INDEX
GENERAL PROVISIONS – CONTRACT SPECIFIC

PARAGRAPH	TITLE	PAGE
1	Brief Scope of Work	CS-1
2	List of Plan Sets	CS-1
3	Applicable Blue Book	CS-1
4	Utility and Municipal Notification and Coordination	CS-1
5	Lane Closures	CS-3
6	Sequence of Construction	CS-3
7	Transportation Management Plan	CS-5
8	Special Requirements for Traffic Maintenance and Protection	CS-6
9	Bridge and Structure Weight Restrictions	CS-7
10	Coordination with Other Projects	CS-7
11	Specialty Items	CS-7
12	Lump Sum Item Breakdown	CS-7
13	Material Testing Breakdown List	CS-7
14	Prefabrication Inspection Notification	CS-7
15	Right-of-Way Easements	CS-7
16	Structural Disposition List	CS-8
17	Stormwater Pollution Prevention Plan	CS-8
18	Environmental Permits	CS-8
19	Shop Drawings	CS-8
20	Submittals	CS-8
21	Pavement Cores	CS-8
22	Rideability	CS-8
23	Americans with Disabilities Act (ADA) Technical Infeasibility	CS-8
24	Geotechnical Data Report	CS-9
25	Borings Logs	CS-9
26	Hazardous Materials Investigation	CS-9
27	Test Pits	CS-9
28	Subsurface Utility Investigation	CS-9

PARAGRAPH	TITLE	PAGE
29	Overhead Wire Measurements	CS-9
30	Endangered Species and Special Resources	CS-9
31	Migratory Birds	CS-10
32	Railroad Requirements	CS-10
33	Weigh-In-Motion (WIM) System Locations	CS-10
34	Pavement Sealant	CS-10
35	Rubberized Asphalt Chip Seal	CS-10
36	Crack Sealing	CS-10
37	Record Plans	CS-10
38	Design Exceptions	CS-10
39	Pre And Post-Construction Survey	CS-10
40	Damage to Existing Utility Structures	CS-11
41	Noise and Vibration Pollution	CS-11
42	Utility Structures and Waterways Within Roadway	CS-11
43	Contractor's Responsibility for Damaged Storm Drains	CS-11
44	Incident Management	CS-12

Appendix A	Utility Company Guidelines
Appendix B	Transportation Management Plan
Appendix C	Material Testing Breakdowns
Appendix D	Structural Disposition List
Appendix E	Stormwater Pollution Prevention Plan
Appendix F	Environmental Permits
Appendix G	Shop Drawings
Appendix H	Submittals
Appendix I	Pavement Cores and Gravel Gradation Reports
Appendix J	Geotechnical Investigation
Appendix K	Endangered Species Protection
Appendix L	Migratory Bird Treaty Act
Appendix M	Record Plans
Appendix N	Design Exceptions

1. BRIEF SCOPE OF WORK

This project consists of 3 bridge replacements. They include Bridge No. 005001 (butted box beam), Bridge No. 005101 (concrete arch), and Bridge No. 005201 (butted box beam). All bridges are over bodies of water. The bridges were built between 1928 and 2002 with several rehabilitations performed as recently as 2019. All the bridges have a bituminous wearing surface. The bridge inspection reports, photos, utility information, and other attached documents provide additional information about the individual
bridges.

Work includes full bridge replacement of two bridges (005001 & 005101), superstructure replacement of bridges 005201, scour repairs, masonry repairs and repointing, waterproofing membranes, wearing surface, MASH-compliant bridge rail, etc. Roadway work includes, but is not limited to, full depth pavement reclamation, full depth pavement reconstruction, sidewalk and wheelchair ramp reconstruction to PROWAG guidelines, MASH-complaint guardrail installation, cleaning and flushing existing drainage systems, existing drainage system repairs, new drainage outlets, STU's, signage and pavement markings.

2. LIST OF PLAN SETS:

Volume 1 of 1:	Highway Plans
Volume 2 of 2:	Bridge Nos. 005001, 005101 and 005201 Plans

3. APPLICABLE BLUE BOOK:

All work shall comply with the February Standard Specifications for Road & Bridge Construction (Blue Book).

4. UTILITY AND MUNICIPAL NOTIFICATION AND COORDINATION

The Contractor shall coordinate all utility work with the appropriate municipalities and companies to avoid conflict during construction. Upon award, the Contractor shall notify the appropriate contacts provided below of the anticipated start of construction so the Contractor can initiate the survey layout necessary for the utility work.

Hopkinton	
Town Council President Michael Geary 1 Town House Hall Hopkinton, RI 02833 Telephone: (401) 290-7254 michaelk.geary@hopkinton.govmailto:	Ashaway Volunteer Fire Department Ronnie J. Sposato Fire Chief P.O Box 363 Ashaway, RI 02804 Telephone: (401) 377-4549 info@ashawayfire.org

Public Works David Caswell Public Works Director Charles Niles Complex 395 Woodville Road Hopkinton, RI 02833 Telephone: (401) 377-7790 dcaswell@hopkintonri.org	Police Department Mark J. Carrier Chief of Police 406 Woodville Road Hopkinton, RI 02833 Telephone: (401) 377-7750 mcarrier@hopkintonpolice.org

Westerly	
Town Manager Shawn Lacey 45 Broad Street Westerly, RI 02891 Telephone: (401)348-2530 slacey@westerlyri.govmailto:	Westerly Fire Department John Mackay Fire Chief P.O Box 2952 Westerly, RI 02891 Telephone: (401) 596-0402 Ext. 2 chief@westerlyfire.com
Engineering Kyle Zalaski Town Engineer 65 White Rock Road Westerly, RI 02891 Telephone: (401) 348-2562 kzalaski@westerlyri.gov	Police Department Paul Gingerella Chief of Police 60 Airport Road Westerly, RI 02891 Telephone: (401) 401-596-2022 pgingerella@westerlypolice.org

Contract Wide	
Rhode Island Energy Electric David Son Project Manager 280 Melrose Street Providence, RI 02907 Telephone: 732-672-3359 hdson@rienergy.com	Verizon Evan McSorley Engineer 85 High Street Pawtucket, RI 02860 Telephone: (508) 994-6701 evan.mcsorley@verizon.com
Cox Communications Shawn Murphy Right of Way Agent II Northeast Region 9 J.P. Murphy Highway West Warwick, RI 02893 Telephone: (401) 430-5599 Shawn.Murphy@cox.com	Rhode Island Energy Gas May Zhen Principal Engineer 1301 Atwood Ave Northwoods Office Park Johnston, RI 02919 Telephone: (401) 603-9253 mzhen@rienergy.com

The anticipated utility construction work duration is as follows:

Underground Gas:

Laurel Street Bridge No. 005051 over the Ashaway River

- Activation of the gas by-pass and cut-off of the gas main crossing the bridge: **27 weeks**
- Activation of the new gas crossing the bridge and cut-off and abandonment of the gas by-pass: **27 weeks**
- Utility Pole and Overhead Wire Relocation: **29 weeks**

Potter Hill Bridge No. 005251 over the Pawcatuck River

- Activation of the gas by-pass and cut-off of the gas main crossing the bridge: **19 weeks**
- Activation of the new gas crossing the bridge and cut-off and abandonment of the gas by-pass: **20 weeks**
- Utility Pole and Overhead Wire Relocation: **8 weeks**

Potter Hill Culvert Bridge No. 005151 over Mile Brook

- Activation of the gas by-pass and cut-off of the gas main across the culvert: **14 weeks**
- Activation of the new gas main over the culvert and cut-off and abandonment of the gas by-pass: **15 weeks**
- Utility Pole and Overhead Wire Relocation: **8 weeks**

The Contractor is responsible for incorporating this information into their schedule. The Contractor is responsible for updating the schedule for utility work during Project Status Meetings per Section 108.03 of Blue Book.

Utility Company Guidelines

- RI Energy Gas guidelines for the contract work are provided in Appendix A.

5. LANE CLOSURES

The Contractor shall provide at least 7 days written notification to the Construction Manager of when and how many work zones are expected.

6. SEQUENCE OF CONSTRUCTION

All work shall be completed in accordance with the Traffic-Related Work Restrictions indicated in the Transportation Management Plan (TMP) provided in Appendix B.

A. The Contractor must submit to the Department for approval a detailed construction work sequence and time schedule in accordance with Section 108.03 of the latest revisions of the Rhode Island Procurement Regulations for the completion of all work associated with this Contract and the requirements it contains. Approval of the work sequence and time schedule is required before the start of any construction or other work associated with the contract. The proposed construction and time schedule must

consider and address the safe vehicle passage through the project. The schedule requirement for this project shall be Level B.

B. If the contract is extended beyond the specified completion date, a similar work schedule will be established by the Department.

C. The Contractor shall be responsible for maintaining all roadways free from debris resulting from vehicles entering and exiting the construction site. The Contractor shall clean and sweep the roadways, at intervals, as required, and/or as determined by the Construction Manager to maintain the roadway in an acceptable condition. The cost associated with complying with this provision shall be considered incidental to the contract.

D. If the Contractor needs to have trees or bushes trimmed or cut back, the Contractor shall notify the RIDOT Construction Manager at least three weeks in advance of beginning work at that site.

E. The Contractor shall exercise care when excavating near the existing block retaining wall to avoid damaging the structure to remain. The Contractor shall provide the Construction Manager with captioned photographs of any damage/defects to the structure prior to work beginning. All damage caused by the Contractor shall be repaired to the satisfaction of the Department at the Contractor's expense.

F. All disturbed grass areas shall be restored with Loam Borrow and Type 2 Seeding.

G. All erosion controls shall be in place and accepted by the Department prior to beginning work, including temporary sedimentation basin and construction access.

H. The Contractor shall be responsible for maintaining appropriate construction always related signing. Any signs not appropriate for construction activity taking place at any given time shall be removed or covered to the satisfaction of the Department.

I. The Contractor shall locate and clean all existing storm drainage systems prior to the start of construction.

J. Any deviations from the requirements stated here as well as any deviations from the approved construction work sequence and time schedule must be submitted to the Department in writing for approval.

K. The Contractor shall be responsible for providing GPS locations of all installed directional, regulatory, warning, parking, and street signs. The submission shall be made electronically in Microsoft Excel format to the RIDOT- GIS Section (contact Stephen Kut, Stephen.Kut@dot.ri.gov) in the following format:

Sign #	MUTCD Code	Easting	Northing
1	R1-1	277311	323478

The cost for completing the GPS work shall be incidental to the cost of the signing items.

The Contract Time **does not include** Winter Shutdown, and the Contractor shall be aware of the following Bridge Phase completion dates:

- **Bridge No. 005051: Ashaway River Bridge -** New Bridge Open to Traffic, as defined as all travel lanes shall remain open other than temporary overnight closures. Completion date: **November 10, 2027**

- **Bridge No. 005251: Potter Hill Bridge** - New Bridge Open to Traffic, as defined as all travel lanes shall remain open other than temporary overnight closures. Completion date: **August 14, 2028**.

The Contractor shall schedule work and provide documentation such that all prefabricated elements are complete and required materials are available at least 4 weeks in advance of commencing detours.

In accordance with the Endangered Species Act, all tree removal/trimming shall be completed between November 1 and April 14 (See conservation measures in Appendix F for details).

In accordance with the Endangered Species Act, temporary lighting shall be directed away from suitable habitat between April 15 and October 31, using downward-facing, full cutoff lens lights when installing new or replacing existing permanent lights (See conservation measures in Appendix F for details).

In accordance with the RIDEM and USACE Permit, in-water work is restricted as follows:

Time-of-Year (TOY) Window and Restriction

	TOY Work Restrictions	TOY Work Window
Ashaway River	March 1 to June 30	July 1 to February 28/29
Pawcatuck River	March 1 to June 30	July 1 to February 28/29

For proposed activities that cannot follow the TOY windows/restrictions listed above, alternate work windows may be proposed under a PCN provided they are first coordinated with and authorized in writing by RIDEM. RIDEM may place additional constraints to protect anadromous fish species in the fall. To avoid delays in review, the applicant should include documentation of this coordination and authorization from RIDEM with the submittal of their PCN to the Corps (See ACOE permit in Appendix F for details).

7. TRANSPORTATION MANAGEMENT PLAN

Included as Appendix B to these Contract Specific General Provisions is the Transportation Management Plan (TMP) for this project. The TMP lays out the set of coordinated transportation management strategies that will be used to manage the work zone safety and mobility impacts of this project. In the event of a discrepancy between information in the TMP and information elsewhere in the Contract Documents, the former shall govern.

The Contractor's attention is called to the applicable portions of **Section 103 – Award and Execution of Contract**, of the RIDOT Standard Specifications for Road and Bridge Construction, latest edition, which describes the requirements for the Contractor's designation of a TMP Implementation Manager for the Contract.

The Contractor's attention is called to the applicable portions of **Section 105- Control of Work**, of the RIDOT Standard Specifications for Road and Bridge Construction, latest edition, which describes the requirements for the training of all Contractor and Subcontractor personnel involved in work zone design, implementation, operation, inspection, management, and/or enforcement.

The Department's latest Training Guidelines for Personnel Responsible for Work Zone Safety & Mobility is available under the "Training" section at:
http://www.dot.ri.gov/documents/doingbusiness/TrainingGuidelinesWZSM.pdf

The Contractor's attention is called to the PERFORMANCE MONITORING, CHANGES TO TMP, & CONTINGENCIES section of the TMP, which describes the requirements for a deviation from the TMP, including, but not limited to, lane closure changes and working hours. If the Contractor is requesting change(s) to the TMP, he is responsible for the documents listed in this section, including preparation of his own revised TMP. Templates are available on the RIDOT website under the "Work Zone Safety & Mobility" section at:
https://www.dot.ri.gov/business/contractorsandconsultants.php

8. SPECIAL REQUIREMENTS FOR TRAFFIC MAINTENANCE AND PROTECTION

In addition to the requirements of the Standard Specifications for Road and Bridge Construction and the special requirements of other sections of this contract document, the following requirements shall be undertaken by the Contractor:

The Contractor shall be responsible for maintaining appropriate construction related signing at all times. Any signs not appropriate for construction activity taking place at any given time shall be removed or covered to the satisfaction of the Department.

The Contractor shall utilize R.I. Standard 26.2.0 barrels when traffic control set-ups are to remain in place beyond normal working hours and when workers are not present. Barrels shall also be used to mark utility adjustments prior to paving. The Contractor shall utilize R.I. Standard 26.1.0 cones when the traffic control set-up is utilized only during working hours and is subsequently broken down at the end of the workday.

The Contractor shall note that work zone time and lane restrictions are listed in the Transportation Management Plan.

The Contractor shall provide eight (8) walkie talkies for flagger and police coordination. These shall be capable of communicating over a range up to 5 miles. The cost of these will be considered incidental to the contract.

It shall be the responsibility of the Contractor to notify the Project Manager and Construction Manager in writing of any parking restrictions necessary to ensure unfettered and unhindered access to the work zone at least 14 days in advance.

9. BRIDGE AND STRUCTURE WEIGHT RESTRICTIONS

A current list of bridge restrictions can be found at www.dot.ri.gov/travel/truckrestrictions.com for coordination with the Department for necessary permits.

10. COORDINATION WITH OTHER PROJECTS

The Contractor shall be aware of the Westerly dam removal project up stream of Bridge No. 005201 and other projects ongoing or commencing during the construction period of this project. It shall be the Contractor's responsibility to coordinate with the Department to determine the impacts of their construction operations on adjacent projects. The Contractor may be required to attend periodic coordination meetings with representatives of the Town and the State to discuss and resolve potential conflicts.

11. SPECIALTY ITEMS

The following Items are designated as Specialty Items per Section 101.83 of the Blue Book:

- Asphaltic Expansion Joint Systems
- Precast Concrete Substructure Elements
- Precast Concrete Culverts
- Press-Brake-Formed Tub Girders (PBFTG)
- Ultra-High Performance Concrete (UHPC)
- Traffic Signing (Excluding Temporary Construction Signs)
- Pavement Markings
- Seeding
- Guardrail

12. LUMP SUM ITEM BREAKDOWN

There are no Lump Sum Items requiring a breakdown in this Contract.

13. MATERIAL TESTING BREAKDOWN LIST

The list of Job Specific Items that require material testing breakdown is provided in Appendix C.

14. PREFABRICATION INSPECTION NOTIFICATION

The Contractor shall provide at least 4 weeks' notice to the Construction Manager in writing and dot.materials@dot.ri.gov of when offsite fabrication is scheduled to begin.

15. RIGHT-OF-WAY EASEMENTS

The Department has completed the process of Temporary Use and Access Agreements/Temporary Easements with owners for construction access along Potter Hill Road

The Department has completed the process of Temporary Use and Access Agreements/Temporary Easements with owners for construction access along Potter Hill Road Sta 303+00 to Sta 304+86, Maxson Street Sta 400+00 to Sta 414+43 and Laurel Street Sta 100+00 to Sta 147+44. Full Right-of-Way Certification was issued on July 13, 2026.

16. STRUCTURAL DISPOSITION LIST

The Structural Disposition List is provided in Appendix D.

17. STORMWATER POLLUTION PREVENTION PLAN

The Stormwater Pollution Prevention Plan (SWPPP) is provided in Appendix E. The Operator shall sign and return the SWPPP Cover Sheet to the Department's Project Manager in advance of the Pre-Construction Conference.

18. ENVIRONMENTAL PERMITS

The following Environmental Permits are provided in Appendix F:

- USACE NAE-2026-00220
- RIDEM Freshwater Wetlands No. 26-0104 (IA-19030)
- RIPDES No.RIR102959

19. SHOP DRAWINGS AND SUBMITTALS

The list of expected Shop Drawings is provided in Appendix G.

20. SUBMITTALS

The list of expected Submittals is provided in Appendix H.

21. PAVEMENT CORES

Pavement Cores are provided in appropriate Appendix I.

22. RIDEABILITY

There is no Rideability associated with this project.

23. AMERICANS WITH DISABILITIES ACT (ADA) TECHNICAL INFEASIBILITY

24. GEOTECHNICAL DATA REPORT

Results of the Geotechnical Data Report are provided in the appropriate Appendix J.

25. BORING LOGS

Boring Logs are provided in Appendix J.

26. HAZARDOUS MATERIALS INVESTIGATION

There was no Hazardous Materials Investigation completed for this project.

27. TEST PITS

There was no test pits required for design of this project.

28. SUBSURFACE UTILITY INVESTIGATION

There was no subsurface utility investigation required for design of this project.

29. OVERHEAD WIRE MEASUREMENTS

There was no overhead wire measurements required for design of this project.

30. ENDANGERED SPECIES AND SPECIAL RESOURCES

The Northern long-eared bat and/or tricolored bat regulated by the U.S. Fish and Wildlife Service are present within the project area; requirements are provided in Appendix K.

Endangered Species regulated by the National Marine Fisheries Service are present within the project area; requirements are provided in the appropriate Appendix K.

Essential Fish Habitat, as designated by the National Marine Fisheries Service, is present within the project area; requirements are provided in Appendix K.
Wild and Scenic Rivers, as designated under the Wild and Scenic Rivers Act, are present within the project area; applicable requirements are set forth in the USACE permit conditions.

31. MIGRATORY BIRDS

Migratory Bird Treaty Act requirements are provided in Appendix L.

32. RAILROAD REQUIREMENTS

There is no railroad coordination required for this project.

33. WEIGH-IN-MOTION (WIM) SYSTEM LOCATIONS

There are no existing WIM System Locations within the project limits.

34. PAVEMENT SEALANT

There is no pavement sealant required for this project.

35. RUBBERIZED ASPHALT CHIP SEAL

There is no Rubberized Asphalt Chip seal associated with this project.

36. CRACK SEALING

There is no Crack Sealing associated with this project.

37. RECORD PLANS

The following Record Plans for work within the project limits are provided in Appendix M.

- RIC No. 7710 (Ashaway River Bridge No. 50 Superstructure Replacement)
- RIC No. 2019-CB-065 (Repairs to Potter Hill Culvert No. 51, Wickford Bridge No. 10 and Thornton Bridge No. 81)
- RIC No. 2000-CB-068 (Potter Hill Bridge No. 52 Bridge Replacement)

38. DESIGN EXCEPTIONS

Approved design exceptions are provided in Appendix N.

39. PRE AND POST-CONSTRUCTION SURVEY

The Contractor shall conduct a pre-construction and post construction survey of all dwellings, buildings and structures adjacent to the construction work. The pre-construction survey shall be performed before work begins to identify and document existing defects like cracks, water seepage or structural settlement of the inside and outside of dwellings and structures as a baseline condition. This process consists of high-resolution photography, video, and written reports. The post-construction survey shall be performed after project completion to compare the state of dwellings, buildings and structures against the pre-construction baseline condition. The cost of the survey shall be included in the bid price and shall not be eligible for additional compensation. The results of the pre-construction survey shall be submitted by the Contractor prior to the commencement of construction and the post-construction survey at project completion.

40. DAMAGE TO EXISTING UTILITY STRUCTURES

It is the Contractor's responsibility to ensure that all utility companies have been notified, and all utilities have been marked prior to commencing any work. All damage to existing utilities shall be replaced or repaired to the satisfaction of the Engineer at no additional cost to the State.

41. NOISE AND VIBRATION POLLUTION

The Contractor shall implement comprehensive measures to minimize noise and vibration pollution caused by construction activities. These activities include, but are not limited to, drilling, pile-driving, demolition, excavation, hauling, and the operation of heavy machinery. All noise and vibration mitigation measures shall comply with applicable local, state, and federal regulations and shall be subject to the ongoing approval of the State. The cost of all noise and vibration control measures shall be included in the bid price and shall not be eligible for additional compensation unless otherwise specified in the contract or if additional requirements are required by RIDOT. A Noise Control Plan shall be developed and submitted by the Contractor prior to the commencement of construction as specified in **JS Code 104.17**.

42. UTILITY STRUCTURES AND WATERWAYS WITHIN ROADWAY

No existing utility structures or waterways (i.e. paved waterways, gutter lines) shall be blocked by new pavement. Also, as shown on the plan, the Contractor shall verify the locations of all utility structures for adjustments to grade. This task is considered incidental to the pavement laying operation, and there shall be no separate payment for this work.

43. CONTRACTOR'S RESPONSIBILITY FOR DAMAGED STORM DRAINS

The Contractor shall use care when working within or in the vicinity of existing drainage structures. Any damage made to drainage structures or pipe while carrying out any work on this Contract shall be the Contractor's responsibility to replace/repair. Any drainage structure or pipe damaged by the Contractor while carrying out this contract shall be replaced or repaired by the Contractor to the satisfaction of the Department at no additional charge to the State. Any pipe, culvert, or other existing drainage structure which is replaced or repaired due to the Contractor damage must be done as an in-kind replacement (materials as well as size/length must be the same as existing) and final invert elevations must match existing elevations. The

Contractor shall make every effort to prevent debris from falling into catch basins. Should any debris fall inside a structure, it shall be removed immediately.

44. INCIDENT MANAGEMENT

In the event of an accident or other unforeseen incident within the work zone, not caused by the Contractor or their Subcontractors, which closes the roadway, the Contractor shall positively cooperate with local authorities by providing traffic control devices, personnel, equipment and material as required, both on and off site. The Contractor shall assist in whatever way possible to clear debris from the roadway and maintain traffic flow. Payment for this work shall be on a force account basis. If the personnel are not available on site, they shall be "on call" and able to respond to the site within one hour of notification by the Department of Transportation (by phone or in person) to the Contractor's appointed representative. No force account payment will be made for incident management if the incident is the result of Contractor error or negligence.

APPENDIX A

UTILITY COMPANY GUIDELINES

Last Update
4/20/2022

RHODE ISLAND ENERGY APPROVED
GAS PIPING CONTRACTORS
IN
RHODE ISLAND

Contractor Name	Address or PO Box	Town	State	Zip	Contact Name	Contact Phone	Contact Email
AGI Construction Inc	34 Appian Way	Smithfield	RI	02917	Michael Smith	401-233-0021	msmith@agiconstruction.com
GPL Construction Inc.	2180 Mendon Rd, Suite 31	Cumberland	RI	02864	Mike Gaudette II	401-639-6282	mgaudette2@gpl-construction.com

Rhode Island Energy

RIDOT REPLACEMENT OF
POTTER HILL BRIDGE NO. 5201
OVER THE PAWCATUCK RIVER

HOPKINTON, RI

MAIN INSTALLATION ACROSS BRIDGE

SECTION 100

JOB DESCRIPTION
AND
DESIGN SPECIFICS

March 4, 2026

101 **JOB DESCRIPTION**

101.1 Work within this project by the RIDOT appointed bridge contractor consists of:

101.11 Installation of (2) 8-in bare steel sleeves approx. 3 feet long in each of the wingwall areas for the gas main carrier to pass through.

101.2 Work within this project by the bridge contractor's appointed Rhode Island Energy approved gas contractor consists of:

101.21 Installation of a by-pass consisting of approx. 148 feet of 2-in steel & approx. 98 feet of 2-in plastic pipe across a temporary bridge (I-Beam) including (14) double roller supports with 220/240 casing insulators and various fittings and connecting to the existing 4-in plastic gas main on each end with a 4-in x 2-in plastic tapping tee with a 1-in blow-off on one end.

101.22 Installation of approx. 135 feet of 4-in steel pipe across the new bridge including (11) double roller supports with 220/240 casing insulators through the 8-inch steel wingwall sleeves, including poly spacers, link seals and casing end seals, and approx. 85 ft of 4-in plastic buried pipe and various fittings ending with a 4-in plastic end cap with a 1-in blow-off on one end and a 4-in Supraflow tee on the other.

101.23 Pressure testing the buried plastic and steel bridge piping together for both the temporary by-pass main and the permanent main to 90 psig for a minimum of 1 hour in accordance with Section 106 and document CNST04003.

101.24 Installation of cathodic protection consisting of (4) 2-wire test stations with (4) 17# anodes installed in accordance with document 030026-CS. This applies to both the by-pass and permanent gas main.

101.25 Development of “as-built” drawings based upon the Rhode Island Energy Location Plans.

101.3 All work included in this section shall be performed by the state appointed Rhode Island Energy approved gas piping contractor.

101.4 Live gas tie-ins and cut-offs will be done exclusively by Rhode Island Energy.

101.5 Rhode Island Energy reserves the right to make inspections of the work during the progress of installation and, where required, have all installation sequences performed in the presence of its inspector or authorized agent.

102 **MATERIAL AVAILABILITY**

102.1 All piping materials, including pipe, valves, fittings and appurtenances shall be provided by Rhode Island Energy and shall not include padding sand and special backfill. Material shall be available at a designated Rhode Island Energy location during normal working hours. Transportation to the job site, including loading and unloading, shall be performed by the contractor.

