have architectural ribbing. WW 1A has an uprooted tree resting on wingwall. The ribbing has minor chipping. There is moderate vegetation growth along all wingwalls.
Piers/Bents - Caps:	N	
Piers/Bents - Pile Bent:	N	
Piers/Bents - Columns:	N	
Piers/Bents - Footings:	N	
Piers/Bents - Settlement:	N	
Erosion - Scour:	9	
Concrete Crack - Spall:	7	See the above items.
Steel Corrosion:	N	
Paint:	N	
Timber Decay:	N	
Collision Damage:	9	
Debris:	7	There is a light accumulation of debris on both abutment seats. There is evidence of past leakage with silt on seat.

61. CHANNEL AND CHANNEL PROTECTION:

Hockanum River.	Overall Rating: 5
-----------------	-------------------

Rating

Channel - Scour:	9	
Embankment - Erosion:	6	There is minor to moderate erosion of the embankment exposing tree root along the both river banks.

Form: BRI-18, Rev. 1/14
 Inspection type: Routine
 Inspection Date: 10/17/2023
 Inspected by: Team 3

:Bridge No 05240

Town: VERNON
 Carried: KELLY ROAD
 Crossed: HOCKANUM RIVER
 Inventory Route: Non-NHS

Debris: 3	Along the upstream east and west embankments there are several fallen trees in channel, they are accumulating other branches. Note the debris along the southwest has narrowed the channel in half. There is a shopping cart along abutment 2 under structure. Light to moderate timber debris lying in channel downstream.
Vegetation: 6	All banks are well vegetated and overhang the channel with some extending into channel.
Channel Change: 5	Channel enters and exits with center line of structure, abutments dry. Freeboard at inlet=10'-05". Water depths upstream range from 3" to 22". Water depths under structure range from 6" to 12". Water depths downstream range from 10" to 22" deep See debris above.
Fender - System: N	
Spur Dikes and Jetties: N	
Rip Rap: 7	Rip rap along the abutments. Some riprap has sloughed into channel. Some riprap has been displaced during highwater events.

62. CULVERTS AND RETAINING WALLS:

Overall Rating:

Rating

Barrel: N	
Concrete: N	
Steel: N	
Timber: N	
Headwall: N	
Cutoff Wall: N	
Debris: N	
Retaining Wall System: N	
Footing: N	

LOAD POSTING:

Rating

Single Unit (Tons):	
Semi Trailer (Tons):	
4 Axle (Tons):	
3S2 (Tons):	
All Vehicles:	
Advanced Warning: N	
Warning At Bridge:	
Legibility: N	

Form: BRI-18, Rev. 1/14
Inspection type: Routine
Inspection Date: 10/17/2023
Inspected by: Team 3

:Bridge No 05240

Town: VERNON
Carried: KELLY ROAD
Crossed: HOCKANUM RIVER
Inventory Route: Non-NHS

Visibility: N

VERTICAL CLEARANCE POSTING

Min. Vert Under Clearance:	<input type="text"/>	Ft	<input type="text"/>	In	<input type="text"/>
Posted Clearance Under Bridge:	<input type="text"/>	Ft	<input type="text"/>	In	<input type="text"/>
Posted Clearance On Bridge:	<input type="text"/>	Ft	<input type="text"/>	In	<input type="text"/>
Advanced Warning:	False				
Warning At Bridge:	<input type="text"/>				
Legibility:	<input type="text"/>				
Visibility:	<input type="text"/>				

NOTES / COMMENTS:

Character of Traffic: Light to moderate / mixed volume.

Additional Notes:

No Bridge Identification Number.
Bridge is logged from west to east with Girder #1 at the north fascia.
Flow is north to south.

Additional Comments:

Recommended Repairs:
- Approach sidewalk settlement.
- Approach MBR
- Clearing tree debris from channel.

National Bridge Elements
 Inspection type: Routine
 Inspection Date: 10/17/2023
 Inspected by: Team 3

:Bridge No 05240

Town: VERNON
 Carried: KELLY ROAD
 Crossed: HOCKANUM RIVER
 Inventory Route: Non-NHS

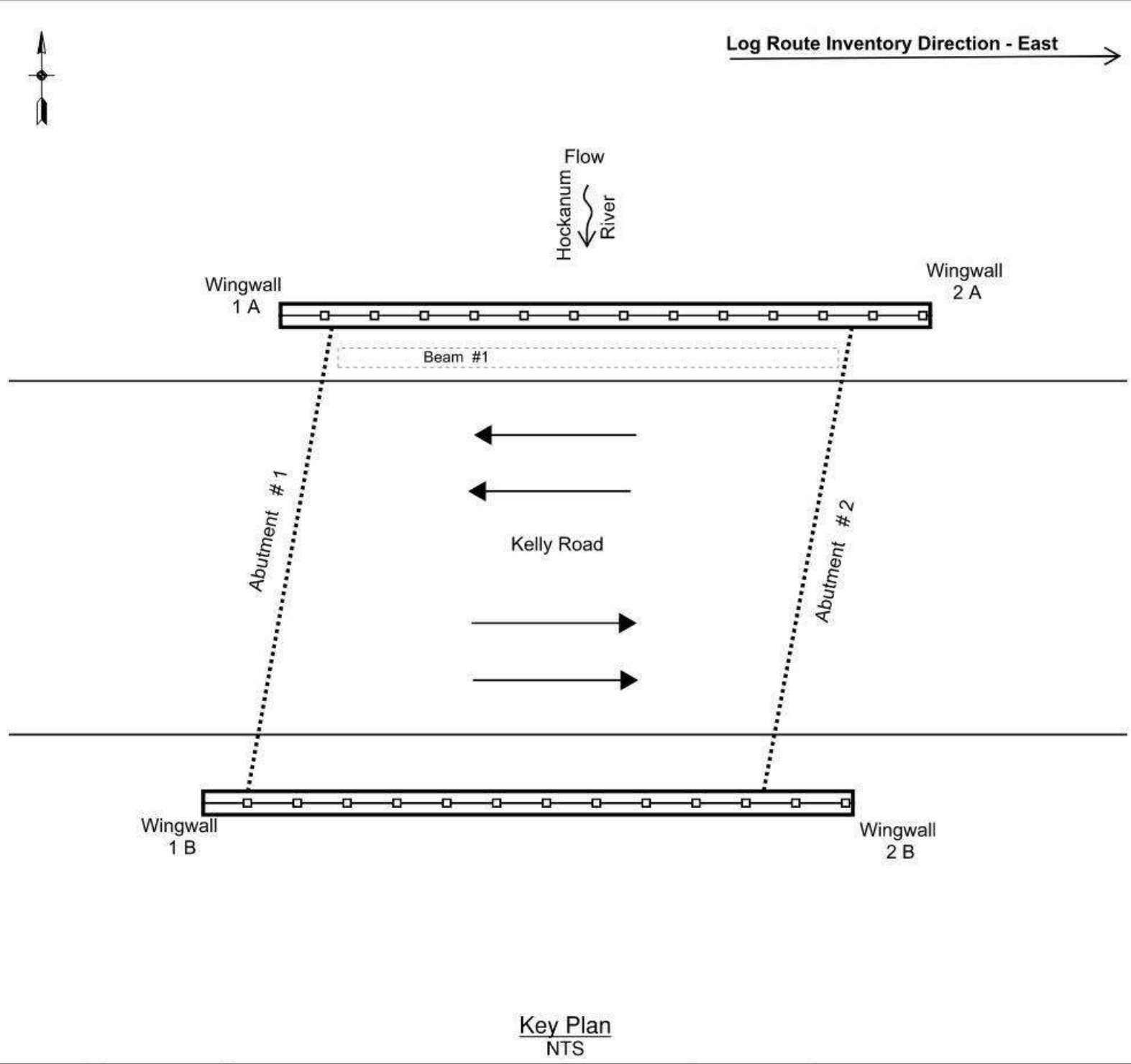
	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
12 - Reinforced Concrete Deck	Mod.	7377	sq. ft.	5765	1612	0	0
1080 - Delamination/Spall/Patched Area		12		0	12	0	0
1130 - Cracking (RC and Other)		1600		0	1600	0	0
510 - Wearing Surfaces		5512	sq. ft.	5512	0	0	0
3230 - Effectiveness (Wearing Surface)		0		0	0	0	0
109 - Prestressed Concrete Open Girder/Beam	Mod.	850	ft.	850	0	0	0
215 - Reinforced Concrete Abutment	Mod.	140	ft.	127	13	0	0
1130 - Cracking (RC and Other)		13		0	13	0	0
302 - Compression Joint Seal	Mod.	104	ft.	0	0	90	14
2320 - Seal Adhesion		90		0	0	90	0
7000 - Damage		14		0	0	0	14
310 - Elastomeric Bearing	Mod.	16	each	16	0	0	0
330 - Metal Bridge Railing	Mod.	212	ft.	209	3	0	0
7000 - Damage		3		0	3	0	0

Sketches
 Inspection type: Routine
 Inspection Date: 10/17/2023
 Inspected by: Team 3

:Bridge No 05240

Town: VERNON
 Carried: KELLY ROAD
 Crossed: HOCKANUM RIVER
 Inventory Route: Non-NHS

CREW: Team # 3	DATE: 10-07-2019	BRIDGE NO.: 05240
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Key Plan
 NTS

REVISION	DATE: 10/17/2023	CREW: Team # 3	REVISION	DATE:	CREW:
REVISION	DATE:	CREW:	REVISION	DATE:	CREW:

