



**TOWN OF HAMDEN
CONNECTICUT
LEGAL NOTICE
REQUEST FOR PROPOSAL #19-12
HAMDEN HILLS DRIVE BRIDGE**

The Town of Hamden is requesting qualified Architect/Engineer firm to provide pricing for preparation of Bid document, specification and oversight the Hamden Hills Drive Bridge #06826 over Shepard Brook & RR-Trail.

Specifications and the form of proposal on which bids must be submitted may be obtained at the Purchasing Office, Hamden Government Center, 2750 Dixwell Avenue, Hamden, CT between the hours of 8:30 A.M. and 4:30 P.M., Telephone (203) 287-7110.

This RFP and Addenda's may be downloaded at www.biznet.ct.gov or a PDF version may be obtained by e-mailing a request to purchasing@hamden.com. It is the responsibility of the vendor to check the website for such addenda prior to submission of any Bid or RFP. Failure to address any addenda relating to the bid of interest may disqualify submitted and or proposals.

It is the sole responsibility of the responder to see that the proposal is in the hands of the proper authority prior to the opening.

Sealed proposals (one 1 original, 3 copies and 1 electronic copy) will be received at the Finance Office, Government Center, 2750 Dixwell Ave, Hamden, CT 06158 to be held in the Purchasing Lock box until **11:00 A.M on June 4, 2019** at which time they will be publicly opened. RFP's received after the time set will be considered informal and will be rejected.

It is the sole responsibility of the bidder to see that the bid is in the hands of the proper authority prior to the bid opening time.

Last day for questions is **Tuesday, May 28, 2019.**

The Town of Hamden reserves the right to accept or reject any or all options, RFP's, bids or proposals; to waive any technicality in a bid or portion thereof submitted, and to accept the bid deemed to be in the best interest of the Town of Hamden.

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A. Project Description:

The Town of Hamden seeks to engage the design services (“the Designer”) to analyze the existing structural reports conducted by the CT DOT and to create a construction contract for maintenance tasks to repair the noted deficiencies.

The bridge was inspected in 2016 and 2018 as part of the standard bridge inspection program. The inspections, photos, and the original construction plans are included for reference.

B. Scope of Services:

- a. Conduct records research to determine the existing necessary extents of repairs as detailed by the CT DOT reports.
- b. Conduct a site visit of the location to conduct any necessary measurements or field verification.
- c. Analyze the existing conditions to determine the scope of work necessary for a contractor to conduct the repairs. Provide analysis and recommendations of the plan for installation to ensure compliance and load capacity.
- d. Work shall include but not be limited to:
 - i. During inspection on 2/14/2018, the team found a 6” x 3” through-hole with active leakage over the pier at the south sidewalk. This is a tripping hazard for pedestrians and active leakage below through the hole could cause deterioration to pier cap and superstructure as shown in support photos.
 - ii. North sidewalk over the pier has severe scaling, spalls and loose/hollow concrete for 15’L x 4’W x up to 4”D with active leakage below. The approach sidewalk at the southeast corner has a vertical misalignment for full-width x up to 3”H. Both deficiencies are posing tripping hazards for pedestrians.
 - iii. MBR at SW approach corner (leading edge) has a 38’L severe collision damage area with (5) bent and (2) disconnected posts.
 - iv. Inspect the abutments for scour and the need for repair.
 - v. Verify any other maintenance work necessary based on the reports.
- e. Prepare a set of plans and specifications for repair work. Use CTDOT and Form 816 as the basis of any specifications.
- f. Bidding support services.

C. Project Deliverables:

- a. Provide a CT PE stamped set of bid ready plans and specifications.
- b. Provide a construction time and cost estimate for the necessary work.

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- c. The following meetings:
 - i. Kick off scope and/or progress meeting with the Town engineering staff.
 - ii. Pre-bid meeting with potential bidders to answer questions.

D. Timetable:

- a. Final specifications and plans to be delivered 90 days after award and issuance of purchase order.
- b. Construction by a contractor to commence, tentatively, when the plans are accepted by the Town or beginning the 2020 construction season.

E. Ownership of Information Provided:

All information provided by the Town and all material developed for this project shall be returned to and become the property of the Town of Hamden before final payment is made to the Designer and will not be used by the Designer for other purposes, or released to others, without the permission of the Town of Hamden.

F. Proposal

- a. Cost proposal (lump sum)
- b. Delivery timetable of report
- c. Example of a minimum of three similar structural analysis from within the past three years. Location, date of analysis, date of construction, and brief description.

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GENERAL REQUEST FOR PROPOSAL SPECIFICATIONS -- PART A

Proposals shall be made on the RFP forms furnished by the Town, without alteration. Proposals shall be submitted in a sealed envelope, stating on the outside of the envelope the words "RFP DOCUMENTS", the Town's RFP number, the title of the Project, the title of the RFP package for which a RFP is being submitted, and the time and date of the RFP opening.

All Responders shall provide one original and three copies of your RFP unless otherwise specified.

Proposals received after the RFP opening deadline shall be rejected. All spaces on the RFP form must be filled in with figures and words or the Town, in its sole discretion, may reject the Proposal as non-responsive. No faxed or emailed Proposals are allowed.

Applicable If Checked



RFP SECURITY: If a security of a certified check or bid bond for 5% of the total is requested, such Security will be returned upon signing of the contract. Checks or bonds must be made to the order of the "Town of Hamden". Security may be held by the Town of Hamden for a period not to exceed 90 days from the date of the opening of the proposals for the purpose of reviewing the proposals. A separate Security must accompany each proposal presented. This is only when a Security is requested in the Proposal Specifications



LIQUIDATED DAMAGES: The successful bidder, upon his/her/its failure or refusal to sign the contract within five (5) business days of receipt of the contract from the Town, shall forfeit to the Town as liquidated damages for such failure or refusal an amount equal to the security deposited with his/her Proposal.

The Town may make such investigations and conduct such scope reviews as deemed necessary by the Town in order for the Town to determine the ability of the Responder to perform the work and the Responder shall promptly, upon the Town's request, furnish to the Town all such data for this purpose. The Town expressly reserves the right to reject a Proposal if, in the Town's sole discretion, the Town determines that a RFP is non-responsive, a Responder is not responsible, a Responder is not qualified to perform the work or the Town otherwise determines that the award of a contract to the Responder is not in the best interest of the Town. Conditional RFPs will not be accepted.

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SUBCONTRACTORS: The Responder is specifically advised that any person, firm or other party to whom Responder intends to award a subcontract or purchase order must be acceptable to the Town and that approval of the proposed subcontract award cannot be sought from the Town unless and until the successful Responder submits all information and evidence to the Town regarding the qualifications, experience and responsibility of the proposed subcontractor. Although the Responder is not required to attach such information to its Proposal, the Responder is hereby advised of this requirement so that it may plan accordingly and prevent delays.

MODIFICATION: Any Responder may modify his/her/its Proposal **prior** to the scheduled deadline for receipt of Proposals. See paragraph one above.

The Responder wishing to modify its Proposal shall submit such modified Proposal in accordance with paragraph one above, shall unequivocally indicate that its prior Proposal is superseded by the modified Proposal and shall submit its modified Proposal in an envelope clearly marked “**MODIFIED PROPOSAL**”.

ERRORS: The Town, in its sole discretion, reserves the right to waive typographical or technical defects in the Proposal, as well as its right to correct an award erroneously made as a result of a clerical error on the part of the Town of Hamden.

PERMITS/LICENSES: All applicable permits and licenses shall be obtained at the sole cost of Responders. No permits or permit fees shall be waived by the Town unless otherwise stated in the Town’s Request for Proposal or Instructions to Responders.

OBLIGATIONS OF RESPONDER: Each Responder shall, prior to submitting a Proposal, familiarize itself with the conditions under which the work will be performed and conduct its own due diligence. Responders shall be presumed to have read and to be thoroughly familiar with the specifications and all RFP documents. The failure of any Responder to request, receive or examine any information or the failure of the Responder to familiarize itself with the conditions relating to the performance and timing of the work shall in no way relieve any Responder from any obligation in respect to the Proposal and shall not subject the Town to any liability whatsoever.

Furthermore, the Responder is responsible for being aware of and conforming in all respects to all existing Federal, State of Connecticut, and Town of Hamden Statutes, Ordinances, Regulations, laws and other legal applicable legal requirements, regardless of whether any such applicable requirements are specifically identified in the RFP documents.

WITHDRAWAL OF PROPOSALS: Proposals may be withdrawn prior to the time fixed for opening by submitting written notification of withdrawal to the Town prior to the RFP opening deadline.

Negligence or mistake on the part of the Responder in preparing the Proposal confers no right of withdrawal or modification of the Proposal after such Proposal has been opened.

“OR EQUAL” CLAUSE: Whenever a material, article or piece of equipment is identified in the RFP document by reference to manufacturers’ or vendors’ names, trade names, catalog numbers, etc., it is intended to establish a standard, unless otherwise stated; any material, article, or equipment of other manufacturers and vendors which will perform adequately the duties imposed by the general design may be considered equally acceptable if, in the opinion of the Town, the material, article, or equipment so

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proposed is of equal substance and function. Any substitutions must be approved in writing by the Purchasing Agent or his designee, who shall have sole discretion to determine the acceptability of the proposed substitute.

PATENTS: The contractor shall indemnify, defend and hold harmless the Town and its officers, agents, and employees from and against liability and costs of any nature or kind, including cost and expenses for, or on account of, any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the contract, including its use by the Town unless otherwise specifically stipulated in the contract or RFP documents.

NON-COLLUSIVE RFP STATEMENT: All Responders shall be required to sign the non-collusive statement attached.

FUNDING: The municipal non-appropriation clause may be applicable.

Applicable if checked



PERFORMANCE AND PAYMENT BONDS: To ensure the delivery of goods and services in conformity with the specifications provided and payment of all subcontractors and suppliers, Responders shall provide payment and performance bonds for any project (1) which is governed by Connecticut's Little Miller Act, C.G.S. §49-41 or (2) for which the Town requires the provision of payment and performance bonds. Successful Responders shall provide the Town with payment and performance bonds, at the Responder's expense, each for the full amount of the contract awarded.

The Town shall be the Obligee under each bond and the bonds shall be issued by a company authorized to conduct surety business in the State, listed on the U.S. Department of the Treasury's List of Approved Sureties and subject to approval by the Town.



INSURANCE: The contractor will provide adequate proof of insurance to the Town for the types of insurance and limits indicated below, providing for all of its operations performed in compliance with this contract.

The successful Responder shall obtain and pay for the insurance coverage described below with the indicated minimum limits. Responders agree to furnish Certificates of Insurance to the Town and/or its Board of Education, certifying coverage to be in effect for the term of this contract and that the Town and/or Board of Education will be given sixty (60) days prior written notice of cancellation or non-renewal.

These requirements if checked also apply to any subcontractor or common carrier used by the Responder.



I. WORKERS COMPENSATION

- | | |
|-------------------------|--------------------------------|
| a) Connecticut | Statutory Limits |
| b) Applicable Federal | Statutory Limits |
| c) Employer's Liability | \$100,000 per Accident |
| | \$100,000 Disease per Employee |
| | \$500,000 Policy Limit |



II. COMMERCIAL GENERAL LIABILITY

Bodily injury and Property Damage	
Each Occurrence	\$1,000,000
Fire Damage	\$ 100,000
Medical Expense	\$ 5,000
Personal Injury/Advertising	\$ 1,000,000
General Aggregate	\$ 3,000,000
Products & Completed Operations Aggregate	\$ 1,000,000

Coverage to include Premise-Operations, Contractors Protective Liability, Products & Completed Operations, Explosion, Collapse & Underground, Contractual Liability, & Broad Form Property Damage.



III. BUSINESS AUTOMOBILE LIABILITY (including owned, hired & non-owned vehicles)

Liability (Combined Single Limit)	\$1,000,000
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(If hazardous material or potential pollutants are transported, MCS90 – Accidental Pollution coverage is required)



IV. UMBRELLA/EXCESS LIABILITY (If Required)

Liability Limit – Each Occurrence over primary	\$3,000,000
Self-Insured retention	\$10,000

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V. RAILROAD PROTECTIVE LIABILITY (If Required)
 Bodily Injury and Property Damage \$1,000,000 Each Occurrence
 \$1,000,000 Aggregate

VI. POLLUTION LIABILITY (If Required)
 Bodily Injury and Property Damage \$1,000,000 Each Occurrence
 \$1,000,000 Aggregate

VII. PROFESSIONAL LIABILITY (If Required)
If Coverage is written on a claims made basis an extended reporting period of at least 24 months is required upon completion of Agreement.
 \$1,000,000 Each Occurrence
 \$1,000,000 Aggregate

VIII. MONEY & SECURITIES-BROAD FORM
 Limit \$(Insert Limit)

IX. The Town of Hamden and/or Hamden Board of Education to be named as an additional insured on all insurance policies, except Workers Compensation and Professional Liability. Vendor coverage shall be primary and non-contributory. A waiver of subrogation shall apply in favor of the Town of Hamden on all policies except Professional Liability.

X. To the fullest extent permitted by law, the Responder shall defend, indemnify and hold the Town of Hamden and Hamden Board of Education harmless from and against any and all claims, losses, expenses, judgments, injuries to persons and/or property resulting out of, and alleged to result from or arise out of the performance of this contract and resulting from and alleged to result from the Responder's negligence. This provision shall survive termination of the Agreement.

ITEM VII AND VIII MUST APPEAR ON THE FACE OF THE INSURANCE CERTIFICATE IN THE SECTION ENTITLED "DESCRIPTION OF OPERATION"

Occupational Safety and Health Administration Requirements; Safety Compliance: According to Connecticut General Statutes, Section 31-53b (a) each contract entered into on or after July 1, 2007 , for the construction, remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public building project by the state or any of its agents, or by a political subdivision of the state or any of its agents, where the total cost of all work to be performed by all contractors and subcontractors in connection with the contract is at least one hundred thousand dollars (\$100,000.00) shall contain a provision requiring that, not later than thirty days after the date such contract is awarded, each contractor furnish proof to the Labor Commissioner that all employees performing manual labor on or in such public building , pursuant to such contract, have 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, in the case of telecommunications employees, have completed at least ten hours of training in accordance with 29 CFR 1910.268. The contractor shall familiarize itself with all aspects of state law and any applicable regulations pertaining to these requirements in order to ensure full compliance. Moreover, contractor shall be solely responsible for full and timely compliance with all federal, state and local safety standards, rules and regulations.

INDEMNITY/HOLD HARMLESS: The contractor's and subcontractor's insurance policies will be endorsed to provide for the Town of Hamden and Hamden BOE to be named as an additional insured. To the fullest extent permitted by law; the contractor will defend, indemnify and save harmless the Town of Hamden and Hamden BOE from and against all claims, expenses, including attorney fees, judgements, suits and actions related to injuries to and/or damage to the property as a result of, arising from or alleged to arise from the activities of the contractor, its servants and agencies acting for the contractor and from the performance of this Project. Contractor and subcontractor coverage shall be primary and non-contributory. Waiver of subrogation shall apply in favor of the Town of Hamden.

CERTIFICATE OF INSURANCE: The Contractor, prior to the start of any work under this contract, shall provide the Town's Purchasing Office with a Certificate of Insurance to conform to the following:

- a. Form(s) acceptable to the Town of Hamden.
- b. Insurance provided by insurance companies authorized to write coverage in the State of Connecticut.
- c. Policy dates must cover the term of this contract.
- d. Certificate will provide for at least 30 days' notice to the Town of Hamden prior to cancellation.
- e. All additional insured certificates are to list the Town of Hamden.

Under no circumstances shall the Contractor begin work until (1) the contract for same shall have been signed by all parties, (2) the required bonds have been furnished by the Contractor and approved by the Town, (3) the required certificates of insurance have been filed with and approved by the Town's Purchasing Office and (4) the Contractor has been duly instructed in writing by the Town to proceed with the work. If the Contractor commences the work before the provisions referred to in this paragraph are

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fulfilled, the Town, in its sole option, may cancel or terminate the contract without penalty or liability chargeable to the Town.

LICENSURE: At the time of the Proposal submissions, Responders shall possess the necessary license(s) to perform the work that is the subject of this Request for Proposal.

NON-RESIDENT CONTRACTORS: Out of state Contractors must post a bond with the Connecticut Department of Revenue Services. The non-resident contractor must receive a Connecticut tax registration number by completing and submitting form REG-1. Non-resident contractors are directed to familiarize themselves and achieve full compliance with applicable requirements, including Form AU-766.

Non-Discrimination and Affirmative Action: 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, 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; and 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 their 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. The following principles and requirements of Equal Opportunity and Affirmative Action, as incorporated herein, will be incorporated into "Equal Opportunity - Non-Discrimination Clause" to be included in all RFP documents, purchase orders, leases and contracts. The principles of Affirmative Action are addressed in the 13th, 14th and 15th Amendments of the United States Constitution, Civil Rights Act of 1964, Equal Pay Act of 1963, Title VI and VII of the 1964 United States Civil Rights Act, Presidential Executive Orders 11246, 11375, 11478 (nondiscrimination under federal contracts), Act 1, Section 1 and 20 of the Connecticut Constitution, Governor Grasso's Executive Order Number 11, Governor O'Neill's Executive Order Number 9, the Connecticut Fair Employment Practices Law (Sec. 46a-60-69) of the Connecticut General Statutes, Connecticut Code of Fair Practices (46a-70-81), Deprivation of Civil Rights (46a-58 (a)(d)),

Public Accommodations Law (46a-63-64), Discrimination against Criminal Offenders (46a-80), definition of blind (46a-51(1)), definition of Physically Disabled (46a-51 (15)), definition of Mentally Retarded (46a-51-13), cooperation with the Commission on Human Rights and Opportunities (46a-77), Sexual Harassment (46a-60 (a)-8), Connecticut Credit Discrimination Law (360436 through 439), Title 1 of the State and the Local Fiscal Assistance Act 1 1972. Every contract to which the State is party must contain the nondiscrimination and affirmative action provisions provided in the Connecticut General Statutes Section 4a-60a. The successful Responder also agrees to comply with all provisions of the Town's Charter and Code of Ordinances –“Town of Hamden, Chapter 110, Business Transactions with Town”. The contractor shall cooperate fully with the Connecticut Commission on Human Rights and Opportunities (“the Commission”) and shall submit periodic reports of employment and subcontracting

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practices to the Commission in such a form, in such a manner, and at such time as may be prescribed by the Commission.

Sec. 4a-60. (Formerly Sec. 4-114a). Nondiscrimination and affirmative action provisions in awarding agency, municipal public works and quasi-public agency project contracts. (a) Every contract to which an awarding agency is a party, every quasi-public agency project contract and every municipal public works contract shall contain the following provisions:

(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, 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; and 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 their 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 on Human Rights and Opportunities;

(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 on Human Rights and Opportunities 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; and

(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 P.A 15-5 amended Subsecs. (a) and (c) by replacing references to the state or political subdivision of the state with references to awarding agency, amended Subsecs. (a)(2), (a)(3) and (f) to (h) by changing "commission" to "Commission on Human Rights and Opportunities", amended Subsec. (a)(4) by adding reference to Sec. 46a-86, amended Subsecs. (a) to (d) and (h) by adding references to municipal public works contracts and quasi-public agency project contracts, amended Subsec. (c) by adding references to commission re provision of representation or documentation, amended Subsec. (d) by deleting former Subdiv. (2) re quasi-public agency and redesignating existing Subdivs. (3) to (6) as Subdivs. (2) to (5), and made technical and conforming changes throughout.

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Sec. 4a-60a. Provisions re nondiscrimination on the basis of sexual orientation required in awarding agency, municipal public works and quasi-public agency project contracts. (a) Every contract to which an awarding agency is a party, every contract for a quasi-public agency project and every municipal public works contract shall contain the following provisions:

(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 sexual orientation, in any manner prohibited by the laws of the United States or of the state of Connecticut, and that employees are treated when employed without regard to their sexual orientation;

(2) 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 on Human Rights and Opportunities 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;

The successful bidder also agrees to comply with all provisions of the Town's Charter and Code of Ordinances – "Town of Hamden, Chapter 110 "Business Transactions with Town". The contractor shall cooperate fully with the Connecticut Commission on Human Rights and Opportunities ("the Commission") and shall submit periodic reports of employment and subcontracting practices to the Commission in such a form, in such a manner, and at such time as may be prescribed by the Commission.

Set Asides: If this Project is funded in whole or in part by State of Connecticut funds, Public Act 15-5 (§§58-71 and 88) requires that, effective with all contracts executed after October 1, 2015, all solicitations for municipal public works contracts funded in whole or in part with State funds state in the notice of solicitation that the contract must comply with the set asides mandated by Public Act 15-5. The set aside requirements include a requirement that 25% of the total value of contracts in excess of \$50,000.00 be set aside for exclusive bidding for "small contractors," as defined by Section 58 (a) (1), and 25% of such amount (that is, 6.25% of the total value), be set aside for "minority business enterprises," as defined by Section 58(a) (4). For contracts in excess of \$50,000.00, Responders must have obtained Commission approval of their Affirmative Action Plan prior to contract execution. RESPONDERS ARE EXPRESSLY DIRECTED TO REVIEW PUBLIC ACT 15-5, SECTIONS 58-71 AND 88, TO FAMILIARIZE THEMSELVES WITH THE REQUIREMENTS OF SUCH LAWS. RESPONDERS SHALL BE DIRECTLY AND SOLELY RESPONSIBLE FOR COMPLIANCE WITH THE REQUIREMENTS OF P.A. 15-5, SECTIONS 58 THROUGH 71 AND 88. THE TOWN ALSO DIRECT RESPONDERS' ATTENTION TO THE SECTIONS 63 AND 64 (NON-DISCRIMINATION REQUIREMENTS) AND 66-68 (AFFIRMATIVE ACTION REQUIREMENTS).

Regardless of whether P.A. 15-5 is applicable to this Project, the contractor shall provide reasonable technical assistance and training to minority business enterprises to whom work is subcontracted to promote the participation of such concerns, to make a good faith effort to award a reasonable proportion of all subcontractors to such enterprises, and undertake such other reasonable activities or efforts as the

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Commission may prescribe to ensure the participation of minority business enterprises as contractors and subcontractors. The contractor shall include a provision in all subcontracts with minority business enterprises requiring the minority business enterprise to provide the Commission with such information on its structure and operations as the Commission finds necessary to make an informed determination as to whether the minority business enterprise is owned and operated by members of a minority group.

The contractor shall maintain full and accurate data, such as contract monitoring reports, for a period of three (3) years from the date of substantial completion of the project or for such longer period as is required by the law then in effect with regard to records retention. The contractor shall not discharge, discipline, or otherwise discriminate against any person who has filed a complaint, testified, or assisted in any proceeding with the Commission.

The contractor shall make available for inspection and copying any supporting data requested by the Commission and make available for interview any agent, servant, or employee having knowledge of any matter concerning the investigation of a discriminatory practice complaint of any matter relating to a contract compliance review.

CLAYTON ACT: The contractor or subcontractor offers and agrees to assign to the public purchasing body all right, title and interest in and to all causes of action it may have under Section 4 of the Clayton Act, 15 U.S.C. 15 or under Chapter 624 of the General Statutes of Connecticut arising out of the purchase of services, property or intangibles of any kind pursuant to a public purchase contract or subcontract. This assignment shall be made and become effective at the time the public purchasing body awards or accepts such contract, without further acknowledgment by the parties.

AWARD TO OTHER THAN THE APPARENT LOW RESPONDER: The Town of Hamden reserves the right to award the work to a Responder other than the one which submitted the lowest price if it deems such action to be in the best interest of the Town of Hamden.

WAGE RATES: Workers employed in the various occupations on this named project shall be required to receive the minimum rates established by the State of Connecticut Labor Department Division of Regulations of Wages.

PRICES: Prices quoted for merchandise, supplies, or equipment shall be the net prices delivered into the Town of Hamden.

Town of Hamden reserves the right to award separate items to separate Responders. Responders may indicate exceptions to this.

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Responders must include Federal ID number or Social Security number to be considered for RFP approval.

DAVIS-BACON ACT - PREVAILING RATES OF WAGES

If this Project is subject to the Connecticut Prevailing Wage law, C.G.S. §31-53 *et seq.*, the Town of Hamden shall require the contractor to make payment of prevailing rates of wages in accordance with the wage section of the Davis-Bacon Act, Town of Hamden, Hamden Code, S 97.35 and State Statute 31-53, Part III. State Contracts, and shall institute such investigations and periodic monitoring procedures as deemed necessary to determine compliance with labor standard provisions and the Federal requirements of the Act as amended.

AS PER THE TOWN OF HAMDEN AFFIRMATIVE ACTION RESOLUTION:

It is in the best interest of the Town to encourage minority and/or female business enterprise. Where two substantially similar Hamden Proposals are submitted, preference may be given to the minority and/or female contractor.

RESERVED RIGHTS OF TOWN:

The Town of Hamden reserves the right to accept or reject any or all RFPs or Proposals; to waive any technicality in a RFP or Proposal or part thereof submitted, and to accept the RFP deemed to be in the best interest of the Town of Hamden. Further, the Town reserves the right to split RFPs and quotations among two or more Responders.

The Town reserves the right to reject any Proposal submitted by a joint venture if the Town determines that any entity to the joint venture fails to satisfy the Town's requirements (i.e., bonding, insurance, qualifications, responsibility).

PREQUALIFICATION REQUIREMENT:

The Connecticut Department of Administrative Services' Contractor Prequalification Program (C.G.S §4a-100) requires all contractors to prequalify before they can propose on a contract or perform work pursuant to a contract for the construction, reconstruction, alteration, remodeling, repair or demolition of any public building or any other public work by the state or a municipality, estimated to cost more than \$500,000 and which is funded in whole or in part with state funds, If this requirement is applicable to the project that is the subject of this Request for Proposal, Responders shall provide their Proposal update statement with their Proposal.

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TIME OF COMPLETION AND LIQUIDATED DAMAGES

Responders understand and acknowledge that timely completion of the Project is essential. Failure of the Contractor to achieve substantial completion of the Project within the calendar days stated herein will result in the Owner and the public incurring damages, additional costs and inconveniences that would be impossible or extremely difficult to accurately quantify at the time.

Therefore, the Responder and the Town agree that, if the Contractor fails to satisfactorily complete the Project hereunder within the time specified or within any extension of time that may have been allowed, there shall be deducted from any monies due or that may become due the Responder,

the sum of _____ (\$ _____) for each and every calendar day, including Saturdays, Sundays and legal holidays, that the Project remains incomplete. This sum shall not be imposed as a penalty, but as liquidated damages due Owner from Contractor by reason of the damages incurred, inconvenience and additional costs and expenses to the public together with other problems suffered as a result of any such delay thereby occasioned.

DISCREPANCY IN RFP FORM:

In the event of any discrepancy between the amount written in numerical figures and the amount stated in written words, the amount written in words will be controlling.

The Town of Hamden hereby notifies all Responders that the Town’s contract with the successful Responder shall contain the following provision:

Payment to Vendor shall be withheld by the Town when any real or personal property taxes, sewer assessment fees, sewer use charges, fines, interest, penalties, **police or fire extra duty, police vehicle use fees**, or lien fees imposed, assessed or otherwise levied by the Town of Hamden and due from/payable by Vendor are delinquent.

For purposes of this Contract, a tax, fee, charge, or fine shall be deemed delinquent if it remains unpaid, in whole or in part, for a period of thirty (30) days following the date upon which payment of such tax, fee, charge, or fine was due, together with any accrued interest and penalties.

The Town expressly reserves the right, in its sole discretion, to set off against its account payable to Vendor and apply any sums due to Vendor by Town pursuant to this Contract to any delinquent real or personal property taxes, sewer assessment fees, sewer use charges, fines, interest, penalties, or lien fees imposed by the Town of Hamden and due from/payable by Vendor

Revised April 9, 2019

**TOWN OF HAMDEN
LEGISLATIVE COUNCIL**

ORDINANCE AMENDING CONSTRUCTION CONTRACTS ORDINANCE

WHEREAS, the Town of Hamden adopted a local prevailing wage ordinance requiring contractors working on town public works projects to pay laborers and mechanics wages based upon the wages established by the State of Connecticut Department of Labor to be prevailing for the corresponding classes or laborers and mechanics on projects of a similar character to the contract work in town; and

WHEREAS, the threshold for local public works projects covered by the prevailing wage ordinance has not increased since the adoption of the ordinance; and

WHEREAS, the Town wishes to amend its ordinance so that the Town's threshold for prevailing wages is 90% of that set by the Connecticut General Statutes.

NOW THEREFORE BE IT ORDAINED that Section 97.35 (A) of the Hamden Code of Ordinances is hereby amended and restated as set forth below:

Revised April 9, 2019

CONSTRUCTION CONTRACTS

97.35: WAGES TO BE STATED IN CONTRACT.

(A) The advertised specification for every public works project by the Town of Hamden that is 90% or more of the amount set forth by the Connecticut General Statutes, as may be amended, for new construction and/or that is 90% or more of the amount set forth by the Connecticut General Statutes, as may be amended, for remodeling, refinishing, refurbishing, rehabilitation, alteration or repair work, and which requires or involves the employment of mechanics, laborers or workmen employed upon the work contracted to be done, shall contain a provision stating the minimum wages to be paid various classes of laborers, mechanics and workman shall be based upon the wages established by the State through its Department of Labor to be prevailing for the corresponding classes of mechanics, laborers or workmen employed on projects of a character similar to the contract work in the town.

(B) Every contract based upon these specifications shall contain a stipulation that the contractor or his subcontractor shall pay all mechanics, laborers or workmen employed directly upon the site of the work, unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account, the full amount accrued at time of payment, computed at wage rates not less than those stated in the advertised specifications, regardless of any contractual relationship which may be alleged to exist between the contractor or subcontractor and such laborers, mechanics and workmen, and that the scale of wages to be paid shall be posted by the contractor in a prominent and easily accessible place at the site of the work.

(C) Every contract based upon these specifications shall further stipulate that there may be withheld from the contractor so much of accrued payments as may be considered necessary by the Town to pay to laborers, mechanics and workmen employed by the contractor or any subcontractor on the work difference between the rates of wages required by the contract to be paid laborers, mechanics or workmen on the work and the rates of wages received by such laborers, mechanics or workmen and not refunded to the contractor, subcontractor or other agents.

(D) Every contract based upon these specifications shall contain the further provision that in the event it is found by the Town that any laborer, mechanic or workmen employed by the contractor or any subcontractor directly on the site of the work covered by the contract has been or is being paid a rate of wages less than the rate of wages required by the contract or be paid as aforesaid the Town may, by written notice to the contractor, terminate the contract, terminate the contractor's right to proceed with the work or such part of the work as to which there has been a failure to pay said required wages and to prosecute the work to completion by contract or otherwise, and the contractor and his sureties shall be liable to the town for any excess cost occasioned the town thereby.

MISCELLANEOUS REQUIREMENTS:

Questions/Requests for Information: All Questions shall be submitted in writing only and e-mailed to purchasing@hamden.com at least seven (7) days prior to the RFP opening date. Responders shall not attempt or engage in any ex parte or verbal communications with Town personnel prior to the RFP opening deadline.

All Applicable Codes to Be Met: All construction shall meet all applicable Building and Fire Codes, as well as ADA requirements.

Pre-RFP Meeting(s): Failure to attend a mandatory pre-RFP meeting may be deemed, by the Town, grounds for rejection of your proposal.

Deliveries: All deliveries are inside deliveries.

Provision of RFP Packets, Submission of RFPs: proposed packets will be mailed upon request.

RFP packets will not be faxed.

RFP proposals must be mailed back or delivered to:

Hamden Government Center
Finance Department
2750 Dixwell Avenue
Hamden, CT 06518

Please include one original, three copies and 1 electronic copy of your RFP unless otherwise specified.

ALL ENVELOPES MUST BE MARKED PROPERLY WITH RFP #, RFP DATE, AND RFP TITLE ONLY.

Ownership of Documents – All qualification statements, proposals and RFPs submitted by Responders are to be the sole property of the Town and subject to the provisions of the Connecticut General Statutes (re: Freedom of Information).

Ownership of Subsequent Products – Any work product, whether acceptable or unacceptable, developed under a contract awarded as a result of this Request for Proposal is to be the sole property of the Town unless stated otherwise in the Request for Proposal or contract.

Timing and Sequence – Timing and sequence of events resulting from this Request for Proposal will ultimately be determined by the Town.

No Oral Agreements – The Town, its agencies and employees, shall not be responsible for any alleged oral agreement or arrangement made by a Responder with any agency or employee of the Town or District.

Rejection for Default or Misrepresentation – The Town reserves the right to reject the RFP of any Responder that is in default of any prior contract or for misrepresentation.

Assigning, Transferring of Agreement – Responders are prohibited from assigning, transferring, conveying, subletting or otherwise disposing of this agreement, their rights, title or interest therein or their power to execute such agreement by any other person, company, or corporation without the prior consent and approval in writing by the Town.

Cost of Preparing Qualification/Proposal Statements – The Town shall not be responsible for any expenses incurred by any Responder in preparing and submitting a Proposal.

Thank you.

Philip Goodwin

Revised April 9, 2019

TOWN OF HAMDEN

**GENERAL REQUEST FOR PROPOSAL
SPECIFICATIONS -- PART B**

1. **Nondiscrimination under Title VI of the Civil Rights Act of 1964.** Contractor shall comply with the requirements of Title VI of the Civil Rights Acts of 1964 (PL 88-352), 42 U.S.C. Sec. 2000d et. Seq. and the Fair Housing Act (42 U.S.C. 3601-20) and Executive Order 11063 and the HUD regulations with respect thereto including the regulations under 24 CFR Part I. In the sale, lease, or other transfer of land acquired, cleared or improved with assistance provided under the Agreement, 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, 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; and 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 their 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. **Fair Housing Opportunities Under Title VIII of the Civil Rights Act of 1968 and Fair Housing Act (42 U.S.C. 3601-20).** Contractor shall comply with the requirements of Title VIII of the Fair Housing Act as amended (PL 90-284). The CONTRACTOR shall provide for fair housing opportunities where possible. The CONTRACTOR is prohibited from discriminating in the sale or rental of housing, the financing of housing, or the provision of brokerage services, including in any way making unavailable or denying a dwelling to any person, because of race, color, religion, sex or national origin. Title VIII further requires programs and activities relating to housing and community development to be administered to affirmatively further fair housing.

3. **Prohibition Against Payments of Bonus or Commission.** The funds paid to Contractor shall not be used in the payment of any bonus or commission for the purpose of obtaining HUD approval of the application for such assistance, or HUD approval of applications for additional assistance, or any other approval or concurrence of HUD required under this AGREEMENT, Title I of the Housing and Community Development Act of 1974, as amended, or HUD regulations with respect thereto; it being understood, however, that reasonable fees or bona fide

technical, consultant, managerial or other such services, are not hereby prohibited if otherwise eligible as program costs.

4. **“Section 3” Compliance in the Provision of Training Employment and Business Opportunities.** Every application, recipient, contracting party, contractor, and subcontractor shall incorporate, or cause to be incorporated, in all contracts, the following clause (referred to as a Section 3 clause):
- a) The work to be performed under this contract is on a project assisted under a program providing direct Federal financial assistance from the Department of Housing and Urban Development and is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u. Section 3 requires that to the greatest extent feasible opportunities for training and employment be given lower income residents of the project area and contracts for work in connection with the project area and contracts for work in connection with the project be awarded to business concerns which are located in or owned in substantial part by persons residing in the area of the project.
 - b) The parties to this contract will comply with the provisions of said Section 3 and the regulations issued pursuant thereto by the Secretary of Housing and Urban Development set forth in 24 CFR Part 135, and all applicable rules and orders of the Department issued thereunder prior to the execution of this Contract. The parties to this contract certify and agree that they are under no contractual or other disability, which would prevent them from complying with these requirements.
 - c) The CONTRACTOR will send to each labor organization or representative of workers with which he has a collective bargaining agreement or other contract or understanding, if any, a notice advising the said labor organization or workers’ representative of his commitments under this Section 3 clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment or training.
 - d) The CONTRACTOR will include this Section 3 clause in every subcontract for work in connection with the project and will, at the direction of the applicant for or recipient of Federal financial assistance, take appropriate action pursuant to the subcontract upon a finding that the subcontractor is in violation of regulations issued by the Secretary of Housing and Urban Development, 24 CFR Part 135. The CONTRACTOR will not subcontract with any subcontractor unless the subcontractor has been found in violation of regulations under 24 CFR Part 135 and will not let any subcontract unless the subcontractor has first provided it with a preliminary statement of ability to comply with the requirements of these regulations.
 - e) Compliance with the provisions of Section 3, the regulations set forth in 24 CFR Part 135, and all applicable rules and orders of the Department issued thereunder prior to the execution of the Contract, shall be a condition of the Federal financial assistance provided to the project, binding upon the applicant or recipient for such assistance, its successors, and assigns. Failure to fulfill

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these requirements shall subject the applicant or recipient, its contractors and subcontractors, its successors, and assigns to those sanctions specified by the grant or loan agreement or contract through which Federal assistance is provided, and to such sanctions as are specified by 24 CFR Part 135.

5. **Prevailing Salaries.** The CONTRACTOR shall be solely responsible for the determination of staff classifications and employ staff in relation to its personnel practices and salary ranges, including fringe benefits, in accordance with the Agreement.

6. **Anti-Kickback Rules.** Salaries of architects, draftsmen, technical engineers, technicians, laborers and mechanics performing work under this Agreement shall be paid unconditionally, and not less often than once a week, without deductions as are mandatory by law or permitted by the applicable regulations issued by the Secretary of Labor pursuant to the Copeland “Anti-Kickback Act” (18 U.S.C. 874) as supplemented in Department of Labor regulations (29 CFR, Part 3). The CONTRACTOR shall comply with all applicable regulations of said “Anti-Kickback Act” and shall insert appropriate provisions in all subcontracts relative to the work under this Agreement; and CONTRACTOR shall take steps to insure compliance by subcontractors with such regulations at all times. CONTRACTOR shall be responsible for the obtaining and submission of the affidavits of subcontractors required thereunder, except that the Secretary of Labor may specifically provide for variations of, or exemptions from, the requirements thereof.

7. **Non-Discrimination in Employment.** During the performance of this Contract, the CONTRACTOR agrees as follows:
 - a) The CONTRACTOR shall not discriminate against any employee or applicant for employment because of race, creed, color, sex or national origin. The CONTRACTOR shall take affirmative action to insure that applicants are employed and that employees are treated during employment without regard to their race, creed, color, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, transfer, recruiting or recruitment advertising, layoff, termination, rates of pay or other forms of compensation, and selection for training including apprenticeship. The CONTRACTOR agrees to post in conspicuous places available to employees and applicants for employment notices to be provided, setting forth the provisions of this Non-Discrimination in Employment Clause.

 - b) The CONTRACTOR shall, in all solicitations or advertisements for employees placed by or in behalf of the CONTRACTOR; state that all qualified applicants will receive consideration for employment without regard to race, creed, color, sex, or national origin.

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c) The CONTRACTOR shall comply with all provisions of Executive Order 11246 of September 24, 1965, entitled "Equal Employment Opportunity", as amended by Executive Order 11375 and Executive Order 12086, as supplemented in Department of Labor Regulations (41 CFR, Part 60), and all of the rules, regulations and relevant orders of the President's Committee of Equal Employment Opportunity in effect as of the date of this Agreement; and the CONTRACTOR shall furnish all information and reports required herein, and shall on demand permit access to its books, records, and accounts, in its possession or control, by TOWN and the said Committee for purposes of investigation to ascertain compliance with such rules, regulations and orders.

d) The CONTRACTOR will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided by the Contract Compliance Officer advising the said labor union or workers' representative of the CONTRACTOR'S commitment under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

e) In the event the CONTRACTOR'S noncompliance with the non-discrimination sections of the contract or with any of such rules, regulations, or orders, this contract may be canceled, terminated or suspended in whole or in part and the CONTRACTOR may be declared ineligible for further Government contracts or federally assisted construction contract procedures authorized in Executive Order 11246 of September 4, 1965, or by rule, regulations, or order of the Secretary of Labor, or as otherwise provided by law.

f) The Contractor will include the portion of the sentence immediately preceding paragraph (a) and the provisions of paragraph (a) through (g) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 25, 1965, as amended by Executive Order 11375 and 12086, so that such provisions will be binding upon each subcontractor or vendor. The CONTRACTOR will take such action with respect to any subcontractor or purchase order as the Department may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Department, the contractor may request the United States to enter into such litigation to protect the interest of the United States.

g) The CONTRACTOR further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 or September 24, 1965, as amended by Executive Orders 11375 and 12086, with a subcontractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the executive order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon CONTRACTOR and subcontractors by the Department of the Secretary of Labor pursuant to Part II, subpart D of the Executive Order.

- h) No person in the United States shall on the ground of race, color, national origin, or sex be excluded from participation in, be denied the benefits of, or be subjected to the discrimination under any program or activity funded in whole or in part with funds made available under this title. Any prohibition against discrimination on the basis of age under the Age Discrimination Act of 1975, as amended, or with respect to an otherwise qualified handicapped individual as provided in Section 504 of the Rehabilitation Act of 1973, as amended, shall also apply to any such program or activity. Remedies described in Section 109 of the Housing and Community Development Act of 1974, as amended, as the regulations issued pursuant thereto, (24 CFR Section 570.601) shall apply, if failure to comply with this paragraph has been determined.
8. **Employment of Certain Persons Prohibited.** No person under the age of sixteen years and no person who at the time is serving sentence in a penal or correctional institution shall be employed on the work covered by this Contract.
9. **Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970 and Federal Implementing Regulations.** Contractor and Owners shall to the greatest extent practicable under state law comply with Sections 301 and 302 of Title III, (Uniform Real Property Acquisition Policy) of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and will comply with Sections 303 and 304 of Title III and HUD implementing instructions in 24 CFR Part 42 and 570.602 (b), comply with Title II (Uniform Relocation Assistance) of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and HUD implementing regulations at 24 CFR Part 42 and 570.602 (a).
10. **Political Activity Hatch Act and Section 109 of HCD Act.** CONTRACTOR shall comply with the provisions of the Hatch Act and Section 109 of the Housing and Community Development Act of 1974, as amended, and the regulations pursuant thereto (24 CFR 570.601). Under no circumstances shall the CONTRACTOR and/or other recipients, subcontractors, and sub recipients use TOWN funds or persons employed in administering TOWN programs for the purposes of conducting any political activity.
11. **Executive Orders 11063, 12259, and Title VIII.** CONTRACTOR will comply with Executive Order 11063 as amended by Executive Order 12259 and the implementing regulations in 24 CFR Part 107 and Title VIII of the Civil Rights Act of 1968 (Pub. L.90-284) as amended.
12. **Historic Preservation.** CONTRACTOR will comply with the National Historic Preservation Act of 1966 (PL 89-665), Preservation of Historic and Archaeological Data Act of 1974 (PL 93-291), Procedures for Protection of Historic and Cultural Properties, Advisory Council on Historic Preservation (36 CFR 800), and the HUD regulations with respect thereto.

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13. CONTRACTOR will comply with HUD Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794 et. seq.) provides:

No otherwise qualified individual with handicaps . . . shall, solely by reason of his or her handicap be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financing assistance.

14. **No Conflict of Interest:** Responder certifies, by submitting a Proposal, that no owner, employee or family member (defined for purposes of this Request for Proposal as a spouse, parent, sibling or child) of an owner or employee of Responder is a current or former employee of the Town or its Board of Education.

Responder further certifies that no owner or employee of Responder has any interest, direct or indirect, which is incompatible with the proper discharge of the proposed duties in the public interest or that would tend to impair Responder's independent judgment or action in the performance of the proposed duties.

Responder certifies that it does not have any past, present or currently planned interests which are an actual or potential organizational conflict of interest with respect to performing the work for Town under this invitation to RFP.

Responder hereby covenants and agrees that no employee, elected official or appointed official of the Town or its Board of Education has any interest in this Agreement or will directly or indirectly benefit therefrom.

15. Compliance with Town Regulations

Responder shall cause all persons performing work pursuant to the contract between Responder and the Town to comply with all Town and Board of Education requirements, including instructions pertaining to conduct and to building access and related requirements issued by the Town and District, respectively. All personnel shall wear readily visible identification in a form that is satisfactory to the Town. The Town may promulgate and modify from time to time rules and regulations relating to conduct as the Town, in its sole discretion, may determine, and the contractor shall cause all persons performing work to comply with any such requirements.