103 **MATERIAL – SPECIFICATIONS – PIPE**

103.1 **Eight-Inch Steel Pipe: (Gas Sleeve in each Wingwall)**

103.11 Length Required: Approximately 3 feet each, Total 6 feet

103.12 Specifications: API-5L, X52, PSL-2, HFW, bevel ends, double random lengths.

103.13 Wall Thickness – std wall (t): 0.322”

103.14 Longitudinal Joint Factor (E): 1.0

103.15 Minimum Specific Yield Strength (S); 52,000 psi

103.16 Pipe Coating: Bare

103.1 **Four-Inch Steel Pipe: (Gas Main Across Bridge & Buried)**

103.11 Length Required: Approximately 135 feet

103.12 Specifications: API-5L, X52, PSL-2, HFW, bevel ends, double random lengths.

103.13 Wall Thickness – std wall(t): 0.237”

103.14 Longitudinal Joint Factor (E): 1.0

103.15 Minimum Specific Yield Strength (S); 52,000 psi

103.16 Design Hoop Stress @ psig =

$$\frac{(100)(P)(D)}{2(t)(E)(S)} = \frac{(100)(21)(4.5)}{(2)(0.237)(1.0)(52{,}000)} = 0.38\% \text{ of SMYS}$$

103.17 Pipe Coating: Pritec 15/50

103.2 **Two-Inch Steel Pipe: (Gas Main Across Temp Bridge & Buried)**

103.21 Length Required: Approximately 148 feet

103.22 Specifications: API-5L, X52, PSL-1, HFW, bevel ends, double random lengths.

103.23 Wall Thickness – std wall(t): 0.154”

103.24 Longitudinal Joint Factor (E): 1.0

103.25 Minimum Specific Yield Strength (S); 52,000 psi

103.26 Design Hoop Stress @ psig =

$$\frac{(100)(P)(D)}{2(t)(E)(S)} = \frac{(100)(21)(2.375)}{(2)(0.154)(1.0)(52{,}000)} = .31\% \text{ of SMYS}$$

103.27 Pipe Coating: Pritec 15/50

103.3 **Four-Inch Plastic Pipe: (Gas Main Buried for Bridge)**

103.31 Length Required: Approximately 85 feet

103.32 Specifications: Performance Pipe Yellowstripe 8300, PE 4710/PE100, Polyethylene Pipe, 40-foot lengths.

103.33 Wall Thickness (t): 0.409” (DR 11.0)

103.34 Long Term Hydrostatic Strength (S): 1600 psi @ 73.4 degrees F

103.35 Maximum Operating Pressure $\frac{(2xSxtx0.32)}{(D-t)} = \frac{(2x1600x0.409x0.32)}{(4.5-0.409)} = 102$ psig*

- These values are limited to a maximum of 100 psig by DOT Code of Federal Regulations, Part 192, Title 49, Subpart C, Section 192.123.

103.4 **Two-Inch Plastic Pipe: (Gas Main Buried for Temp Bridge)**

103.41 Length Required: Approximately 98 feet

103.42 Specifications: Performance Pipe Yellowstripe 8300, PE 4710/PE100, Polyethylene Pipe, 40-foot lengths.

103.43 Wall Thickness (t): 0.216" (DR 11.0)

103.44 Long Term Hydrostatic Strength (S): 1600 psi @ 73.4 degrees F

103.45 Maximum Operating Pressure $\frac{(2xSxtx0.32)}{(D-t)} = \frac{(2x1600x0.216x0.32)}{(2.375-0.216)} =$ 102 psig*

- These values are limited to a maximum of 100 psig by DOT Code of Federal Regulations, Part 192, Title 49, Subpart C, Section 192.123.

104 **OTHER MATERIAL**

104.1 **Weld Valves**

104.11 None

104.2 **Plastic Valves**

104.21 (2) 2" Full Bore; (1) 4" Full Bore

104.3 **Weld Fittings:**

104.31 Elbow: (4) 4"x 45 degree; (4) 4"x 90 degree & (4) 2"x 90 degree
104.32 Transition Fitting: (2) 4"; (2) 2"

104.4 **Plastic Fittings**

104.41 Tapping Tee: (2) 4"x 2"; (1) 4"x 1"; (1) 2"x 1"
104.42 Supaflow Tee: (1) 4"
104.42 Elbow: (4) 4"x 45 degree; (4) 2" x 90 degree
104.43 Transition Fitting: See Weld Fittings
104.44 Caps: (2) 4"

104.5 **Other:**

105.51 (9) Road Box
(11) 4" LB&A Double Roller Supports w/ Non-Conduc Rollers HDG (w 4 extra nuts ea)
(11) 4" Glasmesh FRP 220/240 Casing Insulators
(4) 4"x 8" Plastic Casing Spacers
(2) 4"x 8" Rubber Casing End Seals

(28) LS-475-S Link Seals
(14) 2” LB&A Double Roller Supports w/ Non-Conduc Rollers HDG (w 4 extra nuts ea)
(14) 2” Glasmesh FRP 220/240 Casing Insulators
183’ of Tracing Wire
183’ of 6” Marking Tape
(4) 2-wire test stations w 4/ 17# anodes
(2) 1” pre-fab risers
(3) 2” Canusa Shrink Sleeves
(2) 4” Canusa Shrink Sleeves

105 **INSTALLATION OF MAIN**

105.1 All plastic pipe installation work shall conform to the requirements of Rhode Island Energy’s Installation Specifications and Code Reconciliation: Section 200A, Installation of Polyethylene Gas Mains, Revised January 18, 1988.

105.2 All steel pipe installation work shall conform to the requirements of Rhode Island Energy’s Installation and Code Reconciliation: Section 200, Installation of Steel Gas Mains, Revised March 26, 1992 and Installation of Steel Distribution Mains CNST04005 and the RIDOT project plans.

105.3 The installation of the gas main across the bridge and within the roadway shall conform to the RIDOT Ashaway – Corridor, Potter Hill Bridge No.5201 Installation Plans and Details and to the Rhode Island Energy Potter Hill Bridge No.5201 Installation Plans and Details.

105.4 Installations will terminate as close to the tie-in points as practical. All tie-in locations must be aligned with the existing pipe when installed.

105.5 Any damage to the pipe or pipe coating should be immediately brought to the attention of Rhode Island Energy construction department or the on-site inspector for inspection and, if necessary, repair or replacement.

106 **PRESSURE TEST**

106.1 Pressure test the buried plastic and steel bridge piping together both to 90 psig for a minimum of 1 hour in accordance with Rhode Island Energy document CNST04003—Pressure Testing Mains Operating Below 125psig. This applies to the temp bridge main and the permanent bridge main.

106.2 Test Media: Compressed air, inert gas, or any combination thereof. The contractor shall provide the air compressor and/or inert gas for all required pressure testing.

Rhode Island Energy

RIDOT REPLACEMENT OF
POTTER HILL CULVERT NO. 5101
OVER MILE BROOK

HOPKINTON, RI

MAIN INSTALLATION ACROSS BRIDGE

SECTION 100

JOB DESCRIPTION
AND
DESIGN SPECIFICS

March 3, 2026

101 JOB DESCRIPTION

101.1 Work within this project by the RIDOT appointed bridge contractor consists of:

101.11 No Work

101.2 Work within this project by the bridge contractor's appointed Rhode Island Energy approved gas contractor consists of:

101.21 Installation of a temporary by-pass consisting of approx. 44 feet of 2-in steel & approx. 130 feet of 2-in plastic pipe across a temporary bridge (I-Beam) including (8) double roller supports with 220/240 casing insulators and various fittings and connecting to the existing 4-in plastic gas main on each end with a 2-in 3-way tee.

101.22 Installation of 2 sections of permanent gas main each consisting of a 4-in 3-way tee (connection to existing gas main), a 4-in transition fitting, a 4-in plastic valve with road box, approx. 20 feet of 4-in plastic pipe, a 4-in plastic elbow, a 4-in plastic end cap and a 1-in blow-off.

101.23 Installation of the permanent gas main crossing the culvert and butting up with the ends of the 4-in section installs described above consisting of approx. 125 ft of feet of 4-in plastic pipe, 2 – 4-in plastic end caps, 2 – 4-in 45 plastic elbows and a 1-in blow-off. The gas main section over the culvert is to be wrapped with rockshield.

101.24 Pressure testing the buried plastic and steel bridge piping for the temp by-pass together to 90 psig for a minimum of 1 hour in accordance with Section 106 and document CNST04003.

101.25 Pressure testing the buried plastic for the permanent gas main including the 2 – separate sections installed off of the existing main to 90 psig for a minimum of 1 hour in accordance with Section 106 and document CNST04003.

101.26 Installation of cathodic protection consisting of (6) 2-wire test stations with (4) 17# anodes installed in accordance with document 030026-CS.

101.27 Development of "as-built" drawings based upon the Rhode Island Energy Location Plans.

101.3 All work included in this section shall be performed by the state appointed Rhode Island Energy approved gas piping contractor.

101.4 Live gas tie-ins and cut-offs will be done exclusively by Rhode Island Energy.

101.5 Rhode Island Energy reserves the right to make inspections of the work during the progress of installation and, where required, have all installation sequences performed in the presence of its inspector or authorized agent.

102 **MATERIAL AVAILABILITY**

102.1 All piping materials, including pipe, valves, fittings and appurtenances shall be provided by Rhode Island Energy and shall not include padding sand and special backfill. Material shall be available at a designated Rhode Island Energy location during normal working hours. Transportation to the job site, including loading and unloading, shall be performed by the contractor.

103 **MATERIAL – SPECIFICATIONS – PIPE**

103.1 **Two-Inch Steel Pipe: (Gas Main Across Temp Bridge & Buried)**

103.11 Length Required: Approximately 44 feet

103.12 Specifications: API-5L, X52, PSL-1, HFW, bevel ends, double random lengths.

103.13 Wall Thickness – std wall(t): 0.154"

103.14 Longitudinal Joint Factor (E): 1.0

103.15 Minimum Specific Yield Strength (S); 52,000 psi

103.16 Design Hoop Stress @ psig =

$$\frac{(100)(P)(D)}{2(t)(E)(S)} = \frac{(100)(21)(2.375)}{(2)(0.154)(1.0)(52{,}000)} = .31\% \text{ of SMYS}$$

103.17 Pipe Coating: Pritec 15/50

103.2 **Four-Inch Plastic Pipe: (Gas Main Buried for Culvert Crossing)**

103.21 Length Required: Approximately 175 feet

103.22 Specifications: Performance Pipe Yellowstripe 8300, PE 4710/PE100, Polyethylene Pipe, 40-foot lengths.

103.23 Wall Thickness (t): 0.409" (DR 11.0)

103.24 Long Term Hydrostatic Strength (S): 1600 psi @ 73.4 degrees F

103.25 Maximum Operating Pressure $\frac{(2xSxtx0.32)}{(D-t)} = \frac{(2x1600x0.409x0.32)}{(4.5-0.409)} = 102$ psig*

- These values are limited to a maximum of 100 psig by DOT Code of Federal Regulations, Part 192, Title 49, Subpart C, Section 192.123.

103.3 **Two-Inch Plastic Pipe: (Gas Main Buried for Temp Bridge)**

103.31 Length Required: Approximately 130 feet

103.32 Specifications: Performance Pipe Yellowstripe 8300, PE 4710/PE100, Polyethylene Pipe, 40-foot lengths.

103.33 Wall Thickness (t): 0.216" (DR 11.0)

103.34 Long Term Hydrostatic Strength (S): 1600 psi @ 73.4 degrees F

103.35 Maximum Operating Pressure $\frac{(2xSxtx0.32)}{(D-t)} = \frac{(2x1600x0.216x0.32)}{(2.375-0.216)} = 102$ psig*

- These values are limited to a maximum of 100 psig by DOT Code of Federal Regulations, Part 192, Title 49, Subpart C, Section 192.123.

104 **OTHER MATERIAL**

104.1 **Weld Valves**

104.11 None

104.2 **Plastic Valves**

104.21 (2) 4" Full Bore; (2) 2" Full Bore

104.3 **Weld Fittings:**

104.31 Elbow: (4) 2”x 90 degree
104.32 Transition Fitting: (2) 4”; (4) 2”
104.33 TDW 3-Way Tee: (2) 2”; (2) 4”

104.4 **Plastic Fittings**

104.41 Tapping Tee: (3) 4”x 1”; (1) 2”x 1”
104.42 Elbow: (2) 4”x 45 degree; (2) 4”x 90 degree; (2) 2” x 90 degree
104.43 Transition Fitting: See Weld Fittings
104.44 Caps: (2) 4”

104.5 **Other:**

105.51 (14) Road Box
(8) 2” LB&A Double Roller Supports w/ Non-Conduc Rollers HDG (w 4 extra nuts ea)
(8) 2” Glasmesh FRP 220/240 Casing Insulators
295’ of Tracing Wire
295’ of 6” Marking Tape
(6) 2-wire test stations w 4/ 17# anodes
(4) 1” pre-fab risers
(1) 2” Shrink Sleeves

105 INSTALLATION OF MAIN

105.1 All plastic pipe installation work shall conform to the requirements of Rhode Island Energy’s Installation Specifications and Code Reconciliation: Section 200A, Installation of Polyethylene Gas Mains, Revised January 18, 1988.

105.2 All steel pipe installation work shall conform to the requirements of Rhode Island Energy’s Installation and Code Reconciliation: Section 200, Installation of Steel Gas Mains, Revised March 26, 1992 and Installation of Steel Distribution Mains CNST04005 and the RIDOT project plans.

105.3 The installation of the gas main across the bridge and within the roadway shall conform to the RIDOT Ashaway – Corridor Potter Hill Culvert No.5101 Installation Plans and Details and to the Rhode Island Energy Potter Hill Culvert No.5101 Installation Plans and Details.

105.4 Installations will terminate as close to the tie-in points as practical. All tie-in locations must be aligned with the existing pipe when installed.

105.5 Any damage to the pipe or pipe coating should be immediately brought to the attention of Rhode Island Energy construction department or the on-site inspector for inspection and, if necessary, repair or replacement.

106 **PRESSURE TEST**

106.1 Pressure test the buried plastic and steel bridge piping together for the temporary gas by-pass, the 2 sections of 4-in plastic permanent gas main and the section of 4-in permanent gas main crossing the new culvert to 90 psig for a minimum of 1 hour in accordance with Rhode Island Energy document CNST04003—Pressure Testing Mains Operating Below 125psig.

106.2 Test Media: Compressed air, inert gas, or any combination thereof. The contractor shall provide the air compressor and/or inert gas for all required pressure testing.

Rhode Island Energy

RIDOT REPLACEMENT OF
LAUREL ST BRIDGE NO. 5001
OVER THE ASHAWAY RIVER

HOPKINTON, RI

MAIN INSTALLATION ACROSS BRIDGE

SECTION 100

JOB DESCRIPTION
AND
DESIGN SPECIFICS

March 1, 2026

101 **JOB DESCRIPTION**

101.1 Work within this project by the RIDOT appointed bridge contractor consists of:

101.11 No Work

101.2 Work within this project by the bridge contractor's appointed Rhode Island Energy approved gas contractor consists of:

101.21 Installation of a by-pass consisting of approx. 130 feet of 2-in steel & approx. 135 feet of 2-in plastic pipe across a temporary bridge (I-Beam) including (15) double roller supports with 220/240 casing insulators and various fittings and connecting to the existing 4-in plastic gas main on each end with a 4-in x 2-in plastic tapping tee with a 1-in blow-off on one end.

101.22 Installation of approx. 130 feet of 4-in steel pipe across the new bridge including (10) double roller supports with 220/240 casing insulators and various fittings and approx. 100 ft of 4-in plastic buried pipe and various fittings ending with 4-in plastic end caps with a 1-in blow-off on one end.

101.23 Pressure testing the buried plastic and steel bridge piping together to 90 psig for a minimum of 1 hour in accordance with Section 106 and document CNST04003. This applies to both the by-pass and permanent gas main.

101.24 Installation of cathodic protection consisting of (4) 2-wire test stations with (4) 17# anodes installed in accordance with document 030026-CS. This applies to both the by-pass and permanent gas main.

101.25 Development of “as-built” drawings based upon the Rhode Island Energy Location Plans.

101.3 All work included in this section shall be performed by the state appointed Rhode Island Energy approved gas piping contractor.

101.4 Live gas tie-ins and cut-offs will be done exclusively by Rhode Island Energy.

101.5 Rhode Island Energy reserves the right to make inspections of the work during the progress of installation and, where required, have all installation sequences performed in the presence of its inspector or authorized agent.

102 **MATERIAL AVAILABILITY**

102.1 All piping materials, including pipe, valves, fittings and appurtenances shall be provided by Rhode Island Energy and shall not include padding sand and special backfill. Material shall be available at a designated Rhode Island Energy location during normal working hours. Transportation to the job site, including loading and unloading, shall be performed by the contractor.

103 **MATERIAL – SPECIFICATIONS – PIPE**

103.1 **Four-Inch Steel Pipe: (Gas Main Across Bridge & Buried)**

103.11 Length Required: Approximately 130 feet

103.12 Specifications: API-5L, X52, PSL-2, HFW, bevel ends, double random lengths.

103.13 Wall Thickness – std wall(t): 0.237”

103.14 Longitudinal Joint Factor (E): 1.0

103.15 Minimum Specific Yield Strength (S); 52,000 psi

103.16 Design Hoop Stress @ psig =

$$\frac{(100)(P)(D)}{2(t)(E)(S)} = \frac{(100)(21)(4.5)}{(2)(0.237)(1.0)(52{,}000)} = 0.38\% \text{ of SMYS}$$

103.17 Pipe Coating: Pritec 15/50

103.2 **Two-Inch Steel Pipe: (Gas Main Across Temp Bridge & Buried)**

103.21 Length Required: Approximately 130 feet

103.22 Specifications: API-5L, X52, PSL-1, HFW, bevel ends, double random lengths.

103.23 Wall Thickness – std wall(t): 0.154”

103.24 Longitudinal Joint Factor (E): 1.0

103.25 Minimum Specific Yield Strength (S); 52,000 psi

103.26 Design Hoop Stress @ psig =

$$\frac{(100)(P)(D)}{2(t)(E)(S)} = \frac{(100)(21)(2.375)}{(2)(0.154)(1.0)(52{,}000)} = .31\% \text{ of SMYS}$$

103.27 Pipe Coating: Pritec 15/50

103.3 **Four-Inch Plastic Pipe: (Gas Main Buried for Bridge)**

103.31 Length Required: Approximately 100 feet

103.32 Specifications: Performance Pipe Yellowstripe 8300, PE 4710/PE100, Polyethylene Pipe, 40-foot lengths.

103.33 Wall Thickness (t): 0.409” (DR 11.0)

103.34 Long Term Hydrostatic Strength (S): 1600 psi @ 73.4 degrees F

103.35 Maximum Operating Pressure $\frac{(2xSxtx0.32)}{(D-t)} = \frac{(2x1600x0.409x0.32)}{(4.5-0.409)} = 102$ psig*

- These values are limited to a maximum of 100 psig by DOT Code of Federal Regulations, Part 192, Title 49, Subpart C, Section 192.123.

103.4 **Two-Inch Plastic Pipe: (Gas Main Buried for Temp Bridge)**

103.41 Length Required: Approximately 135 feet

103.42 Specifications: Performance Pipe Yellowstripe 8300, PE 4710/PE100, Polyethylene Pipe, 40-foot lengths.

103.43 Wall Thickness (t): 0.216” (DR 11.0)

103.44 Long Term Hydrostatic Strength (S): 1600 psi @ 73.4 degrees F

103.45 Maximum Operating Pressure $\frac{(2xSxtx0.32)}{(D-t)} = \frac{(2x1600x0.216x0.32)}{(2.375-0.216)} = 102$ psig*

- These values are limited to a maximum of 100 psig by DOT Code of Federal Regulations, Part 192, Title 49, Subpart C, Section 192.123.

104 **OTHER MATERIAL**

104.1 **Weld Valves**

104.11 None

104.2 **Plastic Valves**

104.21 (2) 2” Full Bore

104.3 **Weld Fittings:**

104.31 Elbow: (8) 4”x 45 degree; (4) 2”x 90 degree
104.32 Transition Fitting: (2) 4”; (2) 2”

104.4 **Plastic Fittings**

104.41 Tapping Tee: (2) 4”x 2”; (1) 4”x 1”; (1) 2”x 1”
104.42 Elbow: (2) 4”x 45 degree; (2) 2” x 90 degree
104.43 Transition Fitting: See Weld Fittings
104.44 Caps: (2) 4”

104.5 **Other:**

105.51 (7) Road Box
(10) 4” LB&A Double Roller Supports w/ Non-Conduc Rollers HDG (w 4 extra nuts ea)
(10) 4” Glasmesh FRP 220/240 Casing Insulators
(15) 2” LB&A Double Roller Supports w/ Non-Conduc Rollers HDG (w 4 extra nuts ea)
(15) 2” Glasmesh FRP 220/240 Casing Insulators
235’ of Tracing Wire
235’ of 6” Marking Tape
(4) 2-wire test stations w 4/ 17# anodes
(2) 1” pre-fab risers
(3) 2” Shrink Sleeves
(2) 4” Shrink Sleeves

105 **INSTALLATION OF MAIN**

105.1 All plastic pipe installation work shall conform to the requirements of Rhode Island Energy’s Installation Specifications and Code Reconciliation: Section 200A, Installation of Polyethylene Gas Mains, Revised January 18, 1988.

105.2 All steel pipe installation work shall conform to the requirements of Rhode Island Energy's Installation and Code Reconciliation: Section 200, Installation of Steel Gas Mains, Revised March 26, 1992 and Installation of Steel Distribution Mains CNST04005 and the RIDOT project plans.

105.3 The installation of the gas main across the bridge and within the roadway shall conform to the RIDOT Ashaway – Corridor Laurel St bridge No.5001 Installation Plans and Details and to the Rhode Island Energy Laurel St Bridge No.5001 Installation Plans and Details.

105.4 Installations will terminate as close to the tie-in points as practical. All tie-in locations must be aligned with the existing pipe when installed.

105.5 Any damage to the pipe or pipe coating should be immediately brought to the attention of Rhode Island Energy construction department or the on-site inspector for inspection and, if necessary, repair or replacement.

106 **PRESSURE TEST**

106.1 Pressure test the buried plastic and steel bridge piping together both to 90 psig for a minimum of 1 hour in accordance with Rhode Island Energy document CNST04003—Pressure Testing Mains Operating Below 125psig. This applies to the temp bridge main and the permanent bridge main.

106.2 Test Media: Compressed air, inert gas, or any combination thereof. The contractor shall provide the air compressor and/or inert gas for all required pressure testing.

INSTALLATION SPECIFICATIONS
AND CODE RECONCILIATION
SECTION 200
INSTALLATION OF STEEL GAS MAIN
MARCH 21, 1975

Revised 2/6/2023

201 CONSTRUCTION SPECIFICS (FR 192.5, .303; ANSI 841.21)

All construction work performed by the Contractor shall be in accordance with the primary and supplemental publications of 49CFR 1921/; the ANSI Standard2/, B31.8-1968 Code; and RI Energy Construction Specifications and Drawings. The Contractor shall also abide by the Terms and Conditions for General Construction. Any variation with, deletion from, or additions to the named references and the Project Drawings due to local conditions must originate from sound and specific reason. Arbitrary changes are not permitted. Remedial work required for noncompliance, unacceptable changes or additions, or acceptable changes or additions, where neither have received proper Company approval, will be at the Contractor's expense.

In the event specifics are detailed by both 49CFR 192 and ANSI B31.8, the more rigorous requirement shall control, unless specifically stated otherwise by the Company specifications.

All construction must meet the requirements of a Class 4 installation as defined by 49CFR 192 and as provided for by these specifications. All piping shall be designed for Design Hoop Stress levels of less than 20% of SMYS.

As used in this section "may" means "is permitted to" or "is authorized to," "may not" means "is not permitted to" or "is not authorized to," and "shall" is used in the mandatory and imperative sense.

202 GENERAL REQUIREMENTS (FR 192.305, .307; ANSI 841.221, .223, .271)

202.01 The Company has authority to enforce construction in accordance with Subsection 201, including the removal and replacement of any section of main that fails to meet the described standards.

1) The Federal Register, Volume 35, Number 161, Title 49 Part 192 (Under OPS, DOT) dated August 19, 1970 and effective November 1970, is designated as 49CFR 192. Specific paragraph references are preceded by FR to indicate source.

2) The ANSI Standard B31.8-1968 is designated as ANSI B31.8. Specific paragraph references are preceded by ANSI as to indicate source.

3) RI Energy and its agents are designated as the Company.

202.02 Material Handling

202.02.1 Materials issued to the Contractor by the Company become his responsibility. The Contractor shall assume the responsibility of inventory and inspection before acceptance of materials. Methods of material transfer, handling, and storage are subject to the approval of the Company. Any material determined, by the sole determination of the Company, to be unsatisfactory for construction after acceptance by the Contractor, shall be repaired to the complete satisfaction of the Company, or replaced at the Contractor's expense. Any damage discovered previous to the Contractor's acceptance shall be replaced by the Company or repaired by the Contractor at a predetermined expense to the Company.

202.02.2 The hauling and stringing of pipe or other materials shall be performed in such manner as to prevent damage and to cause the least interference with the normal use of roadways or driveways. Gaps shall be left at intervals to permit passage of vehicles

and pedestrians. In the event transportation by rail or flatcar is involved, the provisions of API Standard RP5L1 shall apply.

202.02.3 Should it become necessary for the Contractor to store material, the Contractor shall do so at his expense and in a manner that will prevent damage from weather, vandalism, or other causes.

202.03 Primary material shall be provided by the Company. The Contractor shall provide all equipment necessary for installation of the facility as designated in Table 200-1, unless otherwise specified.

202.04 The Contractor shall provide all equipment necessary to test for gas tightness, structure integrity, and pigging as designated in Table 200-2, unless otherwise specified.

202.05 Permits for installation shall be provided by the Company. All permits for the transportation of pipe and other materials, and for construction procedures such as blasting shall be secured by the Contractor.

203 TRENCHING (FR 192.327; ANSI 841.16)

203.01 The route of the main shall be as shown on the plans. The specifications and drawings unless otherwise required by field conditions and specifically agreed to by the Company. The Contractor shall conduct his operations so that paving, driveway, and sidewalk cuts are bridged immediately after the trenching operation. Work shall be executed by the Contractor so that all fire hydrants and hydrant valves adjacent to the work area shall be readily accessible to fire-fighting apparatus. Under no conditions shall any materials or obstacles be placed within 15 feet of any fire hydrant or control valve unless by permit secured by the Contractor from the proper authorities.

203.02 All trenching operations shall conform to local Township, Town, City, State, or Federal specifications as required with regard to the overall length, width, and depth of the operation.

203.03 Trenching includes all excavation whether by trenching machine, power shovel, hand or other methods, which may be necessary for preparation of the pipe bed. The Company Specifications require a normal minimum cover of 44 inches. In no event shall depths less than 24 inches be allowed.

203.04 Payment for ledge removal by blasting or other means is limited to the specified dimensions of the trench plus an additional six inches (6") below the pipe for padding. Any ledge removal in excess, without the written approval of the Company, will be at the expense of the Contractor.

203.05 The normal width of the trench shall be the diameter of the pipe plus 14" unless otherwise required to meet minimum trench requirements, or as specified or agreed on in order to facilitate or expedite installation, or to improve the efficiency of construction so as to attain minimum cost of overall installation. Opening width may be increased as necessary for the installation of valves, fittings and appurtenances.

203.06 The minimum width of the trench shall be that which is necessary for the proper fabrication, installation, and padding or other protection of the pipeline and all materials and appurtenances associated with the system installation, unless otherwise specified by the Company.

203.07 A minimum clearance of three feet (3') shall be maintained between parallel runs, and a minimum clearance of six inches (6") shall be maintained at crossings of the Company main and a foreign structure, or shall be otherwise protected as specifically indicated by design detail. Where in-field conditions require variations with the above, the Design Engineer shall be consulted and methods of appropriate protection shall be inaccordance with his specifications.

