

**State of Rhode Island and Providence Plantations Contract Offer
RIVIP GENERATED BIDDER CERTIFICATION COVER FORM**

SECTION 1 - VENDOR INFORMATION

Bid/RFP Number: 7458302
Bid/RFP Title: RI CONTRACT - 2013-DF-045 HURRICANE SANDY-REPAIRS POPPASQUASH ROAD, BRISTOL, RI (46 PGS)
Opening Date & Time: 11/28/2012 2:45 PM
RIVIP Vendor ID #: 853
Vendor Name: J. H. Lynch & Sons, Inc.
Address: 50 Lynch Place
Cumberland , RI 02864-5334
USA
Telephone: 401-333-4300
Fax: 401-333-2659
E-Mail: sales@jhlynch.com
Contact Person: Stephen P. Lynch, Jr.
Title: President
R.I. Foreign Corp #:

*****REVISED NOTICE TO VENDORS*****

Effective January 1, 2012 all public works projects related bids or proposals exceeding SEVEN HUNDRED FIFTY THOUSAND (\$750,000) dollars are required to include a "public copy". All agency contract solicitations, requests for proposals, invitations for bids, etc. shall state that any bid or proposal that exceeds SEVEN HUNDRED FIFTY THOUSAND (\$750,000) dollars must include a copy to be available for public inspection upon the opening of the bids. Any bid or proposal that exceeds SEVEN HUNDRED FIFTY THOUSAND (\$750,000) dollars which does not include a copy for public inspection shall be deemed to be non-responsive. Additionally, proposals submitted for a Master Price Agreement, when the total amount potentially may exceed SEVEN HUNDRED FIFTY THOUSAND (\$750,000) dollars and the solicitation expressly requires any or all vendors to submit a public copy, must include a copy to be available for public inspection. For further information, please see RI Gen Laws §37-2-18(j) and State of RI Procurement Regulations at <http://purchasing.ri.gov/rulesandregulations/rulesandregulations.aspx>. Please see Question #11 below for further instructions regarding RIDOT Highway and Bridge construction projects.

NOTE: AWARD OF CONTRACTS AND PURCHASE ORDERS SHALL BE SUBJECT, AT THE DISCRETION OF THE PURCHASING AGENT, TO THE OFFEROR COMPLETING AN ON-LINE RIVIP REGISTRATION at www.purchasing.ri.gov. It is THE RESPONSIBILITY OF THE VENDOR to make on-line corrections/updates using the Vendor maintenance program on the RI Division of Purchases Web Site.

SECTION 2 - REQUIREMENTS

ALL OFFERS ARE SUBJECT TO THE REQUIREMENTS, PROVISIONS AND PROCEDURES CONTAINED IN THIS THREE-PAGE CERTIFICATION FORM. Offerors are expected to READ, SIGN and COMPLY with all requirements. Failure to do so may be grounds for disqualification of the offer contained herein.

Section 2.1 - RULES FOR SUBMITTING OFFERS

2.1A. This CERTIFICATION FORM MUST BE ATTACHED IN ITS ENTIRETY TO THE FRONT OF THE OFFER and shall be considered an integral part of each offer made by a vendor to enter into a contract with the State of Rhode Island, Division of Purchases. As such, submittal of the entire Bidder Certification Cover Form, signed by a duly authorized representative of the offeror attesting that he/she (1) has read and agrees to comply with the requirements set forth herein and (2) to the accuracy of the information provided and the offer extended, is a mandatory part of any contract award.

To assure that offers are considered on time, each offer must be submitted with the specific Bid/RFP/LOI number (provided above), date and time of opening marked in the upper left hand corner of envelope. Each bid/offer must be submitted in separate sealed envelopes.

A complete, signed (in ink) offer package, must be delivered to the Division of Purchases (via any mail or messenger service) by the time and date specified for the opening of responses in a sealed envelope.

Bids must be submitted on the RI bid solicitation forms provided, indicating brand and part numbers of items offered, as appropriate. Bidders must submit detailed cuts and specs on items offered as equivalent to brands requested WITH THE OFFER. Bidders must be able to submit samples if requested. Mail To: Division of Purchases, One Capitol Hill, Second Floor, Providence, RI 02908-5855.

Documents misdirected to other State locations or which are not present in the Division of Purchases at the time of opening for whatever cause will be deemed to be late and will not be considered. For the purposes of this requirement, the official time and date shall be that of the time clock in the Division of Purchases. Postmarks shall not be considered proof of timely submission.

2.1B. RIVIP SOLICITATIONS. To assure maximum access opportunities for users, public bid/RFP solicitations shall be posted on the RIVIP for a minimum of seven days and no amendments shall be made within the last five days before the date an offer is due. Except when access to the Web Site has been severely curtailed and it is determined by the State Purchasing Agent that special circumstances preclude extending a solicitation due date, requests to mail or fax hard copies of solicitations will not be honored. When the result of an Internet solicitation is unsuccessful, the State of Rhode Island will cancel the original solicitation and resolicit the original offer directly from vendors.

2.2. PRICING. Offers are irrevocable for sixty (60) days from the opening date (or such other extended period set forth in the solicitation) and may not be withdrawn, except with the express permission of the State Purchasing Agent. All pricing will be considered to be firm and fixed unless otherwise indicated. The State of Rhode Island is exempt from Federal excise taxes and State Sales and Use Taxes. Such taxes shall not be included in the bid price. PRICES QUOTED ARE FOB DESTINATION.

2.3. DELIVERY and PRODUCT QUALITY. All offers must define delivery dates for all items; if no delivery date is specified, it is assumed that immediate delivery from stock will be made. The contractor will be responsible for delivery of materials in first class condition. Rejected materials will be at vendor's expense.

2.4. PREVAILING WAGE, OSHA and APPRENTICESHIP.

2.4.1 Prevailing Wage and OSHA Safety Training Requirements. The provisions of the State labor laws and OSHA Safety Training, including but not limited to Rhode Island General Laws 37-13-1 et seq. and 28-20-1 et seq., shall apply for all public works contracts. Prevailing wage rates are posted in the information section of the RIVIP. The RI Department of Labor and Training should be contacted for regulatory requirements.

2.4.2 (a) Apprenticeship. Rhode Island General Laws §37-13-3.1 requires all general contractors and subcontractors who perform work on any public works contract awarded by the state valued at one million dollars (\$1,000,000) or more shall employ apprentices required for the performance of the awarded contract. The number of apprentices shall comply with the apprentice to journeyman ratio for each trade approved by the apprenticeship council of the Department of Labor and Training.

2.4.2(b) In addition to executing this certification, the general contractor shall be responsible for requiring that all subcontractors on the awarded project certify their compliance with R.I. Gen. Laws §37-13-3.1 prior to allowing the subcontractor to commence work on the awarded project. The general contractor shall be responsible for submitting the subcontractors' compliance certification to the Division of Purchases after the contracts are finalized between the contractor and subcontractor.

2.5. PUBLIC RECORDS. Offerors are advised that all materials submitted to the State for consideration in response to this solicitation will be considered without exception to be Public Records pursuant to Title 38 Chapter 2 of the Rhode Island General Laws, and will be released for inspection immediately upon request once an award has been made. Offerors are encouraged to attend public bid/RFP openings to obtain information; however, bid/RFP response summaries may be reviewed after award(s) have been made by using the RIVIP at any time or appearing in person at the Division of Purchases Mondays through Fridays between 8:30 a.m. and 3:30 p.m. Telephone requests for results will not be honored. Written requests for results will only be honored if the information is not available on the RIVIP.

SECTION 3 - AWARD DETERMINATION

Award will be made to the responsive and responsible offeror quoting the lowest net price in accordance with specifications, for any individual item(s), for major groupings of items, or for all items listed, at the State's sole option.

3.1. BID SURETY. Where bid surety is required, bidder must furnish a bid bond or certified check for 5% of the bid total with the bid, or for such other amount as may be specified. Bids submitted without a required bid surety will not be considered.

3.2. SPECIFICATIONS. Unless specified "no substitute," product offerings equivalent in quality and performance will be considered (at the sole option of the State) on the condition that the offer is accompanied by detailed product specifications. Offers which fail to include alternate specifications may be deemed nonresponsive.

SECTION 4 - CONTRACT PROVISIONS

4.1. VENDOR AUTHORIZATION TO PROCEED.

4.1A. When a purchase order, change order, contract/agreement or contract/agreement amendment is issued by the RI Division of Purchases, no claim for payment for services rendered or goods delivered contrary to or in excess of the contract terms and scope shall be considered valid unless the vendor has obtained a written change order or contract amendment issued by the Division of Purchases PRIOR TO delivery.

4.1B. Any offer, whether in response to a solicitation for proposals or bids, or made without a solicitation, which is accepted in the form of an order OR Pricing Agreement made in writing by the Purchasing Agent, or a state official with purchasing authority delegated by the Purchasing Agent, shall be considered a binding contract.

4.2. REGULATIONS, GENERAL TERMS AND CONDITIONS GOVERNING STATE CONTRACTS. This solicitation and any contract or purchase order arising from it are issued in accordance with the specific requirements described herein, and the State's Purchasing Laws and Regulations and other applicable State Laws. The Regulations, General Terms and Conditions are incorporated into all state contracts. These regulations and basic information on How To Do Business with the State of Rhode Island are posted on the Rhode Island Vendor Information Program Website (www.purchasing.ri.gov).

4.2A. ARRA SUPPLEMENTAL TERMS AND CONDITIONS. Contracts and sub-awards funded in whole or in part by the American Recovery and Reinvestment Act of 2009. Pub.L.No. 111-5 and any amendments thereto, such contracts and sub-awards, shall be subject to the Supplemental Terms and Conditions For Contracts and Sub-awards Funded in Whole or in Part by the American Recovery and Reinvestment Act of 2009. Pub.L.No. 111-5 and any amendments thereto located on the Division of Purchases website at www.purchasing.ri.gov.

4.3. EQUAL EMPLOYMENT OPPORTUNITY. Compliance certificate and agreement procedures will apply to all awards for supplies or services valued at \$10,000 and more. Minority Business Enterprise policies and procedures, including subcontracting opportunities as described in Title 37 Chapter 14.1, of the Rhode Island General Laws, also apply.

Revised: 12/20/2011

4.4. PERFORMANCE BONDS. Where indicated, successful bidder must furnish a 100% performance bond and labor and payment bond for contracts subject to Title 37 Chapters 12 and 13 of the Rhode Island General Laws. All bonds must be furnished by a surety company authorized to conduct business in the State of Rhode Island. Performance bonds must be submitted within 21 calendar days of the issuance of a tentative notice of award.

4.5. DEFAULT and NON-COMPLIANCE. Default and/or non-compliance with the RIVIP requirements and any other aspects of the award may result in withholding of payment(s), contract termination, debarment, suspension, or any other remedy necessary that is in the best interest of the state.

4.6. COMPLIANCE. Vendor must comply with all applicable federal, state and local laws, regulations and ordinances.

4.7. SPRINKLER IMPAIRMENT AND HOT WORK. The Contractor agrees to comply with the practices of the State's insurance carrier for sprinkler impairment and hot work. Prior to performing any work, the Contractor shall obtain the necessary information for compliance from the Risk Management Office at the Department of Administration or the agency for which work will be performed.

SECTION 5 – CERTIFICATIONS AND DISCLOSURES
ALL CONTRACT AWARDS ARE SUBJECT TO THE FOLLOWING DISCLOSURES & CERTIFICATIONS
Offerors must respond to every disclosure statement.

A person authorized to enter into contracts must sign the offer and attest to the accuracy of all statements.

Indicate Yes (Y) or No (N):

N 1. Has your firm (or any principal) been subject to any of the following findings by the Federal Government, the State of Rhode Island or any other jurisdiction? Suspension, Debarment, Indictment, Criminal Conviction. CIRCLE APPROPRIATE ITEM(S).

N 2. Has your firm (or any principal) been fined more than \$5000 for a single violation by the Rhode Island Department of Environmental Management for violation of Rhode Island Wetlands law?

Y 3. I/we certify that I/we will immediately disclose, in writing, to the Chief Purchasing Officer any potential conflict of interest, which may occur during the course of the engagement authorized pursuant to this contract.

Y 4. I/we acknowledge that, in accordance with Chapter 37-2-54(c) of the Rhode Island General Laws "no purchase or contract shall be binding on the state or any agency thereof unless approved by the Department [of Administration] or made under general regulations which the Chief Purchasing Officer may prescribe", including change orders and other types of contracts and under State Purchasing Regulation 8.2.1.1.2, "any alleged oral agreement or arrangements made by a bidder or contractor with any agency or an employee of the Office of Purchases may be disregarded and shall not be binding on the state".

Y 5. I/we certify that the above vendor information is correct and complete.

Y 6. I/we certify that I/we or my/our firm possesses all licenses required by Federal and State laws and regulations as they pertain to the requirements of the solicitation and offer made herein and shall maintain such required license(s) during the entire course of the contract resulting from the offer contained herein and should my/our license lapse or be suspended, I/we shall immediately inform the Rhode Island State Purchasing Agent in writing of such circumstance.

Y 7. I/we certify that I/we will maintain required insurance during the entire course of the contract resulting from the offer contained herein and should my/our insurance lapse or be suspended, I/we shall immediately inform the Rhode Island State Purchasing Agent in writing of such circumstance.

Y 8. I/we certify that I/we understand that falsification of any information herein or failure to notify the Rhode Island State Purchasing Agent as certified herein may be grounds for suspension, debarment and/or prosecution for fraud.

Y 9. I/we acknowledge that the provisions and procedures set forth in this three-page form apply to any contract arising from this offer.

Y 10. I/we acknowledge that I/we understand the State's Purchasing Laws (37-2 of the General Laws of Rhode Island) and Purchasing Regulations and General Terms and Conditions available at the Rhode Island Division of Purchases Website (www.purchasing.ri.gov) apply as the governing conditions for any contract or purchase order I/we may receive from the State of Rhode Island, including the offer contained herein.

Y 11. **NEW REVISED REQUIREMENT-IMPORTANT!!!** I/we hereby acknowledge that I/we understand that effective January 1, 2012 all public works related project bids or proposals exceeding SEVEN HUNDRED FIFTY THOUSAND (\$750,000) dollars, inclusive of all proposed alternates, must include a "public copy" as required by RI Gen Laws § 37-2-18(j) and the State Procurement Regulations. It is further understood that any bid or proposal in excess of SEVEN HUNDRED FIFTY THOUSAND (\$750,000) dollars which does not include a copy for public inspection shall be deemed to be non-responsive.

RIDOT Highway and Bridge Public Works related projects utilizing Quest Lite program only – Effective immediately, submission to the Division of Purchases of a duplicate original of a vendor's Quest Lite compatible electronic copy on a readable compact disk shall satisfy the statutory "public copy" requirements. Quest Lite software is defined in the Division of Purchases "State Procurement Regulations" §12.102.05 (Preparation of Proposal).

For further information, please see R.I Gen. Laws § 37-2-18(j) and specific instructions at www.purchasing.ri.gov.

IF YOU HAVE ANSWERED "YES" TO QUESTIONS #1-2 OR IF YOU ARE UNABLE TO CERTIFY YES TO ITEMS #3-11 OF THE FOREGOING, PROVIDE DETAILS/EXPLANATION IN AN ATTACHED STATEMENT. INCOMPLETE CERTIFICATION FORMS SHALL BE GROUNDS FOR DISQUALIFICATION OF OFFER.

Signature below commits vendor to the attached offer and certifies (1) that the offer has taken into account all solicitation amendments, (2) that the above statements and information are accurate and that vendor understands and has complied with the requirements set forth herein. When delivering offers in person to One Capitol Hill, vendors are advised to allow at least one hour additional time for clearance through security checkpoints.


Vendor's Signature (Person authorized to enter into contracts; signature must be in ink.)
Stephen P. Lynch, Jr., President

Date November 28, 2012

Print Name and Title of company official signing offer
Revised: 12/20/2011



Interchange Corporate Center
450 Plymouth Road, Suite 400
Plymouth Meeting, PA. 19462-1644
Ph. (610) 832-8240

BID BOND

Bond Number: N/A

KNOW ALL MEN BY THESE PRESENTS, that we J. H. Lynch & Sons, Inc.

50 Lynch Place, Cumberland, RI 02864 as principal (the "Principal"),
and LIBERTY MUTUAL INSURANCE COMPANY, a Massachusetts stock insurance company, as surety (the
"Surety"), are held and firmly bound unto RHODE ISLAND DEPARTMENT OF TRANSPORTATION

One Capitol Hill, Providence, RI 02903 as obligee (the "Obligee"), in
the penal sum of Five Percent of the Amount of the Accompanying Bid

_____ Dollars (\$ 5% of Bid _____),
for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our
heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for: RI CONTRACT No. 2013-DF-045
HURRICANE SANDY REPAIRS TO POPPASQUASH RD., BRISTOL, RHODE ISLAND

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal within the period specified therein, or, if no
period be specified, within sixty (60) days after opening, and the Principal shall enter into a contract with the
Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding
or contract documents, or in the event of the failure of the Principal to enter into such contract and give such
bond or bonds, if the Principal shall pay to the Obligee the difference in money not to exceed the penal sum
hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith
contract with another party to perform the work covered by said bid, then this obligation shall be null and void;
otherwise to remain in full force and effect. In no event shall the liability hereunder exceed the penal sum hereof.