16. Confidential Information

Responder shall cause all persons under Responder's control who are providing services or materials under or through Responder's contract with the Town to preserve and protect all information of the Town and Hamden School District to which they may have access during the performance of work as confidential. Responder expressly acknowledges that if the facilities that are the subject of the Project are school facilities or public buildings, the security and safety of the occupants, users and general public are of paramount importance and Responder shall observe and enforce appropriate security protocol to ensure the safety of users and occupants.

COMPLETE AND RETURN

**RFP #:
RFP TITLE**

RFP FORM

TO: Purchasing Agent
Hamden Government Center
2750 Dixwell Avenue
Hamden, CT 06518

I have received the RFP documents entitled _____

and dated _____

I have received Addenda dated as follows: _____

I have considered and included the provisions of the RFP documents noted above in my Proposal. I have examined the RFP documents and I submit the following Proposal:

In submitting this Proposal, I agree:

1. To hold my Proposal open until 60 days after the date on which RFPs are due.
2. To enter into and execute a contract provided by the Town, without alteration by me, if awarded on the basis of this Proposal, according to the contract form provided by the Town of Hamden.
3. To accomplish the work in accord with the RFP Specifications and Contract Documents and to the extent that there is a conflict between the provisions of any RFP documents, the order of precedence shall require me to provide the item or service that is of the greater value or benefit to the Town of Hamden.
4. To begin the work in strict accordance with the project schedule or the Notice to Proceed issued by the Town and to complete the work within _____ calendar days following Owner's date of Notice to Proceed.
5. The undersigned submits a RFP bond in the sum of _____ dollars (\$ _____) 5% of Base Proposal, which sum is agreed shall become the sole and exclusive property of the Owner as liquidated damages to the Owner if the undersigned fails to execute a contract in conformity with the RFP Form and to furnish surety bonds and insurance policies in accordance with the General Conditions after due notification has been given.
6. I acknowledge that the Town of Hamden reserves the right to accept or reject any or all RFPs, alternates, options, or Proposals; to waive any technical defect in a RFP or part thereof submitted, and to accept the RFP deemed by the Town to be in the best interest of the Town of Hamden.

Name

Title

Dated

Contractor Tax ID #

Contractor License #

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COMPLETE AND RETURN

RFP #:
RFP TITLE

NON-CONFLICT AFFIDAVIT OF RESPONDENTS

No Elected or Appointed Official, SBC member or other officer or employee or person whose salary is payable in whole or in part from the Town of Hamden OR Board of Education, nor any immediate family member thereof, 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 profits thereof.

The undersigned further certifies that this statement is executed for the purpose of inducing the Town of Hamden to consider the statement of qualifications submitted herein.

State of Connecticut S.S.

County of _____

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

Legal Name of Respondent: _____

Business Name: _____

Business Address: _____

Signature and Title of Person

By: _____

Notary Public

My Commission Expires: _____

Date: _____

Revised April 9, 2019

COMPLETE AND RETURN

RFP #:
RFP TITLE

NON-COLLUSIVE RFP STATEMENT

The undersigned Responder, having fully informed itself regarding the accuracy of the statements herein, certifies that:

- (1) The Proposal has been arrived at by the Responder independently and has been submitted without collusion with, and without any agreement, understanding, or planned common course of action with, any other vendor or Responder of materials, supplies, equipment, or services described in the invitation to RFP, designed to limit independent proposing or completion, and
- (2) The contents of the proposal have not been communicated by the Responder or its employees or agents to any person not any employee or agent of the Responder or its surety on any bonds furnished with the Proposal and will not be communicated to any such person prior to the official opening of the Proposal.

The undersigned Responder further certifies that this statement is executed for the purposes of inducing the Town of Hamden to consider the Proposal and make an award in accordance therewith.

Legal Name of Responder

Business Address

Signature and Title of Person
Authorized to Sign

Printed Name

Date

Revised April 9, 2019

COMPLETE AND RETURN

RFP #:
RFP TITLE

PRICE SHEET

You are required to furnish the following information to the Town of Hamden:

Name and address of Company _____
(Print or type) _____

Name and Title of Agent of Company _____
(Print or type)

Signature: _____ Date: _____

Telephone: _____ Email: _____

Fax: _____ Federal I.D. Number: _____

Lump sum price for equipment, material, and labor: \$ _____

\$ _____

WRITTEN AMOUNT

Revised April 9, 2019

BRIDGE NO.06826

35650 - HAMDEN
HAMDEN HILLS DRIVE
over
SHEPARD BROOK & RR-TRAIL

Routine Inspection

2/26/2016

Inspected by: AI Engineers



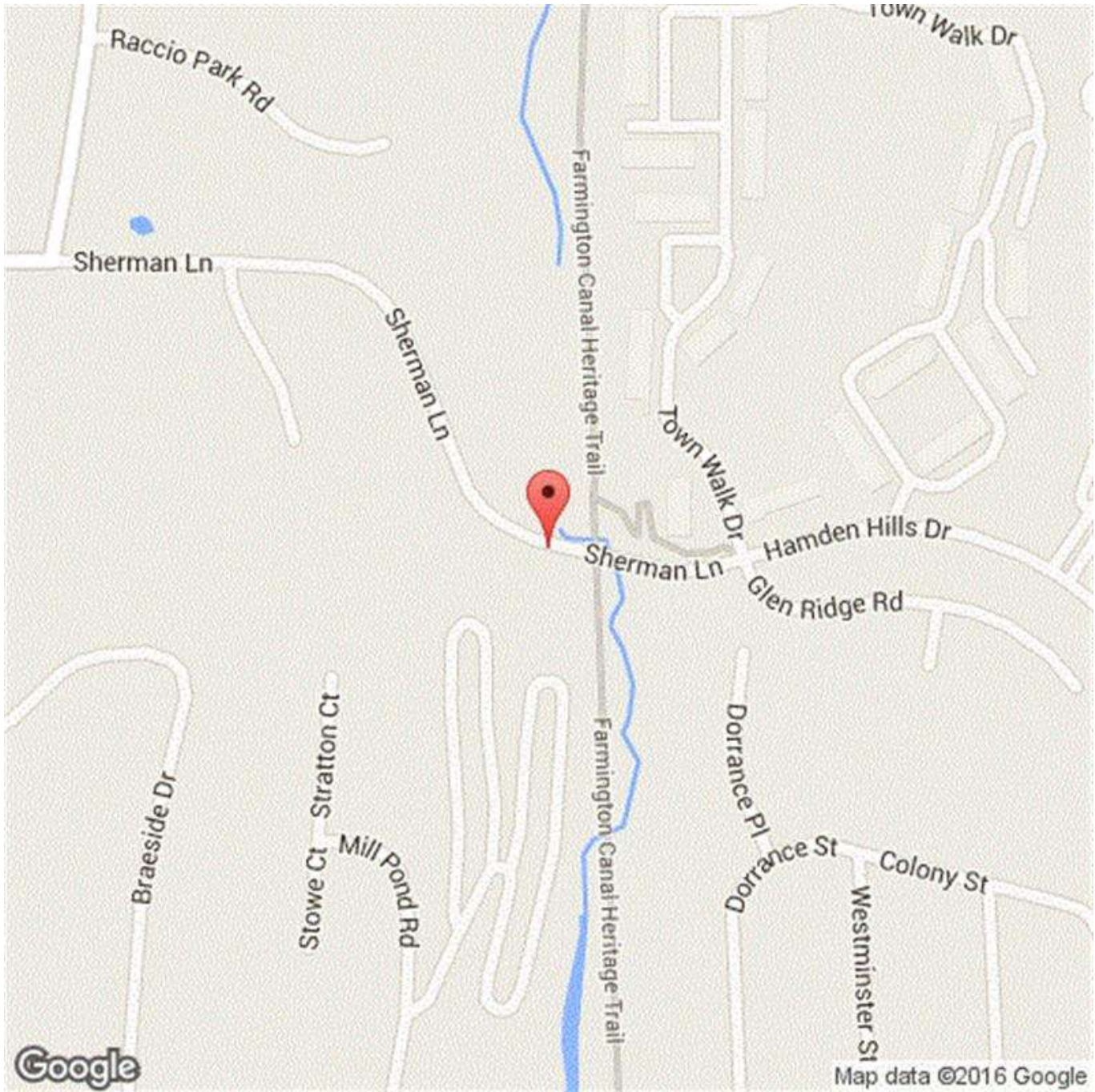
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Form: Location
Inspection type: Routine
Inspection Date: 2/26/2016
Inspected by: AI Engineers

Bridge No: 06826

Town: HAMDEN
Carried: HAMDEN HILLS DRIVE
Crossed: SHEPARD BROOK & RR-TRAIL
Inventory Route: Non-NHS



Location Map # 1

EXECUTIVE SUMMARY
2-26-16

Bridge No. 06826 carries Hamden Hills Drive over Shepard Brook and Railroad Trail (Farmington Canal Greenway) in Hamden, Connecticut. The two span structure consists of steel multi-girder composite with a reinforced concrete deck supported by reinforced concrete abutments and pier. The bridge has an overall length of 216' with a curb-to-curb width of 32.0' and a 4.5' sidewalk on both sides. The bridge was built in 1991. According to a Load and Resistance Factor Rating (LRFR) on file with the Connecticut Department of Transportation completed in 2014 using the Rating Factor (RF) method, the bridge has an AASHTO HL-93 Inventory Rating Factor of 1.10. Since no significant deterioration was noted, a re-evaluation is not required at this time.

A routine inspection completed on February 26th, 2016 found the bridge to be in satisfactory condition (Rating = 6). The deficiencies found on the bridge are as follows:

Deck:

The deck is in good condition. (Rating = 7).

Approaches:

The approaches are in fair condition. (Rating = 5).

- Bituminous concrete pavement exhibits random transverse, longitudinal and map cracks open up to 1/2" wide and moderate to heavy raveling throughout.
- The pavement adjacent to the paved over deck joints at the abutments exhibits severe raveling with full-width map cracks open up to 1" wide, breaking-up bituminous and potholes up to 5.5' x 4" x 2" deep. There is partially exposed membrane at the center of the east abutment joint.

Superstructure:

The superstructure is in good condition. (Rating = 7).

Substructure:

The substructure is in satisfactory condition. (Rating = 6).

Channel & Channel Protection:

The channel is in satisfactory condition. (Rating = 6).



P.E. Signature: _____

Date: 4/1/2016

Form: BRI-19, Rev. 2/15
Inspection type: Routine
Inspection Date: 2/26/2016
Inspected by: AI Engineers

Bridge No: 06826

Town: HAMDEN
Carried: HAMDEN HILLS DRIVE
Crossed: SHEPARD BROOK & RR-TRAIL
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" value="G Check of scour or undermining"/>

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: 2/26/2016
Inspected by: AI Engineers

Bridge No: 06826

Town: HAMDEN
Carried: HAMDEN HILLS DRIVE
Crossed: SHEPARD BROOK & RR-TRAIL
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.

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

- Bridge is over Shepard Brook and the Farmington Canal Heritage Greenway (RR-Trail).
- Bridge is logged west to east with girder G1 at the north fascia.
- Previous special inspection "G- Check of scour or undermining" at the pier north column, west elevation, has been repaired with rip-rap previously. Special inspection has been removed as per BRI-8 issued 10-1-15 by TD. Continue to monitor this location in future inspections.
- ADT increased from 2012 value at 1% increase per year.

CLASSIFICATION

(112) NBIS Bridge Length
(104) Highway System
(26) Functional Class
(100) Defense Highway

Form: BRI-19, Rev. 2/15
Inspection type: Routine
Inspection Date: 2/26/2016
Inspected by: AI Engineers

Bridge No: 06826

Town: HAMDEN
Carried: HAMDEN HILLS DRIVE
Crossed: SHEPARD BROOK & RR-TRAIL
Inventory Route: Non-NHS

(111) Pier/Abutment Navigation	<input type="text"/>	(101) Parallel Structure	<input type="text" value="N - No parallel structure"/>
(116) Vert-Lift Brg Nav Min	<input type="text" value="0"/> ft. <input type="text" value="0"/> In.	(102) Direction of Traffic	<input type="text" value="2 - 2-way traffic"/>

Form: BRI-19, Rev. 2/15
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Bridge No: 06826

Town: HAMDEN
 Carried: HAMDEN HILLS DRIVE
 Crossed: SHEPARD BROOK & RR-TRAIL
 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 ft. in.
 Posted Vert. Underclearance ft. in.

Posted Speed Limit on Bridge m.p.h.

OTHER FEATURES

Fence Required
 Fence Present
 Fence Type
 Fence Height
 Fence Material
 Fence Top Type
 Barrel Ladders
 Stand Pipes
 Catwalks

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

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Inventory Route: Non-NHS

Moveable Inspection System

Haunches Present over Roadway

Utilities

1 Gas
2 Water
7 Sewer

Form: BRI-19, Rev. 2/15
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Inspection Date: 2/26/2016
Inspected by: AI Engineers

Bridge No: 06826

Town: HAMDEN
Carried: HAMDEN HILLS DRIVE
Crossed: SHEPARD BROOK & RR-TRAIL
Inventory Route: Non-NHS

INSPECTOR'S SIGNATURES:

1) _____ Date: 02/29/2016



2) _____ Date: 02/29/2016



3) _____ Date: 03/01/2016



4) _____ Date: _____

P.E. SIGNATURE: _____



Date: 04/05/2016

P.E. # _____

22856

Reviewed By: _____



Date: 04/06/2016

Form: BRI-18, Rev. 1/14
 Inspection type: Routine
 Inspection Date: 2/26/2016
 Inspected by: AI Engineers

Bridge No: 06826

Town: HAMDEN
 Carried: HAMDEN HILLS DRIVE
 Crossed: SHEPARD BROOK & RR-TRAIL
 Inventory Route: Non-NHS

FIELD INSPECTION REPORT

Location: 300 FT W OF GLEN RIDGE
 Main Material: 3 - Steel
 Main Design: 02 - Stringer/Multi-beam or

Year Built: 1991
 Year Rebuilt:

Snooper Required:
 Snooper Used:

Inspectors:

Lead Inspector:	Pavan Seemakurty
Inspector:	Task:
Aziz, Ali	BSE - Inspector
Cote, Ethan	BSE - Inspector
Seemakurty, Pavan	BSE - Inspector

Visits:

Visit Date:	Temp:	Start Time:	End Time:
02/26/2016	34	08:30 AM	03:00 PM

58. DECK:

Reinforced concrete deck and bituminous concrete overlay with preformed fabric membrane.

Overall Rating: 7

The deck is in good condition.

Rating

Overlay: 5 Bituminous concrete overlay exhibits transverse, longitudinal and map cracks open up to 1/4" wide and areas of light to moderate raveling throughout. See photo 8. In span 1, there are 1' x 1' x 1" deep potholes along scupper grates at both curb lines. See photo 22. There is light to moderate sand/debris accumulation along both curb lines.

The deck joints at the abutments are paved over, and the overlay exhibits severe raveling with full-width x full-length map cracks open up to 1" wide, breaking-up bituminous and potholes up to 5.5' x 4" x 2" deep. See photos 9-10. There is partially exposed membrane at the center of the east abutment joint.

Along the saw cut and seal joint at the pier, the overlay exhibits edge spalls/potholes up to 3' x 4" x 2" deep. See photo 11.

See field notes sheet 3.

Deck - Str. Condition: 7 Underside of reinforced concrete deck exhibits isolated transverse hairline cracks with and without efflorescence in span 1, bay 1.

The overall underside of deck deterioration is <1%. See BRI-10.

See field notes sheets 6-8 and photo 12.

Curbs: N Curbs are monolithic with sidewalks. See item "Sidewalks" below.

Average curb reveal: South curb = 6"; North curb = 6-3/8".

See field notes sheet 4.

Median: N

Sidewalks: 4 Concrete sidewalks with monolithic curbs at both sides of the bridge exhibit light scale throughout, edge spalls up to 1/4" deep and scrapes at random locations. There is light to moderate sand/debris accumulation on both sidewalks.

South sidewalk:

- At the west abutment joint, the curb has a 6" x 3" hole with vegetation growth and a 4" high x 4" long x 4' deep void under the approach sidewalk. There is evidence of past leakage below. See photo 14.
- At the pier joint, there is a 3' x 18" x 2" deep spall with the joint open up to 2" wide and a 1' long through hole. There is active leakage below at the pier. See photo 15.

North sidewalk:
 - At the pier joint, there is a 15' long x 4' wide area of plow damage with spalls and scale up to 4" deep, loose concrete and hollow areas. There are longitudinal cracks up to 42' long x 1/4" wide in the sidewalk extending from this location with edge spalls up to 42' long x 4" wide x 1" deep. See photo 16.
 - At the east end, there is a 30" long x 7" wide x 6" high hollow area/potential spall with cracks at the curb.

Approach sidewalks:
 - At the southeast and northeast corners, there are gaps up to a 47" long x 3/4" wide between the sidewalk and the bottom of parapet (filled with debris). See photo 17.
 - At the southwest corner, there is a 16" x 1' x 4" deep spall in the sidewalk and a 50' long x 4" wide x up to 4" deep area of severe scale at the curb. See photo 18.
 - At the southeast corner, there is full-width x up to 3" high vertical mis-alignment between sidewalk segments at the end of the approach parapet (pedestrian tripping hazard). See photo 13.
 - At the northeast corner, there is a 2' x 7" x 1" deep spall at the east abutment joint. There is also a full-width x 1/8" wide transverse crack.

See field notes sheets 3, 6-7 & 13.

Parapet: 6 Reinforced concrete parapets have isolated vertical hairline cracks up to full-height with and without efflorescence. In span 1, the south parapet has three (3) spalls up to 1.5' x 4" x 2" deep at the top. See photo 19.

Approach parapets:
 South parapet is laterally misaligned with the southeast approach parapet by 11/16" to the south (no change; appears to be an as-built condition). See photo 20. There is a 16" x 3" hollow area/potential spall in the northeast approach corner parapet. See photo 17. Also, see item "Sidewalks" above.

See field notes sheet 3 and photo 13.

Railing: 8 Extruded aluminum double pipe bridge railings with no deficiencies noted.

See field notes sheet 3 and photo 13.

Paint: N

Fence: N

Drains: 5 Scupper pipes at the underside of the deck in span 1, bays 1 & 4 near the pier, exhibit heavy surface rust. The scupper pipe in span 1, bay 1, is disconnected from the coupling (previously noted active leakage onto steel at this location was not found). See photo 21.

Scupper grates along the north and south curbs in span 1 are partially clogged. See photo 22.

PVC weeps without extensions at the underside of the deck in both spans, bays 1 & 4 (do not drain onto steel). See photo 21.

See field notes sheets 3 & 6-7.

Lighting Standard: 6 Lighting standards mounted on the north parapet in spans 1 & 2. The lighting standard in span 2 is missing two (2) of three (3) anchor bolt covers at the base and exhibits three (3) of four (4) broken/cracked light covers at the top. See photos 23-24.

See field notes sheet 3.

Overall Utility Condition Rating 6 - Fair

Utility Type/Size

1 Gas	6" diameter gas main in bay 4. The insulation wrapping is torn and hanging down from the gas main at random
---------	---

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 Inspection type: Routine
 Inspection Date: 2/26/2016
 Inspected by: AI Engineers

Bridge No: 06826

Town: HAMDEN
 Carried: HAMDEN HILLS DRIVE
 Crossed: SHEPARD BROOK & RR-TRAIL
 Inventory Route: Non-NHS

	locations. See field notes sheets 6-7 and photo 12.
2 Water	18" diameter insulated water main in bay 1. The insulation wrapping is torn and hanging down from the water main at random locations. See field notes sheets 6-7 and photo 12.
7 Sewer	15" diameter insulated sewer pipe in bay 2. The insulation wrapping is torn and hanging down from the sewer pipe at random locations. See field notes sheets 6-7 and photo 12.

Construction Joints:	N	
Expansion Joint:	4	The saw cut and seal joint at the pier has deteriorated sealant for the full-length with up to 3' long x 4" wide x 2" deep separations and/or potholes in the adjacent overlay. Joint over the pier is open up to 1" wide. See photo 11. The pier joint in the south sidewalk is open up to 2" wide and has a 1' long through hole. See photo 15. There is active leakage below at the pier. See photos 34-35. The abutment deck joints are paved over. See item "Overlay" above. See field notes sheets 3, 6-7 & 13.

Haunches Present over travelway?

APPROACH CONDITION:

Bituminous concrete pavement.	Overall Rating: <input type="text" value="5"/>
The approaches are in fair condition.	

Rating

Approach Slab:	<input type="text" value="5"/>	Not visible and paved over. Rating based on the condition of the approach pavement. See item "Approach Pavement" below.
Relief Joints:	N	
Approach Guide Rail:	<input type="text" value="5"/>	Metal beam guide rails at all approach corners. The southwest approach metal beam guide rail has a ±38' long area of severe collision damage near the end, with the rail bent ±26' long x 4' deep and seven (7) bent/disconnected posts. See photo 25. See field notes sheet 3.
Approach Pavement:	<input type="text" value="5"/>	Bituminous concrete pavement exhibits random transverse, longitudinal and map cracks open up to 1/2" wide and moderate to heavy raveling throughout. See photo 26. See item "Deck - Overlay" above. See field notes sheet 3.
Approach Embankment:	<input type="text" value="8"/>	No deficiencies noted.

Traffic Safety Features

Bridge Railings:	<input type="text" value="1"/>	>32" high (Non-NHS).
Transitions:	<input type="text" value="0"/>	Does not meet R-B 350 standards (parapet end is more than 3" higher than approach rail).
Approach Guardrails:	<input type="text" value="0"/>	Does not meet R-B 350 standards (steel block-outs).

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 Inventory Route: Non-NHS

Approach Guardrail Ends: 1 Continuous beyond bridge limits.

59. SUPERSTRUCTURE:

Steel multi-girder.

Overall Rating: 7

The superstructure is in good condition.

Rating

Bearing Devices:	7	Elastomeric expansion bearings at both abutments exhibit minor bulging and up to 10" long x 1/2" curling at the top edges. Anchor bolt nuts are backed off up to 1/4" at both abutments. Elastomeric pads were painted over previously and exhibit peeling paint. See photo 27. Fixed elastomeric bearings at pier exhibit minor bulging. Elastomeric pads were painted over previously and exhibit peeling paint. See field notes sheets 6-7.
Stringers:	N	
Girders:	7	Steel girders exhibit isolated locations of peeling paint with light to moderate surface rust at fascia girders and adjacent end diaphragms in bays 1 & 4 over the pier due to deck joint leakage. See photo 28. See field notes sheets 6-7 and photo 12.
Floor Beams:	N	
Trusses - General:	N	
Trusses - Portals:	N	
Trusses - Bracing:	N	
Paint:	7	<10% peeling paint of total structural steel area. See above items.
Rust:	7	See above items.
Machinery Movable Span:	N	
Rivets & Bolts:	8	
Welds - Cracks:	8	All girder bottom flange transition welds (fatigue category B) were checked 100% hands-on with no deficiencies noted. See photo 29. All girder transverse web stiffener to bottom flange fillet welds (fatigue category C') were checked 100% hands-on with no deficiencies noted. See field notes sheets 6-7.
Timber Decay:	N	
Concrete Cracking:	N	
Collision Damage:	7	In span 2, girders G4 & G5 exhibit isolated 1' long scrape marks at the underside of the bottom flange. See photo 30. See field notes sheet 7.
Member Alignment:	8	
Deflection Under Load:	N	(N) Normal, (E) Excessive.
Vibration Under Load:	N	(N) Normal, (E) Excessive.
Stand Pipes:	N	
Barrel Ladders:	N	
Are Barrel Ladders OSHA Compliant?		NA

60. SUBSTRUCTURE:

Reinforced concrete abutments.

Overall Rating: 6

The substructure is in satisfactory condition.

Rating

Abutments - Stem:	7	Reinforced concrete abutment stems exhibit random areas of light scale. The west abutment stem has an isolated 6" long vertical hairline crack. There is evidence of past leakage noted at both abutment stems. See field notes sheets 9-10 and photos 31-32.
Abutments - Backwall:	8	Reinforced concrete abutment backwalls exhibit evidence of past leakage noted at both abutments. See field notes sheets 9-10 and photos 31-32.
Abutments - Footings:	N	Not visible.
Abutments - Settlement:	8	No evidence of settlement noted.
Abutments - Wingwalls:	7	Reinforced concrete wingwalls exhibit missing/deteriorated joint filler material with joints open up to 1.25" wide at the vertical joints along abutment stems. The southwest wingwall has an isolated 6' x 6" hairline map cracking area. See field notes sheets 11-12 and photo 33.
Piers/Bents - Caps:	7	Reinforced concrete pier cap exhibits random vertical hairline cracks, mostly along the bottom of the west face, with some extending full-width across the underside of the cap. There is an isolated crack that extends across the top of the cap at the south end. There is active leakage noted at the north end of the cap. See field notes sheets 13-14 and photos 34-35.
Piers/Bents - Pile Bent:	N	
Piers/Bents - Columns:	7	Reinforced concrete pier columns. There is an isolated horizontal hairline crack at the southwest side of column 2. There are several trees protruding from the base of the south column. See photo 36. See field notes sheets 13-14 and photos 34-35.
Piers/Bents - Footings:	6	Reinforced concrete pier footings are partially exposed 16' x 10' x up to 3' high at the west side of the pier (as-built condition) and exhibit light scale. Previously noted scour area causing undermining at the southwest corner of the north column was repaired previously with rip rap as per Special Inspection Report dated 7/8/15. See photo 37. Also, see item "Erosion - Scour" below. Rating revised from "5". See field notes sheet 13 and photo 34.
Piers/Bents - Settlement:	8	No evidence of settlement noted.
Erosion - Scour:	6	Erosion: Rating = 8. Scour: Rating = 6. Previously noted scour area causing undermining at the southwest corner of the north column was repaired previously with rip rap as per Special Inspection Report dated 7/8/15. See above item "Piers/Bents - Footings". See field notes sheet 13 and photo 34.
Concrete Crack - Spall:	7	See above items.
Steel Corrosion:	N	
Paint:	N	
Timber Decay:	N	
Collision Damage:	8	
Debris:	7	Light pigeon debris on abutment seats and on top of pier cap.

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 Inspected by: AI Engineers

Bridge No: 06826

Town: HAMDEN
 Carried: HAMDEN HILLS DRIVE
 Crossed: SHEPARD BROOK & RR-TRAIL
 Inventory Route: Non-NHS

See field notes sheets 9-10 & 13-14.

61. CHANNEL AND CHANNEL PROTECTION:

Shepard Brook.

Overall Rating: 6

The channel is in satisfactory condition.

Rating

Channel - Scour: 6	<p>Channel exhibits minor local scour holes up to 2.5' deep at the inlet and outlet of the stone masonry arch culvert located between the pier columns.</p> <p>The channel bed consists of sand/silt, mud and leaves.</p> <p>The southwest corner of the footing is ±1' away from the edge of the channel and susceptible to undermining when the channel has a high volume of water. Previously noted scour area causing undermining at the southwest corner of the north column was repaired previously with rip rap as per Special Inspection Report dated 7/8/15. Tree root growth is still present at this location. See photo 37.</p> <p>See field notes sheet 16.</p>
Embankment - Erosion: 6	<p>Channel embankments exhibit up to 18" high erosion at upstream and downstream with partially exposed tree roots. See photos 40-41.</p> <p>There is minor erosion of the channel embankments at both ends of the stone masonry arch culvert wingwalls. See photos 37-38.</p> <p>There is heavy erosion trough 40' long x 7' wide x 4' deep at the embankment along the roadway drainage outlet at the southwest end of the bridge. The drain opening is also undermined 7' wide x 3' high x 3' deep. See photo 39.</p> <p>See field notes sheets 15-16.</p>
Debris: 7	<p>Small tree branches and vegetation growth in the channel.</p> <p>See field notes sheet 16 and photos 40-41.</p>
Vegetation: 7	<p>Trees and heavy vegetation overhang the edges of the channel.</p> <p>See field notes sheet 16 and photos 40-41.</p>
Channel Change: 6	<p>Shepard Brook passes below the structure at the north side of span 1 and is redirected through a stone masonry arch culvert located between the pier columns, below the Farmington Canal Greenway Trail into span 2, at the south side of the bridge. See photos 37-38 & 40-41.</p> <p>A small drainage system feeds into Shepard Brook at the north side of span 2. See photo 42.</p> <p>There is a roadway drainage outlet at the southwest end of the bridge. See photo 39.</p> <p>Also, see above items.</p> <p>See field notes sheets 15-16.</p>
Fender - System: N	
Spur Dikes and Jetties: N	
Rip Rap: 7	<p>Rip-rap along the abutment/wingwall embankments. The embankment along the northeast wingwall exhibits eroded rip rap with exposed synthetic fabric. See photo 43.</p> <p>Also, see above items.</p>

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Inventory Route: Non-NHS

See field notes sheets 15-16.

62. CULVERTS AND RETAINING WALLS:

Overall Rating:

Rating

Barrel:	<input type="text" value="N"/>
Concrete:	<input type="text" value="N"/>
Steel:	<input type="text" value="N"/>
Timber:	<input type="text" value="N"/>
Headwall:	<input type="text" value="N"/>
Cutoff Wall:	<input type="text" value="N"/>
Debris:	<input type="text" value="N"/>
Retaining Wall System:	<input type="text" value="N"/>
Footing:	<input type="text" value="N"/>

LOAD POSTING:

Rating

Single Unit (Tons):	<input type="text"/>
Semi Trailer (Tons):	<input type="text"/>
4 Axle (Tons):	<input type="text"/>
3S2 (Tons):	<input type="text"/>
All Vehicles:	<input type="text"/>
Advanced Warning:	<input type="text" value="None"/>
Warning At Bridge:	<input type="text" value="None"/>
Legibility:	<input type="text"/>
Visibility:	<input type="text"/>

VERTICAL CLEARANCE POSTING

Min. Vert Under Clearance:	<input type="text"/>	Ft	<input type="text"/>	In	<input type="text"/>
Posted Clearence Under Bridge:	<input type="text"/>	Ft	<input type="text"/>	In	<input type="text"/>
Posted Clearence On Bridge:	<input type="text"/>	Ft	<input type="text"/>	In	<input type="text"/>
Advanced Warning:	<input type="text" value="None"/>				
Warning At Bridge:	<input type="text" value="None"/>				
Legibility:	<input type="text"/>				
Visibility:	<input type="text"/>				

NOTES / COMMENTS:

Character of Traffic:

Additional Notes:

- Bridge identification was stenciled at time of inspection. See photo 1.
- Bridge log direction is west to east with girder G1 at the north fascia, which is consistent with previous inspection reports and bridge plans. Shepard Brook flows from north to south.
- Bridge inspected using 62' snooper and local police assistance for one-way traffic control on Hamden Hills Drive.

Additional Comments:

National Bridge Elements
 Inspection type: Routine
 Inspection Date: 2/26/2016
 Inspected by: AI Engineers

Bridge No: 06826

Town: HAMDEN
 Carried: HAMDEN HILLS DRIVE
 Crossed: SHEPARD BROOK & RR-TRAIL
 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.	9439	sq. ft.	9430	9	0	0
1120 - Efflorescence/Rust Staining		8			8		
1130 - Cracking (RC and Other)		1			1		
107 - Steel Open Girder/Beam	Mod.	1050	ft.	1030	20	0	0
1000 - Corrosion		20			20		
205 - Reinforced Concrete Column	Mod.	2	each	2			
215 - Reinforced Concrete Abutment	Mod.	87	ft.	86	1	0	0
1130 - Cracking (RC and Other)		1			1		
220 - Reinforced Concrete Pile Cap/Footing	Mod.	32	ft.	0	32		
1190 - Abrasion/Wear (PSC/RC)		32			32		
234 - Reinforced Concrete Pier Cap	Mod.	44	ft.	28	16	0	0
1120 - Efflorescence/Rust Staining		1			1		
1130 - Cracking (RC and Other)		15			15		
310 - Elastomeric Bearing	Mod.	20	each	15	5		
2230 - Bulging, Splitting, or Tearing		5			5		
330 - Metal Bridge Railing	Mod.	432	ft.	432			
331 - Reinforced Concrete Bridge Railing	Mod.	432	ft.	417	15	0	0
1130 - Cracking (RC and Other)		15			15		

Bridge Number : 06826

Date: 2-26-16 Prepared by: EJC (AI) Checked By: MAI (AI)

MAI (AI)

CONCRETE DETERIORATION WORKSHEET

Form BRI-10, Rev. 9/01

Deterioration By Span- In Square Feet											
Span Number											
Deterioration Type	1	2	3	4	5	6	7	8	9	10	Total
Spalled and Delaminated Areas	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:
	Bot: 0	Bot: 0	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 0
Scale (Moderate to Severe only)	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:
	Bot: 0	Bot: 0	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 0
Cracks: w/ Efflorescence (use 6in. width x length)	Bot: 8	Bot: 0	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 8
w/o Efflo. (use 3in. width x length)	Bot: 1	Bot: 0	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 1
Map Cracking: w/Efflorescence (use full area)	Bot: 0	Bot: 0	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 0
w/o Efflo. (use 50 % of area)	Bot: 0	Bot: 0	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 0
Honeycombed Areas (only areas more than 1-1/2in. deep)	Bot: 0	Bot: 0	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 0
TOTAL	9	0									9
Total Span Area (Square Feet)	4326	5113									9439
% Spalled and Delaminated on Top											
% Deterioration on Bottom	0.2%	0.0%									0.1%

Form: BRI-17, Rev. 1/14
 Inspection type: Routine
 Inspection Date: 2/26/2016
 Inspected by: AI Engineers

Bridge No: 06826

Town: HAMDEN
 Carried: HAMDEN HILLS DRIVE
 Crossed: SHEPARD BROOK & RR-TRAIL
 Inventory Route: Non-NHS

JOINT MEASUREMENTS

Inspectors:		Visits:	
Lead Inspector:	Pavan Seemakurty	Visit Date:	Temp: Start Time: End Time:
Inspector:	Task:	02/26/2016	34 08:30 AM 03:00 PM
Aziz, Ali	BSE - Inspector		
Cote, Ethan	BSE - Inspector		
Seemakurty, Pavan	BSE - Inspector		

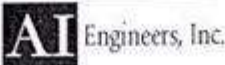
Deck Joint	Deck Joint Type	Effect Span (Ft.)	Comments	
W. Abut	None or Paved Over	96.0	Expansion	
<input checked="" type="checkbox"/> Winter Measurements		<input type="checkbox"/> Summer Measurements		Differential
Date		Date	Actual	
Temp oF	Left(in.)	Right (in.)	Temp oF	Left(in.) Right (in.)
34	1.063	1.063		

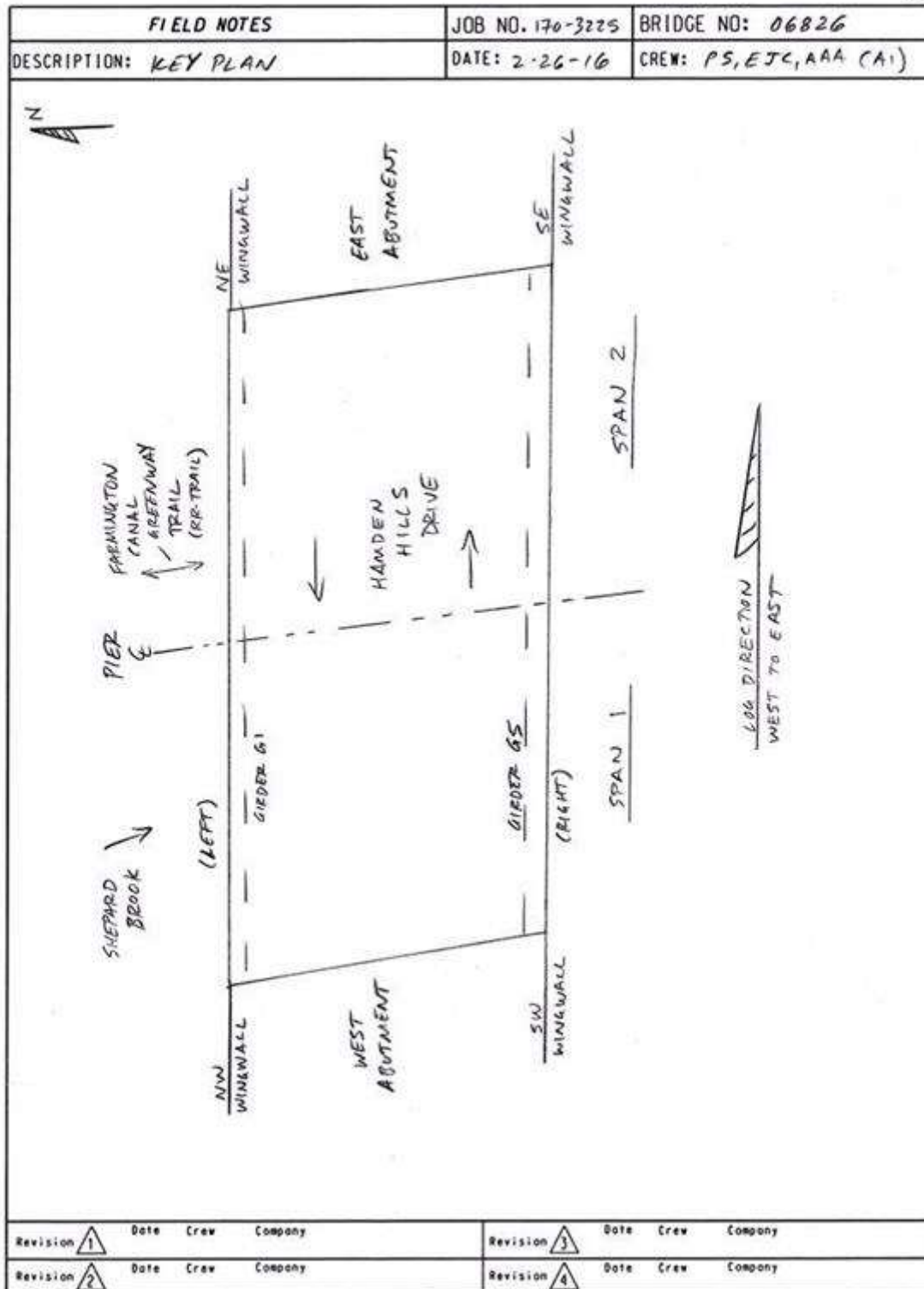
Deck Joint	Deck Joint Type	Effect Span (Ft.)	Comments	
Pier	Saw and Seal	0	Fixed/Fixed	
<input checked="" type="checkbox"/> Winter Measurements		<input type="checkbox"/> Summer Measurements		Differential
Date		Date	Actual	
Temp oF	Left(in.)	Right (in.)	Temp oF	Left(in.) Right (in.)
34	.625	.625		

Deck Joint	Deck Joint Type	Effect Span (Ft.)	Comments	
E. Abut	None or Paved Over	114.0	Expansion	
<input checked="" type="checkbox"/> Winter Measurements		<input type="checkbox"/> Summer Measurements		Differential
Date		Date	Actual	
Temp oF	Left(in.)	Right (in.)	Temp oF	Left(in.) Right (in.)
34	1.5	1.625		

Note: The 'Effective Span' is the length contributing to expansion at the joint. This should be 0 at fixed joints of single span

Reviewer's Comments: - Measurements taken 3" down from top of inside parapet face at inside to inside chamfer.

	JOB NO: 170-3225	BRIDGE NO: 06826
FIELD TIME LOG	DATE: SEE BELOW	SHEET 1 OF
DATE: 02/26/16	DESCRIPTION	TIME AT SITE
WEATHER: 24°F, SUNNY	CREW: PS, AAA, ETC	8:30 AM to 3:00 PM
EQUIP. LIST: AI WHITE TRUCK	SNOOPER: 60' (ALL ACCESS)	8:30 AM to 3:00 PM
	TMA TRUCK:	to
	RR FLAGMAN:	to
VISITOR: NONE	TOWN POLICE PROOPER: R. DEWYAM (#2449)	8:30 AM to 12:30 PM
TC & NOTES: TC REQ'D: ALT ONE-WAY TRAFFIC ON HAMDEN HILLS DRIVE BY AI. INSPECTION (100%) COMPLETE.		
DATE: _____	DESCRIPTION	TIME AT SITE
WEATHER: _____	CREW: _____	to _____
EQUIP. LIST: _____	SNOOPER: _____	to _____
	TMA TRUCK: _____	to _____
	RR FLAGMAN: _____	to _____
VISITOR: _____	TROOPER: _____	to _____
TC & NOTES: _____		
DATE: _____	DESCRIPTION	TIME AT SITE
WEATHER: _____	CREW: _____	to _____
EQUIP. LIST: _____	SNOOPER: _____	to _____
	TMA TRUCK: _____	to _____
	RR FLAGMAN: _____	to _____
VISITOR: _____	TROOPER: _____	to _____
TC & NOTES: _____		
DATE: _____	DESCRIPTION	TIME AT SITE
WEATHER: _____	CREW: _____	to _____
EQUIP. LIST: _____	SNOOPER: _____	to _____
	TMA TRUCK: _____	to _____
	RR FLAGMAN: _____	to _____
VISITOR: _____	TROOPER: _____	to _____
TC & NOTES: _____		



REGULAR INSPECTION X
 Date: 2/26/2016

SUMMER / WINTER JOINT MEASUREMENTS
 Summer 20____ Winter 20____

Bridge No.: 06826		Hamden Hills Drive over Shepard Brook & RR-Trail		Form BRI-17, Rev. 9/03		Town: Hamden		Measurements Taken By: EJC						
								Measurements Reviewed By: MAI						
Deck Joint Location	Deck Joint Type	Effect Span (ft.)	Cooler Measurements		Warmer Measurements		Differential Movements		Comments	Difference Between Actual & Calc'd Mov't				
			Date: 2/26/16	Date: 1/31/12	Temp °F	Temp °F	Left (in.)	Right (in.)		Left (in.)	Right (in.)	Left (in.)	Right (in.)	
W. Abut.	Paved Over Saw Cut & Seal	96.0	34	1- 1/16	1- 1/16	47	1- 1/16	15/16	0	2/16	2/16	Expansion	2/16	-0
Pier	Seal	0.0	34	10/16	10/16	47	8/16	8/16	2/16	2/16	0	Fixed/Fixed	2/16	- 2/16
E. Abut.	Paved Over	114.0	34	1- 8/16	1-10/16	47	1- 7/16	1- 7/16	1/16	3/16	2/16	Expansion	1/16	- 1/16

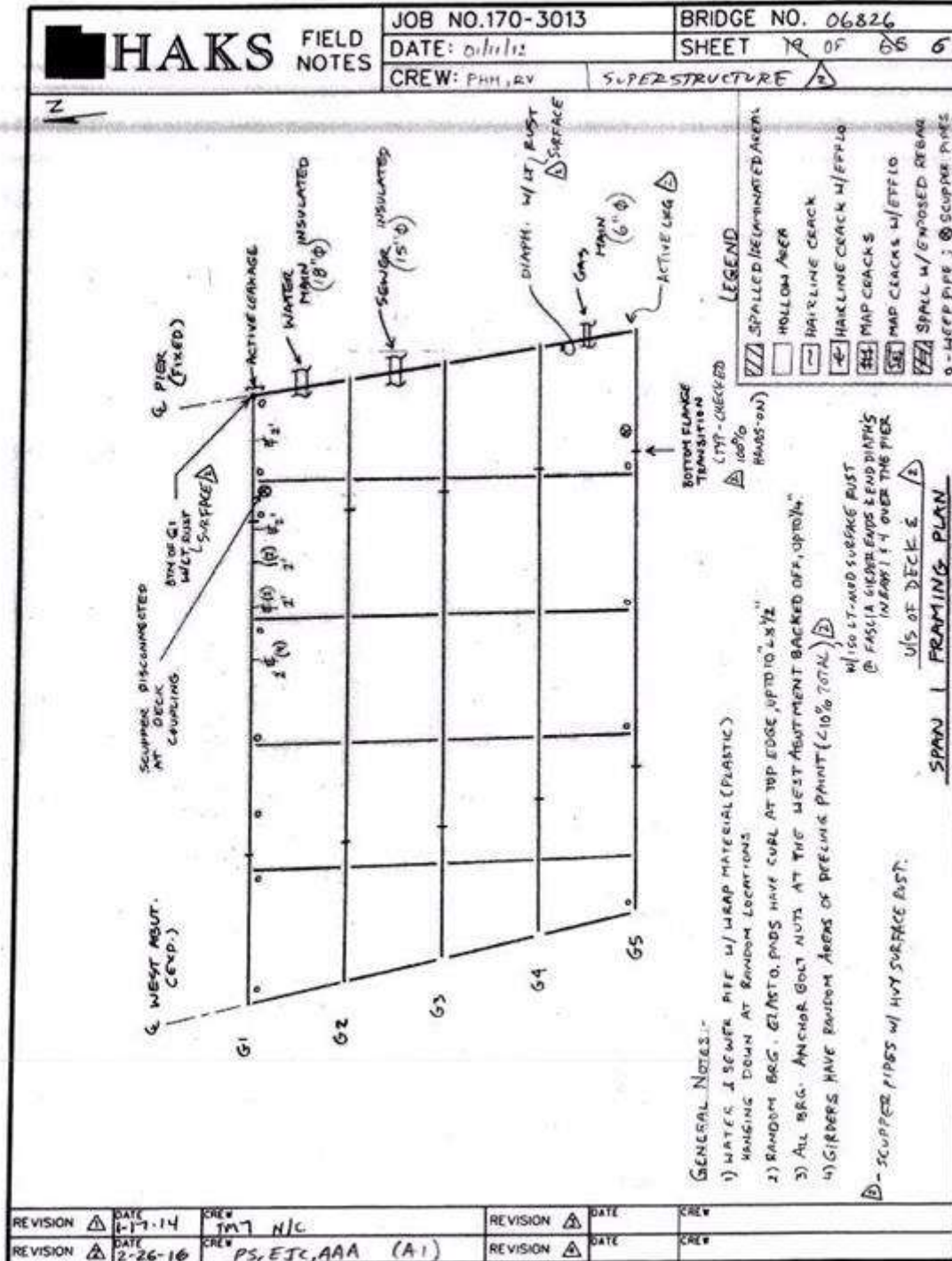
1. The "Deck Joint Type" should be "plug" for Asphaltic Plug joints, "strip" for Strip Seals, "seg." for Segmental Joints, etc.
 2. The "Effective Span" is the length contributing to expansion at the joint. This should be 0 at fixed joints of single span bridges.