203.08 Pavement Cuts

203.08.1 Pavement shall be cut to the full trench width prior to excavation to provide a neat patch joint.

203.08.2 Where required by local governmental agencies, paving shall be cut six inches (6") wider than the trench in order to provide for a neat joint overlap on both sides unless one edge is adjacent to the curbing.

203.08.3 No payment for paving excavations wider than specified will be allowed unless specifically agreed to by the Company.

203.09 Surface materials must be kept separate from potential backfill material. The term "surface materials" includes asphalt, oiled sand, concrete, brick, paving stones, loam, and other surface substance which is dissimilar to the substrata materials of the trench excavation. Trenching includes removal and appropriate disposition of this material as the work progresses.

203.10 Care shall be taken in placing excavated material so that lawns and shrubs are not covered or damaged, and, if possible, streets and gutters are left unobstructed.

203.11 Excess excavated material that is acceptable for backfill shall be removed to a site satisfactory to the Company at the Contractor's expense.

203.12 Precautions shall be taken to avoid damage to any existing utilities. Proper support shall be provided before excavating below any utility line. However, when a utility line is accidentally damaged or broken, the Contractor shall immediately notify the authorities of the utility involve Contractor shall then cooperate and assist with immediate repair of damaged line, and in no case shall the trench be backfilled before approval by authorities of the involved utility is obtained.

203.13 Shoring will be provided in accordance with OSHA requirements, or where soil conditions are such that excessive widening of the trench occurs due to caving.

204 INSTALLATION

Welding or other joining procedure must be continuous from the point of origin to terminus and intermittent installations along the route of traverse is not permitted without special approval of the Design Engineer.

Due to difficulties encountered in support and alignment of "double joined" sections of double random lengths of pipe, the practice of double joining is not allowed.

All connecting points with the existing main must be aligned and spaced for connection to the existing main when installed in order that connecting segments may be true and continuous.

Adequate methods shall be employed to prevent the entrance of dirt or debris into the pipe during stringing and installation.

All pipe and associated equipment shall be inspected prior to installation but after stringing to insure that damage has not occurred to the hardware or protective coating during handling. The provisions of Subsection 202.02 apply to any damages discovered.

205 WELDING OF STEEL (FR 192.223, .225, .227, .229, 231, .235, .241,.243, .245; ANSI 821.3, 823.1, 824.1, 825.1, .2, 828.1, 841.22)

205.01 General

205.01.1 Welds and welding procedures must be qualified under API Standard 1104 and Subpart E of 49CFR 192.

205.01.2 All welders must be qualified under RI Energy Safety Department Standards and FR 192.227.

205.01.3 The quality of field welds will be checked by either destructive or nondestructive inspection.

205.01.3.1 Nondestructive inspection shall consist of radiographic examination over the entire weld circumference, unless otherwise specified.

205.01.3.2 Destructive testing requires a field weld to be cut from the pipe as a cylinder and tested according to the requirements of API standard 1104.

205.01.4 The Contractor will cooperate with the Company during inspection of welded joints. The welds inspected will be selected at random by the Company. Inspected weld shall be identified and noted on the Foreman's Work Order. If a weld is nondestructively tested, the testing company will examine the welds and classify approval or rejection.

205.01.5 If there is any reason to believe that a field weld is defective after nondestructive testing and it cannot be repaired in accordance with FR 192.245, it shall be removed from the line with the cost for cutting and rewelding borne by the Contractor. The welder may be disqualified for further construction if deemed appropriate by the Company.

205.02 Testing and Inspection

205.02.1 Initial weld inspection for steel main

205.02.1.1 A testing company shall be employed by the Company, at its expense, unless otherwise specified, to nondestructively test by techniques described in Sub-section 205.01.3.1 all welds done by each welder during his first day on the job. A minimum of five (5) welds shall be tested during the testing period. Results of the test must be satisfactory and shall be reported to the project inspector and the Company Safety Department before proceeding with further construction.

205.02.1.2 The radiographic contractor must provide documentary evidence that the radiographer who interprets the film is a certified SNT-TC-1A Level 11 or Level 111 radiographer.

205.02.2 In addition to Subsection 205.02.1, the Company will inspect, at its expense, 10% of the project's welds. The specifications of Subsections 205.01.4 and 205.01.5 will apply.

205.03 Welding Specifics

205.03.1 A firm and positive grounding electrical connection must be established. Connecting apparatus equal to or exceeding the requirements of the Pipetron Quick-Bond Clamp is required, and jury-rig attachments such as homemade spring bars, etc., are disallowed.

205.03.2 Arc burns have been found to cause serious stress concentrations in pipe. The metallurgical notch caused by arc burns shall be prevented or eliminated in all mains. Arc burns resulting from faulty grounds and connections are not allowed and must be removed by cutting out the damaged portion of the pipe as a cylinder and replaced at the Contractor's expense. (See Subsection 209.)

205.03.3 It is suggested that grinding be given consideration after both the root and hot pass of welds in order to assure a clean field for subsequent welding. This practice may obviate an area of potential weld test failure.

205.03.4 The different wall thickness between pipe and fittings requires that the thicker wall be ground or the weld joint backwelded to avoid stress concentrations.

206 BENDS, ELBOWS, AND FITTINGS (FR 192.147, .149, .155, .313, .315; ANSI 831.21, .22, .23, .3, .4, .5, 841.23)

206.01 Flanges, Gaskets and Bolting

206.01.1 Steel pipeline flanges shall be manufactured in accordance with MSS Standard SP-44.

206.01.2 Flange connections between 150 psi steel and Class 125 cast iron flanges will be made with flat faced flanges, full faced gaskets, and allow steel bolts conforming to ASTM Specification A-193.

206.01.3 Flange connections between steel flanges will be made with raised face flanges, flat ring gaskets, and alloy steel bolts conforming to ASTM Specification A-193.

206.01.4 PSI products flange insulating gasket kits shall be used wherever points of isolation are specified in Section 900. Gasket kit specification is as follows: PSI Gasket Seal Type E with Phenolic Retainer and Nitrile (Buna N) Seal equipped with one piece sleeve and washers and steel washers. Alloy-steel bolts conforming to ASTM Specification A-193 with A-194 nuts shall be used in conjunction with raised face flanges when both are steel and with flat face flanges when one is steel and the other Class 125 cast iron.

206.02 Elbows and Bends

206.02.1 Miter bends shall be disallowed.

206.02.2 Elbows, reducers, tees, laterals, and other fittings shall be standard wall conforming with ASTM Speciation A-234, Grade WPB.

206.02.3 Field formed cold bends may be used for changes of direction less than 1-1/2 degrees per diameter length. They must be free from buckling, cracks, or other evidence of mechanical damage, and shall be formed with an appropriate die or shoe such that the deformation does not produce a difference between the maximum and minimum diameters in excess of 2.5% of the nominal diameter.

206.02.4 For greater changes in direction than that provided for in Subsection 206.02.3, factory-made wrought-steel welding elbows or transverse segments, cut there from shall be used. For tranverse segments, the arc length measured along the crotch shall be at least on inch (1") on pipe sizes two inches (2") and larger.

206.03 Branch Connections

206.03.1 Tees and branches for branch connections with d/D ratios greater than 1/3 and operating at less than 20% of SMYS, shall be fabricated with factory manufactured fittings having smooth configuration and manufactured in accordance with applicable codes. Where the complete fitting cannot be used, full encirclement fittings shall be provided in accordance with Figure 831-D of the ANSI B31.8.

206.03.2 Tees or laterals for branch connections or manifolds, with d/D ratios of less than 1/3 and operating at less than 20% of SMYS, may be field- or shop fabricated from pipe, if approved by the Design Engineer.

206.03.3 Thread-o-let and weld-o-let penetrations shall be clean cut holes for the full diameter of the connection.

207 SURFACE DAMAGE AND IMPERFECTIONS (FR 192.309)

207.01 Inspection for the detection of dents, gouges, and grooves shall be made prior to the pipe section being welded into the line, or just ahead of the backfilling operation. A dent is a depression which produces a gross disturbance in the curvature of the pipe wall without reducing the pipe wall thickness. A gouge or groove results where the metal of the pipe has been disrupted producing

minor changes in wall thickness and resulting points of stress concentrators.

207.02 A dent shall be removed where: it contains a stress concentrator such as a gouge, groove, or scratch; or if the dent results in a depression of more than 2% of the nominal pipe diameter, enclosed in an area of less than one pipe diameter in any direction. Gouges and grooves shall always be removed.

207.03 Dents requiring removal shall be removed by cutting out the damaged portion of the pipe as a cylinder, or shall be repaired by installing full encirclement reinforcing segments to completely lap the damaged area. Patching or coupon replacement is not permissible.

207.04 A gouge or groove shall be removed by smoothly grinding or sanding, provided that the remaining wall thickness is not less than that required by the pipe specification tolerances. Where the remaining wall thickness becomes less than the pipe specification tolerances, repair must be made by cutting out the damaged portion of the pipe as a cylinder. Patching or coupon replacement is not permitted.

208 INTERNAL CLEANING

208.01 Prior to the pressure test, each section of completed construction shall be "pigged" to remove any scale, dirt, or debris which may have been inadvertently entrained. Pigging shall be repeated until the exit air is free of traces of dust and dirt. The Contractor shall be responsible, at his expense, for locating and removing a trapped pig, and shall repair the main as may be necessary. It is recommended that a signaling device be incorporated in the pig for easy location. The pig used by the Contractor must be approved by the Company.

208.02 Care must be exercised during the pigging operation to prevent the pressure from exceeding the design pressure of the main.

208.03 The Contractor shall install a device to restrain and retain the pig upon exit from the main such that injury or damage to persons or property will be prevented. Any device judged unsuitable by the Company may be rejected.

209 PIPE TESTING (FR 192.507, .509, .619; ANSI 841.3, .42, .43, .44, .5, 845.22)

209.01 New mains shall be tested after construction and before being placed in operation to demonstrate gas tightness and structural integrity.

209.02 All steel welded main shall have a design operating pressure of 75 psig, be qualified for a Class 4 location as defined by the Register, and be tested to a minimum pressure of 150 psig, unless otherwise specified.

209.03 Testing procedure shall be by either standup static test or by direct inspection methods as designated in the Job Specifications.

209.03.1 Standup static testing prodecure shall require a minimum of 24 hours, after compression, for stabilization, and a static period of an additional 24 hours. The temperature and pressure shall be recorded immediately after the initial compression, after the 24-hour stabilization period, and after the 24-hour static test period. Pressures adjusted for temperature differential must remain static over the test period.

209.03.2 Direct inspection testing procedure shall require that all welds and mechanical connections be soap tested by thoroughly soaping the area and determining that no leaks are evident. During the test, the soaped area must be thoroughly shielded from wind or other disturbances. A standup period, at the required test pressure, must be maintained for a minimum of one hour prior to initiation of the test.

209.03.3 The pipe should be open and free to the test when possible.

209.04 The test medium shall be air, inert gas (N2 or CO2), or any combination thereof, unless otherwise specified.

209.05 Costs shall be borne by the Contractor for repair of defects disclosed by testing, and any further testing necessitated thereby, except that the Company shall assume responsibility for defects which are shown to be solely attributable to materials which the Company has supplied.

209.06 All temporary connections to the line shall be repaired to the satisfaction of the Company.

210 PADDING AND BACKFILL (FR 192.319; ANSI 841.273)

210.01 Backfill must be performed in a manner to provide firm support under the pipe. Care shall be used to prevent damage to the coating, by such means as the use of rock-shield material, or by making the initial fill with rock-free material to a sufficient depth over the main to prevent rock damage. (See Subsection 210.08)

210.02 Where it is indicated that soil conditions will be unstable, a clean backfill material must be provided around the pipe to provide continuous support along the section. (Clay soils can undergo severe volume changes resulting in soil plasticity with corresponding shifting and heaving producing increased secondary stresses on the pipeline.)

210.03 The Contractor shall provide all equipment necessary to place padding and backfill. Padding material shall be uniform natural bank sand, graded from all particles sizes smaller than the No. 10 sieve and coarser than a No. 200. Backfill material shall consist of natural bank gravel having durable particles graded from fine (greater than No. 200) to coarse (2-inch) in a reasonable uniform combination with no boulders or stones larger than 2-inch in size. Padding and backfill material must be free of lumps, frozen material, cinders, ash rubbish, paving material, clay, loam, rocks and any other material which might subject pipe, associated equipment, or coating, to injury. All padding and backfilled material must meet the approval of the Company. All wood used for blocking or shoring must be removed from the trench prior to the backfill operation.

210.04 Where suitable material, approved by the Company, for either padding or backfill is available along the line of traverse, the Contractor shall haul and place such fill under the contract price without extra cost. Where suitable fill is not available from excavated materials, by the sole determination of the Company, the Contractor shall procure, haul, and place suitable gravel to the satisfaction of the Company.

210.05 The Contractor shall submit a unit price for gravel fill, purchased, hauled, and placed, and shall be entitled to payment determined as the product of said price quotation and placed quantities only when such quantities are appropriately measured or otherwise accounted for at delivery and approved by the Company as correctly received. Gravel needed to replace fill which has been excavated from the trench and made unusable, in the opinion of the Company, due to failure by the Contractor to exercise reasonable care to save such otherwise usable fill in accordance with these specifications, and gravel to fill that portion of a trench opening which exceeds the width of the nominal run of the trench or the maximum trench width otherwise specified, whichever is the lesser, will be provided by the Contractor without extra cost, unless previously and specifically agreed to by the Company.

210.06 Where the Contractor fails to specify a unit price for gravel fill as an extra in his original quotation, no payment will be allowed.

210.07 Where padding is necessary in the opinion of the Company, it shall be placed in the trench bottom to a minimum depth of four inches (4") and to a minimum dimension of six inches (6") elsewhere around the pipe so as to completely encase and protect the pipe, piping materials, and coating from injury.

210.08 Wherever, in the opinion of the Company, the conditions of trench and surroundings is such that damage to any coating used would result from using machine methods of placing backfill to a depth of six inches (6") above pipe, Contractor shall place same by hand shoveling. This backfill, to a depth of six inches (6") above the top of appurtenances along the top of the main, shall be

placed as soon as possible after the pipe has been lowered in the trench.

210.09 Backfill shall be carefully placed under the main and any appurtenances, and compaction of the backfill to the original density is required by wetting and/or tamping by six-inch (6") layers to a level six inches (6") above the top of appurtenances along the top of the main. Similar compaction of the remainder of the trench shall be performed if required by local governmental authorities.

210.10 Whenever crossing under an existing Cast Iron or Ductile Iron main is required, the backfill material below the Cast Iron or Ductile Iron main shall be compacted to its original density by wetting and tamping in four-inch (4") layers to a level six inches (6") above the top of appurtenances along the top of the main.

210.11 The trench shall be backfilled to a point of within ten feet (10') of the end of the completed main installed each day. The trench may be left open overnight, to the extent necessary to permit testing by direct inspection methods, provided the amount is not in excess of that allowed by local governmental authorities.

211 RESURFACING

211.01 All roadway paving, sidewalk resurfacing, backfilling and compaction shall conform to local Township, Town, City, State or Federal specifications as required.

211.02 All resurfacing shall be kept in repair by the Contractor for two years. If settling or any other defect is evident, the Contractor shall make repairs at his expense until the resurfacing is determined acceptable by all governmental bodies concerned.

212 PURGING (FR 192.629, .751; ANSI 841.28)

212.01 A minimum of two (2) tested gascopes are required for each test when purging. Continuous sampling with two (2) gascopes at each location is required during each purge and all welding and cutting operations.

212.02 Purging During Welding and Cutting Operations

212.02.1 If no gas is detected on the L.E.L. scale of either of two (2) gascopes, or the reading is below 10% L.E.L., it is safe to proceed without adding nitrogen.

212.02.2 If gas is detected and complete shut-off is impossible or impractical, nitrogen must be added either upstream or downstream of the welding or cutting operation until the combustible gas concentration of the mixture is decreased to a point where the admixture of any additional amount of air will not result in a flammable mixture.

212.02.2.1 If nitrogen is added downstream of the welding or cutting operation, it is safe to proceed only when sufficient nitrogen has been added to reduce the L.E.L. readings taken upstream of the welding or cutting operation with two (2) gascopes, to below 30% L.E.L. in nitrogen

212.02.2.2 Although it is normally preferred that nitrogen be added downstream of the welding or cutting operation, specific conditions may require that nitrogen be added at an upstream location. If nitrogen is added upstream of the welding or cutting operation, it is safe to preceed only when sufficient nitrogen has been added to reduce the L.E.L. readings taken downstream of the welding or cutting operation with two (2) gascopes, to below 20% L.E.L. in nitrogen.

INSTALLATION SPECIFICATIONS
AND CODE RECONCILIATION
SECTION 200A
INSTALLATION OF POLYETHYLENE GAS MAIN
AUGUST 6, 1976
(REVISED JANUARY 24, 1979)
(REVISED JANUARY 18, 1988)

201A CONSTRUCTION SPECIFICS

201.01A These specifications set forth standards to which the installation of piping shall adhere to.

201.02A The specifications cover the installation and handling procedures for polyethylene pipe, tubing, and associated fittings when used for mains and service piping.

201.03A Piping material is manufactured as outlined by the Department of Transportation Title 49, Part 192, TRANSPORTATION OF NATURAL AND OTHER GAS BY PIPELINE - MINIMUM SAFETY REGULATIONS and the ANSI B 31.8 Code for GAS TRANSMISSION AND DISTRIBUTION PIPING SYSTEM based on ASTM D-2513 SPECIFICATION FOR THERMOPLASTIC GAS PRESSURE PIPE TUBING FITTINGS.

202A GENERAL REQUIREMENTS

202.02A The Company has the authority to enforce these specifications in accordance with Section 200 (Installation of Steel Gas Main, 3/21/75) and Section 200A (Installation of Polyethylene Gas Main, 8/6/76), (Revised January 24, 1979). This includes the stipulation that: "Any variation with, deletion from, or additions to the named references and the Project Drawings due to local conditions must originate from sound and specific reason. Arbitrary changes are not permitted. Remedial work required for noncompliance, unacceptable changes or additions, or acceptable changes or additions, where neither have received prior Company approval, will be at the Contractor's expense."

203A MATERIAL STORAGE AND HANDLING

203.01A For periods of storage in excess of two weeks, the piping material shall be stored indoors, or shall be covered so as to shield it from direct sunlight. It shall be stacked so that no out-of-round flattening, or "egging" results. Exposure to excessive heat or harmful chemicals shall be avoided.

203.02A When the polyethylene material must be transported, the pipe, tubing and fittings shall be handled carefully. Proper support so as to minimize movement between the pipe and its support to avoid kinking, cutting, gouging, or abrading the surface will be maintained.

203.03A Prior to actual installation, polyethylene piping shall be stored on the job site in a cool dry place protected from direct sunlight.

203.04A Polyethylene pipe shall not be left exposed in the work area during the absence of the installation crew, because of possible damage by vehicular or foot traffic, construction equipment and miscellaneous foreign objects.

204A INSTALLATION PROCEDURES

204.01A The polyethylene pipe must be carefully inspected for cuts, gouges, deep scratches and other imperfections before use. Defective pipe will be rejected.

204.02A Adequate attention must be given to polyethylene pipe during placement in the trench to prevent kinking, stretching or the striking of sharp objects. The pipe shall be snaked in the trench to permit contraction. The extra length installed shall amount to one foot per 100 feet of trench.

204.03A The bottom of the trench shall be as smooth and level as practical and free of rocks and other abrasive materials. Sand or soil, free of stones and other abrasive materials, shall be used as base to protect the polyethylene piping from damage. A minimum of six inches of padding sand will be installed at the bottom of
the trench.

204.04A Polyethylene mains require a normal minimum cover of 44 inches. Depths less than 24 inches will not be allowed.

204.05A Polyethylene service pipe shall be installed at least 30 inches below grade between the curb and the property line. The cover at the foundation wall will be 24 inches below finished grade. Depths less than 18 inches cover on private property and 24 inches cover on public property will not be allowed.

204.06A A minimum clearance of three feet shall be maintained between parallel runs. A minimum clearance of twelve inches shall be maintained at crossings of a Company main and a foreign structure, or shall otherwise be protected as specifically indicated by design detail. Where in-field conditions require variations with the above, the Design Engineer shall be consulted and methods of appropriate protection shall be in accordance with his specifications.

204.07A Polyethylene pipe may be bent in conformity with the natural curve of a reel. Otherwise changes in direction must be made with suitable fittings. Miter bends are not permitted and neither are bends which exhibit buckles, cracks, or other evidence of damage. There shall be a minimum of 3 feet straight run out of a branching tee, coupling, service tee, meter riser or any rigid filling before the initiation of a bend.

204.08A Polyethylene pipe or tubing will be cut utilizing special cutters designed for plastic pipe to insure square cut ends.

204.09A Adequate pipe anchorage will be properly installed as noted on design specifications.

205A PIPELINE SUPPORTS

205.01A When polyethylene pipe or tubing is used and soil conditions are indicated to be unstable, additional support shall be provided by installing a protective polyethylene sleeve.

205.02A A protective polyethylene sleeve will be installed at metal-to-plastic transition fittings, at services with a saddle and tapping tee, and at those locations where forces on the pipe may result in bending and shear stresses.

205.03A The protective polyethylene sleeve will be installed in such a way that it fits securely around the pipe being protected. It will be backfilled and compacted as soon as possible to provide ground support across the span. The installation of a protective polyethylene sleeve does not eliminate the need for proper backfilling and compaction around and under the sleeve. Care must be exercised to insure that the protective polyethylene sleeve does not move from its intended position during backfilling and tamping.

206A POLYETHYLENE FUSION AND MECHANICAL JOINTS

206.01A When field joints are required, the polyethylene pipe shall be cut several inches too long and the extra length distributed as slack as near as possible to the joint. This will provide for contraction of the polyethylene pipe due to temperature changes and should be in proportion of 12 inches per 100 feet of pipe.

206.02A Heat-fusion joints. Each heat-fusion joint on polyethylene pipe must comply with the following:

(1) A butt heat-fusion joint must be joined by a device that holds the heater element square to the ends of the piping, compresses the heated ends together, and holds the

pipe in proper alignment while the polyethylene hardens.

(2) A socket heat-fusion joint must be joined by a device that heats the mating surfaces of the joint uniformly and simultaneously to essentially the same temperature

(3) Heat may not be applied with a torch or other open flame.

206.03A Heat-fusion joint will not be disturbed until it has properly set for 10 minutes. Cooling time for "rough handling" will be 20 minutes after the last joint has set.

206.04A Any fused joint of questionable integrity will be removed and repaired at contractor expense.

206.05A Mechanical joints - each compression-type mechanical joint on polyethylene pipe must comply with the following:-

(1) The gasket material in the compression coupling must be compatible with the polyethylene.

(2) A metal insert stiffener must be used in conjunction with the coupling.

(3) They must effectively resist pull-out forces caused by thermal contraction or by external loading forces.

207A VALVES AND METER RISERS

207.01A Valves installed in polyethylene systems must be properly anchored to prevent rotational stresses when operated.

207.02A Meter risers shall be installed to permit easy installation of the meter at the foundation wall.

207.03A Curb boxes or other enclosures shall not be supported by the polyethylene pipe, or in any way impose stress on the pipe.

208A PRESSURE TESTING PROCEDURES

208.01A Pressure testing will not be initiated until 20 minutes after the final heat fused joint has set.

208.02A In accordance with the rating of polyethylene pipe and tubing, installations shall be tested to a pressure of at least 1.5 times the maximum operating pressure or 90 psig, whichever is greater. The test pressure, however, must not exceed three times the design pressure of the pipe or 100 psig, whichever is the least. All joints will be soap tested at this pressure before being backfilled.

208.03A Temperature of the polyethylene pipe shall not exceed 100°F during test.

209A PIPE LOCATOR AND MARKING TAPE

209.01A To facilitate location of directly buried pipe, No. 12 AWG THW coated copper wire will be strung along the full length of the pipe. The locator wire will be secured to the steel meter riser at the building wall. If the polyethylene service is connected to a polyethylene main, the locator wires for both the service and the main must be connected by stripping sufficient insulation to twist the bare copper end of the service wire onto a bare section of the main wire within six inches (6") of the service tee. This connection must be thoroughly coated with TAPECOAT MASTIC.

209.02A The locator wire and marking tape shall be installed after backfilling and tamping 12 inches above all direct burial polyethylene mains and stubs. The marking tape is high-visibility orange and is imprinted with the words, "CAUTION BURIED GAS LINE BELOW".

210A STATIC ELECTRICITY

210.01A Procedures to minimize the possibility of static electricity will include keeping the pipe wet (water spray, wet rag, wet rope), wetting down both the polyethylene pipe and excavation hole before attempting to work on the piping, and by performing squeeze-off operations in a separate excavation hole, removed from and upwind of any escaping gas.

211A INSPECTION AND REPAIR

211.01A If any section of polyethylene pipe or tubing is found to be kinked, flattened, or out-of-round, or if there is evidence of damage due to sunlight, excessive heat, or chemicals, the damaged section must be replaced.

211.02A All metal fittings and bare metallic surfaces used in conjunction with polyethylene pipe shall not be coated by any material which requires the application of heat. Fittings and surfaces requiring coating protection shall be protected by thorough application of Tapecoat Mastic.

211A PADDING AND BACKFILL

212.01A Padding sand will be installed in such a way that there will be a layer of 6 inches below and 12 inches above the pipe.

212.02A Care must be exercised when backfilling to insure that no sharp objects or rocks will be in contact with the pipe. Mechanical tamping shall not be used until 12 inches of cover has been placed over the pipe.

212.03A Special care shall be exercised to backfill and tamp the excess soil at the service tee and at all other joints of the polyethylene system.

212.04A The Contractor shall provide all equipment necessary to place padding and backfill. Padding material shall be uniform natural bank sand, graded from all particles sizes smaller than the No. 10 sieve and coarser than a No. 200. Backfill material shall consist of natural bank gravel having durable particles graded from fine (greater than No. 200) to coarse (2-inch) in a reasonably uniform combination with no boulders or stones larger than 2-inch in size. Padding and backfill material must be free of lumps, frozen material, cinders, ash, rubbish, paving material, clay, loam, rocks and any other material which might subject pipe, associated equipment, or coating, to injury. All padding and backfill material must meet the approval of the Company. All wood used for blocking or shoring must be removed from the trench prior to the backfill operation.

Installing Steel Distribution Mains CNST04005

1. Purpose

This document describes the requirements for installing steel distribution mains that will have maximum allowable operating pressures (MAOPs) below 125 psig and less than 20% SMYS. If the pipeline will exceed either of these parameters, then the pipeline shall be installed in accordance with Installing Transmission Lines and Pipelines Operating at 125 psig or Greater [CNST04006].

2. Responsibilities

Construct & Maintain or Designee shall be responsible for:

- Installing steel distribution mains in accordance with this procedure

3. Personal & Process Safety

All required PPE shall be worn and utilized in accordance with the Rhode Island Energy Safety Policy.

4. Operator Qualification Required Tasks [Qualified or Directed & Observed]

- Task 31 – Installation of Pipe
- Task 49 – Mechanical Joining of Pipe Other Than Plastic
- Task 53 – Non-Destructive Testing of Welds
- Task 54 – Welding on a Pipeline
- Task 70 – Abnormal Operating Conditions and Properties of Natural Gas

Not all personnel shall be required to perform all tasks associated with this document. Therefore, Operations personnel shall only be required to qualify on those tasks associated with the tasks they will perform.