PROVIDED AND SUBJECT TO THE CONDITION PRECEDENT, that any claim by Obligee under this bond must
be submitted in writing by registered mail, to the attention of the Surety Law Department at the address above,
within 120 days of the date of this bond. Any suit under this bond must be instituted before the expiration of one
(1) year from the date of this bond. If the provisions of this paragraph are void or prohibited by law, the minimum
period of limitation available to sureties as a defense in the jurisdiction of the suit shall apply.

DATED as of this 28th day of NOVEMBER, 2012

WITNESS / ATTEST:

Susan Cullen

J. H. Lynch & Sons, Inc.
(Principal)
By: *[Signature]* (Seal)
Name: Stephen P. Lynch, Jr.
Title: President

LIBERTY MUTUAL INSURANCE COMPANY
(Surety)
BY: *[Signature]* (Seal)
Donald L. Goodrich, Attorney-in-Fact

THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.

4749608

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

LIBERTY MUTUAL INSURANCE COMPANY
BOSTON, MASSACHUSETTS
POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS: That Liberty Mutual Insurance Company (the "Company"), a Massachusetts stock insurance company, pursuant to and by authority of the By-law and Authorization hereinafter set forth, does hereby name, constitute and appoint DONALD L. GOODRICH, ROGER E. WATSON, PHYLLIS A. NIGRIS, MICHAEL E. BROMAGE, JOAN A. VERARDO, ALL OF THE CITY OF CRANSTON, STATE OF RHODE ISLAND.....

each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations in the penal sum not exceeding ONE HUNDRED MILLION AND 00/100 DOLLARS (\$ 100,000,000.00) each, and the execution of such undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents, shall be as binding upon the Company as if they had been duly signed by the president and attested by the secretary of the Company in their own proper persons.

That this power is made and executed pursuant to and by authority of the following By-law and Authorization:

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

By the following instrument the chairman or the president has authorized the officer or other official named therein to appoint attorneys-in-fact:

Pursuant to Article XIII, Section 5 of the By-Laws, David M. Carey, Assistant Secretary of Liberty Mutual Insurance Company, is hereby authorized to appoint such attorneys-in-fact as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

That the By-law and the Authorization set forth above are true copies thereof and are now in full force and effect.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Company and the corporate seal of Liberty Mutual Insurance Company has been affixed thereto in Plymouth Meeting, Pennsylvania this day of 4th day of August 2011.



LIBERTY MUTUAL INSURANCE COMPANY

By David M. Carey
David M. Carey, Assistant Secretary

COMMONWEALTH OF PENNSYLVANIA ss
COUNTY OF MONTGOMERY

On this 4th day of August, 2011, before me, a Notary Public, personally came David M. Carey, to me known, and acknowledged that he is an Assistant Secretary of Liberty Mutual Insurance Company; that he knows the seal of said corporation; and that he executed the above Power of Attorney and affixed the corporate seal of Liberty Mutual Insurance Company thereto with the authority and at the direction of said corporation.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.



Notarial Seal
Teresa Pastella, Notary Public
Plymouth Twp., Montgomery County
My Commission Expires Mar. 28, 2013
Member, Pennsylvania Association of Notaries

By Teresa Pastella
Teresa Pastella, Notary Public

CERTIFICATE

I, the undersigned, Assistant Secretary of Liberty Mutual Insurance Company, do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy, is in full force and effect on the date of this certificate; and I do further certify that the officer or official who executed the said power of attorney is an Assistant Secretary specially authorized by the chairman or the president to appoint attorneys-in-fact as provided in Article XIII, Section 5 of the By-laws of Liberty Mutual Insurance Company.

This certificate and the above power of attorney may be signed by facsimile or mechanically reproduced signatures under and by authority of the following vote of the board of directors of Liberty Mutual Insurance Company at a meeting duly called and held on the 12th day of March, 1980.

VOTED that the facsimile or mechanically reproduced signature of any assistant secretary of the company, wherever appearing upon a certified copy of any power of attorney issued by the company in connection with surety bonds, shall be valid and binding upon the company with the same force and effect as though manually affixed.

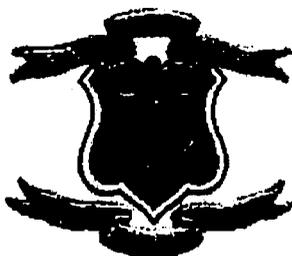
IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seal of the said company, this 28th day of November, 2012



Gregory W. Davenport
Gregory W. Davenport, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, bank deposit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.



Solicitation Information

BID # 7458302

**TITLE: 2013-DF-045 HURRICANE SANDY-REPAIRS
POPPASQUASH ROAD, BRISTOL**

Submission Deadline: 11/28/12 – 2:45P.M.

Bidders are advised that, due to the emergency nature of the repairs identified in this solicitation, a general scope of work and description only is provided. The available documents are contained herein, and are the only available specifications that will be provided for this procurement.

A total lump sum bid proposal is required, and will be the basis for award, however where there are multiple sites identified, a lump sum breakdown is required.

BID PROPOSALS MUST BE DELIVERED TO THE DIVISION OF PURCHASES , ONE CAPITOL HILL, PROVIDENCE, RI AT THE DATE AND TIME NOTED ABOVE, AND MUST INCLUDE THE FOLLOWING:

- BID PROPOSAL FORM WITH TOTAL LUMP SUM PRICE
- BID SURETY
- LUMP SUM BREAKDOWN OF SITE, IF MULTIPLE SITES ARE IDENTIFIED
- THREE-PAGE BIDDER CERTIFICATION COVER FORM
- FEDERAL FORMS, COMPLETED (LOBBYING FORM, DISCLOSURE FORM, ANTI-COLLUSION FORM)
- LATE BIDS SHALL NOT BE ACCEPTED. PROPOSALS MISDIRECTED TO OTHER STATE LOCATIONS OR WHICH ARE OTHERWISE NOT SUBMITTED TO THE DIVISION OF PURCHASES PRIOR TO THE TIME OF THE OPENING FOR ANY CAUSE WILL BE DETERMINED TO BE LATE AND SHALL NOT BE CONSIDERED. THE 'OFFICIAL' TIME CLOCK IS IN THE RECEPTION AREA OF THE DIVISION OF PURCHASES.
- PUBLIC COPY REQUIREMENT- DUE TO THE ANTICIPATED BID VALUE IN EXCESS OF \$750,000 , BIDDERS ARE REQUIRED TO SUBMIT A "PUBLIC COPY" OF BIDS IN ACCORDANCE WITH R.I. GEN. LAWS 37-2-18(j). THIS PUBLIC COPY MAY BE SUBMITTED ON EITHER A READABLE CD OR HARD (PAPER) COPY FOR THIS EMERGENCY PROCUREMENT.

**SURETY REQUIRED: YES
BOND REQUIRED: YES**

DISKS CONTAINING PLANS AND SPECIFICATIONS ARE ALSO AVAILABLE FOR PICK UP AT DOT, 2 CAPITOL HILL, ROOM 108, PROVIDENCE, RI BETWEEN THE HOURS OF 8:00-4:00 P.M. M-F

**Lisa Hill
Chief Buyer**

Vendors must register on-line at the State Purchasing Website at www.purchasing.ri.gov

Note to Vendors: Offers received without the completed RIVP Generated Bidder Certification Form may result in disqualification.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
HURRICANE SANDY BID PROPOSAL FORM



PROJECT NO. 2013-DF-045

BID A TOTAL PRICE TO FURNISH ALL LABOR, MATERIALS AND EQUIPMENT, AND INCIDENTALS WITH TRAFFIC CONTROL IN CONFORMANCE MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) REQUIREMENTS TO PERFORM REPAIRS AS DESCRIBED IN THE BID DOCUMENTS.

The breakdown for each Hurricane ID is as follows:

HRS-005 \$ 796,000.00

HRS-006 \$ 780,000.00

\$ 1,576,000.00

NUMERICAL

\$ One million five hundred seventy-six thousand dollars and zero cents

WRITTEN WORDS

*NOTE: WORDS AND NUMBERS MUST MATCH. PROPOSALS OFFERING DIFFERENT AMOUNTS WILL BE REJECTED.

BID PROPOSAL MUST BE ACCOMPANIED BY THE ATTACHED BIDDER CERTIFICATION FORM.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
HURRICANE SANDY BID PROPOSAL FORM

SUCCESSFUL BIDDER WILL BE REQUIRED TO FURNISH AN INSURANCE CERTIFICATE IDENTIFYING THE STATE OF RHODE ISLAND DEPARTMENT OF TRANSPORTATION AS THE ADDITIONAL INSURED. LIMITS OF LIABILITY ARE AS IDENTIFIED IN ITEM 31 STATE OF RHODE ISLAND CONDITIONS OF PURCHASE WHICH CAN BE VIEWED AT THE FOLLOWING WEBSITE:

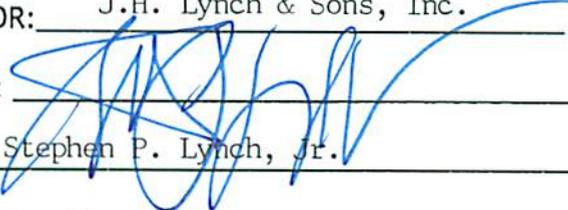
<http://www.purchasing.ri.gov/RIVIP/publicdocuments/ATTA.pdf>

IF THE CONTRACTOR VALUE EXCEEDS \$50,000 THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FURNISH A PERFORMANCE AND PAYMENT BOND FOR 100% OF THE CONTRACT VALUE WITHIN THREE (3) DAYS OF REQUEST. FAILURE TO FURNISH SAID BOND WILL RESULT IN DISQUALIFICATION.

ALL WORK PERFORMED IN CONJUNCTION WITH THIS PROJECT SHALL BE COMPLETED IN ACCORDANCE WITH THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2004 EDITION, COMPILATIONS OF APPROVED SPECIFICATIONS, REQUIRED CONTRACT PROVISIONS FOR FEDERAL AID CONSTRUCTION CONTRACTS, GENERAL PROVISIONS, RHODE ISLAND STANDARD DETAILS, RHODE ISLAND BRIDGE STANDARD DETAILS, FEDERAL WAGE RATES, CONTRACT SPECIFIC GENERAL PROVISIONS, JOB-SPECIFIC SPECIFICATIONS, DISTRIBUTION OF QUANTITIES, APPENDICES (IF APPLICABLE).

DATE: November 28, 2012

CONTRACTOR: J.H. Lynch & Sons, Inc.

SIGNATURE: 

NAME: Stephen P. Lynch, Jr.

TITLE: President

Revised: 4/12/2002

**ANTI-COLLUSION CERTIFICATE FOR CONTRACT AND FORCE ACCOUNT
[Unsworn Declaration]**

Title 23, United States Code, Section 112(c), requires, as a condition precedent to approval by the Director of Public Roads of the contract for this work, that there be filed an unsworn declaration executed by, on behalf of, the person, firm, association, or corporation submitting the bid certifying that such person, firm, association, or corporation has not either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action, in restraint of free competitive bidding in connection with the submitted bid. This unsworn statement shall be in the form of a declaration executed under penalty of perjury under the laws of the United States.

To the: **STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF TRANSPORTATION, DIVISION OF PUBLIC WORKS**

State of Rhode Island

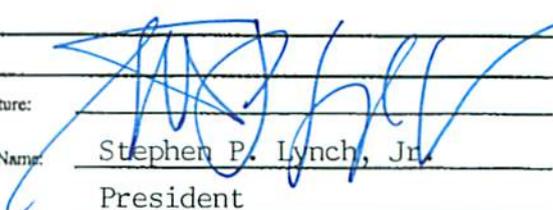
County of Providence

I, Stephen P. Lynch, Jr. President, under penalty under the laws of the United States, do depose and say:

On behalf of J.H. Lynch & Sons, Inc. Cumberland, RI that said Contractor has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with Rhode Island Contract Number, Federal-Aid Project Number, County of, Town-City, Road-Bridge.

DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352 - 0348-0046
(see reverse for public burden disclosure)

<p>1. Type of Federal Action:</p> <p><input checked="" type="checkbox"/> A a. contract <input type="checkbox"/> b. grant <input type="checkbox"/> c. cooperative agreement <input type="checkbox"/> d. loan <input type="checkbox"/> e. loan guarantee <input type="checkbox"/> f. loan insurance</p>	<p>2. Status of Federal Action:</p> <p><input checked="" type="checkbox"/> A a. bid/offer/application <input type="checkbox"/> b. initial award <input type="checkbox"/> c. post-award</p>	<p>3. Report Type:</p> <p><input checked="" type="checkbox"/> A a. initial filing <input type="checkbox"/> b. material change</p> <p>For Material Change Only: year _____ quarter _____ date of last report _____</p>
<p>4. Name and Address of Report Entity: <u>J.H. Lynch & Sons, Inc.</u> <input checked="" type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier _____, if known: <u>50 Lynch Place, Cumberland, RI 02864</u> Congressional District, if known: _____</p>		<p>5. If Reporting Entity in No. 4 is Subawardee, Enter Name and Address of Prime: <u>None</u> Congressional District, if known: _____</p>
<p>6. Federal Department Agency: <u>Federal Highway Administration</u></p>	<p>7. Federal Program Name/Description: <u>Hurricane Sandy Repairs</u> <u>Poppasquash Road, Bristol</u> CFDA Number, if applicable: _____</p>	
<p>8. Federal Action Number, if known: _____</p>	<p>9. Award Amount, if known: <u>\$ 1,576,000.00</u></p>	
<p>10. a. Name and Address of Lobbying Entity: <u>N/A</u> (if individual, last name, first name, mi): _____</p>	<p>10. b. Individuals Performing Services (including address if different from No. 10a) <u>None</u> (last name, first name, mi): _____</p>	
<p>11. Amount of Payment (check all that apply) <u>\$ N/A</u> <input type="checkbox"/> actual <input type="checkbox"/> planned</p>	<p>13. Type of Payment (check all that apply): <input type="checkbox"/> a. retainer <u>None</u> <input type="checkbox"/> b. one-time fee <input type="checkbox"/> c. commission <input type="checkbox"/> d. contingent fee <input type="checkbox"/> e. deferred <input type="checkbox"/> f. other; specify: _____</p>	
<p>12. Form of Payment (check all that apply): <input type="checkbox"/> a. cash <u>N/A</u> <input type="checkbox"/> b. in-kind; specify: nature _____ value _____</p>		
<p>14. Brief Description of Services Performed or to be Performed and Date(s) of Service, including officer(s), employee(s), or Member(s) contracted, for Payment indicated in Item 11 (Attach Continuation Sheet(s) SF-LLL-A, if necessary): </p>		
<p>15. Continuation Sheet(s) SF-LLL-A attached: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no</p>		
<p>16. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.</p>	<p>Signature: </p> <p>Print Name: <u>Stephen P. Lynch, Jr.</u> <u>President</u></p> <p>Title: _____</p> <p>Telephone No: <u>401-333-4300</u> Date: <u>11/28/12</u></p>	
<p>For Federal use Only:</p>	<p>Authorized for Local Reproduction Standard Form - LLL-A</p>	

DISCLOSURE OF LOBBYING ACTIVITIES

CONTINUATION SHEET

Reporting Entity: _____ Page _____ of _____

CONFLICTS DISCLOSURE POLICY

To ensure that the Rhode Island Department of Transportation (RIDOT) maintains the continued confidence and trust of the people of Rhode Island in carrying out its mission, prospective vendors must disclose any family (or other personal) relationships, associations or connections that the vendor, its affiliates, or employees, may currently have with any RIDOT employee. A Conflicts Disclosure Statement shall be submitted to RIDOT from the following:

- ❖ Owners;
- ❖ Directors;
- ❖ Principals;
- ❖ Officers, board members, or individuals with corporate authority;
- ❖ If the vendor is a partnership, the applicant's partners;
- ❖ If the vendor is a limited liability company, its members and managers;
- ❖ Employees with decision-making authority, including executive directors, managers or individuals in a similar position with corporate authority; and
- ❖ Shareholders with a controlling interest.

CONFLICTS DISCLOSURE STATEMENT

RE: Hurrican Saney Repairs - Poppasquash Road, Bristol

I, Stephen P. Lynch, Jr. hereby certify as follows:

I am employed as a President of J.H. Lynch & Sons, Inc.
 [TITLE] [COMPANY]

and to the best of my knowledge:

PLEASE CHECK THE APPROPRIATE BOX:

- I have no family or personal relations currently employed either on a full-time or part-time basis at the Rhode Island Department of Transportation.
- I do have family or personal relations currently employed at the Rhode Island Department of Transportation. Please list their name(s), title(s), and RIDOT Division(s) (if known):

NAME	TITLE	RIDOT DIVISION

If necessary, please add any additional names as attachments hereto.

FOR ILLUSTRATIVE PURPOSES, FAMILY RELATIONS SHALL INCLUDE, WHETHER BY BLOOD, ADOPTION OR MARRIAGE, ANY OF THE FOLLOWING RELATIONSHIPS:

Father, Mother, Son, Daughter, Brother, Sister, Grandfather, Grandmother, Grandson, Granddaughter, Father-In-Law, Mother-In-Law, Brother-In-Law, Sister-In-Law, Son-In-Law, Daughter-In-Law, Stepfather, Stepmother, Stepson, Stepdaughter, Stepbrother, Stepsister, Half-Brother Or Half-Sister, Niece, Nephew, And Cousin

❖ *If you are unsure whether a relationship, association, or connection you have may need to be disclosed, please consult with RIDOT's Legal Office at (401) 222-6510.*

 November 28, 2012
SIGNATURE **DATE**

By signing this form you: (1) certify that the information contained in this form is complete and accurate to the best of your knowledge; and (2) acknowledge your continuing obligation to complete and submit a new Disclosure form when there is any change in your family or personal relations during the course of this Contract.