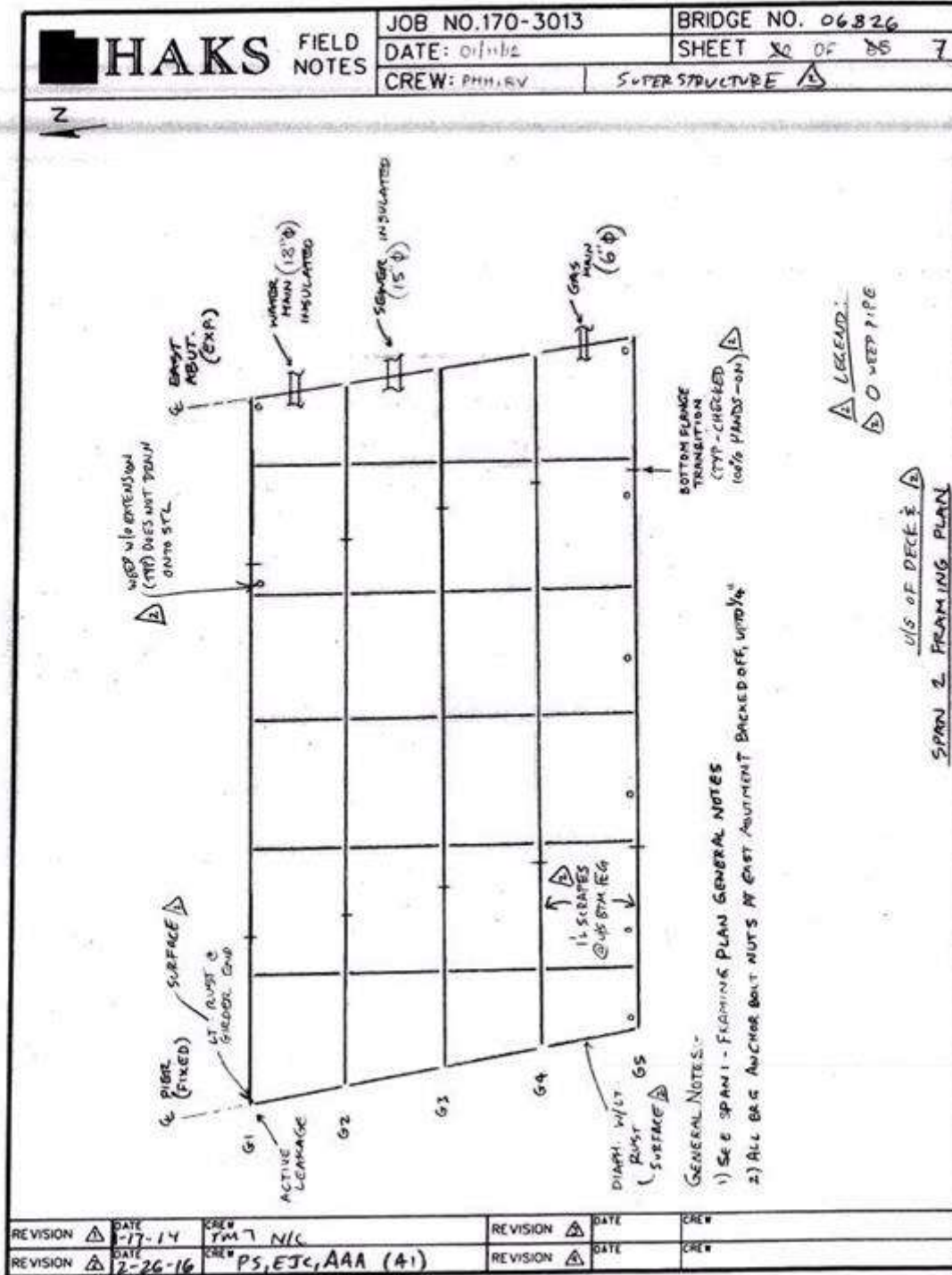
Reviewer's Comments:
 - Measurements taken 3" down from top of inside parapet face at inside to inside chamfer.
 - No 2014 measurements available for comparison.

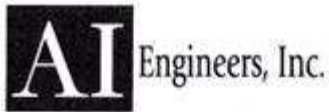
Summer / Winter Joint Measurements: ADD TO SUMMER/WINTER LIST REMOVE FROM SUMMER/WINTER LIST

(IF ADDING OR REMOVING, SEND A COPY OF THIS FORM TO SUPERVISOR FOR REVIEW/APPROVAL WITH REASONS FOR CHANGE INDICATED)
 SUPERVISOR APPROVAL: _____
 MASTER LIST ENTRY: _____

5







JOB No. 170-3225 BR No. 06826
SHEET NO. 8 OF _____
DESIGNED BY EJC DATE 2-26-16
CHECKED BY MAI DATE 2-26-16

BRI-10 CALCULATION SHEET

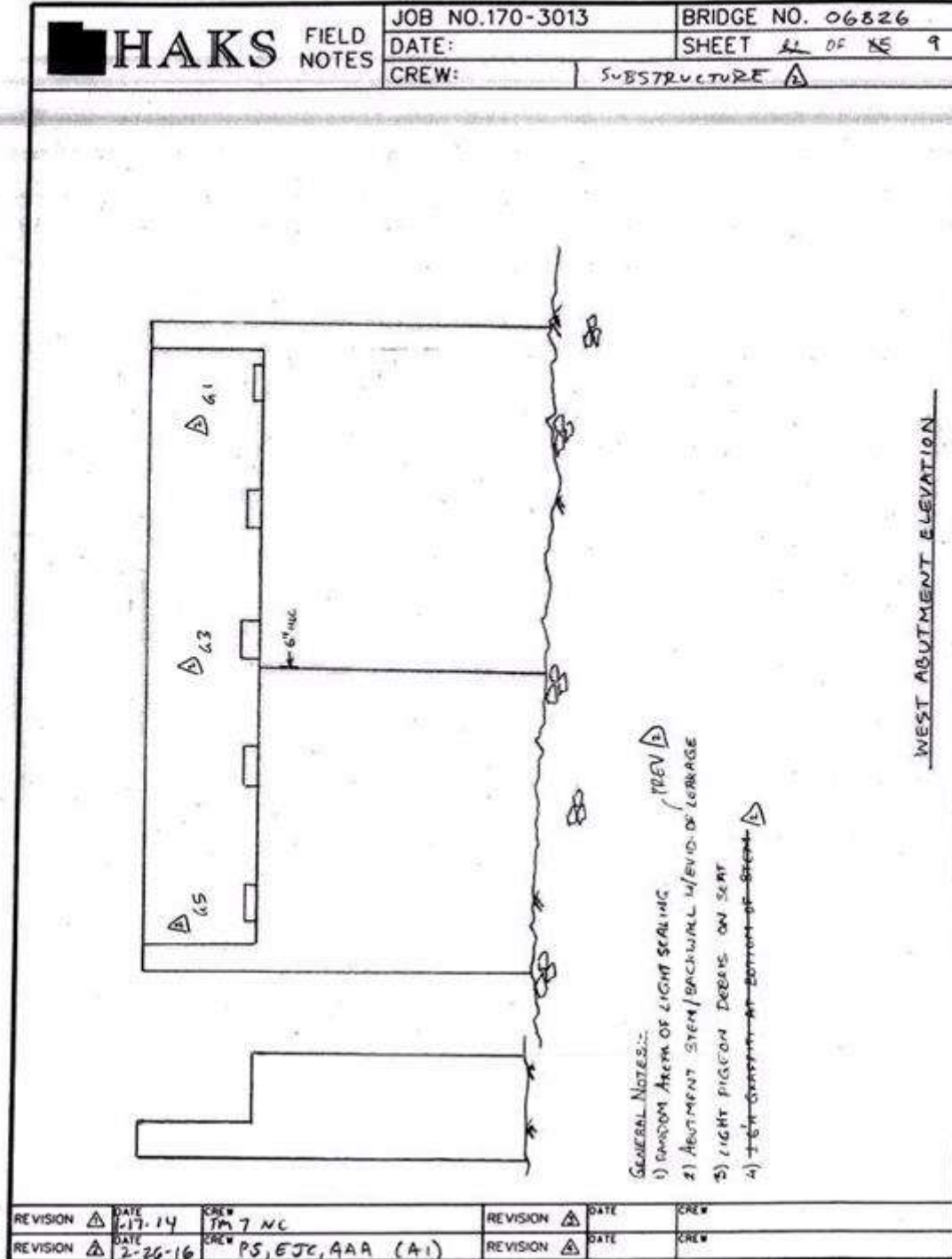
- NO PLANS AVAILABLE - SEE BACKUP F.M.'S FOR 2012 FIELD MEASUREMENTS

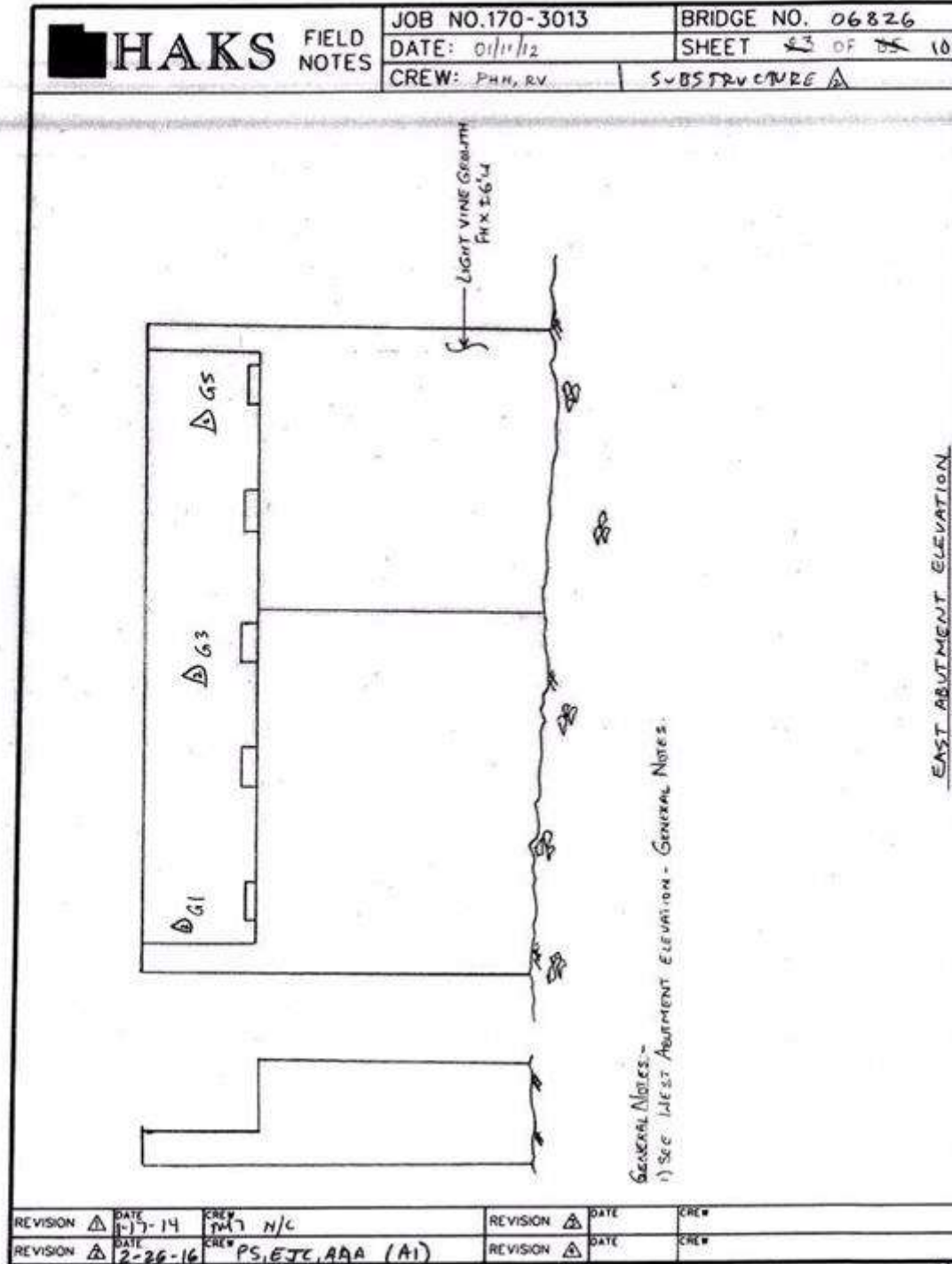
- DECK AREA = 43.7' W X 216' L = 9439 sq. ft

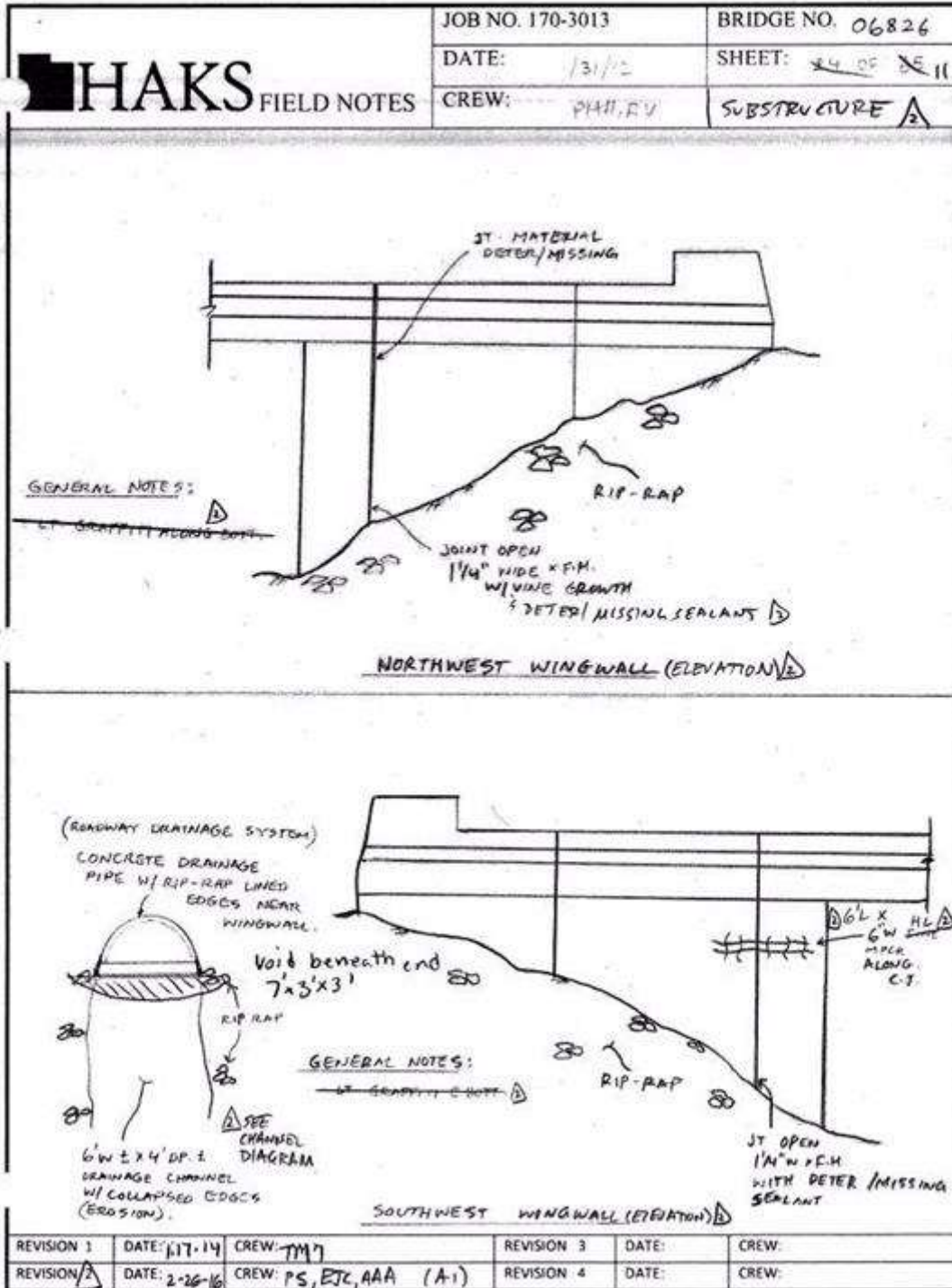
- SPAN 1 AREA = 43.7' W X 99' L = 4326 sq ft

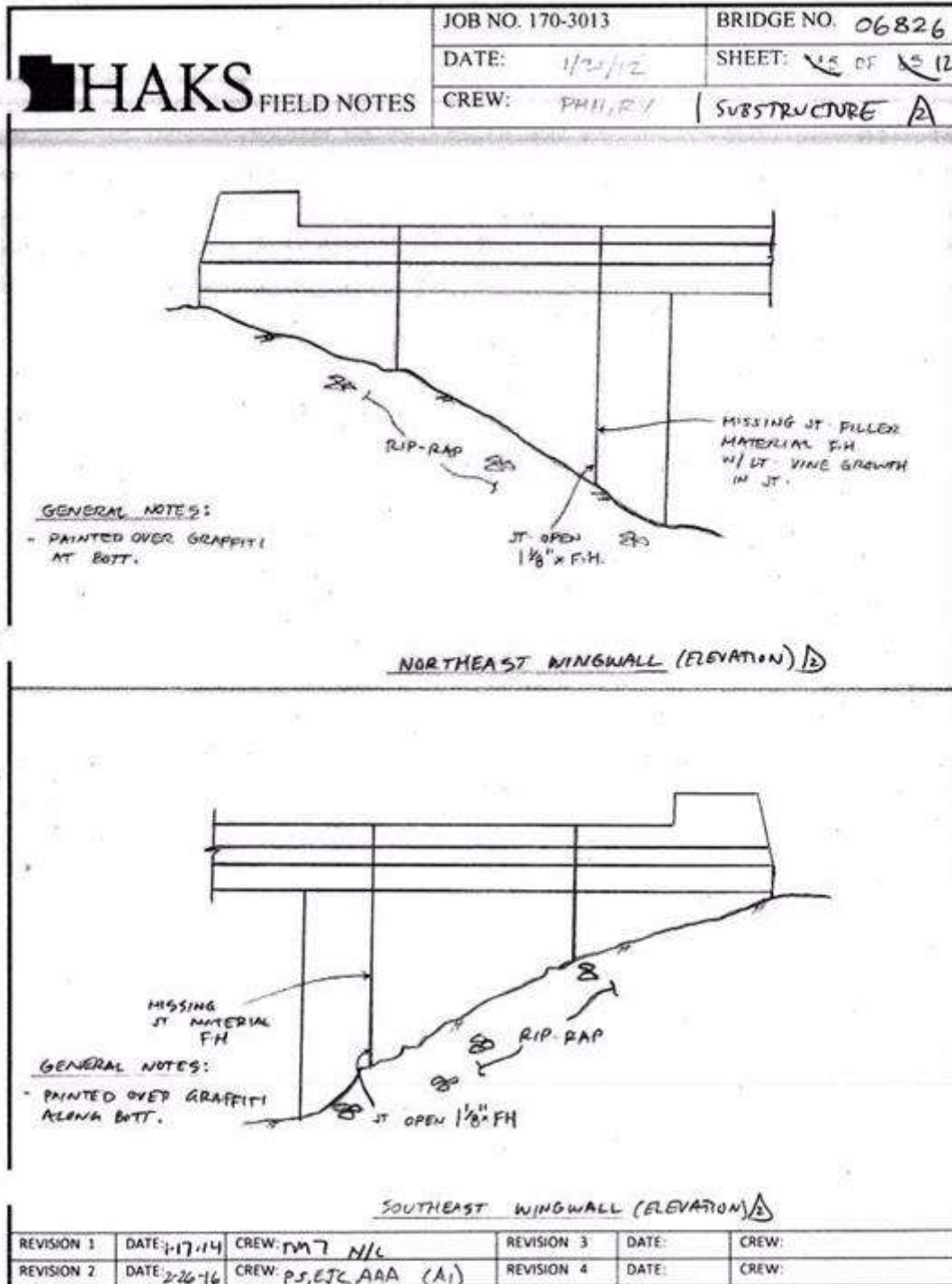
- SPAN 2 AREA = 43.7' W X 117' L = 5113 sq ft

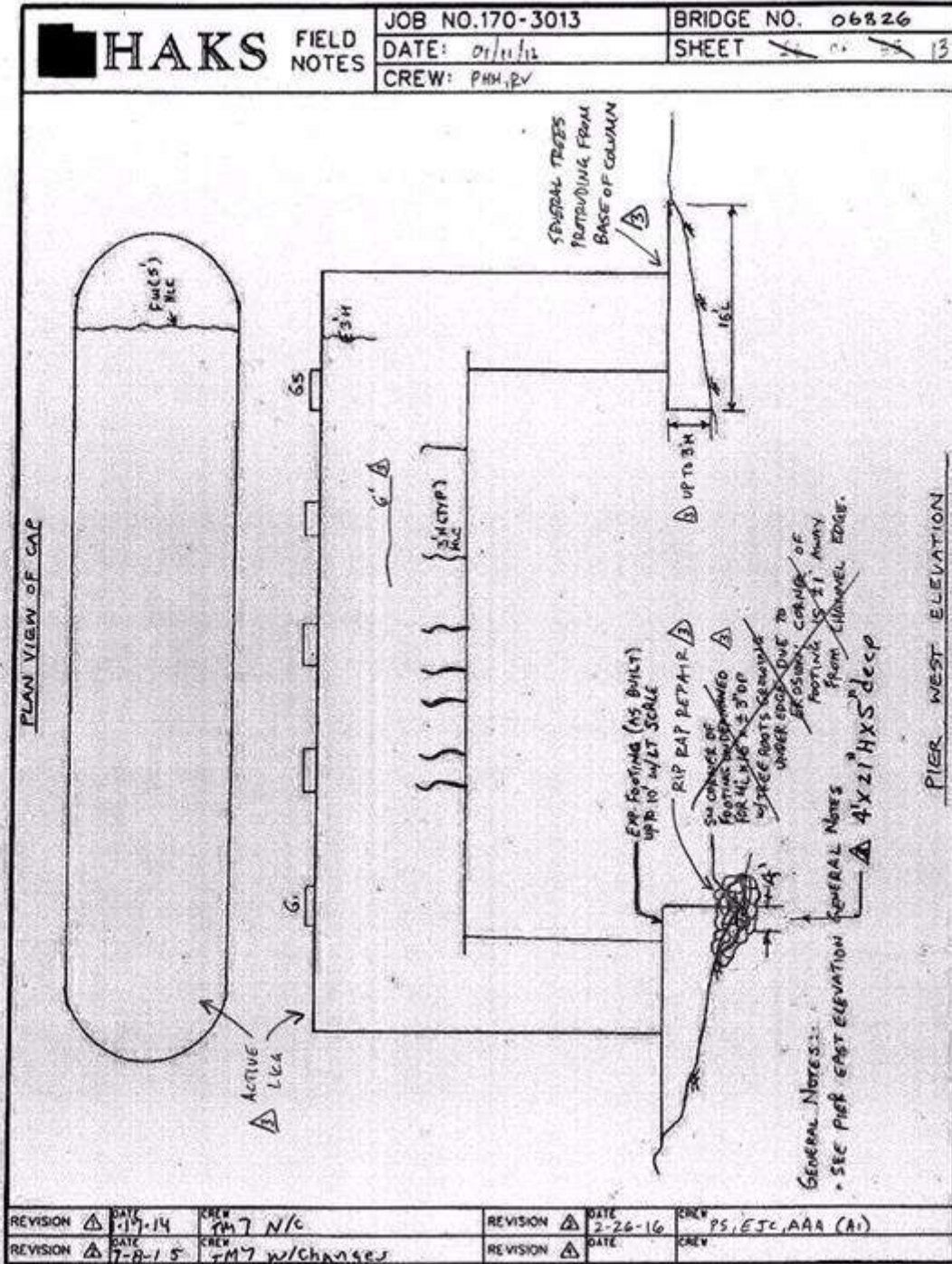
- SPAN (:	<u>CRKS W/E</u>	<u>CRKS W/O E</u>
	2' - (8) total	2' - (2)
	16' L x 1/2' W	4' L x 1/4' W
	= <u>8 sq ft</u>	= <u>1 sq ft</u>

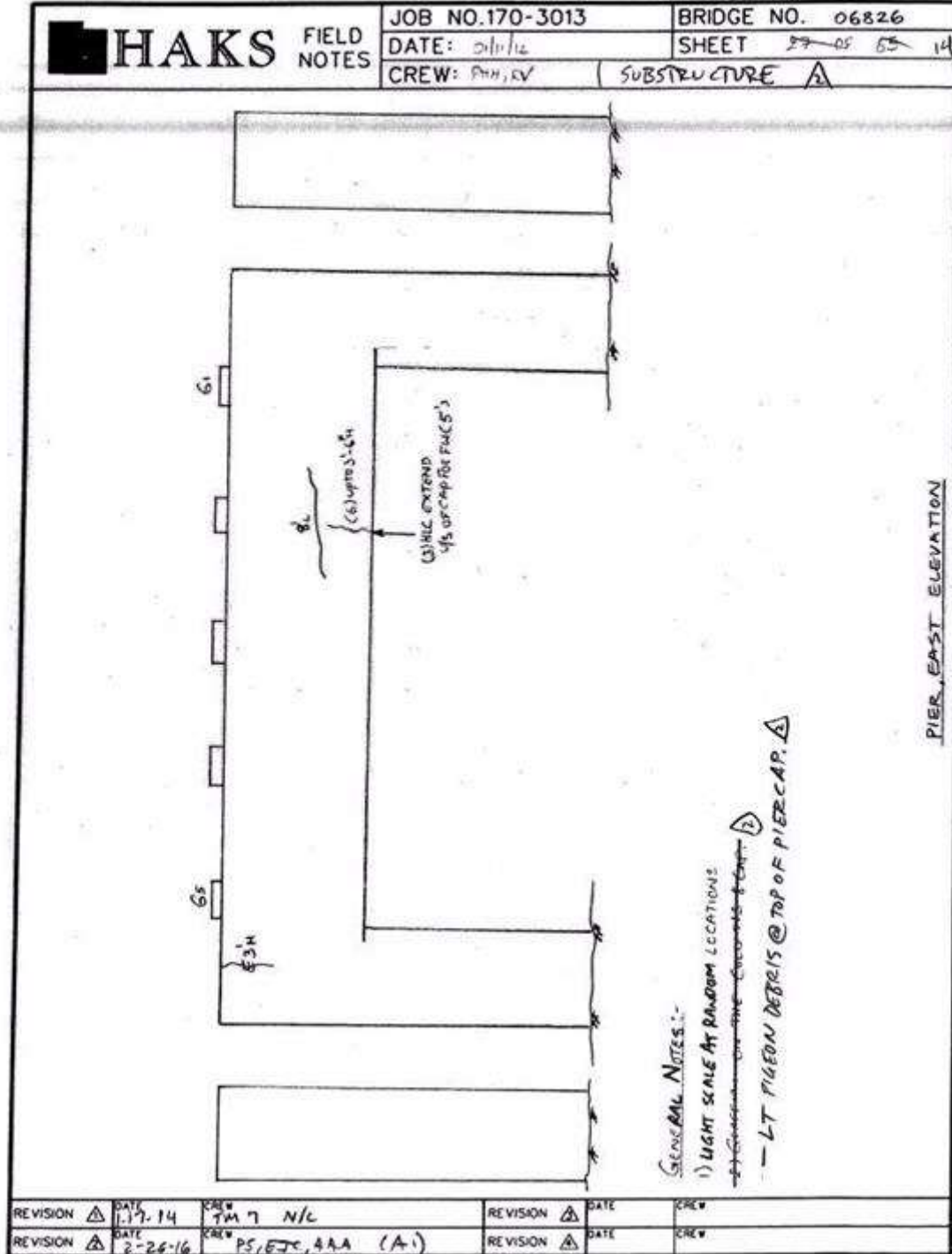




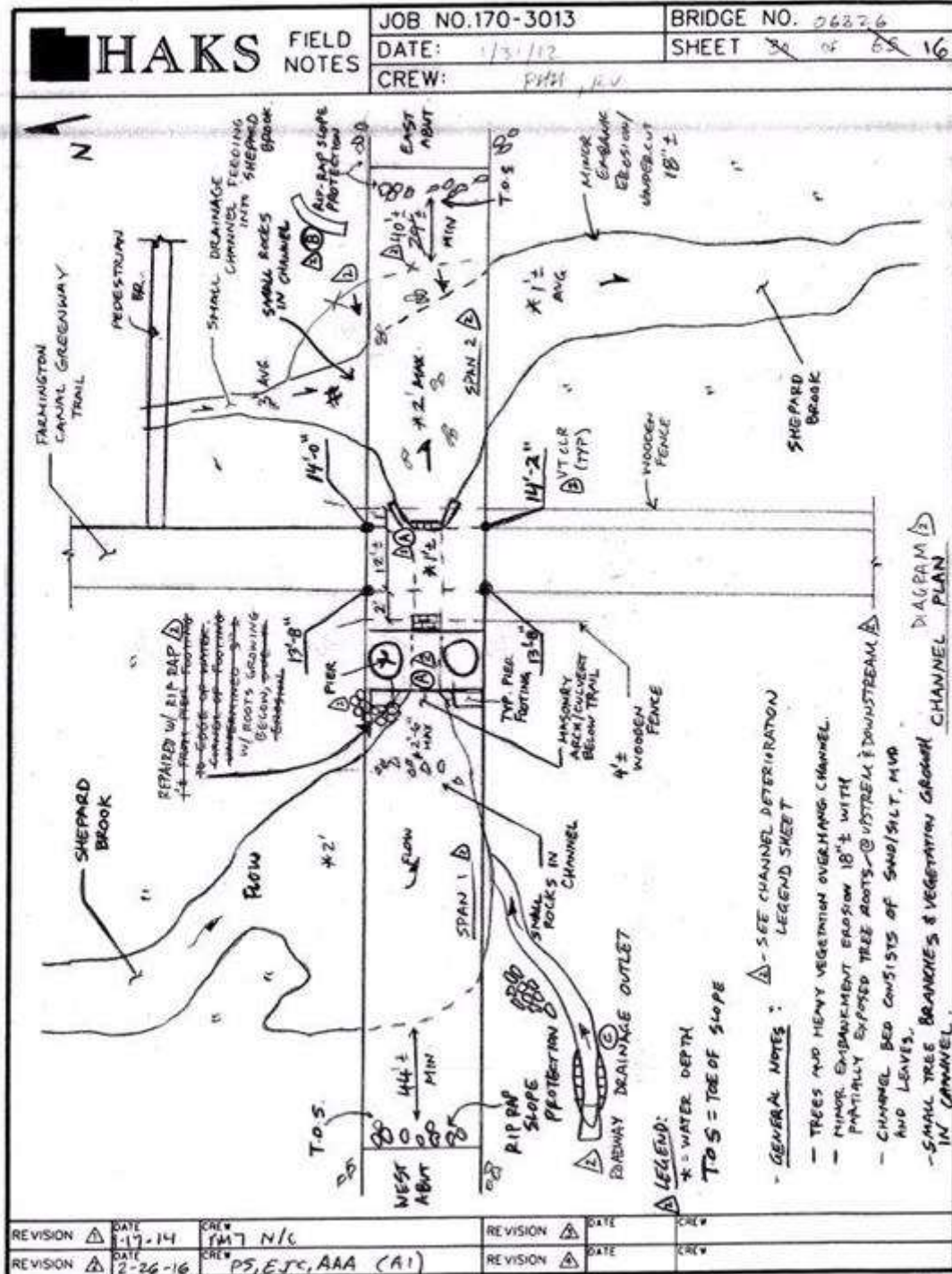








<i>FIELD NOTES</i>		BRIDGE NO. 06826	DATE: 2-26-16
DESCRIPTION: CHANNEL DETERIORATION LEGEND		CREW: PS, EJC, AAA (AI)	SHEET: 15
<p>(A) Minor erosion of the channel embankments at both ends of the stone masonry arch culvert wingwalls.</p> <p>(B) Rip rap eroded with exposed synthetic fabric.</p> <p>(C) Roadway drainage outlet at the embankment located at the southwest end of the bridge exhibits a heavy erosion trough 40' long x 7' wide x 4' deep from the runoff drain. The drain opening is also undermined 7' wide x 3' high x 3' deep penetration.</p>			
Revision \triangle 1	Date:	Crew:	Company:
Revision \triangle 2	Date:	Crew:	Company:
Revision \triangle 3	Date:	Crew:	Company:
Revision \triangle 4	Date:	Crew:	Company:



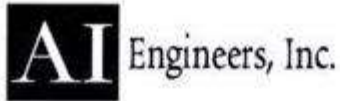


PHOTO LOG

Form BRI-13, Rev. 9/97

17

Bridge Information System	
Image Inventory	
Bridge No. <u>06826</u>	Date: <u>2-26-16</u>
Town: <u>HAMDEN</u>	Photographer: <u>EJC</u>
Carried / Crossed: <u>HAMDEN HILLS DRIVE / SHEPARD BROOK & RR TRAIL</u>	
Film Frame #	Image Description
1	BR F E APP
2,15	NE MBR
3,4,6	E APP PJMT
5	SE MBR
7	SEATCH BASIN
8	SE APP SIDEWALK
9,11	E. ABUT PAVED OVER JT
(30) 10	SE APP PPT GAP
12	N. PPT, RAIL, SIDEWALK SP2
13,37	BR OVERLAY SP2 / SP1
14	S. SIDE
16	NE APP PPT SPALL GAP
17	E. APP FR BR
18-21	→ N UPSTREAM
22-24,34	N. PPT, RAIL, SIDEWALK SP1
(45) 25	PIER JT
26,32,38	→ S DOWNSTREAM
27-31	LT STD SP2
33	SCURFER GATE N. SP1
35-36	LT STD SP1
39-40,49-51	SWUPSTREAM EMB
41,46	S. PPT SP1, SIDEWALK
(62) 42-45	W. ABUT PAVED OVER JT
47,54-57,60	SW MBR

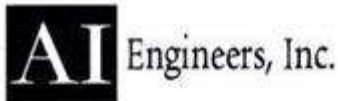


PHOTO LOG

Form BRI-13, Rev. 9/97

18

Bridge Information System	
Image Inventory	
Bridge No. <u>06826</u>	Date: <u>2-26-16</u>
Town: <u>HAMDEN</u>	Photographer: <u>EJC</u>
Carried / Crossed: <u>HAMDEN HILLS DRIVE / SHEPARD BROOK & RR TRAIL</u>	
Film Frame #	Image Description
(66) 48	W. ASP FR BR
52-53, 58, 63	NW MBR
59	BR FR W. ASP
61	SW ASP SIDEWALK
62	W. ASP PVM T
64	NW WWALL
65, 68-69, 72-73, 95, 104-105	N. ELEV
66	E. ABUT PATCHING @ T.O.I.
67, 94	NE WWALL
(90) 70	PIER N. ELEV
71, 82, 83	MARKETING
74	TOD GRATE SPI N. SIDE
75-79	PIER FOOTING
80-81, 85-86, 88, 90	99-102 CHANNEL
84	PIER E. ELEV
87	E. ABUT SL. PROT.
89	US SP 2
91	E. ABUT ELEV
92-93	NE SL PROT
96-98	S. ELEV
103	W. ABUT ELEV
106	ID
107	TOD GRATE SPI S. SIDE

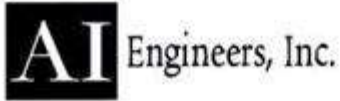


PHOTO LOG

Form BRI-13, Rev. 9/97

19

Bridge Information System	
Image Inventory	
Bridge No. <u>06826</u>	Date: <u>02/26/16</u>
Town: <u>HAMDEN</u>	Photographer: <u>PS</u>
Carried / Crossed: <u>HAMDENS HILL DR OVER SHEPARD BROOK + RR-TRAIL</u>	
Film Frame #	Image Description
1	WEST ELEV OF PIER
2	WEST ABUT ELEV
3	SPAN 1, BAY 3 END DIAPH OVER W ABUT
4	SPAN 1, G5 OVER W ABUT
5	" " G4 " " "
6	SPAN 1, G5, S. A-B NOT BARRED OFF
7	" " BAY 4 END OVER W ABUT
8	SPAN 1, G5 TRUSS WELD NEAR W ABUT
9	SPAN 1, U/S OF BAY 1 WATER MAIN w/ HANGING
10	N END OF W ELEV OF PIER w/ ACTIVE LEAK
11	SPAN 1, G7 END OVER PIER
12	SPAN 1, 2, S. FACE OF G1 OVER PIER
13	SPAN 1, BAY 4 BTWN 1 ST + 2 ND FROM PIER 1 w/
14	SPAN 1 G3 BRG OVER W ABUT
15	" " G1 " " " "
16, 17	UNDER COLUMN 1 OF PIER w/ REPAIR RIP RAP
18	" " 2 " "
19, 20	SPAN 1, BAY 4 END OVER PIER
21	SPAN 1, G4 OVER PIER
22	SPAN 1 U/S
23	W. FACE OF PIER ADJ TO COL 1 w/ EROSION
24	SPAN 1, BAY 1 BTWN 1 ST + 2 ND DOWN FROM PIER w/ DISCON SECTION
25	UP STREAM



Photo Number: 1

Bridge identification number.

Photo Taken: 02/29/2016



Photo Number: 2

South elevation, span 1.

Photo Taken: 02/29/2016



Photo Number: 3

South elevation, span 2.

Photo Taken: 02/29/2016



Photo Number: 4

North elevation, span 1.

Photo Taken: 02/29/2016



Photo Number: 5

North elevation, span 2.

Photo Taken: 02/29/2016



Photo Number: 6

Bridge from west approach.

Photo Taken: 02/29/2016



Photo Number: 7

Photo Taken: 02/29/2016

West approach from bridge.



Photo Number: 8

Photo Taken: 02/29/2016

Bituminous concrete overlay in span 1. Note random transverse, longitudinal and map cracks and light to moderate raveling throughout.



Photo Number: 9

Photo Taken: 02/29/2016

Bituminous concrete overlay over the west abutment joint exhibits severe raveling with full-width map cracks, breaking up bituminous and potholes.



Photo Number: 10

Photo Taken: 02/29/2016

Bituminous concrete overlay over the east abutment joint exhibits severe raveling with full-width map cracks, breaking up bituminous and potholes. Note the partially exposed membrane at the center of joint.



Photo Number: 11

Photo Taken: 02/29/2016

Bituminous concrete overlay along the pier joint exhibits edge spalls and potholes. Note pier joint is open.



Photo Number: 12

Photo Taken: 02/29/2016

Underside of reinforced concrete deck and steel framing in span 2. Note water main in bay 1, sewer pipe in bay 2 and gas main in bay 4, all with insulation wrapping torn and hanging down.



Photo Number: 13

Photo Taken: 02/29/2016

General view of south sidewalk, parapet and railing from the southeast approach corner. Note vertical misalignment between approach sidewalk sections.



Photo Number: 14

Photo Taken: 02/29/2016

South sidewalk at the west abutment joint exhibits hole through curb with vegetation growth and void under approach sidewalk. There is evidence of past leakage noted below.



Photo Number: 15

Photo Taken: 02/26/2016

South sidewalk at the pier joint exhibits spall with through hole in joint. Active leakage noted below at the pier cap.



Photo Number: 16

Photo Taken: 02/29/2016

North sidewalk at the pier joint exhibits area of plow damage with longitudinal cracks, spalls, scale, loose concrete, and hollow areas. Note accumulation of debris on sidewalk.



Photo Number: 17

Photo Taken: 02/29/2016

Northeast approach sidewalk exhibits gap between sidewalk and parapet filled with debris. Note parapet with hollow area/potential spall.



Photo Number: 18

Photo Taken: 02/29/2016

Southwest approach sidewalk exhibits spall and curb exhibits severe scale.



Photo Number: 19

Photo Taken: 02/29/2016

South parapet in span 1 exhibits spalls at top.



Photo Number: 20

Photo Taken: 02/29/2016

South parapet is laterally misaligned with the southeast approach parapet.



Photo Number: 21

Photo Taken: 02/29/2016

Scupper pipe with heavy surface rust and is disconnected from the coupling in span 1, bay 1 (not draining onto steel). Note PVC weep with missing extension (not draining onto steel).



Photo Number: 22

Photo Taken: 02/29/2016

Scupper grate along the south curb in span 1 is partially clogged. Note potholes in adjacent overlay.



Photo Number: 23

Photo Taken: 02/29/2016

Lighting standard at the north parapet in span 2 exhibits missing anchor bolt covers.



Photo Number: 24

Photo Taken: 02/29/2016

Lighting standard at the north parapet in span 2 exhibits broken/cracked light covers.



Photo Number: 25

Photo Taken: 02/29/2016

Metal beam guide rail at southwest approach corner exhibits severe collision damage area with bent rail and bent/disconnected posts.



Photo Number: 26

Photo Taken: 02/29/2016

Bituminous concrete pavement at east approach exhibits random transverse, longitudinal and map cracks and moderate to heavy raveling throughout.



Photo Number: 27

Photo Taken: 02/29/2016

Girder G5 elastomeric expansion bearing at the west abutment exhibits minor bulging and curling at top of pad.



Photo Number: 28

Photo Taken: 02/29/2016

Girder G5 end and adjacent end diaphragm over the pier exhibits peeling paint with isolated light to moderate surface rust due to active leakage.



Photo Number: 29

Photo Taken: 02/29/2016

Girder G5 bottom flange transition weld in span 1 near the west abutment, typical.



Photo Number: 30

Photo Taken: 02/29/2016

Girder G4 in span 2 near the pier exhibits isolated scrape at underside of bottom flange (construction related).



Photo Number: 31

Photo Taken: 02/29/2016

West abutment elevation. Note evidence of past leakage at stem.



Photo Number: 32

Photo Taken: 02/29/2016

East abutment elevation. Note evidence of past leakage at stem.



Photo Number: 33

Photo Taken: 02/29/2016

Northeast wingwall elevation.



Photo Number: 34

Photo Taken: 02/29/2016

Pier, west elevation. Note active leakage at ends of pier cap. Also note exposed footings.



Photo Number: 35

Photo Taken: 02/29/2016

Pier, east elevation. Note active leakage at ends of pier cap.



Photo Number: 36

Photo Taken: 02/29/2016

Trees protruding at base of south pier column.



Photo Number: 37

Photo Taken: 02/29/2016

General view of the channel under the bridge at the west side of the pier and the masonry arch culvert. Note rip rap repair at the north pier footing with adjacent tree roots. Also note minor erosion along culvert wingwalls.