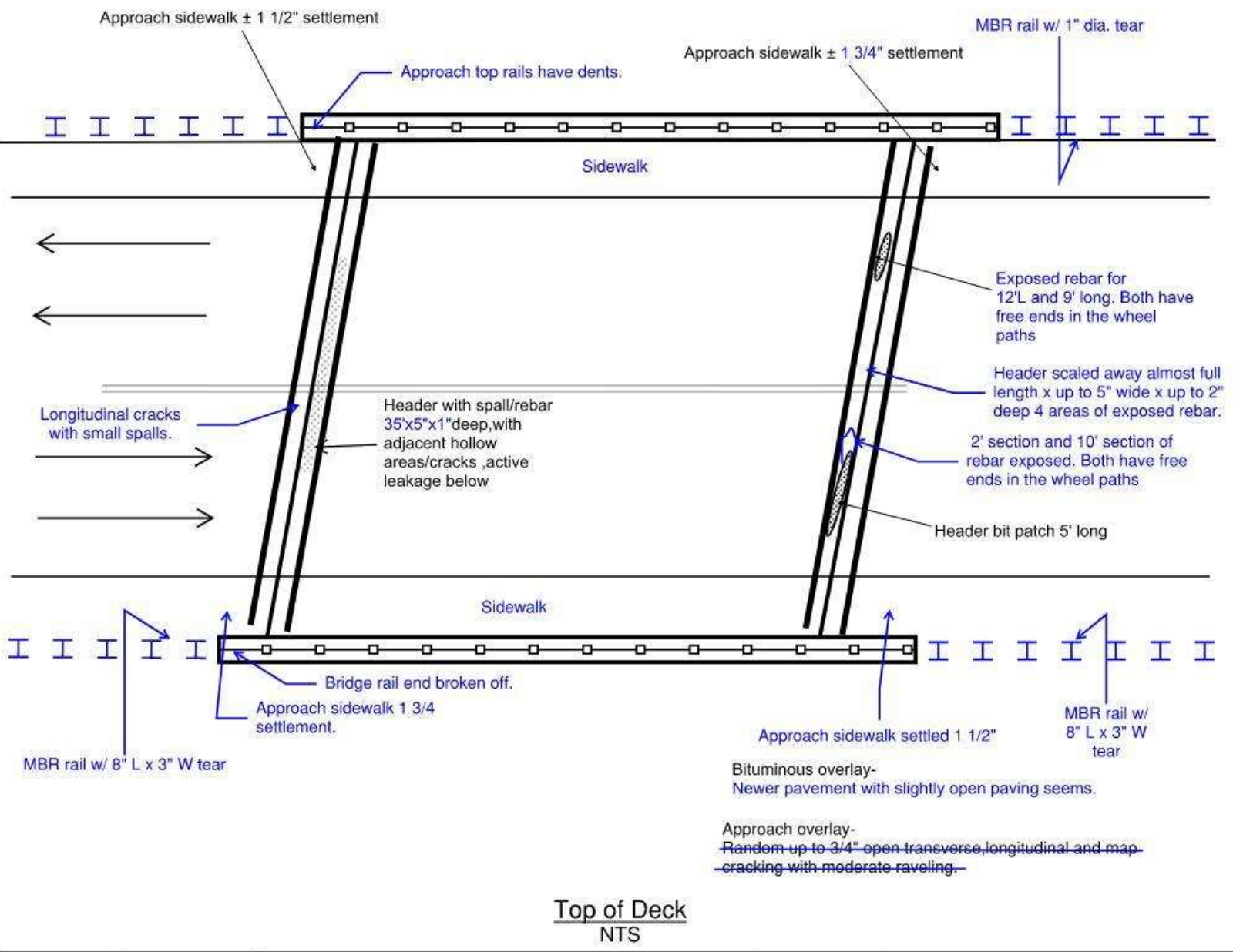
Sketches
 Inspection type: Routine
 Inspection Date: 10/17/2023
 Inspected by: Team 3

:Bridge No 05240

Town: VERNON
 Carried: KELLY ROAD
 Crossed: HOCKANUM RIVER
 Inventory Route: Non-NHS

CREW: Team # 3	DATE: 10-07-2019	BRIDGE NO.: 05240
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Log Route Inventory Direction - East →



REVISION	DATE: 10-2021	CREW: Team # 3	REVISION	DATE:	CREW:
REVISION	DATE: 10/17/2023	CREW: Team # 3	REVISION	DATE:	CREW:

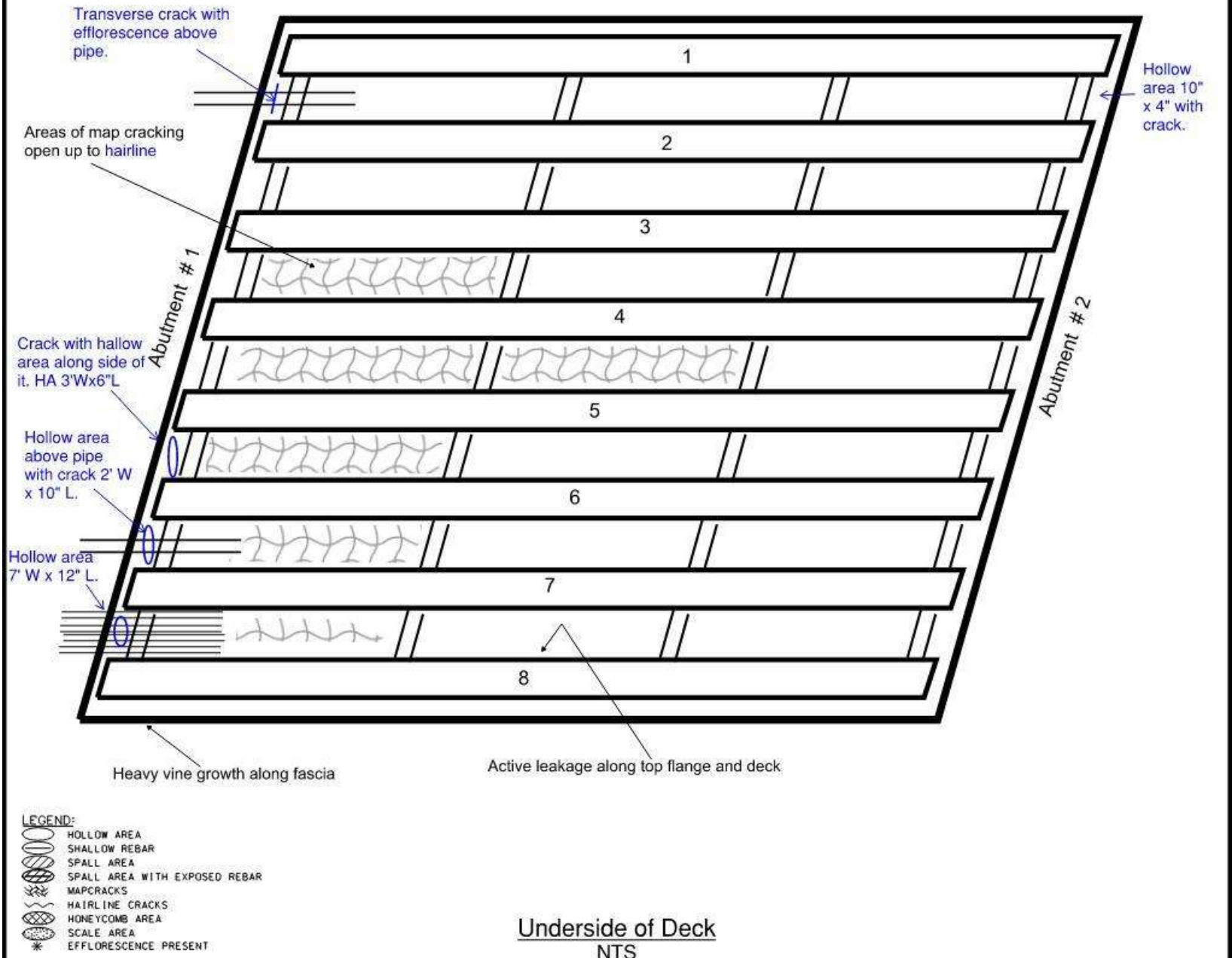
Sketches
 Inspection type: Routine
 Inspection Date: 10/17/2023
 Inspected by: Team 3

:Bridge No 05240

Town: VERNON
 Carried: KELLY ROAD
 Crossed: HOCKANUM RIVER
 Inventory Route: Non-NHS

CREW: Team # 3	DATE: 10-07-2019	BRIDGE NO.: 05240
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Log Route Inventory Direction - East →



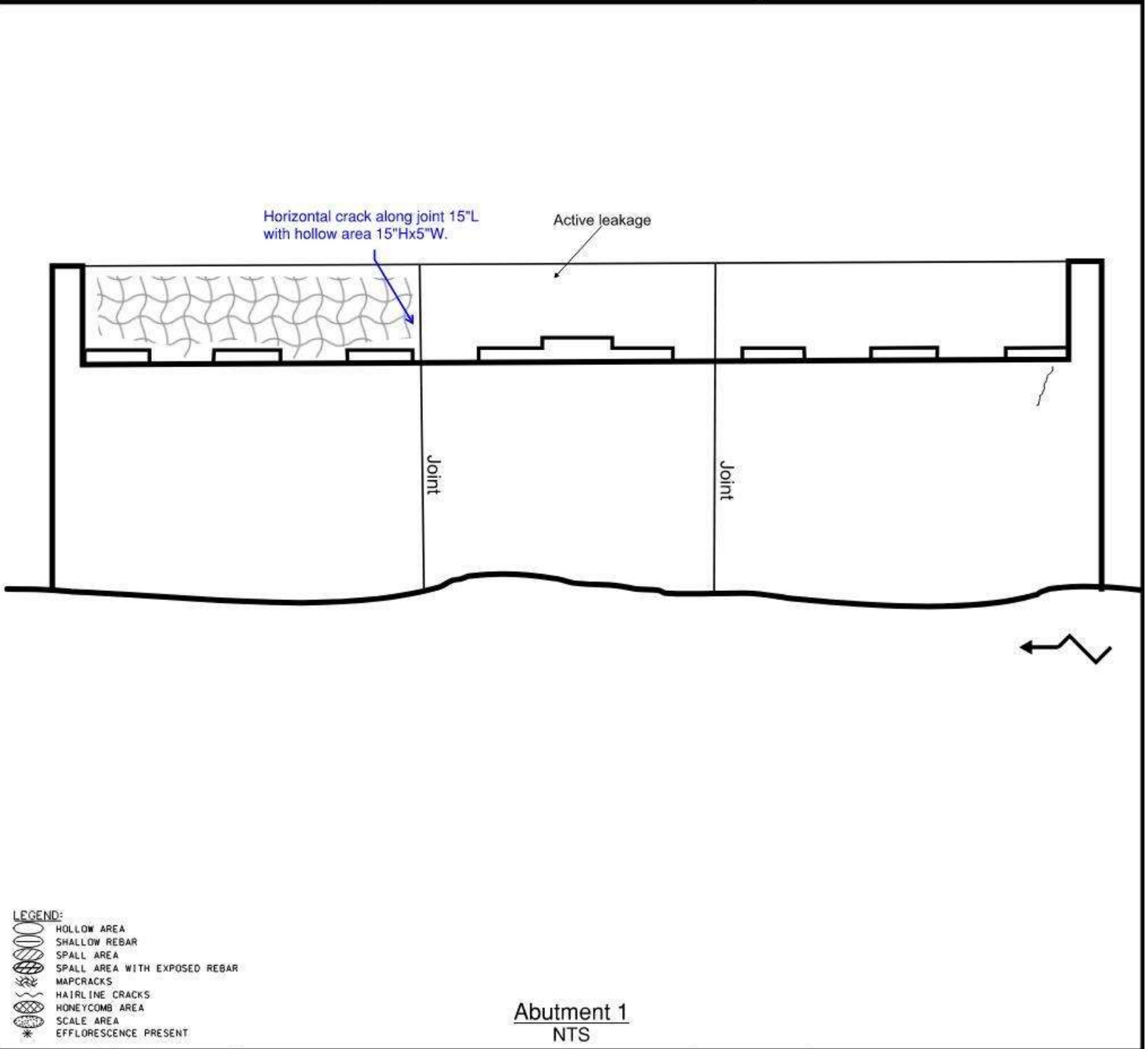
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REVISION	DATE: 10/17/2023	CREW: Team # 3	REVISION	DATE:	CREW:

Sketches
 Inspection type: Routine
 Inspection Date: 10/17/2023
 Inspected by: Team 3

:Bridge No 05240

Town: VERNON
 Carried: KELLY ROAD
 Crossed: HOCKANUM RIVER
 Inventory Route: Non-NHS

CREW: Team # 3	DATE: 10-07-2019	BRIDGE NO.: 05240
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Abutment 1
 NTS