This document is used for Internal RIDOT purposes only in order to address and avoid any potential conflicts at the inception of the contract process and to avoid any impropriety or the appearance of impropriety during the contract process. Any disclosures made hereto will not prejudice prospective vendors from selection.

**CERTIFICATION REGARDING DEBARMENT, SUSPENSION
AND OTHER RESPONSIBILITY MATTERS
PRIMARY COVERED TRANSACTIONS**

In accordance with the code of Federal Regulations, Part 49 CFR Section 29.510, the prospective primary participant J.H. Lynch & Sons, Inc (name of Authorized Agent), President (Title), being duly sworn (or under penalty of perjury under the laws of the United States), certifies to the best of his/her knowledge and belief, that its principals:

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal department or agency;
- b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification;
- d. Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall list exceptions below.

Exceptions will not necessarily result in denial of award, but, will be considered in determining contractor responsibility. For any exception noted, indicate below to whom it applies, the initiating agency, and the dates of the action. Providing false information may result in criminal prosecution or administrative sanctions. If an exception is noted the contractor must contact the Department to discuss the exception prior to award of the contract.



Signature of Authorized Agent

November 28, 2012

Date

RI Contract No. 2013-DF-045
Hurricane Sandy Repairs to
POPPASQUASH ROAD IN BRISTOL
(HRS-005 and HRS-006 attached)

The Contractor shall not use private property to store equipment or materials without written approval of the property owner. All work must be completed from the State Right-of-Way. No areas shall be disturbed outside the limits of work.

RIDOT will pay for police when they are used. The contractor is required to include flaggers in their bid.

All RIDOT Standard Specifications, latest Compilations and Material Testing requirements apply to this contract.

All work associated with HRS-005 and HRS-006 must be completed by February 14, 2013.

Payment of Lump Sum items will be based on the percentage of work completed. The State will hold 10% of the Lump Sum item until Final Acceptance. A 3% retainage will not be held.

All Construction Layout and Survey will be incidental to this Contract.

All pavement layer thickness shall as required in the project scope. All areas where pavement is removed must be restored within 3 days or the end of the work week.

All pavement markings will be paint.

Performance Bonds and Insurance are required for all work over \$50,000.

The contractor shall certify with their bid that they have sufficient resources to complete the work without having an effect on any existing emergency repair contracts or other RIDOT contracts.

Latest Federal Wage rates shall apply.

Subcontractor agreements must be submitted and accepted by the Department.

RIDOT Hurricane Sandy Guidelines are also attached for your information.

HURRICANE SANDY DAMAGE GUIDELINES

Hurricane Sandy Damage Proposal Protocol

1. Talk with Engineering to obtain photos or take your own for repair location.
2. Verify scope with engineering and your supervisor.
3. Meet with a minimum of two contractors together at the site to discuss the scope of restoration. Obtain proposal from the two contractors, within 24 hours, and forward to the main office. Proposal for work should be lump sum based on the estimated scope from discussions with you and engineering, and supervisor. The contractor's proposal must include schedule for start and completion for work as well as a bond (for restoration/repair work over \$50,000 only).
4. Contract Administration office will provide a letter of approval to start work and Construction Management Office will authorize RE to start work.
5. Construction Management Office to give copies of proposal and projected completion date to Engineering Office to update spreadsheet.
6. Engineering will set up paperwork for FHWA funding.
7. Resident Engineer/Inspector to document activity using daily activity reports and photos.
8. Supervisor must be notified of completed work, perform final inspection with Office of Quality Compliance and Review to accept work and authorize payment.

General Guidelines

1. All work and materials must comply with RI Standards and Specifications.
2. Stay within the original scope of work unless otherwise approved by Construction Management Office.
3. Erosion controls are required, where appropriate.
4. All traffic controls must be installed per the MUTCD.

Construction Guidelines

1. Repairs are to be kept to a minimum, but restored to original line and grade.
2. Materials section must be contacted accordingly for appropriate test as required.
3. Paved shoulder repairs/roadways should be leveled, backfilled with appropriate material, compacted, paved and striped.
4. All paved shoulder/roadway restoration, cut and match line, should be located on the roadway edge line. If the washout is beyond the edge line the cut and match line should be the center of the travel lane. If greater

than ½ of the travel lane... cut and match at the centerline of the roadway.

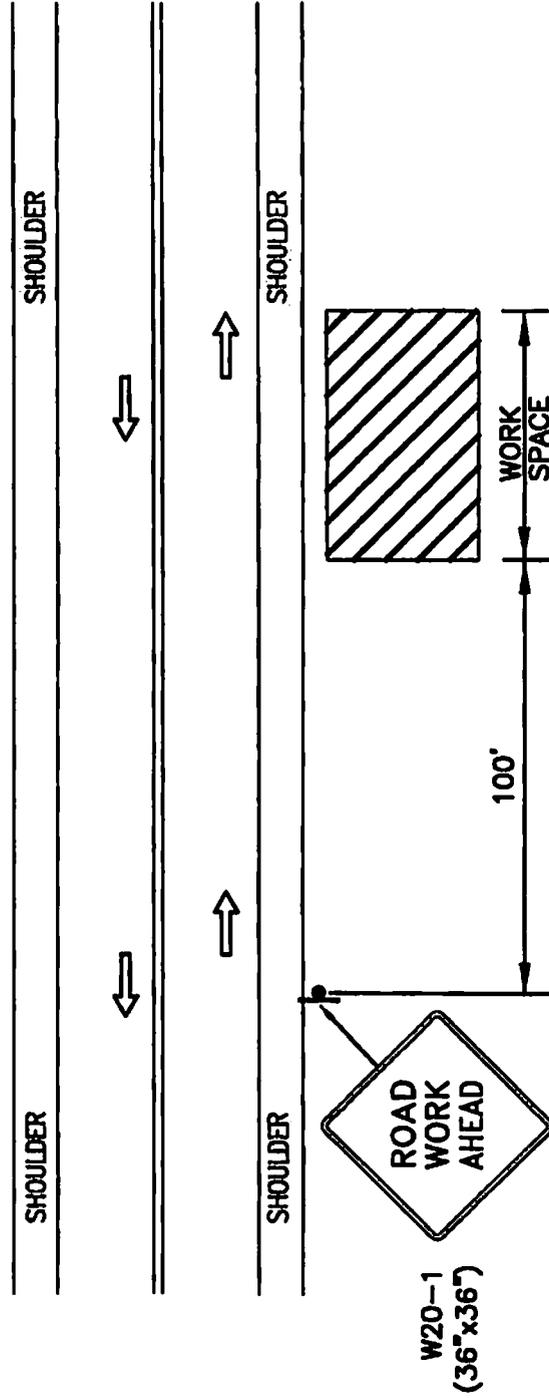
DO NOT LOCATE JOINTS IN THE WHEELPATH

Roadway repairs should include, but not be limited to the following. Saw cut pavement, remove pavement, backfill with gravel borrow subbase and restore flexible pavement in-kind.

5. Landscape shoulders must be restored and stabilized with appropriate materials such as jute mesh, fabric or just plantable soil and seed
6. If the roadway/bridge is closed, this will be considered a priority and the contractor should base his proposal on working a minimum of 12 hours per day and work will take place six days per week, Monday thru Saturday.
7. If the roadway/bridge is open to traffic, the contractor proposal should be based on a minimum 8 hours per day and work will take place six days per week, Monday thru Saturday
8. We do not anticipate any overnight work at this time
9. Holiday work is required except on Thanksgiving Day, Christmas Day and New Year's Day

NOTES:

1. ALL TEMPORARY TRAFFIC CONTROL SET-UPS AND DEVICES AND THEIR INSTALLATION, MAINTENANCE, AND REMOVAL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) LATEST EDITION WITH ALL REVISIONS, AND THE LATEST EDITION OF THE "RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" WITH ALL REVISIONS.
2. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF WORK.
3. TEMPORARY CONSTRUCTION SIGNS SHALL BE PLACED SO THEY DO NOT ENCROACH ON OPEN LANES OF TRAFFIC.
4. CONSTRUCTION VEHICLES SHALL NOT ENCROACH UPON OPEN LANES OF TRAFFIC EXCEPT WHEN ENTERING AND EXITING THE WORK ZONE.
5. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE REMOVED AS SOON AS PRACTICAL WHEN THEY ARE NO LONGER NEEDED. WHEN WORK IS SUSPENDED FOR SHORT PERIODS OF TIME, TEMPORARY TRAFFIC CONTROL DEVICES THAT ARE NO LONGER APPROPRIATE SHALL BE REMOVED OR COVERED.



TYPICAL TRAFFIC CONTROL PLAN FOR

WORK BEYOND THE SHOULDER

NOT TO SCALE

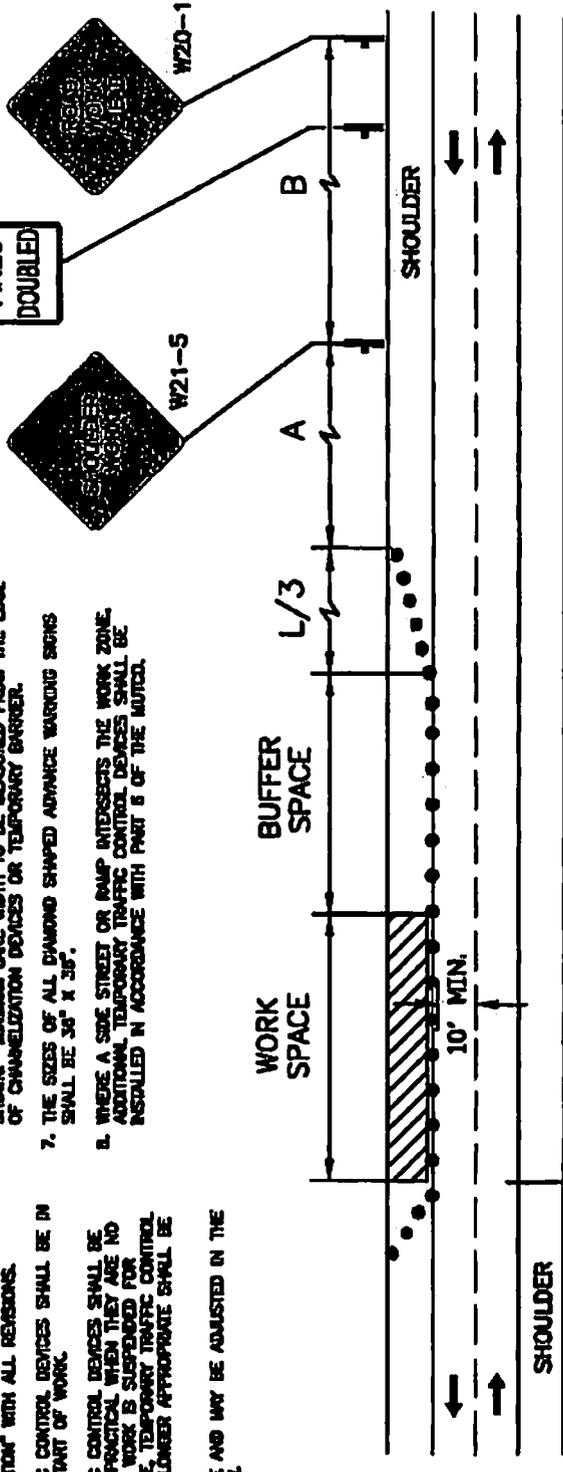
NOTES:

1. ALL TEMPORARY TRAFFIC CONTROL SET-UPS AND DEVICES AND THEIR INSTALLATION, MAINTENANCE, AND REMOVAL SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) WITH ALL REVISIONS, AND THE LATEST EDITION OF THE "BEST STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" WITH ALL REVISIONS.
2. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF WORK.
3. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE REMOVED AS SOON AS PRACTICAL WHEN THEY ARE NO LONGER NEEDED, WHEN WORK IS SUSPENDED FOR SHORT PERIODS OF TIME, TEMPORARY TRAFFIC CONTROL DEVICES THAT ARE NO LONGER APPROPRIATE SHALL BE REMOVED OR COVERED.
4. DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.

5. MINIMUM SPACING OF CHANNELIZATION DEVICES IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH. MINIMUM SPACING OF CHANNELIZATION DEVICES IN A TANGENT SECTION IS EQUAL IN FEET TO TWO TIMES THE SPEED LIMIT IN MPH.
6. MINIMUM LANE WIDTH IS TO BE 10 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF CHANNELIZATION DEVICES OR TEMPORARY BARRIER.
7. THE SIZES OF ALL CHANNEL SHAPED ADVANCE WARNING SIGNS SHALL BE 36" X 36".
8. WHERE A SIDE STREET OR RAMP INTERSECTS THE WORK ZONE, ADDITIONAL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH PART 6 OF THE MUTCD.

ADVISORIES
TRAFFIC FINES DOUBLED

R.I. Std. 27.1.1
 (SEE STD. FOR SIZES AND INSTALL LOCATION)



TAPER AND BUFFER LENGTHS

Speed Limit	Taper Length (L) Buffer Spacing	Buffer Spacing
25 MPH	125	55
30 MPH	180	85
35 MPH	245	120
40 MPH	320	170
45 MPH	540	220
50 MPH	600	260

* Required
 ** Suggested

MINIMUM ADVANCE WARNING SIGN SPACING

Posted Speed Limit & Location	Distance Between Signs (FEET)		
	A	B	C
30 MPH OR LESS in URBAN OR SUBURBAN AREA	100	100	100
35 MPH OR HIGHER in URBAN AREA	350	350	350
35 MPH OR HIGHER in RURAL AREA	500	500	500



TYPICAL SHOULDER CLOSURE ON TWO-LANE ROADWAY

RHODE ISLAND
 DEPARTMENT OF TRANSPORTATION
 TEMPORARY TRAFFIC CONTROL PLAN

NOT TO SCALE

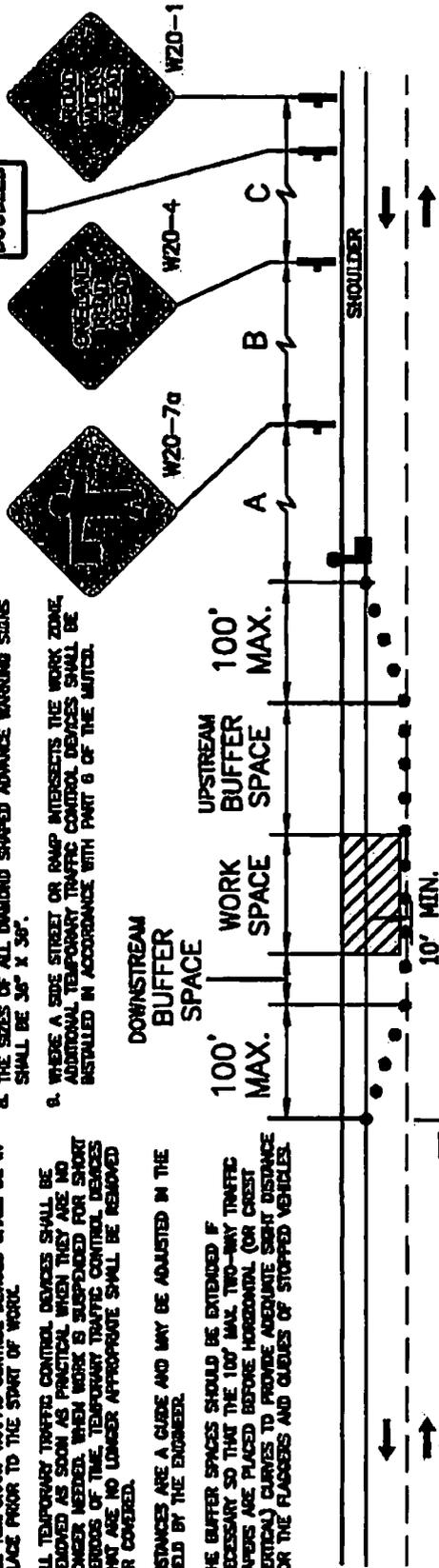
DATE: 12-23-08

NOTES:

1. ALL TEMPORARY TRAFFIC CONTROL SET-UPS AND DEVICES AND THEIR INSTALLATION, MAINTENANCE, AND REMOVAL SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) WITH ALL REVISIONS, AND THE LATEST EDITION OF THE "RODENT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" WITH ALL REVISIONS.
2. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF WORK.
3. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE REMOVED AS SOON AS PRACTICAL WHEN THEY ARE NO LONGER NEEDED. WHEN WORK IS SUSPENDED FOR SHORT PERIODS OF TIME, TEMPORARY TRAFFIC CONTROL DEVICES THAT ARE NO LONGER APPROPRIATE SHALL BE REMOVED OR CORRECTED.
4. DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
5. THE BUFFER SPACES SHOULD BE EXTENDED IF NECESSARY SO THAT THE 100' MAX. TWO-WAY TRAFFIC TAPERS ARE PLACED BEFORE HORIZONTAL (OR CREST VERTICAL) CURVES TO PROVIDE ADEQUATE SIGHT DISTANCE FOR THE FLAGGERS AND QUEUES OF STOPPED VEHICLES.