Photo Number: 38

Photo Taken: 02/29/2016

General view of the channel under the bridge at the east side of the pier and the masonry arch culvert. Note minor erosion along culvert wingwalls.



Photo Number: 39

Photo Taken: 02/29/2016

Southwest corner roadway drainage outlet exhibits eroded edges.



Photo Number: 40

Photo Taken: 02/29/2016

Northwest corner view of channel (looking upstream in span 1).



Photo Number: 41

Photo Taken: 02/29/2016

Southeast corner view of channel (looking downstream in span 2).



Photo Number: 42

Photo Taken: 02/29/2016

Northeast corner view of channel (looking upstream in span 2).

Form: Asset Photos
Inspection type: Routine
Inspection Date: 2/26/2016
Inspected by: AI Engineers

Bridge No: 06826

Town: HAMDEN
Carried: HAMDEN HILLS DRIVE
Crossed: SHEPARD BROOK & RR-TRAIL
Inventory Route: Non-NHS



Photo Number: 43

Photo Taken: 02/29/2016

Embankment along the northeast wingwall exhibits eroded rip rap with exposed synthetic fabric.

BACK UP FIELD NOTES

Ethan Cote

From: Pavan Seemakurty
Sent: Friday, April 01, 2016 10:06 AM
To: Ethan Cote
Cc: Muhammad Iqbal
Subject: FW: 06826 - Hamden Hills Drive over Shepard Brook in Hamden
Attachments: Photo 1.JPG; Photo 2.JPG; Photo 3.JPG; Photo 4.JPG

From: Muhammad Iqbal
Sent: Monday, February 29, 2016 12:58 PM
To: Funk, Gregory A <Gregory.Funk@ct.gov>
Cc: Aslam Siddiqui <asiddiqui@aiengineers.com>; Pavan Seemakurty <PSeemakurty@aiengineers.com>
Subject: FW: 06826 - Hamden Hills Drive over Shepard Brook in Hamden

Good afternoon Greg,

Please see below e-mail and attached photos regarding the deficiencies noted at the subject bridge by our team while doing the inspection.

Any questions, please let me know.

Thanks,
Asif

From: Pavan Seemakurty
Sent: Monday, February 29, 2016 12:01 PM
To: Muhammad Iqbal; Aslam Siddiqui
Cc: Ethan Cote; Ali Aziz
Subject: 06826 - Hamden Hills Drive over Shepard Brook

Asif,

Here are a few things we found out during our inspection of the subject bridge:

1. The paved over joint at the west abutment has broken up bituminous material throughout with several minor potholes up to 1' long x 2" wide x up to 2" deep. See photo 1. There are no loose pieces of bituminous right now, however this condition could worsen with more rain and general wear and tear.
2. The north sidewalk has severe scaling, spalls and loose/hollow concrete for 15' long x 4' wide x up to 4" deep. See photo 2. Also, the approach sidewalk at the southeast corner has a vertical misalignment for full width x up to 3" high. See photo 3. [Both deficiencies are posing a tripping hazard for the pedestrians.](#)
3. The MBR at the southwest approach corner (Leading Edge) has a 38' long [severe](#) collision damage [area](#) with (5) bent and (2) disconnected posts. See photo 4.

Let me know if you have any questions.

Thanks,

Pavan Seemakurty, P.E.
Senior Structural Engineer



Celebrating Over 20 Years of Engineering Excellence

919 Middle Street
Middletown, CT 06457
Phone: 860-635-7740 ext. 121
Fax: 860-635-7312
www.aiengineers.com









From: "Funk, Gregory A" <Gregory.Funk@ct.gov>

Date: February 26, 2016 at 1:56:08 PM EST

To: Muhammad Asif Iqbal <miqbal@aiengineers.com>

Cc: Aslam Siddiqui <asiddiqui@aiengineers.com>, "Keedy, G Stephen" <Stephen.Keedy@ct.gov>

Subject: SMS overdue reason comments

Asif,

There are a few outstanding reports that need an overdue reason, please see the below table:

User Assigned to Inspection	Inspection Team	Asset Code	Last Inspection Date	Inspection Due Date	Inspection Date	Overdue Reason Comments	Inspection Type	NBI 007 Feature Carried	NBI 006 Feature Crossed	NBI 004 Town	NBI 112 NBI Length	NBI 067 Structure Eval	Completion Date
AI, BSE		02114	02/05/2013	02/28/2015			Routine	INTERSTATE-691	AMTRAK YARD & STATE ST	46520 - MERIDEN	Yes	5 - Somewhat better than minimum adequacy	
AI, BSE		02649	04/15/2013	04/30/2015			Routine	US ROUTE 5	I-91, AMTRAK, RAMP B	54870 - NORTH HAVEN	Yes	6 - Equal to present minimum criteria	
AI, BSE		03086	03/29/2013	03/31/2015			Routine	INTERSTATE-91	I-91 RAMP S 136-	52070 - NEW HAVEN	Yes	6 - Equal to present minimum	

									134 & RR			m criteria	
AI, BSE		068 26	01/17/2 014	01/31/2 016				Routine	HAMDEN HILLS DRIVE	SHEPA RD BROO K & RR- TRAIL	35650 - HAMD EN	Yes	6 - Equal to present minimu m criteria

It looks like the overdue reason is due to railroad issues. Please update the overdue reason for the reports.

Bridge 06826 is obviously overdue from the SMS schedule because when we assigned it to you it was already overdue. For that overdue reason, I would simply put what I wrote in the comment section next to the schedule: "Assigned on 02/23/2016".

Nice job to you and your guys for keeping up with the inspection dates, inspection team and overdue reason information in SMS. Despite all the temporary issues we've been having with SMS, impressively the vast majority of your data is updated and complete.

Thanks,

Gregory A. Funk, EIT
 Transportation Engineer
Gregory.Funk@ct.gov
 (860) 594-3214
 Connecticut Department of Transportation
 Bridge Safety and Evaluation – Room 3220
 2800 Berlin Turnpike
 Newington, CT 06111

**STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
BRIDGE SAFETY & EVALUATION
INSPECTION FREQUENCY CHANGE REQUEST**

FORM BRI 8 REVISED 6/07

BRIDGE NUMBER 06826	TOWN NAME HAMDEN	NBIS YES
BORDER TOWN 		REPORT CLASS L
FACILITY CARRIED HAMDEN HILLS DRIVE		FEATURE CROSSED SHEPARD BROOK & RR-TRAIL
ROUTINE INSP. DATE & FREQ. 1/17/2014 24		(90I) INDEPTH DATE 1/11/2012
UW INSP. DATE & FREQ. 		SPEC. INSP. DATE & FREQ. 7/8/2015
		FRAC. INSP. DATE & FREQ.

PROPOSED FREQUENCY CHANGES			
ROUTINE INSP. DATE	/ /	FREQ.	
UW INSP. DATE	/ /	UW FREQ.	
SPEC. INSP. DATE	/ /	SPEC. FREQ.	blank
FRAC. INSP. DATE	/ /	FRAC. FREQ.	
(Prop. Inspection & uwater dates should match)		(Max. inspection freq 48 mos.)	

BS&E RECEIVED DATA ENTRY DATE: _____
 COPIES MADE DATA ENTERED BY: _____
 Submitted by: _____ Date: _____
 Reviewed by: *S. R. O'P* Date: _____

Digitally signed by Theodore G. Lyons, P.E.
DN: cn=Theodore G. Lyons, o=State of Connecticut,
ou=Department of Transportation,
ou=Engineering Division, ou=Bridge Safety & Evaluation, ou=Connecticut Department of Transportation, email=lyons@dot.state.ct.us,
c=US

----- Structure Inventory Data -----

(43) Structure Type **3 2** Steel Stringer/Multi-beam or Girder

(45) No. of Spans **2** (54) Min. Vert. Clearance >= 14'3" **0 0**

(46) Max. Span Length **114** (66) Inv. Rating >= 34 tons **110**

(49) Structure Length **216** (64) Operating Rating >= 63 **142**

(41) Struc. Operational Status **A** Evaluation type & year **F 2014**

----- Condition Rating -----

(58) Deck **8**

(59) Superstructure **7**

(60) Substructure **6**

(61) Channel **6**

(62) Culverts **N**

(113) Scour Critical Bridge **3**

Scour screening susceptibility rating

----- Steel Superstructures -----

----- Concrete Structures -----

(29) ADT <= 50,000 **5,600** (29) ADT <= 125,000 **5,600**

(109) ADTT= **2%** (109) ADTT= **2%**

(27) Year Built <= 50 years old **1991**

(106) Year Rebuilt >= 4 years old

An assessment of frequency and degree of overload that is anticipated on the structure has been made and found to be:

Acceptable Not Acceptable Date: ___/___/___ By: _____

Comments: **Scoured area at pier footing has been repaired. Special inspection no longer needed. TDL 10/1/15**

Approved by: _____ Date: _____ Approved by FHWA Date: _____ Approved By Town Date: _____

Manager, Bridge Safety & Evaluation Section

For 48 Months Proposed Frequency

NOTES:

This form is to be used to increase or decrease inspection frequency.

Prior to proposing to change inspection frequency, the submitter must review the bridge inspection file and Bridge Inspection Manual (BIM) section 3.2.2.2 "INCREASED INSPECTION INTERVAL" as approved by the FHWA. All requirements of this section must be met unless otherwise noted below.

For non-NBIS structures, there are no scour susceptibility index ratings nor item 113 "scour critical bridge" assignments. Thus, visual scour evidence, history of scour at the structure, channel stability and vulnerability of the structure to failure due to scour should be considered and utilized instead.

**STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
BRIDGE SAFETY & EVALUATION
INSPECTION FREQUENCY CHANGE REQUEST**

FORM BRI 8 REVISED 6/07

BRIDGE NUMBER 06826	TOWN NAME HAMDEN	NBIS YES
BORDER TOWN	REPORT CLASS L	
FACILITY CARRIED HAMDEN HILLS DRIVE	FEATURE CROSSED SHEPARD BROOK & RR-TRAIL	
ROUTINE INSP. DATE & FREQ. 1/17/2014 24	(901) INDEPTH DATE 1/11/2012	
UW INSP. DATE & FREQ.	SPEC. INSP. DATE & FREQ. 1/14/2015 6	
	FRAC. INSP. DATE & FREQ.	

PROPOSED FREQUENCY CHANGES			
ROUTINE INSP. DATE	1/17/2016	FREQ.	24
UW INSP. DATE	//	UW FREQ.	
SPEC. INSP. DATE	//	SPEC. FREQ.	
FRAC. INSP. DATE	//	FRAC. FREQ.	

(Prop. inspection && uwater dates should match) (Max. inspection freq 48 mos.)

BS&E RECEIVED DATA ENTRY DATE: _____
 COPIES MADE DATA ENTERED BY: _____
 Submitted by: P. MIRZABE Date: 9/2/2015
 Reviewed by: [Signature] Date: 10/8/15
 Blank

----- Structure Inventory Data -----

(43) Structure Type	3 2	Steel	Stringer/Multi-beam or Girder
(45) No. of Spans	2	(54) Min. Vert. Clearance >= 14'3"	0 0
(48) Max. Span Length <=100'	114	(66) Inv. Rating >= 34 tons	110
(49) Structure Length	216	(64) Operating Rating >= 63	142
(41) Struc. Operational Status	A	Evaluation type && year	F 2014

----- Condition Rating -----

(58) Deck	8
(59) Superstructure	7
(60) Substructure	5
(61) Channel	6
(62) Culverts	N
(113) Scour Critical Bridge	3
Scour screening susceptibility rating	

----- Steel Superstructures -----

(29) ADT <= 50,000	5,600
(109) ADTT=	2%
(27) Year Built <= 50 years old	1991
(106) Year Rebuilt >= 4 years old	

----- Concrete Structures -----

(29) ADT <= 125,000	5,600
(109) ADTT=	2%

An assessment of frequency and degree of overload that is anticipated on the structure has been made and found to be:

Acceptable Not Acceptable Date: ____/____/____ By: _____

Comments: THE SCOUR AREA AT THE PIER FOOTING HAS BEEN REPAIRED. PLEASE REMOVE THE SPECIAL INSPECTION.

Approved by: _____ Date: _____ Approved by FHWA Date: _____ Approved By Town Date: _____

Manager, Bridge Safety & Evaluation Section

For 48 Months Proposed Frequency

NOTES:

This form is to be used to increase or decrease inspection frequency.

Prior to proposing to change inspection frequency, the submitter must review the bridge inspection file and Bridge Inspection Manual (BIM) section 3.2.2.2 "INCREASED INSPECTION INTERVAL" as approved by the FHWA. All requirements of this section must be met unless otherwise noted below.

**STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
BRIDGE SAFETY & EVALUATION
INSPECTION FREQUENCY CHANGE REQUEST**

FORM BRI 8 REVISED 6/07

BRIDGE NUMBER 06826	TOWN NAME HAMDEN	NBIS YES
BORDER TOWN	REPORT CLASS L	
FACILITY CARRIED HAMDEN HILLS DRIVE	FEATURE CROSSED SHEPARD BROOK & RR-TRAIL	
ROUTINE INSP. DATE & FREQ. 1/17/2014 24	(901) INDEPTH DATE 1/11/2012	
UW INSP. DATE & FREQ.	SPEC. INSP. DATE & FREQ.	
	FRAC. INSP. DATE & FREQ.	

PROPOSED FREQUENCY CHANGES		
ROUTINE INSP. DATE	/ /	FREQ.
UW INSP. DATE	/ /	UW FREQ.
SPEC. INSP. DATE	7 / 17 / 14	SPEC. FREQ. 6
FRAC. INSP. DATE	/ /	FRAC. FREQ.
(Prop. Inspection & uwater dates should match)		(Max. Inspection freq 48 mos.)

BS&E RECEIVED DATA ENTRY DATE: _____
 COPIES MADE DATA ENTERED BY: _____
 Submitted by: TPL Date: 3/1/14
 Reviewed by: _____ Date: _____

Structure Inventory Data

(43) Structure Type 3 2 Steel Stringer/Multi-beam or Girder
 (45) No. of Spans 2 (54) Min. Vert. Clearance >= 0 0
 (48) Max. Span Length <= 100' 114 (66) Inv. Rating >= 34 1.095
 (49) Structure Length 216 (64) Operating Rating >= 63 1.424
 (41) Struc. Operational Status A Evaluation type && year F 2014

Condition Rating

(58) Deck 8
 (59) Superstructure 7
 (60) Substructure 5
 (61) Channel 6
 (62) Culverts N
 (113) Scour Critical Bridge 3
 Scour screening susceptibility rating _____

Steel Superstructures

Concrete Structures

(29) ADT <= 50,000 5,600 (29) ADT <= 125,000 5,600
 (109) ADTT= 2% (109) ADTT= 2%
 (27) Year Built <= 50 years old 1991
 (106) Year Rebuilt >= 4 years old _____

An assessment of frequency and degree of overload that is anticipated on the structure has been made and found to be:

Acceptable Not Acceptable Date: ____/____/____ By: _____

Comments:

Check undermining of pier footing

TPL
3/1/14

Approved by: _____ Date: _____ Approved by FHWA Date: _____ Approved By Town Date: _____

Manager, Bridge Safety & Evaluation Section

For 48 Months Proposed Frequency

NOTES:

This form is to be used to increase or decrease inspection frequency.
 Prior to proposing to change inspection frequency, the submitter must review the bridge inspection file and Bridge Inspection Manual (BIM) section 3.2.2.2 "INCREASED INSPECTION INTERVAL" as approved by the FHWA. All requirements of this section must be met unless otherwise noted below.
 For non-NBIS structures, there are no scour susceptibility index ratings nor Item 113 "scour critical bridge" assignments. Thus, visual scour evidence, history of scour at the structure, channel stability and vulnerability of the structure to failure due to scour should be considered and utilized instead.



HAKS

FIELD NOTES

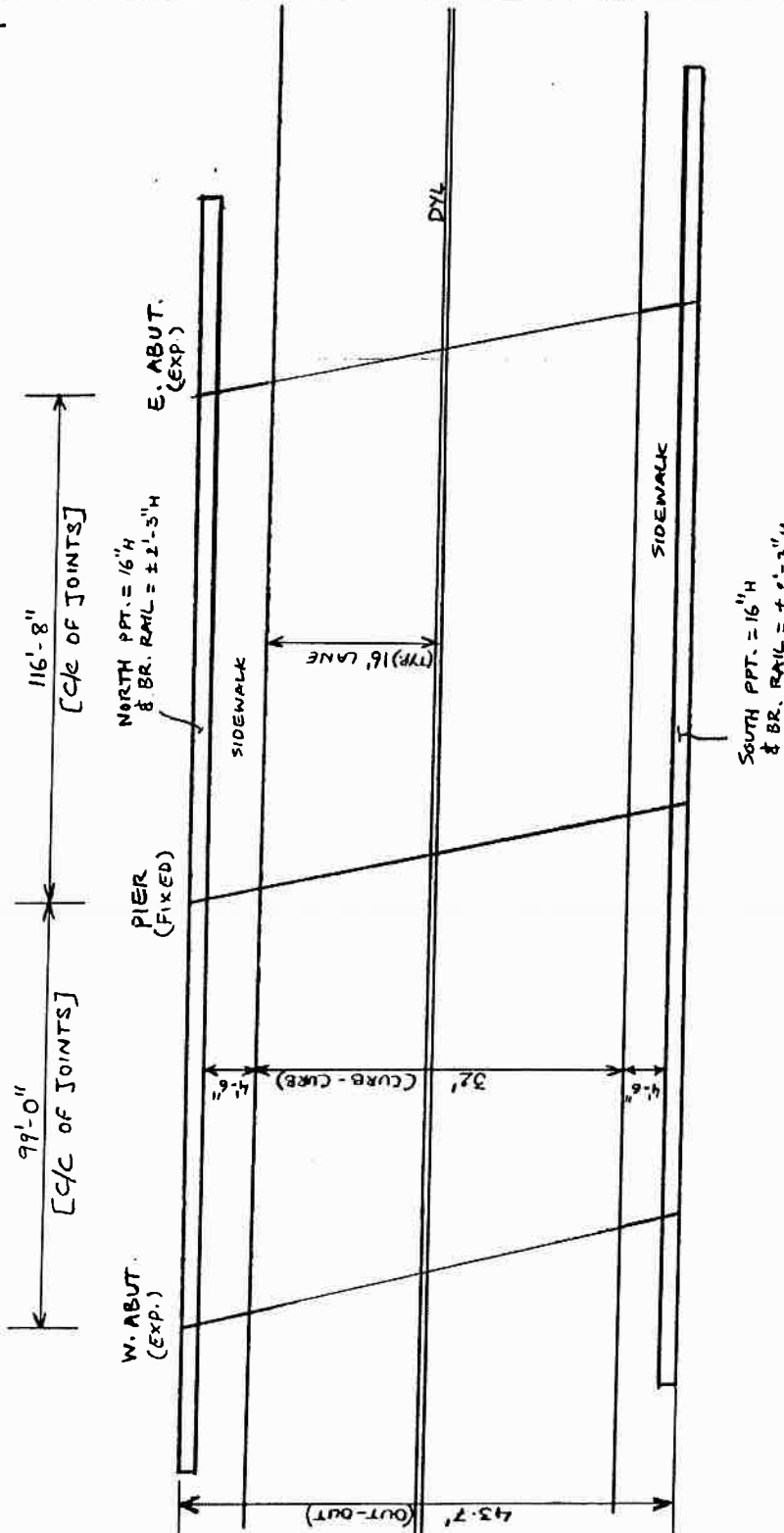
JOB NO. 170-3013

BRIDGE NO. 06826

DATE: 1/31/12

SHEET 1

CREW: PTH, RV



TOP OF DECK PLAN

REVISION	△	DATE	CREW	REVISION	△	DATE	CREW
REVISION	△	DATE	CREW	REVISION	△	DATE	CREW



HAKS

FIELD NOTES

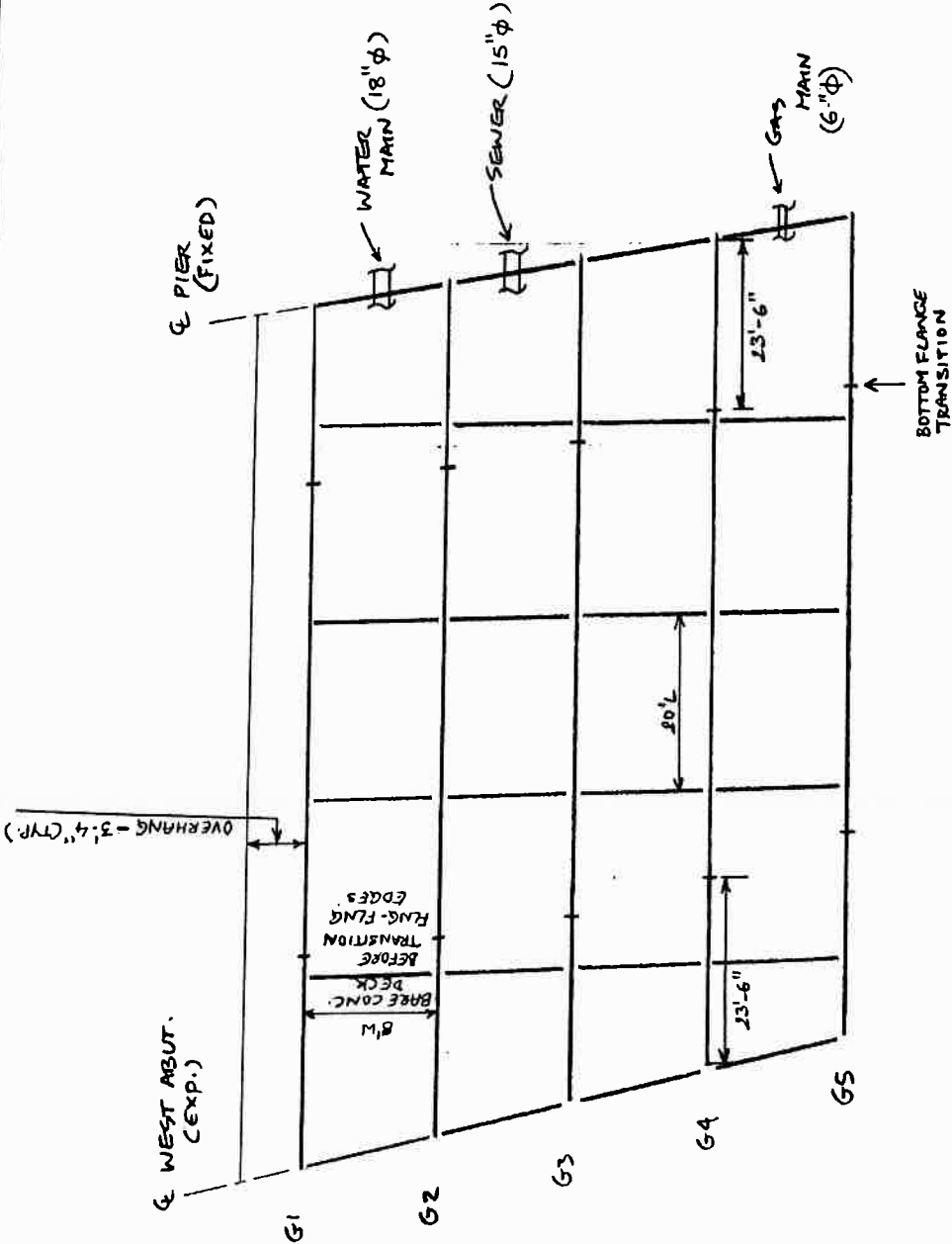
JOB NO. 170-3013

BRIDGE NO. 06826

DATE: 1/11/12

SHEET 2

CREW: PHA, RV



SPAN 1 FRAMING PLAN

REVISION	DATE	CREW	REVISION	DATE	CREW
REVISION	DATE	CREW	REVISION	DATE	CREW

HAKS FIELD NOTES

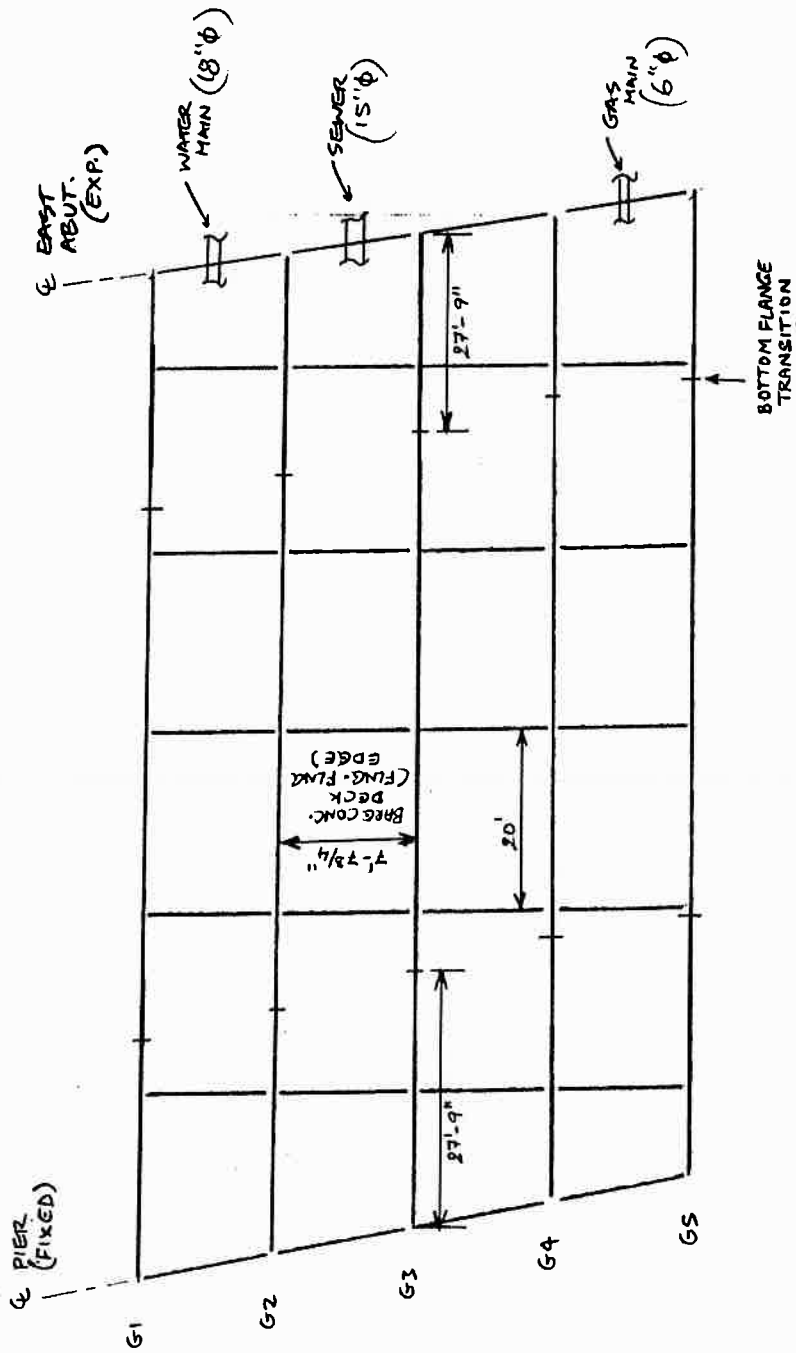
JOB NO. 170-3013

BRIDGE NO. 06826

DATE: 1/11/12

SHEET 3

CREW: PHA, RV



SPAN 2 FRAMING PLAN

REVISION	△	DATE	CREW	REVISION	△	DATE	CREW
REVISION	△	DATE	CREW	REVISION	△	DATE	CREW

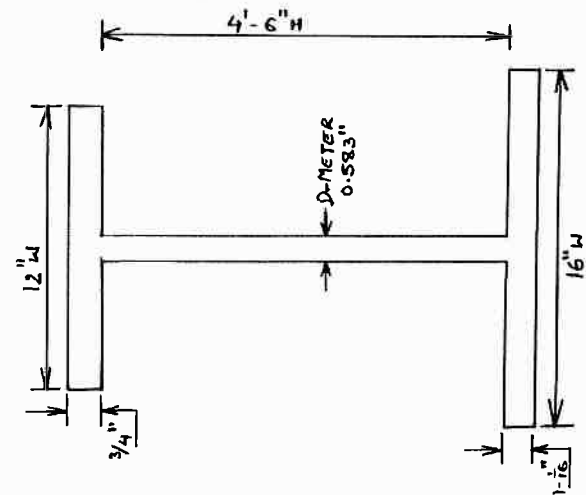
JOB NO. 170-3013

BRIDGE NO. 06826

DATE: 01/11/12

SHEET: 4

CREW: PHH, RV



TYPICAL CROSS SECTION NEAR ABUTMENT

ELASTOMERIC BEARING - WEST ABUTMENT

SOLE PL: 18" W x 14" x 1" - 3/4" (VARIES)

ELASTO PAD: 12" x 14" x 2-1/4" THICK

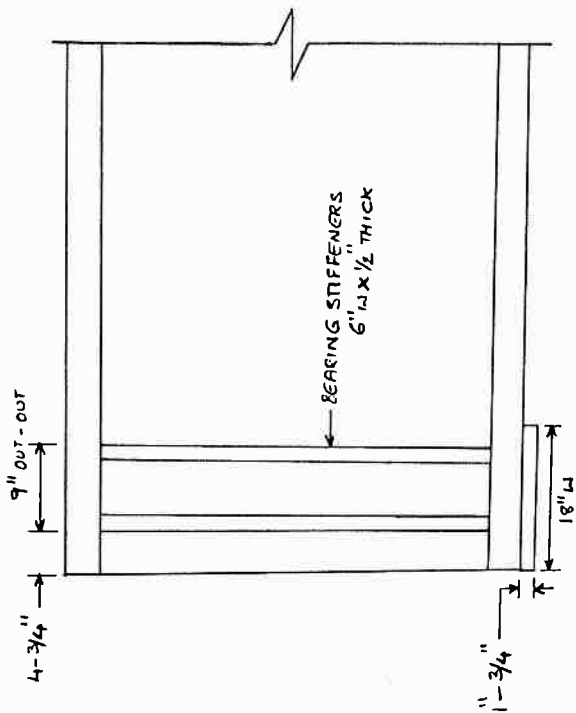
ANCHOR BOLTS: 1-3/8" ϕ ; NUTS = 2-3/8"

LONGITUDINAL SLOTTED HOLES: 3" x 1-1/2"

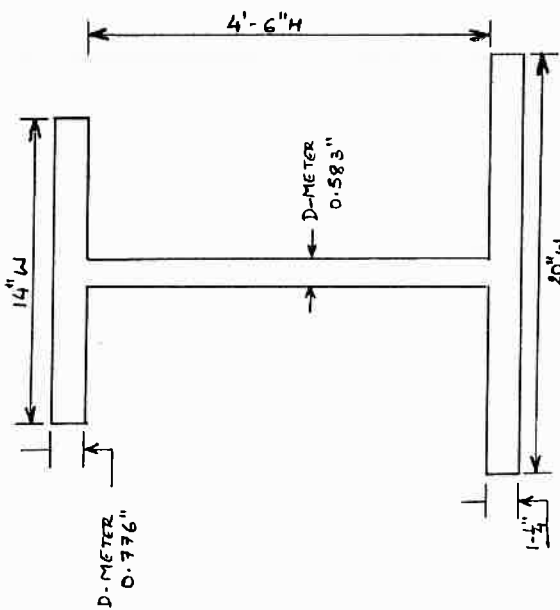
AT PIER

SOLE PL: 16" x 14" x 3/4"

ELASTO PAD: 1' x 14" x 2-1/2" THICK



SPAN 1, TYPICAL GIRDER ELEVATION - G1, SOUTH ELEVATION



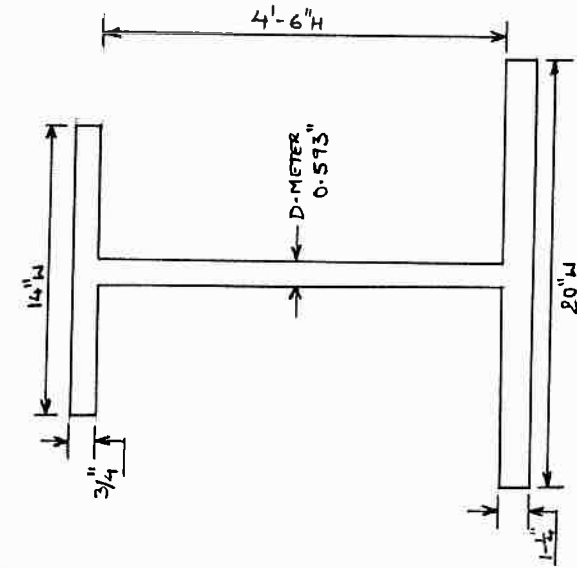
TYPICAL CROSS SECTION AT MID-SPAN

REVISION 1 DATE: CREW:

REVISION 3 DATE: CREW:

REVISION 2 DATE: CREW:

REVISION 4 DATE: CREW:

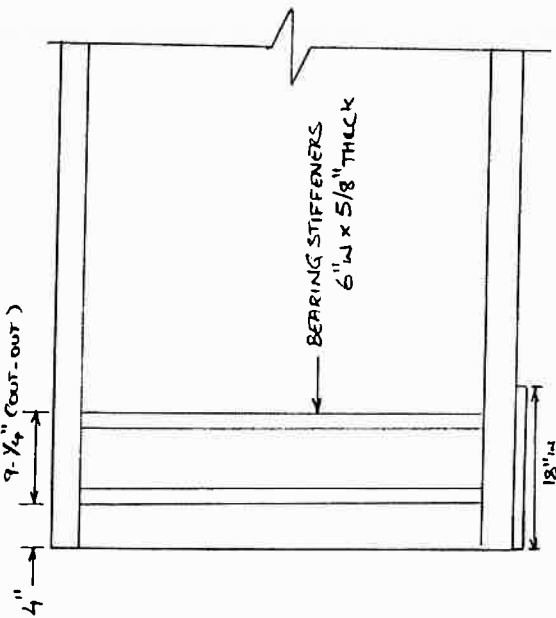


TYPICAL CROSS SECTION - NEAR ABUTMENT

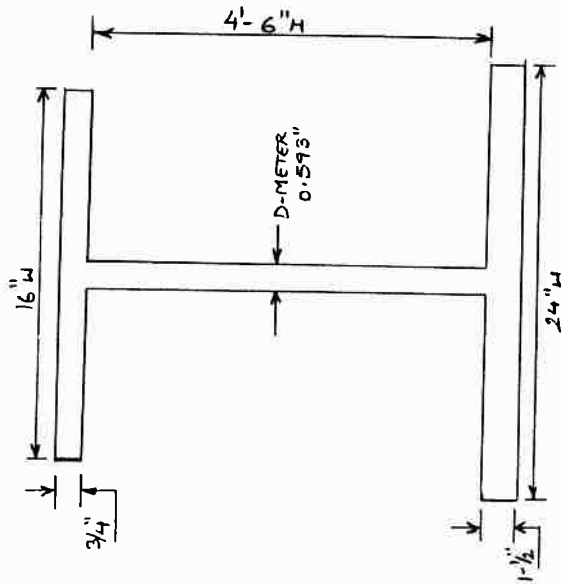
ELASTOMERIC BEARING - EAST ABUTMENT

SOLE PLATE = 18" x 18" x 1" - 3/4" (VARIES)

ELASTO PAD = 18-1/4" x 11" L x 3" THICK



SPAN 2, TYPICAL GIRDER ELEVATION - G1, SOUTH ELEVATION



TYPICAL CROSS SECTION - AT MID-SPAN

REVISION 1	DATE:	CREW:	REVISION 3	DATE:	CREW:
REVISION 2	DATE:	CREW:	REVISION 4	DATE:	CREW:



HAKS FIELD NOTES

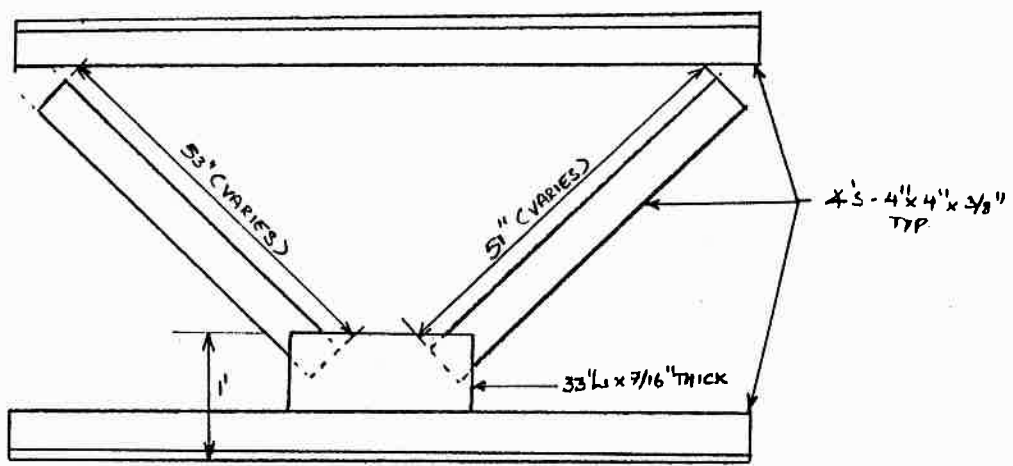
JOB NO. 170-3013

BRIDGE NO. 06826

DATE: 01/11/12

SHEET 6

CREW: PHH, RV



SPAN 1, BAY 3, 3RD INTERMEDIATE DIAPHRAGM

FROM WEST ABUTMENT

DIAPHRAGM DETAIL

REVISION	△	DATE	CREW	REVISION	△	DATE	CREW
REVISION	△	DATE	CREW	REVISION	△	DATE	CREW



HAKS

FIELD NOTES

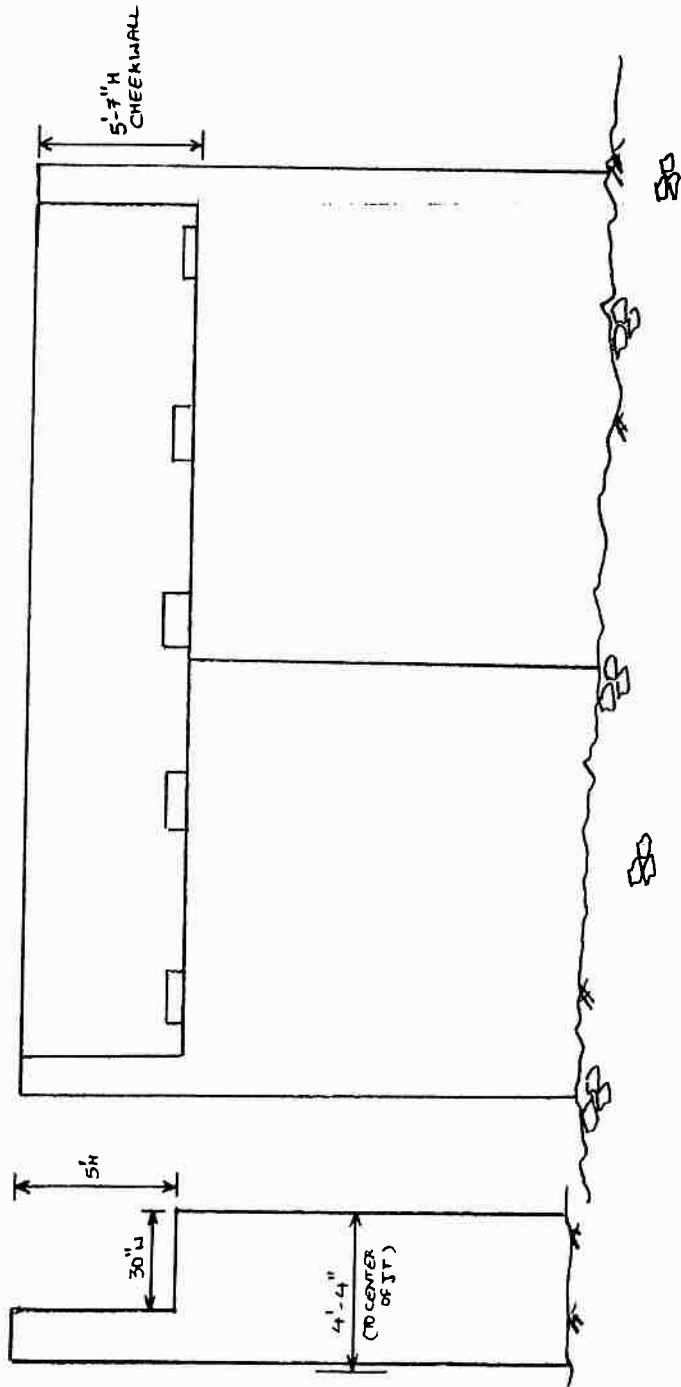
JOB NO. 170-3013

BRIDGE NO. 06826

DATE: 1/31/12

SHEET 7

CREW: PHH, RV



WEST ABUTMENT ELEVATION

REVISION	△	DATE	CREW	REVISION	△	DATE	CREW
REVISION	△	DATE	CREW	REVISION	△	DATE	CREW



HAKS

FIELD NOTES

JOB NO. 170-3013

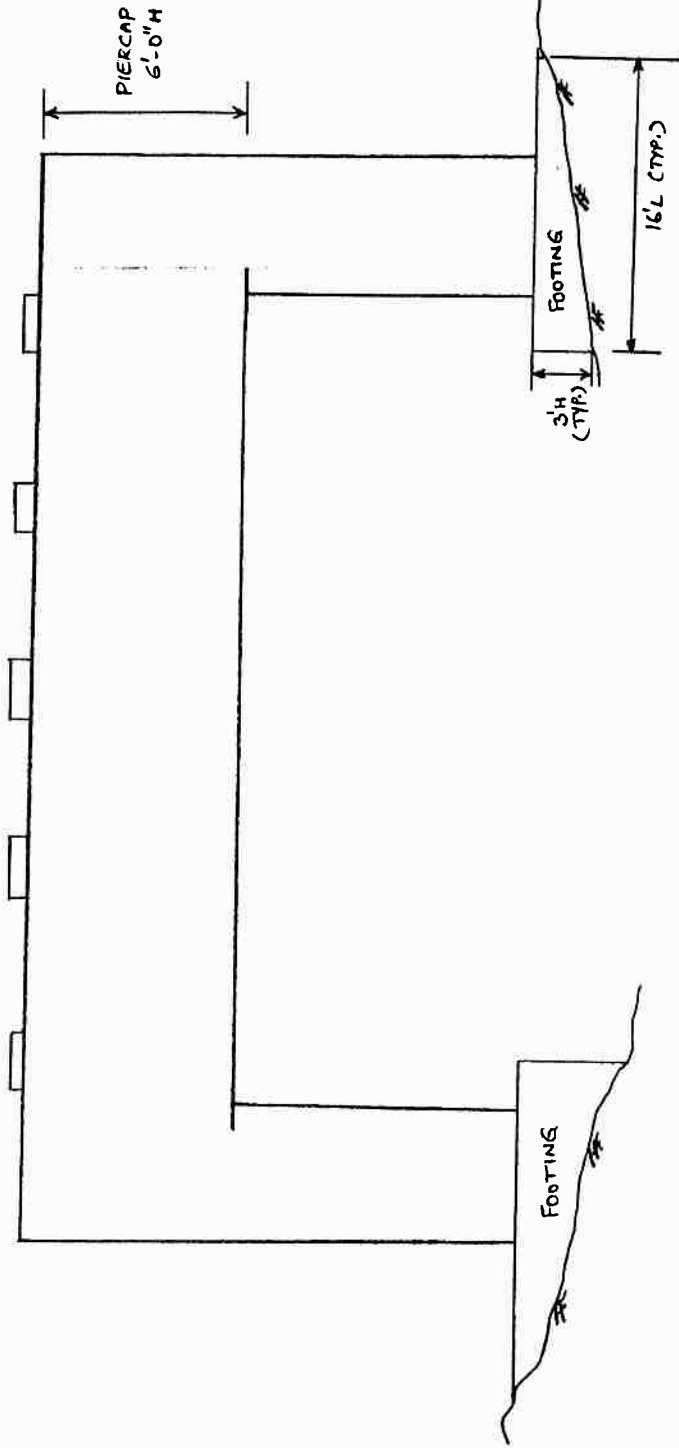
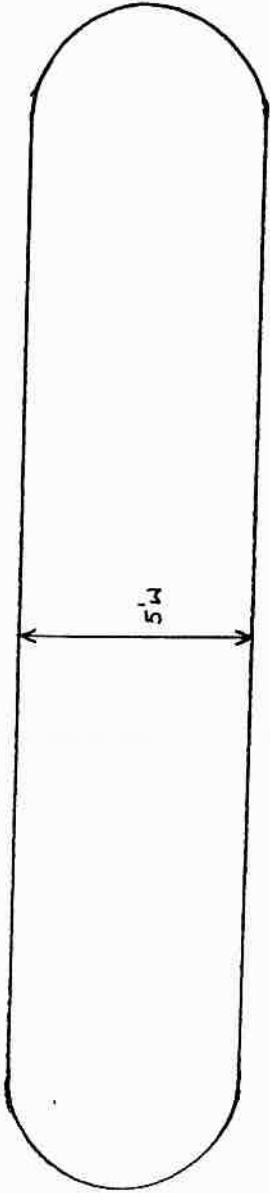
BRIDGE NO. 06826