- LEGEND:
- HOLLOW AREA
 - SHALLOW REBAR
 - SPALL AREA
 - SPALL AREA WITH EXPOSED REBAR
 - MAPCRACKS
 - HAIRLINE CRACKS
 - HONEYCOMB AREA
 - SCALE AREA
 - EFFLORESCENCE PRESENT

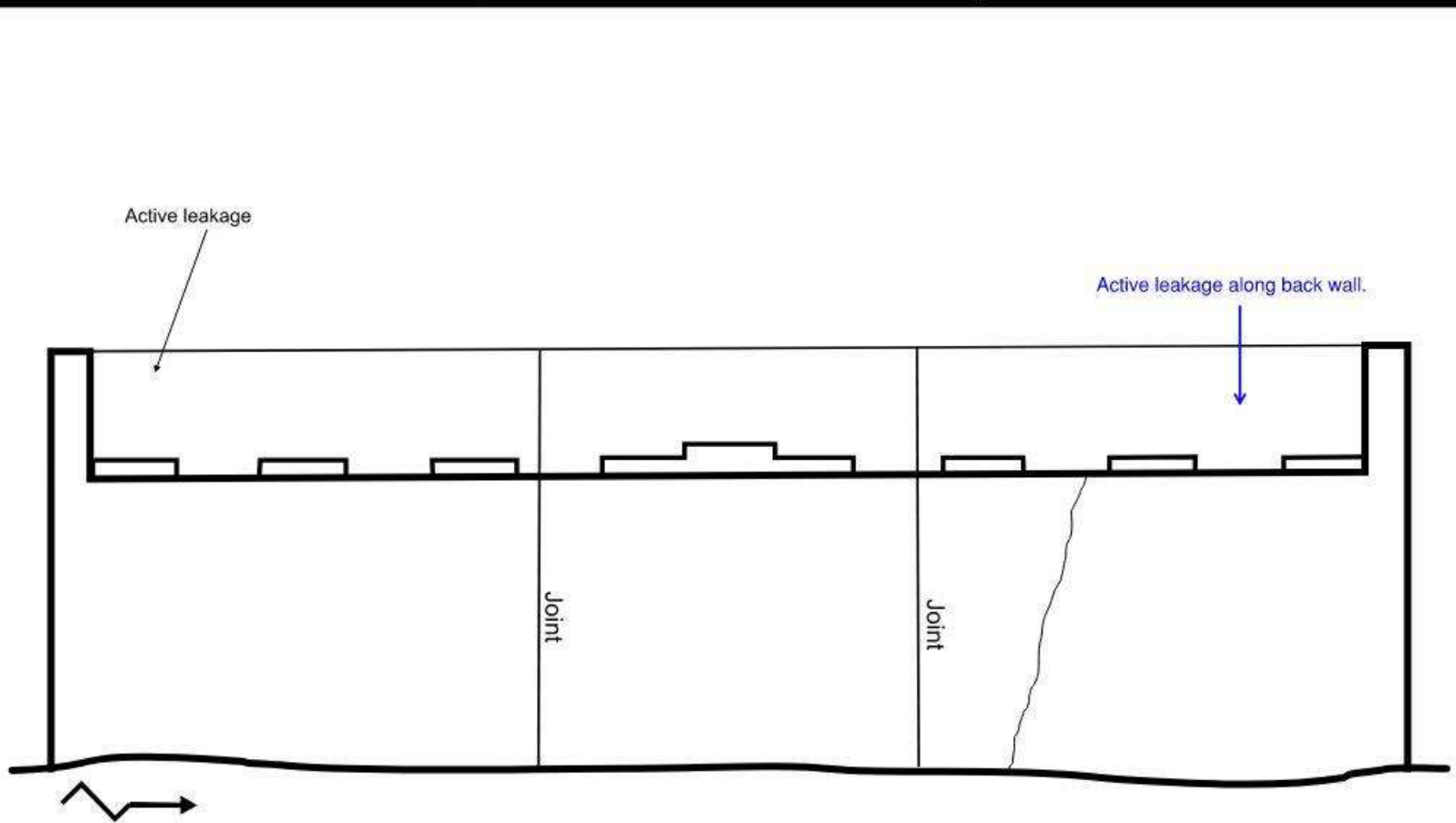
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REVISION	DATE: 10/17/2023	CREW: Team # 3	REVISION	DATE:	CREW:

Sketches
 Inspection type: Routine
 Inspection Date: 10/17/2023
 Inspected by: Team 3

:Bridge No 05240

Town: VERNON
 Carried: KELLY ROAD
 Crossed: HOCKANUM RIVER
 Inventory Route: Non-NHS

CREW: Team # 3	DATE: 10-07-2019	BRIDGE NO.: 05240
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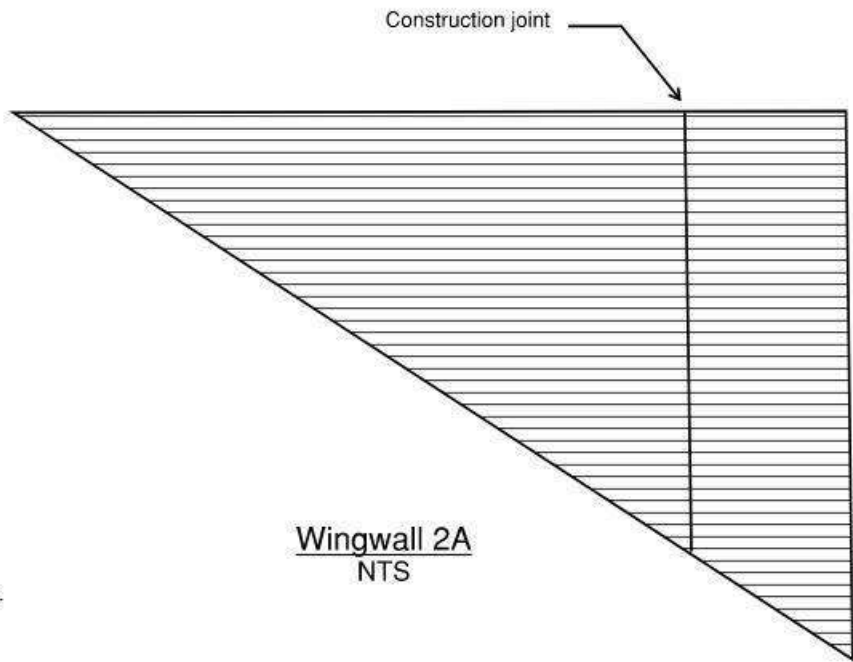
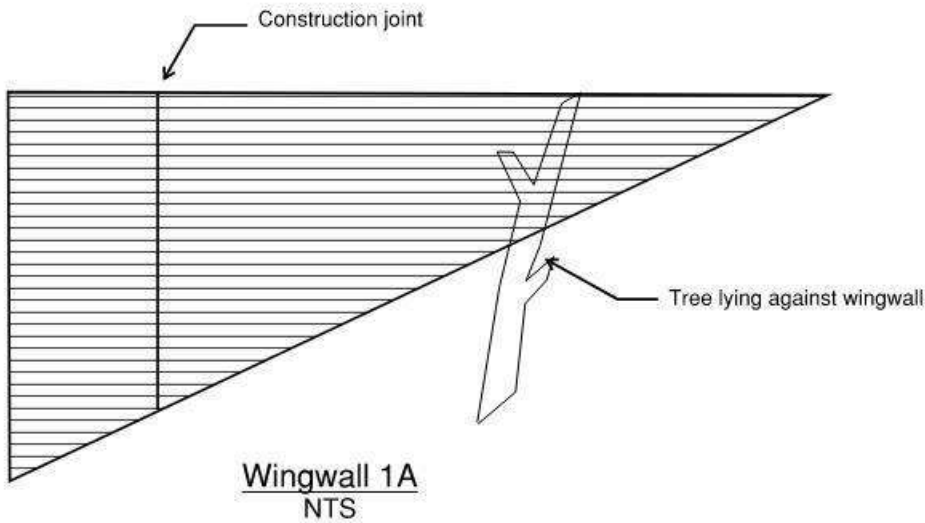


- LEGEND:
- HOLLOW AREA
 - SHALLOW REBAR
 - SPALL AREA
 - SPALL AREA WITH EXPOSED REBAR
 - MAPCRACKS
 - HAIRLINE CRACKS
 - HONEYCOMB AREA
 - SCALE AREA
 - EFFLORESCENCE PRESENT

Abutment 2
 NTS

REVISION	DATE: 10-2021	CREW: Team # 3	REVISION	DATE:	CREW:
REVISION	DATE: 10/17/2023	CREW: Team # 3	REVISION	DATE:	CREW:

CREW: Team # 3	DATE: 10-17-2023	BRIDGE NO.: 05240
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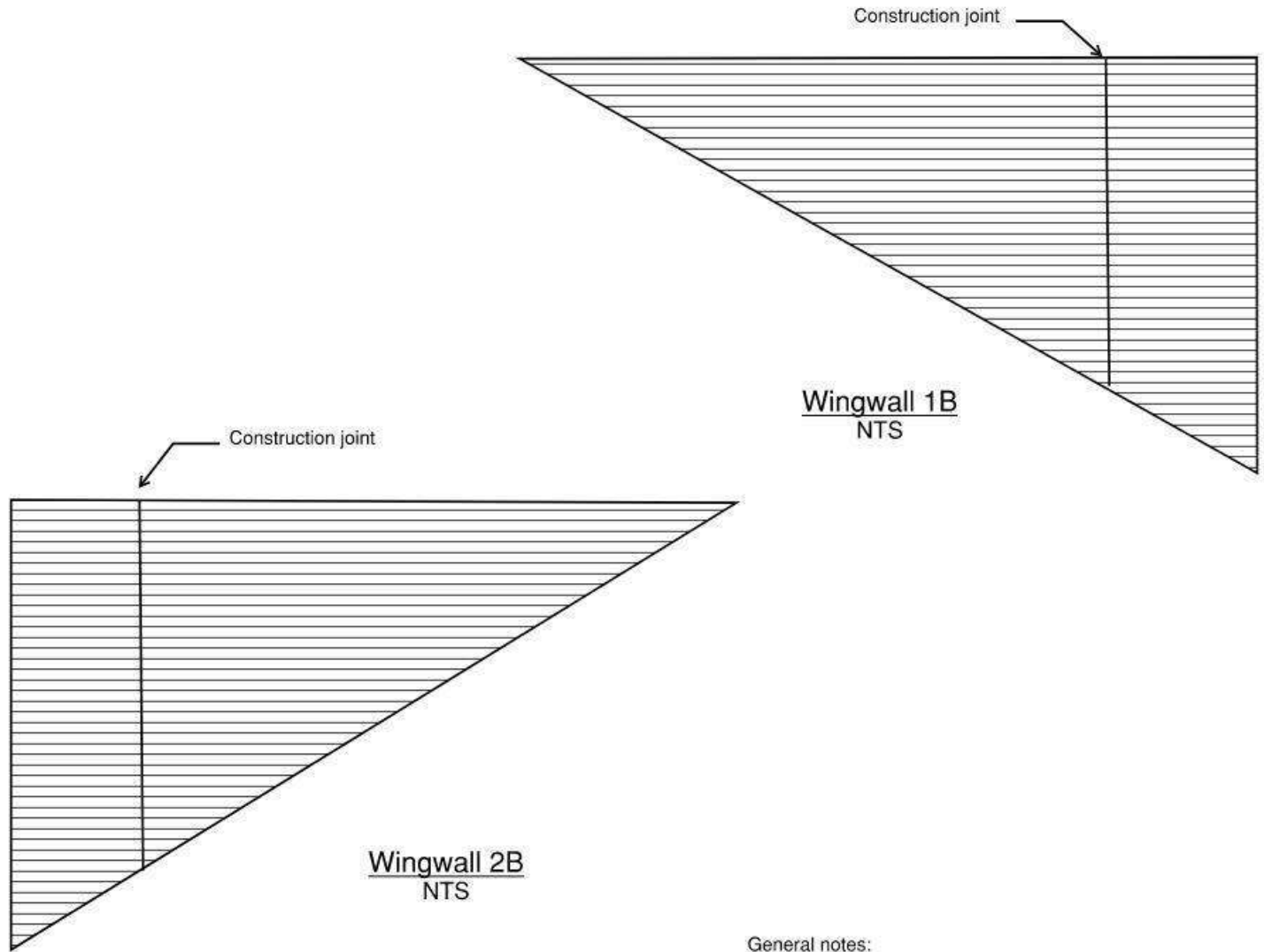
General notes:

- The ribbing has minor chipping.
- Moderate vegetation growth along wingwalls.