6. MAXIMUM SPACING OF CHANNELIZATION DEVICES IN THE 100' MAX. TWO-WAY TRAFFIC TAPERS IS 25 FEET. MAXIMUM SPACING OF CHANNELIZATION DEVICES IN A TANGENT SECTION IS EQUAL IN FEET TO TWO TIMES THE SPEED LIMIT IN MPH.
7. MINIMUM LANE WIDTH IS TO BE 10 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF CHANNELIZATION DEVICES OR TEMPORARY BARRIER.
8. THE SIZES OF ALL DIAMOND SHAPED ADVANCE WARNING SIGNS SHALL BE 36" X 36".
9. WHERE A SIDE STREET OR RAMP INTERSECTS THE WORK ZONE, ADDITIONAL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH PART 6 OF THE MUTCD.

WORK ZONE
TRAFFIC FINES DOUBLED
 R.I.S.D. 27.1.1
 (SEE STD. FOR SIZES AND INSTALL. LOCATIONS)



BUFFER LENGTHS

Speed Limit	Upstream Buffer Space (Feet)
25 MPH	55
30 MPH	85
35 MPH	120
40 MPH	170
45 MPH	220
50 MPH	280

* Suggested

MINIMUM ADVANCE WARNING SIGN SPACING

Posted Speed Limit & Location	Distance Between Signs (Feet)		
	A	B	C
25 MPH OR LESS IN URBAN OR RURAL AREA	100	100	100
35 MPH OR GREATER IN URBAN AREA	350	350	350
35 MPH OR GREATER IN RURAL AREA	500	500	500

R.I.S.D. 27.1.1

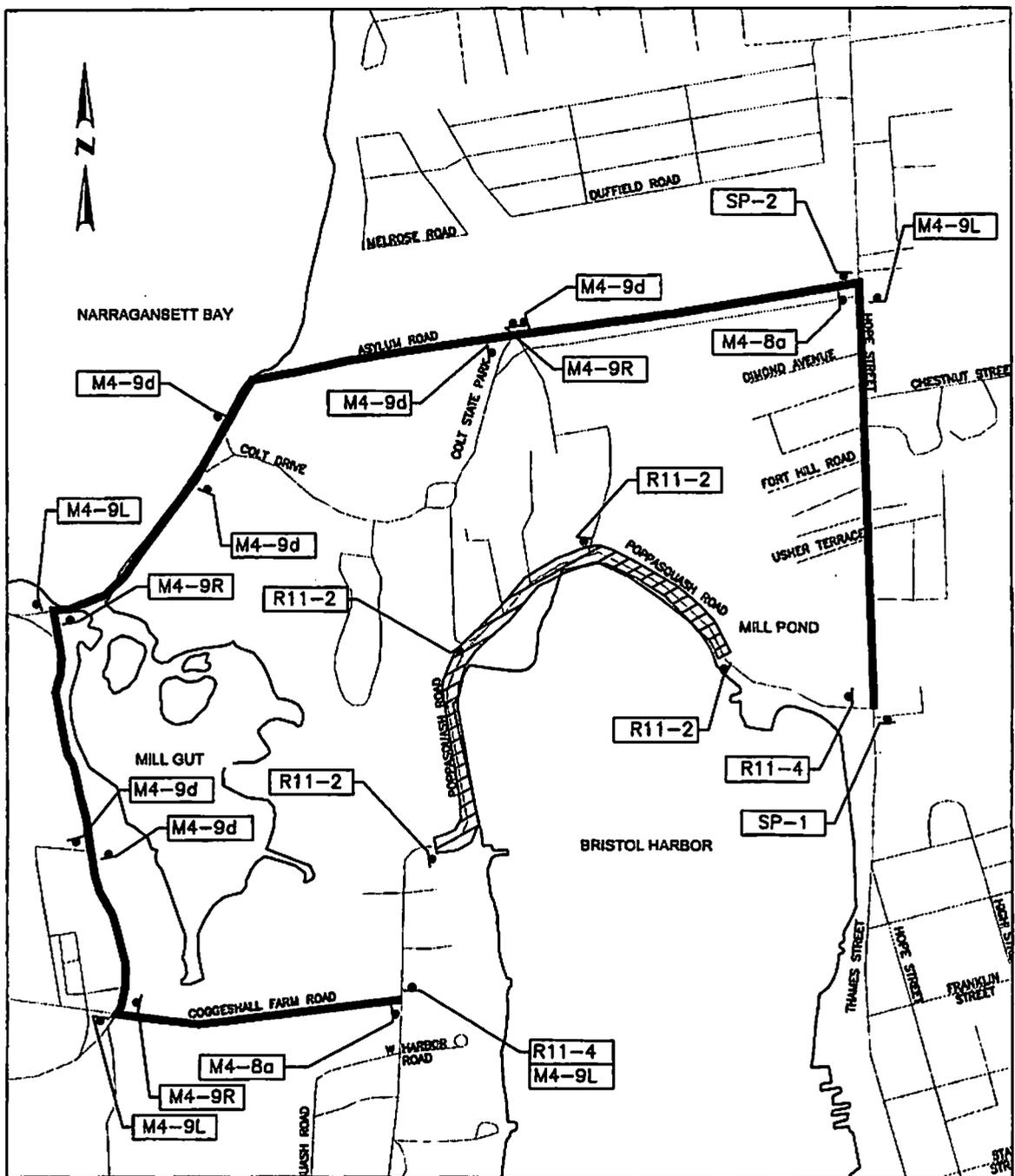


RHODE ISLAND
 DEPARTMENT OF TRANSPORTATION
 TEMPORARY
 TRAFFIC CONTROL PLAN

**TYPICAL LANE CLOSURE
 ON
 TWO-LANE ROADWAY**

NOT TO SCALE

DATE: 12-23-08



LEGEND

- ↑ SIGN
 - I PORTABLE CHANGEABLE MESSAGE SIGN (PCMS-A/B)
 - DIRECTION OF TRAVEL
 - DETOUR PATH
 - ▨ CLOSED ROADWAY
- | | | | | |
|-------|-------|-------|-------|-------|
| | | | | |
| | | | | |
| M4-9d | M4-9R | M4-9L | M4-8a | R11-2 |
| | | | | |
| | | | R11-4 | |
| | | | SP-1 | SP-2 |

DETOUR PLAN
FOR CLOSURE OF POPPASQUASH ROAD
BRISTOL, RI

NOT TO SCALE

- NOTE:
1. FINAL LOCATION OF SIGNS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
 2. THE CONTRACTOR SHALL COORDINATE WITH RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT FOR THE APPROVAL OF THE DETOUR THROUGH COGGESHALL FARM ROAD.

MEMORANDUM

To: Eric Atkins, P.E. / Green International Affiliates
Michael A. Cruz, P.E./Green International Affiliates

From: Douglas J. Aghjayan, P.E.

Date: November 19, 2012

Project: Emergency Culvert Repair for Poppasquash Road
Culvert No. 2
Bristol, Rhode Island
GEI Project 13004-0

Re: Subsurface Conditions and Geotechnical Culvert Support Recommendations

Attachment: Boring Log B2

Copy:

This memorandum presents the results of our subsurface explorations and geotechnical recommendations for the emergency repairs to Culvert No. 2 located on Poppasquash Road in Bristol, Rhode Island. Our work for this project was authorized by Green International Affiliates.

Site Description

The site is located along Poppasquash Road in Bristol, Rhode Island. The site begins about 200 feet west of the intersection of Hope Street and Poppasquash Road, and extends a distance of about 3,900 feet along the road. The site is bordered on the south by Bristol Harbor and on the north by Mill Pond, Colt State Park, and private property.

Culvert No. 2 is a single-cell culvert located about 700 feet southwest of the entrance to Colt State Park that also passes beneath the road. Culvert No. 2 allows flow between the harbor and a wetland area. The culvert is constructed from unmortared stone. Culvert wingwalls consist of crudely placed concrete blocks and stone.

Subsurface Explorations

GEI engaged Geologic-Earth Explorations of Norfolk, Massachusetts to drill boring B2 near Culvert No. 2 at the site on November 9, 2012. B2 was drilled using rotary-wash methods. Standard Penetration Tests were performed in the boring beginning near the ground surface and at five-foot intervals thereafter. B2 was terminated due to refusal in rock at a depth of 27 feet. The borehole was backfilled with soil cuttings upon completion and topped off with asphalt cold patch. The boring log is attached.

Subsurface Conditions

The major soil layers encountered in the boring are described below, starting from the ground surface and proceeding downward. The soil conditions are known only at the boring location. Subsurface conditions between may vary significantly at other locations.

Asphalt: An approximately 4-inch-thick layer of asphalt was encountered at the ground surface.

Fill: An approximately 5-foot-thick layer of fill was encountered beneath the asphalt. The fill consisted mostly of dark gray fine to coarse sand with varying amounts of silt.

Sand and Silt: An approximately 13-foot-thick layer of silt and sand was encountered beneath the fill. The upper portion of the sand and silt layer consisted mostly non- to low plasticity fines with varying amounts of fine sand. The layer graded to mostly fine sand with non-plastic fines with depth. Two SPT N-value in this layer were 2 and 41 blows per foot. The upper portion of this layer may be topsoil/tidal mud that was buried when the road was constructed.

Weathered Shale: Dark gray to black severely to completely weathered shale was encountered beneath the sand and silt layer. Samples of the weathered shale contained material that had completely decomposed into soil to small intact moderately hard pieces up to about 1/4-inch in size.

Groundwater levels were not measured in the borings. However, given the close proximity of both borings to Bristol Harbor, it is reasonable to assume that the groundwater is roughly at the same elevation as the harbor water and that groundwater levels fluctuate with the harbor tide.

Geotechnical Recommendations

Based on discussions with Green, we understand that the existing culvert will be replaced with a new two-cell precast concrete culvert. We have assumed that the invert of the new culvert will be the same as the existing culvert.

We expect that the new culvert can bear directly on the existing natural sand and silt, or a 6- to 12-inch thick layer of compacted gravel bedding layer that extends down to the natural sand and silt. The gravel bedding layer should conform to RIDOT M.01.04 Table I Column II. A geotextile satisfying US 205NW criteria (such as Carthage Mills FX-80HS or equivalent) may be placed between the natural soil and gravel bedding if desired.

BORING INFORMATION

LOCATION: Sea Plan
 GROUND SURFACE EL. (ft): NM DATE START/END: 11/9/2012 - 11/9/2012
 VERTICAL DATUM: _____ DRILLING COMPANY: Geologic, Inc.
 TOTAL DEPTH (ft): 27.0 DRILLER NAME: J. Stokes
 LOGGED BY: E. Fazbc RIG TYPE: Acker Soil Scout

BORING

B2

PAGE 1 of 2

DRILLING INFORMATION

HAMMER TYPE: Donut Hammer - rope and cathead CASING I.D./O.D.: 4 inch/ 4.5 inch CORE BARREL TYPE: NA
 AUGER I.D./O.D.: NA / NA DRILL ROD O.D.: 3.5 CORE BARREL I.D./O.D. NA / NA
 DRILLING METHOD: Driven casing and washed with rotary tooling.
 WATER LEVEL DEPTHS (ft): Not measured

ABBREVIATIONS: Pen = Penetration Length S = Split Spoon Sample Cp = Pocket Penetrometer Strength NA, NM = Not Applicable, Not Measured
 Rec = Recovery Length C = Core Sample Sv = Pocket Torvane Shear Strength Blows per 6 in.: 140-lb hammer falling
 RQD = Rock Quality Designation U = Undisturbed Sample LL = Liquid Limit 30 inches to drive a 2-inch-O.D.
 = Length of Sound Cores > 4 in / Pen. % SC = Sonic Core PI = Plasticity Index split spoon sampler.
 WOR = Weight of Rods DP = Direct Push Sample PID = Phototization Detector
 WOH = Weight of Hammer HSA = Hollow-Stem Auger I.D./O.D. = Inside Diameter/Outside Diameter

Elev. (ft)	Depth (ft)	Sample Information				Drilling Remarks/ Field Test Data	Layer Name	Soil and Rock Description
		Sample No.	Depth (ft)	Pen./ Rec. (in)	Blows per 6 in. or RQD			
		S1	0.5 to 2.5	24/13	30-28-40-29		ASPHALT	ASPHALT S1: SILTY SAND WITH GRAVEL (SM); ~60% fine to coarse sand, ~20% fine gravel, ~20% non-plastic fines. Dark brown. [FILL]
	5	S2	4 to 6	24/10	18-12-10-10		FILL	S2: SILTY SAND WITH GRAVEL (SM); ~50% fine to coarse sand, ~35% fine to coarse gravel up to 3/4 in, ~15% non-plastic fines. Dark gray.
	10	S3	9 to 11	24/8	5-1-1-1		SAND AND SILT	S3: SILT WITH SAND (ML); ~75% low plasticity fines, ~25% fine sand with traces of roots. Dark gray to black. Slight organic-like odor.
	15	S4	14 to 16	24/20	11-18-23-24			S4: SILTY SAND (SM); ~80% fine to medium sand, ~40% non-plastic fines. Dark gray, brown.
	20	S5	19 to 21	24/18	29-21-35-44		WEATHERED ROCK	S5: SHALE; Severely weathered, decomposed to soil and small (<1/2 in) stony pieces. Dark gray.

GEI WOBURN STD 1-LOCATION-LAYER NAME 13004-0 BORING LOGS.GPJ GEI DATA TEMPLATE 2011.GDT 11/12/12

NOTES:

PROJECT NAME: Poppasquash Rd. Culvert Repairs
 CITY/STATE: Bristol, RI
 GEI PROJECT NUMBER: 13004-0



LOCATION: See Plan

GROUND SURFACE EL. (ft): NM

VERTICAL DATUM:

DATE START/END: 11/8/2012 - 11/8/2012

DRILLING COMPANY: Geologic, Inc.

BORING

B2

PAGE 2 of 2

Elev. (ft)	Depth (ft)	Sample Information				Drilling Remarks/ Field Test Data	Layer Name	Soil and Rock Description
		Sample No.	Depth (ft)	Pen./ Rec. (in)	Blows per 6 in. or RQD			
	25	S6	24 to 25.4	17/12	64-67- 120/5*	Encountered hard bedrock at 27 ft.	WEATHERED ROCK	S6: SHALE; Similar to S5.
								Bottom of borehole at 27 ft. Backfilled with cuttings and patched with asphalt.
	30							
	35							
	40							
	45							
	50							

GEI WOBURN STD 1-LOCATION-LAYER NAME 13004-0 BORING LOGS.GPJ GEI DATA TEMPLATE 2011.GDT 11/12/12

NOTES:

PROJECT NAME: Poppasquash Rd. Culvert Repairs

CITY/STATE: Bristol, RI

GEI PROJECT NUMBER: 13004-0



**Rhode Island Department of Transportation
Operations - Materials Section**

Contract Number 2006-EH-011

Project Improvements to Poppasquash Rd.

FAP STP-DESN-001

Cored By RIDOT / Materials Coring Crew **Date:** 3/10/2010

City/Town Bristol

Limits Hope St. to Coggeshall Farm Rd

Comments All in Travel Lane. Culvert Locations: 1 - 37' S of pole 8; 2 - 32' N of pole 36.

LOCATION			SURFACE		BINDER	BASE	GRAVEL		
Number	Station	OffSet	Depth Description	Depth Description	Depth Description	Depth Description	TOTAL DEPTH	FROM	TO
01	38' South of Pole 2	5' Rt Curb		5.00 " Class 11			5.00 "	5 "	17 "
02	31' Before Culvert 1	4' Rt Curb		3.25 " Class 11			3.25 "	3.25 "	15.25 "
03	32' After culvert 1	5' Rt Curb		3.50 " Class 11			3.50 "	3.5 "	15.5 "
04	@ Pole 15	11' Rt Curb		5.25 " Class 11			5.25 "	5.25 "	17.25 "
05	@ Pole 24	6' Rt Curb		5.00 " Class 11			5.00 "	5 "	17 "
06	16' Befort culvert 2	6' Rt Curb		2.50 " Class 11			2.50 "	2.5 "	14.5 "
07	26' After Culvert 2	6' Rt Curb		4.00 " Class 11			4.00 "	4 "	16 "
08	@ Pole 39	7' Rt Curb		4.50 " Class 11			4.50 "	4.5 "	16.5 "
09	63' North of Pole	8' Rt Curb		3.00 " Class 11			3.00 "	3 "	15 "

P.E.

Final

Special Projects

Bel 3/30/10

MATERIALS ENGINEER / DATE

**Rhode Island Department of Transportation
Operations - Materials Section**

Contract Number 2006-EH-011

Project Improvements to Poppasquash Rd.

FAP STP-DESN-001

Cored By RIDOT / Materials Coring Crew **Date:** 3/10/2010

City/Town Bristol

Limits Hope St. to Coggeshall Farm Rd

Comments All in Travel Lane. Culvert Locations: 1 - 37' S of pole 8; 2 - 32' N of pole 36.

LOCATION			SURFACE		BINDER	BASE	GRAVEL		
Number	Station	OffSet	Depth Description	Depth Description	Depth Description	Depth Description	TOTAL DEPTH	FROM	TO
10	@ Pole 58	7' Rt Curb		2.75 " Class I1			2.75 "	2.75 "	14.75 "
	South Bound								
11	@ Pole 58	9' Rt Curb		3.75 " Class I1			3.75 "	3.75 "	15.75 "
	North Bound								
12	63' North of Pole 46	7' Rt Curb		3.00 " Class I1			3.00 "	3 "	15 "
	North Bound								
13	@ Pole 39	6' Rt Curb		3.75 " Class I1			3.75 "	3.75 "	15.75 "
	North Bound								
14	10' Before Culvert 2	7' Rt Curb		3.00 " Class I1			3.00 "	3 "	15 "
	North Bound								
15	22' After Culvert 2	5' Rt Curb		3.25 " Class I1			3.25 "	3.25 "	15.25 "
	North Bound								
16	@ Pole 24	6' Rt Curb		5.00 " Class I1			5.00 "	5 "	17 "
	North Bound								
17	@ Pole 15	9' Rt Curb		5.00 " Class I1			5.00 "	5 "	17 "
	North Bound								
18	23' Before Culvert 1	7' Rt Curb		2.25 " Class I1			2.25 "	2.25 "	14.25 "
	North Bound								

P.E.