DATE: 1/31/12

SHEET 8

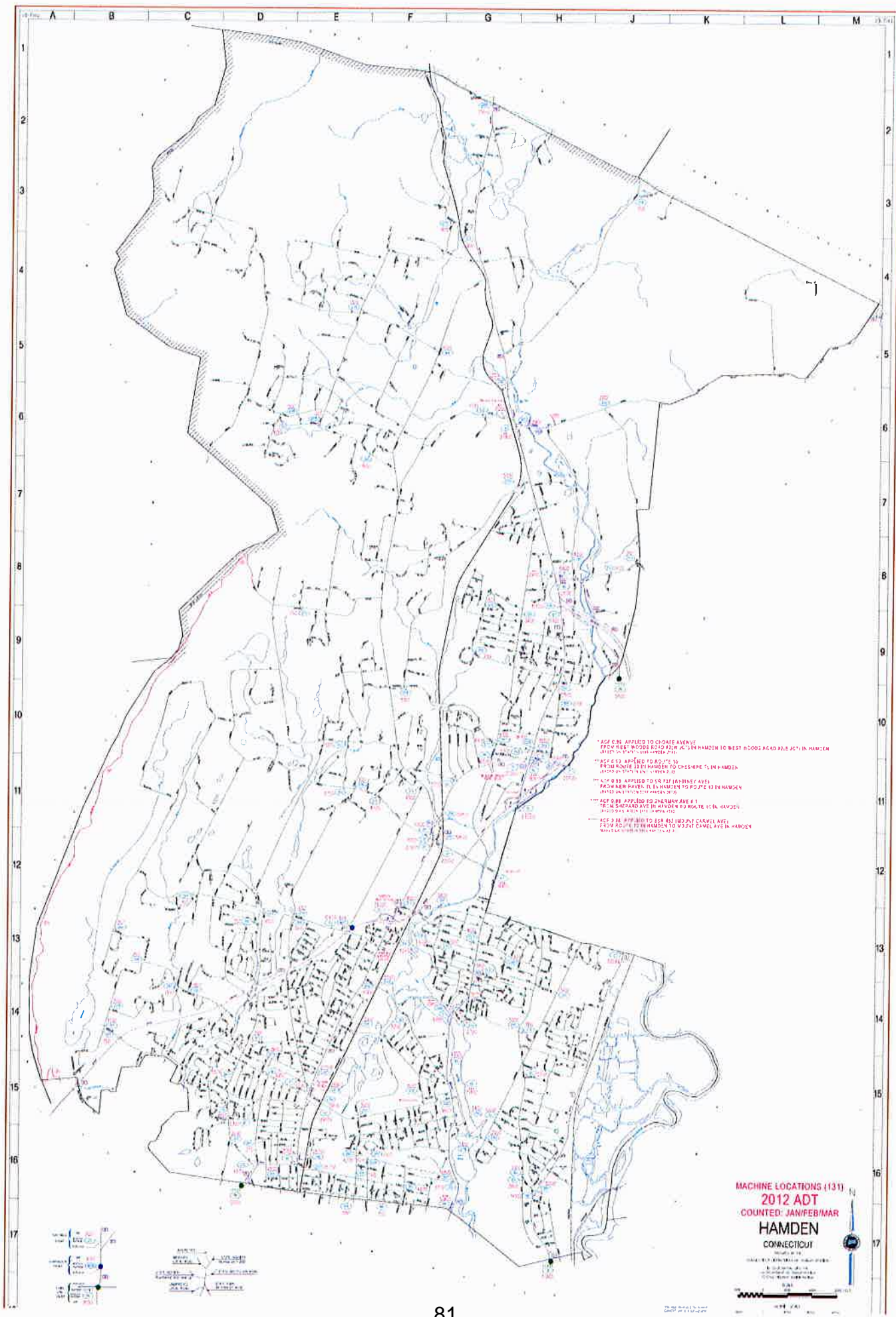
CREW: PHH, RV

PLAN VIEW OF CAP



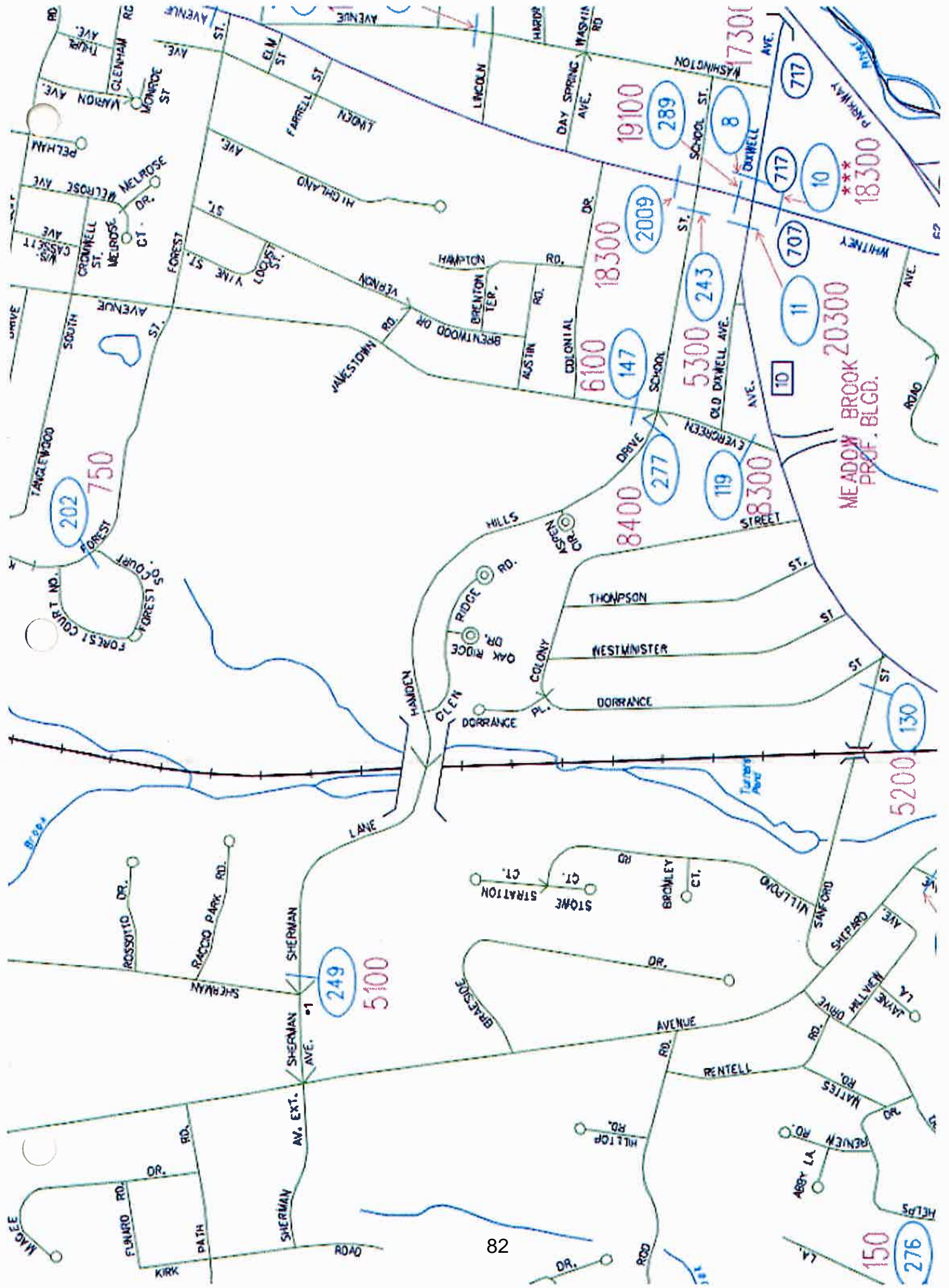
PIER EAST ELEVATION

REVISION	△	DATE	CREW	REVISION	△	DATE	CREW
REVISION	△	DATE	CREW	REVISION	△	DATE	CREW



- ACF 0 96 APPLIED TO CHATEAU AVENUE FROM WEST WOODS ROAD FROM AC-114 HAMDEN TO WEST WOODS ROAD SIDE AC-114 IN HAMDEN
- ACF 0 96 APPLIED TO ROUTE 10 FROM ROUTE 10 IN HAMDEN TO SPESHIRE ST IN HAMDEN
- ACF 0 96 APPLIED TO ROUTE 10 FROM ROUTE 10 IN HAMDEN TO ROUTE 10 IN HAMDEN
- ACF 0 96 APPLIED TO ROUTE 10 FROM ROUTE 10 IN HAMDEN TO ROUTE 10 IN HAMDEN
- ACF 0 96 APPLIED TO ROUTE 10 FROM ROUTE 10 IN HAMDEN TO ROUTE 10 IN HAMDEN
- ACF 0 96 APPLIED TO ROUTE 10 FROM ROUTE 10 IN HAMDEN TO ROUTE 10 IN HAMDEN
- ACF 0 96 APPLIED TO ROUTE 10 FROM ROUTE 10 IN HAMDEN TO ROUTE 10 IN HAMDEN
- ACF 0 96 APPLIED TO ROUTE 10 FROM ROUTE 10 IN HAMDEN TO ROUTE 10 IN HAMDEN
- ACF 0 96 APPLIED TO ROUTE 10 FROM ROUTE 10 IN HAMDEN TO ROUTE 10 IN HAMDEN
- ACF 0 96 APPLIED TO ROUTE 10 FROM ROUTE 10 IN HAMDEN TO ROUTE 10 IN HAMDEN

MACHINE LOCATIONS (131)
2012 ADT
 COUNTED: JAN/FEB/MAR
HAMDEN
 CONNECTICUT



MEADOW BROOK PROF. BLDG.

BRIDGE NO.06826

35650 - HAMDEN
HAMDEN HILLS DRIVE
over
SHEPARD BROOK & RR-TRAIL

Routine Inspection

2/14/2018

Inspected by: AI Engineers



TABLE OF CONTENTS

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Bridge No. 06826

Hamden Hills Drive
over
Shepard Brook & Farmington Canal Heritage Trail
Hamden

Inspected By:



Date: 02/14/2018



Personal Certification: I hereby certify that this report, including all of its contents, has been approved by me, and that I am a duly licensed professional engineer under the laws of the State of Connecticut.

Signature: 

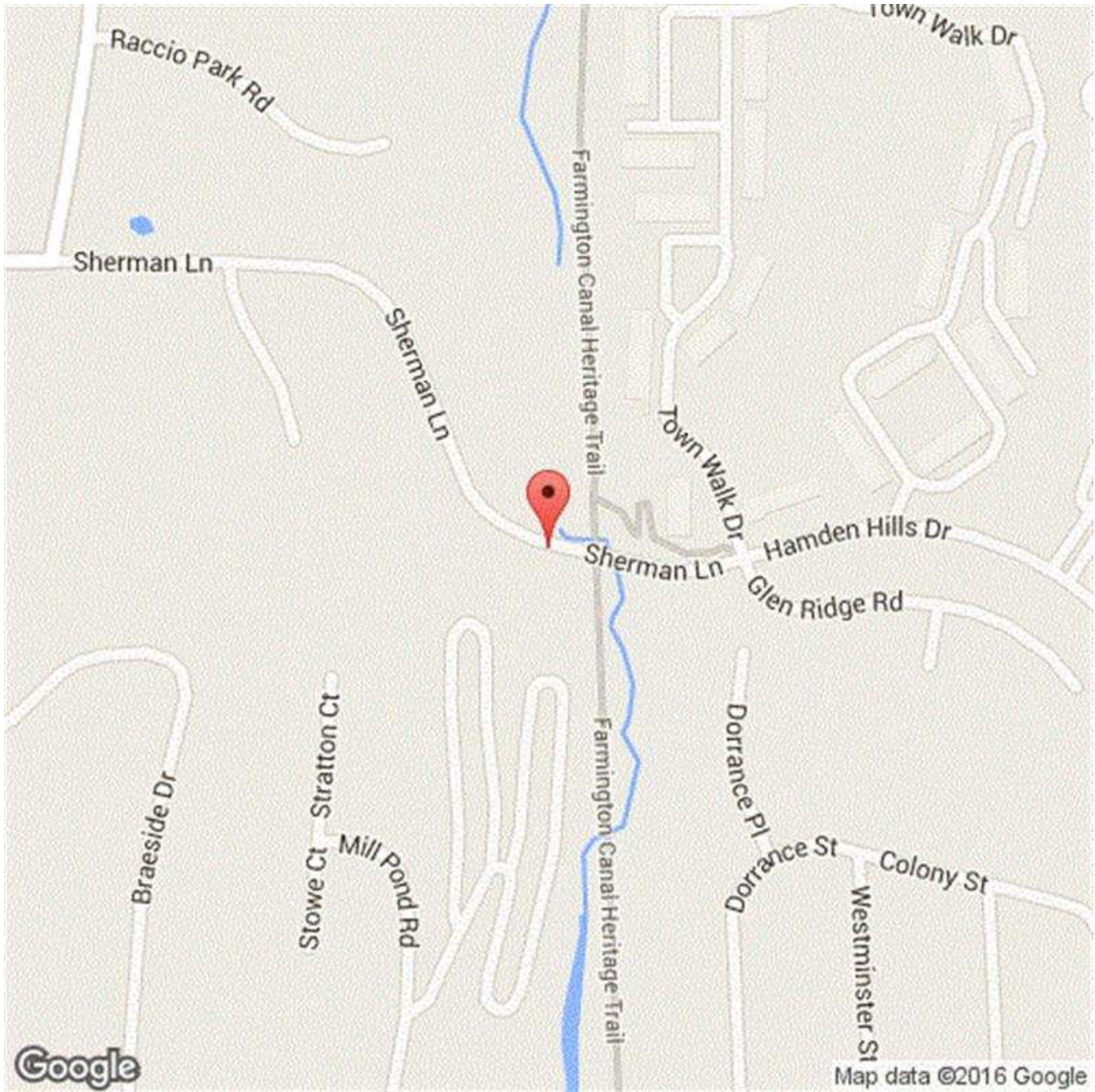
License No.: 27653

Date: 3-07-2018

Form: Location
Inspection type: Routine
Inspection Date: 2/14/2018
Inspected by: AI Engineers

Bridge No: 06826

Town: HAMDEN
Carried: HAMDEN HILLS DRIVE
Crossed: SHEPARD BROOK & RR-TRAIL
Inventory Route: Non-NHS



Location Map # 1

Form: BRI-19, Rev. 2/15
Inspection type: Routine
Inspection Date: 2/14/2018
Inspected by: AI Engineers

Bridge No: 06826

Town: HAMDEN
Carried: HAMDEN HILLS DRIVE
Crossed: SHEPARD BROOK & RR-TRAIL
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" value="G Check of scour or undermining"/>

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: 2/14/2018
Inspected by: AI Engineers

Bridge No: 06826

Town: HAMDEN
Carried: HAMDEN HILLS DRIVE
Crossed: SHEPARD BROOK & RR-TRAIL
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.

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

- Bridge is logged west to east with girder G1 at the north fascia.
- Previous special inspection "G- Check of scour or undermining" at the pier north column, west elevation, has been repaired with rip-rap previously but the rip rap has moved and the undermining is exposed again. Special inspection has been removed as per BRI-8 issued 10-1-15 by TDL. Continue to monitor this location in future inspections.
- ADT increased from 2015 value at 1% increase per year.

CLASSIFICATION

(112) NBIS Bridge Length
(104) Highway System
(26) Functional Class
(100) Defense Highway

Form: BRI-19, Rev. 2/15
Inspection type: Routine
Inspection Date: 2/14/2018
Inspected by: AI Engineers

Bridge No: 06826

Town: HAMDEN
Carried: HAMDEN HILLS DRIVE
Crossed: SHEPARD BROOK & RR-TRAIL
Inventory Route: Non-NHS

(111) Pier/Abutment Navigation	<input type="text"/>	(101) Parallel Structure	<input type="text" value="N - No parallel structure"/>
(116) Vert-Lift Brg Nav Min	<input type="text" value="0"/> ft. <input type="text" value="0"/> In.	(102) Direction of Traffic	<input type="text" value="2 - 2-way traffic"/>

Form: BRI-19, Rev. 2/15
 Inspection type: Routine
 Inspection Date: 2/14/2018
 Inspected by: AI Engineers

Bridge No: 06826

Town: HAMDEN
 Carried: HAMDEN HILLS DRIVE
 Crossed: SHEPARD BROOK & RR-TRAIL
 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 ft. in.
 Posted Vert. Underclearance ft. in.

Posted Speed Limit on Bridge m.p.h.

OTHER FEATURES

Fence Required
 Fence Present
 Fence Type
 Fence Height
 Fence Material
 Fence Top Type
 Barrel Ladders
 Stand Pipes
 Catwalks

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: 2/14/2018
Inspected by: AI Engineers

Bridge No: 06826

Town: HAMDEN
Carried: HAMDEN HILLS DRIVE
Crossed: SHEPARD BROOK & RR-TRAIL
Inventory Route: Non-NHS

Moveable Inspection System

Haunches Present over Roadway

Utilities

1 Gas
2 Water
7 Sewer

Form: BRI-19, Rev. 2/15
Inspection type: Routine
Inspection Date: 2/14/2018
Inspected by: AI Engineers

Bridge No: 06826

Town: HAMDEN
Carried: HAMDEN HILLS DRIVE
Crossed: SHEPARD BROOK & RR-TRAIL
Inventory Route: Non-NHS


INSPECTOR'S SIGNATURES:

1)  Date: 03/02/2018

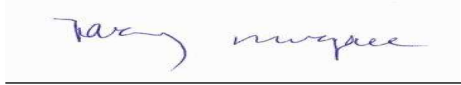
2)  Date: 03/02/2018

3)  Date: 03/02/2018

4) _____ Date: _____

P.E. SIGNATURE:  Date: 03/07/2018

P.E. # _____

Reviewed By:  Date: 03/09/2018

Form: BRI-18, Rev. 1/14
 Inspection type: Routine
 Inspection Date: 2/14/2018
 Inspected by: AI Engineers

Bridge No: 06826

Town: HAMDEN
 Carried: HAMDEN HILLS DRIVE
 Crossed: SHEPARD BROOK & RR-TRAIL
 Inventory Route: Non-NHS

FIELD INSPECTION REPORT

Location: 300 FT W OF GLEN RIDGE
 Main Material: 3 - Steel
 Main Design: 02 - Stringer/Multi-beam or

Year Built: 1991
 Year Rebuilt:

Snooper Required:
 Snooper Used:

<u>Inspectors:</u>	
Lead Inspector:	Ethan Cote
Inspector:	Task:
Cote, Ethan	BSE - Inspector
Ismail, Ziad	BSE - Inspector
Salehi, Mohammad	BSE - Inspector

<u>Visits:</u>			
Visit Date:	Temp:	Start Time:	End Time:
02/14/2018	42	08:30 AM	01:30 PM

58. DECK:

Reinforced concrete deck and bituminous concrete overlay with preformed fabric membrane.

Overall Rating: 7

The deck is in good condition.

Rating

Overlay:	6	<p>Bituminous concrete overlay is new since last inspection. See photo 8.</p> <p>The deck joints at the abutments and pier are paved over, and the overlay exhibits transverse cracks open up to 1/2" wide. See photo 9. There is active leakage and evidence of past leakage noted below. See photos 20, 23, 24 & 26.</p> <p>Rating upgraded from '5'.</p>
Deck - Str. Condition:	7	<p>Underside of reinforced concrete deck exhibits isolated transverse hairline cracks with and without efflorescence in span 1, bay 1.</p> <p>Previously noted: The overall underside of deck deterioration is <1%.</p> <p>See photo 10.</p>
Curbs:	N	<p>Curbs are monolithic with sidewalks. See item "Sidewalks" below.</p> <p>Average curb reveal: South curb = 5-1/2"; North curb = 5-7/8".</p>
Median:	N	
Sidewalks:	4	<p>Concrete sidewalks with monolithic curbs at both sides of the bridge exhibit light scale throughout, edge spalls up to 1/4" deep and scrapes at random locations. There is light to moderate sand/debris accumulation on both sidewalks. See photo 11.</p> <p>South sidewalk:</p> <ul style="list-style-type: none"> - At the abutment 1 joint, the curb has a 6" x 3" hole with vegetation growth and a 4" high x 4" long x 4" deep void under the approach sidewalk. There is evidence of past leakage below. - At the pier joint, there is a 3' x 18" x 2" deep spall with the joint open up to 2" wide and a 1' long through hole. There is active leakage below at the pier. See photo 12. <p>North sidewalk:</p> <ul style="list-style-type: none"> - At the pier joint, there is a 15' long x 4' wide area of plow damage with spalls and severe scale up to 4" deep, loose concrete and hollow areas. There are longitudinal cracks up to 42' long x 1/4" wide in the sidewalk extending from this location with edge spalls up to 4" wide x 1" deep. See photo 13. - At the east end, there is a 30" long x 7" wide x 6" high hollow area/potential spall with cracks at the curb.

Approach sidewalks:
 - At the southeast and northeast corners, there are gaps up to a 47" long x 3/4" wide between the sidewalk and the bottom of parapet (filled with debris).
 - At the southwest corner, there is a 16" long x 1' wide x 4" deep spall in the sidewalk and a 50' long x 4" wide x up to 4" deep area of severe scale at the curb.
 - At the southeast corner, there is full-width x up to 3" high vertical mis-alignment between sidewalk segments at the end of the approach parapet (pedestrian tripping hazard). See photo 14.
 - At the northeast corner, there is a 2' x 7" x 1" deep spall at the abutment 2 joint. There is also a full-width x 1/8" wide transverse crack.

Parapet: 6 Reinforced concrete parapets have isolated vertical hairline cracks up to full-height with and without efflorescence. In span 1, the south parapet has three (3) spalls up to 1.5' long x 4" wide x 2" deep at the top. See photo 15.

Approach parapets:
 South parapet is laterally misaligned with the southeast approach parapet by 11/16" to the south (no change; appears to be an as-built condition). There is a 16" x 3" hollow area/potential spall in the northeast approach corner parapet. Also, see item "Sidewalks" above.

See photo 11.

Railing: 8 Extruded aluminum double pipe bridge railings with no deficiencies noted.

See photo 11.

Paint: N

Fence: N

Drains: 5 Scupper pipes at the underside of the deck in span 1, bays 1 & 4 near the pier, exhibit heavy surface rust. The scupper pipe in span 1, bay 1, is disconnected from the coupling (previously noted active leakage onto steel at this location was not found). See photo 16.

Scupper grates along the north and south curbs in span 1 have been cleared since last inspection.

PVC weeps without extensions at the underside of the deck in both spans, bays 1 & 4 (do not drain onto steel). See photo 16.

Lighting Standard: 7 Lighting standards mounted on the north parapet in spans 1 & 2. The lighting standard in span 2 is missing two (2) of three (3) anchor bolt covers at the base, and the previously noted broken/cracked light covers at the top have been repaired since last inspection. Rating upgraded from '6'.

Overall Utility Condition Rating 6 - Fair

Utility Type/Size

1 Gas	6" diameter gas main in bay 4. The insulation wrapping is torn and hanging down from the gas main at random locations. See photo 10.
2 Water	18" diameter insulated water main in bay 1. The insulation wrapping is torn and hanging down from the water main at random locations. See photo 10.
7 Sewer	15" diameter insulated sewer pipe in bay 2. The insulation wrapping is torn and hanging down from the sewer pipe at random locations.

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 Crossed: SHEPARD BROOK & RR-TRAIL
 Inventory Route: Non-NHS

See photo 10.

Construction Joints: N
 Expansion Joint: N The deck joints have been paved over since last inspection. See item "Overlay" above. Rating revised from '4'.

Haunches Present over travelway?

APPROACH CONDITION:

Bituminous concrete pavement. Overall Rating:
 The approaches are in very good condition. Rating upgraded from '5'.

Rating

Approach Slab: Not visible and paved over. Rating based on the condition of the approach pavement. See item "Approach Pavement" below. Rating upgraded from '5'.
 Relief Joints: N
 Approach Guide Rail: Metal beam guide rails at all approach corners. The southwest approach metal beam guide rail has a ±38' long area of severe collision damage near the end, with the rail bent ±26' long x 4' deep and seven (7) bent/disconnected posts. See photo 17.
 Approach Pavement: Bituminous concrete pavement is new since last inspection with no deficiencies noted. See photo 18. Rating upgraded from '5'.
 Approach Embankment: No deficiencies noted.

Traffic Safety Features

Bridge Railings: >32" high (Non-NHS).
 Transitions: Does not meet R-B 350 standards (parapet end is more than 3" higher than approach rail).
 Approach Guardrails: Does not meet R-B 350 standards (steel block-outs).
 Approach Guardrail Ends: Continuous beyond bridge limits.

59. SUPERSTRUCTURE:

Steel multi-girder. Overall Rating:
 The superstructure is in good condition.

Rating

Bearing Devices: Elastomeric expansion bearings at both abutments were in slight expansion mode at 42°F and exhibit minor bulging and up to 10" long x 1/2" curling at the top edges. Anchor bolt nuts are backed off up to 1/4" at both abutments. Elastomeric pads were painted over previously and exhibit peeling paint. See photo 19.
 Fixed elastomeric bearings at pier exhibit minor bulging. Elastomeric pads were painted over previously and exhibit peeling paint. See photo 20.
 Stringers: N
 Girders: Steel girders exhibit isolated locations of peeling paint with light to moderate surface rust at fascia girders and adjacent end diaphragms in bays 1 & 4 over the pier due to deck joint leakage. See photo 20.
 See photo 10.
 Floor Beams: N
 Trusses - General: N
 Trusses - Portals: N
 Trusses - Bracing: N

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Paint:	7	<10% peeling paint of total structural steel area. See above items.
Rust:	7	See above items.
Machinery Movable Span:	N	
Rivets & Bolts:	8	
Welds - Cracks:	8	All girder bottom flange transition welds (fatigue category B) were checked 100% hands-on with no deficiencies noted. See photo 21. All girder transverse web stiffener to bottom flange fillet welds (fatigue category C') were checked 100% hands-on with no deficiencies noted.
Timber Decay:	N	
Concrete Cracking:	N	
Collision Damage:	7	In span 2, girders G4 & G5 exhibit isolated 1' long scrape marks at the underside of the bottom flange. See photo 22.
Member Alignment:	8	
Deflection Under Load:	N	(N) Normal, (E) Excessive.
Vibration Under Load:	N	(N) Normal, (E) Excessive.
Stand Pipes:	N	
Catwalks:	N	
Movable Inspection System:	N	
Barrel Ladders:	N	
Are Barrel Ladders OSHA Compliant?		<input type="text" value="NA"/>

60. SUBSTRUCTURE:

Reinforced concrete abutments and pier.

Overall Rating:

The substructure is in fair condition.

Rating

Abutments - Stem:	7	Reinforced concrete abutment stems exhibit random areas of light scale. The abutment 1 stem has an isolated 6" long vertical hairline crack. There is evidence of past leakage noted at both abutment stems. See photos 23-24.
Abutments - Backwall:	8	Reinforced concrete abutment backwalls exhibit evidence of past leakage noted at both abutments.
Abutments - Footings:	N	Not visible.
Abutments - Settlement:	8	No evidence of settlement noted.
Abutments - Wingwalls:	7	Reinforced concrete wingwalls exhibit missing/deteriorated joint filler material with joints open up to 1.25" wide at the vertical joints along abutment stems (no change). Wingwall 1B has an isolated 6' x 6" hairline map cracking area. See photo 25.
Piers/Bents - Caps:	7	Reinforced concrete pier cap exhibits random vertical hairline cracks, mostly along the bottom of the west face, with some extending full-width across the underside of the cap. There is an isolated crack that extends across the top of the cap at the south end. There is active leakage noted at the north end of the cap. See photo 26.
Piers/Bents - Pile Bent:	N	
Piers/Bents - Columns:	7	Reinforced concrete pier columns. There is an isolated horizontal hairline crack at the southwest side of column 2. There are several trees protruding from the base of the south column. See photo 26.

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Piers/Bents - Footings:	5	Reinforced concrete pier footings are partially exposed 16' x 10' x up to 3' high at the west side of the pier (as-built condition) and exhibit light scale. See photo 26. At the southwest corner of the north column, there is an area of scour causing undermining of the footing 4' long x 16" high x up to 6" deep with tree root growth below (recurring condition; previously placed rip rap displaced). See photo 27. Also, see item "Erosion - Scour" below. Rating downgraded from "6".
Piers/Bents - Settlement:	8	No evidence of settlement noted.
Erosion - Scour:	5	Erosion: Rating = 8. Scour: Rating = 5. Scour of the channel bank has slightly undermined the north column at the southwest corner for 4' long x 16" high x up to 6" deep (re-occurring condition; previously placed rip rap displaced). See above item "Piers/Bents - Footings". Rating downgraded from "6". See photo 27.
Concrete Crack - Spall:	7	See above items.
Steel Corrosion:	N	
Paint:	N	
Timber Decay:	N	
Collision Damage:	8	
Debris:	7	Light pigeon debris on abutment seats.

61. CHANNEL AND CHANNEL PROTECTION:

Shepard Brook.

Overall Rating: 5

The channel is in fair condition.

Rating

Channel - Scour:	5	Channel exhibits minor local scour holes up to 2.5' deep at the inlet and outlet of the stone masonry arch culvert located between the pier columns. See photo 26. The channel bed consists of sand/silt, mud and leaves. The southwest corner of the pier footing, north column, is ±1' away from the edge of the channel and susceptible to undermining when the channel has a high volume of water. Scour of the channel bank has slightly undermined the north column at the southwest corner for 4' long x 16" high x up to 6" deep (recurring condition; previously placed rip rap displaced). Tree root growth is present at this location. See photo 27.
Embankment - Erosion:	6	Channel embankments exhibit up to 18" high erosion at upstream and downstream with partially exposed tree roots. See photos 28-29. There is minor erosion of the channel embankments at both ends of the stone masonry arch culvert wingwalls. See photo 26. There is heavy erosion trough 40' long x 7' wide x 4' deep at the embankment along the roadway drainage outlet at the southwest end of the bridge. The drain opening is also undermined 7' wide x 3' high x 3' deep. See photo 30.
Debris:	7	Small tree branches and vegetation growth in the channel. See photos 28-29.
Vegetation:	7	Trees and heavy vegetation overhang the edges of the channel. See photos 28-29.
Channel Change:	6	Shepard Brook passes below the structure at the north side of span 1 and is redirected through a stone masonry arch culvert located between the pier columns, below the Farmington Canal Greenway Trail into span 2, at the south side of the bridge. See photos 26 & 28-29.

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	A small drainage system feeds into Shepard Brook at the north side of span 2.
	There is a roadway drainage outlet at the southwest end of the bridge. See photo 30.
	Also, see above items.
Fender - System: N	
Spur Dikes and Jetties: N	
Rip Rap: 5	Rip-rap along the abutment/wingwall embankments. The embankment along wingwall 2A (northeast corner) exhibits eroded rip rap with exposed synthetic fabric. See photo 31. Rip rap is displaced at the north pier column causing undermining of the footing. Rating downgraded from '7'. Also, see above items.

62. CULVERTS AND RETAINING WALLS:

	Overall Rating: N
--	-------------------

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: None	
Warning At Bridge: None	
Legibility:	
Visibility:	

VERTICAL CLEARANCE POSTING

Min. Vert Under Clearance:		Ft		In	
Posted Clearance Under Bridge:		Ft		In	
Posted Clearance On Bridge:		Ft		In	
Advanced Warning: None					
Warning At Bridge: None					
Legibility:					
Visibility:					

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Town: HAMDEN
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Crossed: SHEPARD BROOK & RR-TRAIL
Inventory Route: Non-NHS

NOTES / COMMENTS:

Character of Traffic: Local, mixed weights.

Additional Notes:

- Bridge identification was stenciled at time of inspection. See photo 1.
- Bridge log direction is west to east with girder G1 at the north fascia, which is consistent with previous inspection reports and bridge plans. Shepard Brook flows from north to south.
- Bridge inspected using 62' snooper and local police assistance for one-way traffic control on Hamden Hills Drive.

Additional Comments:

See report table of contents.

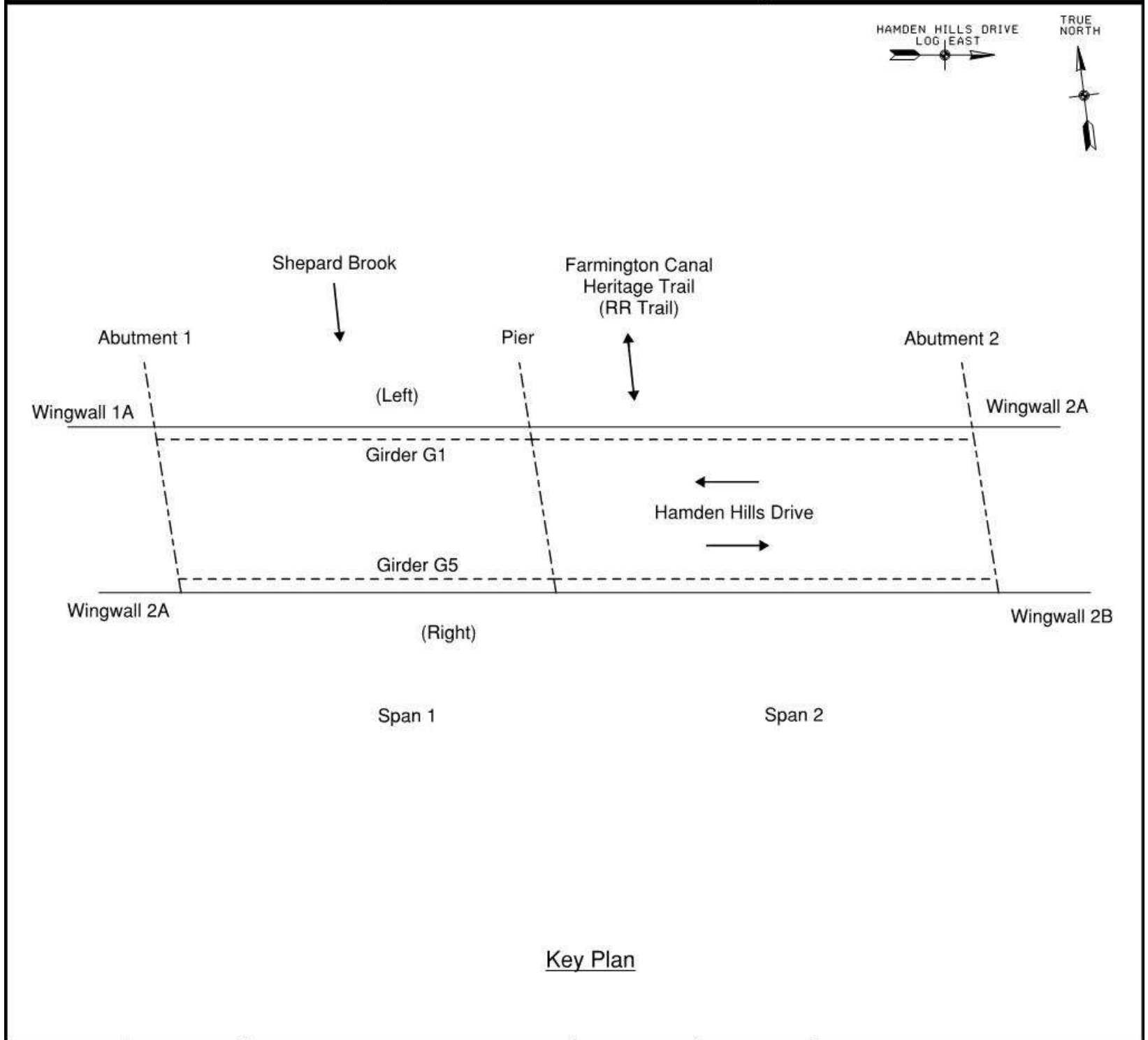
National Bridge Elements
 Inspection type: Routine
 Inspection Date: 2/14/2018
 Inspected by: AI Engineers

Bridge No: 06826

Town: HAMDEN
 Carried: HAMDEN HILLS DRIVE
 Crossed: SHEPARD BROOK & RR-TRAIL
 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.	9439	sq. ft.	9430	9	0	0
1120 - Efflorescence/Rust Staining		8		0	8	0	0
1130 - Cracking (RC and Other)		1		0	1	0	0
107 - Steel Open Girder/Beam	Mod.	1050	ft.	1030	20	0	0
1000 - Corrosion		20		0	20	0	0
205 - Reinforced Concrete Column	Mod.	2	each	2	0	0	0
215 - Reinforced Concrete Abutment	Mod.	87	ft.	86	1	0	0
1130 - Cracking (RC and Other)		1		0	1	0	0
220 - Reinforced Concrete Pile Cap/Footing	Mod.	32	ft.	0	28	4	0
1190 - Abrasion/Wear (PSC/RC)		28		0	28	0	0
6000 - Scour		4		0	0	4	0
234 - Reinforced Concrete Pier Cap	Mod.	44	ft.	28	16	0	0
1120 - Efflorescence/Rust Staining		1		0	1	0	0
1130 - Cracking (RC and Other)		15		0	15	0	0
310 - Elastomeric Bearing	Mod.	20	each	15	5	0	0
2230 - Bulging, Splitting, or Tearing		5		0	5	0	0
330 - Metal Bridge Railing	Mod.	432	ft.	432	0	0	0
331 - Reinforced Concrete Bridge Railing	Mod.	432	ft.	417	15	0	0
1130 - Cracking (RC and Other)		15		0	15	0	0

CREW: EJC, ZRI, MRS (AI Engineers)	DATE: 02/14/18	BRIDGE NO.: 06826
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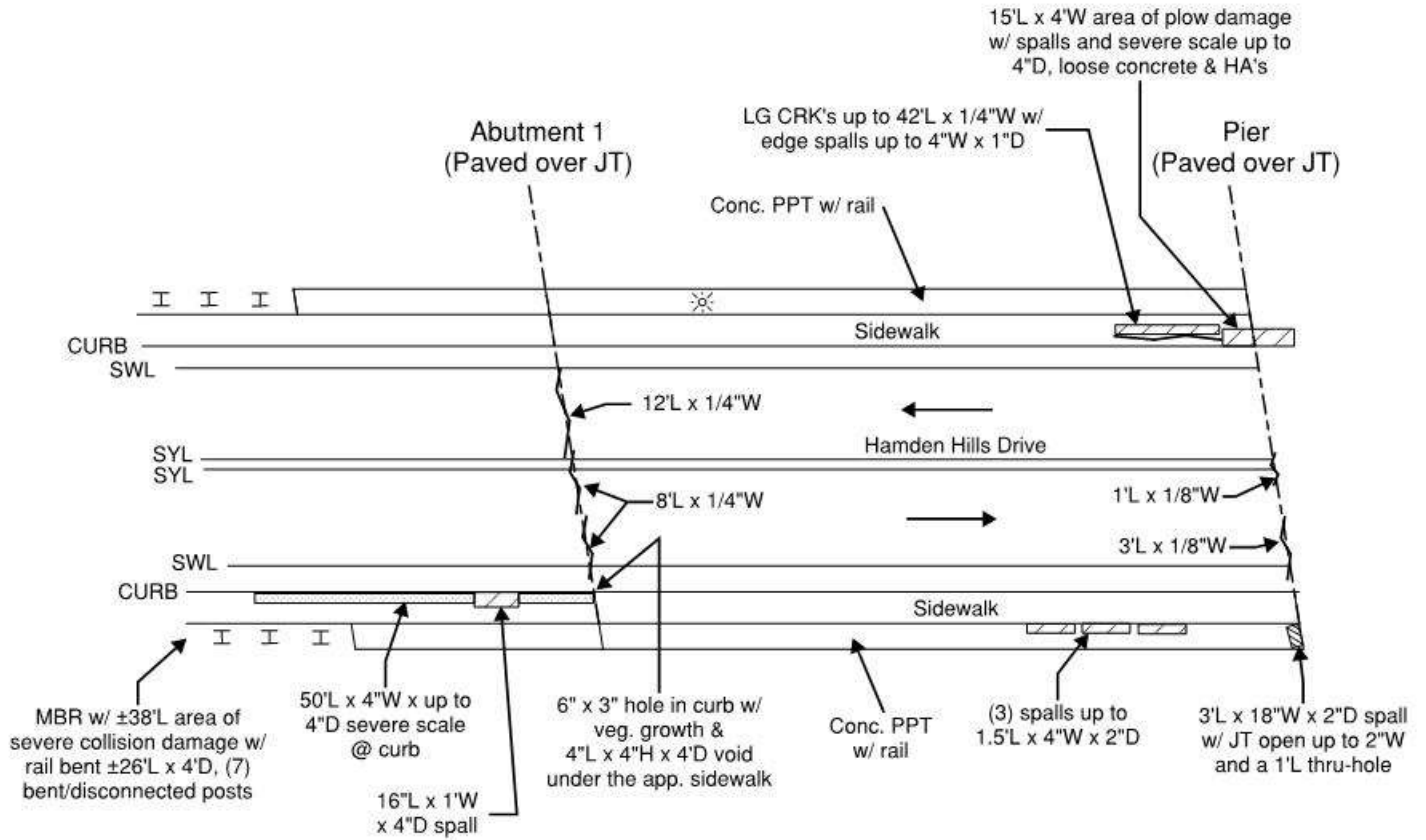
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Sketches
 Inspection type: Routine
 Inspection Date: 2/14/2018
 Inspected by: AI Engineers

Bridge No: 06826

Town: HAMDEN
 Carried: HAMDEN HILLS DRIVE
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 Inventory Route: Non-NHS

CREW: EJC, ZRI, MRS (AI Engineers)	DATE: 02/14/18	BRIDGE NO.: 06826
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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
 - SWL SOLID WHITE LINE
 - SYL SOLID YELLOW LINE
 - CURB NON-MOUNTABLE
 - METAL BEAM RAIL (MBR)
 - LIGHT POLE

GENERAL NOTES:

- New bituminous concrete overlay & app. pavement since last inspection.
- LT-MOD sand/debris along curb lines.
- Avg. curb reveals: South = 5-1/2", North = 5-7/8".
- Sidewalks: LT scale, rand. edge spalls up to 1/4"D, scrapes.
- Parapets: Iso. VT HL CRK's w/ & w/o efflo.