5. Content

	General
	Mains shall be installed in accordance with the line and grade specified on the drawings for the job. Where no grade is specified, mains shall be installed in accordance with the cover requirements in the section below titled, “Steel Pipe Installation.”
	The trench width shall be as described in the specifications or as directed by the Rhode Island Energy representative. There shall be no undercutting of the pavement.
	All underground facilities shall be marked prior to construction. Test holes may be required to verify and determine the depth, size, and exact location of all subsurface facilities that cross or lay parallel (within the affected work area) to any excavation for the proposed installation of the gas main prior to excavating the line trench.
	Where drawings or field conditions indicate the presence of other substructures and facilities notification, mark-out, and excavation shall be in accordance with regional damage prevention procedures.

	Pipeline welding shall be performed in accordance with Welding policy [CNST05002] and Pipe Welding Safety [CNST05003].
	All excavations shall be performed in accordance with Standards for Working in Excavations M-1301.
	The finished pipe shall be clean, dry, and free of foreign material.
	Install cathodic protection in accordance with Rhode Island Energy's specifications including, Corrosion Design Criteria [COR01100]. Steel mains including welds, valves, and fittings shall be properly coated in accordance with the Facility Coating Guide [030031-CS].
	Anodes and test stations shall be installed as designated on the drawings. In the absence of specific guidance on the drawings or from Corrosion Engineering, refer to Installation of Magnesium Anodes [COR04001] and Installation of Test Stations for Cathodic Protection [COR04003].
	Insulating joints shall be installed as designated on the drawings. Install and electrically-test each insulated joint in accordance with Installation of Insulating Joints for Cathodic Protection [COR04005].
	Pipeline markers shall be installed at locations indicated on the installation drawings and as per, Pipeline Markers for Main and Transmission Lines [DAM01020].
	If supplemental odorization is required prior to placing the pipeline in service, it shall be performed in accordance with Supplemental Odorization for New Piping [INR06002].
	Prior to and after the pressure test, the pipeline shall be cleaned to the satisfaction of Rhode Island Energy. Brush pigs shall be used to clean the pipe before testing. After a hydrostatic test, foam pigs shall be used to remove all water and to dry the pipeline. Sufficient "pig" runs shall be made to ensure a clean, dry pipeline prior to introducing natural gas into the pipeline. This is determined by measuring dust penetration into the pig. Generally, dust penetration of less than 1 inch is acceptable.
	For pressure testing mains, refer to Pressure Testing Mains Operating Below 125 psig [CNST04003].
	If there is a plan to uprate the pipeline in the future to operate at pressures of 125 psig or greater, or operate at 20% SMYS or greater, then the pipeline shall be installed and repaired in accordance with the more stringent requirements described in Installing Transmission Lines and Pipelines Operating at 125 psig or Greater [CNST04006].
	For situations where pipelines are exposed to the public (such as aboveground piping) and where the pipeline may be used by the public for unintended purposes, signs should be posted to warn the public to keep away from these facilities.

	Inspections
	Perform a thorough field inspection to prevent damaged/gouged, grooved pipe, or coating from being installed in the completed pipeline. The inspection shall be performed by someone other

	than a person who participated in the construction (49 CFR §192.305).
	When an applied-coating holiday test is required, perform the test in accordance with Testing of Pipe Coating [COR03001].
	Inspect the bottom of the excavation just before the pipe is lowered in and remove any object that could harm the piping.
	Inspect the fit of the pipe to the ditch prior to backfilling to prevent unnecessary strain on the pipe.
⚠	All exposed existing piping shall be inspected for hazardous liquids in accordance with Handling Contaminated Materials and Piping [SHE02001] prior to working on the pipe.
	Examine all exposed existing piping for external corrosion and the condition of the coating in accordance with Inspection of Exposed Steel Pipe for Corrosion [COR02020]. In addition, existing piping, whenever accessible or removed such as at tie-ins, shall be internally examined for signs of corrosion in accordance with Inspection of Exposed Steel Pipe for Corrosion [COR02020].

	Supporting Existing Structures and Utilities
	Exposed gas facilities shall be properly supported
	Gas facilities that will be crossed or exposed shall be excavated in accordance with regional damage prevention procedures.
⚠	If an in-service unrestrained coupling is unearthed on a high-pressure (pressures above low pressure) pipeline while excavating, then precautions shall be taken to prevent pipe pullout. Unrestrained couplings located near pipeline offsets or bends present a higher risk than couplings on straight segments of pipe due to the longitudinal force applied to the offset or bend from the pressure in the pipe. Prior to fully exposing the unrestrained coupling, in order to prevent pipe pullout, ensure that the pipe on each side of the coupling is embedded in the earth before fully exposing the coupling. If an unrestrained coupling is unearthed after a pipeline offset or bend is unearthed, then further excavation work shall stop until the pipeline is adequately braced horizontally and vertically.
	If Gas Control and Gas Systems Engineering provide permission for the operating pressure of the in-service pipeline to be lowered or for the pipeline to be shut down, then the risk of pipe pullout will be reduced.
	An unrestrained coupling that is unearthed shall be restrained using anchorage lugs and threaded rods. Provide plastic insulators for the reinforcing lugs as necessary (refer to Construction standard, Supplemental Restraining of Non-Restraining Mechanical Compression Couplings and Caps on Steel Pipe [MAIN-6220]). Following the installation of an insulating coupling, contact Corrosion for testing.
	If visual inspection is not conclusive about whether an exposed coupling is self-restraining or unrestrained, refer to the markings on the coupling to determine its status. Contact Engineering if guidance is needed.
	The Installer shall notify the Rhode Island Energy field representative when cast iron mains, eight (8) inches and less in diameter, are exposed. Prior to undermining any cast iron, refer to the regional cast iron encroachment policy.

	Adequately support all other subsurface facilities to ensure protection from damage. Any damage shall be promptly reported to Supervision.
	Maintain the integrity of fences, poles, and other structures adjacent to the trench, pits, and work area.
	Exercise care to prevent damage to transverse and parallel curbs, sidewalks, driveways, and property monuments.

	Materials
	Steel pipes shall comply with the material specifications contained in Steel Pipe API 5L Grade B, X42 and Greater [120020-MS]. Factory-coated steel pipes shall comply with External Coating of Steel Pipe with Pritec [MS-017] or Coating and Inspection of Steel Pipe with Fusion Bonded Epoxy (FBE) and Powercrete Abrasion Resistant Epoxy Overlay [MS-018].
	Steel fittings such as flanges, ells, tees, reducers, and caps shall be forged welded fittings in accordance with Rhode Island Energy specifications. Prior to the start of construction, material certifications and material grades/markings shall be verified to ensure that they meet the design requirements.

	Steel Pipe Installation
	The pipe shall be laid without causing unnecessary strain on the pipe. The pipe shall be laid with as few vertical and horizontal changes in direction as possible.
	The bottom of the trench shall be relatively smooth and free of any objects which may damage the pipe coating. The backfill material to be used around the main and for a minimum of 6 inches over the piping shall be free of any material that could be harmful to the pipe surface (see Backfill and Restoration [CNST01003]).
	In areas where it is not practicable to pad the trench with sand prior to lowering the pipe into the trench, sandbags shall be placed in the trench to act as a bed for the pipe. These bags shall generally be placed at intervals of 10 feet or as directed. After the pipe has been positioned and welded in the trench, sand backfill acceptable to the Rhode Island Energy field representative shall be placed. The sandbags shall then be broken in a manner acceptable to the Rhode Island Energy field representative.
	The amount of cover from the top of the pipeline (e.g., tees, couplings, and other appurtenances) to finished grade shall be as shown on the project drawings and as described in the project specifications. If not specified, the pipeline shall be installed with the covers shown in Table 1 below. The cover may be varied at the discretion of the Rhode Island Energy Project Engineer in order to avoid interference with existing structures or high ground water conditions. Where an underground structure prevents the installation of the pipeline with the minimum cover, obtain permission from the appropriate agency, where required, and protect the pipeline (such as with steel plates). For highway and railroad crossings, refer to Design Requirements for Installation of Casings [ENG04010] for casing cover requirements when casings are required and Design of Distribution Mains [ENG04001].

Table 1: Cover Requirements

Region	Streets and Roads Not Controlled by the State or the DOT		State Right-of-Way	
	Recommended	Minimum	Below the Roadway Minimum	Outside the Roadway but within the Right-of-Way Minimum
RI	30”	24”	36”	36”
All	48 inches of cover in soil below navigable river, stream, or harbor or 24 inches in consolidated rock between the top of the pipe and the underwater natural bottom.			

Each pipe segment shall be thoroughly cleaned to remove all dirt or foreign matter from the ends of the pipe before the joints are aligned for welding.

In order to keep the inside of the pipe free of foreign material, a suitable tamp plug or cap shall be installed on the open ends of the pipeline at the end of each day. Any foreign matter which may enter the pipe after laying and joining operations have been completed shall be removed by suitable means before the final test.

If pigging is to be performed to clean the pipe and the need arises to cap the laterals, then only full-restraint or welded end caps shall be used to resist the pressure from the pigging operations.

⚠ It is imperative that the inside of the pipe be kept free and clean of all obstructions, and it shall be the Installer’s responsibility to protect the pipe from any hazard. In the event that a storm, broken water main, or other condition should allow water and muck into the line, the Installer shall be required to clean the pipe in a manner that is acceptable to Rhode Island Energy.

At the end of each day’s work, the pipe shall be capped, made watertight, and anchored to prevent movement in the event the trench becomes flooded.

The preferred clearance for distribution piping when crossing other underground structures is 12 inches. However, distribution piping shall have a minimum clearance of 6 inches from other underground facilities or structures not used in conjunction with the installation of the gas pipeline, except as follows. Where this distance cannot be achieved, a field representative shall notify Gas Systems Engineering for guidance on how to protect the gas distribution facility. The minimum clearance, provided the main is suitably protected from other underground structures, is 2 inches (4 inches minimum preferred for LI).

Note: 6 inches of clearance from water lines should be maintained, whenever practicable.

Consideration should be given regarding protection for the coating on steel pipes located in close proximity to steam lines.

Changes in direction of piping should be made with welded fittings such as ells, whenever possible. If field cold bending is necessary for line pipe, it shall be performed in accordance with, Field Cold Bending of Line Pipe [CNST04007] to ensure that pipe ovality limits and minimum radii requirements are met. Upon completion of the bending, check the coating for defects in accordance with Testing of Pipe Coating [COR03001] and repair it in accordance with,

	Application of Coating Systems [COR02001].
	The preferred method of joining steel pipe is by welding. The cut end of the pipe shall be beveled in accordance with Welding Policy [CNST05002]. Welding elbows furnished by Rhode Island Energy should be either 90 degrees or 45 degrees long radius with a wall thickness that at least matches the pipe thickness.
⚠	When welded sections of pipe are lowered into the trench, care shall be taken to prevent a permanent bend or distortion to the pipe.

	Repairing Steel Pipe
	Each imperfection or damage that impairs the serviceability of the pipe shall be repaired or removed. If repair is made by grinding, the remaining wall thickness shall at least be equal to either (49 CFR §192.309(a)): • The minimum thickness required by the tolerances in the specification to which the pipe was manufactured; or • The nominal wall thickness required for the design pressure of the pipeline.
STOP	A gouge, groove, arc burn, or dent shall not be repaired by insert patching or pounding out.
	Each gouge, groove, arc burn, or dent that is removed from a length of pipe shall be removed by cutting out the damaged portion as a cylinder. The cylinder shall be replaced with a new pipe that meets the design specification.
	Notches and laminations on pipe ends shall not be repaired; the damaged portion shall be removed as a cylinder and the pipe ends re-beveled.

	Pipe Joining
	Unless otherwise noted, joints between pipe sections, valves, and fittings shall be welded. All welding, inspections, and nondestructive testing shall be performed in accordance with Welding Policy [CNST05002] and Pipe Welding Safety [CNST05003].
	Whenever practicable, joints shall not be located under active tracks or any other substructures.
	The welder and inspector or foreman shall visually examine the quality of all the welds.
	All steel distribution mains shall have at least 10% of all welds nondestructively examined in accordance with Welding Policy [CNST05002]. A Main Field Record (weld map) should be created with the welds numbered along the length of the pipeline.
	Compression couplings and caps may only be used under extenuating circumstances, such as for tie-ins, where welding is not practicable. If non-restraining mechanical couplings or caps are used, then they shall be restrained in the field using anchorage lugs and threaded rods in accordance with Supplemental Restraining of Non-Restraining Mechanical Compression Couplings and Caps on Steel Pipe [MAIN-6220]. Approved self-restraining couplings and caps require no further supplemental restraining when installed in accordance with the manufacturer's

	specifications.
	Threaded joints shall not be used, unless specifically approved by the Rhode Island Energy VP of Gas Systems Engineering or the VP of Asset Management for a particular project or condition.

	Valves
	Valves shall be furnished as specified in the particular project specifications and they shall be of the appropriate pressure class to meet or exceed the MAOP of the pipeline.
	All valves should be below grade and shall have roadway boxes which provide access to the operating mechanism.
	At Rhode Island Energy's option, valves may be pressure tested prior to installation as specified in the particular project specification.
	The Installer shall use extreme care when making a valve weld.
	If the valve leaks during a pressure test Rhode Island Energy, at its option, may arrange to contact the manufacturer's representative for assistance, and if Rhode Island Energy determines it necessary, a replacement valve will be ordered.
	The Installer shall leave line valves in an open position and purge valves in a closed position. The Installer shall not open and close valves after installation unless directed by the Field representative.
	System Interconnection Valves – A minimum of two valves placed in series that are used for manual pressure control between two mains operating at different MAOPs may be installed provided they are approved by Gas Control and Long-Term Planning. The valves shall be installed in accordance with current standards or special designs as specified by Project Engineering & Design, but as a minimum shall be of the appropriate pressure class for the system with the highest MAOP and shall be installed with pressure taps upstream, downstream, and between both valves. Lock high-pressure valves to prevent unauthorized operation.

	Application and Testing of Protective Coating
	Field-Applied Coating: The external surfaces of bare steel pipe, pipe welded joints, anode and test lead connections, valves, fittings, and pipe coating damage, etc., shall be cleaned and coated in accordance with, Application of Coating Systems [COR02001].
	Tests and Inspection of Coating: • Standards of Acceptance: It is the intent of this procedure to require protective coating completely free from holidays and other faults. Work not satisfying these requirements shall be repaired in accordance with Application of Coating Systems [COR02001]. Care shall be exercised during all phases of the application of protective coating to prevent cleaning, priming, or coating materials from damaging or adhering to any internal surfaces. Prior to backfilling, holiday testing should be performed by jeep testing the pipe in accordance with

	Testing of Pipe Coating [COR03001]. • Rhode Island Energy Acceptance Test: Rhode Island Energy or its representative will perform a pipe-to-earth electrical potential test, as it deems necessary, to ensure adequate cathodic protection and coating integrity in accordance with Measuring Pipe-to-Soil Potential [COR03002].

	Recordkeeping
	Main field records shall be required for all pipe installations per Preparation of Gas Facility Historical Records [CNST01005].
	The Installer shall keep a historical record and update all related drawings of work performed and facilities encountered in performing the work. The location of all welds shall be indicated and numbered in sequence on the project historical drawings. These historical records and drawings shall include the following: • The locations of pipes, valves, directional drills, welds, mechanical couplings, and casings by stations and offsets relative to the baseline. Cover or elevations relative to the bench run shall be taken at every weld and sleeve end. • The locations of insulating joints and valves by stations and offsets relative to baseline and take-offs from physical structures such as houses, poles, etc. • The locations of cathodic protection test stations and attachment to pipe by station, offset, and elevation. • The locations of subsurface obstructions, listing the type of obstruction by station, offset, and elevation.
	The final completed historical package shall be presented to the Rhode Island Energy Project Engineer prior to placing the pipeline in service. Refer to Processing Gas Main and New Services Work Packages [GEN03002].

6. Knowledge Base & References

Code	Section	Description
49 CFR	192.309	Repair of steel pipe
49 CFR	192.309	Repair of steel pipe
220 CMR	101.6	Additional Rules or Modifications
220 CMR	101.6	Additional Rules or Modifications

7. Attachments

No Attachments.

GUIDELINES FOR BACKFILL AND COMPACTION AROUND GAS PIPES

PERMANENT BACKFILL AND COMPACTION

DESCRIPTION

This work shall consist of backfilling and compacting all disturbed material at and around existing gas pipes and facilities. Size of pipe, material, length of exposed pipe, location of pipe, etc. will all follow the same set of Standards and Specifications stipulated by RI Energy. If design plans call for gas pipes to be exposed and supported (sheeting methods not used), then at the time of backfill, all disturbed material below the invert of the gas pipe shall be removed and replaced with suitable roadway or trench excavation material or bedding material. The contractor will not be allowed to replace this disturbed material with the same existing material if it has now been mixed with adjacent silty subsoil (clays) and fines. Well-graded gravel and sands will be used to replace the unsuitable material when no excess suitable material is available on site. Soils with high humus or mineral content should not be used to for backfill because they can promote electrolytic or bacterial attack.

Backfilling the gas pipe should begin immediately after the work in that location is complete. The region within 6" alongside and on top of the gas pipe shall be backfilled with padding sand (free of cinders, ash, and rock). In no case shall the material used for backfilling in this region contain any stones. Backfill shall consist of suitable materials (medium to coarse sands with little or no silts) placed in layers of not more than 8" to 12" after compaction.

Trench spoil material shall be suitable for backfilling above the padding material as long as rocks with a diameter larger than 3" are removed. The layers shall be mechanically compacted to the industry standard of 95% or until a density comparable to the unexcavated material is achieved. In some instances, flooding with water is an acceptable method of compaction but only if the back-fill material is clean, coarse, and adequate drainage is existent. The above specified backfill material is essential in order to attain the degree of compaction necessary to avoid future settlement.

Tracing Wire, if necessary, shall be installed 2” to 6” below Plastic gas pipes.

Warning Tape shall be installed approximately 12” above the gas pipe.

A minimum of 2" temporary pavement shall be applied over the trench as soon as possible.

GUIDELINES FOR WORKING AROUND CORROSION CONTROL SYSTEM COMPONENTS

DESCRIPTION

This guideline shall control work around existing Corrosion Control components. Replacement of test stations, anodes and test wire leads shall comply with Standards and Specifications stipulated by RI Energy. If design plans call for work in the area of Corrosion Control components, care must be taken to prevent damage to such components.

GENERAL RI ENERGY CONSIDERATIONS

The contractor shall perform replacement of damaged corrosion control test boxes, resetting of disturbed test boxes, and ensure a minimum of 12” of excess wire above the rim of the test box after set to finished grade. Wires shall not be pulled taught to achieve the 12” above the box, as this will cause stress on the wire connection at the main. Wires needing to be lengthened, damaged corrosion control components i.e. wires, or wire coating, shall require notification to the Corrosion Control Department to initiate inspection/repair or replacement of the damaged components.

Backfilling exposed Corrosion Control wire components should begin immediately after the work in that location is complete. The region within 6" alongside and on top of the connector wires shall be backfilled with padding sand (free of cinders, ash, and rock). Test wire leads must be kept with enough slack to prevent stress on the points where the wires connect to the gas main. Trench spoil material shall be suitable for backfilling above the padding material as long as rocks with a diameter larger than 3" are removed. The 8” to 12” backfill layers shall be mechanically compacted to the industry standard of 95%.

10/01/12
Revised 2/6/2023

Guidelines for Working Around Gas Utilities

Notification of Construction

RI Energy requests at least six week advanced notification prior to the start of construction to perform scheduled work in the proposed project area. Be aware that some gas work cannot be performed during the normal heating season.

Support and Protect

Contractor must call Dig Safe to have the gas mains and services marked out before construction. Care must be exercised when saw cutting over any gas infrastructure, especially services, which are more shallow than the main. Depth of gas mains vary. Contractor shall dig test pits in order to ascertain exact locations, cover and invert elevations, clearances, alignment and operating status of existing gas facilities. Contractor shall exercise extreme caution when excavating in the vicinity of any gas facility. Hand excavation shall be performed to locate all gas facilities and whenever digging within 24" of gas facilities. If cover over gas piping is removed the required cover must be replaced, or if not feasible, RI Energy must be notified for review of the issue. Undermined gas pipe must be adequately supported and protected from damage. Contact RI Energy engineer for guidelines regarding proper pipe support. Significant vibration from pile driving and such may negatively impact gas facilities, particularly cast iron mains and regulator station vaults. Contact RI Energy engineer prior to performing such activities as well as operations which may undermine gas facilities such as micro-tunneling, jacking, directional drilling, etc.

Gas Leaks

For any gas leak please call 800-640-1595 immediately.

Types of Gas Facilities

Gas mains and services are made of several different materials and contain a wide range of pressures. Typical materials used for buried gas pipe includes bare steel, coated steel, plastic, cast iron, wrought iron, ductile iron, and copper. Never assume that a pipe is not gas. At times gas lines are inserted into older lines to save excavation cost.

Exposure of Gas Facilities

If any gas mains or services become exposed, RI Energy must be notified to inspect the line before backfilling. Also any damage that may have been made to the pipe or pipe coating will need to be repaired by RI Energy before backfilling. Contact our Dispatch office at (877) 304-1203 for inspection. It is important that even minor damage or scrapes be reported to RI Energy. Backfill shall be 6" of sand around the gas line and clean compacted fill above.

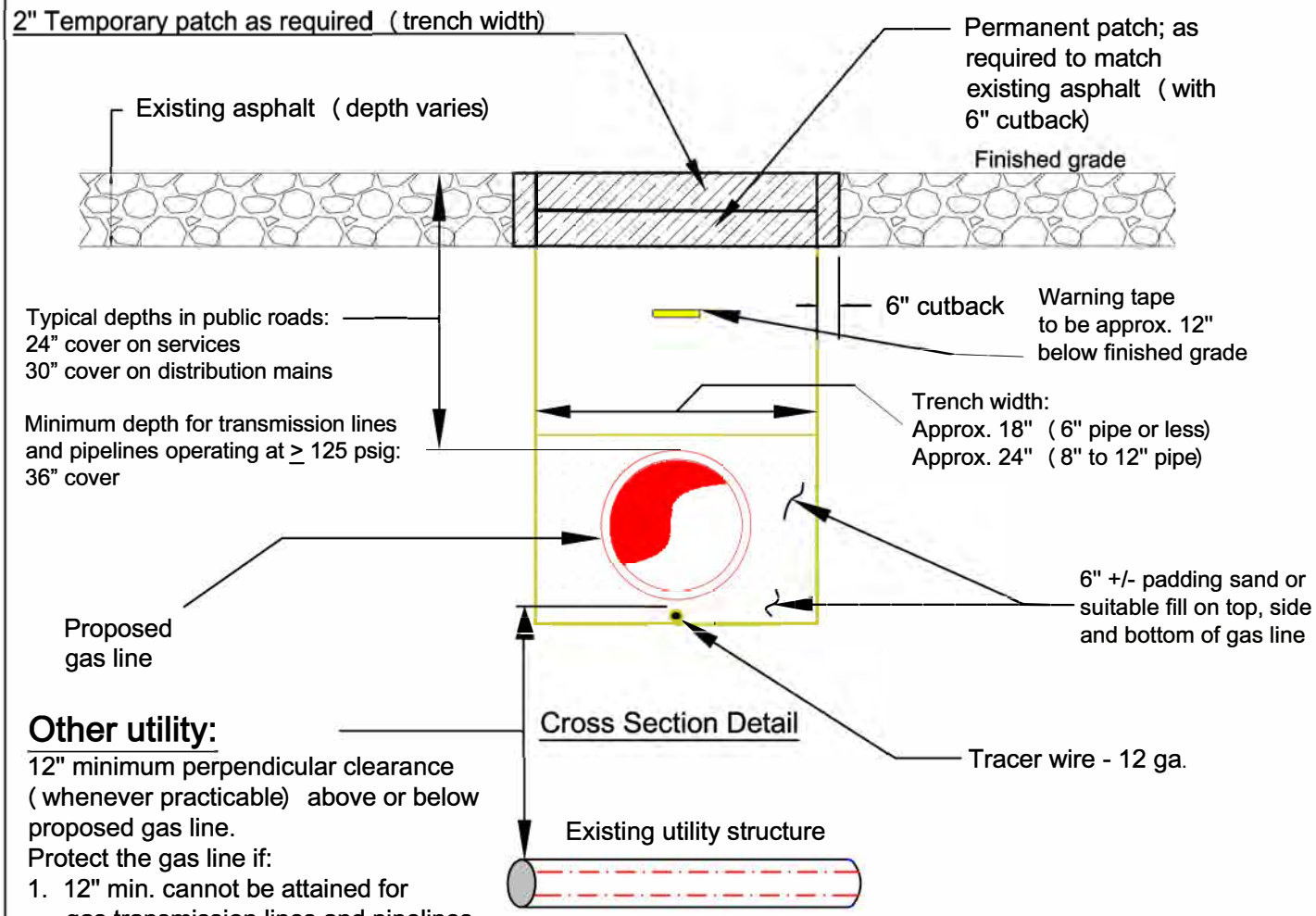
Regulator Stations
Gas regulator stations are particularly critical facilities and RI Energy must be notified whenever work is to take place within 200 feet of a station. Regulator stations are typically in buried vaults accessed through either manhole covers or aluminum doors. ONLY AUTHORIZED RI ENERGY EMPLOYEES SHALL OPEN A REGULATOR STATION VAULT. Be aware that a complex nest of piping and valves often exists in the vicinity outside the vaults.

Blasting
RI Energy must be notified of any blasting that will take place within 200 feet of a gas utility. RI Energy must be supplied with a detailed blast plan for blasting in the vicinity of gas facilities. The evaluation of the blast plan by a RI Energy engineer may take some time, therefore, blast plan data should be submitted at least two weeks prior to the planned blasting. As a general rule blasting will not be permitted within 10 feet of a gas line and PPV at the nearest gas pipe shall not exceed 5 in/sec. PPV at the nearest gas main shall be monitored.

Valves
Access to gas valves must be maintained throughout construction and left at grade at the end of construction. Should valve boxes be damaged and need to be replaced RI Energy will supply replacements upon request. NEVER OPERATE A GAS VALVE. ONLY RI ENERGY SHALL OPERATE GAS VALVES.

Clearance
Adequate clearance must be provided when installing other utilities, foundations, structures, etc. Contact RI Energy engineer for guidance.

Typical Utility Crossing and Trench Guidelines



Other utility:

12" minimum perpendicular clearance (whenever practicable) above or below proposed gas line.

Protect the gas line if:

1. 12" min. cannot be attained for gas transmission lines and pipelines operating at ≥ 125 psig.
2. 6" min. cannot be attained for distribution mains.
3. 4" min. cannot be attained for services.

Minimum clearance when protection is provided against damage is 2" for all gas lines.

Pipeline backfill will consist of suitable materials (medium to coarse sands with little or no silts) placed in layers of no more than 8" to 12" after compaction. Trench spoil materials suitable for backfilling will be mechanically compacted to the industry standards of 95% (as measured by Drop-Cone Penetrometer method) or until a density comparable to the unexcavated material is achieved.