- LEGEND:
- HOLLOW AREA
 - SHALLOW REBAR
 - SPALL AREA
 - SPALL AREA WITH EXPOSED REBAR
 - MAPCRACKS
 - HAIRLINE CRACKS
 - HONEYCOMB AREA
 - SCALE AREA
 - EFFLORESCENCE PRESENT

REVISION	DATE:	CREW:	REVISION	DATE:	CREW:
REVISION	DATE:	CREW:	REVISION	DATE:	CREW:

CREW: Team 3	DATE: 10-17-2023	BRIDGE NO.: 05240
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General notes:
 The ribbing has minor chipping.
 Moderate vegetation growth along wingwalls.

- LEGEND:
- HOLLOW AREA
 - SHALLOW REBAR
 - SPALL AREA
 - SPALL AREA WITH EXPOSED REBAR
 - MAPCRACKS
 - HAIRLINE CRACKS
 - HONEYCOMB AREA
 - SCALE AREA
 - EFFLORESCENCE PRESENT

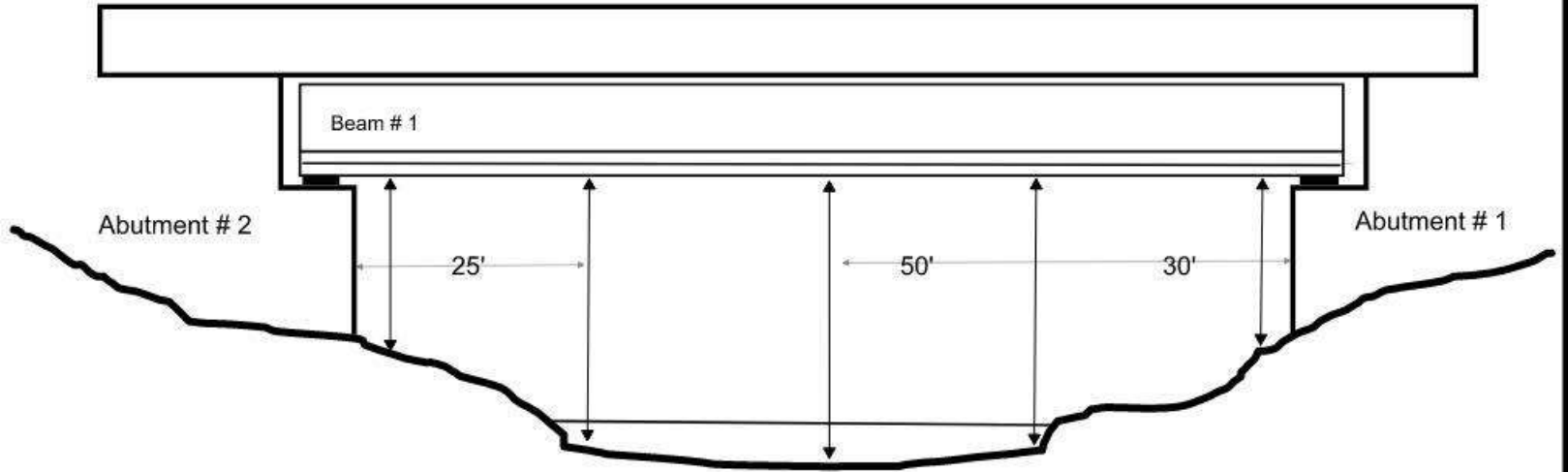
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REVISION	DATE:	CREW:	REVISION	DATE:	CREW:

Sketches
 Inspection type: Routine
 Inspection Date: 10/17/2023
 Inspected by: Team 3

:Bridge No 05240

Town: VERNON
 Carried: KELLY ROAD
 Crossed: HOCKANUM RIVER
 Inventory Route: Non-NHS

CREW: Team # 3	DATE: 10-07-2019	BRIDGE NO.: 05240
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10-07-2019	4'-11"	11'-01"	12'-00"	11'-04"	5'-04"	▼=Freeboard 11'-00"
10-25-2021	4'-11"	11'-04"	12'-00"	11'-10"	5'-02"	▼=Freeboard 10'-09"
10-17-2023	4'-11"	11'-01"	11'-11"	11'-04"	5'-02"	▼=Freeboard 10'-05"

Upstream (North) Channel Cross Section
 NTS

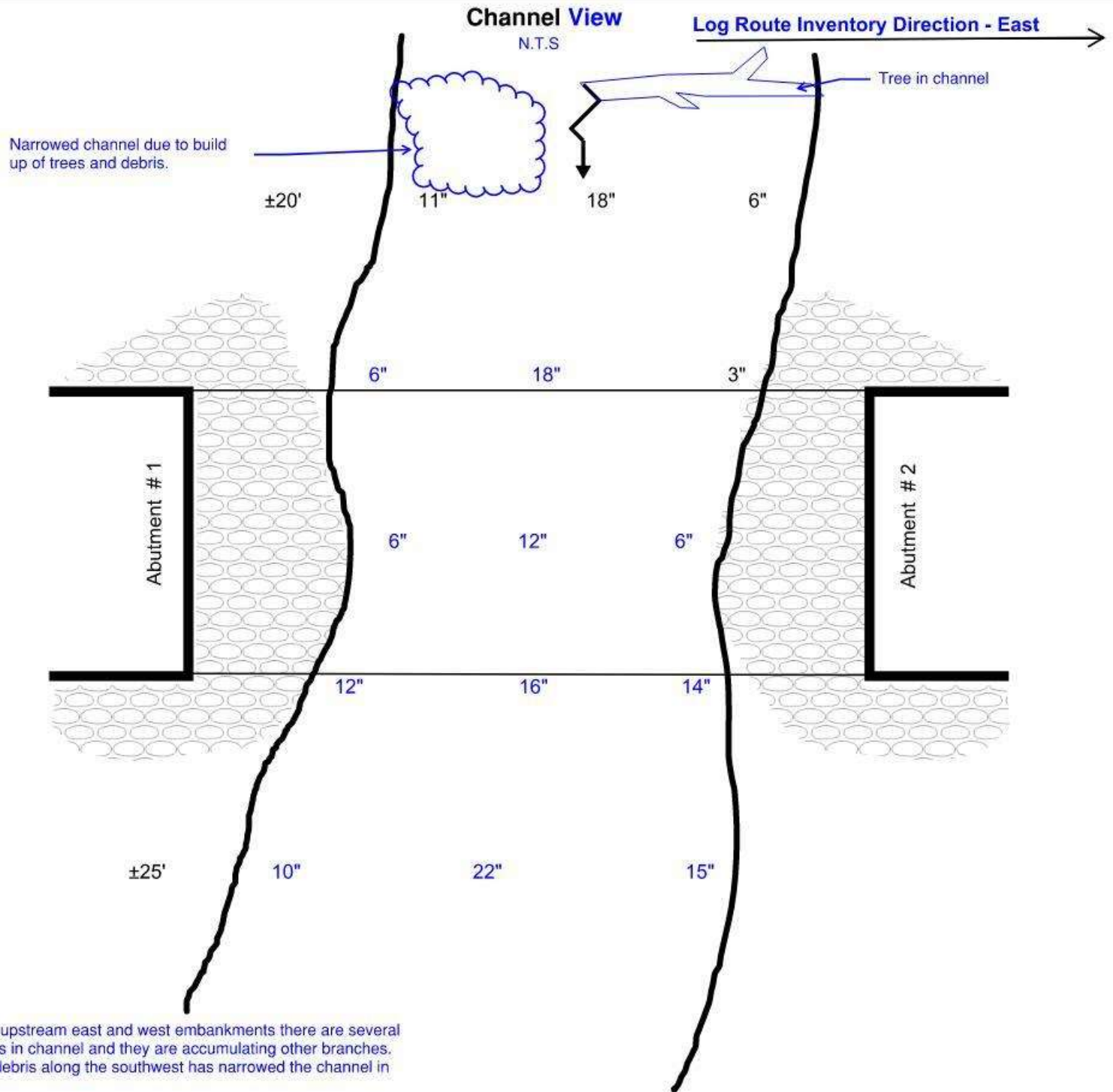
REVISION	DATE: 10-2021	CREW: Team # 3	REVISION	DATE:	CREW:
REVISION	DATE: 10/17/2023	CREW: Team # 3	REVISION	DATE:	CREW:

Sketches
 Inspection type: Routine
 Inspection Date: 10/17/2023
 Inspected by: Team 3

:Bridge No 05240

Town: VERNON
 Carried: KELLY ROAD
 Crossed: HOCKANUM RIVER
 Inventory Route: Non-NHS

CREW: Team # 3	DATE: 10-07-2019	BRIDGE NO.: 05240
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REVISION	DATE: 10-2021	CREW: Team # 3	REVISION	DATE:	CREW:
REVISION	DATE: 10/17/2023	CREW: Team # 3	REVISION	DATE:	CREW:

Form: Asset Photos
Inspection type: Routine
Inspection Date: 10/17/2023
Inspected by: Team 3

:Bridge No 05240

Town: VERNON
Carried: KELLY ROAD
Crossed: HOCKANUM RIVER
Inventory Route: Non-NHS



Photo Number: 1

Photo Taken: 10/17/2023

Outlet elevation south



Photo Number: 2

Photo Taken: 10/17/2023

Inlet elevation north

Form: Asset Photos
Inspection type: Routine
Inspection Date: 10/17/2023
Inspected by: Team 3

:Bridge No 05240

Town: VERNON
Carried: KELLY ROAD
Crossed: HOCKANUM RIVER
Inventory Route: Non-NHS



Photo Number: 3

Photo Taken: 10/17/2023

Looking westbound from east approach



Photo Number: 4

Photo Taken: 10/17/2023

Looking eastbound from west approach

Form: Asset Photos
Inspection type: Routine
Inspection Date: 10/17/2023
Inspected by: Team 3

:Bridge No 05240

Town: VERNON
Carried: KELLY ROAD
Crossed: HOCKANUM RIVER
Inventory Route: Non-NHS



Photo Number: 5

Photo Taken: 10/17/2023

General overlay



Photo Number: 6

Photo Taken: 10/17/2023

Joint over abutment 1



Photo Number: 7

Photo Taken: 10/17/2023

Joint over abutment 2



Photo Number: 8

Photo Taken: 10/17/2023

Compression seal joint header rebar is loose with free end in roadway.