Top of Deck - Span 1

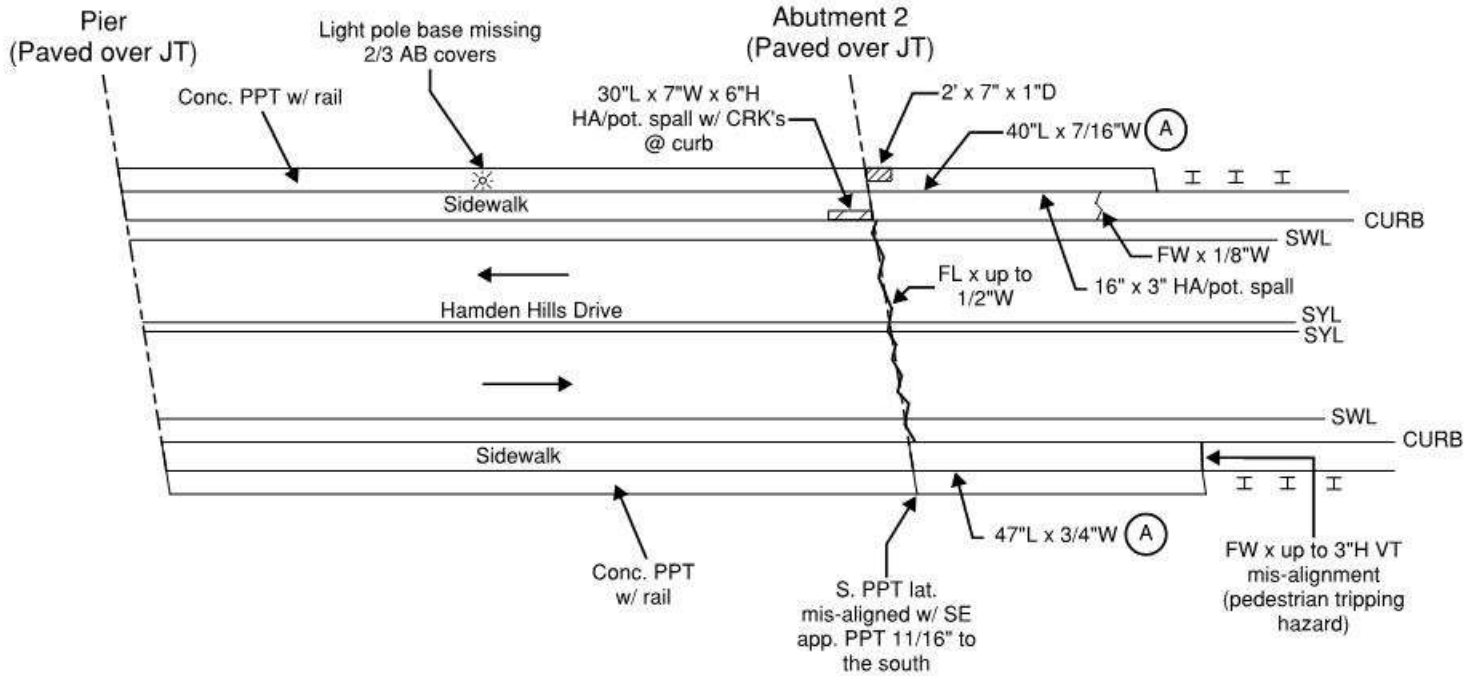
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Sketches
 Inspection type: Routine
 Inspection Date: 2/14/2018
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GENERAL NOTES:
 - See Top of Deck Span 1 General Notes.

Deterioration Legend:

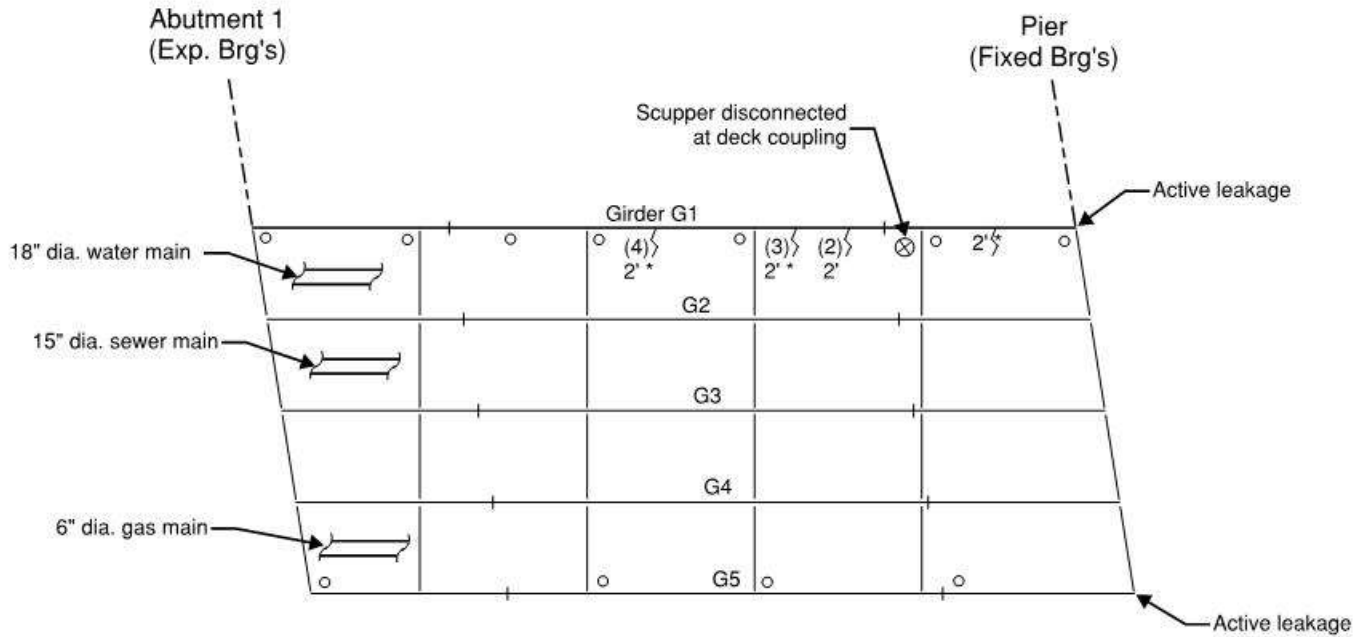
(A) Gap between PPT & app. sidewalk (filled w/ debris)

- LEGEND:**
- HOLLOW AREA
 - SHALLOW REBAR
 - SPALL AREA
 - SPALL AREA WITH EXPOSED REBAR
 - MAPCRACKS
 - HAIRLINE CRACKS
 - HONEYCOMB AREA
 - SCALE AREA
 - EFFLORESCENCE PRESENT
 - SWL SOLID WHITE LINE
 - SYL SOLID YELLOW LINE
 - CURB NON-MOUNTABLE
 - METAL BEAM RAIL (MBR)
 - LIGHT POLE

Top of Deck - Span 2

REVISION	DATE:	CREW:	REVISION	DATE:	CREW:
REVISION	DATE:	CREW:	REVISION	DATE:	CREW:

CREW: EJC, ZRI, MRS (AI Engineers)	DATE: 02/14/18	BRIDGE NO.: 06826
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GENERAL NOTES:

- Elastomeric expansion bearings at both abutments were in slight expansion mode at 42°F and exhibit minor bulging and up to 10" long x 1/2" curling at the top edges. Anchor bolt nuts are backed off up to 1/4" at both abutments. Elastomeric pads were painted over previously and exhibit peeling paint.
- Fixed elastomeric bearings at pier exhibit minor bulging. Elastomeric pads were painted over previously and exhibit peeling paint.
- Steel girders exhibit isolated locations of peeling paint with light to moderate surface rust at fascia girders and adjacent end diaphragms in bays 1 & 4 over the pier due to deck joint leakage.
- Utilities w/ insulation wrapping torn and hanging down at random locations.
- PVC weeps do not drain onto super/substructure unless otherwise noted.

LEGEND:

	HOLLOW AREA
	SHALLOW REBAR
	SPALL AREA
	SPALL AREA WITH EXPOSED REBAR
	MAPCRACKS
	HAIRLINE CRACKS
	HONEYCOMB AREA
	SCALE AREA
	EFFLORESCENCE PRESENT
	B.F.L.G. COV. PL. TRANSITION WELD
	WEEP (ALL MISSING EXTENSIONS)

Underside of Deck & Framing Plan - Span 1

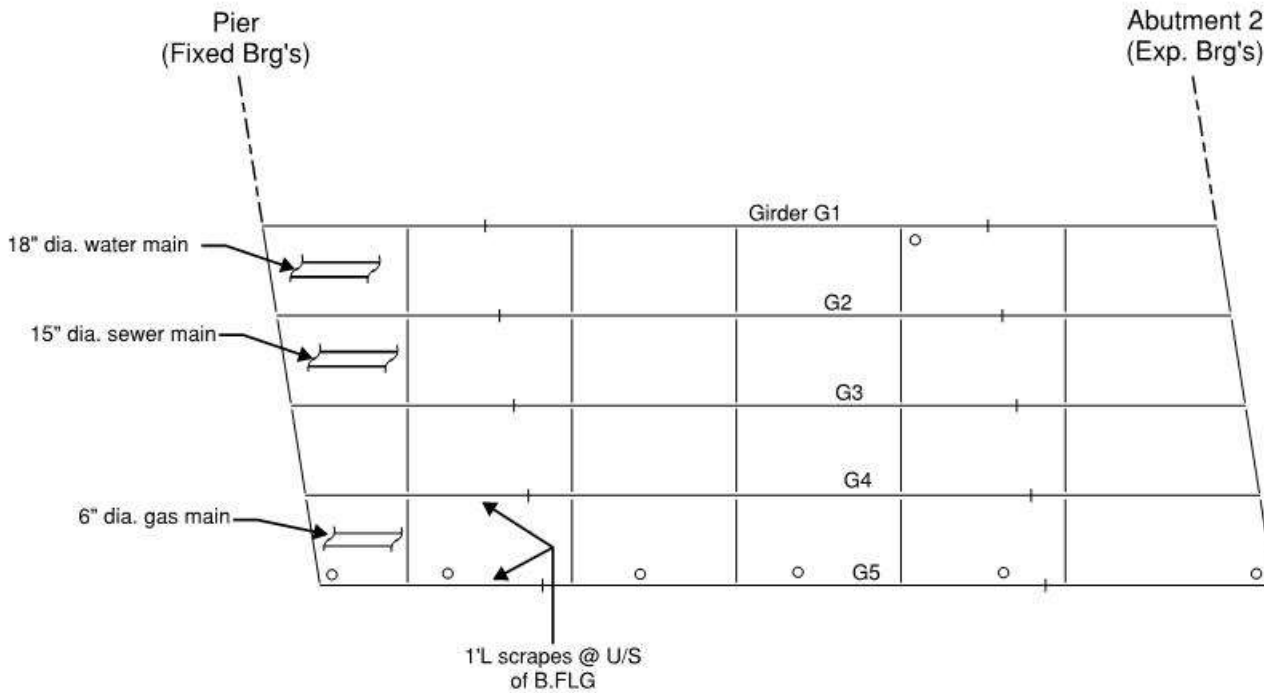
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Sketches
 Inspection type: Routine
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Town: HAMDEN
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 Inventory Route: Non-NHS

CREW: EJC, ZRI, MRS (AI Engineers)	DATE: 02/14/18	BRIDGE NO.: 06826
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GENERAL NOTES:

- See Underside of Deck & Steel Framing Span 1 General Notes.

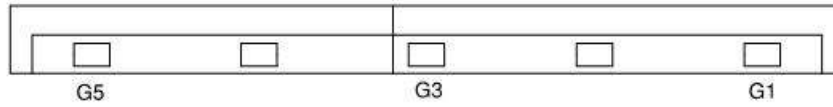
LEGEND:

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAPCRACKS
- HAIRLINE CRACKS
- HONEYCOMB AREA
- SCALE AREA
- EFFLORESCENCE PRESENT
- B.FLG COV PL TRANSITION WELD
- WEEP

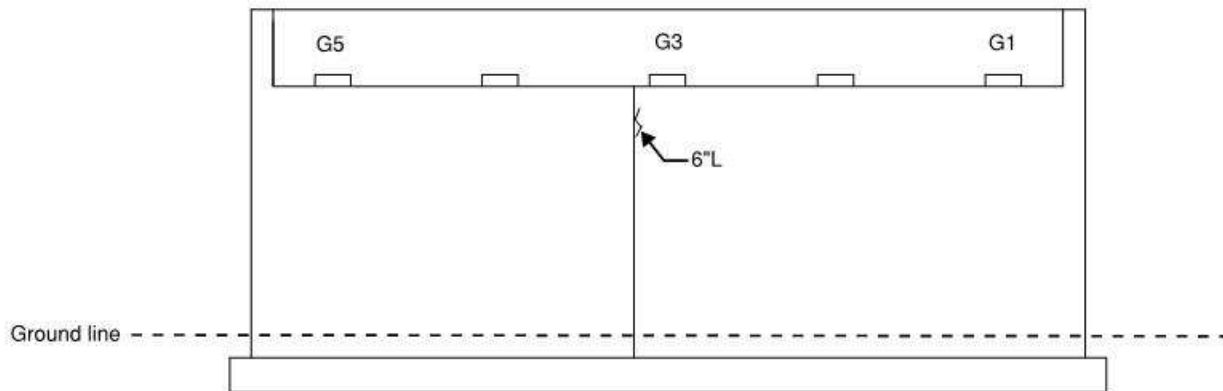
Underside of Deck & Framing Plan - Span 2

REVISION	DATE:	CREW:	REVISION	DATE:	CREW:
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CREW: EJC, ZRI, MRS (AI Engineers)	DATE: 02/14/18	BRIDGE NO.: 06826
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Plan



Elevation

GENERAL NOTES:

- Reinforced concrete abutment stems exhibit random areas of light scale.
- There is evidence of past leakage noted at both abutment stems.
- Light pigeon debris on abutment seats.

LEGEND:

	HOLLOW AREA
	SHALLOW REBAR
	SPALL AREA
	SPALL AREA WITH EXPOSED REBAR
	MAPCRACKS
	HAIRLINE CRACKS
	HONEYCOMB AREA
	SCALE AREA
	EFFLORESCENCE PRESENT

Abutment 1

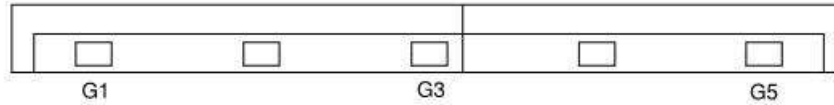
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Sketches
 Inspection type: Routine
 Inspection Date: 2/14/2018
 Inspected by: AI Engineers

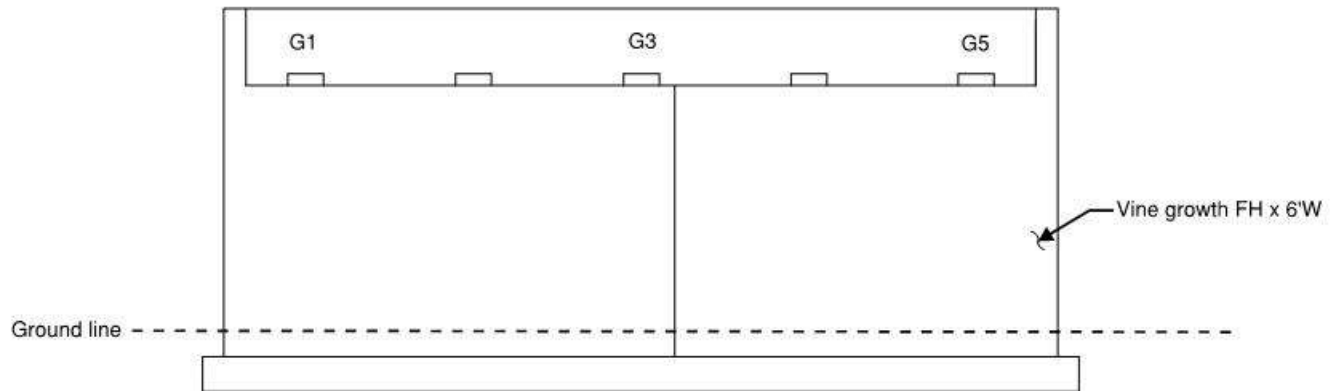
Bridge No: 06826

Town: HAMDEN
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 Crossed: SHEPARD BROOK & RR-TRAIL
 Inventory Route: Non-NHS

CREW: EJC, ZRI, MRS (AI Engineers)	DATE: 02/14/18	BRIDGE NO.: 06826
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Plan



Elevation

GENERAL NOTES:

- Reinforced concrete abutment stems exhibit random areas of light scale.
- There is evidence of past leakage noted at both abutment stems.
- Light pigeon debris on abutment seats.

LEGEND:

	HOLLOW AREA
	SHALLOW REBAR
	SPALL AREA
	SPALL AREA WITH EXPOSED REBAR
	MAPCRACKS
	HAIRLINE CRACKS
	HONEYCOMB AREA
	SCALE AREA
	EFFLORESCEENCE PRESENT

Abutment 2

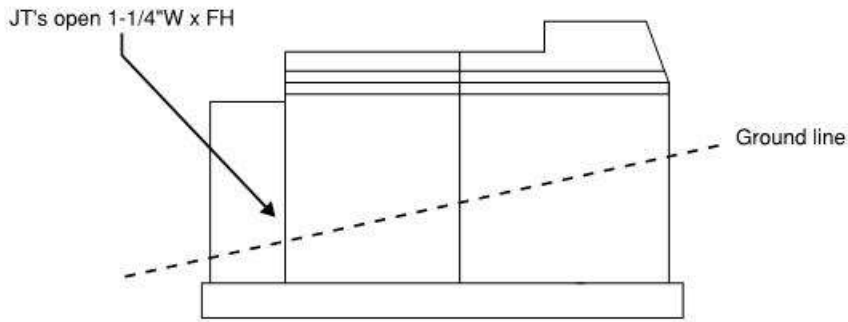
REVISION	DATE:	CREW:	REVISION	DATE:	CREW:
REVISION	DATE:	CREW:	REVISION	DATE:	CREW:

Sketches
 Inspection type: Routine
 Inspection Date: 2/14/2018
 Inspected by: AI Engineers

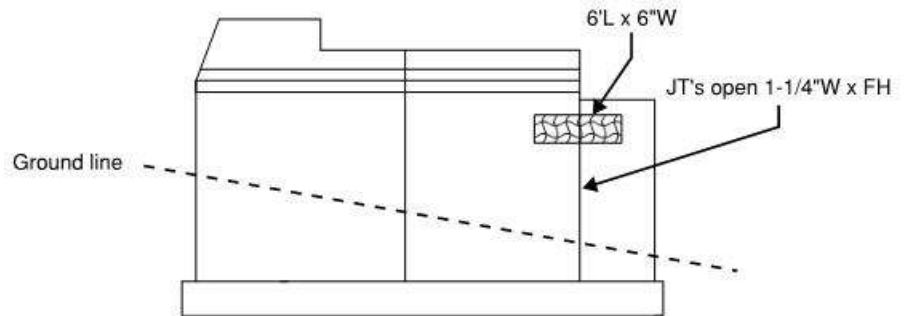
Bridge No: 06826

Town: HAMDEN
 Carried: HAMDEN HILLS DRIVE
 Crossed: SHEPARD BROOK & RR-TRAIL
 Inventory Route: Non-NHS

CREW: EJC, ZRI, MRS (AI Engineers)	DATE: 02/14/18	BRIDGE NO.: 06826
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Wingwall 1A



Wingwall 1B

GENERAL NOTES:

- Reinforced concrete wingwalls exhibit missing/deteriorated joint filler material.

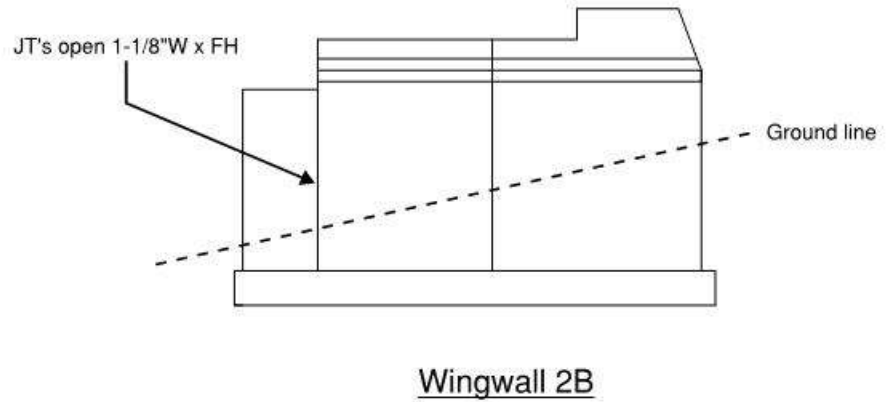
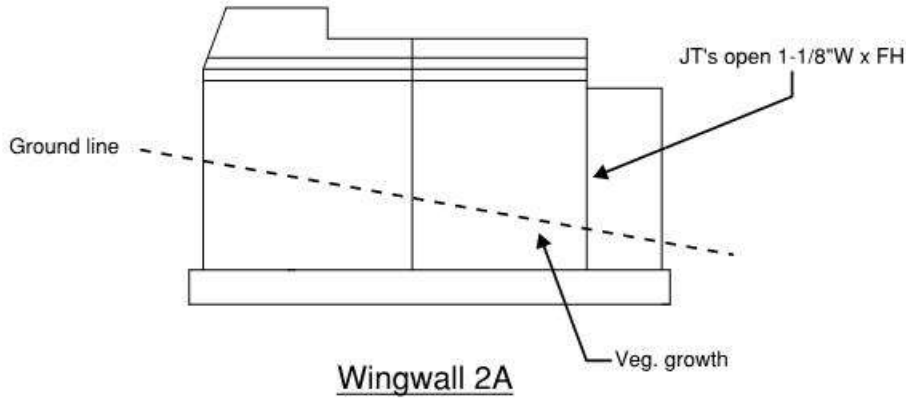
- LEGEND:**
- HOLLOW AREA
 - SHALLOW REBAR
 - SPALL AREA
 - SPALL AREA WITH EXPOSED REBAR
 - MAPCRACKS
 - HAIRLINE CRACKS
 - HONEYCOMB AREA
 - SCALE AREA
 - EFFLORESCENCE PRESENT

REVISION	DATE:	CREW:	REVISION	DATE:	CREW:
REVISION	DATE:	CREW:	REVISION	DATE:	CREW:

CREW: EJC, ZRI, MRS (AI Engineers)

DATE: 02/14/18

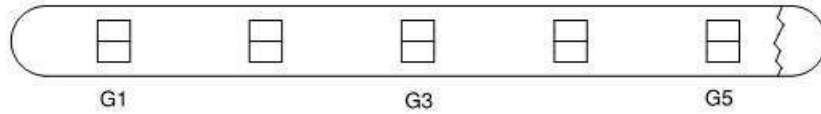
BRIDGE NO.: 06826



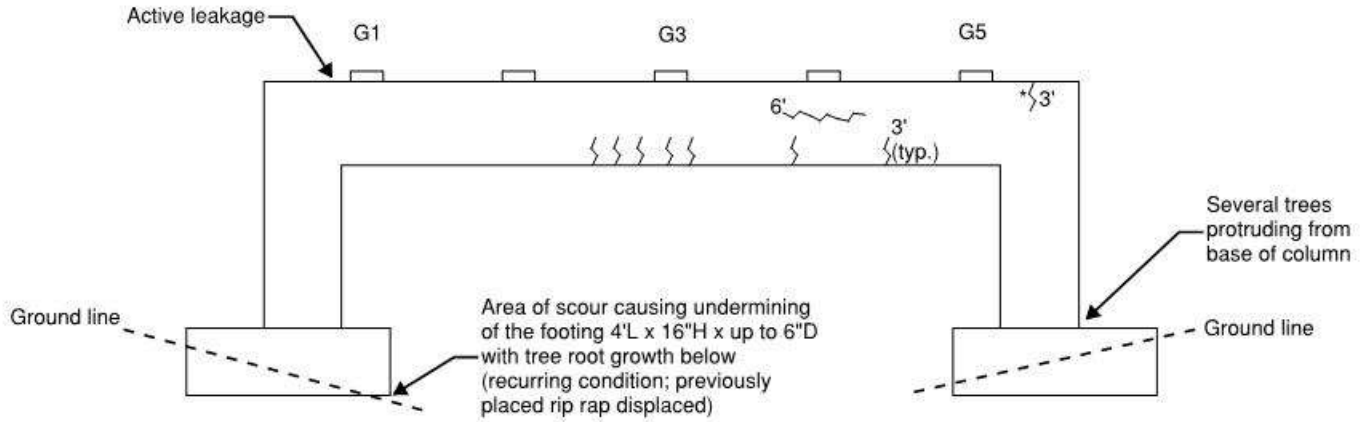
- LEGEND:
- HOLLOW AREA
 - SHALLOW REBAR
 - SPALL AREA
 - SPALL AREA WITH EXPOSED REBAR
 - MAPCRACKS
 - HAIRLINE CRACKS
 - HONEYCOMB AREA
 - SCALE AREA
 - EFFLORESCENCE PRESENT

REVISION	DATE:	CREW:	REVISION	DATE:	CREW:
REVISION	DATE:	CREW:	REVISION	DATE:	CREW:

CREW: EJC, ZRI, MRS (AI Engineers)	DATE: 02/14/18	BRIDGE NO.: 06826
------------------------------------	----------------	-------------------



Plan



GENERAL NOTES:

- Reinforced concrete pier footings are partially exposed 16' x 10' x up to 3' high at the west side of the pier (as-built condition) and exhibit light scale.

- LEGEND:**
- HOLLOW AREA
 - SHALLOW REBAR
 - SPALL AREA
 - SPALL AREA WITH EXPOSED REBAR
 - MAPCRACKS
 - HAIRLINE CRACKS
 - HONEYCOMB AREA
 - SCALE AREA
 - EFFLORESCENCE PRESENT

Pier - West Elevation

REVISION	DATE:	CREW:	REVISION	DATE:	CREW:
REVISION	DATE:	CREW:	REVISION	DATE:	CREW:

Sketches
 Inspection type: Routine
 Inspection Date: 2/14/2018
 Inspected by: AI Engineers

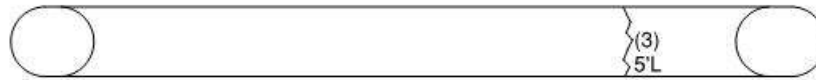
Bridge No: 06826

Town: HAMDEN
 Carried: HAMDEN HILLS DRIVE
 Crossed: SHEPARD BROOK & RR-TRAIL
 Inventory Route: Non-NHS

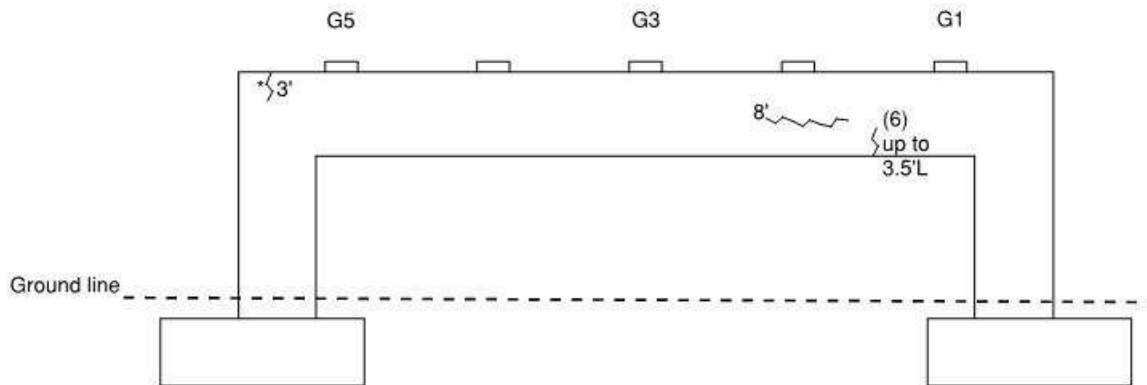
CREW: EJC, ZRI, MRS (AI Engineers)

DATE: 02/14/18

BRIDGE NO.: 06826



Underside of Cap



Pier - East Elevation

- 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:

Sketches
 Inspection type: Routine
 Inspection Date: 2/14/2018
 Inspected by: AI Engineers

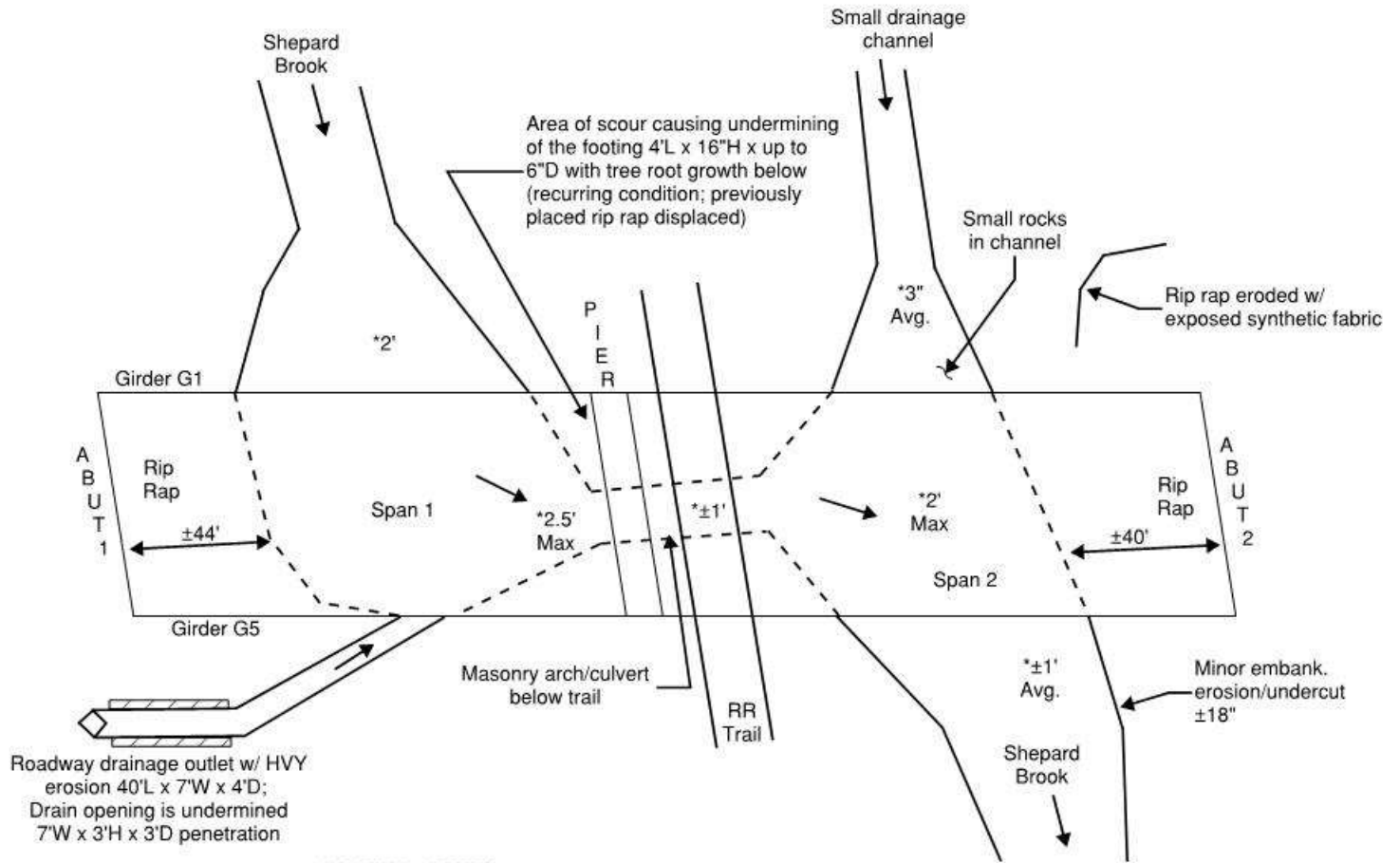
Bridge No: 06826

Town: HAMDEN
 Carried: HAMDEN HILLS DRIVE
 Crossed: SHEPARD BROOK & RR-TRAIL
 Inventory Route: Non-NHS

CREW: EJC, ZRI, MRS (AI Engineers)

DATE: 02/14/18

BRIDGE NO.: 06826



GENERAL NOTES:

- Channel exhibits minor local scour holes up to 2.5' deep at the inlet and outlet of the stone masonry arch culvert located between the pier columns.
- The channel bed consists of sand/silt, mud and leaves.
- Small tree branches and vegetation growth in the channel.
- Trees and heavy vegetation overhang the edges of the channel.
- Minor erosion of the channel embankments at both ends of the stone masonry arch culvert wingwalls.

LEGEND:
 * CHANNEL DEPTH

Channel Diagram

REVISION	DATE:	CREW:	REVISION	DATE:	CREW:
REVISION	DATE:	CREW:	REVISION	DATE:	CREW:



Photo Number: 1

Photo Taken: 02/14/2018

Bridge identification.



Photo Number: 2

Photo Taken: 02/14/2018

South elevation, span 2.

Form: Asset Photos
Inspection type: Routine
Inspection Date: 2/14/2018
Inspected by: AI Engineers

Bridge No: 06826

Town: HAMDEN
Carried: HAMDEN HILLS DRIVE
Crossed: SHEPARD BROOK & RR-TRAIL
Inventory Route: Non-NHS



Photo Number: 3

Photo Taken: 02/14/2018

South elevation, span 1.



Photo Number: 4

Photo Taken: 02/14/2018

North elevation, span 2.



Photo Number: 5

Photo Taken: 02/14/2018

North elevation, span 1.



Photo Number: 6

Photo Taken: 02/14/2018

Bridge from west approach



Photo Number: 7

Photo Taken: 02/14/2018

West approach from bridge.



Photo Number: 8

Photo Taken: 02/14/2018

Bituminous concrete overlay in span 1 (new since last inspection).



Photo Number: 9

Photo Taken: 02/14/2018

Bituminous concrete overlay (new since last inspection) over the abutment 2 joint exhibits transverse cracks.



Photo Number: 10

Photo Taken: 02/14/2018

Underside of reinforced concrete deck and steel framing in span 1. Note water main in bay 1, sewer pipe in bay 2 and gas main in bay 4, all with insulation wrapping hanging down.



Photo Number: 11

Photo Taken: 02/14/2018

General view of south sidewalk, parapet and railing.



Photo Number: 12

Photo Taken: 02/14/2018

South sidewalk at the pier joint exhibits spall with hole through joint.



Photo Number: 13

Photo Taken: 02/14/2018

North sidewalk at the pier joint exhibits area of plow damage with longitudinal cracks, spalls, scale, loose concrete, and hollow areas.



Photo Number: 14

Photo Taken: 02/14/2018

Southeast approach sidewalk exhibits vertical mis-alignment between segments (pedestrian tripping hazard).



Photo Number: 15

Photo Taken: 02/14/2018

South parapet in span 1 exhibits spalls at top.



Photo Number: 16

Photo Taken: 02/14/2018

Scupper pipe with heavy surface rust and is disconnected from the coupling in span 1, bay 1. Note PVC weep with missing extension.



Photo Number: 17

Photo Taken: 02/14/2018

Metal beam guide rail at southwest approach corner exhibits collision damage with bent rail and broken/disconnected posts.



Photo Number: 18

Photo Taken: 02/14/2018

Bituminous concrete pavement at west approach (new since last inspection).



Photo Number: 19

Photo Taken: 02/14/2018

Girder G5 elastomeric expansion bearing at abutment 1 exhibits minor bulging and curling at top of pad.



Photo Number: 20

Photo Taken: 02/14/2018

Girder G1 elastomeric fixed bearing at the pier in span 1 exhibits minor bulging. Note girder end and stiffener with isolated light to moderate surface rust due to active leakage through the joint.



Photo Number: 21

Girder G3 bottom flange transition weld in span 2 near abutment 2, typical.

Photo Taken: 02/14/2018



Photo Number: 22

Girder G5 in span 2 near the pier exhibits isolated scrape at underside of bottom flange (construction related).

Photo Taken: 02/14/2018



Photo Number: 23

Photo Taken: 02/14/2018

Abutment 1 elevation. Note evidence of past leakage at stem.



Photo Number: 24

Photo Taken: 02/14/2018

Abutment 2 elevation. Note evidence of past leakage at stem.



Photo Number: 25

Photo Taken: 02/14/2018

Wingwall 1A elevation.



Photo Number: 26

Photo Taken: 02/14/2018

Pier, west elevation. Note active leakage at north end of pier cap and exposed footings. Also note channel under bridge with minor erosion along culvert wingwalls.



Photo Number: 27

Photo Taken: 02/14/2018

Pier, west elevation at the north exposed footing, exhibits area of scour causing undermining of the footing with tree root growth below (re-occurring condition; previously placed rip rap displaced).



Photo Number: 28

Photo Taken: 02/14/2018

Northwest corner view of channel (looking upstream in span 1).



Photo Number: 29

Photo Taken: 02/14/2018

Southeast corner view of channel (looking downstream in span 2).



Photo Number: 30

Photo Taken: 02/14/2018

Southwest corner roadway drainage outlet exhibits eroded edges and undermined drain opening.

Form: Asset Photos
Inspection type: Routine
Inspection Date: 2/14/2018
Inspected by: AI Engineers

Bridge No: 06826

Town: HAMDEN
Carried: HAMDEN HILLS DRIVE
Crossed: SHEPARD BROOK & RR-TRAIL
Inventory Route: Non-NHS



Photo Number: 31

Photo Taken: 02/14/2018

Slope protection along northeast embankment with eroded rip rap with exposed synthetic fabric.

Form: Maintenance

Carried: HAMDEN HILLS DRIVE

Crossed: SHEPARD BROOK & RR-TRAIL

Bridge No: 06826

Town: HAMDEN

Inventory Route: Non-NHS

Status: TE3 Review

Assigned To: Gregory Funk

Work Item ID: 06826-2018-0007

Date Issued: 03/07/2018

Priority: Routine Repair

Deficiency: Deck Joint

Structural Component: Deck

Comments: The deck joints at the abutments and pier are paved over, and the overlay exhibits transverse cracks open up to 1/2" wide. There is active and evidence of past leakage noted below.

Date Completed:

Actual Quantity:



Bituminous concrete overlay (new since last inspection) over the abutment 2 joint exhibits transverse cracks.

Form: Maintenance

Carried: HAMDEN HILLS DRIVE

Crossed: SHEPARD BROOK & RR-TRAIL

Bridge No: 06826

Town: HAMDEN

Inventory Route: Non-NHS

Status: TE3 Review

Assigned To: Gregory Funk

Work Item ID: 06826-2018-0006

Date Issued: 03/06/2018

Priority: Priority Repair

Deficiency: Scour

Structural Component: Substructure

Comments: At the southwest corner of the north column, there is an area of scour causing undermining of the footing 4' long x 16" high x up to 6" deep with tree root growth below (recurring condition; previously placed rip rap displaced).

Date Completed:

Actual Quantity:



Pier, west elevation at the north exposed footing, exhibits area of scour causing undermining of the footing with tree root growth below (re-occurring condition; previously placed rip rap displaced).

Form: Maintenance

Carried: HAMDEN HILLS DRIVE

Crossed: SHEPARD BROOK & RR-TRAIL

Bridge No: 06826

Town: HAMDEN

Inventory Route: Non-NHS

Status: TE3 Review

Assigned To: Gregory Funk

Work Item ID: 06826-2018-0005

Date Issued: 03/06/2018

Priority: Routine Repair

Deficiency: Drainage System

Structural Component: Deck

Comments: The scupper pipe in span 1, bay 1, is disconnected from the coupling (previously noted active leakage onto steel at this location was not found, however evidence of past leakage noted).

Date Completed:

Actual Quantity:



Scupper pipe with heavy surface rust and is disconnected from the coupling in span 1, bay 1. Note PVC weep with missing extension.

Form: Maintenance

Carried: HAMDEN HILLS DRIVE

Crossed: SHEPARD BROOK & RR-TRAIL

Bridge No: 06826

Town: HAMDEN

Inventory Route: Non-NHS

Status: TE3 Review

Assigned To: Gregory Funk

Work Item ID: 06826-2018-0004

Date Issued: 03/05/2018

Priority: Routine Repair

Deficiency: Approach Rail Transition

Structural Component: N/A

Comments: The southwest approach metal beam guide rail has a $\pm 38'$ long area of severe collision damage near the end, with the rail bent $\pm 26'$ long x 4' deep and seven (7) bent/disconnected posts.

Date Completed:

Actual Quantity:



Metal beam guide rail at southwest approach corner exhibits collision damage with bent rail and broken/disconnected posts.

Form: Maintenance

Carried: HAMDEN HILLS DRIVE

Crossed: SHEPARD BROOK & RR-TRAIL

Bridge No: 06826

Town: HAMDEN

Inventory Route: Non-NHS

Status: TE3 Review

Assigned To: Gregory Funk

Work Item ID: 06826-2018-0003

Date Issued: 03/05/2018

Priority: Priority Repair

Deficiency: Sidewalk/ Safety Walk

Structural Component: Deck

Comments: Approach sidewalks:

- At the southeast and northeast corners, there are gaps up to a 47" long x 3/4" wide between the sidewalk and the bottom of parapet (filled with debris).

- At the southwest corner, there is a 16" long x 1' wide x 4" deep spall in the sidewalk and a 50' long x 4" wide x up to 4" deep area of severe scale at the curb.

- At the southeast corner approach sidewalk, there is full-width x up to 3" high vertical mis-alignment between sidewalk segments (pedestrian tripping hazard).

Date Completed:

Actual Quantity:



Southeast approach sidewalk exhibits vertical mis-alignment between segments (pedestrian tripping hazard).

Form: Maintenance

Carried: HAMDEN HILLS DRIVE

Crossed: SHEPARD BROOK & RR-TRAIL

Bridge No: 06826

Town: HAMDEN

Inventory Route: Non-NHS

Status: TE3 Review

Assigned To: Gregory Funk

Work Item ID: 06826-2018-0002

Date Issued: 03/05/2018

Priority: Priority Repair

Deficiency: Sidewalk/ Safety Walk

Structural Component: Deck

Comments: South sidewalk:

- At the pier joint, there is a 3' x 18" x 2" deep spall with the joint open up to 2" wide and a 1' long through hole. There is active leakage below at the pier.

- At the abutment 1 joint, the curb has a 6" x 3" hole with vegetation growth and a 4" high x 4" long x 4' deep void under the approach sidewalk. There is evidence of past leakage below.

Date Completed:

Actual Quantity:



South sidewalk at the pier joint exhibits spall with hole through joint.

Form: Maintenance

Carried: HAMDEN HILLS DRIVE

Crossed: SHEPARD BROOK & RR-TRAIL

Bridge No: 06826

Town: HAMDEN

Inventory Route: Non-NHS

Status: TE3 Review

Assigned To: Gregory Funk

Work Item ID: 06826-2018-0001

Date Issued: 03/05/2018

Priority: Priority Repair

Deficiency: Sidewalk/ Safety Walk

Structural Component: Deck

Comments: North sidewalk:

- At the pier joint, there is a 15' long x 4' wide area of plow damage with spalls and scale up to 4" deep, loose concrete and hollow areas. There are longitudinal cracks up to 42' long x 1/4" wide in the sidewalk extending from this location with edge spalls up to 4" wide x 1" deep.

Date Completed:

Actual Quantity:



North sidewalk at the pier joint exhibits area of plow damage with longitudinal cracks, spalls, scale, loose concrete, and hollow areas.

BACK UP FIELD NOTES

Ethan Cote

From: Muhammad Iqbal, PE, LEED Green Assoc.
Sent: Thursday, February 15, 2018 10:45 AM
To: Funk, Gregory A
Cc: Ethan Cote; Aslam Siddiqui, PE; Jay Messier
Subject: FW: Bridge 06826 Hamden hazards
Attachments: MBR Damage.jpg; Sidewalk Scaling.jpg; Sidewalk Settlement.jpg; Active leakage below sidewalk.jpg

Greg,

In addition to the sidewalk deficiency email I sent yesterday for the subject bridge, please see below e-mail and attached photos for additional deficiencies found at this bridge. Bridge Safety was notified about these deficiencies during previous inspection.

Thanks,

Muhammad Asif Iqbal, PE, LEED GA
Director, Transportation Engineering



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919 Middle Street
Middletown, CT 06457
Phone: (860) 635-7740 ext. 110
Fax: (860) 635-7312
www.aiengineers.com



From: Ethan Cote
Sent: Wednesday, February 14, 2018 12:20 PM
To: Muhammad Iqbal, PE, LEED Green Assoc. <miqbal@aiengineers.com>
Cc: Mohammad R. Salehi, NICET I <MSalehi@aiengineers.com>; Ziad Ismail <zismail@aiengineers.com>
Subject: Bridge 06826 Hamden hazards

MAI- additional hazard items below (no changes since last inspection):

- North sidewalk over the pier has severe scaling, spalls and loose/hollow concrete for 15'L x 4'W x up to 4"D with active leakage below.
- The approach sidewalk at the southeast corner has a vertical misalignment for full-width x up to 3"H. Both deficiencies are posing tripping hazards for pedestrians.
- MBR at SW approach corner (leading edge) has a 38'L severe collision damage area with (5) bent and (2) disconnected posts.

Please see attached photos.