Rhode Island Energy™

TYPICAL UTILITY CROSSING AND TRENCH GUIDELINES

Key Changes: Rebranded.

DATE: 09/15/2014		EFFECTIVE DATE: 08/15/2022
DESIGN: N. COSTANZO		STD. DWG. NO. CS-CNST002-RI
DRAWN: N. COSTANZO		

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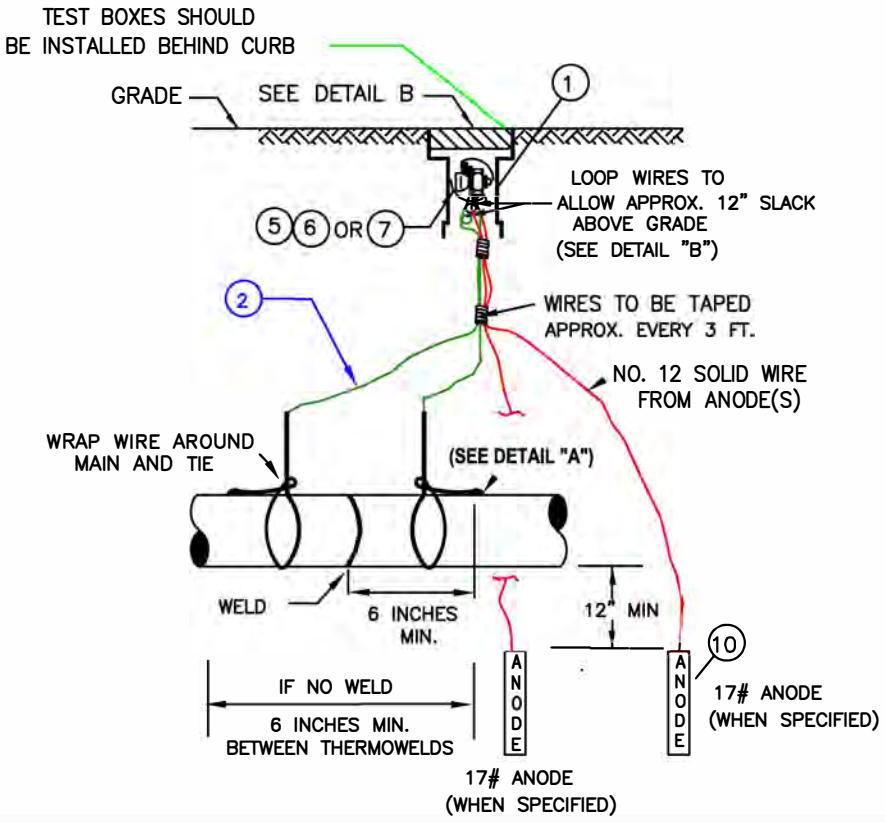
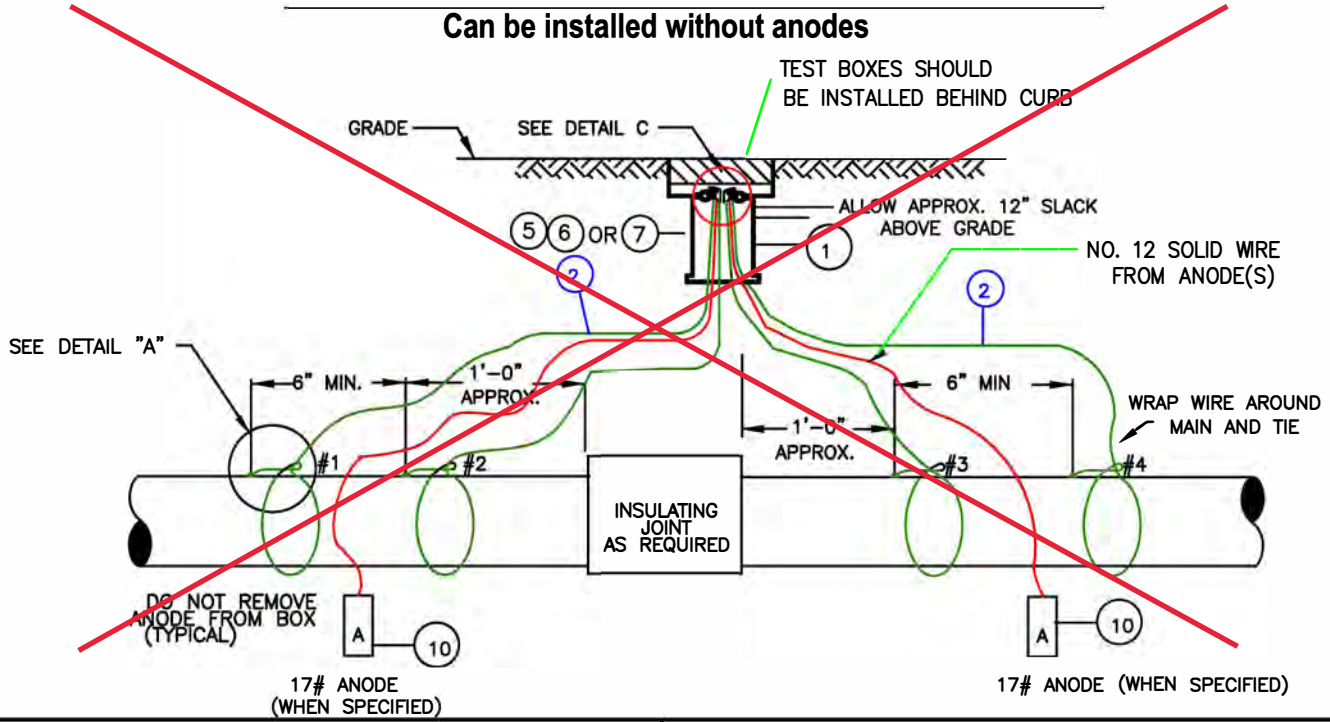
TWO WIRE TEST STATION WITH ANODE(S)

Can be installed without anodes



FOUR WIRE TEST STATION WITH ANODES

Can be installed without anodes



Rhode Island Energy™

INSTALLATION OF TEST STATIONS FOR CATHODIC PROTECTION

REVISIONS: Rebranded and confirmed item ID's.

DATE: 07/15/2010	EFFECTIVE DATE: 08/15/2022
DESIGN: PG	STD. DWG. NO. 030026-CS
APPROVED: PS	

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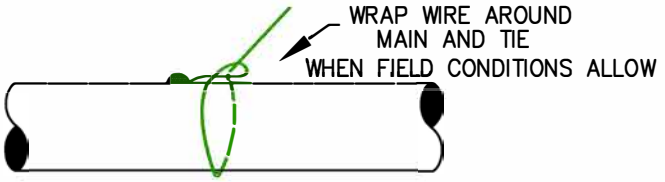
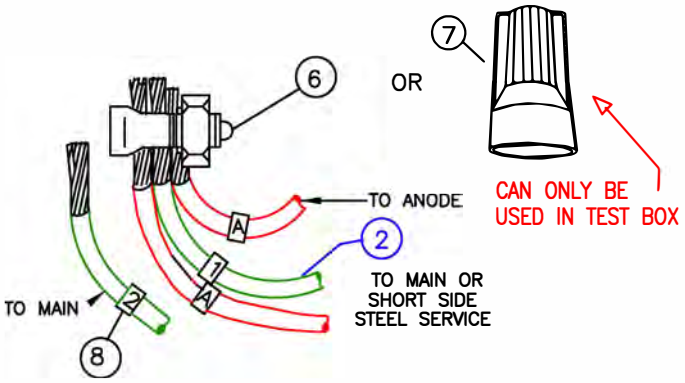
ATTACH WIRE IN ACCORDANCE
WITH APPROVED THERMOWELD PROCEDURE



DETAIL "A"

Two wire test station

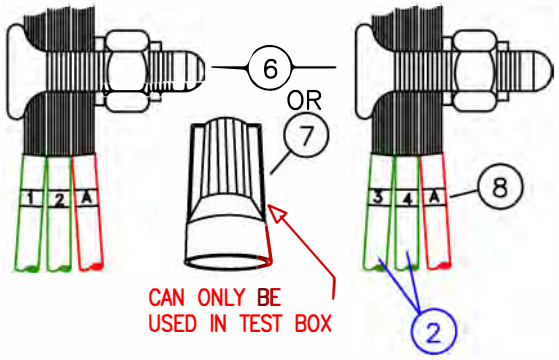
Shown with 2 anodes



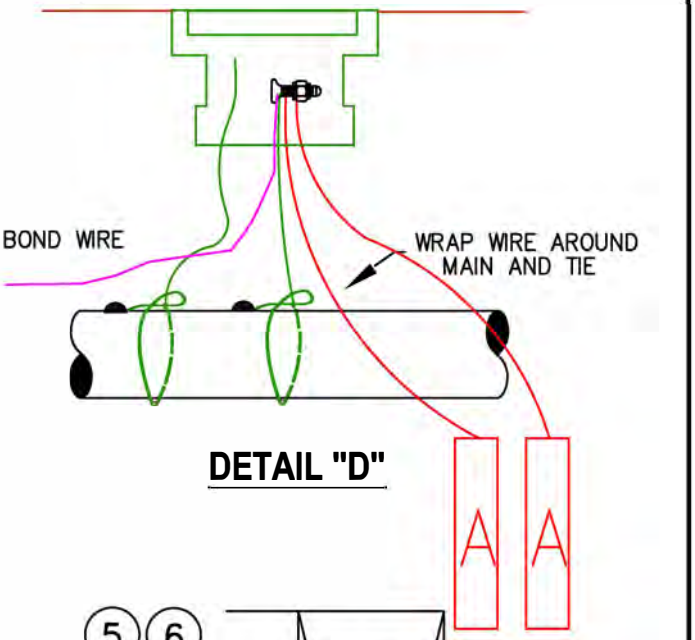
DETAIL "B"

Four wire test station

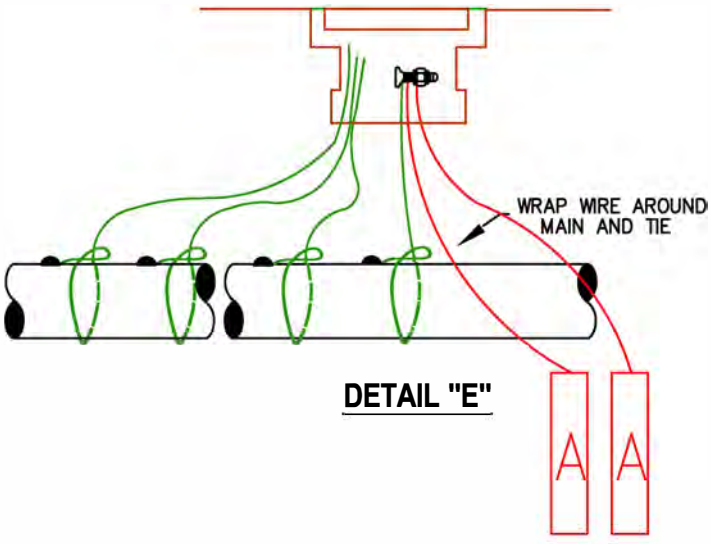
CONNECT ALL WIRES AS NEEDED



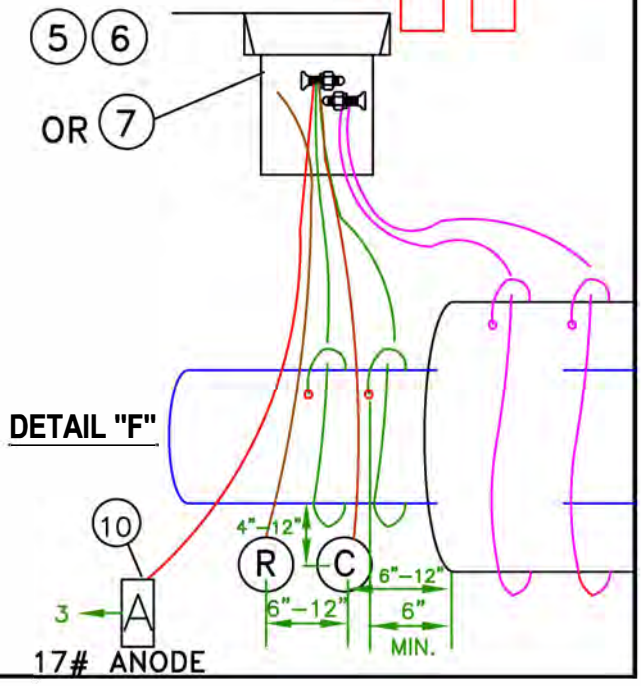
DETAIL "C" (typ)



DETAIL "D"



DETAIL "E"



DETAIL "F"

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MATERIAL LIST

	Description	Item ID	MATERIAL NOTES
1	TEST BOX WITH COVER or TEST BOX 9" SQUARE HEAVY DUTY COVER FOR 9" SQUARE BOX	(Sm - 445) 9311209 or (Lg - 556) in Prov. 9311208	NON-LOCKING COVER. DISCARD FOOT PIECE. (PREFERRED USAGE FOR GRASS AND DIRT AREAS) WEIGHS 95 LBS, STREET USE, WITHOUT COVER PREFERRED USAGE FOR ROADWAY INSTALLATIONS NON-LOCKING COVER
2	WIRE, NO. 8, 7 STRAND	9307539	TEST WIRE ONLY, NOT FOR GROUND BEDS, UPSTATE AND RI WIRE HAS 19 STRANDS.
3	WIRE, NO. 6, 7 STRAND	9311795	BOND WIRE ONLY, NOT FOR GROUND BEDS
4	WIRE 1/0 – 19 STRAND 600 V –1/C	NON STOCK	USE IN STRAY CURRENT AREAS
5	TAPE, PVC - ¾" WIDE	9316070	NOT FOR PIPE COATING.
6	CONNECTOR, SPLIT BOLT, TYPE 6 CONNECTOR, SPLIT BOLT FOR #8 WIRE 7 CONNECTOR, SPLIT BOLT, TYPE 1/01 CONNECTOR, TWIST-ON WIRE NUT	NON STOCK 9331641 - 9314631	USE WITH NO. 6 CABLE USE WITH 1/0 CABLE
8	TAG, ADHESIVE NUMBER 1 NUMBER 2 NUMBER 3 NUMBER 4 LETTER A	 9307918 9307896 9307895 9307894 9307893	LABEL WITH #1 (N) OR (E), CONSECUTIVELY TO (S) OR (W) SEE DETAILS "B" AND "C" USE TO LABEL ANODES
9	GROUNDING CELL	NON-STOCK	AS SPECIFIED BY CORROSION ENGINEERING
10	ANODE, MAGNESIUM 17LBS	9311183	SATURATE WITH WATER BEFORE BACKFILL. ANODE MAY BE INSTALLED VERTICALLY OR HORIZONTALLY.
11	COUPON	By Corrosion	MC MILLER OR EQUAL
12	REFERENCE CELL	By Corrosion	BORIN MFGR INC OR EQUAL

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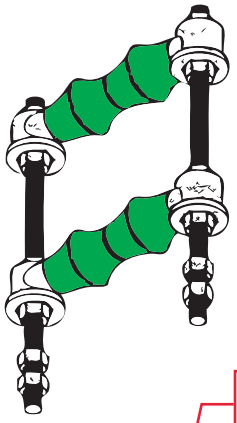
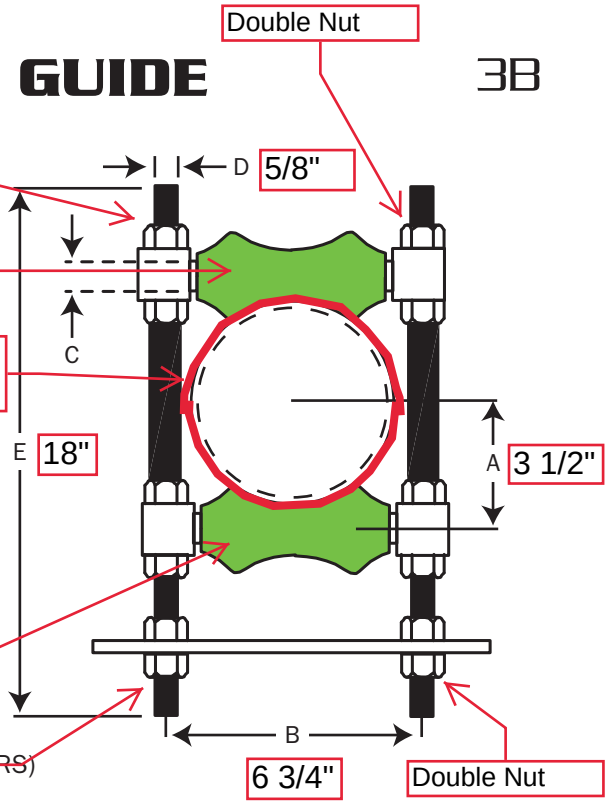
ADJUSTABLE ROLL GUIDE





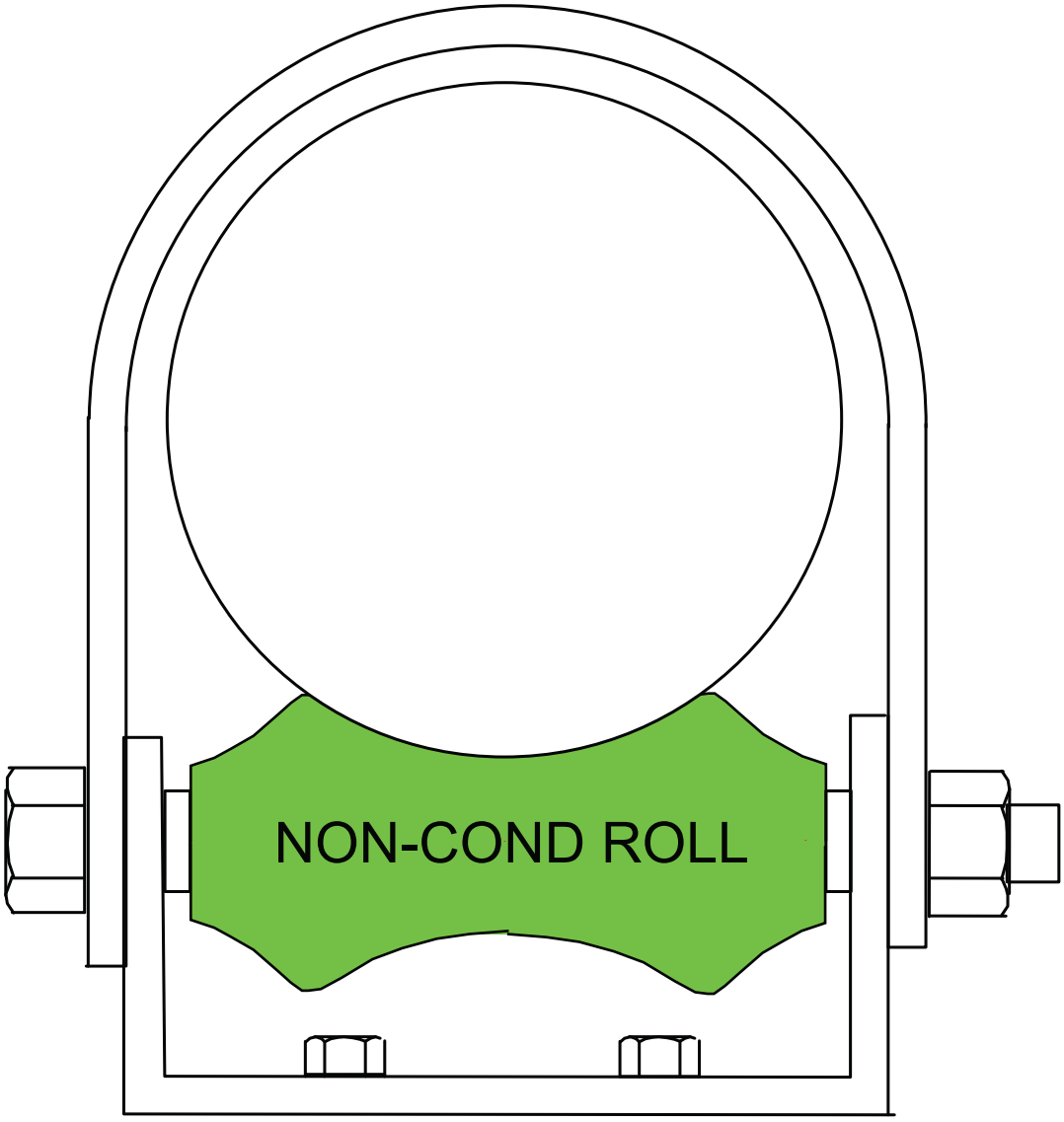
ADJUSTABLE ROLL GUIDE INCLUDES:
4 ADJUSTABLE SOCKETS
2 ROLL AXLES
2 VERTICAL THREADED RODS
12 HEX NUTS
2 CAST IRON ROLLS (OMIT WHEN ORDERING NON-CO ERS)
SPECIFICATIONS MAY VARY - All Dimensions in inches

Pipe Size	A	*B	C	Rod Size D	E	Socket No.	Max. Load lbs.	Wt. lbs/ea.
2	1 9/16	4 1/8	3/8	3/8	12	#1-3/8	600	2.15
3	2 3/16	5 1/2	1/2	1/2	14	#2-1/2	700	4.34
4	2 3/4	6 3/4	1/2	5/8	18	#3-1/2	750	6.73
5	3 7/16	8 1/16	5/8	5/8	18	#3-5/8	750	8.95
6	4	9 9/16	3/4	3/4	24	#4-3/4	1070	14.59
8	5 1/4	11 15/16	7/8	7/8	24	#5-7/8	1350	24.33
10	6 1/4	14 1/16	7/8	7/8	30	#5-7/8	1730	27.7
12	7 7/16	15 13/16	1	7/8	30	#5-1	2400	39.62
14	8 5/16	17 3/4	1 1/8	1	36	#6-1 1/8	3130	57.61
16	9 3/8	19 3/4	1 1/4	1	36	#6-1 1/4	3970	87.57
18	10 3/8	21 7/8	1 1/4	1	42	#6-1 1/4	4200	99.54
20	11 1/2	24 1/4	1 1/4	1 1/4	42	#8-1 1/4	4550	131.82
24	13 13/16	28 5/8	1 1/2	1 1/2	42	#9-1 1/2	6160	219.74

*Axle lengths may affect B dimension. Contact supplier before pre drilling holes.

LB&A, INC
LINN BROWN & ASSOCIATES
A UTILITY SERVICE COMPANY

ROLLER CHAIR WITH HOLD DOWN STRAP



SPECIAL ROLLER CHAIR W/HOLD DOWN STRAP

INCLUDES: 1 - STEEL BASE
1 - SPECIAL AXLE W/NUTS
1 - HOLD DOWN STRAP

STRAPS ARE AVAILABLE WITH OR WITHOUT A POLYOLIFIN (SHRINK SLEEVE) COATING.

LB&A, INC
LINN BROWN & ASSOCIATES
A UTILITY SERVICE COMPANY

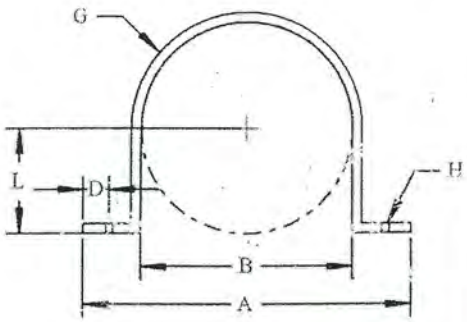
6B-1 Roller Chair with Hold Down Strap

- Components: 1 steel chair, 1 axle, 2 bolts/nuts, 1 hold down strap
- Pipe sizes: 2”-30”
- Finishes available: Hot-dip galvanized, 304SS, 316SS, Bluecoat
- * Strap available coated or uncoated
- * Domestic components available upon request

6B-1 drawing

HOLD DOWN STRAP

DI HOLD DOWN STRAP



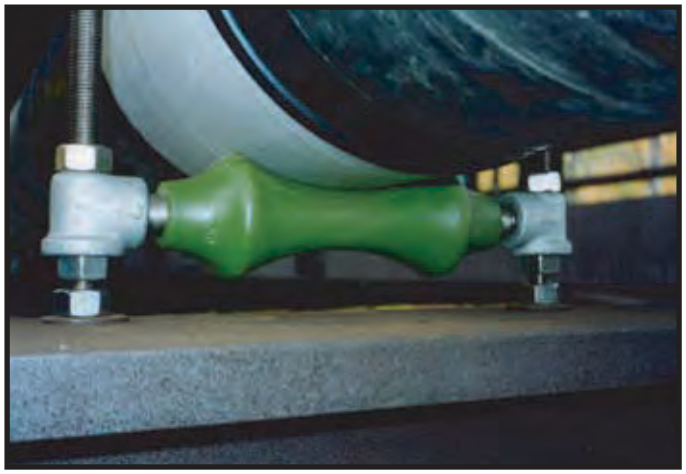
MATERIAL: Carbon steel or 304/316 stainless steel.
FINISH: Black, electro or hot-dipped galvanized.
SERVICE: For use as a hanger from walls or ceilings where piping is run close to the structure.
ORDERING: Specify pipe size, figure number and finish.

PIPE SIZE	A	B	D	STOCK SIZE "G"	H	L	WEIGHT EACH, LBS.
3	7	3 1/2	3/4	1/4 x 1 1/2	7/16	1 3/4	1.3
3 1/2	7 1/2	4	3/4	1/4 x 1 1/2	7/16	2	1.4
4	8	4 1/2	3/4	1/4 x 1 1/2	7/16	2 1/4	1.6
5	9 1/16	5 9/16	3/4	1/4 x 1 1/2	7/16	2 13/16	1.9
6	11 1/8	6 5/8	1	1/4 x 2	9/16	3 5/16	3
8	13 1/8	8 5/8	1	1/4 x 2	9/16	4 5/16	3.7
10	15 1/4	10 3/4	1	1/4 x 2	9/16	5 3/8	4.5
12	17 1/4	12 3/4	1	1/4 x 2	9/16	6 3/8	5.2
14	18 3/4	14	1	3/8 x 2	11/16	7	8.5
16	20 3/4	16	1	3/8 x 2	11/16	8	9.6
18	22 3/4	18	1	3/8 x 2	11/16	9	10.7
20	24 3/4	20	1	3/8 x 2	11/16	10	11.8
24	30 3/4	24	1 1/2	3/8 x 3	13/16	12	21.6

DI PIPE SIZE	A	B	D	STOCK SIZE "G"	H	L	WEIGHT EACH, LBS.
3	7 7/16	3.9	3/4	1/4 x 1 1/2	7/16	1 3/4	1.4
4	8 5/16	4.8	3/4	1/4 x 1 1/2	7/16	2 1/4	1.7
6	11 7/16	6.9	1	1/4 x 2	9/16	3 5/16	3.1
8	13 9/16	9.05	1	1/4 x 2	9/16	4 5/16	3.9
10	15 5/8	11.1	1	1/4 x 2	9/16	5 3/8	4.6
12	17 3/4	13.2	1	1/4 x 2	9/16	6 3/8	5.4
14	20 1/16	15.3	1	3/8 x 2	11/16	7	9.2
16	22 3/16	17.4	1	3/8 x 2	11/16	8	10.4
18	24 1/4	19.5	1	3/8 x 2	11/16	9	11.5
20	26 3/8	21.6	1	3/8 x 2	11/16	10	12.7
24	32 9/16	25.8	1 1/2	3/8 x 3	13/16	12	23.1

NON-CONDUCTIVE PIPE ROLLERS

PREVENT THE PASSING OF CURRENT FROM THE PIPELINE TO BRIDGE STRUCTURE, REBARS, ETC.