Final

Special Projects

Bak 3/30/10
MATERIALS ENGINEER / DATE

**Rhode Island Department of Transportation
Operations - Materials Section**

Contract Number 2006-EH-011 **Project** Improvements to Poppasquash Rd.
FAP STP-DESN-001 **Cored By** RIDOT / Materials Coring Crew **Date:** 3/10/2010
City/Town Bristol **Limits** Hope St. to Coggeshell Farm Rd
Comments All in Travel Lane. Culvert Locations: 1 - 37' S of pole 8; 2 - 32' N of pole 36.

LOCATION		Offset	SURFACE Depth Description	BINDER Depth Description	BASE Depth Description	GRAVEL	
Number Description	Station					TOTAL DEPTH	FROM
19	45' After Culvert 1 North Bound	5' Rt Curb	3.50 " Class 11	2.50 " Sand Mix		6.00 "	6" 18"
20	28' South of Pole 2 North Bound	6' Rt Curb	5.75 " Class 11			5.75 "	5.75" 17.75"

P.E. Final Special Projects

Bob [Signature]
 MATERIALS ENGINEER / DATE

**Rhode Island Department of Transportation
Operations - Materials Section**

Contract Number: 2008-EH-011

Date Tested: 03/22/2010

FAP: STP-DESN-001

Date Sampled: 03/10/2010

Cored By:

Location: Improvements to Poppasquash Rd.

Comments: All in Travel Lane. Culvert Locations: 1 - 37' S of pole 8; 2 - 32' N of pole 36.

SAMPLE NO.	PERCENT PASSING SIEVE						Soil Class	Remarks
	1/2 "	3/8 "	# 4	# 10	# 40	# 200		
SPECIFICATION	50/85	45/80	40/75	-----	0/45	0/10		
01	77.7%	71.9%	57.5%	44.9%	21.8%	3.5%	A-1-a	Conforms
02	74.0%	67.5%	53.9%	44.1%	17.4%	2.5%	A-1-a	Conforms
03	76.8%	71.6%	58.5%	45.0%	17.5%	3.6%	A-1-a	Conforms
04	74.6%	69.6%	58.1%	47.1%	22.7%	2.7%	A-1-a	Conforms
05	62.4%	57.0%	46.8%	37.9%	18.0%	2.3%	A-1-a	Conforms
08	80.3%	55.5%	46.1%	35.9%	17.7%	2.4%	A-1-a	Conforms
07	66.7%	61.3%	50.8%	42.4%	20.9%	3.9%	A-1-a	Conforms
08	66.5%	61.0%	47.7%	38.6%	12.0%	1.8%	A-1-a	Conforms
09	59.2%	54.3%	44.8%	37.0%	17.3%	3.0%	A-1-a	Conforms
10	62.1%	58.1%	44.6%	38.8%	16.3%	2.0%	A-1-a	Conforms
11	64.4%	59.5%	47.8%	38.4%	16.3%	1.3%	A-1-a	Conforms
12	72.2%	66.9%	54.4%	45.6%	19.9%	3.4%	A-1-a	Conforms
13	71.6%	65.3%	53.2%	42.3%	17.7%	2.2%	A-1-a	Conforms
14	69.8%	65.3%	55.3%	47.8%	23.9%	3.7%	A-1-a	Conforms
15	64.5%	59.4%	48.8%	42.5%	19.6%	1.9%	A-1-a	Conforms
16	55.8%	51.6%	41.7%	33.7%	13.9%	2.0%	A-1-a	Conforms
17	64.9%	60.6%	50.6%	43.8%	21.5%	2.2%	A-1-a	Conforms
18	81.5%	76.6%	69.5%	43.9%	19.1%	4.1%	A-1-a	Conforms
19	62.5%	59.8%	52.8%	45.4%	24.6%	5.6%	A-1-a	Conforms

David Cook 3-30-10

TECHNICIAN / DATE

Blz 3/30/10

MATERIALS ENGINEER / DATE

TECHNICIAN / DATE

**Rhode Island Department of Transportation
Operations - Materials Section**

Contract Number: 2008-EH-011

Date Tested: 03/22/2010

FAP: STP-DESN-001

Date Sampled: 03/10/2010

Cored By:

Location: Improvements to Poppasquash Rd.

Comments: All in Travel Lane. Culvert Locations: 1 - 37' S of pole 8; 2 - 32' N of pole 36.

SAMPLE NO.	PERCENT PASSING SIEVE						Soil Class	Remarks
	1/2 "	3/8 "	# 4	# 10	# 40	# 200		
SPECIFICATION	50/85	45/80	40/75	-----	0/45	0/10		
20	64.4%	58.4%	48.3%	39.1%	19.9%	3.6%	A-1-a	Conforms

David Cook 3-30-10

TECHNICIAN / DATE

MATERIALS ENGINEER / DATE

TECHNICIAN / DATE

EXISTING	NEW	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
EDGE OF PAVEMENT	EDGE OF PAVEMENT	1.10	UNDERDRAIN	7.2	GRANITE TRANSITION CURB (VERTICAL FACE TO SLOPE FACE)	80	ADJUST CATCH BASIN TO GRADE
BORN	BORN	1.15	CONCRETE CONNECTING COLLAR	7.3	SPERMIOUS CONCRETE 1/2" CURB	81	ADJUST CATCH BASIN TO MANHOLE
CLUB	CLUB	1.20	CONCRETE HEADWALLS FOR PIPE CHANGERS	7.4	SPERMIOUS BORN (CONSTRUCTION METHOD A)	82	ADJUST CURB STOP TO GRADE
CLAMBOARD	CLAMBOARD	1.25	SHALLOW HEADWALLS FOR MULTIPLE 3'-4" TO 7'-0" PIPE CHANGERS	7.5	SPERMIOUS BORN (CONSTRUCTION METHOD B)	83	ADJUST DRAINAGE MANHOLE TO GRADE
MANHOLE	MANHOLE	1.30 (DA)	PRECAST CONCRETE FLARED END SECTION	7.6	CLUB SETTING DETAIL	84	ADJUST ELECTRIC MANHOLE TO GRADE
UTILITY POLE	UTILITY POLE	1.35	BRICK/SOLID BLOCK 4'-0" ROUND MANHOLE	7.7	SPERMIOUS CONCRETE DITCH	85	ADJUST FRAME AND COVER TO GRADE
POLE CAP	POLE CAP	1.40 (DA)	BRICK/SOLID BLOCK 5'-0" OR 6'-0" ROUND MANHOLE	7.8	IMPACT DITCH	86	ADJUST FRAME AND COVER TO GRADE
LAWNPIPE	LAWNPIPE	1.45	BRICK/SOLID BLOCK TYPE "D" SQUARE CATCH BASIN	7.9	PAVED WATERWAY	87	ADJUST GAS GATE BOX TO GRADE
SOB	SOB	1.50	BRICK/SOLID BLOCK TYPE "T" SQUARE CATCH BASIN	7.10	GRADED DITCH	88	ADJUST HANDHOLE TO GRADE
SHOULDER	SHOULDER	1.55	SOLID BLOCK FLUSH SQUARE CATCH BASIN	7.11	GRADED DITCH PROSSON CHECK AND SAT FENCE COMBINED	89	ADJUST SANITARY SEWER MANHOLE TO GRADE
STORMDRAIN	STORMDRAIN	1.60	BRICK/SOLID BLOCK TYPE "D" ROUND CATCH BASIN	7.12	GRADED DITCH AND STABLE PROSSON CHECK	90	ADJUST TELEPHONE MANHOLE TO GRADE
SAFETY STRIP	SAFETY STRIP	1.65	BRICK/SOLID BLOCK ROUND CATCH BASIN WITH CUTTER INLET	7.13	LOG AND HALF CHECK DAM	91	ADJUST WATER GATE BOX TO GRADE
WIDER MARK	WIDER MARK	1.70	BRICK/SOLID BLOCK TYPE "T" ROUND CATCH BASIN	7.14	DEWATERING BASIN	92	ADJUST HANDHOLE TO GRADE
CHG MARK	CHG MARK	1.75	SOLID BLOCK FLUSH ROUND CATCH BASIN	7.15	GRADED DITCH	93	ADJUST TELEPHONE MANHOLE TO GRADE
TELEPHONE DUCT	TELEPHONE DUCT	1.80	BRICK/SOLID BLOCK 5'-0" OR 6'-0" ROUND CATCH BASIN	7.16	NET STONE MASONRY RETAINING WALL	94	STORMDRAIN CONCRETE STRUCTURE
ELECTRIC DUCT	ELECTRIC DUCT	1.85	SOLID BLOCK SHALLOW TYPE "T" SQUARE CATCH BASIN	7.17	RUBBLE MASONRY WALL	95	BUILD NEW STRUCTURE OVER EXISTING PIPE
PLUG AND CAP PIPE	PLUG AND CAP PIPE	1.90	SOLID BLOCK SHALLOW TYPE "D" SQUARE CATCH BASIN	7.18	CONCRETE RETAINING WALL	96	CLEAN CATCH BASIN
ADJUSTED UTILITY	ADJUSTED UTILITY	1.95	BRICK/SOLID BLOCK DROP INLET	7.19	STONE MASONRY WALL	97	CUT AND CAP PIPE WITH RESISTANT (ALL SIZES)
FLARED END SECTION	FLARED END SECTION	1.100	BRICK/SOLID BLOCK ROUNDED MANHOLE OF CATCH BASIN GREATER THAN 12'-0"	7.20	CONCRETE MASONRY WALL	98	CLEAN AND FLUSH PIPE
HEADWALL	HEADWALL	1.105	PRECAST 4'-0" ROUND MANHOLE	7.21	POST AND RAILINGS FOR RURAL HIGHWAY	99	CLEARING AND EXCAVATING
WATER OR GAS GATE	WATER OR GAS GATE	1.110	PRECAST 5'-0" ROUND MANHOLE	7.22	POST AND MULTIPLE RAILINGS FOR RURAL HIGHWAYS	100	CLEAN MANHOLE
CATCH BASIN	CATCH BASIN	1.115	PRECAST 6'-0" ROUND MANHOLE	7.23	PRECISE TYPE "A" MANHOLE	101	CUT AND PLUG PIPE (ALL TYPES, ALL SIZES)
MANHOLE	MANHOLE	1.120	PRECAST 4'-0" OF 6'-0" SQUARE MANHOLE OR CATCH BASIN	7.24	HEAVY DUTY TYPE "M" MANHOLE	102	REMOVE AND DISPOSE SPERMIOUS CURB
HYDRANT	HYDRANT	1.125	PRECAST 4'-0", 5'-0" OR 6'-0" ROUND CATCH BASIN	7.25	ALUMINUM LIGHTING STANDARDS	103	REMOVE AND DISPOSE CONCRETE CURB
SHOULDER OR CENTERLINE	SHOULDER OR CENTERLINE	1.130	PRECAST CONCRETE DROP INLET	7.26	BI-DIRECTIONAL CONTROL DEVICE	104	REMOVE AND DISPOSE CATCH BASIN
STATE HIGHWAY LINE	STATE HIGHWAY LINE	1.135	PRECAST CONCRETE DROP INLET LATERAL OUTLET	7.27	STREET SIGN MOUNTING DETAIL	105	REMOVE AND DISPOSE DRAIN BASIN
STATE FERRYWAY LINE	STATE FERRYWAY LINE	1.140	CATCH BASIN AND MANHOLE STEP	7.28	POLYETHYLENE DRAIN WITH MANHOLE	106	REMOVE AND DISPOSE FRAME AND COVER
PERMANENT EASEMENT LINE	PERMANENT EASEMENT LINE	1.145	CONCRETE COLLARS	7.29	PIPE PLASTIC PIPE TYPE 8 BARBERAGE	107	REMOVE AND DISPOSE FLARED END SECTION
TEMPORARY EASEMENT LINE	TEMPORARY EASEMENT LINE	1.150	LIGHT-DUTY SQUARE FRAME AND ROUND COVER	7.30	CHAIN LINK FENCE 3'-0" TO 4'-0"	108	REMOVE AND DISPOSE FRAME AND COVER
PROPERTY LINE	PROPERTY LINE	1.155	HEAVY DUTY SQUARE FRAME AND ROUND COVER	7.31	CHAIN LINK FENCE 5'-0" TO 6'-0"	109	REMOVE AND DISPOSE FIRE HYDRANT
CITY OF TOWN LINE	CITY OF TOWN LINE	1.160	LIGHT-DUTY ROUND FRAME AND COVER	7.32	WOMEN WIRE RIGHT-OF-WAY FENCE (SEE POST)	110	REMOVE AND DISPOSE FLEETIBLE PAVEMENT
PAVED WATERWAY	PAVED WATERWAY	1.165	HEAVY-DUTY ROUND FRAME AND COVER	7.33	TYPICAL CLADDING INSULATION	111	REMOVE AND DISPOSE FLEETIBLE PAVEMENT
CENTUR LINE	CENTUR LINE	1.170	SQUARE FRAME AND GRAZE	7.34	STEEL BEAM CLADDING	112	REMOVE AND DISPOSE LIGHT AND FOUNDATION
OPEN DITCH	OPEN DITCH	1.175	SQUARE FRAME AND GRAZE (BICYCLE SAFE)	7.35	STEEL BEAM CLADDING DOUBLE FACED ASSEMBLY	113	REMOVE AND DISPOSE MEDIUM BARRIER
R.I. HIGHWAY BOUNDARY	R.I. HIGHWAY BOUNDARY	1.180	HIGH CAPACITY FRAME AND GRAZE	7.36	STEEL BEAM CLADDING PUTLOGS	114	REMOVE AND DISPOSE MANHOLE
STONE BOUNDARY	STONE BOUNDARY	1.185	ROUND FRAME AND GRAZE	7.37	GLASSHOLE END SECTION	115	REMOVE AND DISPOSE WELDER MARKER
RETAINING WALL	RETAINING WALL	1.190	PRECAST CONCRETE CURB (STRAIGHT)	7.38	VERTICAL END SECTION (SINGLE FACE)	116	REMOVE AND DISPOSE OBSERVATION WELL
FIELD STONE WALL	FIELD STONE WALL	1.195	PRECAST CONCRETE CURB (STADIUM)	7.39	ANCHORAGE DETAILS APPROACH END SECTION	117	REMOVE AND DISPOSE PIPE
BORINGS	BORINGS	1.200	3'-0" PRECAST CONCRETE TRANSITION CURB	7.40	ANCHORAGE DETAILS TRAILING END SECTION	118	REMOVE AND DISPOSE PAVEMENT AND RAIL BACK
FENCE	FENCE	1.205	6'-0" PRECAST CONCRETE TRANSITION CURB	7.41	STEEL BACKED THIN CLADDING	119	REMOVE AND DISPOSE ROAD BASE
WOOD OR BRUSH LINE	WOOD OR BRUSH LINE	1.210	PRECAST CONCRETE INLET STONE (FOR SQUARE CATCH BASIN)	7.42	DOUBLE-FACED PRECAST MEDIUM BARRIER	120	REMOVE AND DISPOSE SOIL
TREES	TREES	1.215	PRECAST CONCRETE INLET STONE (FOR ROUND CATCH BASIN)	7.43	SINGLE-FACED PRECAST MEDIUM BARRIER	121	REMOVE AND DISPOSE TRAFFIC SIGNAL SYSTEM
RAMP OR SLOPE	RAMP OR SLOPE	1.220	PRECAST CONCRETE APPROX STONE (FOR SQUARE CATCH BASIN)	7.44	PRECAST MEDIUM BARRIER TRANSITION UNIT	122	REMOVE AND DISPOSE SCREWDRIVER
RETAINED AREA	RETAINED AREA	1.225	PRECAST CONCRETE SLOPED FACE CURB (STRAIGHT)	7.45	PRECAST MEDIUM BARRIER FOR TEMPORARY TRAFFIC CONTROL	123	REMOVE AND DISPOSE TELEPHONE DUCT BOWNS
BLADING	BLADING	1.230	PRECAST CONCRETE SLOPED FACE CURB (SPERMIOUS)	7.46	GRANITE CONCRETE SCHEMALS	124	REMOVE AND DISPOSE UTILITY POLE
FOUNDATION	FOUNDATION	1.235	PRECAST CONCRETE SLOPED FACE TRANSITION CURB	7.47	SPERMIOUS CONCRETE SCHEMALS	125	REMOVE AND DISPOSE PAVED WATERWAY
BUILDING TO BE REMOVED	BUILDING TO BE REMOVED	1.240	GRANITE CURB (STRAIGHT)	7.48	WHEELWARP RAMP	126	FIELD FACED RAMP FLARED END UNDERPAVEMENT
RAILROAD TRACKS	RAILROAD TRACKS	1.245	GRANITE CURB (CORNER)	7.49	WHEELWARP RAMP FOR LIMITED RIGHT-OF-WAY AREAS	127	FLARED CLADDING END TREATMENT
CUT AND PATCH	CUT AND PATCH	1.250	3'-0" GRANITE TRANSITION CURB	7.50	DETECTABLE WARNING SYSTEM	128	IMPACT ATTENUATOR
OUT SLOPE	OUT SLOPE	1.255	6'-0" GRANITE TRANSITION CURB	7.51	TYPE PROTECTION DEVICE	129	IMPERVIOUS DITCH LINER
FLL SLOPE	FLL SLOPE	1.260	GRANITE WHEELWARP RAMP TRANSITION CURB	7.52	DIP LINE TREE PROTECTION DEVICE FOR EXISTING TREES	130	LIMIT OF DISTURBANCE
ROCK CUT	ROCK CUT	1.265	GRANITE 2'-0" RADIUS CORNER	7.53	SHRUB PROTECTION DEVICE	131	LIMIT OF RESURFACING
SPOT GRADE	SPOT GRADE	1.270	GRANITE INLET STONE (FOR SQUARE CATCH BASIN)	7.54	TREE WELL	132	1' LOAN AND SEE
AREA GRABED TO DRAIN	AREA GRABED TO DRAIN	1.275	GRANITE INLET STONE (FOR ROUND CATCH BASIN)	7.55	TYPE WELL		
GRADED HWY TO SEC 5.1.0	GRADED HWY TO SEC 5.1.0	1.280	GRANITE APPROX STONE (FOR SQUARE CATCH BASIN)	7.56			
BUILD HWY 5 SELF FENCE @ 573 5.1.6	BUILD HWY 5 SELF FENCE @ 573 5.1.6	1.285	GRANITE APPROX STONE (FOR ROUND CATCH BASIN)	7.57			
EDGE OF WETLAND	EDGE OF WETLAND	1.290	GRANITE SLOPED FACE CURB	7.58			
WETLAND RESTRICTION	WETLAND RESTRICTION	1.295	GRANITE SLOPED FACE TRANSITION CURB	7.59			
AREA SUBJECT TO STORM FLOW	AREA SUBJECT TO STORM FLOW	1.300					
100-YEAR FLOOD PLAIN	100-YEAR FLOOD PLAIN	1.305					
LIMIT OF DISTURBANCE	LIMIT OF DISTURBANCE	1.310					
LIMIT OF CLEARING	LIMIT OF CLEARING	1.315					