Thanks,

- Ethan

Ethan Cote

From: Muhammad Iqbal, PE, LEED Green Assoc.
Sent: Wednesday, February 14, 2018 11:04 AM
To: Funk, Gregory A
Cc: Ethan Cote; Aslam Siddiqui, PE; Jay Messier
Subject: FW: Bridge 06826 Hamden Sidewalk Hole
Attachments: 6826-underside of sidewalk photo.jpg

Good morning Greg,

Please see below email and photos for sidewalk deficiency noted today while our team was inspecting the top of deck at the subject bridge. This is a tripping hazard for pedestrians and active leakage below through the hole could cause deterioration to pier cap and superstructure as shown in attached photo.

Bridge carries Hamden Hills Drive over Shepard Brook and RR trail.

Thanks,

Muhammad Asif Iqbal, PE, LEED GA
Director, Transportation Engineering



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Middletown, CT 06457
Phone: (860) 635-7740 ext. 110
Fax: (860) 635-7312
www.aiengineers.com



From: Ethan Cote
Sent: Wednesday, February 14, 2018 10:48 AM
To: Muhammad Iqbal, PE, LEED Green Assoc. <miqbal@aiengineers.com>
Cc: Mohammad R. Salehi, NICET I <MSalehi@aiengineers.com>; Ziad Ismail <zismail@aiengineers.com>
Subject: Bridge 06826 Hamden Sidewalk Hole

MAI- during inspection today- found a 6" x 3" through-hole with active leakage over the pier at the south sidewalk (new condition). Please see photos attached and forward as required.

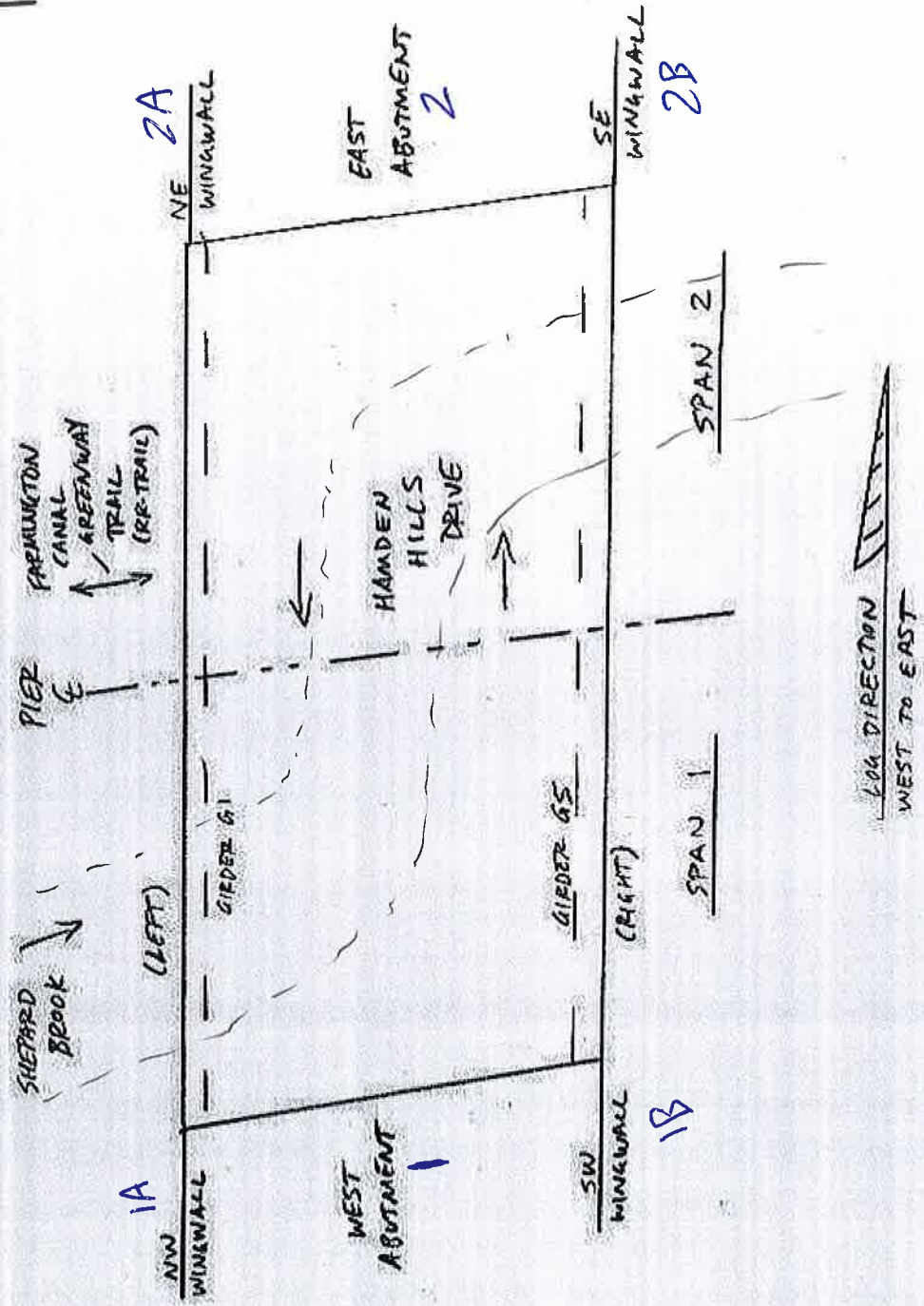
- Ethan







FIELD NOTES	JOB NO. 170-3225	BRIDGE NO: 06826
DESCRIPTION: KEY PLAN	DATE: 2-26-16	CREW: PS, ETC, AAA (A1)



Revision 1	Date	Crew	Company	Revision 3	Date	Crew	Company
Revision 2	Date	Crew	Company	Revision 4	Date	Crew	Company

HAKS

FIELD NOTES

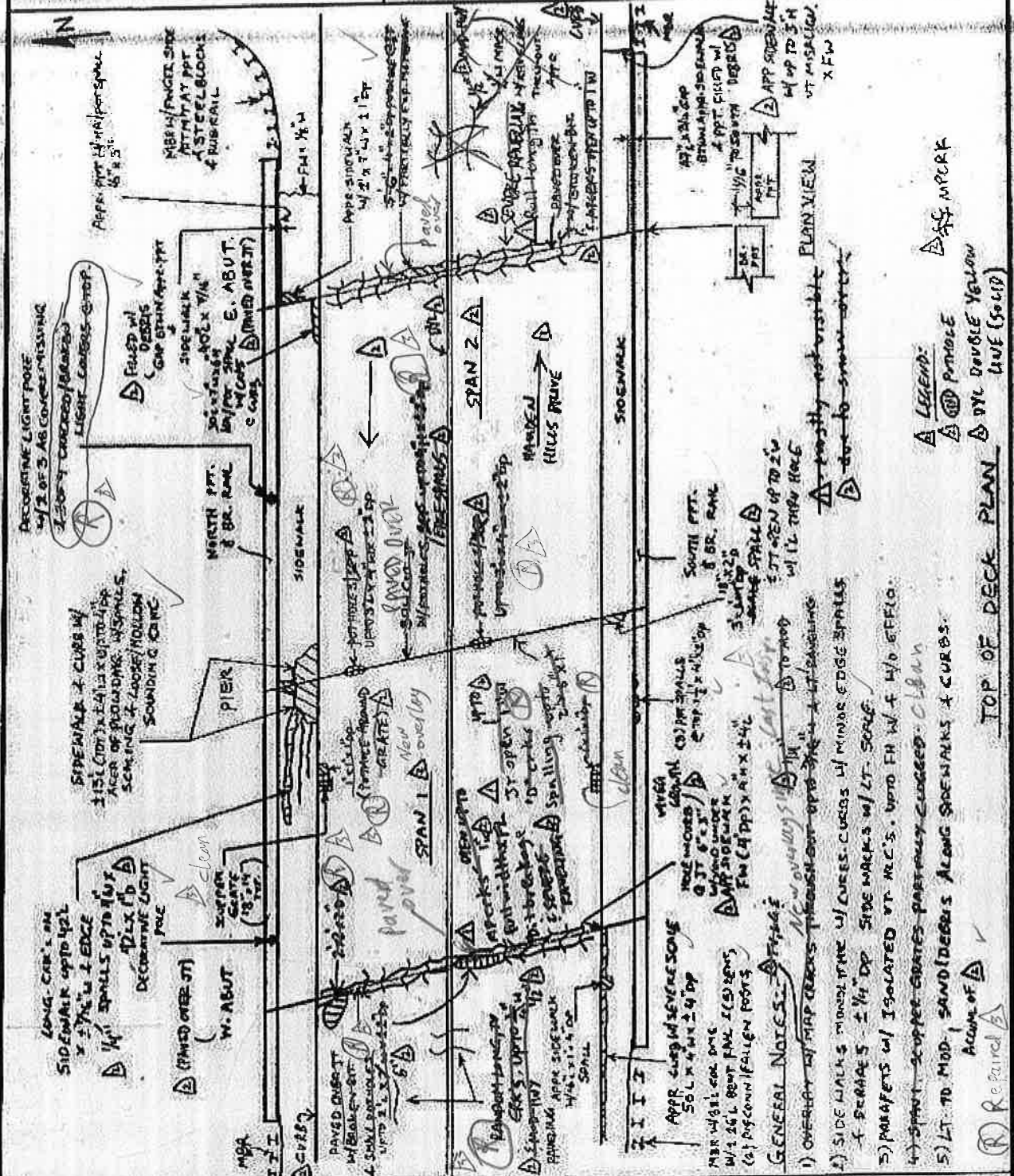
JOB NO. 170-3013

BRIDGE NO. 06826

DATE: 01/21/12

SHEET 16 OF 18 W

CREW: PHH, RV



REVISION	DATE	CREW	REVISION	DATE	CREW
REVISION	1-17-14	IM7, Charis	REVISION	2/14/18	ZRI, EJC, MRSCAD
REVISION	2-26-16	PS, ETC, AAA (A1)	REVISION		

W/N CRCS CONC W/ 7' W/N
 STS RAIL ON BRIDGE

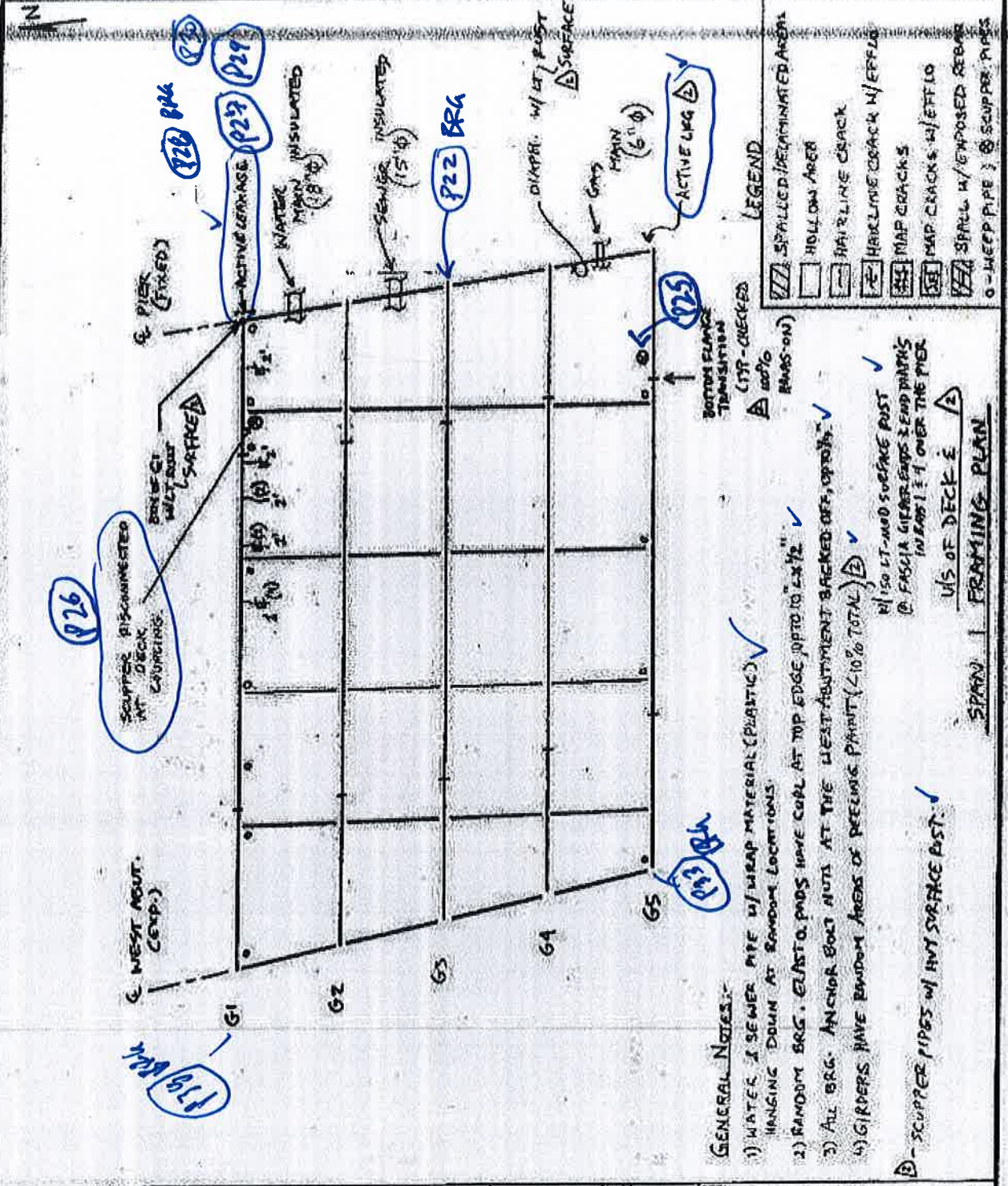
- LEGEND:**
- △ PINK
 - △ PINK
 - △ DYL DOUBLE YELLOW
 - △ LIVE (SOLID)

TOP OF DECK PLAN

- GENERAL NOTES:**
- 1) OVERLAY W/ MAP CRCS THROUGHOUT BRIDGE & SIDEWALKS
 - 2) SIDEWALKS MONITORING W/ CURBS, CURBS W/ MINOR EDGE SPALLS & SCRAPES ± 1/4" DP SIDE WALKS W/ LT. SCRAPES
 - 3) PARAPETS W/ ISOLATED AT RC'S. W/ 0.5" W/ 4" W/ 6" EFFLO.
 - 4) SPALL SCRAPER GRATES PARTIALLY CLOGGED. CLEAN
 - 5) LT. TO MOD. SAND/DREBS ALONG SIDEWALKS & CURBS.

ACUM OF △
 (R) Repaired △

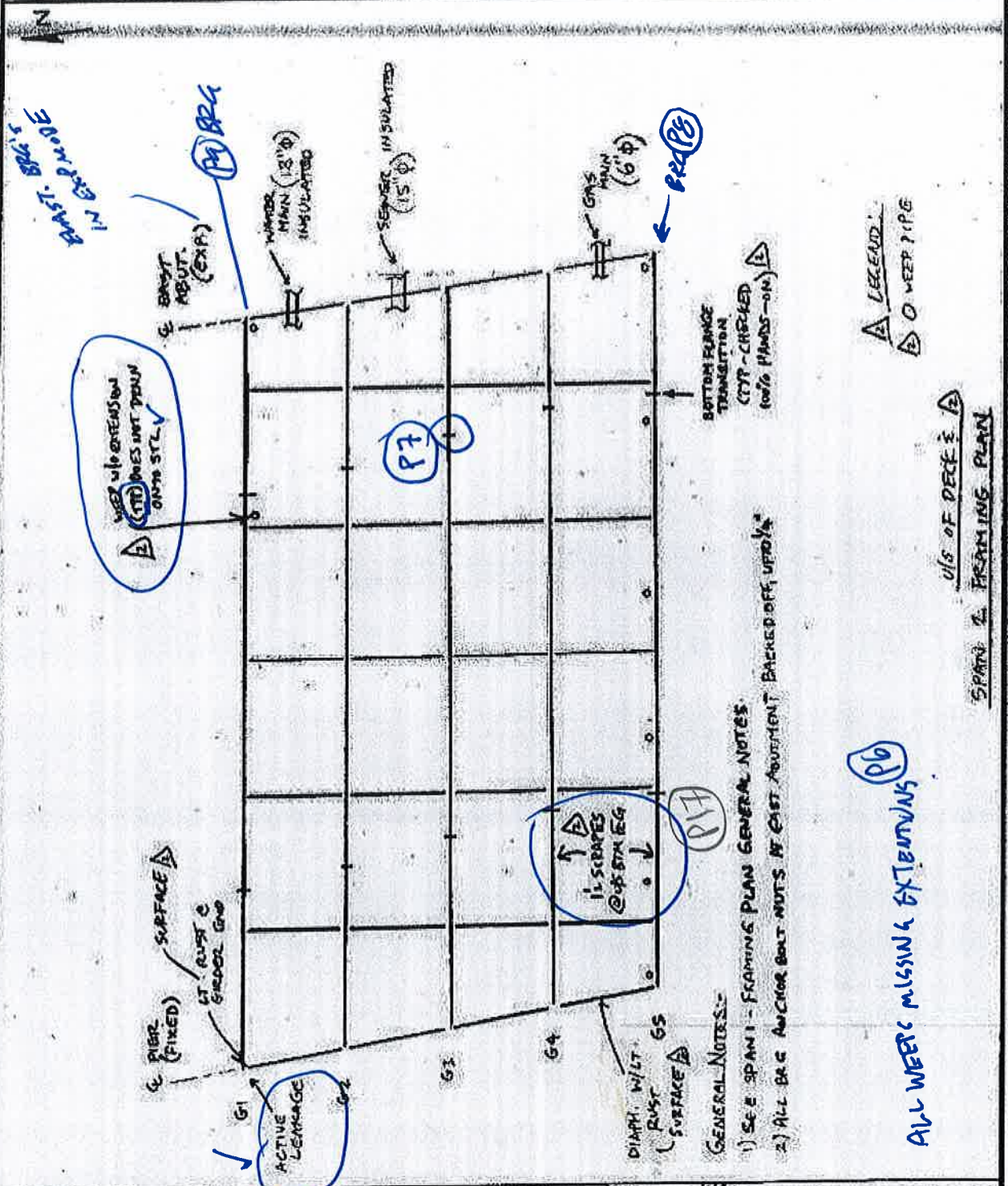
1015R



REVISION	DATE	CREW	REVISION	DATE	CREW
	1-17-14	TM7 N/C			
	2-26-10	PS, ETC, AAA (A1)			

- 1 DSTR 5 NE BRIDGE
- 2 AZ
- 3 P-E
- 4 CHAN

HAKS FIELD NOTES	JOB NO. 170-3013	BRIDGE NO. 06826
	DATE: 01/11/12	SHEET 26 OF 85 7
	CREW: PHH/RV	SUPERSTRUCTURE



REVISION	DATE	CREW	REVISION	DATE	CREW
	1-17-14	TM 7 NIC			
	2-26-16	PS, ETC, AAA (A1)			

LEGEND:
 WEIR PIPE

US OF DECK & SPAN 2 FRAMING PLAN

ALL WEIRS MISSING & EXTENDING

- GENERAL NOTES:-**
- 1) SEE SPAN 1 - FRAMING PLAN GENERAL NOTES.
 - 2) ALL BRG ANCHOR BOLT NUTS IN EAST ABUTMENT BACKED OFF UP 1/2"

h/k

HAKS FIELD NOTES


JOB NO. 170-3013

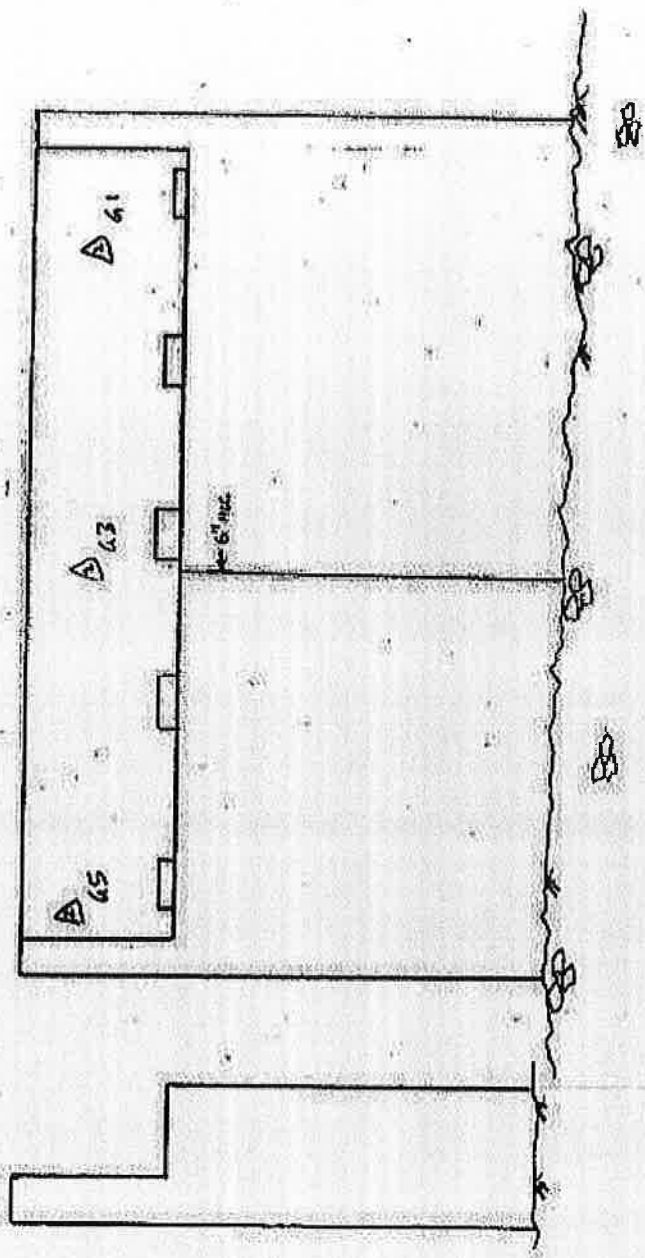
BRIDGE NO. 06826

DATE:

SHEET 22 OF 25 9

CREW:

SUBSTRUCTURE 



- GENERAL NOTES:-
- 1) RANDOM AREA OF LIGHT SCALING
 - 2) ABUTMENT STEM/BACKWALL W/ EVID. OF LEAKAGE
 - 3) LIGHT PIGEON DEBRIS ON SEAT
 - 4) ~~1-5\"/>~~

WEST ABUTMENT ELEVATION

REVISION 	DATE 1-17-14	CREW TM 7 NC	REVISION 	DATE	CREW
REVISION 	DATE 2-26-16	CREW PS, EJC, AAA (A-1)	REVISION 	DATE	CREW

HAKS

FIELD NOTES

JOB NO. 170-3013

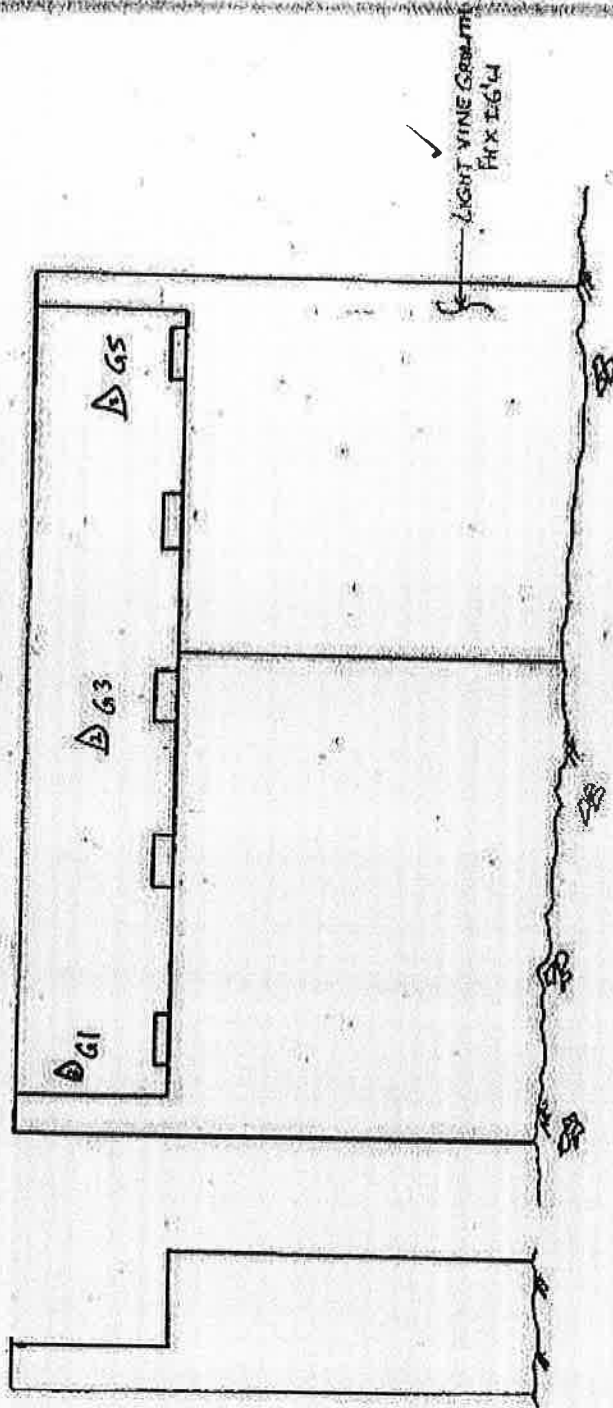
BRIDGE NO. 06826

DATE: 01/11/12

SHEET 23 OF 25 10

CREW: PHH, RV

SUBSTRUCTURE Δ



GENERAL NOTES:
1) SEE WEST ABUTMENT ELEVATION - GENERAL NOTES.

EAST ABUTMENT ELEVATION

REVISION Δ DATE 1-17-14
REVISION Δ DATE 2-26-16

CREW PHH N/C
CREW PS, ETC, RAA (A1)

REVISION Δ DATE
REVISION Δ DATE

CREW
CREW

HAKS FIELD NOTES

JOB NO. 170-3013

BRIDGE NO. 06826

DATE: 1/31/12

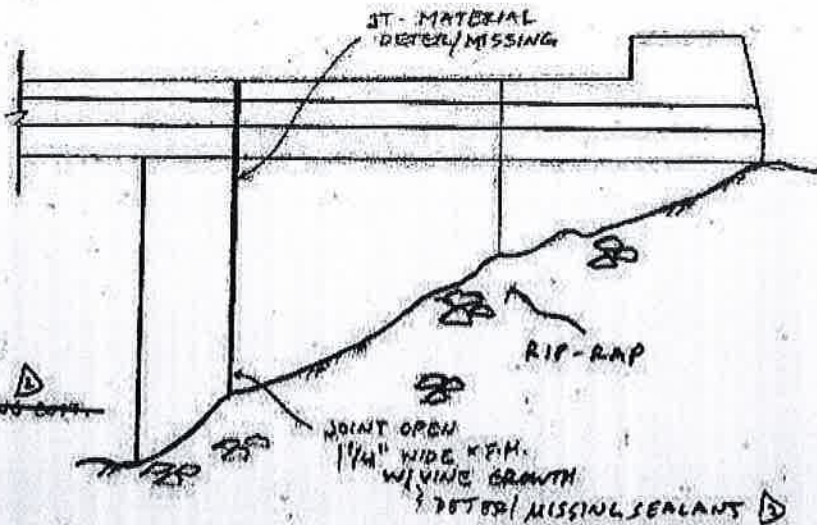
SHEET: 24 OF 25 11

CREW: PHIL, EV

SUBSTRUCTURE A

GENERAL NOTES:

SEE GENERAL CHART

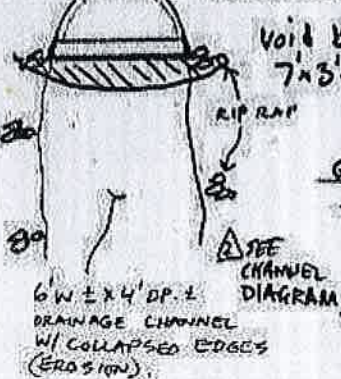


NORTHWEST WINGWALL (ELEVATION)

1A

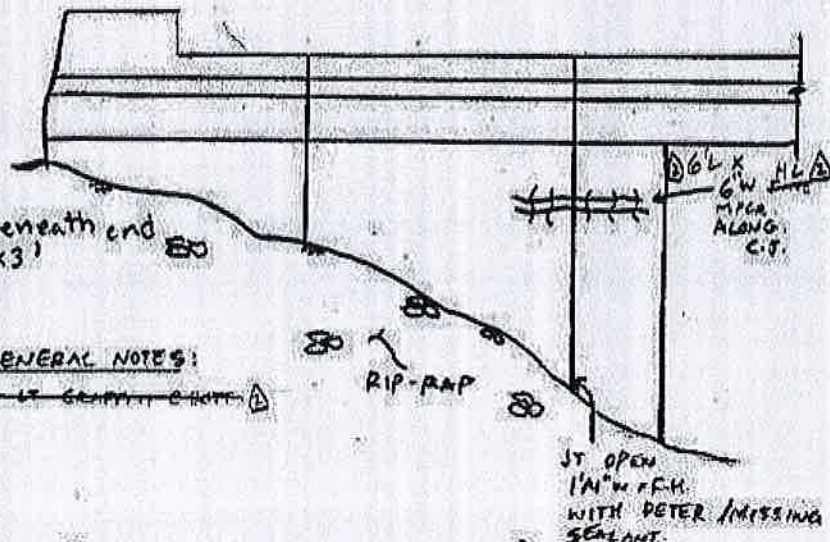
(ROADWAY DRAINAGE SYSTEM)

CONCRETE DRAINAGE PIPE W/ RIP-RAP LINED BOGGS NEAR WINGWALL.



GENERAL NOTES:

SEE GENERAL CHART



SOUTHWEST WINGWALL (ELEVATION)

1B

REVISION 1	DATE: 1/17/12	CREW: TM	REVISION 3	DATE:	CREW:
REVISION 2	DATE: 2/26/12	CREW: PS, EJC, AAA (A1)	REVISION 4	DATE:	CREW:

HAKS FIELD NOTES

JOB NO. 170-3013

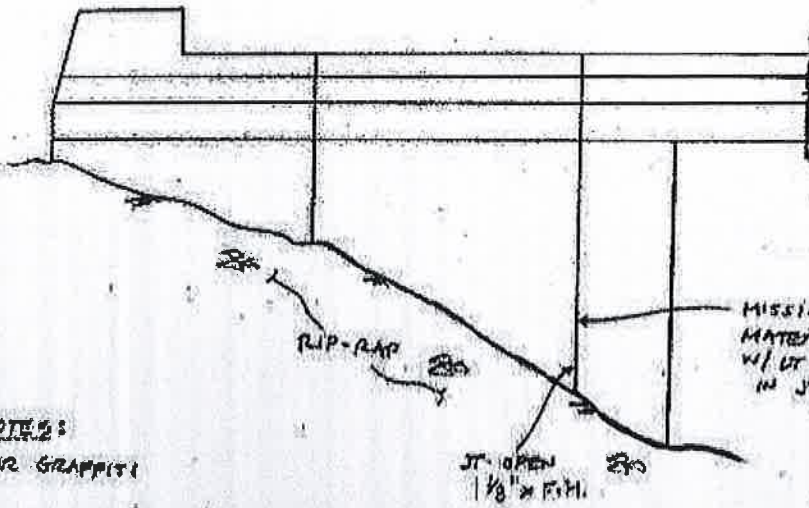
BRIDGE NO. 06826

DATE: 1/21/12

SHEET: 15 OF 12

CREW: PHILIP

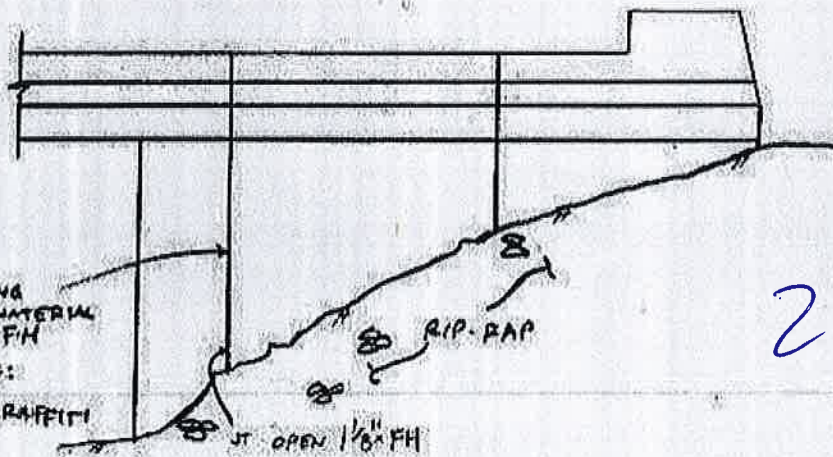
SUBSTRUCTURE A



GENERAL NOTES:
 * PAINTED OVER GRAFFITI AT BOT.

2A

NORTHEAST WINGWALL (ELEVATION) D



GENERAL NOTES:
 * PAINTED OVER GRAFFITI ALONG BOT.

2B

SOUTHEAST WINGWALL (ELEVATION) D

REVISION 1	DATE: 1-17-14	CREW: TM7 N/L	REVISION 3	DATE:	CREW:
REVISION 2	DATE: 2-26-16	CREW: P5, ETC, AAA (A1)	REVISION 4	DATE:	CREW:

HAKS FIELD NOTES

JOB NO. 170-3013

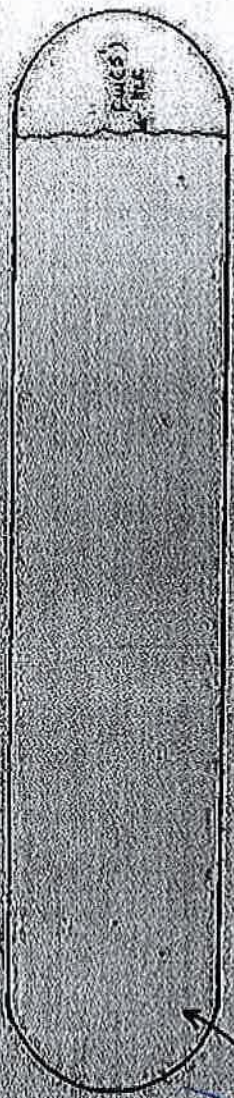
BRIDGE NO. 06826

DATE: 01/11/12

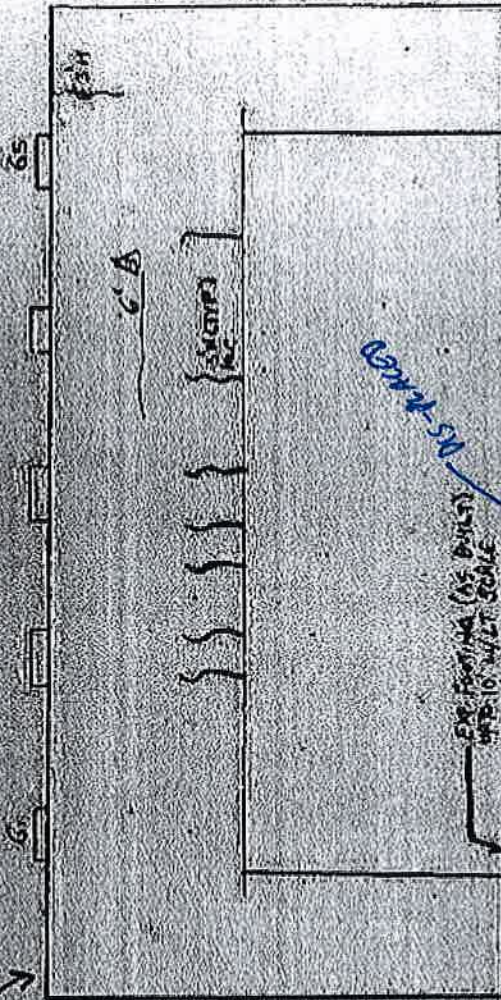
SHEET 2 OF 13

CREW: PHH, RV

PLAN VIEW OF CAP



ACTIVE LUL



SEVERAL TREES PROTRUDING FROM BASE OF COLUMN



OLD (CONDITION) 11' x 11' x 10' W/10' DIA

CONV-SW

EXP FOOTING (AS BUILT) W/10' DIA SCALE

RIP RAP DETAIL

SURROUNDING OF PIER FOUNDATION

UNDERSTANDING OF EXP. FOUNDATION

GENERAL NOTES

SEE PIER CAP ELEVATION

GENERAL NOTES

PIER WEST ELEVATION

REVISION	DATE	BY	REVISION	DATE	BY
Δ	7-17-14	PHH	Δ	2-26-16	PS, EJC, AAA (A)
Δ	7-8-15	PHH	Δ		
		w/changes			

HAKS FIELD NOTES

JOB NO. 170-3013

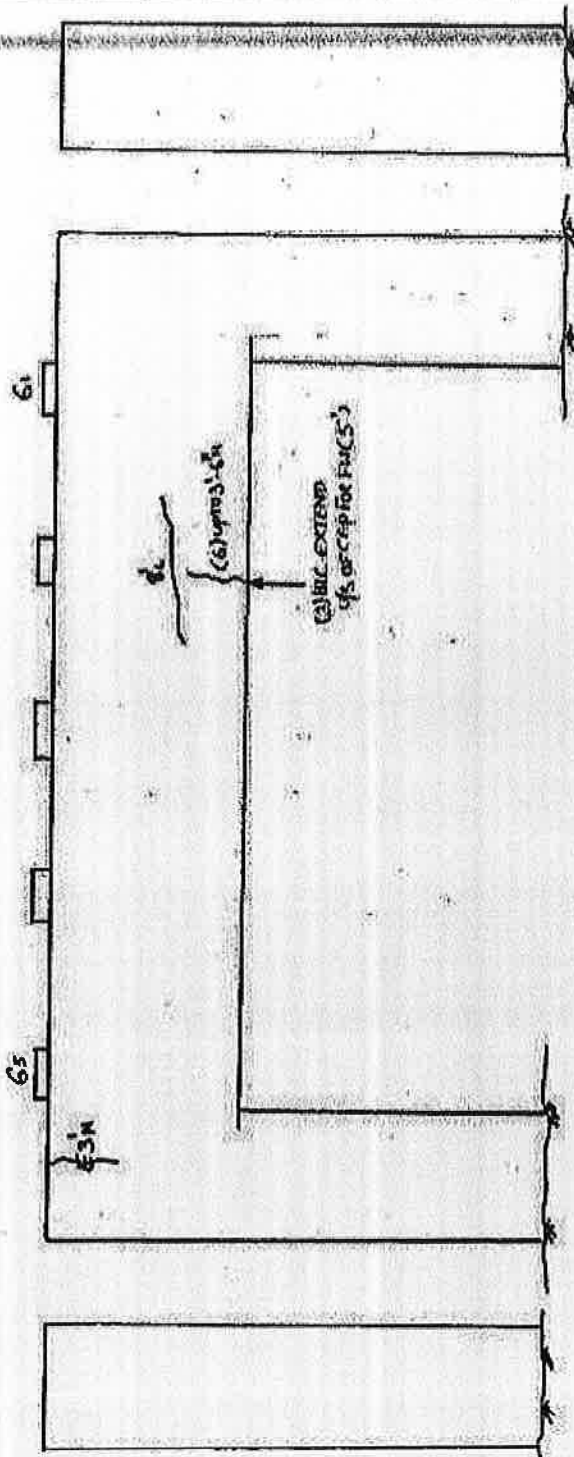
BRIDGE NO. 06826

DATE: 01/11/14

SHEET 24 OF 65 14

CREW: PHH, RV

SUBSTRUCTURE A



PIER, EAST ELEVATION

GENERAL NOTES:-

1) LIGHT SCALE AT RANDOM LOCATIONS

2) ~~CHANGES ON THE GROUND TOP~~

--- LT PILEIN DEBRIS @ TOP OF PIER CAP. A

REVISION	△	DATE	CREW
		1-17-14	TM 7 N/C
REVISION	△	DATE	CREW
		2-26-16	PS/EJC,AAA (A1)

REVISION	△	DATE	CREW
REVISION	△	DATE	CREW

<i>FIELD NOTES</i>	BRIDGE NO. 06826	DATE: 2-26-16
DESCRIPTION: CHANNEL DETERIORATION LEGEND	CREW: PS, EJC, AAA (AI)	SHEET: 15

- Ⓐ Minor erosion of the channel embankments at both ends of the stone masonry arch culvert wingwalls.

- Ⓑ Rip rap eroded with exposed synthetic fabric.

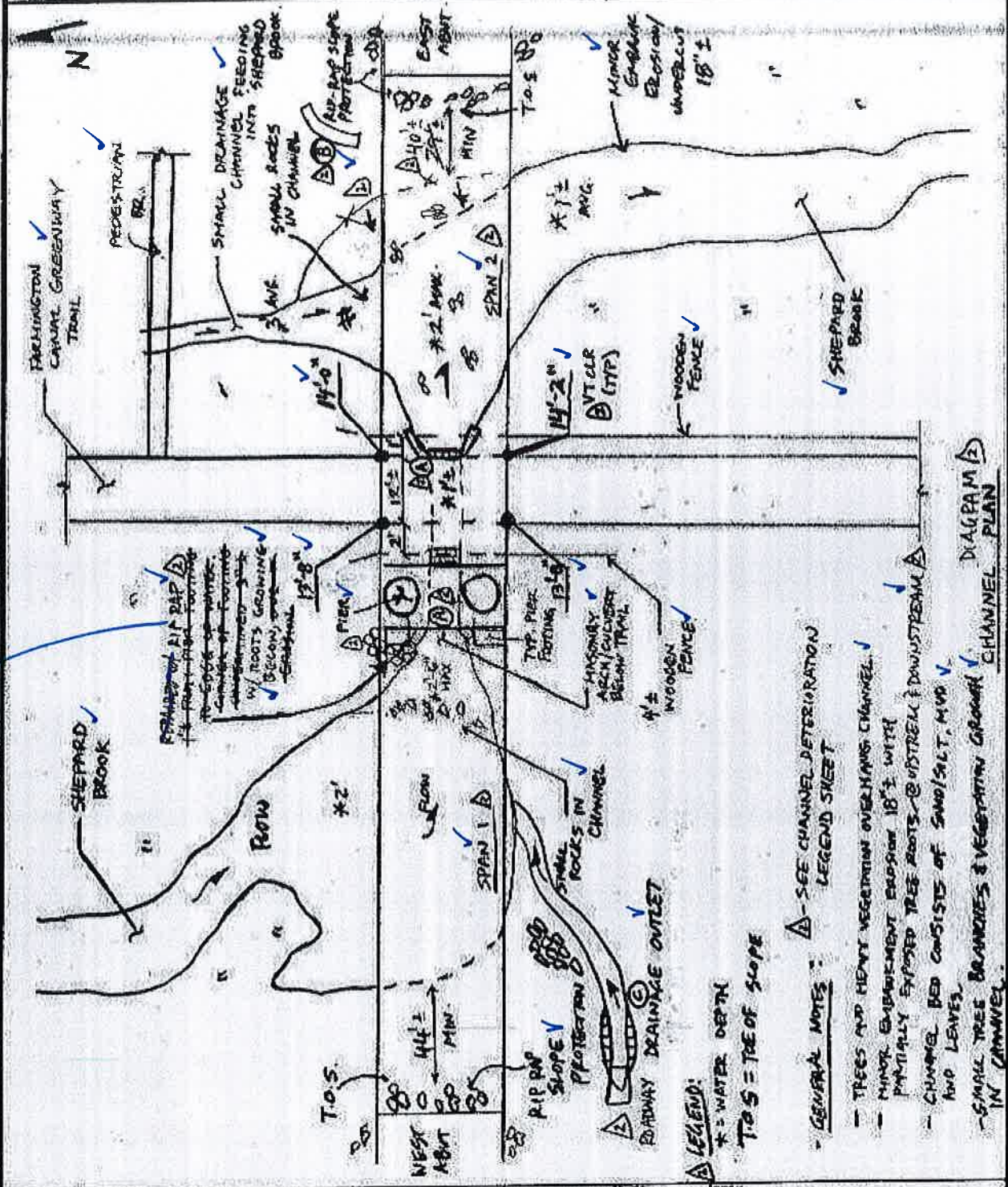
- Ⓒ Roadway drainage outlet at the embankment located at the southwest end of the bridge exhibits a heavy erosion trough 40' long x 7' wide x 4' deep from the runoff drain. The drain opening is also undermined 7' wide x 3' high x 3' deep penetration.