Can be used in conjunction with

FRP Type #240 Roll-On Shields™

- Maintain same support strength of pipe hanger system
- Eliminate chafing and pipe coating damage caused by cast iron rolls
- Eliminate electrical grounding of the pipeline to the bridge structure
- Eliminate insulting joints at each end of bridge, and include the suspended line as part of the cathodic protected pipeline, i.e., continuity of cathodic protection.
- Absorb vibration from traffic of other sources, saving wear and tear on pipe hanger parts.
- Highest specification polyurethane compound is cast around a stainless steel sleeve to form a full length bearing surface for the axle.
- Direct replacement for cast iron rolls.

LB&A, INC

LINN BROWN & ASSOCIATES

A UTILITY SERVICE COMPANY

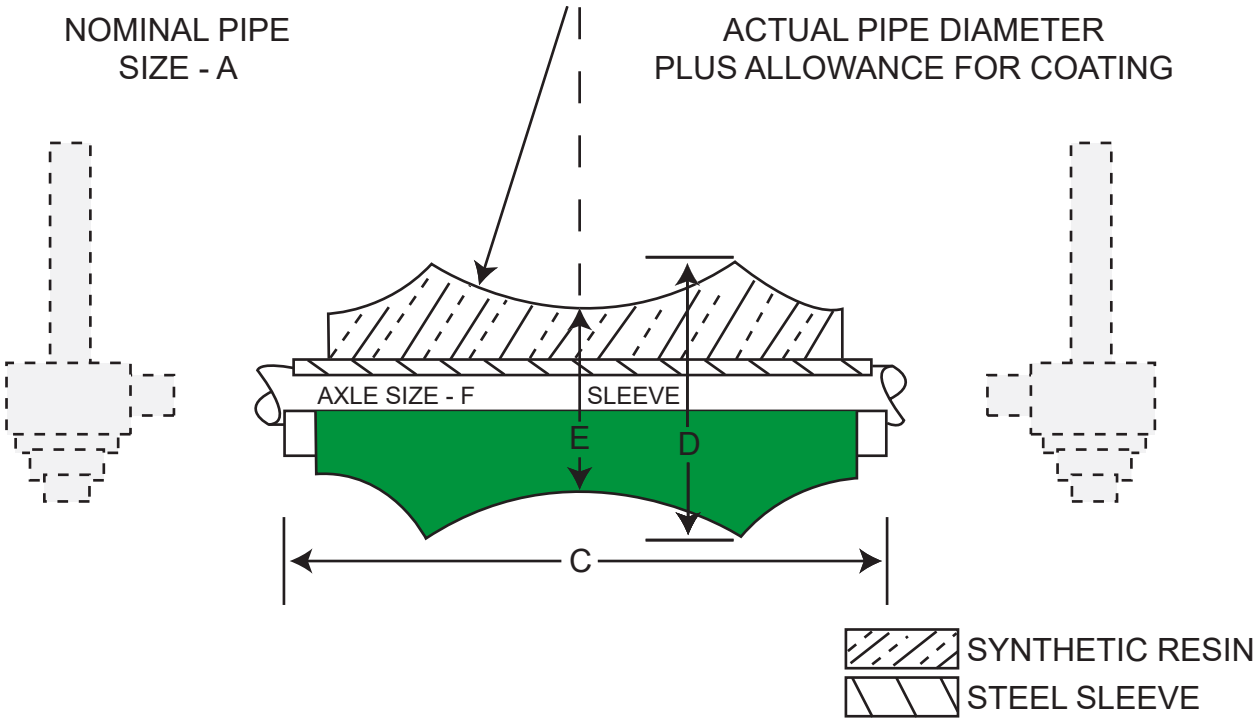
PO Box 540

Westtown, PA 19395-9982

610.696.9220 • 610.344.7519

www.ncroll.com

NON-CONDUCTIVE PIPE ROLLER DIMENSIONS
HANGER MOUNTED MODEL

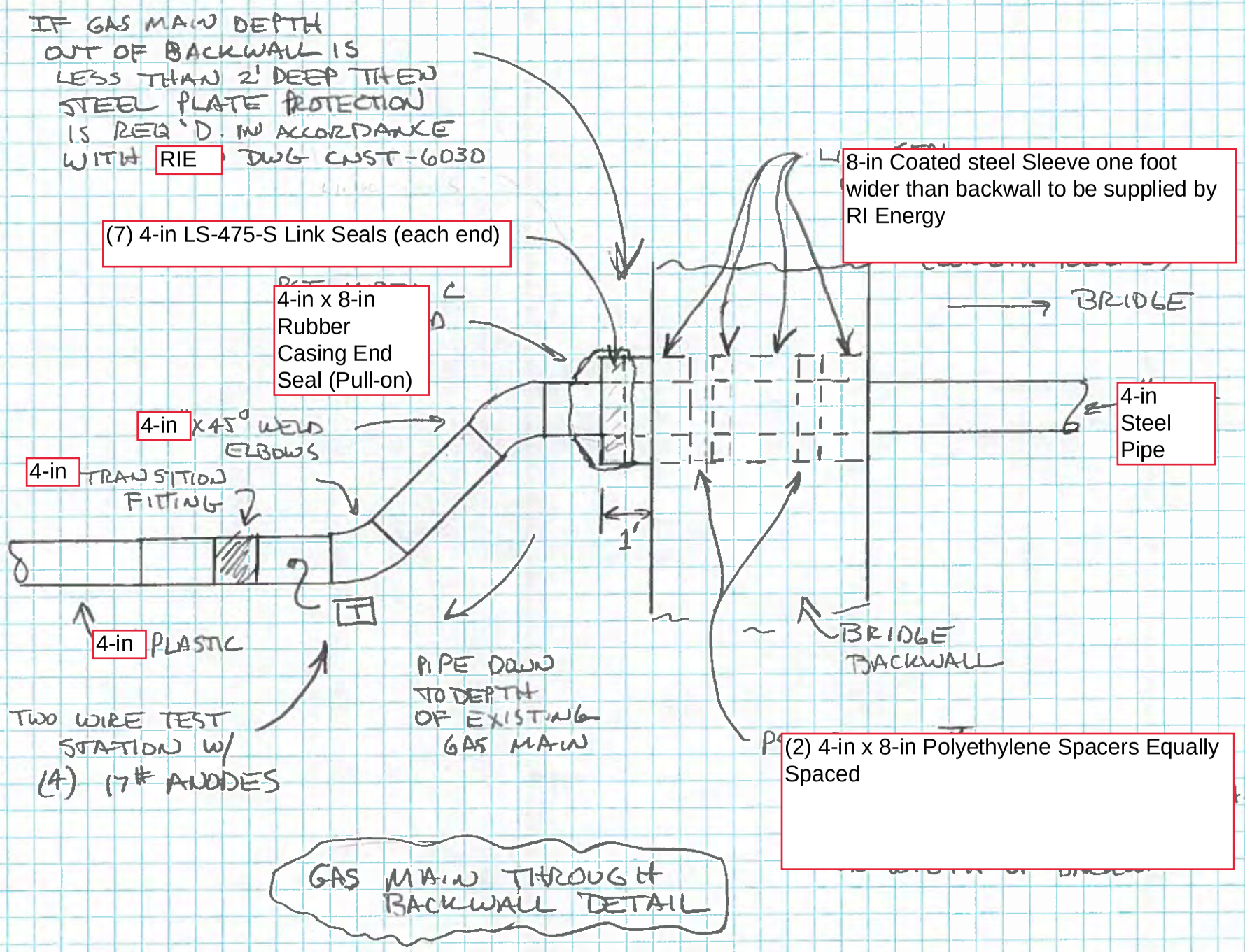


HANGER RODS, NUTS, SOCKETS AND
AXLE ARE DESCRIBED IN OUR PIPE HANGER CATALOG

(IN INCHES)

MODEL NUMBER	NOMINAL PIPE SIZE - A	C	D	E	F
2 H	2	2 5/8	1 1/4	13/16	3/8
2 1/2 H*	2 1/2	3 1/4	1 1/2	7/8	1/2
3 H	3	3 3/4	1 5/8	7/8	1/2
4 H	4	4 3/4	2	1 1/2	1/2
5 H	5	5 13/16	2 3/8	1 1/2	5/8
6 H	6	6 7/8	2 3/4	1 3/4	3/4
8 H	8	8 7/8	3 1/8	2 1/8	7/8
10 H	10	11	3 5/8	2 1/8	7/8
12 H	12	12 1/2	4	2 1/8	1
14 H	14	14 1/2	4 1/2	2 1/2	1 1/8
16 H	16	16 1/4	5	2 5/8	1 1/4
18 H	18	18 3/8	5 9/16	2 3/4	1 1/4
20 H	20	20 1/4	5 3/4	3 1/2	1 1/4
24 H	24	24 1/4	7 1/16	4 1/8	1 1/2
LARGER SIZES ON SPECIAL ORDER					

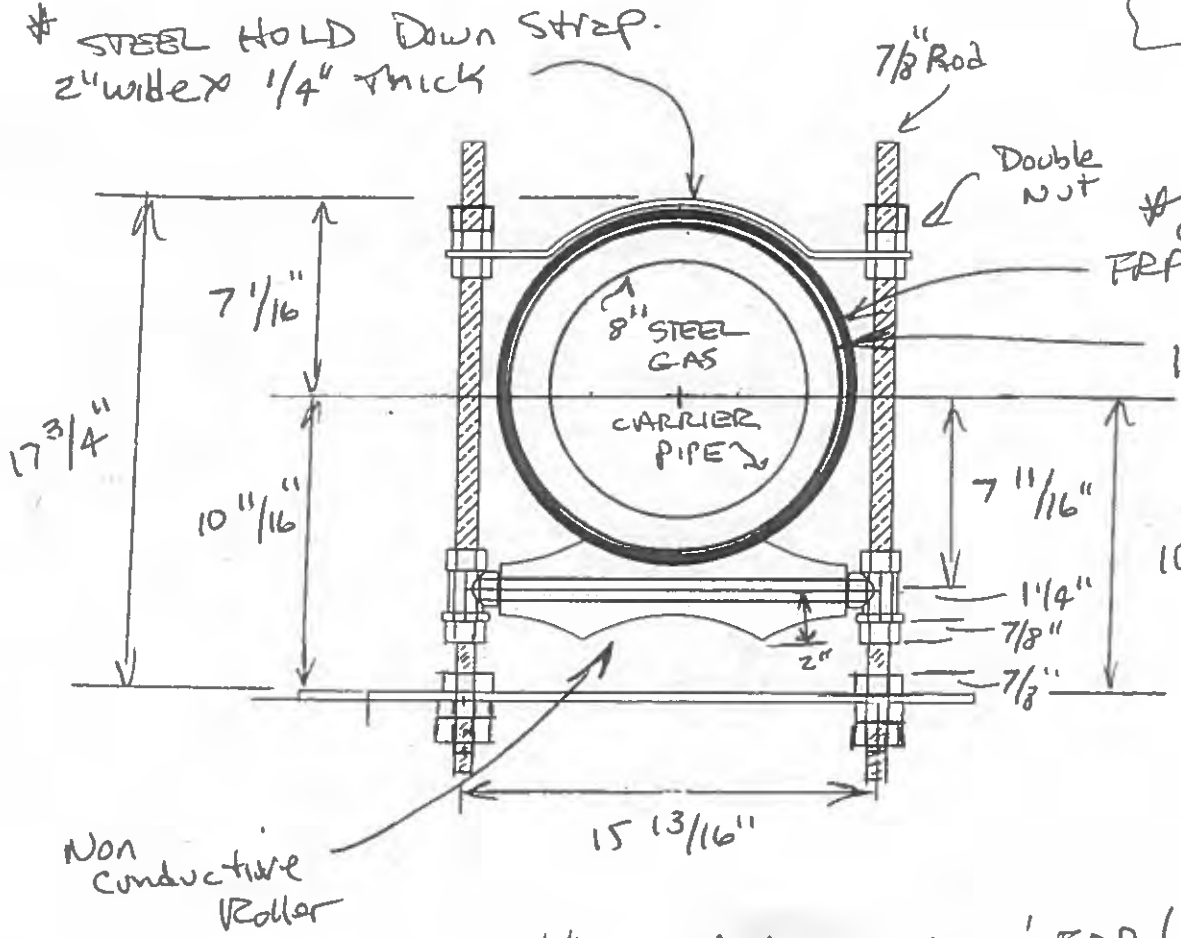
*SPECIAL ORDER


IF GAS MAIN DEPTH OUT OF BACKWALL IS LESS THAN 2' DEEP THEN STEEL PLATE PROTECTION IS REQ'D. IN ACCORDANCE WITH RIE DWG CNST-6030
(7) 4-in LS-475-S Link Seals (each end)
8-in Coated steel Sleeve one foot wider than backwall to be supplied by RI Energy
4-in x 8-in Rubber Casing End Seal (Pull-on)
BRIDGE
4-in Steel Pipe
4-in x 45° WELD ELBOWS
4-in TRANSITION FITTING
1'
4-in PLASTIC
BRIDGE BACKWALL
PIPE DOWN TO DEPTH OF EXISTING GAS MAIN
TWO WIRE TEST STATION W/ (4) 17# ANODES
(2) 4-in x 8-in Polyethylene Spacers Equally Spaced
GAS MAIN THROUGH BACKWALL DETAIL

ITEM	QTY	DESCRIPTION	FINISH
1	1		H D GALV
2	1		H D GALV

ADJUSTABLE ROLL SUPPORT
W/ HOLD DOWN STRAP (2B)

(12")



ALL HDG

1/4" space between strap & FRP!

CUSTOMER APPROVAL
SPECIAL ITEMS ARE NON-RETURNABLE
BY:
DATE:

FABRICATION TOLERANCE
CUTTING: ±1/8", ±1°
FORMING: ±4°
HOLD TOLERANCE
ASSEMBLY: ±1/16", ±1°

INFORMATION CONTAINED HEREIN IS THE CONFIDENTIAL PROPERTY OF LINN BROWN & ASSOCIATES AND MUST NOT BE DISCLOSED OR REPRODUCED WITHOUT PRIOR WRITTEN PERMISSION.

DESCRIPTION		FINISH	QUANTITY
CUSTOMER	PROJECT	H D GALV	

DRAWN BY	CHECKED BY	CREATION DATE	SCALE	CUSTOMER ORDER NUMBER	TAG	SHEET	REVISION	DRAWING NUMBER
	----		1/8"=1"		TAG		0	

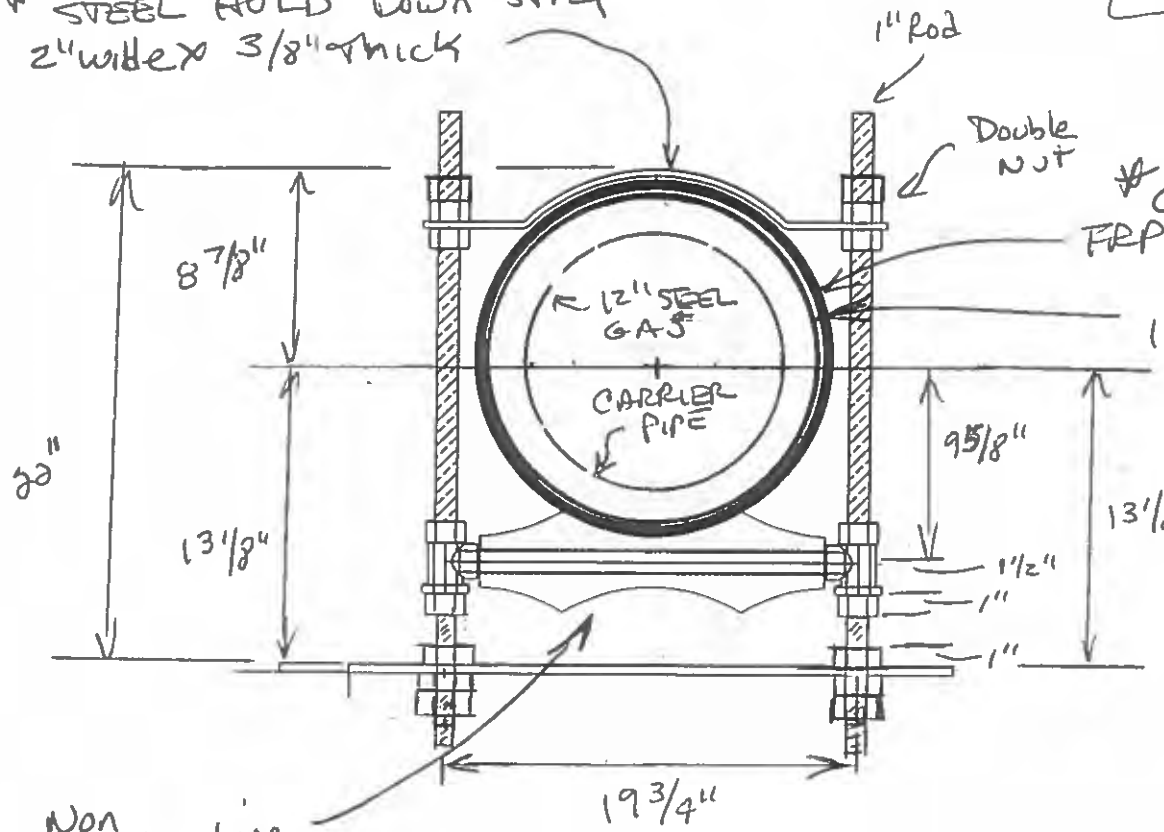
LINN BROWN & ASSOC.
1085C Andrew Drive
West Chester, PA 19380
610-696-9220 Phone
610-344-7519 Fax

ITEM	QTY	DESCRIPTION	FINISH
1	1		H D GALV
2	1		H D GALV

ADJUSTABLE ROLL SUPPORT
W/ HOLD DOWN STRAP (2B)

(16")

* STEEL HOLD Down Strap.
2" wide x 3/8" thick



* Glas Mesh FRP Casing Insulator 220/240 1/4" Thick.

16" STEEL PIPE
PRITEC COATED 15/50
(16" O.D.) .375" wall
(CASING PIPE)

ALL HDG

CUSTOMER APPROVAL
SPECIAL ITEMS ARE NON-RETURNABLE
BY:
DATE:

* 1/4" space between Strap & FRP!

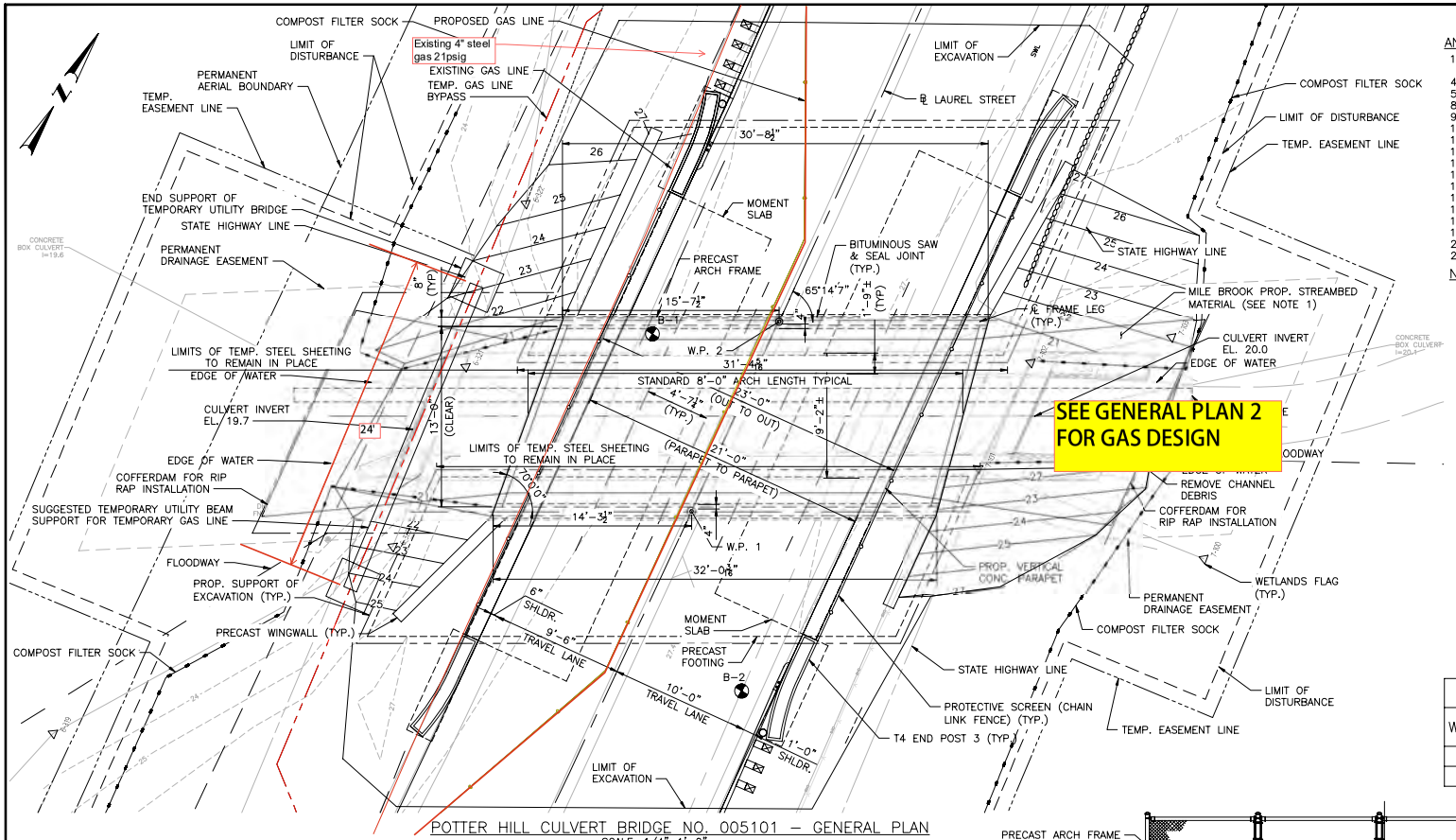
FABRICATION TOLERANCE
CUTTING: ±1/8", ±1°
FORMING: ±4°
HOLD TOLERANCE
ASSEMBLY: ±1/16", ±1°

INFORMATION CONTAINED HEREIN IS THE CONFIDENTIAL PROPERTY OF LINN BROWN & ASSOCIATES AND MUST NOT BE DISCLOSED OR REPRODUCED WITHOUT PRIOR WRITTEN PERMISSION

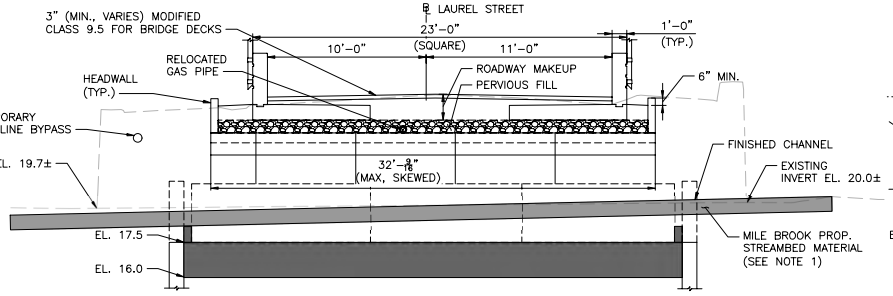
DESCRIPTION		FINISH	QUANTITY
CUSTOMER	PROJECT	H D GALV	

DRAWN BY	CHECKED BY	CREATION DATE	SCALE	CUSTOMER ORDER NUMBER	TAG	SHEET	REVISION	DRAWING NUMBER
	-----		1/8"=1"		TAG		0	

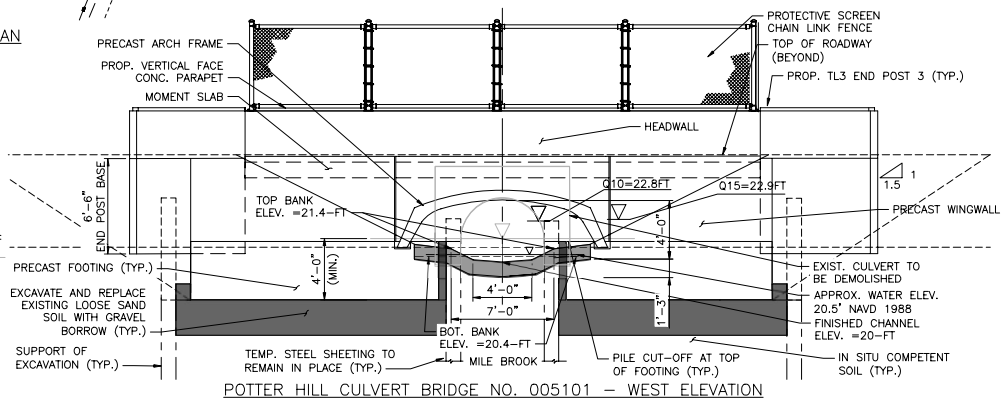
LINN BROWN & ASSOC
1085C Andrew Drive
West Chester, PA 19380
610-696-9220 Phone
610-344-7519 Fax



POTTER HILL CULVERT BRIDGE NO. 005101 – GENERAL PLAN
SCALE: 1/4"=1'-0"



POTTER HILL CULVERT BRIDGE NO. 005101 – LONGITUDINAL SECTION
SCALE: 1/4"=1'-0"



POTTER HILL CULVERT BRIDGE NO. 005101 – WEST ELEVATION
SCALE: 1/4"=1'-0"

ANTICIPATED WORK AT BRIDGE 005101:

1. PERFORM CLEARING AND TEMPORARY UTILITY RELOCATIONS OF OVERHEAD WIRES
4. EXCAVATE TO EXPOSE EXISTING CULVERT
5. SUPPORT AND PROTECT EXISTING GAS LINE
8. DEMOLISH EXISTING STRUCTURE
9. INSTALL STEEL SHEETING SOE FOR FOUNDATIONS
10. INSTALL COFFERDAM AND WATER DIVERSION PIPE
11. OVER-EXCAVATE TO COMPETENT SOILS WITHIN SOE
12. INSTALL GRAVEL BORROW BASE AND PRECAST FOOTINGS
13. INSTALL PRECAST ARCH FRAME AND WINGWALLS
14. BACKFILL AND CUT SHEETING BENEATH PROPOSED CHANNEL ELEVATION
15. EXCAVATE STREAM BED AND INSTALL PROPOSED STREAM BED MATERIAL
16. INSTALL PRECAST ENDPOST, PARAPET, CURB, AND MOMENT SLABS
17. RELOCATE GAS LINE TO FINAL POSITION AT CULVERT WESTERN FASCIA
18. INSTALL WATERPROOFING MEMBRANE AND PROPOSED ROADWAY FILL
19. INSTALL PROTECTIVE SCREEN AND GUARD RAIL
20. INSTALL WEARING SURFACE AND RESTRIPE ROADWAY
21. REMOVE BYPASS PIPE AND COFFERDAM

NOTE:

1. PLACE 1-FT DEPTH OF MILE BROOK PROPOSED STREAMBED MATERIAL WITHIN STREAM BED FOOTPRINT (ELEV. 21.5-FT AND BELOW). SHAPE CHANNEL BASED ON WEST ELEVATION.