Photo Number: 9

Underside from abutment 1

Photo Taken: 10/17/2023



Photo Number: 10

Typical bearing at abutment 2

Photo Taken: 10/17/2023



Photo Number: 11

Photo Taken: 10/17/2023

Typical strand on back side of beam 7 abutment 2 side



Photo Number: 12

Photo Taken: 10/17/2023

Typical bearing at abutment 1



Photo Number: 13

Photo Taken: 10/17/2023

Typical row of bearings at abutment 1



Photo Number: 14

Photo Taken: 10/17/2023

Abutment 1



Photo Number: 15

Abutment 2

Photo Taken: 10/17/2023



Photo Number: 16

Wingwall 1A

Photo Taken: 10/17/2023



Photo Number: 17

Wingwall 2A

Photo Taken: 10/17/2023



Photo Number: 18

Upstream

Photo Taken: 10/17/2023

Form: Asset Photos
Inspection type: Routine
Inspection Date: 10/17/2023
Inspected by: Team 3

:Bridge No 05240

Town: VERNON
Carried: KELLY ROAD
Crossed: HOCKANUM RIVER
Inventory Route: Non-NHS



Photo Number: 19

Downstream

Photo Taken: 10/17/2023



Photo Number: 20

Trees and limbs lying in channel upstream

Photo Taken: 10/17/2023

APPENDIX B

Wage Rates

**Minimum Rates and Classifications for
Heavy/Highway Construction**

ID#: 24-59442

**Connecticut Department of Labor
Wage and Workplace Standards**

By virtue of the authority vested in the Labor Commissioner under provisions of Section 31-53 of the General Statutes of Connecticut, as amended, the following are declared to be the prevailing rates and welfare payments and will apply only where the contract is advertised for bid within 20 days of the date on which the rates are established. Any contractor or subcontractor not obligated by agreement to pay to the welfare and pension fund shall pay this amount to each employee as part of his/her hourly wages.

Project Number:

Project Town: Vernon

State#:

FAP#:

Project: Repair and Resurfacing of Bridge No. 05240 Kelly Road over the Hockanum River

CLASSIFICATION	Hourly Rate	Benefits
1) Boilermaker	46.21	29.35
1a) Bricklayer, Cement Masons, Cement Finishers, Plasterers, Stone Masons	41.63	34.50
2) Carpenters, Piledrivermen	37.61	27.61
2a) Diver Tenders	37.61	27.61
3) Divers	46.07	27.61
03a) Millwrights	40.56	28.87
4) Painters: (Bridge Construction) Brush, Roller, Blasting (Sand, Water, etc.), Spray	56.25	25.15
4a) Painters: Brush and Roller	37.62	24.55
4b) Painters: Spray Only	40.62	24.55

As of: March 14, 2024

4c) Painters: Steel Only	39.62	24.55
4d) Painters: Blast and Spray	40.62	24.55
4e) Painters: Tanks, Tower and Swing	39.62	24.55
4f) Elevated Tanks (60 feet and above)	46.62	24.55
5) Electrician (Trade License required: E-1,2 L-5,6 C-5,6 T-1,2 L-1,2 V-1,2,7,8,9)	43.75	32.47+3% of gross wage
6) Ironworkers: Ornamental, Reinforcing, Structural, and Precast Concrete Erection	42.37	40.02 + a
7) Plumbers (Trade License required: (P-1,2,6,7,8,9 J-1,2,3,4 SP-1,2) and Pipefitters (Including HVAC Work) (Trade License required: S-1,2,3,4,5,6,7,8 B-1,2,3,4 D-1,2,3,4 G-1, G-2, G-8, G-9)	48.28	35.50
----LABORERS----		
8) Group 1: General Laborers and concrete specialist	33.5	25.59
8) Group 1a: Acetylene Burners (Hours worked with a torch)	34.5	25.59
9) Group 2: Chain saw operators, fence and guard rail erectors, pneumatic tool operators, powdermen	33.75	25.59
10) Group 3: Pipelayers	34.0	25.59
11) Group 4: Jackhammer/Pavement breaker (handheld); mason tenders (cement/concrete), catch basin builders, asphalt rakers, air track operators, block paver, curb setter and forklift operators	34.0	25.59

As of: March 14, 2024

12) Group 5: Toxic waste removal (non-mechanical systems)	35.5	25.59
13) Group 6: Blasters	35.25	25.59
Group 7: Asbestos/lead removal, non-mechanical systems (does not include leaded joint pipe)	36.5	25.59
Group 8: Traffic control signalmen	20.1	25.59
Group 9: Hydraulic Drills	34.25	25.59
Group 10: Toxic Waste Removers A or B With PPE	36.5	25.59
----LABORERS (TUNNEL CONSTRUCTION, FREE AIR). Shield Drive and Liner Plate Tunnels in Free Air.----		
13a) Miners, Motormen, Mucking Machine Operators, Nozzle Men, Grout Men, Shaft & Tunnel Steel & Rodmen, Shield & Erector, Arm Operator, Cable Tenders	35.73	25.59 + a
13b) Brakemen, Trackmen, Miners' Helpers and all other men	34.76	25.59 + a
----CLEANING, CONCRETE AND CAULKING TUNNEL----		
14) Concrete Workers, Form Movers, and Strippers	34.76	25.59 + a
15) Form Erectors	35.09	25.59 + a
----ROCK SHAFT LINING, CONCRETE, LINING OF SAME AND TUNNEL IN FREE AIR:----		

As of: March 14, 2024

16) Brakemen, Trackmen, Tunnel Laborers, Shaft Laborers, Miners Helpers	34.76	25.59 + a
17) Laborers Topside, Cage Tenders, Bellman	34.65	25.59 + a
18) Miners	35.73	25.59 + a
----TUNNELS, CAISSON AND CYLINDER WORK IN COMPRESSED AIR: ----		
18a) Blaster	42.22	25.59 + a
19) Brakemen, Trackmen, Groutman, Laborers, Outside Lock Tender, Gauge Tenders	42.02	25.59 + a
20) Change House Attendants, Powder Watchmen, Top on Iron Bolts	40.04	25.59 + a
21) Mucking Machine Operator, Grout Boss, Track Boss	42.81	25.59 + a
----TRUCK DRIVERS----(*see note below)		
Two Axle Trucks, Helpers	32.16	30.51 + a
Three Axle Trucks; Two Axle Ready Mix	32.27	30.51 + a
Three Axle Ready Mix	32.33	30.51 + a
Four Axle Trucks	32.39	30.51 + a
Four Axle Ready-Mix	32.44	30.51 + a

As of: March 14, 2024

Heavy Duty Trailer (40 tons and over)	34.66	30.51 + a
Specialized earth moving equipment other than conventional type on-the road trucks and semi-trailer (including Euclids)	32.44	30.51 + a
Heavy Duty Trailer (up to 40 tons)	33.39	30.51 + a
Snorkle Truck	32.54	30.51 + a
----POWER EQUIPMENT OPERATORS----		
Group 1: Crane Handling or Erecting Structural Steel or Stone, Hoisting Engineer (2 drums or over). (Trade License Required)	52.78	27.80 + a
Group 1a: Front End Loader (7 cubic yards or over); Work Boat 26 ft. and over.	48.37	27.80 + a
Group 2: Cranes (100 ton rate capacity and over); Bauer Drill/Caisson. (Trade License Required)	52.41	27.80 + a
Group 2a: Cranes (under 100 ton rated capacity).	51.51	27.80 + a
Group 2b: Excavator over 2 cubic yards; Pile Driver (\$3.00 premium when operator controls hammer).	48.0	27.80 + a
Group 3: Excavator; Gradall; Master Mechanic; Hoisting Engineer (all types of equipment where a drum and cable are used to hoist or drag material regardless of motive power of operation), Rubber Tire Excavator (Drott-1085 or similar); Grader Operator; Bulldozer Fine Grade (slopes, shaping, laser or GPS, etc.). (Trade License Required)	47.1	27.80 + a
Group 4: Trenching Machines; Lighter Derrick; CMI Machine or Similar; Koehring Loader (Skooper).	46.64	27.80 + a
Group 5: Specialty Railroad Equipment; Asphalt Paver; Asphalt Spreader; Asphalt Reclaiming Machine; Line Grinder; Concrete Pumps;	45.92	27.80 + a

As of: March 14, 2024

Drills with Self Contained Power Units; Boring Machine; Post Hole Digger; Auger; Pounder; Well Digger; Milling Machine (over 24" mandrel)

Group 5 continued: Side Boom; Combination Hoe and Loader; Directional Driller.	45.92	27.80 + a
Group 6: Front End Loader (3 up to 7 cubic yards); Bulldozer (rough grade dozer).	45.55	27.80 + a
Group 7: Asphalt Roller; Concrete Saws and Cutters (ride on types); Vermeer Concrete Cutter; Stump Grinder; Scraper; Snooper; Skidder; Milling Machine (24" and under Mandrel)	45.14	27.80 + a
Group 8: Mechanic, Grease Truck Operator, Hydroblaster, Barrier Mover, Power Stone Spreader; Welder; Work Boat under 26 ft.; Transfer Machine.	44.67	27.80 + a
Group 9: Front End Loader (under 3 cubic yards), Skid Steer Loader regardless of attachments (Bobcat or Similar); Fork Lift, Power Chipper; Landscape Equipment (including hydroseeder), Vacuum Excavation Truck and Hydrovac Excavation Truck (27 HG pressure or greater).	44.14	27.80 + a
Group 10: Vibratory Hammer, Ice Machine, Diesel and Air Hammer, etc.	41.69	27.80 + a
Group 11: Conveyor, Earth Roller; Power Pavement Breaker (whiphammer), Robot Demolition Equipment.	41.69	27.80 + a
Group 12: Wellpoint Operator.	41.61	27.80 + a
Group 13: Compressor Battery Operator.	40.92	27.80 + a
Group 14: Elevator Operator; Tow Motor Operator (Solid Tire No Rough Terrain).	39.54	27.80 + a

As of: March 14, 2024

Group 15: Generator Operator; Compressor Operator; Pump Operator; Welding Machine Operator; Heater Operator.	39.06	27.80 + a
Group 16: Maintenance Engineer.	38.28	27.80 + a
Group 17: Portable Asphalt Plant Operator; Portable Crusher Plant Operator; Portable Concrete Plant Operator., Portable Grout Plant Operator, Portable Water Filtration Plant Operator.	43.46	27.80 + a
Group 18: Power Safety Boat; Vacuum Truck; Zim Mixer; Sweeper; (minimum for any job requiring CDL license).	40.54	27.80 + a

****NOTE: SEE BELOW**

----LINE CONSTRUCTION----(Railroad Construction and Maintenance)----

20) Lineman, Cable Splicer, Technician	48.36	16.92
21) Heavy Equipment Operator	42.26	6.5% + 19.88
22) Equipment Operator, Tractor Trailer Driver, Material Men	40.96	6.5% + 19.21
23) Driver Groundmen	26.5	6.5% + 9.00
23a) Truck Driver	40.96	6.5% + 17.76

----LINE CONSTRUCTION----

24) Driver Groundmen	30.92	6.5% + 9.70
25) Groundmen	22.67	6.5% + 6.20

As of: March 14, 2024

26) Heavy Equipment Operators	37.1	6.5% + 10.70
27) Linemen, Cable Splicers, Dynamite Men	41.22	6.5% + 12.20
28) Material Men, Tractor Trailer Drivers, Equipment Operators	35.04	6.5% + 10.45

Welders: Rate for craft to which welding is incidental.