Revision 1 Date: Crew: Company:	Revision 3 Date: Crew: Company:
Revision 2 Date: Crew: Company:	Revision 4 Date: Crew: Company:

HAKS FIELD NOTES

JOB NO. 170-3013
 DATE: 1/3/12
 CREW: PHH, JLV

BRIDGE NO. 06226
 SHEET 34 OF 65 16



RIP RAP SLOPE PROTECTION
 3' x 3' x 3'

REVISION	DATE	CREW	REVISION	DATE	CREW
Δ	1-19-14	JM7 N/C	Δ		
Δ	2-26-16	PS, EJS, AAA (A1)	Δ		

- LEGEND:**
 * = WATER DEPTH
 T.O.S = TOP OF SLOPE
- GENERAL NOTES:**
- SEE CHANNEL DETERIORATION LEGEND SHEET
 - TREES AND HERB VEGETATION OVERHANG CHANNEL
 - MINOR EMBANKMENT APPROX 18" WITH PARTIALLY EXPOSED TREE ROOTS @ UPSTREAM & DOWNSTREAM
 - CHANNEL BED CONSISTS OF SAND/SILT, MUD AND LEAVES
 - SMALL TREE BRANCHES & VEGETATION GROWTH IN CHANNEL

DIAGRAM PLAN

FIELD NOTES	BRIDGE NO: 06826	DATE: 2-26-16
DESCRIPTION: PARAPET JOINT MEASUREMENTS	CREW: PS, EJC, AAA (AI)	SHEET: 4



* CURB REVEAL
 AVERAGES: NORTH SIDE = 6 3/8"
 SOUTH SIDE = 6"

LOCATION	WINTER MEASUREMENT < 50° F				SUMMER MEASUREMENT > 50° F				JOINT TYPE
	LEFT	RIGHT	TEMP	DATE	LEFT	RIGHT	TEMP	DATE	
W. ABUT	1- 1/16"	1- 1/16"	34°F	2/26/16					PAVED OVER JT
PIER	5/8"	5/8"	34°F	2/26/16					SAW CUT & SEAL JT
E. ABUT	1- 1/2"	1- 5/8"	34°F	2/26/16					PAVED OVER JT

GENERAL NOTES:

- Measurements taken 3" down from top of inside parapet face at inside to inside chamfer.

Ethan Cote

From: Pavan Seemakurty
Sent: Friday, April 01, 2016 10:06 AM
To: Ethan Cote
Cc: Muhammad Iqbal
Subject: FW: 06826 - Hamden Hills Drive over Shepard Brook in Hamden
Attachments: Photo 1.JPG; Photo 2.JPG; Photo 3.JPG; Photo 4.JPG

From: Muhammad Iqbal
Sent: Monday, February 29, 2016 12:58 PM
To: Funk, Gregory A <Gregory.Funk@ct.gov>
Cc: Aslam Siddiqui <asiddiqui@aiengineers.com>; Pavan Seemakurty <PSeemakurty@aiengineers.com>
Subject: FW: 06826 - Hamden Hills Drive over Shepard Brook in Hamden

Good afternoon Greg,

Please see below e-mail and attached photos regarding the deficiencies noted at the subject bridge by our team while doing the inspection.


Any questions, please let me know.

Thanks,
Asif

From: Pavan Seemakurty
Sent: Monday, February 29, 2016 12:01 PM
To: Muhammad Iqbal; Aslam Siddiqui
Cc: Ethan Cote; Ali Aziz
Subject: 06826 - Hamden Hills Drive over Shepard Brook

Asif,

Here are a few things we found out during our inspection of the subject bridge:

1. The paved over joint at the west abutment has broken up bituminous material throughout with several minor potholes up to 1' long x 2" wide x up to 2" deep. See photo 1. There are no loose pieces of bituminous right now, however this condition could worsen with more rain and general wear and tear. 
2. The north sidewalk has severe scaling, spalls and loose/hollow concrete for 15' long x 4' wide x up to 4" deep. See photo 2. Also, the approach sidewalk at the southeast corner has a vertical misalignment for full width x up to 3" high. See photo 3. Both deficiencies are posing a tripping hazard for the pedestrians.
3. The MBR at the southwest approach corner (Leading Edge) has a 38' long severe collision damage area with (5) bent and (2) disconnected posts. See photo 4.

Let me know if you have any questions.

Thanks,

x.
07/1



64





**STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
BRIDGE SAFETY & EVALUATION
INSPECTION FREQUENCY CHANGE REQUEST**

FORM BRI 8 REVISED 6/07

BRIDGE NUMBER 06826	TOWN NAME HAMDEN	NBIS YES
BORDER TOWN	REPORT CLASS L	
FACILITY CARRIED HAMDEN HILLS DRIVE	FEATURE CROSSED SHEPARD BROOK & RR-TRAIL	
ROUTINE INSP. DATE & FREQ. 1/17/2014 24	(90I) INDEPTH DATE 1/11/2012	
UW INSP. DATE & FREQ.	SPEC. INSP. DATE & FREQ. 7/8/2015	
	FRAC. INSP. DATE & FREQ.	

PROPOSED FREQUENCY CHANGES		
ROUTINE INSP. DATE	/ /	FREQ.
UW INSP. DATE	/ /	UW FREQ.
SPEC. INSP. DATE	/ /	SPEC. FREQ. blank
FRAC. INSP. DATE	/ /	FRAC. FREQ.
(Prop. Inspection & uwater dates should match)		(Max. inspection freq 48 mos.)

BS&E RECEIVED DATA ENTRY DATE: _____
 COPIES MADE DATA ENTERED BY: _____
 Submitted by: _____ Date: _____
 Reviewed by: *[Signature]* Date: _____

Approved by: Theodore D. Lerner, P.E.
 Approved by: Thomas D. Lerner, P.E.
 Approved by: [Name]
 Approved by: [Name]
 Approved by: [Name]
 Approved by: [Name]
 Approved by: [Name]
 Approved by: [Name]
 Approved by: [Name]

----- Structure Inventory Data -----

(43) Structure Type 3 2 Steel Stringer/Multi-beam or Girder

(45) No. of Spans 2 (54) Min. Vert. Clearance >= 14'3" 0 0

(46) Max. Span Length, 00' 114 (66) Inv. Rating >= 34 tons 110

(49) Structure Length 216 (64) Operating Rating >= 63 142

(41) Struc. Operational Status A Evaluation type & year F 2014

----- Condition Rating -----

(58) Deck 8

(59) Superstructure 7

(60) Substructure 6

(61) Channel 6

(62) Culverts N

(113) Scour Critical Bridge 3

Scour screening susceptibility rating

----- Steel Superstructures -----

----- Concrete Structures -----

(29) ADT <= 50,000 6,600 (29) ADT <= 125,000 6,600

(109) ADTT= 2% (109) ADTT= 2%

(27) Year Built <= 50 years old 1991

(106) Year Rebuilt >= 4 years old

An assessment of frequency and degree of overload that is anticipated on the structure has been made and found to be:

Acceptable Not Acceptable Date: ___/___/___ By: _____

Comments: Scoured area at pier footing has been repaired. Special inspection no longer needed. TDL 10/1/15

Approved by: _____ Date: _____ Approved by FHWA Date: _____ Approved By Town Date: _____

Manager, Bridge Safety & Evaluation Section

For 48 Months Proposed Frequency

NOTES:
 This form is to be used to increase or decrease inspection frequency.
 Prior to proposing to change inspection frequency, the submitter must review the bridge inspection file and Bridge Inspection Manual (BIM) section 3.2.2.2 "INCREASED INSPECTION INTERVAL" as approved by the FHWA. All requirements of this section must be met unless otherwise noted below.
 For non-NBIS structures, there are no scour susceptibility index ratings nor Item 113 "scour critical bridge" assignments. Thus, visual scour evidence, history of scour at the structure, channel stability and vulnerability of the structure to failure due to scour should be considered and utilized instead.

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
BRIDGE SAFETY & EVALUATION

INSPECTION FREQUENCY CHANGE REQUEST

FORM BRI 8 REVISED 6/07

BRIDGE NUMBER 06826	TOWN NAME HAMDEN	NBIS YES
BORDER TOWN	REPORT CLASS L	
FACILITY CARRIED HAMDEN HILLS DRIVE	FEATURE CROSSED SHEPARD BROOK & RR-TRAIL	
ROUTINE INSP. DATE & FREQ. 1/17/2014 24	(801) INDEPTH DATE 1/11/2012	
UW INSP. DATE & FREQ.	SPEC. INSP. DATE & FREQ. 1/14/2015	
	FRAC. INSP. DATE & FREQ.	

PROPOSED FREQUENCY CHANGES		
ROUTINE INSP. DATE	1/17/2016	FREQ. 24
UW INSP. DATE	//	UW FREQ.
SPEC. INSP. DATE	//	SPEC. FREQ.
FRAC. INSP. DATE	//	FRAC. FREQ.

(Prop. Inspection & uwater dates should match)

(Max. Inspection freq 48 mos.)

BS&E RECEIVED

DATA ENTRY DATE: _____

COPIES MADE

DATA ENTERED BY: _____

Submitted by: P. MIRZANE

Date: 9/21/2015

Reviewed by: [Signature]

Date: 10/8/15

Blank

----- Structure Inventory Data -----

(43) Structure Type	3 2	Steel	Stringer/Multi-beam or Girder
(45) No. of Spans	2	(54) Min. Vert. Clearance >= 14'3"	0 0
(48) Max. Span Length <=100'	114	(66) Inv. Rating >= 34 tons	110
(49) Structure Length	216	(64) Operating Rating >= 63	142
(41) Struc. Operational Status	A	Evaluation type && year	F 2014

----- Condition Rating -----

(58) Deck	8
(59) Superstructure	7
(60) Substructure	5
(61) Channel	8
(62) Culverts	N
(113) Scour Critical Bridge	3
Scour screening susceptibility rating	

----- Steel Superstructures -----

(29) ADT <= 60,000	5,600
(109) ADTT=	2%
(27) Year Built <= 50 years old	1991
(106) Year Rebuilt >= 4 years old	

----- Concrete Structures -----

(29) ADT <= 125,000	5,600
(109) ADTT=	2%

An assessment of frequency and degree of overload that is anticipated on the structure has been made and found to be:

Acceptable Not Acceptable

Date: ___/___/___

By: _____

Comments:

THE SCOUR AREA AT THE PIER FOOTING HAS BEEN REPAIRED.
PLEASE REMOVE THE SPECIAL INSPECTION.

Approved by: _____

Date: _____

Approved by FHWA Date: _____

Approved By Town Date: _____

Manager, Bridge Safety & Evaluation Section

For 48 Months Proposed Frequency

NOTES:

This form is to be used to increase or decrease inspection frequency.

Prior to proposing to change inspection frequency, the submitter must review the bridge inspection file and Bridge Inspection Manual (BIM) section 3.2.2.2 "INCREASED INSPECTION INTERVAL" as approved by the FHWA. All requirements of this section must be met unless otherwise noted below.

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
BRIDGE SAFETY & EVALUATION
INSPECTION FREQUENCY CHANGE REQUEST

FORM DRI 8 REVISED 6/07

BRIDGE NUMBER 06826	TOWN NAME HAMDEN	NBIS YES
BORDER TOWN	REPORT CLASS L	
FACILITY CARRIED HAMDEN HILLS DRIVE	FEATURE CROSSED SHEPARD BROOK & RR-TRAIL	
ROUTINE INSP. DATE & FREQ. 1/17/2014 24	(90) INDEPTH DATE 1/11/2012	
UW INSP. DATE & FREQ.	SPEC. INSP. DATE & FREQ.	
	FRAC. INSP. DATE & FREQ.	

PROPOSED FREQUENCY CHANGES			
ROUTINE INSP. DATE	1 / 1	FREQ.	
UW INSP. DATE	1 / 1	UW FREQ.	
SPEC. INSP. DATE	7 / 17 / 14	SPEC. FREQ.	6
FRAC. INSP. DATE	1 / 1	FRAC. FREQ.	
(Prop. inspection & uwaler dates should match)		(Max. inspection freq 48 mos.)	

BS&E RECEIVED DATA ENTRY DATE: _____
 COPIES MADE DATA ENTERED BY: _____
 Submitted by: *[Signature]* Date: *3/1/14*
 Reviewed by: _____ Date: _____

----- Structure Inventory Data -----

(43) Structure Type **3** **2** Steel Stringer/Multi-beam or Girder

(45) No. of Spans **2** (54) Min. Vert. Clearance >= **0** **0**
14'3"

(48) Max. Span Length <= 100' **114** (66) Inv. Rating >= 34 **1.095**
tons

(49) Structure Length **216** (64) Operating Rating >= 63 **1.424**

(41) Struc. Operational Status **A** Evaluation type && year **F** **2014**

----- Steel Superstructures ----- ----- Concrete Structures -----

(29) ADT <= 50,000 **5,600** (29) ADT <= 125,000 **5,600**

(109) ADTT= **2%** (109) ADTT= **2%**

(27) Year Built <= 60 years old **1991**

(106) Year Rebuilt >= 4 years old

----- Condition Rating -----

(58) Deck **8**

(59) Superstructure **7**

(60) Substructure **5**

(61) Channel **6**

(62) Culverts **N**

(113) Scour Critical Bridge **3**

Scour screening susceptibility rating

An assessment of frequency and degree of overload that is anticipated on the structure has been made and found to be:

Acceptable Not Acceptable Date: 1 / 1 / By: _____

Comments:

Check undermining of pier footing.

TPL
3/1/14

Approved by: _____ Date: _____ Approved by FHWA Date: _____ Approved by Town Date: _____

Manager, Bridge Safety & Evaluation Section

For 48 Months Proposed Frequency

NOTES:

This form is to be used to increase or decrease inspection frequency.

Prior to proposing to change inspection frequency, the submitter must review the bridge inspection file and Bridge Inspection Manual (BIM) section 3.2.2.2 "INCREASED INSPECTION INTERVAL" as approved by the FHWA. All requirements of this section must be met unless otherwise noted below.

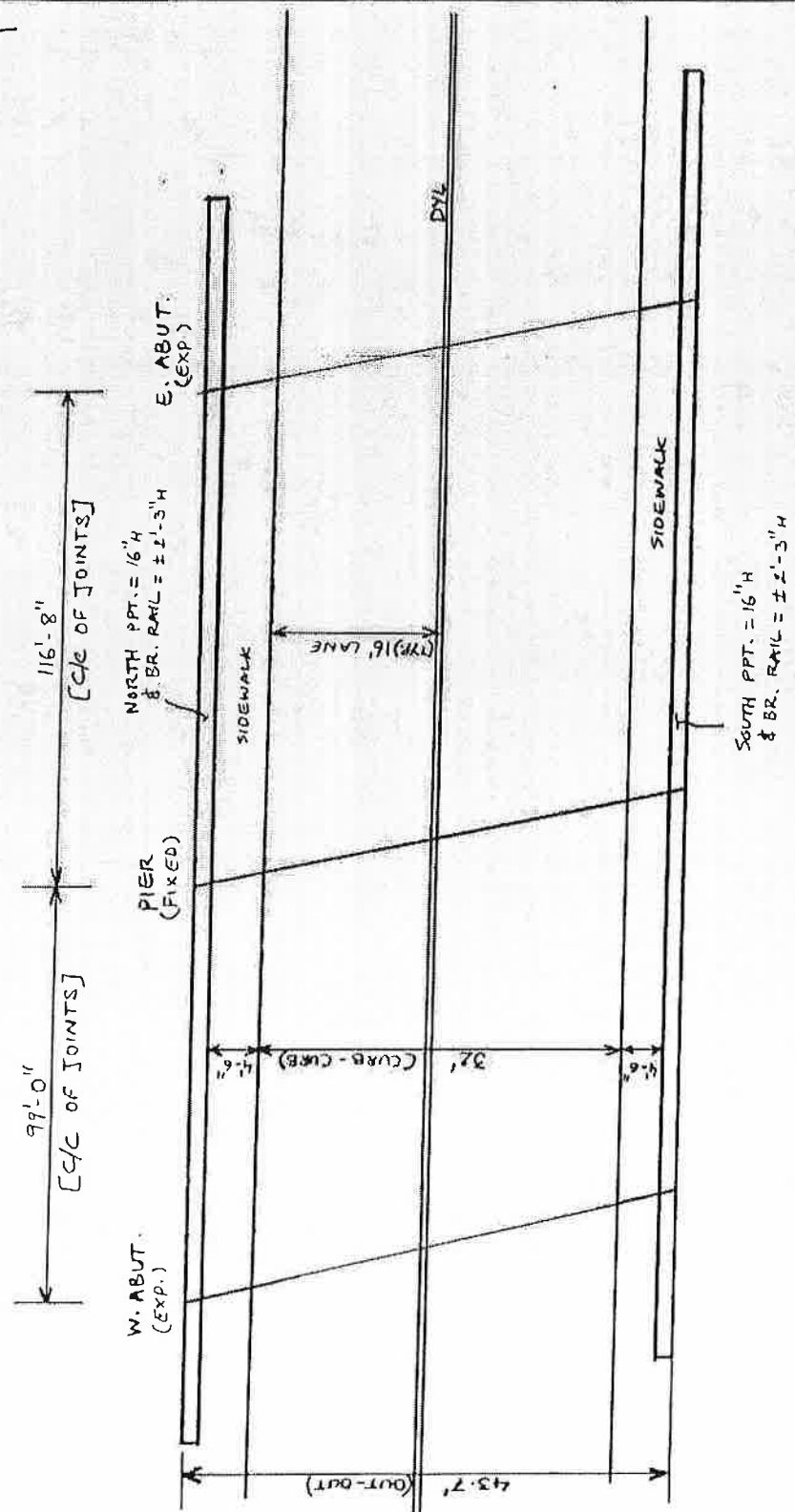
For non-NBIS structures, there are no scour susceptibility index ratings nor Item 113 "scour critical bridge" assignments. Thus, visual scour evidence, history of scour at the structure, and stability and vulnerability of the structure to failure due to scour should be considered and utilized instead.

HAKS

FIELD NOTES

JOB NO. 170-3013
 DATE: 1/31/12
 CREW: PTH, RV

BRIDGE NO. 06826
 SHEET 1



TOP OF DECK PLAN

REVISION	△	DATE	CREW	REVISION	△	DATE	CREW
REVISION	△	DATE	CREW	REVISION	△	DATE	CREW



HAKS

FIELD NOTES

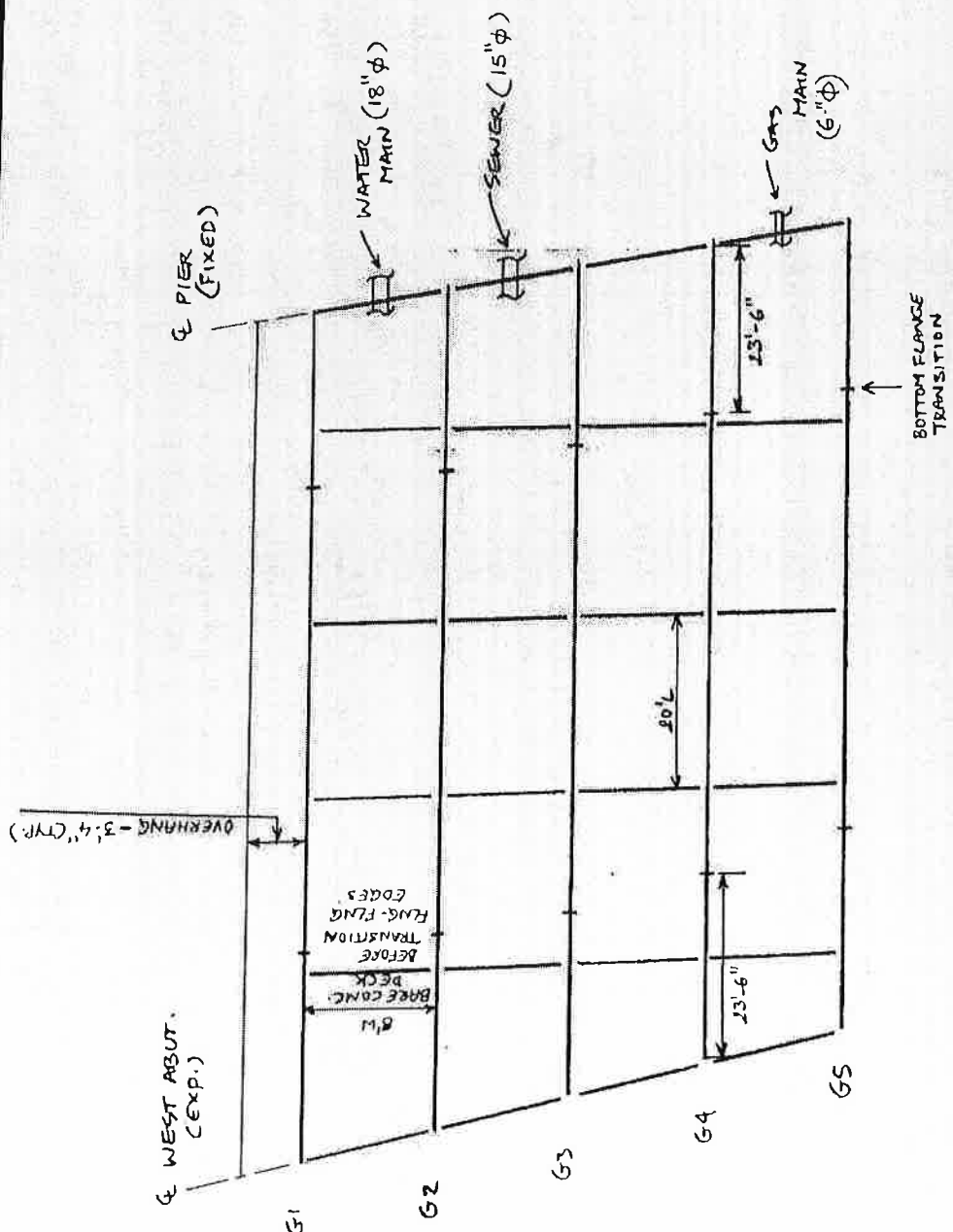
JOB NO. 170-3013

BRIDGE NO. 06826

DATE: 1/11/12

SHEET 2

CREW: PHA, RV



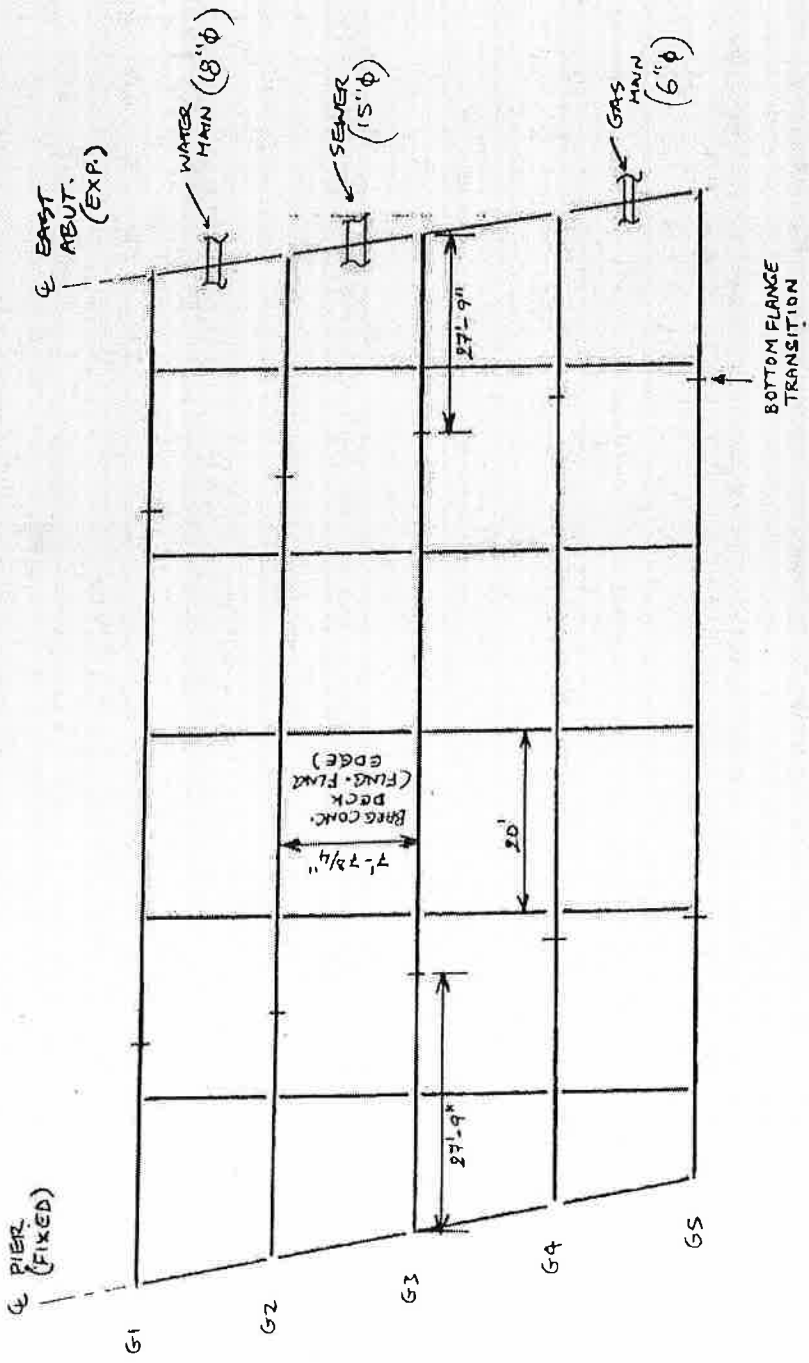
SPAN | FRAMING PLAN

REVISION	△	DATE	CREW	REVISION	△	DATE	CREW
REVISION	△	DATE	CREW	REVISION	△	DATE	CREW

HAKS FIELD NOTES

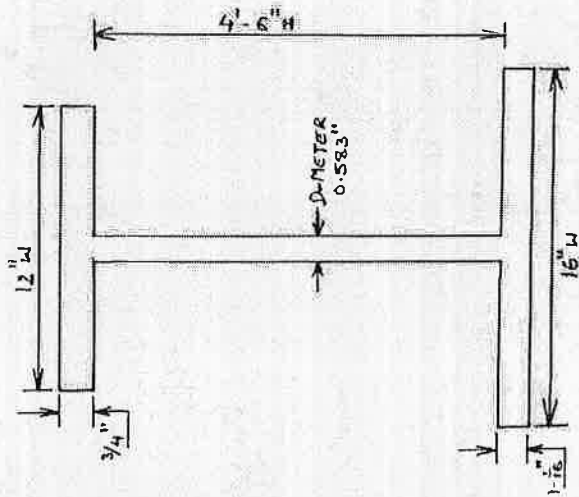
JOB NO. 170-3013
 DATE: 1/11/12
 CREW: PHA, RV

BRIDGE NO. 06826
 SHEET 3



SPAN 2 FRAMING PLAN

REVISION	△	DATE	CREW	REVISION	△	DATE	CREW
REVISION	△	DATE	CREW	REVISION	△	DATE	CREW



TYPICAL CROSS SECTION NEAR ABUTMENT

ELASTOMERIC BEARING - WEST ABUTMENT

SOLE PLATE: 18" W x 14" x 1" - 3/4" (VARIES)

ELASTO PAD: 12" x 14" x 2" - 1/4" THICK

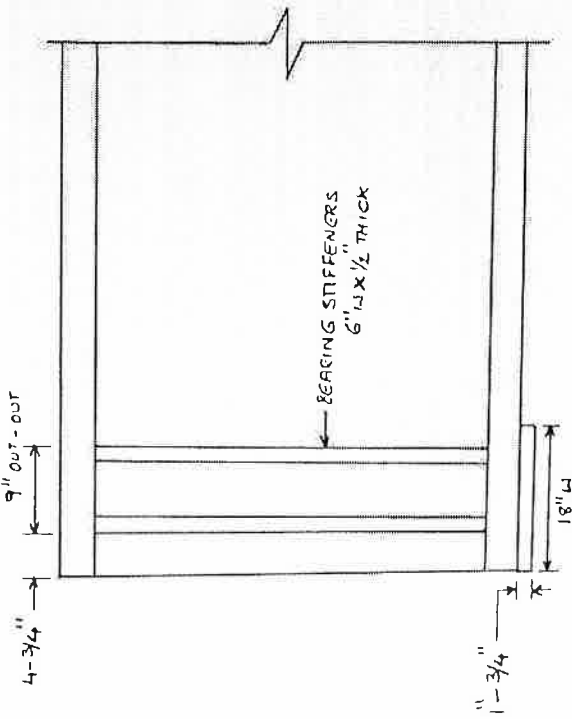
ANCHOR BOLTS: 1-3/8" ϕ ; NUTS = 2-3/8"

LONGITUDINAL SLOTTED HOLES: 3/2" x 1-1/2" W

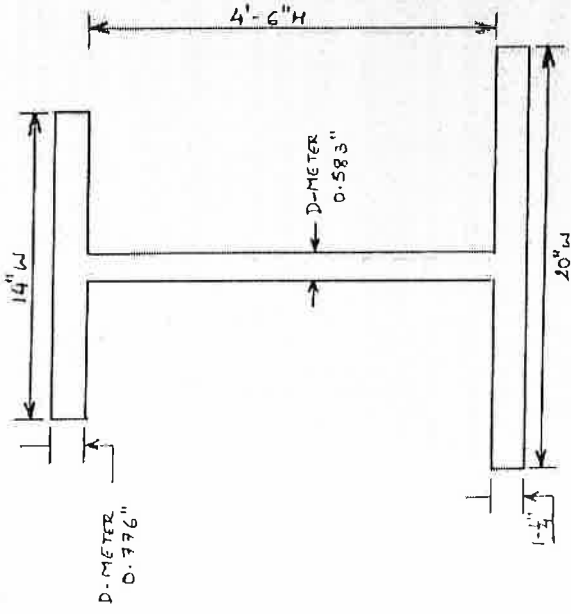
AT PIER

SOLE PLATE: 16" x 14" x 3/4"

ELASTO PAD: 1" x 14" x 2" - 1/2" THICK



SPAN 1 TYPICAL GIRDER ELEVATION - G1, SOUTH ELEVATION



TYPICAL CROSS SECTION AT MID-SPAN

REVISION 1	DATE:	CREW:	REVISION 3	DATE:	CREW:
REVISION 2	DATE:	CREW:	REVISION 4	DATE:	CREW:

HAKS FIELD NOTES

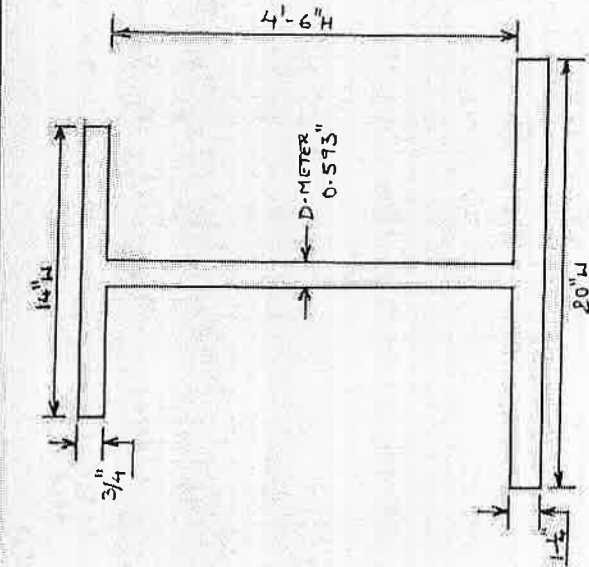
JOB NO. 170-3013

BRIDGE NO. 06826

DATE: 01/11/12

SHEET: 5

CREW: PHH, RV

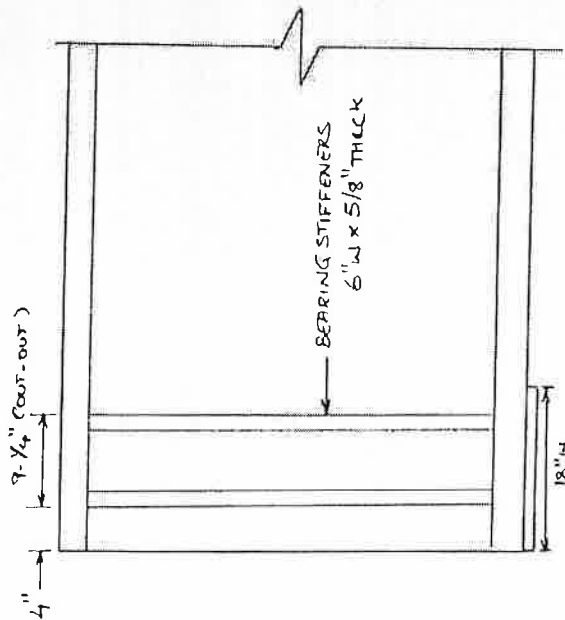


TYPICAL CROSS SECTION - NEAR ABUTMENT

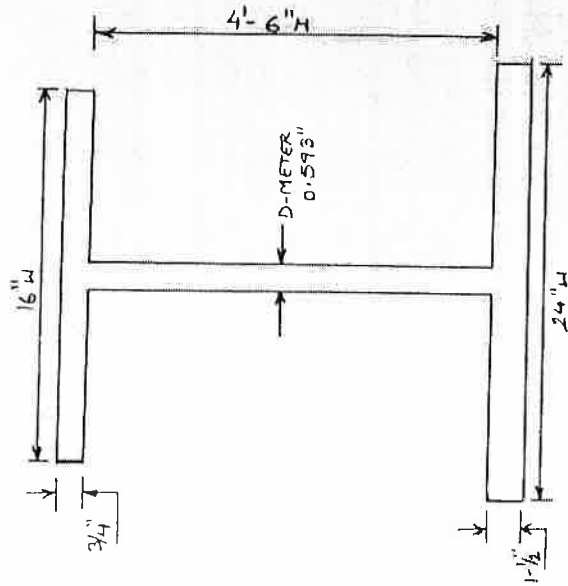
ELASTOMERIC BEARING - EAST ABUTMENT

SOLE PLATE = 18" x 18" x 1" - 3/4" (VARIES)

ELASTO PAD = 18-3/4" x 11" x 5" THICK



SPAN 2, TYPICAL GIRDER ELEVATION - G.I. SOUTH ELEVATION



TYPICAL CROSS SECTION - AT MID-SPAN

REVISION 1	DATE:	CREW:	REVISION 3	DATE:	CREW:
REVISION 2	DATE:	CREW:	REVISION 4	DATE:	CREW:



HAKS

FIELD NOTES

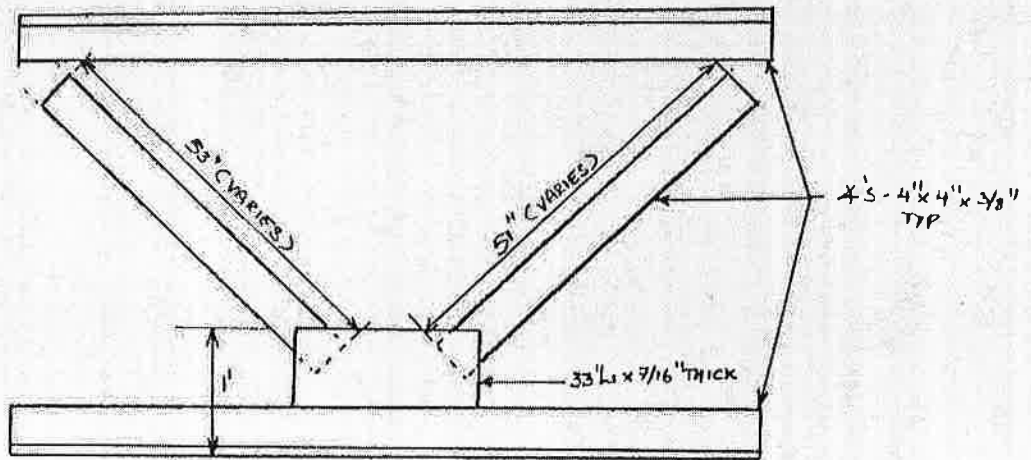
JOB NO. 170-3013

BRIDGE NO. 06826

DATE: 01/11/12

SHEET 6

CREW: PHH, RV



SPAN 1, BAY 3, 3RD INTERMEDIATE DIAPHRAGM

FROM WEST ABUTMENT

DIAPHRAGM DETAIL

REVISION	△	DATE	CREW	REVISION	△	DATE	CREW
REVISION	△	DATE	CREW	REVISION	△	DATE	CREW



HAKS

FIELD NOTES

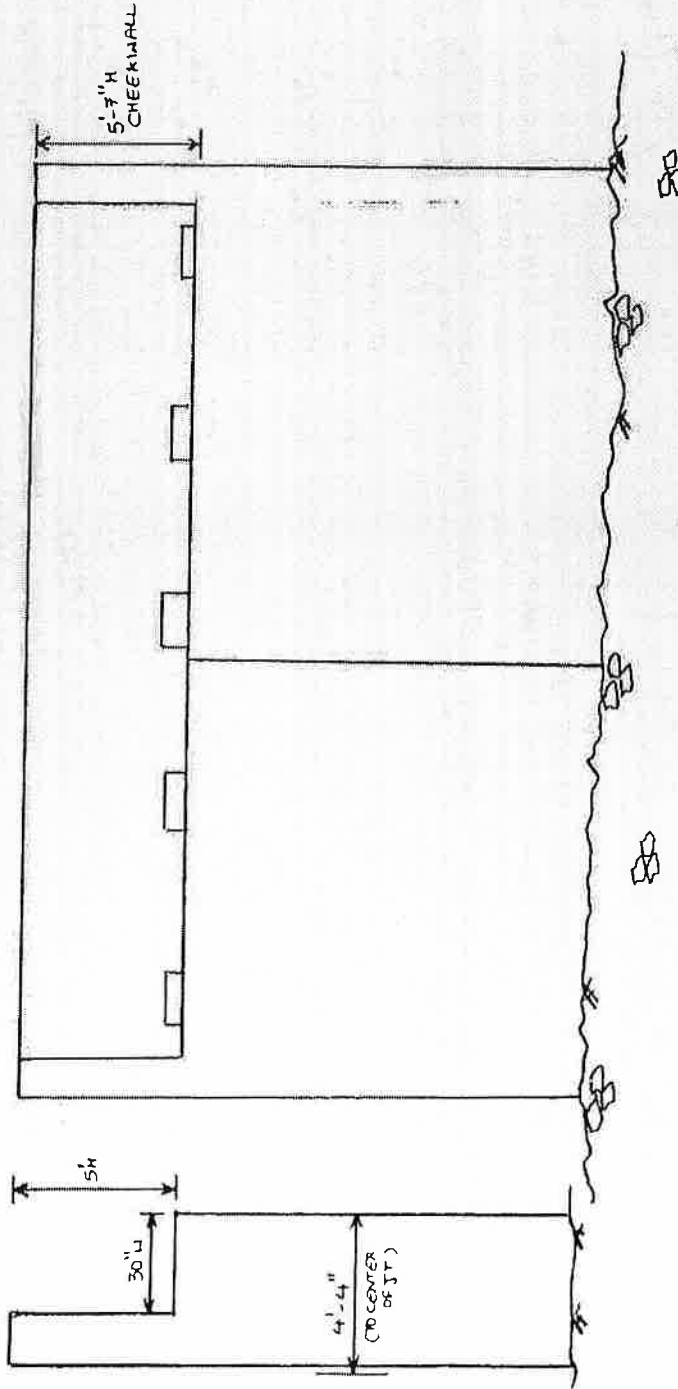
JOB NO. 170-3013

BRIDGE NO. 06826

DATE: 1/31/12

SHEET 7

CREW: PTH, RV



WEST ABUTMENT ELEVATION

REVISION	△	DATE	CREW	REVISION	△	DATE	CREW
REVISION	△	DATE	CREW	REVISION	△	DATE	CREW



HAKS

FIELD NOTES

JOB NO. 170-3013

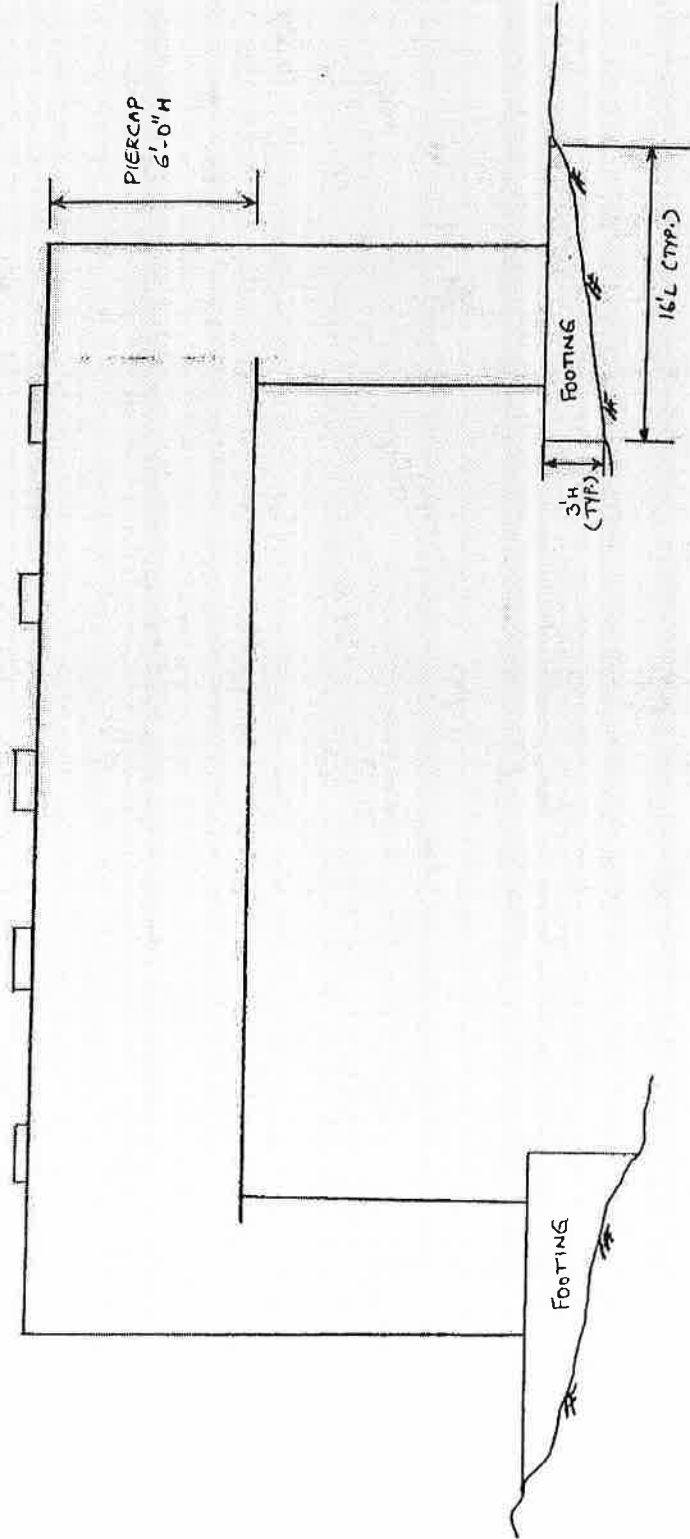
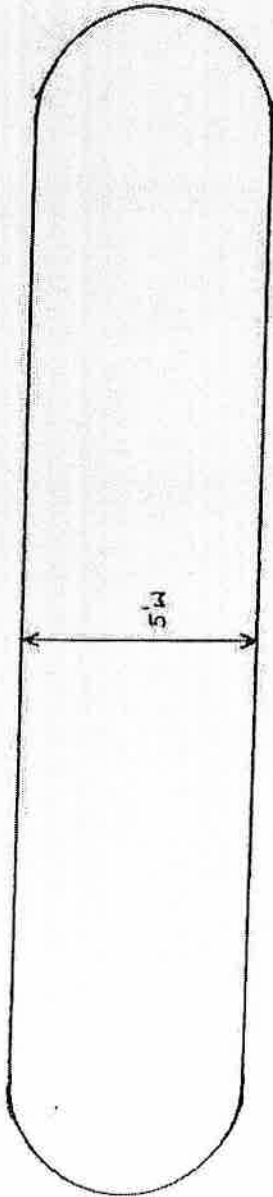
BRIDGE NO. 06826

DATE: 1/31/12

SHEET 8

CREW: PHU, RV

PLAN VIEW OF CAP



PIER, EAST ELEVATION

REVISION	△	DATE	CREW	REVISION	△	DATE	CREW
REVISION	△	DATE	CREW	REVISION	△	DATE	CREW