REV	DATE	BY	CHKD	APP'D	DESC
1	8.1				2013

REVISED		RHODE ISLAND	
NO	DATE	DEPARTMENT OF TRANSPORTATION	
		HURRICANE SANDY REPAIRS TO POPPASQUASH ROAD	
		CRISTOL, RHODE ISLAND	
STANDARD PLAN SYMBOLS AND STANDARD LEGEND			
CHECKED BY: E.L. DATE: SCALE: 1" = 30'			

GREEN ENGINEERING APPLICATES, INC.
 1000 ROUTE 1
 SUITE 100
 PROVIDENCE, RHODE ISLAND 02908
 TEL: 401-863-1111
 FAX: 401-863-1112

HURRICANE SANDY DAMAGE INVENTORY

**TOWN OF BRISTOL
NOVEMBER 20, 2012**

POPPASQUASH ROAD

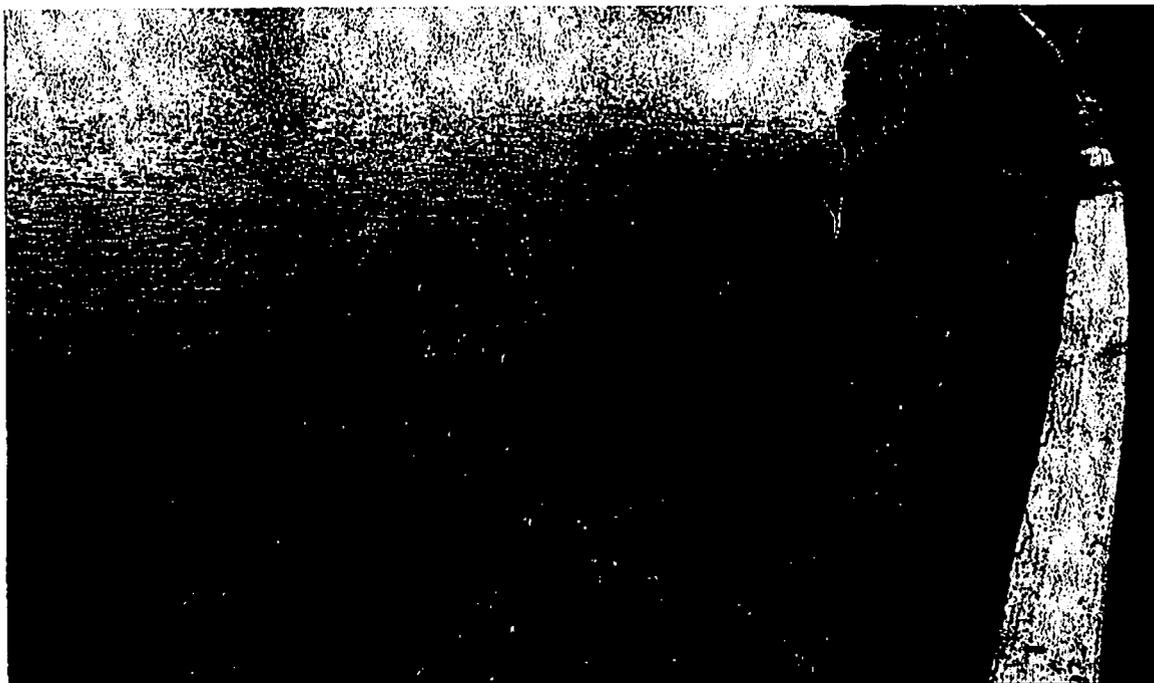
HRS-005

Hurricane Sandy has damaged seawalls and their respective footings along Poppasquash Road.

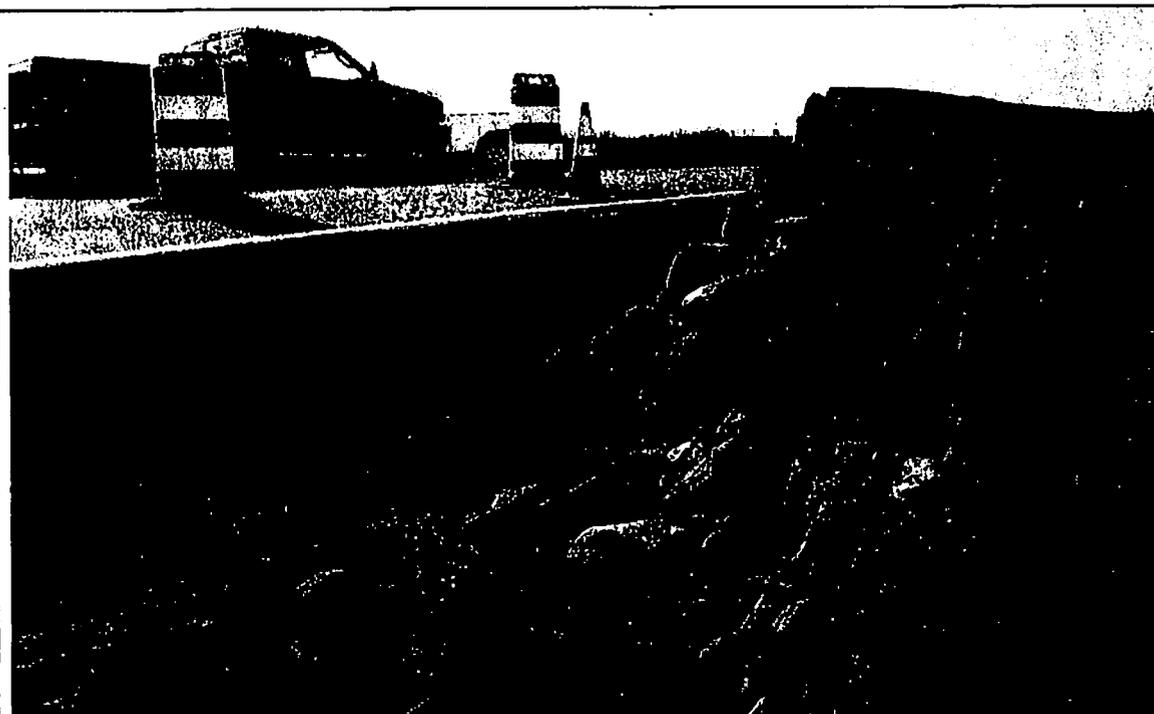
The repair and/or reconstruction of the seawalls and their footings shall follow the attached plans and will include:

- Place turbidity curtains and silt fence erosion control as required or directed by the Engineer
- Full depth sawcut existing pavement to limits of repair work
- Remove and dispose pavement to limits of repair work
- Remove and dispose debris from shoulders
- Stockpile and retain stones from damaged wall portions for re-use in wall repairs
- Stockpile and retain existing large angular rocks remaining from the eroded embankments for use as rip rap
- Excavation
- Dewatering/water protection
- Pervious Fill
- Heavy Woven Geotextile Fabric
- Mortar for Masonry Joints
- Reconstruct/repair stone seawalls as needed using existing stones and supplemented by new stones resembling the existing stones and approved by the Engineer
- Wall repair and/or reconstruction in accordance with Section 939, Stone Walls in Historic, Scenic or Rural Areas
- Rebuild embankments along seawalls
- Armor the roadway embankment with placed rip rap comprised of existing stockpiled stones and supplemented as needed with new rip rap, RI Standard R-7
- Bedding for rip rap
- Filter fabric for rip rap bedding, RI Standard FS-3
- See HRS-006 for items included in repair of adjacent retaining walls
- See HRS-006 for items included in repair of roadway above box culvert

The limits of work are identified on the plans and total approximately 3,800 LF of Seawall.



Failed Portion of Wall "A" – West of Culvert 1 (Bridge #293)



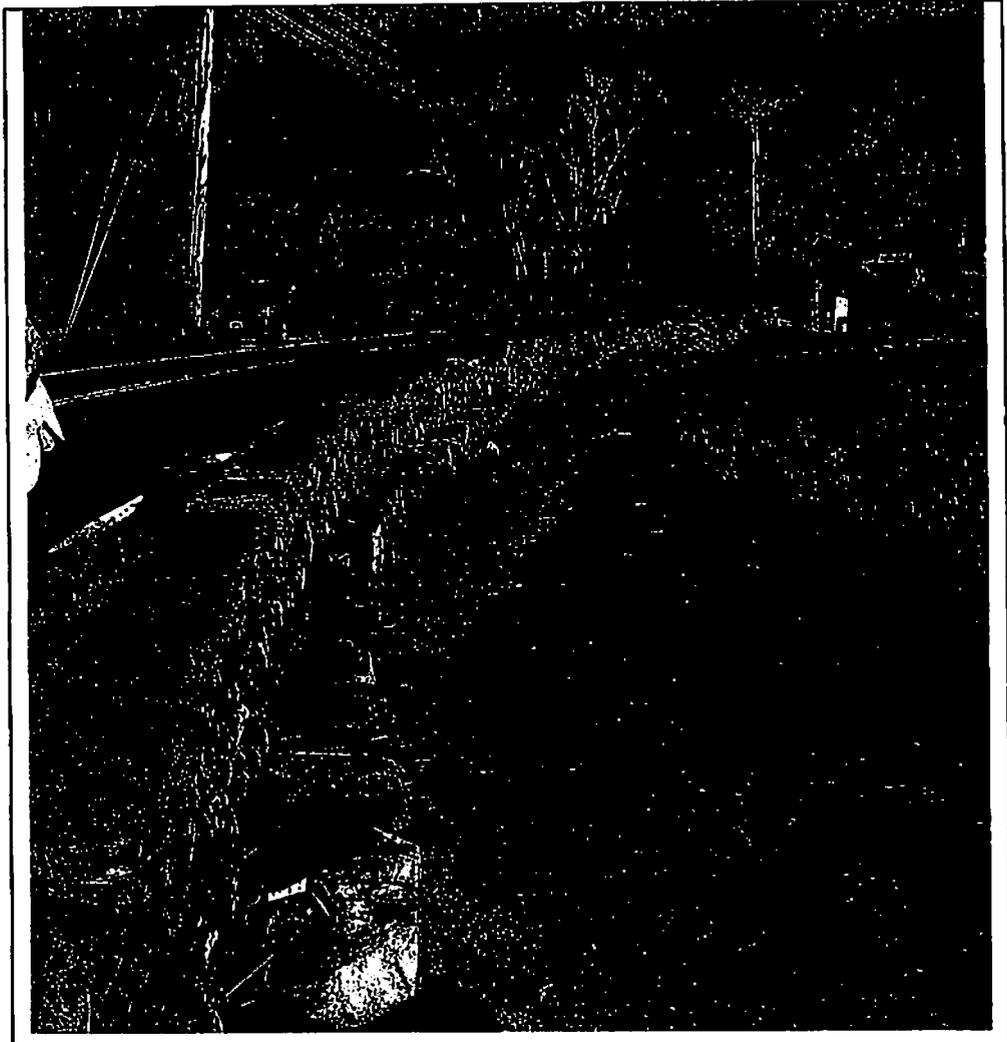
Failed Portion of Wall "A" – West of Culvert 1 (Bridge #293)



Typical Condition of Wall "C"

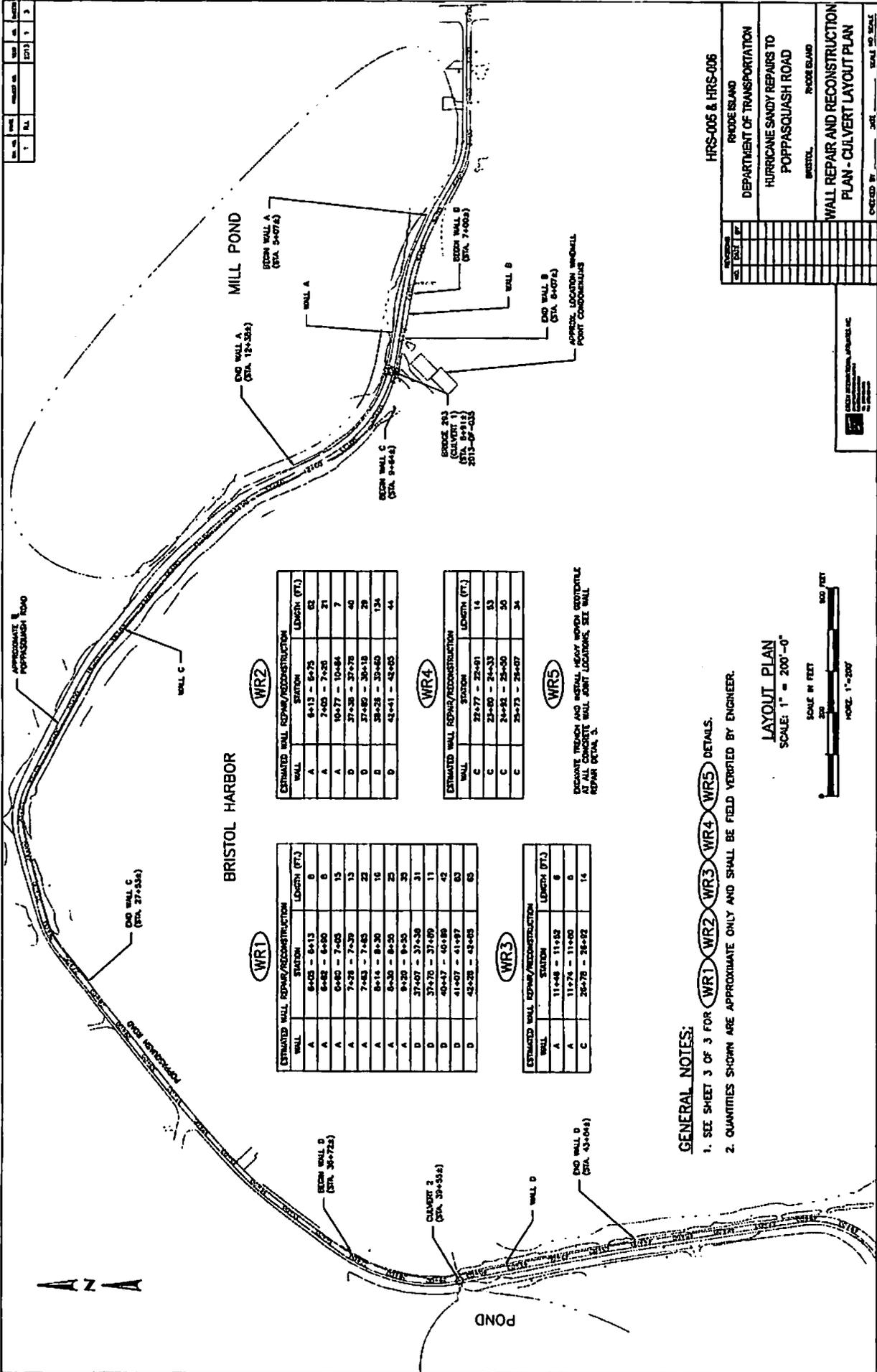


Damage to Top of Wall "A" – East of Culvert 1 (Bridge #293)



Typical Condition of Wall "D"

NO.	DATE	BY	REVISION
1	11/11/11	ML	ISSUE FOR BIDDING



WR2

WALL	STATION	LENGTH (FT.)
A	6+12 - 6+75	63
A	7+05 - 7+20	15
A	10+77 - 10+84	7
D	27+28 - 27+70	42
D	27+80 - 30+10	23
D	28+28 - 30+60	32
D	42+41 - 42+05	36

WR4

WALL	STATION	LENGTH (FT.)
C	22+77 - 22+91	14
C	24+00 - 24+33	33
C	24+22 - 25+00	78
C	25+75 - 26+07	32

EXCAVATE TRENCH AND INSTALL HEAVY REINFORCED CONCRETE WALL JOINT LOCATIONS. SEE WALL REPAIR DETAIL 3.