**Note: Hazardous waste removal work receives additional \$1.25 per hour for truck drivers.*

***Note: Hazardous waste premium \$3.00 per hour over classified rate*

Crane with 150 ft. boom (including jib) - \$1.50 extra

Crane with 200 ft. boom (including jib) - \$2.50 extra

Crane with 250 ft. boom (including jib) - \$5.00 extra

Crane with 300 ft. boom (including jib) - \$7.00 extra

Crane with 400 ft. boom (including jib) - \$10.00 extra

All classifications that indicate a percentage of the fringe benefits must be calculated at the percentage rate times the "base hourly rate".

Apprentices duly registered under the Commissioner of Labor's regulations on "Work Training Standards for Apprenticeship and Training Programs" Section 31-51-d-1 to 12, are allowed to be paid the appropriate percentage of the prevailing journeymen hourly base and the full fringe benefit rate, providing the work site ratio shall not be less than one full-time journeyman instructing and supervising the work of each apprentice in a specific trade.

~~Connecticut General Statute Section 31-55a: Annual Adjustments to wage rates by contractors doing state work
~~

The Prevailing wage rates applicable to this project are subject to annual adjustments each July 1st for the duration of the project.

Each contractor shall pay the annual adjusted prevailing wage rate that is in effect each July 1st, as posted by the Department of Labor.

It is the contractor's responsibility to obtain the annual adjusted prevailing wage rate increases directly from the Department of Labor's website.

The annual adjustments will be posted on the Department of Labor's Web page: www.ct.gov/dol. For those without internet access, please contact the division listed below.

The Department of Labor will continue to issue the initial prevailing wage rate schedule to the Contracting Agency for the project.

All subsequent annual adjustments will be posted on our Web Site for contractor access.

Contracting Agencies are under no obligation pursuant to State labor law to pay any increase due to the annual adjustment provision.

Effective October 1, 2005 - Public Act 05-50: any person performing the work of any mechanic, laborer, or worker shall be paid prevailing wage

All Person who perform work ON SITE must be paid prevailing wage for the appropriate mechanic, laborer, or worker classification.

All certified payrolls must list the hours worked and wages paid to All Persons who perform work ON SITE regardless of their ownership i.e.: (Owners, Corporate Officers, LLC Members, Independent Contractors, et. al)

Reporting and payment of wages is required regardless of any contractual relationship alleged to exist between the contractor and such person.

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

Please direct any questions which you may have pertaining to classification of work and payment of prevailing wages to the Wage and Workplace Standards Division, telephone (860)263-6790.



Opportunity * Guidance * Support



THIS IS A PUBLIC WORKS PROJECT

Covered by the

PREVAILING WAGE LAW

CT General Statutes Section 31-53

**If you have QUESTIONS regarding your wages
CALL (860) 263-6790**

Section 31-55 of the CT State Statutes requires every contractor or subcontractor performing work for the state to post in a prominent place the prevailing wages as determined by the Labor Commissioner.

Sec. 31-53b. Construction safety and health course. New miner training program. Proof of completion required for mechanics, laborers and workers on public works projects. Enforcement. Regulations. Exceptions. (a) Each contract for a public works project entered into on or after July 1, 2009, by the state or any of its agents, or by any political subdivision of the state or any of its agents, described in subsection (g) of section 31-53, shall contain a provision requiring that each contractor furnish proof with the weekly certified payroll form for the first week each employee begins work on such project that any person performing the work of a mechanic, laborer or worker pursuant to the classifications of labor under section 31-53 on such public works project, pursuant to such contract, has completed a course of at least ten hours in duration in construction safety and health approved by the federal Occupational Safety and Health Administration or, has completed a new miner training program approved by the Federal Mine Safety and Health Administration in accordance with 30 CFR 48 or, in the case of telecommunications employees, has completed at least ten hours of training in accordance with 29 CFR 1910.268.

(b) Any person required to complete a course or program under subsection (a) of this section who has not completed the course or program shall be subject to removal from the worksite if the person does not provide documentation of having completed such course or program by the fifteenth day after the date the person is found to be in noncompliance. The Labor Commissioner or said commissioner's designee shall enforce this section.

(c) Not later than January 1, 2009, the Labor Commissioner shall adopt regulations, in accordance with the provisions of chapter 54, to implement the provisions of subsections (a) and (b) of this section. Such regulations shall require that the ten-hour construction safety and health courses required under subsection (a) of this section be conducted in accordance with federal Occupational Safety and Health Administration Training Institute standards, or in accordance with Federal Mine Safety and Health Administration Standards or in accordance with 29 CFR 1910.268, as appropriate. The Labor Commissioner shall accept as sufficient proof of compliance with the provisions of subsection (a) or (b) of this section a student course completion card issued by the federal Occupational Safety and Health Administration Training Institute, or such other proof of compliance said commissioner deems appropriate, dated no earlier than five years before the commencement date of such public works project.

(d) This section shall not apply to employees of public service companies, as defined in section 16-1, or drivers of commercial motor vehicles driving the vehicle on the public works project and delivering or picking up cargo from public works projects provided they perform no labor relating to the project other than the loading and unloading of their cargo.

(P.A. 06-175, S. 1; P.A. 08-83, S. 1.)

History: P.A. 08-83 amended Subsec. (a) by making provisions applicable to public works project contracts entered into on or after July 1, 2009, replacing provision re total cost of work with reference to Sec. 31-53(g), requiring proof in certified payroll form that new mechanic, laborer or worker has completed a 10-hour or more construction safety course and adding provision re new miner training program, amended Subsec. (b) by substituting "person" for "employee" and adding "or program", amended Subsec. (c) by adding "or in accordance with Federal Mine Safety and Health Administration Standards" and setting new deadline of January 1, 2009, deleted former Subsec. (d) re "public building", added new Subsec. (d) re exemptions for public service company employees and delivery drivers who perform no labor other than delivery and made conforming and technical changes, effective January 1, 2009.

Informational Bulletin

THE 10-HOUR OSHA CONSTRUCTION SAFETY AND HEALTH COURSE

(applicable to public building contracts entered into *on or after July 1, 2007*, where the total cost of all work to be performed is at least \$100,000)

- (1) This requirement was created by Public Act No. 06-175, which is codified in Section 31-53b of the Connecticut General Statutes (pertaining to the prevailing wage statutes);
- (2) The course is required for public building construction contracts (projects funded in whole or in part by the state or any political subdivision of the state) entered into on or after July 1, 2007;
- (3) It is required of private employees (not state or municipal employees) and apprentices who perform manual labor for a general contractor or subcontractor on a public building project where the total cost of all work to be performed is at least \$100,000;
- (4) The ten-hour construction course pertains to the ten-hour Outreach Course conducted in accordance with federal OSHA Training Institute standards, and, for telecommunications workers, a ten-hour training course conducted in accordance with federal OSHA standard, 29 CFR 1910.268;
- (5) The internet website for the federal OSHA Training Institute is http://www.osha.gov/fso/ote/training/edcenters/fact_sheet.html;
- (6) The statutory language leaves it to the contractor and its employees to determine who pays for the cost of the ten-hour Outreach Course;
- (7) Within 30 days of receiving a contract award, a general contractor must furnish proof to the Labor Commissioner that all employees and apprentices performing manual labor on the project will have completed such a course;
- (8) Proof of completion may be demonstrated through either: (a) the presentation of a *bona fide* student course completion card issued by the federal OSHA Training Institute; *or* (2) the presentation of documentation provided to an employee by a trainer certified by the Institute pending the actual issuance of the completion card;
- (9) Any card with an issuance date more than 5 years prior to the commencement date of the construction project shall not constitute proof of compliance;

- (10) Each employer shall affix a copy of the construction safety course completion card to the certified payroll submitted to the contracting agency in accordance with Conn. Gen. Stat. § 31-53(f) on which such employee's name first appears;
- (11) Any employee found to be in non-compliance shall be subject to removal from the worksite if such employee does not provide satisfactory proof of course completion to the Labor Commissioner by the fifteenth day after the date the employee is determined to be in noncompliance;
- (12) Any such employee who is determined to be in noncompliance may continue to work on a public building construction project for a maximum of fourteen consecutive calendar days while bringing his or her status into compliance;
- (13) The Labor Commissioner may make complaint to the prosecuting authorities regarding any employer or agent of the employer, or officer or agent of the corporation who files a false certified payroll with respect to the status of an employee who is performing manual labor on a public building construction project;
- (14) The statute provides the minimum standards required for the completion of a safety course by manual laborers on public construction contracts; any contractor can exceed these minimum requirements; and
- (15) Regulations clarifying the statute are currently in the regulatory process, and shall be posted on the CTDOL website as soon as they are adopted in final form.
- (16) Any questions regarding this statute may be directed to the Wage and Workplace Standards Division of the Connecticut Labor Department via the internet website of <http://www.ctdol.state.ct.us/wgwkstnd/wgemenu.htm>; or by telephone at (860)263-6790.

THE ABOVE INFORMATION IS PROVIDED EXCLUSIVELY AS AN EDUCATIONAL RESOURCE, AND IS NOT INTENDED AS A SUBSTITUTE FOR LEGAL INTERPRETATIONS WHICH MAY ULTIMATELY ARISE CONCERNING THE CONSTRUCTION OF THE STATUTE OR THE REGULATIONS.

November 29, 2006

Notice
To All Mason Contractors and Interested Parties
Regarding Construction Pursuant to Section 31-53 of the
Connecticut General Statutes (Prevailing Wage)

The Connecticut Labor Department Wage and Workplace Standards Division is empowered to enforce the prevailing wage rates on projects covered by the above referenced statute.

Over the past few years the Division has withheld enforcement of the rate in effect for workers who operate a forklift on a prevailing wage rate project due to a potential jurisdictional dispute.

The rate listed in the schedules and in our Occupational Bulletin (see enclosed) has been as follows:

Forklift Operator:

- **Laborers (Group 4) Mason Tenders** - operates forklift solely to assist a mason to a maximum height of nine feet only.
- **Power Equipment Operator (Group 9)** - operates forklift to assist any trade and to assist a mason to a height over nine feet.