MILE BROOK PROPOSED STREAMBED GRADATION	
PERCENT PASSING	RANGE (IN.)
0.990	4 TO 6
0.950	4 TO 6
0.840	3 TO 6
0.500	2 TO 4
0.300	1 TO 2
0.160	1 TO 1
0.050	0.1 TO 0.04

LEGEND:

123 124 125 — EDGE OF WETLAND
WETLAND PERIMETER
APPROXIMATE RIVER EDGE
B-# — APPROXIMATE BORING LOCATION

CONSTRUCTION WORKING POINTS			
WORKING POINT	STATION	NORTHING	EASTING
W.P. 1	105+45.67	120912.285	246947.172
W.P. 2	105+59.72	120927.230	246945.389

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2026-XX-XXX	2026	53	81

AECOM

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

DESIGNED BY: ----- CHECKED BY: ----- DATE: MAR 2026 SHEET: 53 OF: 81

SCALE:

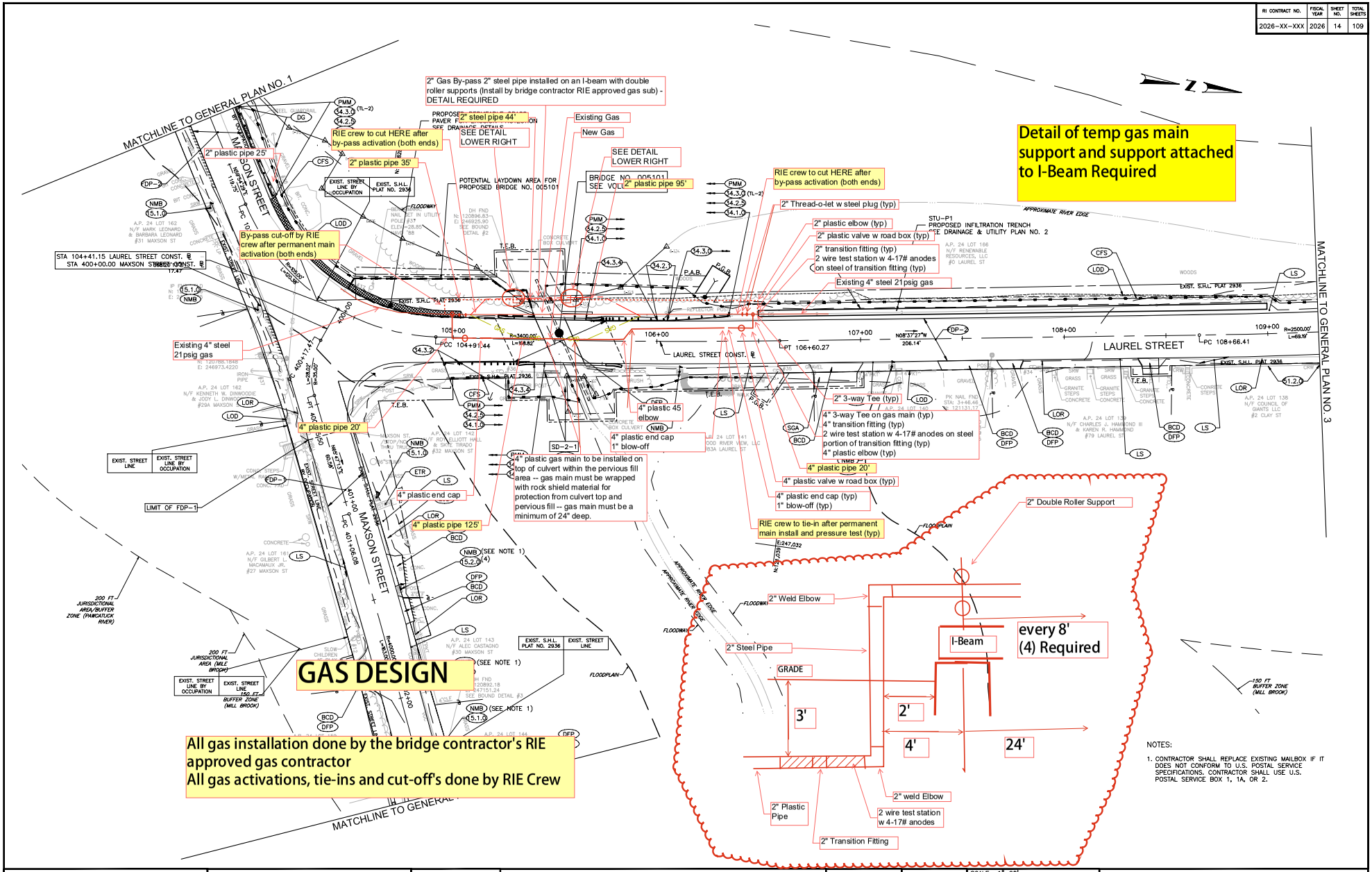
REVISIONS NO. DATE BY | REVISIONS NO. DATE BY

ASHAWAY - CORRIDOR
BRIDGE NO. 005101
VOLUME 2
HOPKINTON RHODE ISLAND

CULVERT PLAN

00130_V2_002_51_BGENERAL002.dwg

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2026-XX-XXX	2026	14	109



AECOM

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

DESIGNED BY:	PJP/OEL
CHECKED BY:	JTS
DATE:	3/6/2026
SHEET:	14
OF:	109

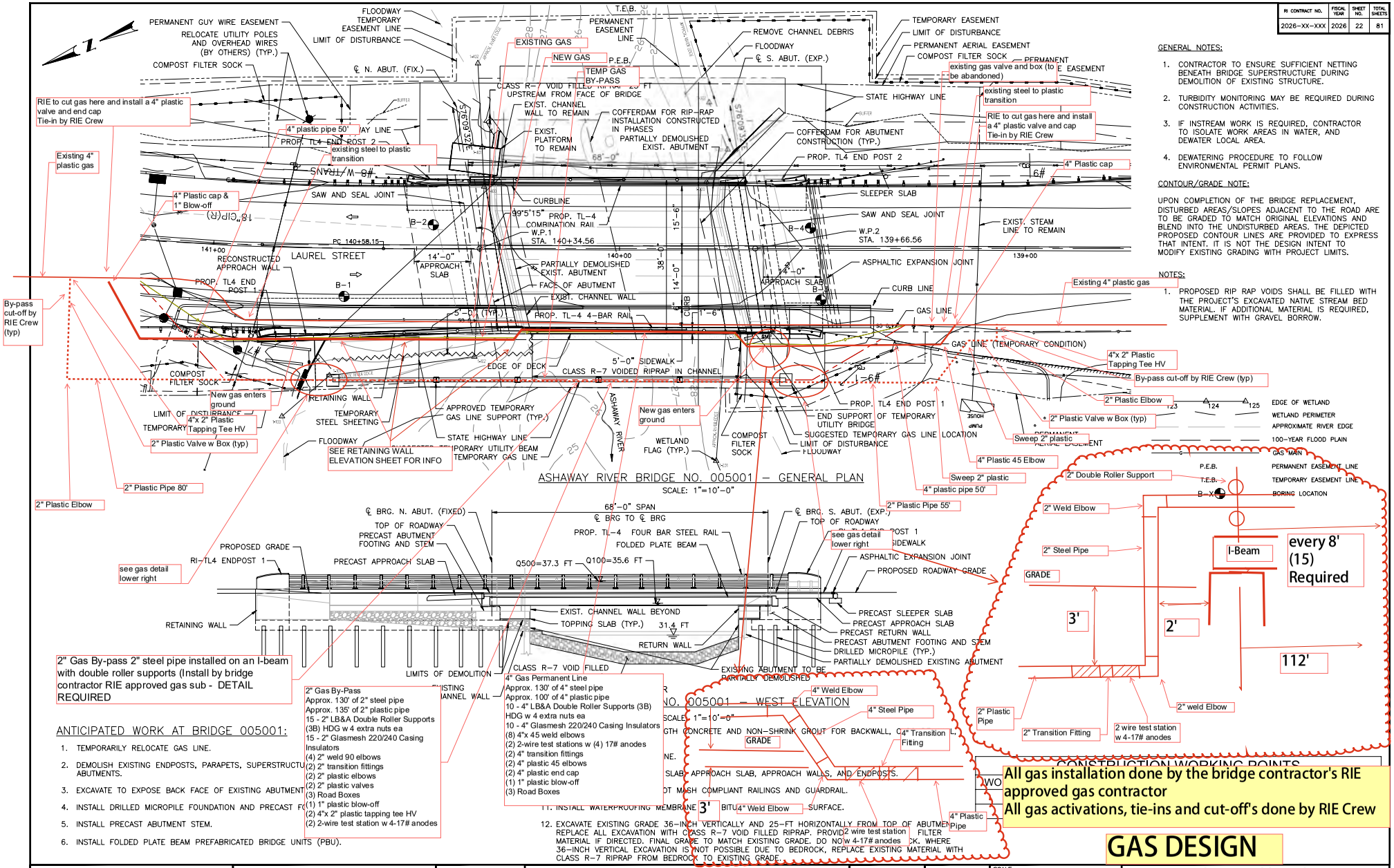
SCALE: 1"=20'

REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY

HIGHWAY
CORRIDOR - ASHAWAY
HOPKINTON RHODE ISLAND

GENERAL PLAN NO. 2
POTTER HILL ROAD/LAUREL STREET/MAXSON STREET

0013Q_V1_009-022_GENERAL



GENERAL NOTES:

1. CONTRACTOR TO ENSURE SUFFICIENT NETTING BENEATH BRIDGE SUPERSTRUCTURE DURING DEMOLITION OF EXISTING STRUCTURE.
2. TURBIDITY MONITORING MAY BE REQUIRED DURING CONSTRUCTION ACTIVITIES.
3. IF INSTREAM WORK IS REQUIRED, CONTRACTOR TO ISOLATE WORK AREAS IN WATER, AND DEWATER LOCAL AREA.
4. DEWATERING PROCEDURE TO FOLLOW ENVIRONMENTAL PERMIT PLANS.

CONTOUR/GRADE NOTE:

UPON COMPLETION OF THE BRIDGE REPLACEMENT, DISTURBED AREAS/SLOPES ADJACENT TO THE ROAD ARE TO BE GRADED TO MATCH ORIGINAL ELEVATIONS AND BLEND INTO THE UNDISTURBED AREAS. THE DEPICTED PROPOSED CONTOUR LINES ARE PROVIDED TO EXPRESS THAT INTENT. IT IS NOT THE DESIGN INTENT TO MODIFY EXISTING GRADING WITH PROJECT LIMITS.

NOTES:

1. PROPOSED RIP RAP VOIDS SHALL BE FILLED WITH THE PROJECT'S EXCAVATED NATIVE STREAM BED MATERIAL. IF ADDITIONAL MATERIAL IS REQUIRED, SUPPLEMENT WITH GRAVEL BORROW.

2" Gas By-pass 2" steel pipe installed on an I-beam with double roller supports (Install by bridge contractor RIE approved gas sub - DETAIL REQUIRED

2" Gas By-Pass
Approx. 130' of 2" steel pipe
Approx. 135' of 2" plastic pipe
15 - 2" LB&A Double Roller Supports (3B) HDG w 4 extra nuts ea
15 - 2" Glasmesh 220/240 Casing Insulators
(4) 2" weld 90 elbows
(2) 2" transition fittings
(2) 2" plastic elbows
(2) 2" plastic valves
(3) Road Boxes
(1) 1" plastic blow-off
(2) 4"x 2" plastic tapping tee HV
(2) 2-wire test station w 4-17# anodes

4" Gas Permanent Line
Approx. 130' of 4" steel pipe
Approx. 100' of 4" plastic pipe
10 - 4" LB&A Double Roller Supports (3B) HDG w 4 extra nuts ea
10 - 4" Glasmesh 220/240 Casing Insulators
(8) 4"x 45 weld elbows
(2) 2-wire test stations w (4) 17# anodes
(2) 4" transition fittings
(2) 4" plastic 45 elbows
(2) 4" plastic end cap
(1) 1" plastic blow-off
(3) Road Boxes

ANTICIPATED WORK AT BRIDGE 005001:

1. TEMPORARILY RELOCATE GAS LINE.
2. DEMOLISH EXISTING ENDPOSTS, PARAPETS, SUPERSTRUCTU ABUTMENTS.
3. EXCAVATE TO EXPOSE BACK FACE OF EXISTING ABUTMENT
4. INSTALL DRILLED MICROPILE FOUNDATION AND PRECAST F
5. INSTALL PRECAST ABUTMENT STEM.
6. INSTALL FOLDED PLATE BEAM PREFABRICATED BRIDGE UNITS (PBU).

NO. 005001 - WEST ELEVATION
SCALE: 1"=10'-0"
GTH CONCRETE AND NON-SHRINK GROUT FOR BACKWALL, C
NE.
SLAB, APPROACH SLAB, APPROACH WALLS, AND ENDPOSTS.
T MASH COMPLIANT RAILINGS AND GUARDRAIL.
11. INSTALL WATERPROOFING MEMBRANE
12. EXCAVATE EXISTING GRADE 36-INCH VERTICALLY AND 25-FT HORIZONTALLY FROM TOP OF ABUTMEN REPLACE ALL EXCAVATION WITH CLASS R-7 VOID FILLED RIPRAP. PROVID MATERIAL IF DIRECTED. FINAL GRADE TO MATCH EXISTING GRADE. DO NO CK. WHERE 36-INCH VERTICAL EXCAVATION IS NOT POSSIBLE DUE TO BEDROCK, REPLACE EXISTING MATERIAL WITH CLASS R-7 RIPRAP FROM BEDROCK TO EXISTING GRADE.

CONSTRUCTION WORKING POINTS
WO

All gas installation done by the bridge contractor's RIE approved gas contractor
All gas activations, tie-ins and cut-off's done by RIE Crew

GAS DESIGN

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2026-XX-XXX	2026	22	81

AECOM

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

DESIGNED BY: -----
CHECKED BY: -----
DATE: MAR 2026
SHEET: 22
OF: 81

SCALE:

REVISIONS

NO.	DATE	BY

REVISIONS

NO.	DATE	BY

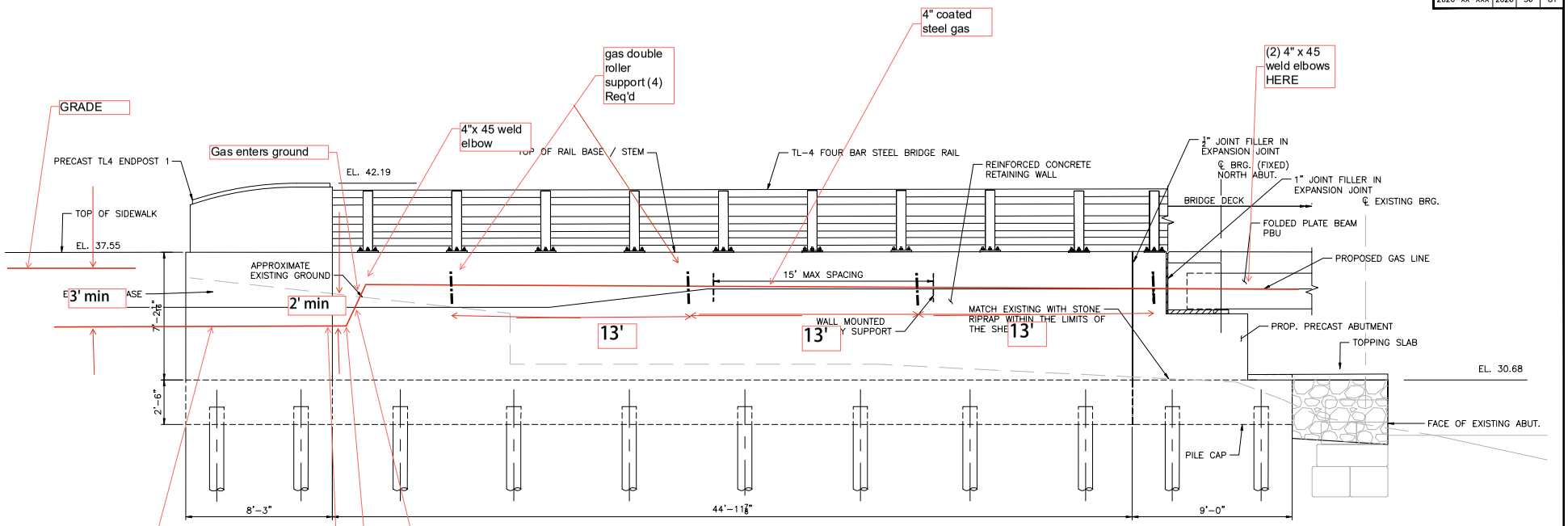
HOPKINTON — RHODE ISLAND

ASHAWAY - CORRIDOR
BRIDGE NO. 005001
VOLUME 2

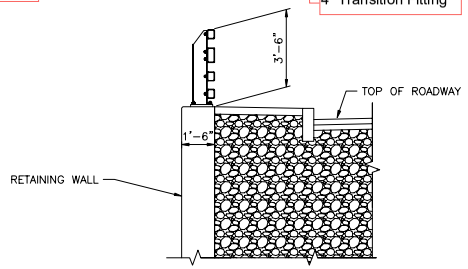
GENERAL PLAN AND ELEVATION

0013Q_V2_XXX_50_GENPLAN

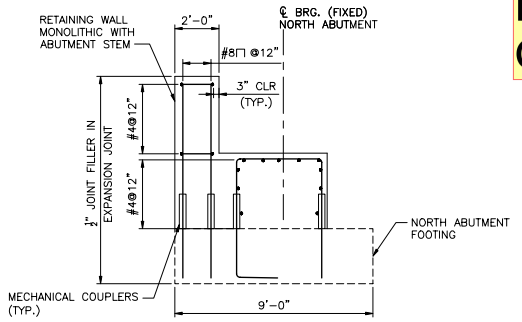
RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2026-XX-XXX	2026	36	81



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



SECTION
SCALE: 3/8"=1'-0"



RETAINING WALL ELEVATION REINFORCEMENT AT ABUTMENT
SCALE: 3/8=1'-0"

Part of GAS DESIGN

NOTES:
1. PILES AND FOOTING REINFORCEMENT ARE NOT SHOWN FOR CLARITY. REFER TO SHEET 33 FOR PILE AND REINFORCEMENT DETAILS IN T THE FOOTING.
2. REINFORCEMENT CALLOUTS ARE FOR THE RETAINING WALL ONLY.
3. RETAINING WALL ELEVATION REINFORCEMENT SHOWN, RETURN WALL REINFORCEMENT SIMILAR.

AECOM

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

DESIGNED BY:	----
CHECKED BY:	----
DATE:	MAR 2026
SHEET:	36
OF:	81

SCALE:

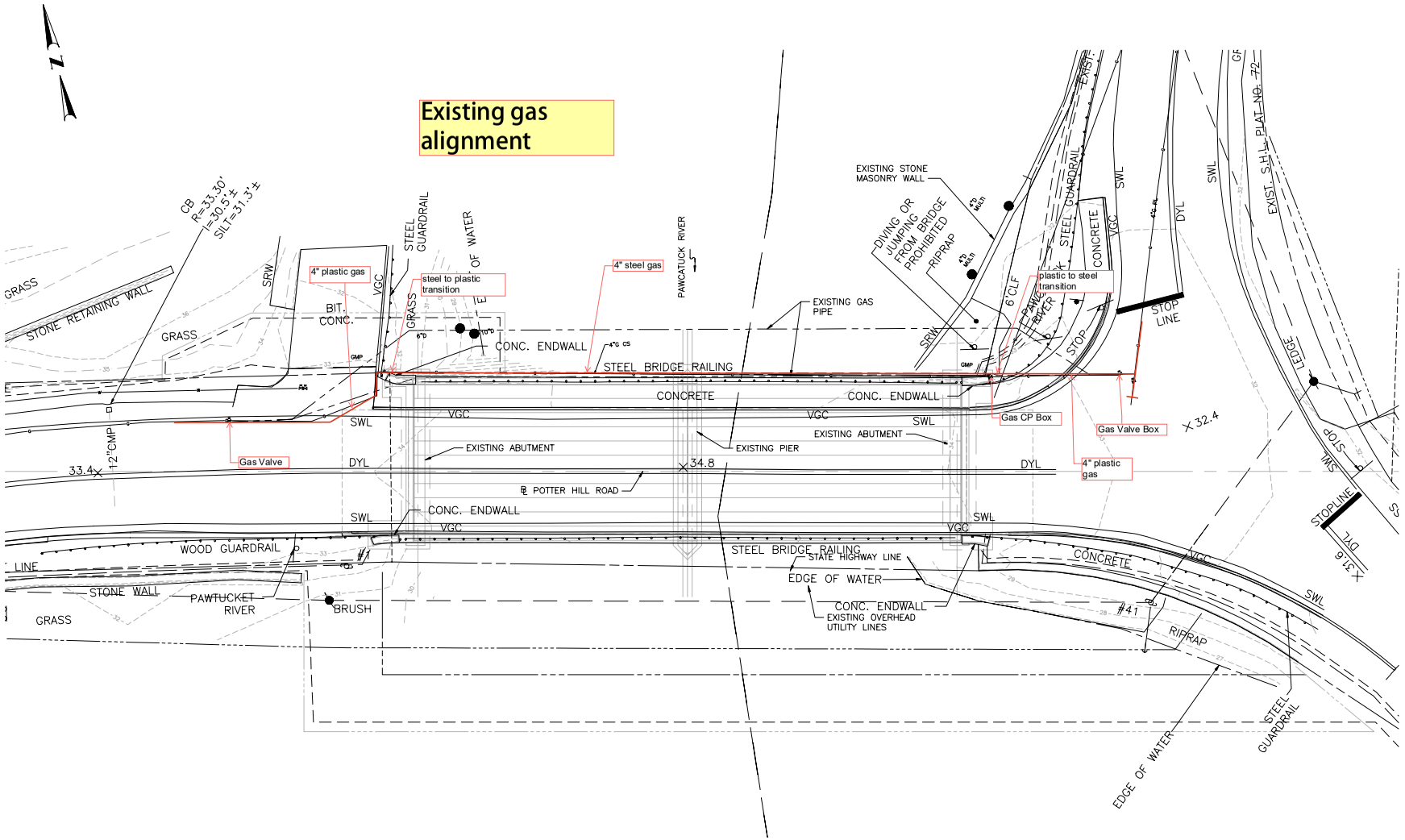
REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY

ASHAWAY - CORRIDOR
BRIDGE NO. 005001
VOLUME 2
HOPKINTON — RHODE ISLAND

RETAINING WALL ELEVATION

00130_V2_016_50_RETWALL001.dwg

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2026-XX-XXX	2026	56	74



POTTER HILL BRIDGE NO. 005201 – EXISTING CONDITIONS

SCALE: 1"=10'-0"

AECOM

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

DESIGNED BY:	----
CHECKED BY:	----
DATE:	JAN 2026
SHEET:	56
OF:	74

SCALE:

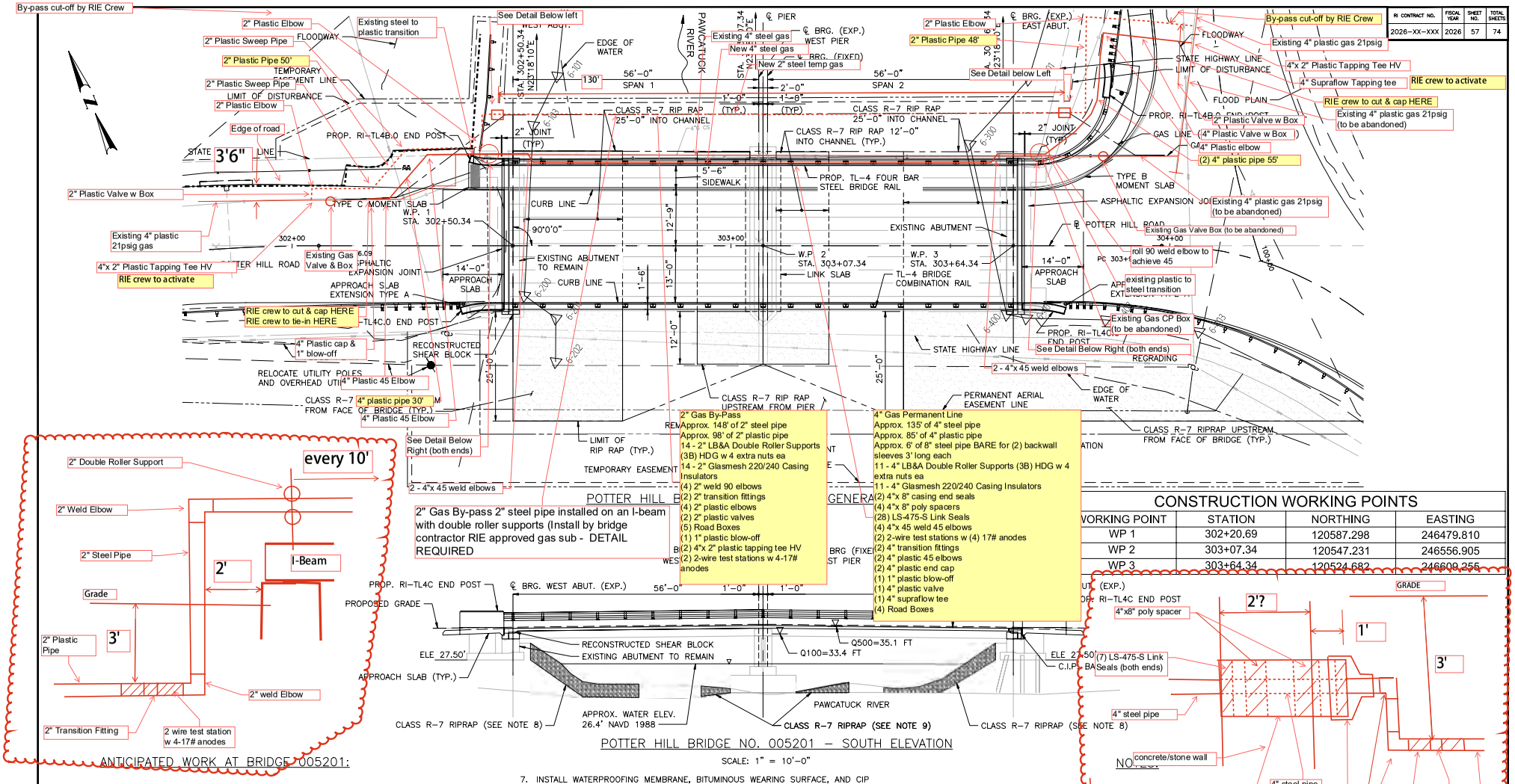
REVISIONS NO.	DATE	BY	REVISIONS NO.	DATE	BY

ASHAWAY - CORRIDOR
BRIDGE NO. 005201
VOLUME 2

HOPKINTON RHODE ISLAND

EXISTING CONDITIONS SURVEY PLAN

0013Q_V2_047_52_EXSVPLAN



CONSTRUCTION WORKING POINTS

WORKING POINT	STATION	NORTHING	EASTING
WP 1	302+20.69	120587.298	246479.810
WP 2	303+07.34	120547.231	246556.905
WP 3	303+64.34	120524.682	246609.256

ANTICIPATED WORK AT BRIDGE 005201:

1. DEMOLISH EXISTING ENDPOSTS, PARAPETS, BACKWALL, SHEAR BLOCKS, BOX BEAM SUPERSTRUCTURE, APPROACH SLAB, AND PORTIONS OF WINGWALLS
2. EXCAVATE TO EXPOSE AND DRILL AND GROUT DOWELS FOR WINGWALL EXTENSION
3. INSTALL FOLDED PLATE BEAM PREFABRICATED BRIDGE UNITS (PBU).
4. INSTALL HIGH EARLY STRENGTH CONCRETE AND NON-SHRINK GROUT FOR BACKW SHEAR BLOCKS, WINGWALL EXTENSIONS, APPROACH SLAB AND CLOSURE POURS.
5. INSTALL PRECAST ENDPOSTS (RI-TL4C.0, RI-TL4B.0) AND BRIDGE COMBINATION RAIL PARAPET (RI-TL-4C.1)
6. INSTALL NEW RIDOT MASH COMPLIANT RAILINGS (RI-TL-4B.1) (RI-TL-4C.1) AND GUARDRAIL.
7. INSTALL WATERPROOFING MEMBRANE, BITUMINOUS WEARING SURFACE, AND CIP SIDEWALK.