WR1

WALL	STATION	LENGTH (FT.)
A	6+05 - 6+13	8
A	6+82 - 6+90	8
A	6+80 - 7+03	23
A	7+28 - 7+39	11
A	7+63 - 7+65	2
A	8+16 - 8+30	14
A	8+30 - 8+35	5
A	8+30 - 8+35	5
D	27+67 - 27+50	17
D	30+47 - 40+00	93
D	41+07 - 41+07	0
D	42+28 - 42+05	23

WR3

WALL	STATION	LENGTH (FT.)
A	11+48 - 11+82	34
A	11+74 - 11+80	6
C	26+78 - 26+82	4

GENERAL NOTES:

- SEE SHEET 3 OF 3 FOR WR1 WR2 WR3 WR4 WR5 DETAILS.
- QUANTITIES SHOWN ARE APPROXIMATE ONLY AND SHALL BE FIELD VERIFIED BY ENGINEER.

LAYOUT PLAN
SCALE: 1" = 200'-0"



HRS-005 & HRS-006
ROODE ISLAND
DEPARTMENT OF TRANSPORTATION
HURRICANE SANDY REPAIRS TO
POPPASQUASH ROAD
BRISTOL, ROODE ISLAND
WALL REPAIR AND RECONSTRUCTION
PLAN - CULVERT LAYOUT PLAN
DESIGNED BY: JMS
SCALE: 1"=200'



REV	DATE	BY	APP	NO.
1	04			1
2				2
3				3

GENERAL NOTES

- ALL CONSTRUCTION INDICATED ON THESE PLANS SHALL BE IN ACCORDANCE WITH THE 2005 EDITION OF AASHTO SPECIFICATIONS TO THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION (RIDOT) SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (R1 STANDARD SPECIFICATIONS).
- THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS CONSTRUCTION SPECIFICATIONS, THIRD EDITION, 2011, INCLUDING THE LATEST EDITION OF REVISIONS.
- THE SPECIFICATIONS ACCOMPANYING THESE PLANS.
- BOTH FEDERAL AND STATE LAW (R.I. GENERAL LAWS) REQUIRE NOTIFICATION OF APPROPRIATE UTILITY COMPANIES (GAS, ELECTRIC, TELEPHONE, CABLE, TELEVISION, CABLE, WATER, SEWER, GAS, FUEL, GAS, LANDSCAPE, OR OTHER EARTH MOVING OPERATIONS). IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL NECESSARY NOTICES THROUGH THE "TWO WAYS" PROGRAM TO ENSURE THAT ALL UTILITIES WITHIN THE ROADWAY AND OVERPASS HAVE BEEN MARKED BEFORE COMMENCEMENT OF SUCH WORK. THE CONTRACTOR SHOULD UNDERSTAND THAT NOT ALL UTILITIES SUBSCRIBE TO THE "TWO WAYS" PROGRAM. ANY DAMAGE TO EXISTING UTILITIES MARKED IN THE FIELD OR AS A RESULT OF PLANS TO CONDUCT CONSTRUCTION SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL APPROVE BY THE STATE AND/OR THE IMPACTED UTILITY COMPANY AT NO ADDITIONAL COST TO THE STATE.

DESIGN DATA

- DESIGN SPECIFICATIONS
 - THE AASHTO AND RIDOT DESIGN SPECIFICATIONS, BOTH EDITION, 2011, INCLUDING ALL EDITION REVISIONS TO DATE.
 - THE RHODE ISLAND RIDOT DESIGN MANUAL, 2007 EDITION INCLUDING ALL REVISIONS TO DATE.
 - ALL OTHER APPLICABLE DESIGN SPECIFICATIONS ARE REFERENCED IN SECTION 1 OF THE RHODE ISLAND RIDOT DESIGN MANUAL DATED 2007.
 - TO THE STATE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (R1 STANDARD SPECIFICATIONS).
 - IN CASE OF CONFLICT, THE RHODE ISLAND RIDOT DESIGN MANUAL SHALL GOVERN.
- LINE LOADS
 - THE DESIGN VEHICLE LOAD SHALL BE THE H-18 DESIGNATION ADJUSTED FOR DYNAMIC LOAD ALLOWANCE AND MULTIPLE PRESENCE FACTOR.

MATERIALS

- REINFORCING STEEL
 - AASHTO DESIGNATION M 31, GRADE 60
- CONCRETE STRENGTHS
 - CLASS II (SEE SECTION 2)
- PRECAST BOX CULVERTS, CONCRETE MANUALS, APPROACH SLABS

CONCRETE NOTES

- CLASS OF CONCRETE SHALL BE HIGH PERFORMANCE CLASS HP AS DESCRIBED IN THE R1 STANDARD SPECIFICATIONS FOR CONCRETE. REFER TO THE "NATIONAL" NOTES FOR CLASSES OF CONCRETE SPECIFIED FOR VARIOUS COMPONENTS. ALL CLASSES OF CONCRETE ARE TO BE MODIFIED THROUGH THE ADDITION OF CALCIUM NITRIDE-BASED CORROSION INHIBITOR IN ACCORDANCE WITH SECTION 605 OF THE R1 STANDARD SPECIFICATIONS.
- THE CONTRACTOR MAY, AT THE APPROVAL OF THE ENGINEER, PROPPOSE THE USE OF SELF-COMPACTATING CONCRETE FOR ANY CLASS OF CONCRETE ON THE PROJECT. SECTION 605 "SELF-COMPACTATING CONCRETE" OF THE R1 STANDARD SPECIFICATIONS SHALL APPLY FOR ANY SELF-COMPACTATING CONCRETE FOR SELF-COMPACTING APPLICATIONS.
- ALL PORTLAND CEMENT CONCRETE SHALL BE AIR-ENTRAINED.
- ALL REINFORCING STEEL SHALL BE EPOXY COATED. ALL BARS, TIES AND ACCESSORIES SHALL BE EPOXY COATED. EPOXY COATING FOR REINFORCING STEEL SHALL CONFORM TO AASHTO DESIGNATION M 314.
- UNLESS OTHERWISE INDICATED ON THE PLANS, ALL MAIN REINFORCING BARS SHALL HAVE THE FOLLOWING MINIMUM COVERAGE:

CONCRETE CAST AGAINST OR PERMANENTLY EXPOSED TO WEATHER, EXCEPT FOR CURB AND WALL FACES (MINIMUM)	3"
CONCRETE DIRECTLY EXPOSED TO SOIL WATER	4"
DECK SLABS (WITH WEARWAYS SURFACES)	3" (TOP) 4" (BOTTOM)

- ALL OTHER BARS
 - BOTTOM OF DECK SLAB OVER BUILT OR BRACKEN WATER
 - BOTTOM 1.5" (4'-0")
- UNLESS OTHERWISE NOTED ON THE PLANS, ALL EXPOSED CONCRETE SURFACES VISIBLE IN ELEVATION TO ONE FOOT BELOW FINAL GROUND LINE SHALL RECEIVE A CONCRETE SURFACE REPAIRS HATCH IN ACCORDANCE WITH THE R1 STANDARD SPECIFICATIONS.
- ALL EXPOSED EDGES AND REINFORCING CONCRETE NOT OTHERWISE DETAILED ON THE PLANS SHALL HAVE A MINIMUM 1% SLOPE.

PRECAST CONCRETE BOX CULVERT NOTES

- ALL PRECAST CONCRETE BOX CULVERT SECTIONS SHALL BE DESIGNED AND MANUFACTURED BY THE CONTRACTOR IN CONFORMANCE WITH THE "NATIONAL" LISTED. THE PLANS AND THE FOLLOWING NOTES SHALL BE CONSIDERED TO BE PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY NOTICES THROUGH THE "TWO WAYS" PROGRAM TO ENSURE THAT ALL UTILITIES WITHIN THE ROADWAY AND OVERPASS HAVE BEEN MARKED BEFORE COMMENCEMENT OF SUCH WORK. THE CONTRACTOR SHOULD UNDERSTAND THAT NOT ALL UTILITIES SUBSCRIBE TO THE "TWO WAYS" PROGRAM. ANY DAMAGE TO EXISTING UTILITIES MARKED IN THE FIELD OR AS A RESULT OF PLANS TO CONDUCT CONSTRUCTION SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL APPROVE BY THE STATE AND/OR THE IMPACTED UTILITY COMPANY AT NO ADDITIONAL COST TO THE STATE.
- EACH PRECAST CONCRETE SECTION SHALL HAVE A REMAINING END WITH A 1% SLOPE TOWARD THE CULVERT. EACH JOINT SHALL BE FINISHED WITH A REPLACED REINFORCED CONCRETE JOINT. JOINTS SHALL BE TIGHT AND PROVIDE GOOD ALIGNMENT OF SECTIONS AND INSIDE SURFACES.
- A LEGS OF FOOTING LATERAL BEARING BY CONTINUOUS CONTACT BETWEEN THE SOBS OF ADJACENT SECTIONS SHALL BE PROVIDED.
- LIFTING HOLES OR DEVICES ARE REQUIRED FOR LIFTING, HANDLING AND PLACING THE SECTIONS.
- SECTION LIFTING SHALL BE A MINIMUM OF 4 LINE VERTICAL LIFTS SHALL BE CONSIDERED BY TRANSPORTATION REQUIREMENTS.
- ONE CULVERT BARREL AT FINAL COMPLETION WILL BE BLOCKED OFF USING CHAIN BLOCKS, SEE PLANS.

SEAWALL NOTES

- ALL REPAIRS AND/OR RECONSTRUCTION IS TO BE DONE IN ACCORDANCE WITH SECTION 601, STONE WALLS IN HISTORIC, SCENIC OR RURAL AREAS.

SUGGESTED SEQUENCE OF CULVERT CONSTRUCTION

- PRIOR TO DEMOLITION OF CULVERT, INSTALL NEW CULVERT CELL ADJACENT TO EXISTING CULVERT.
- DIVERT FLOW INTO NEWLY CONSTRUCTED BARREL AND THEN DEMOLISH EXISTING CULVERT.
- CONSTRUCT REMAINING PORTION OF PROPOSED CULVERTS.
- REMOVE FLOW DIVERSION MEASURES AND INSTALL IN-BUILDUP BARREL AS SHOWN IN PLANS.

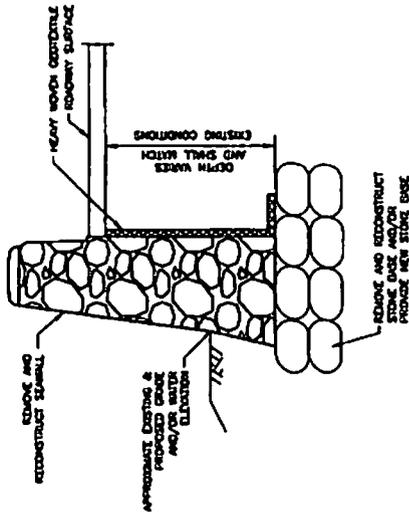
CONSTRUCTION NOTES

- FLOW MUST BE MAINTAINED AT EACH CULVERT DURING CONSTRUCTION.
- NO ADDITIONAL PAYMENT WILL BE MADE FOR MATERIAL, EQUIPMENT, LABOR OR INCIDENTALS NECESSARY FOR THE PROTECTION OF EXISTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY NOTICES THROUGH THE "TWO WAYS" PROGRAM TO ENSURE THAT ALL UTILITIES WITHIN THE ROADWAY AND OVERPASS HAVE BEEN MARKED BEFORE COMMENCEMENT OF SUCH WORK. THE CONTRACTOR SHOULD UNDERSTAND THAT NOT ALL UTILITIES SUBSCRIBE TO THE "TWO WAYS" PROGRAM. ANY DAMAGE TO EXISTING UTILITIES MARKED IN THE FIELD OR AS A RESULT OF PLANS TO CONDUCT CONSTRUCTION SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL APPROVE BY THE STATE AND/OR THE IMPACTED UTILITY COMPANY AT NO ADDITIONAL COST TO THE STATE.
- CONTRACTOR SHALL PROVIDE A TEMPORARY OVERFLOW/WATER CONTROL PLAN AND SUBMIT TO ENGINEER FOR APPROVAL.
- TURNOUT CURTAINS SHALL BE USED AT RIP RAP REPAIR LOCATIONS.
- THE CONTRACTOR SHOULD BE AWARE THAT CONSTRUCTION MAY BE AFFECTED BY THE CYCLES OF THE OCEAN TIDES WHICH ARE INCLUDED AS PART OF THE SITE CONDITIONS.
- EXISTING UTILITIES HAVE BEEN SHOWN ON THE PLANS USING THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES AND PROVIDING PROTECTIVE MEASURES AS NECESSARY TO AVOID DAMAGE TO ALL UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY NOTICES THROUGH THE "TWO WAYS" PROGRAM TO ENSURE THAT ALL UTILITIES WITHIN THE ROADWAY AND OVERPASS HAVE BEEN MARKED BEFORE COMMENCEMENT OF SUCH WORK. THE CONTRACTOR SHOULD UNDERSTAND THAT NOT ALL UTILITIES SUBSCRIBE TO THE "TWO WAYS" PROGRAM. ANY DAMAGE TO EXISTING UTILITIES MARKED IN THE FIELD OR AS A RESULT OF PLANS TO CONDUCT CONSTRUCTION SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL APPROVE BY THE STATE AND/OR THE IMPACTED UTILITY COMPANY AT NO ADDITIONAL COST TO THE STATE.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE, COORDINATE AND SCHEDULE ALL WORK WITH THE STATE AND/OR LOCAL AGENCIES. ALL WORK SHALL BE SUBJECT TO THE APPROVAL OF THE STATE AND/OR LOCAL AGENCIES. ALL WORK SHALL BE SUBJECT TO THE APPROVAL OF THE STATE AND/OR LOCAL AGENCIES. ALL WORK SHALL BE SUBJECT TO THE APPROVAL OF THE STATE AND/OR LOCAL AGENCIES.

HRS-005 & HRS-006	
RHODE ISLAND	
DEPARTMENT OF TRANSPORTATION	
HURRICANE SANDY REPAIRS TO	
POPPASQUASH ROAD	
BRISTOL, RHODE ISLAND	
STANDARD PLAN SYMBOLS & STANDARD LEGEND	
CHECKED BY	SCALE: AS SHOWN



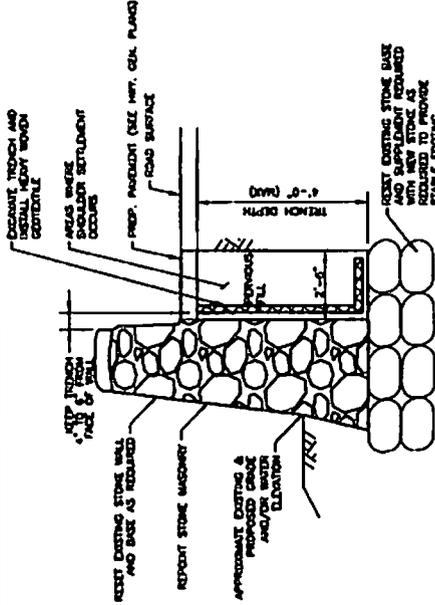
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ISSUES:
1. FULL REPLACEMENT OF MISSING WALL.

WALL REPAIR DETAIL 1
(WHERE FASCIA DAMAGE EXTENDS)
NOT TO SCALE

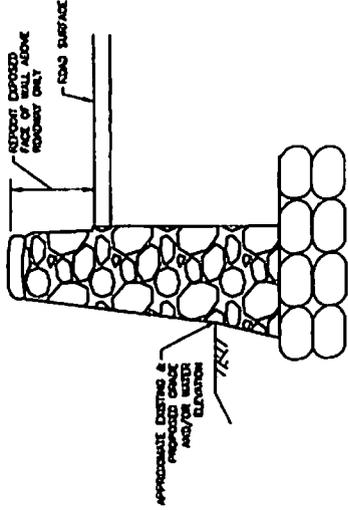
WR1



ISSUES:
1. REPORT ENTIRE EXPOSED FACE OF WALL BELOW ROAD ELEVATION.
2. RESET ALL MISSING STONES.

WALL REPAIR DETAIL 2
NOT TO SCALE

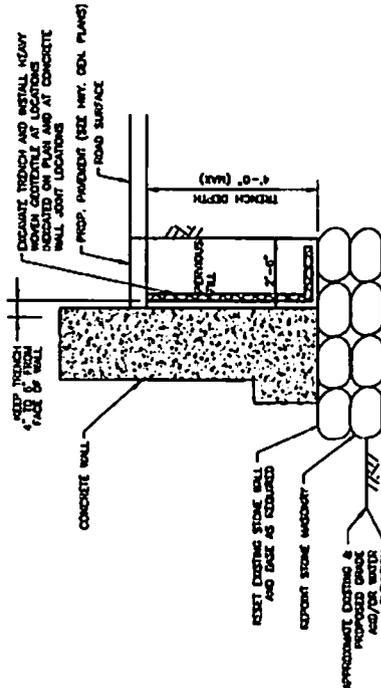
WR2



ISSUES:
1. REPORT EXPOSED FACE ROADWAY SIDE ONLY.
2. RESET ALL MISSING STONES.