The U.S. Labor Department conducted a survey of rates in Connecticut but it has not been published and the rate in effect remains as outlined in the above Occupational Bulletin.

Since this is a classification matter and not one of jurisdiction, effective January 1, 2007 the Connecticut Labor Department will enforce the rate on each schedule in accordance with our statutory authority.

Your cooperation in filing appropriate and accurate certified payrolls is appreciated.

STATUTE 31-55a

- SPECIAL NOTICE -

To: All State and Political Subdivisions, Their Agents, and Contractors

Connecticut General Statute 31-55a - Annual adjustments to wage rates by contractors doing state work.

Each contractor that is awarded a contract on or after October 1, 2002, for (1) the construction of a state highway or bridge that falls under the provisions of section 31-54 of the general statutes, or (2) the construction, remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project that falls under the provisions of section 31-53 of the general statutes shall contact the Labor Commissioner on or before July first of each year, for the duration of such contract, to ascertain the prevailing rate of wages on an hourly basis and the amount of payment or contributions paid or payable on behalf of each mechanic, laborer or worker employed upon the work contracted to be done, and shall make any necessary adjustments to such prevailing rate of wages and such payment or contributions paid or payable on behalf of each such employee, effective each July first.

- The prevailing wage rates applicable to any contract or subcontract awarded on or after October 1, 2002 are subject to annual adjustments each July 1st for the duration of any project which was originally advertised for bids on or after October 1, 2002.
- Each contractor affected by the above requirement shall pay the annual adjusted prevailing wage rate that is in effect each July 1st, as posted by the Department of Labor.
- It is the **contractor's** responsibility to obtain the annual adjusted prevailing wage rate increases directly from the Department of Labor's Web Site. The annual adjustments will be posted on the Department of Labor Web page: www.ctdol.state.ct.us. For those without internet access, please contact the division listed below.
- The Department of Labor will continue to issue the initial prevailing wage rate schedule to the Contracting Agency for the project. All subsequent annual adjustments will be posted on our Web Site for contractor access.


Any questions should be directed to the Contract Compliance Unit, Wage and Workplace Standards Division, Connecticut Department of Labor, 200 Folly Brook Blvd., Wethersfield, CT 06109 at (860)263-6790.

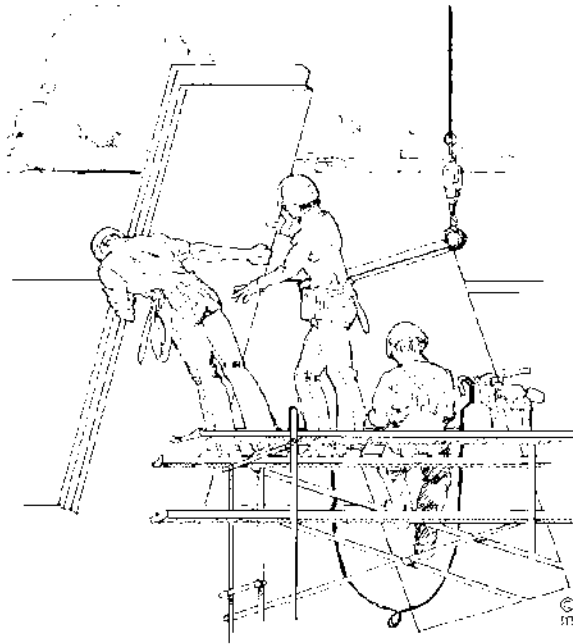
~NOTICE~

TO ALL CONTRACTING AGENCIES

Please be advised that Connecticut General Statutes Section 31-53, requires the contracting agency to certify to the Department of Labor, the total dollar amount of work to be done in connection with such public works project, regardless of whether such project consists of one or more contracts.

Please find the attached “Contracting Agency Certification Form” to be completed and returned to the Department of Labor, Wage and Workplace Standards Division, Public Contract Compliance Unit.

 Inquiries can be directed to (860)263-6543.



CONNECTICUT DEPARTMENT OF LABOR
WAGE AND WORKPLACE STANDARDS DIVISION
CONTRACT COMPLIANCE UNIT

CONTRACTING AGENCY CERTIFICATION FORM

I, _____, acting in my official capacity as _____,
authorized representative title

for _____, located at _____,
contracting agency address

do hereby certify that the total dollar amount of work to be done in connection with
_____, located at _____,
project name and number address

shall be \$_____, which includes all work, regardless of whether such project
consists of one or more contracts.

CONTRACTOR INFORMATION

Name: _____

Address: _____

Authorized Representative: _____

Approximate Starting Date: _____

Approximate Completion Date: _____

Signature

Date

Return To: Connecticut Department of Labor
Wage & Workplace Standards Division
Contract Compliance Unit
200 Folly Brook Blvd.
Wethersfield, CT 06109

Date Issued: _____

CONNECTICUT DEPARTMENT OF LABOR
WAGE AND WORKPLACE STANDARDS DIVISION

CONTRACTORS WAGE CERTIFICATION FORM
Construction Manager at Risk/General Contractor/Prime Contractor

I, _____ of _____
Officer, Owner, Authorized Rep. Company Name

do hereby certify that the _____
Company Name

Street

City

and all of its subcontractors will pay all workers on the

Project Name and Number

Street and City

the wages as listed in the schedule of prevailing rates required for such project (a copy of which is attached hereto).

Signed

Subscribed and sworn to before me this _____ day of _____, _____.

Notary Public

Return to:

Connecticut Department of Labor
Wage & Workplace Standards Division
200 Folly Brook Blvd.
Wethersfield, CT 06109

Rate Schedule Issued (Date): _____

[New] In accordance with Section 31-53b(a) of the C.G.S. each contractor shall provide a copy of the OSHA 10 Hour Construction Safety and Health Card for each employee, to be attached to the first certified payroll on the project.

In accordance with Connecticut General Statutes, 31-53 Certified Payrolls with a statement of compliance shall be submitted monthly to the contracting agency.											PAYROLL CERTIFICATION FOR PUBLIC WORKS PROJECTS										Connecticut Department of Labor Wage and Workplace Standards Division 200 Folly Brook Blvd. Wethersfield, CT 06109				
CONTRACTOR NAME AND ADDRESS:											SUBCONTRACTOR NAME & ADDRESS						WORKER'S COMPENSATION INSURANCE CARRIER								
PAYROLL NUMBER		Week-Ending Date		PROJECT NAME & ADDRESS							Total ST Hours		BASE HOURLY RATE		TYPE OF FRINGE BENEFITS Per Hour 1 through 6 (see back)		GROSS PAY FOR ALL WORK PERFORMED THIS WEEK		TOTAL DEDUCTIONS				GROSS PAY FOR THIS PREVAILING RATE JOB		CHECK # AND NET PAY
PERSON/WORKER, ADDRESS and SECTION	APPR RATE %	MALE/FEMALE AND RACE*	WORK CLASSIFICATION	DAY AND DATE						Total O/T Hours	TOTAL FRINGE BENEFIT PLAN CASH	FICA	FEDERAL WITH-HOLDING	STATE WITH-HOLDING	LIST OTHER	GROSS PAY FOR THIS PREVAILING RATE JOB	CHECK # AND NET PAY								
				S	M	T	W	TH	F									S	HOURS WORKED EACH DAY						
Trade License Type & Number - OSHA 10 Certification Number																									

12/9/2013 *IF REQUIRED
WWS-CPI

*SEE REVERSE SIDE

PAGE NUMBER ____ OF

***FRINGE BENEFITS EXPLANATION (P):**

Bona fide benefits paid to approved plans, funds or programs, except those required by Federal or State Law (unemployment tax, worker’s compensation, income taxes, etc.).

Please specify the type of benefits provided:

- 1) Medical or hospital care _____ 4) Disability _____
- 2) Pension or retirement _____ 5) Vacation, holiday _____
- 3) Life Insurance _____ 6) Other (please specify) _____

CERTIFIED STATEMENT OF COMPLIANCE

For the week ending date of _____,

I, _____ of _____, (hereafter known as Employer) in my capacity as _____ (title) do hereby certify and state:

Section A:

1. All persons employed on said project have been paid the full weekly wages earned by them during the week in accordance with Connecticut General Statutes, section 31-53, as amended. Further, I hereby certify and state the following:

- a) The records submitted are true and accurate;
- b) The rate of wages paid to each mechanic, laborer or workman and the amount of payment or contributions paid or payable on behalf of each such person to any employee welfare fund, as defined in Connecticut General Statutes, section 31-53 (h), are not less than the prevailing rate of wages and the amount of payment or contributions paid or payable on behalf of each such person to any employee welfare fund, as determined by the Labor Commissioner pursuant to subsection Connecticut General Statutes, section 31-53 (d), and said wages and benefits are not less than those which may also be required by contract;
- c) The Employer has complied with all of the provisions in Connecticut General Statutes, section 31-53 (and Section 31-54 if applicable for state highway construction);
- d) Each such person is covered by a worker’s compensation insurance policy for the duration of his employment which proof of coverage has been provided to the contracting agency;
- e) The Employer does not receive kickbacks, which means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided directly or indirectly, to any prime contractor, prime contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a prime contractor in connection with a subcontractor relating to a prime contractor; and
- f) The Employer is aware that filing a certified payroll which he knows to be false is a class D felony for which the employer may be fined up to five thousand dollars, imprisoned for up to five years or both.

2. OSHA~The employer shall affix a copy of the construction safety course, program or training completion document to the certified payroll required to be submitted to the contracting agency for this project on which such persons name first appears.

 (Signature) (Title) Submitted on (Date)

Information Bulletin ***Occupational Classifications***

The Connecticut Department of Labor has the responsibility to properly determine "job classification" on prevailing wage projects covered under C.G.S. Section 31-53(d).

Note: This information is intended to provide a sample of some occupational classifications for guidance purposes only. It is not an all-inclusive list of each occupation's duties. This list is being provided only to highlight some areas where a contractor may be unclear regarding the proper classification. If unsure, the employer should seek guidelines for CTDOL.

Below are additional clarifications of specific job duties performed for certain classifications:

- **ASBESTOS WORKERS**

Applies all insulating materials, protective coverings, coatings and finishes to all types of mechanical systems.

- **ASBESTOS INSULATOR**

Handle, install apply, fabricate, distribute, prepare, alter, repair, dismantle, heat and frost insulation, including penetration and fire stopping work on all penetration fire stop systems.

- **BOILERMAKERS**

Erects hydro plants, incomplete vessels, steel stacks, storage tanks for water, fuel, etc. Builds incomplete boilers, repairs heat exchanges and steam generators.

- **BRICKLAYERS, CEMENT MASONS, CEMENT FINISHERS, MARBLE MASONS, PLASTERERS, STONE MASONS, PLASTERERS. STONE MASONS, TERRAZZO WORKERS, TILE SETTERS**

Lays building materials such as brick, structural tile and concrete cinder, glass, gypsum, terra cotta block. Cuts, tools and sets marble, sets stone, finishes concrete, applies decorative steel, aluminum and plastic tile, applies cements, sand, pigment and marble chips to floors, stairways, etc.