WALL REPAIR DETAIL 3
NOT TO SCALE

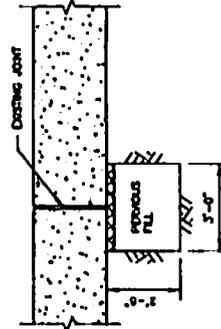
WR3



ISSUES:
1. REPORT STONE DISE.
2. RESET ALL MISSING STONES.

WALL REPAIR DETAIL 4
NOT TO SCALE

WR4



WALL REPAIR DETAIL 5
NOT TO SCALE

WR5

- NOTES:**
1. ELEMENTS SUBJECT TO BE CONSTRUCTED IN ACCORDANCE WITH SECTION 808, STATE WALLS IN HISTORIC, SCENIC OR RURAL AREAS.
 2. DRAINAGE TRENCH TO BOTTOM OF WALL DOWN TO A MINIMUM DEPTH OF 4\"/>

HRS-005

NO.	REV.	DATE	BY
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RHODE ISLAND
DEPARTMENT OF TRANSPORTATION
HURRICANE SANDY REPAIRS TO
POPPASQUASH ROAD
BRISTOL, RHODE ISLAND
WALL REPAIR DETAILS

CHECKED BY: _____ DATE: _____ SCALE: AS SHOWN

THIS DOCUMENT IS UNCLASSIFIED

HURRICANE SANDY FLOOD DAMAGED INVENTORY

TOWN OF BRISTOL
NOVEMEBR 20, 2012

POPPASQUASH ROAD

HRS-006

Hurricane Sandy caused erosion to existing seawalls and undermined the roadway and culverts. Flooding has scoured embankments and pavements.

The roadway repairs shall follow the attached typical sections and General Plans and will include:

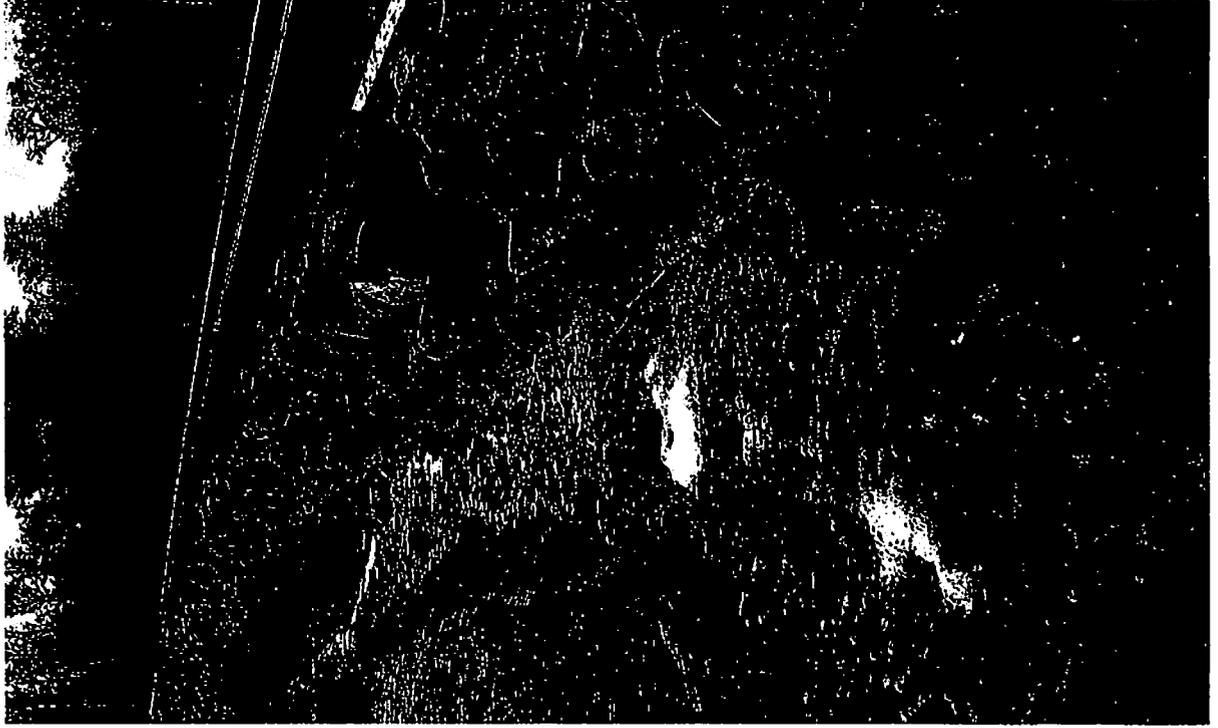
- Survey existing roadway centerline horizontal and vertical position at a minimum of 50 foot intervals.
- Install erosion controls including but not limited to hay bales, silt fence, floating turbidity curtain etc. required in the areas where wall does not exist.
- Full depth sawcut of existing pavements to limits of repair work.
- Remove pavement to its full depth and retain existing subbase. Fill any voids with gravel borrow subbase course.
- Trim and fine grade subbase material
- Curb setting
- Adjust utility castings and structures
- Remove and dispose drainage structures
- Install new drainage structures (RI STD. 4.4.0)
- Install bicycle safe grates
- Install new pavement for the full width of Poppasquash Road (2" Class 12.5 over 3" Class 19.0) between Sta. 9+25 and 49+00.
- Install riprap RI standard R-7
- Install filter fabric for Rip Rap bedding, RI Standard FS-3
- Pavement Markings
- Install extended term biodegradable erosion control blanket at shoulders.
- Remove all erosion controls
- Traffic Control
 - Roadway closed in accordance with MUTCD 2009
 - Sign the road closed detour as indicated on the Plans
- See HRS-005 for items included in repair of adjacent retaining walls
- Coordinate with Contractor and other work being performed under Contract 2013-DF-035

The replacement of the culvert (Culvert 2) shall follow the attached plan and will include, but is not limited to:

- Survey existing culvert
- Preparation of design calculations and shop drawings for culvert
- Preparation of Temporary Diversion/Water Control Plan
- Installing turbidity curtains as needed and/or directed by the Engineer
- Temporary diversion of channel flow
- Dewatering/water protection and floating turbidity curtain
- Excavation

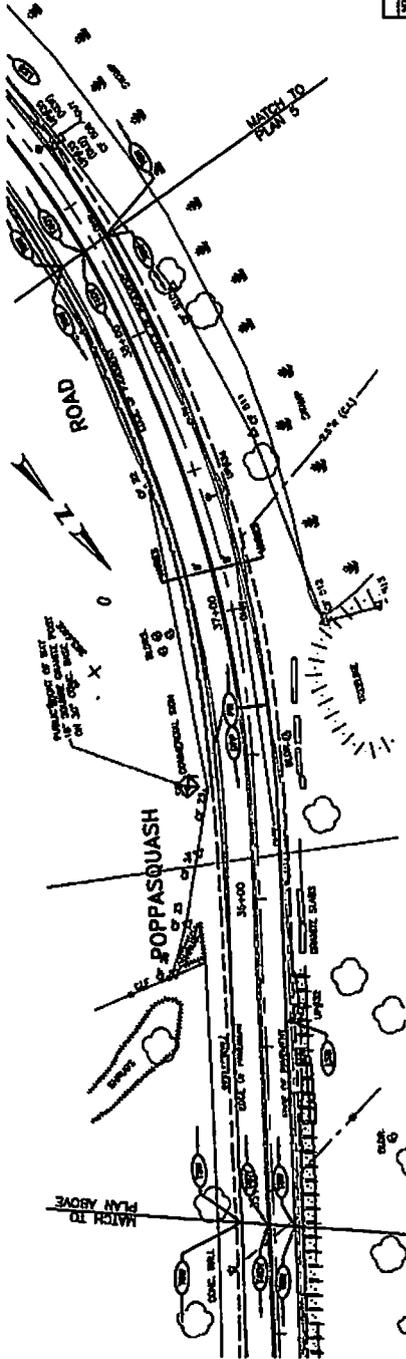
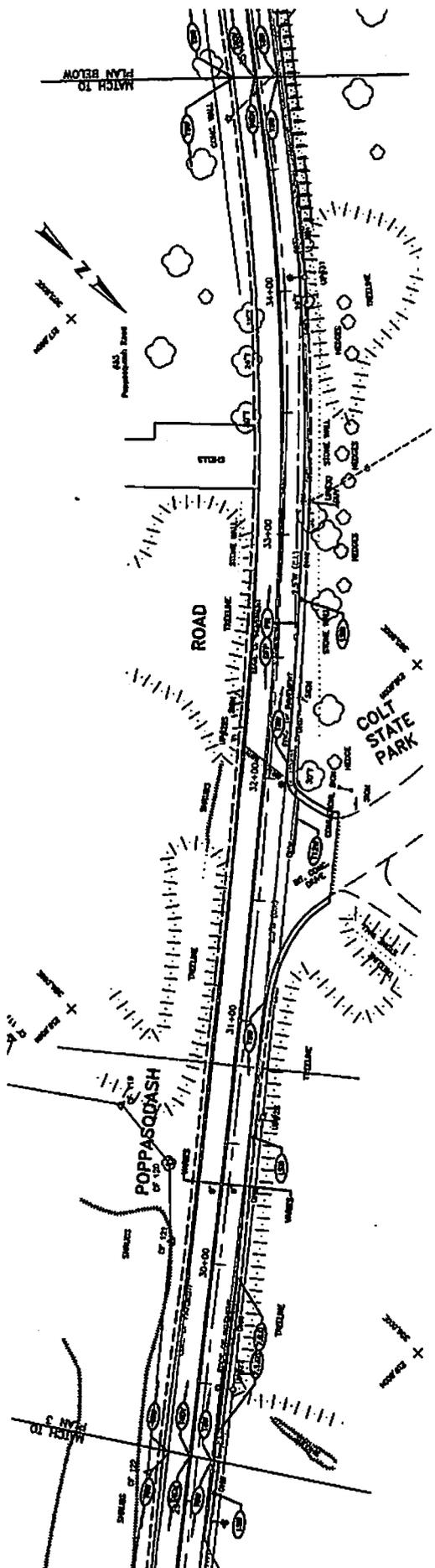
- Removal and disposal of existing culvert
- Bedding (crushed stone) for proposed culvert
- Rip-rap (RI Standard R-5) channel protection with RI Standard FS-2 bedding and geotextile fabric at inlet and outlet of culvert
- Installation of two (2) 4' x 4' precast concrete box culverts
- All joint sealants, grouting and reinforcement necessary for installation of culverts and head walls
- Membrane waterproofing
- Bituminous damp-proofing
- Pervious fill w/ filter fabric
- Form and cast-in-place concrete headwalls/parapets
- Installation of CMU bulkhead on each end of one (1) precast concrete box culvert upon completion
- Installation of RIDOT Historic Section approved finish on headwalls
- Restore channel rip rap and disturbed areas as determined by Engineer
- All other incidentals necessary to complete work within the limits shown on the attached plans
- Coordinate with Contractor and other work being performed under Contract 2013-DF-035

The limits of work are identified in the field and total approximately 0.86 miles.

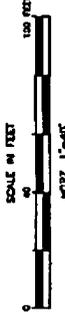


ROADWAY EROSION

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1	10/13



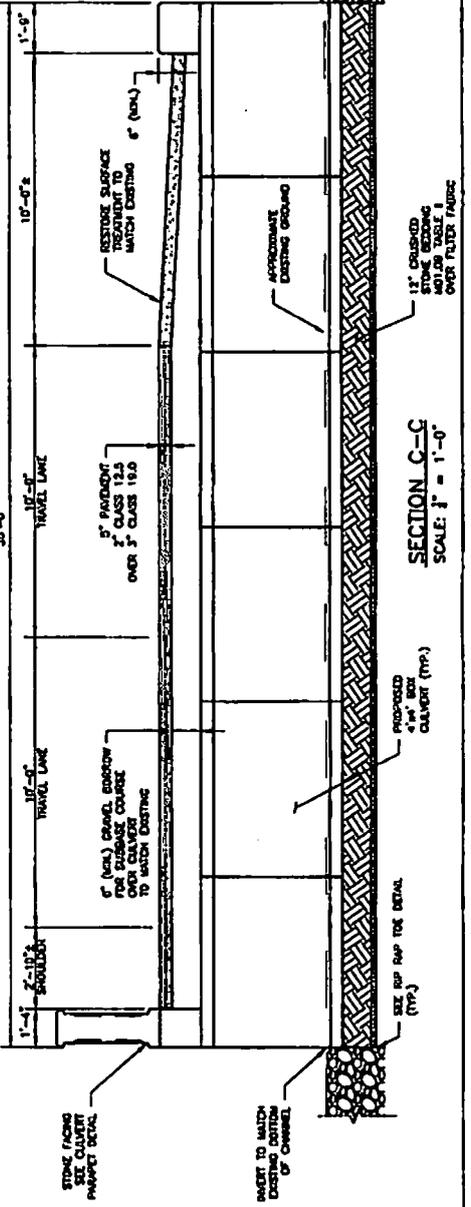
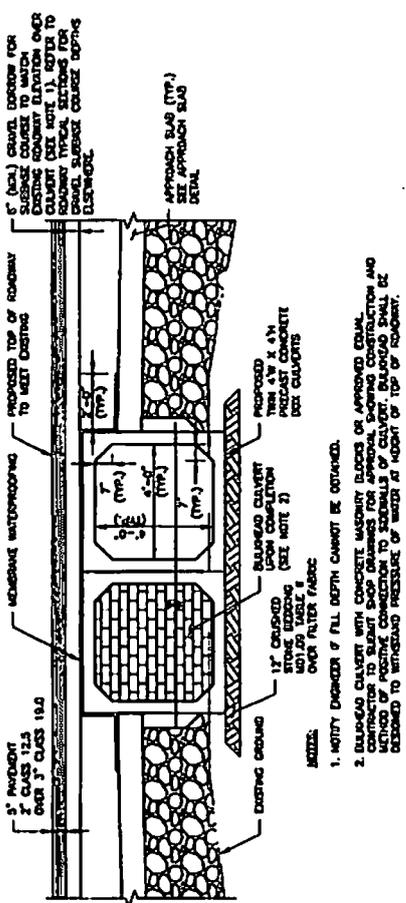
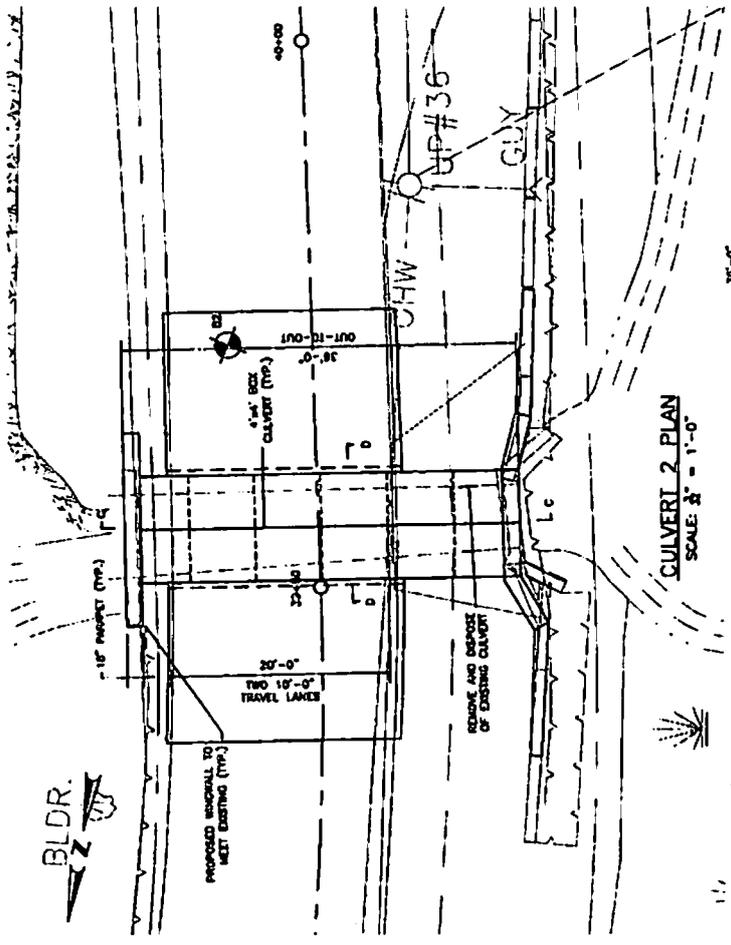
RHODE ISLAND	
DEPARTMENT OF TRANSPORTATION	
HURRICANE SANDY REPAIRS TO	
POPPASQUASH ROAD	
BARSTON	RHODE ISLAND
GENERAL PLAN NO. 4	
CHECKED BY	DATE
SCALE 1" = 40'	DATE



DESIGNED BY
CHECKED BY
DATE

600-000-00000, PLANS

NO.	DATE	BY	CHKD.	APP.
1	8.1



REVISION	NO.	DATE	BY	CHKD.

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION
HURRICANE SANDY REPAIRS TO
POPPASQUASH ROAD
EXETER, RHODE ISLAND
CULVERT 2 PLAN AND SECTIONS
CHECKED BY: _____ DATE: _____ SCALE: 1/2" = 1'-0"

CONSTRUCTION PROJECT NO. _____
PROJECT NAME: _____
PROJECT LOCATION: _____