- **CARPENTERS, MILLWRIGHTS. PILEDRIVERMEN. LATHERS. RESILEINT FLOOR LAYERS, DOCK BUILDERS, DIKERS, DIVER TENDERS**

Constructs, erects, installs and repairs structures and fixtures of wood, plywood and wallboard. Installs, assembles, dismantles, moves industrial machinery. Drives piling into ground to provide foundations for structures such as buildings and bridges, retaining walls for earth embankments, such as cofferdams. Fastens wooden, metal or rockboard lath to walls, ceilings and partitions of buildings, acoustical tile layer, concrete form builder. Applies firestopping materials on fire resistive joint systems only. Installation of curtain/window walls only where attached to wood or metal studs. Installation of insulated material of all types whether blown, nailed or attached in other ways to walls, ceilings and floors of buildings. Assembly and installation of modular furniture/furniture systems. Free-standing furniture is not covered. This includes free standing: student chairs, study top desks, book box desks, computer furniture, dictionary stand, atlas stand, wood shelving, two-position information access station, file cabinets, storage cabinets, tables, etc.

- **LABORER, CLEANING**

- The clean up of any construction debris and the general (heavy/light) cleaning, including sweeping, wash down, mopping, wiping of the construction facility and its furniture, washing, polishing, and dusting.

- **DELIVERY PERSONNEL**

- If delivery of supplies/building materials is to one common point and stockpiled there, prevailing wages are not required. If the delivery personnel are involved in the distribution of the material to multiple locations within the construction site then they would have to be paid prevailing wages for the type of work performed: laborer, equipment operator, electrician, ironworker, plumber, etc.

- An example of this would be where delivery of drywall is made to a building and the delivery personnel distribute the drywall from one "stockpile" location to further sub-locations on each floor. Distribution of material around a construction site is the job of a laborer or tradesman, and not a delivery personnel.

- **ELECTRICIANS**

Install, erect, maintenance, alteration or repair of any wire, cable, conduit, etc., which generates, transforms, transmits or uses electrical energy for light, heat, power or other purposes, including the Installation or maintenance of telecommunication, LAN wiring or computer equipment, and low voltage wiring. ****License required per Connecticut General Statutes: E-1,2 L-5,6 C-5,6 T-1,2 L-1,2 V-1,2,7,8,9.***

- **ELEVATOR CONSTRUCTORS**

Install, erect, maintenance and repair of all types of elevators, escalators, dumb waiters and moving walks. **License required by Connecticut General Statutes: R-1,2,5,6.*

- **FORK LIFT OPERATOR**

Laborers Group 4) Mason Tenders - operates forklift solely to assist a mason to a maximum height of nine (9) feet only.

Power Equipment Operator Group 9 - operates forklift to assist any trade, and to assist a mason to a height over nine (9) feet.

- **GLAZIERS**

Glazing wood and metal sash, doors, partitions, and 2 story aluminum storefronts. Installs glass windows, skylights, store fronts and display cases or surfaces such as building fronts, interior walls, ceilings and table tops and metal store fronts. Installation of aluminum window walls and curtain walls is the "joint" work of glaziers and ironworkers, which require equal composite workforce.

- **IRONWORKERS**

Erection, installation and placement of structural steel, precast concrete, miscellaneous iron, ornamental iron, metal curtain wall, rigging and reinforcing steel. Handling, sorting, and installation of reinforcing steel (rebar). Metal bridge rail (traffic), metal bridge handrail, and decorative security fence installation. Installation of aluminum window walls and curtain walls is the "joint" work of glaziers and ironworkers which require equal composite workforce.

- **INSULATOR**

- Installing fire stopping systems/materials for "Penetration Firestop Systems": transit to cables, electrical conduits, insulated pipes, sprinkler pipe penetrations, ductwork behind radiation, electrical cable trays, fire rated pipe penetrations, natural polypropylene, HVAC ducts, plumbing bare metal, telephone and communication wires, and boiler room ceilings.

- **LABORERS**

Acetylene burners, asphalt rakers, chain saw operators, concrete and power buggy operator, concrete saw operator, fence and guard rail erector (except metal bridge rail (traffic), decorative security fence (non-metal).

installation.), hand operated concrete vibrator operator, mason tenders, pipelayers (installation of storm drainage or sewage lines on the street only), pneumatic drill operator, pneumatic gas and electric drill operator, powermen and wagon drill operator, air track operator, block paver, curb setters, blasters, concrete spreaders.

- **PAINTERS**

Maintenance, preparation, cleaning, blasting (water and sand, etc.), painting or application of any protective coatings of every description on all bridges and appurtenances of highways, roadways, and railroads. Painting, decorating, hardwood finishing, paper hanging, sign writing, scenic art work and drywall hhg for any and all types of building and residential work.

- **LEAD PAINT REMOVAL**

- Painter's Rate

1. Removal of lead paint from bridges.
2. Removal of lead paint as preparation of any surface to be repainted.
3. Where removal is on a Demolition project prior to reconstruction.

- Laborer's Rate

1. Removal of lead paint from any surface NOT to be repainted.
2. Where removal is on a *TOTAL* Demolition project only.

- **PLUMBERS AND PIPEFITTERS**

Installation, repair, replacement, alteration or maintenance of all plumbing, heating, cooling and piping. ****License required per Connecticut General Statutes: P-1,2,6,7,8,9 J-1,2,3,4 SP-1,2 S-1,2,3,4,5,6,7,8 B-1,2,3,4 D-1,2,3,4.***

- **POWER EQUIPMENT OPERATORS**

Operates several types of power construction equipment such as compressors, pumps, hoists, derricks, cranes, shovels, tractors, scrapers or motor graders, etc. Repairs and maintains equipment. ****License required, crane operators only, per Connecticut General Statutes.***

- **ROOFERS**

Covers roofs with composition shingles or sheets, wood shingles, slate or asphalt and gravel to waterproof roofs, including preparation of surface. (demolition or removal of any type of roofing and or clean-up of any and all areas where a roof is to be relaid.)

- **SHEETMETAL WORKERS**

Fabricate, assembles, installs and repairs sheetmetal products and equipment in such areas as ventilation, air-conditioning, warm air heating, restaurant equipment, architectural sheet metal work, sheetmetal roofing, and aluminum gutters. Fabrication, handling, assembling, erecting, altering, repairing, etc. of coated metal material panels and composite metal material panels when used on building exteriors and interiors as soffits, fascia, louvers, partitions, canopies, cornice, column covers, awnings, beam covers, cladding, sun shades, lighting troughs, spires, ornamental roofing, metal ceilings, mansards, copings, ornamental and ventilation hoods, vertical and horizontal siding panels, trim, etc. The sheet metal classification also applies to the vast variety of coated metal material panels and composite metal material panels that have evolved over the years as an alternative to conventional ferrous and non-ferrous metals like steel, iron, tin, copper, brass, bronze, aluminum, etc. Fabrication, handling, assembling, erecting, altering, repairing, etc. of architectural metal roof, standing seam roof, composite metal roof, metal and composite bathroom/toilet partitions, aluminum gutters, metal and composite lockers and shelving, kitchen equipment, and walk-in coolers. To include testing and air –balancing ancillary to installation and construction.

- **SPRINKLER FITTERS**

Installation, alteration, maintenance and repair of fire protection sprinkler systems.

****License required per Connecticut General Statutes: F-1,2,3,4.***

- **TILE MARBLE AND TERRAZZO FINISHERS**

Assists and tends the tile setter, marble mason and terrazzo worker in the performance of their duties.

- **TRUCK DRIVERS**

~How to pay truck drivers delivering asphalt is under REVISION~

Truck Drivers are requires to be paid prevailing wage for time spent "working" directly on the site. These drivers remain covered by the prevailing wage for any time spent transporting between the actual construction location and facilities (such as fabrication, plants, mobile factories, batch plant, borrow pits, job headquarters, tool yards, etc.) dedicated exclusively, or nearly so, to performance of the contract or project, which are so located in proximity to the actual construction location that it is reasonable to include them. ****License required, drivers only, per Connecticut General Statutes.***

For example:

- Material men and deliverymen are not covered under prevailing wage as long as they are not directly involved in the construction process. If, they unload the material, they would then be covered by prevailing wage for the classification they are performing work in: laborer, equipment operator, etc.
- Hauling material off site is not covered provided they are not dumping it at a location outlined above.
- Driving a truck on site and moving equipment or materials on site would be considered covered work, as this is part of the construction process.

➤ *Any questions regarding the proper classification should be directed to:*
Public Contract Compliance Unit
Wage and Workplace Standards Division
Connecticut Department of Labor
200 Folly Brook Blvd, Wethersfield, CT 06109
(860) 263-6543.

**Connecticut Department of Labor
Wage and Workplace Standards Division
FOOTNOTES**

⇒ Please Note: If the “Benefits” listed on the schedule for the following occupations includes a letter(s) (+ a or + a+b for instance), refer to the information below.

Benefits to be paid at the appropriate prevailing wage rate for the listed occupation.

If the “Benefits” section for the occupation lists only a dollar amount, disregard the information below.

Bricklayers, Cement Masons, Cement Finishers, Concrete Finishers, Stone Masons
(Building Construction) and
(Residential- Hartford, Middlesex, New Haven, New London and Tolland Counties)

- a. Paid Holiday: Employees shall receive 4 hours for Christmas Eve holiday provided the employee works the regularly scheduled day before and after the holiday. Employers may schedule work on Christmas Eve and employees shall receive pay for actual hours worked in addition to holiday pay.

Elevator Constructors: Mechanics

- a. Paid Holidays: New Year’s Day, Memorial Day, Independence Day, Labor Day, Veterans’ Day, Thanksgiving Day, Christmas Day, plus the Friday after Thanksgiving.
- b. Vacation: Employer contributes 8% of basic hourly rate for 5 years or more of service or 6% of basic hourly rate for 6 months to 5 years of service as vacation pay credit.

Glaziers

- a. Paid Holidays: Labor Day and Christmas Day.

Power Equipment Operators
(Heavy and Highway Construction & Building Construction)

- a. Paid Holidays: New Year’s Day, Good Friday, Memorial day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day, provided the employee works 3 days during the week in which the holiday falls, if scheduled, and if scheduled, the working day before and the working day after the holiday. Holidays falling on Saturday may be observed on Saturday, or if the employer so elects, on the preceding Friday.

Ironworkers

- a. Paid Holiday: Labor Day provided employee has been on the payroll for the 5 consecutive work days prior to Labor Day.

Laborers (Tunnel Construction)

- a. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. No employee shall be eligible for holiday pay when he fails, without cause, to work the regular work day preceding the holiday or the regular work day following the holiday.

Roofers

- a. Paid Holidays: July 4th, Labor Day, and Christmas Day provided the employee is employed 15 days prior to the holiday.

Sprinkler Fitters

- a. Paid Holidays: Memorial Day, July 4th, Labor Day, Thanksgiving Day and Christmas Day, provided the employee has been in the employment of a contractor 20 working days prior to any such paid holiday.

Truck Drivers

(Heavy and Highway Construction & Building Construction)

- a. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas day, and Good Friday, provided the employee has at least 31 calendar days of service and works the last scheduled day before and the first scheduled day after the holiday, unless excused.