TALLY FROM R-7 RIPRAP. WHERE REPLACE STING GRADE.

TALLY FROM NAL

TOE OF PIER. REPLACE ALL EXCAVATION WITH CLASS R-7 RIPRAP TO MATCH EXISTING GRADE. DO NOT IMPACT BEDROCK. WHERE 32-INCH VER EXCAVATION IS NOT POSSIBLE, REPLACE EXISTING MATERIAL WITH CLASS R FROM BEDROCK TO EXISTING GRADE.

All gas installation done by the bridge contractor's RIE approved gas contractor
All gas activations, tie-ins and cut-off's done by RIE Crew

GAS DESIGN

POTTER HILL BRIDGE NO. 005201 – SOUTH ELEVATION

SCALE: 1" = 10'-0"

LEGEND:

APPROXIMATE RIVER EDGE

100-YEAR FLOOD PLAIN

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2026-XX-XXX	2026	57	74

AECOM

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

DESIGNED BY: ----
CHECKED BY: ----
DATE: JAN 2026
SHEET: 57
OF: 74

SCALE:

REVISIONS: NO. | DATE | BY

REVISIONS: NO. | DATE | BY

HOPKINTON — RHODE ISLAND

ASHAWAY - CORRIDOR
BRIDGE NO. 005201
VOLUME 2

GENERAL PLAN

0013Q_V2_048_52_GENPLAN

APPENDIX B

TRANSPORTATION MANAGEMENT PLAN

LEVEL 2 TRANSPORTATION MANAGEMENT PLAN

SIGNIFICANT PROJECT

Project Name: **Corridor - Ashaway**

RI Design Contract No(s): **2023-EH-007D**

RI Construction Contract No(s): **2026-CB-019**

PTSID # **0013Q**

Municipalities: **Westerly, Hopkinton**

Submission: **PS&E** Date: **4/28/2026**

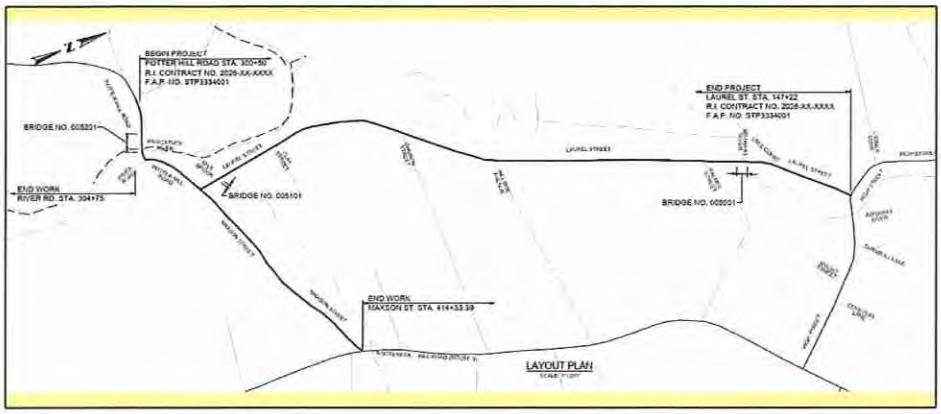


TABLE OF CONTENTS

Section Title	Page Number
TMP Roles and Responsibilities	**2**
Project Information	**6**
Traffic Conditions Prior to Start of Work	8
Expected Traffic Conditions During the Work	9
Transportation Management Strategies	
Traffic-Related Work Restrictions	10
Temporary Traffic Control Plans	11
Public Information Plan	12
Transportation Operations Plan	13
Performance Monitoring Plan	14
Changes to TMP & Contingency Plans	**15**
TMP Approvals	**15**
List of Attachments	**16**

TMP ROLES AND RESPONSIBILITIES

TMP Development Managers

RIDOT Project Manager for the project and Design Consultant who is responsible for development of this TMP

RIDOT PROJECT MANAGER	
Name:	**Jon Fontana**
Title:	**Project Manager 1**
Unit:	**Division of Project Management**
Office Phone:	**401-563-4211**
Mobile Phone:	**401-447-6239**
E-Mail:	jon.fontana@dot.ri.gov

CONSULTANT	
Name:	**Derek Hug, PE, PTOE**
Title:	**New England Traffic Lead**
Company/Unit:	**AECOM**
Office Phone:	
Mobile Phone:	**401-578-8543**
E-Mail:	derek.hug@aecom.com

TMP Implementation Managers

RIDOT Construction Manager and Contractor with the primary responsibility for implementation of this TMP

RIDOT CONSTRUCTION MANAGER	
Name:	
Title:	
Unit:	
Office Phone:	
Mobile Phone:	
E-Mail:	

CONTRACTOR	
Name:	
Title:	
Company/Unit:	
Office Phone:	
Mobile Phone:	
E-Mail:	

TMP Implementation Task Leaders

Other parties responsible for completing specific transportation management tasks required by this TMP

NAME / TITLE (if individual is named)		COMPANY / UNIT	PHONE	E-MAIL
		RIDOT / TMC	**401-222-5826**	tmc_operations@dot.ri.gov
Task Description / Responsibilities:	To be contacted via RIDOT notification form (FAX to 222-4225 / 222-5640) min. 48 hours prior to the implementation of lane closures and detours. Will update RIDOT 511 system as necessary.			
		RIDOT / Communications	**401-222-1362**	webmaster@dot.ri.gov
Task Description / Responsibilities:	To be contacted via RIDOT notification form (FAX to 222-3905) min. 48 hours prior to the implementation of lane closures and detours. Will update/issue RIDOT travel advisories web site / news releases as necessary.			
		RIDOT / Customer Service	**401-222-2450**	CustomerService@dot.ri.gov
Task Description / Responsibilities:	To be contacted via RIDOT notification form (FAX to 222-5648) min. 48 hours prior to the implementation of lane closures and detours. If necessary, will assist in coordinating the strategies included in the Public Information Plan.			
Task Description / Responsibilities:				

TMP Implementation Task Leaders (continued)

NAME / TITLE (if individual is named)	COMPANY / UNIT	PHONE	E-MAIL
Task Description / Responsibilities:			
Task Description / Responsibilities:			
Task Description / Responsibilities:			
Task Description / Responsibilities:			
Task Description / Responsibilities:			
Task Description / Responsibilities:			
Task Description / Responsibilities:			
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Task Description / Responsibilities:			
Task Description / Responsibilities:			
Task Description / Responsibilities:			
Task Description / Responsibilities:			
Task Description / Responsibilities:			
Task Description / Responsibilities:			

TMP Stakeholder Contacts

TMP Stakeholders to be consulted or coordinated with during the work

NAME / TITLE (if individual is named)		COMPANY / UNIT	PHONE	E-MAIL
Michael Geary	**Town Council President**	**Town of Hopkinton**	**401-290-7254**	chaelk.geary@hopkinton.gov
Role / Notification/Consultation Requirements:	To be contacted at least 1 week before the implementation of detours.			
Shawn Lacey	**Town Manager**	**Town of Westerly**	**401-348-2530**	slacey@westerlyri.gov
Role / Notification/Consultation Requirements:	To be contacted at least 1 week before the implementation of detours.			
David Caswell	**Public Works Director**	**Hopkinton Public Works**	**401-377-7790**	dcaswell@hopkintonri.org
Role / Notification/Consultation Requirements:	To be contacted at least 1 week before the implementation of detours.			
Kyle Zalaski	**Town Engineer**	**Westerly Engineering**	**401-348-2562**	kzalaski@westerlyri.gov
Role / Notification/Consultation Requirements:	To be contacted at least 1 week before the implementation of detours.			
Amanda Leclerc	**Principal**	**Ashaway Elementary School**	**401-377-2211**	ıda.leclerc@chariho.k12.ri.us
Role / Notification/Consultation Requirements:	To be contacted at least 3 weeks before the implementation of detours to coordinate impacts to bus routes.			
Gina M. Picard	**Superintendent**	**Chariho Regional School District**	**401-364-7575**	
Role / Notification/Consultation Requirements:	To be contacted at least 3 weeks before the implementation of detours to coordinate impacts to bus routes.			
Steven Crandall		**Ashaway Line & Twine Mfg.**	**401-377-2221**	info@ashawayusa.com
Role / Notification/Consultation Requirements:	To be contacted at least 1 week before the implementation of detours.			
Rev. Byeta Hoover-Mulvany		**Babcock Presbyterian Church**	**815-503-9228**	
Role / Notification/Consultation Requirements:	To be contacted at least 1 week before the implementation of detours.			
Michelle Pelchat	**Branch Manager**	**Ocean State Transit - Chariho, RI**	**401-552-7608**	mpelchat@ridesta.com
Role / Notification/Consultation Requirements:	To be contacted at least 3 weeks before the implementation of detours to coordinate impacts to bus routes.			
Role / Notification/Consultation Requirements:				
Role / Notification/Consultation Requirements:				
Role / Notification/Consultation Requirements:				
Role / Notification/Consultation Requirements:				
Role / Notification/Consultation Requirements:				
Role / Notification/Consultation Requirements:				

Emergency Service Contacts

Emergency service agencies/providers expected to be impacted by the project work zones

NAME / TITLE (If individual is named)		AGENCY / UNIT	PHONE	E-MAIL
Ronnie J. Sposato	Fire Chief	Ashaway Volunteer Fire Dept.	401-377-4549	info@ashawayfire.org
Special Details / Requirements:				
John Mackay	Fire Chief	Westerly Fire Dept.	401-596-0402 Ext. 2	chief@westerlyfire.com
Special Details / Requirements:				
Mark J. Carrier	Chief of Police	Hopkinton Police Dept.	401-377-7750	ncarrier@hopkintonpolice.org
Special Details / Requirements:				
Paul Gingerella	Chief of Police	Westerly Police Dept.	401-596-2022	ingerella@westerlypolice.org
Special Details / Requirements:				
Special Details / Requirements:				
Special Details / Requirements:				
Special Details / Requirements:				
Special Details / Requirements:				
Special Details / Requirements:				
Special Details / Requirements:				
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Special Details / Requirements:				
Special Details / Requirements:				
Special Details / Requirements:				
Special Details / Requirements:				
Special Details / Requirements:				

PROJECT INFORMATION

Brief Project Description

The project consists of 3 bridge replacements. They include: Bridge No. 005001 (butted box beam), Bridge No. 005101 (concrete arch), and Bridge No. 005201 (butted box beam). All bridges are over water. The bridges were built between 1928 and 2002 with several having rehabilitation performed as recently as 2019. All of the bridges have a bituminous wearing surface.
The type of work expected to be performed includes full bridge replacement of two bridges (005001 & 005101), superstructure replacement of one bridge (005251), scour repairs, masonry repairs and repointing, waterproofing membranes, wearing surface, MASH-compliant bridge rail, etc. Roadway work includes, but is not limited to, full depth pavement reclamation, full depth pavement reconstruction, sidewalk and wheelchair ramp reconstruction to PROWAG guidelines, MASH-compliant guardrail installation, cleaning and flushing existing drainage system, existing drainage system repairs, new drainage outlets, STU's, signage and pavement markings.

General Work Limits

Primary work zones will include the three bridge structures, with associated roadway, curbing and sidewalk rehabilitation that will extend through the project limits. It is anticipated that sidewalk and bridge structure work will be completed prior to roadway surface rehabilitation. Structural work will result in long-term full closures of the roadway. Roadway and sidewalk work will result in lane narrowing and occasional short-term roadway closures as necessary. A minimum of 50 feet from the limits of the bridge are anticipated to be needed for construction, necessitating the closure of the Potter Hill Road/River Road intersection.

WORK ZONE LOCATIONS

ROADWAY NAME or INTERSECTION	FROM	TO	APPROX. LENGTH
Laurel Street	High Street	Maxson Street/Potter Hill Road	4,300 ft
Maxson Street	Laurel Street/Potter Hill Road	Nooseneck Hill Road	1,400 ft
Potter Hill Road	Post Office Lane	Laurel Street/Maxson Street	800 ft

Attachment A to Level 2 TMP - Corridor - Ashaway

TRAFFIC-RELATED WORK RESTRICTIONS / General Restrictions:

			MINIMUM NUMBER OF LANES & SHOULDERS TO REMAIN OPEN TO TRAFFIC[1,2,3,4,5,6,7]						
	Time of Day		Day of Week						
Location	From	To	SUN	MON	TUES	WED	THURS	FRI	SAT
Potter Hill Road Bridge No. 005251 (During Bridge Replacement)	0:00	7:00	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR
	7:00	19:00	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR
	19:00	0:00	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR
Maxson Street Potter Hill Road River Road (All Other Times)	0:00	7:00	ALL	1L - ALT	1L - ALT	1L - ALT	1L - ALT	1L - ALT	ALL
	7:00	9:00	ALL	ALL	ALL	ALL	ALL	ALL	ALL
	9:00	16:00	ALL	1L - ALT	1L - ALT	1L - ALT	1L - ALT	1L - ALT	ALL
	16:00	18:00	ALL	ALL	ALL	ALL	ALL	ALL	ALL
	18:00	0:00	1L - ALT	1L - ALT	1L - ALT	1L - ALT	1L - ALT	ALL	ALL
Laurel Street Bridge No. 005051 (During Bridge Replacement)	0:00	7:00	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR
	7:00	19:00	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR
	19:00	0:00	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR
Laurel Street (All Other Times)	0:00	7:00	ALL	1L - ALT	1L - ALT	1L - ALT	1L - ALT	1L - ALT	ALL
	7:00	9:00	ALL	ALL	ALL	ALL	ALL	ALL	ALL
	9:00	16:00	ALL	1L - ALT	1L - ALT	1L - ALT	1L - ALT	1L - ALT	ALL
	16:00	18:00	ALL	ALL	ALL	ALL	ALL	ALL	ALL
	18:00	0:00	1L - ALT	1L - ALT	1L - ALT	1L - ALT	1L - ALT	ALL	ALL
Laurel Street Bridge No. 005151 (During Bridge Replacement)	0:00	7:00	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR
	7:00	19:00	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR
	19:00	0:00	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR
Laurel Street (All Other Times)	0:00	7:00	ALL	1L - ALT	1L - ALT	1L - ALT	1L - ALT	1L - ALT	ALL
	7:00	9:00	ALL	ALL	ALL	ALL	ALL	ALL	ALL
	9:00	16:00	ALL	1L - ALT	1L - ALT	1L - ALT	1L - ALT	1L - ALT	ALL
	16:00	18:00	ALL	ALL	ALL	ALL	ALL	ALL	ALL
	18:00	0:00	1L - ALT	1L - ALT	1L - ALT	1L - ALT	1L - ALT	ALL	ALL

LEGEND

ALL	All travel lanes and shoulders shall remain open to traffic
1L	A minimum of one 11- foot wide travel lane in each direction shall remain open to traffic
2L	A minimum of two 11- foot wide travel lanes in each direction shall remain open to traffic
3L	A minimum of three 11- foot wide travel lanes in each direction shall remain open to traffic
1L - ALT	A minimum of one 11-foot wide travel lane shall remain open to alternating traffic
SHLDR	Shoulder closure only, all travel lanes shall remain open to traffic
DETOUR	All traffic to be detoured
CLOSED	All travel lanes and shoulders may be closed

Notes:

1. The set-up and break-down of temporary traffic control devices within a traveled way shall be construed as a closure of that traveled way.
2. The provisions noted herein shall not free the Contractor from their responsibility to conduct all work in such a manner that assures the least possible obstruction to traffic.
3. Access to and egress from all side streets, driveways and service entrances within the Project work zones shall be maintained at all times unless otherwise noted or shown on the Plans.
4. Pedestrian access to and egress on at least one side of the roadway within the Project work zones must be maintained at all times during construction, where sidewalks exist, unless otherwise noted or shown on the Plans.
5. The Contractor shall coordinate their work with other projects in the surrounding area.
6. RIDOT reserves the right to rescind the approval of the above restrictions in the event of significant impacts to traffic operations.
7. Detour implemented after 9:00 PM on the Friday before the start of the detour.

General Project Schedule & Construction Sequence*

Both bridge and roadwork occur simultaneously, however the work ofn the three structures will be completed consecutively.

Bridge work is performed sequentially, beginning with Bridge No. 005051 , followed by Bridge No. 005251 and ending with Bridge No. 005151 there is no concurrency in the construction of the bridges.

Please refer to contract documents for milestone completion dates.

While the bridge construction is underway, the roadwork will have separate crews that will start construction as soon as the General Contractor mobilizes to the site. Road work for Laurel Street will begin at station 139+00 through station 145+51.14 (roadwork around Bridge No. 005051) The schedule shows that the road crews will move sequentially throughout all stations until reaching the end of the project at Laurel Street station 145+51.14 through station 147+44.00. Finally, the sequence of the schedule ends with a period to close out the project with punch list and as-builts.

Substantial Completion on October 23, 2028

*The information in this section is not intended to and shall not supersede the approved schedule and milestone/completion dates for the project.

OTHER ACTIVITIES IN PROJECT VICINITY WITH POTENTIAL FOR CAUSING SIGNIFICANT CUMULATIVE IMPACTS	
ACTIVITY	DETAILS / DATES / LOCATIONS
NONE ANTICIPATED	

TRAFFIC CONDITIONS PRIOR TO START OF WORK

Traffic Data

See attached traffic counts.

Intersection Control

All intersections within the project limits are stop sign controlled.

Crash Data

Crash analyses were not completed as part of the design for this project.

Local Community Issues and Concerns

Concern with cut-throughs on Knight Street along detour route for the Ashaway River bridge.
Construction may impact school bus routes.

EXPECTED TRAFFIC CONDITIONS DURING THE WORK

Traffic Data

Due to the generally low traffic volumes in the project area, future traffic projections and analyses for conditions during construction were deemed not to be necessary. It is anticipated that volumes are sufficiently low that the detoured traffic will not cause congestion on the proposed detour routes. The detour routes selected minimize the length of the proposed detour while directing traffic onto the routes that can accommodate two-way traffic. Bus routes may be impacted due to road closures and as such, the proposed detour routes have been approved by the Chariho Regional School District and Ashaway Elementary School. The detour for Bridge 5251 is approximately 3.5 miles in length.
The detour will cause a eight minute addition to drive time. The detour for bridge 5001 is approximately .5 of a mile. it will add an additional 2 minutes of travel time. The detour for bridge 5151 is approximately .5 of a mile and will add an additional 2 minutes of drive time.

Anticipated Demands from Other Activities in Vicinity of Projec

None anticipated.

TRAFFIC-RELATED WORK RESTRICTIONS

General Restrictions

See Attachment A: General Restrictions Chart

Holiday Restrictions

New Year's Day (if on weekend, the Holiday is recognized the Monday after) -- No lane closures on 13:00 New Year's Eve Day through 0:00 day after New Year's (or the Monday if on a weekend)

Martin Luther King Day - No lane closures on the Holiday.

Presidents Day - No lane closures on the Holiday.

Easter Day - No lane closures on the Holiday.

Memorial Day - No lane closures from 13:00 Friday Before to 00:00 Tuesday after the Holiday.

Juneteenth National Freedom Day - No lane closures on the Holiday (if the Holiday falls on the weekend the holiday is recognized on the Monday following the Holiday.)

Independence Day - No lane closures from 13:00 day before until 00:00 the day after the holiday.

Victory Day - No lane closures on the Holiday.

Labor Day - No lane closures from 13:00 day before until 00:00 the day after the holiday

Columbus Day - No lane closures on the holiday.

Veteran's Day - No lane closures on the holiday.

Election Day (If its an Observed RI State Holiday) - No lane closures on the holiday.

Thanksgiving Day - No lane closures shall be performed by the contractor on Wednesday through Sunday of Thanksgiving Week. Work can resume at 00:00 on Monday after the Holiday weekend.

Christmas Day (if on weekend, the Holiday is recognized the Monday after) - No lane closures from 13:00 on Christmas Eve through 0:00 day after Christmas

TEMPORARY TRAFFIC CONTROL PLANS

These RIDOT- and/or Designer-Developed TTC Plans will be used during the work on this project

RIDOT-DEVELOPED TYPICAL TTC PLANS	Included in: TMP	Included in: Plan Set
☐ Mobile Operation		
☐ Work Beyond the Shoulder		
☐ Shoulder Closure - Two Lane Road		
☐ Shoulder Closure - Limited Access		
☐ 1-Side Lane Shift - Two Lane Road		
☐ 2-Side Lane Shift - Two Lane Road		
☐ Lane Shift - Limited Access		
☐ Lane Closure - Two Lane Road		
☐ Lane Closure - Four Lane Road		
☐ Lane Closure - Limited Access		
☐ Double Lane Closure - Limited Access		
☐ Others (list) -		

DESIGNER-DEVELOPED TTC PLANS	Included in: TMP	Included in: Plan Set
Typical Work Beyond the Shoulder (Local Road)		X
Typical Shoulder Work with Minor Encroachment (Local Road)		X
Typical One-Lane Closure with Alternating Traffic Using Flaggers (Local Road)		X
Typical Shoulder Work with Minor Encroachment & Sidewalk Closure (Local Road)		X
Detour for a Closed Street		X
Detour Plans Nos. 1-3		X

PUBLIC INFORMATION PLAN

These strategies will be used to provide information concerning the project to road users and the community

Public Awareness Strategies

SELECTED STRATEGIES	RESPONSIBILITIES / REQUIREMENTS / SPECIAL CONSIDERATIONS
RIDOT travel advisories news releases	RIDOT TMP Imp. Mngr. to send RIDOT notification form to Communications min. 48 hrs. in advance of restrictions. Communications to include appropriate information in weekly news releases.
RIDOT travel advisories web site	RIDOT TMP Imp. Mngr. to send RIDOT notification form to Communications min. 48 hrs. in advance of restrictions. Communications to post appropriate information on RIDOT travel advisories web page.

Road User Information Strategies

SELECTED STRATEGIES	RESPONSIBILITIES / REQUIREMENTS / SPECIAL CONSIDERATIONS
RIDOT 511 traveler information system	RIDOT TMP Imp. Mngr. to send RIDOT notification form to RIDOT TMC min. 48 hrs. in advance of restrictions. RIDOT TMC to include appropriate restriction information in 511 phone and web services.

TRANSPORTATION OPERATIONS PLAN

These strategies will be used to provide improved transportation operations/safety within project work zones

Corridor/Network Management Strategies

SELECTED STRATEGIES	RESPONSIBILITIES / REQUIREMENTS / SPECIAL CONSIDERATIONS

Work Zone Safety Management Strategies

SELECTED STRATEGIES	RESPONSIBILITIES / REQUIREMENTS / SPECIAL CONSIDERATIONS

Traffic/Incident Management & Enforcement Strategies

SELECTED STRATEGIES	RESPONSIBILITIES / REQUIREMENTS / SPECIAL CONSIDERATIONS

Demand Management Strategies

SELECTED STRATEGIES	RESPONSIBILITIES / REQUIREMENTS / SPECIAL CONSIDERATIONS

PERFORMANCE MONITORING PLAN

General Monitoring Requirements

The **Contractor's TMP Implementation Manager** is responsible for keeping the portion of the project being used by public traffic in a condition that (1) safely and adequately accommodates such traffic and (2) is in accordance with the Traffic-Related Work Restrictions, the Temporary Traffic Control Plans, and where appropriate, the other transportation management strategies identified above.

The **RIDOT TMP Implementation Manager** or his/her responsible designee should (1) inspect the project work zones for conformance with the Temporary Traffic Control Plans, the *ATSSA Quality Guidelines for Temporary Traffic Control Devices and Features*, and where applicable, the other transportation management strategies identified above and (2) document all work zone-related feedback and complaints that are received from the public.

Project-Specific Performance Monitoring Strategies

SELECTED STRATEGIES	RESPONSIBILITIES / REQUIREMENTS / SPECIAL CONSIDERATIONS

CHANGES TO TMP & CONTINGENCY PLANS

If at any time (1) a deviation from any of the strategies included in the TMP (e.g., the use of an alternate construction sequence) is desired by one or more members of the project implementation team, (2) field observations and/or data suggest that impacts to road users are or will be unacceptable, or (3) one or more performance requirements established in the TMP are not being met in the field, the RIDOT TMP Implementation Manager and/or Project Manager shall report the situation to his/her supervisor. The Project Manager will coordinate with the Design Consultant of record and present the changes to the State Traffic Safety Engineer, Administrator of Project Management, the Chief Engineer of Infrastructure, and/or other interested parties as appropriate and/or necessary to consider and determine whether revised alternate strategies should be implemented in an effort to lessen the adverse safety and mobility impacts of the project. If any changes should be implemented, the changes shall be documented in a revised version of the TMP. Any changes implemented can be removed at any time, at RIDOTs discretion, if unexpected adverse impacts to traffic occur.

If a deviation from any of the strategies included in the TMP is requested by the Contractor, the Contractor is responsible for preparing and submitting to the RIDOT TMP Implementation Manager appropriate documentation (e.g., design calculations, analysis reports, Temporary Traffic Control Plans, etc.) showing that the requested change(s) are (1) feasible and (2) expected to result in safety and mobility impacts that are no more adverse than the impacts resulting from the strategies already included in the latest approved TMP. RIDOT will review and consider the submittal(s) as described in the preceding paragraph and will determine whether the changes should be implemented. The Contractor shall prepare and submit to the RIDOT TMP Implementation Manager a revised version of the latest approved TMP in both printed and electronic (Microsoft® Excel) format that documents all of the proposed changes. Work to implement the changes shall not begin until the revised TMP is approved.

When unexpected events (e.g., crashes, inclement weather, unforeseen traffic demands, etc.) occur in a project work zone where one or more lanes are closed, the RIDOT TMP Implementation Manager or his/her responsible designee should (1) determine whether or not the lane closure(s) can/should be removed in order to improve traffic operations and/or minimize delays and (2) if deemed appropriate, take action to remove the lane closure(s).

Project Specific Contingencies

TMP APPROVALS

All approvals must be obtained prior to start of work.

DIRECTOR OF PROJECT MANAGEMENT	STATE TRAFFIC SAFETY ENGINEER	CHIEF ENGINEER OF INFRASTRUCTURE
Signature: For John W Prior	Signature:	Signature: John W Prior
Date: 5/29/26	Date: 5-28-26	Date: 5/29/26

Revision #	Initials	Date

Revision #	Initials	Date

Revision #	Initials	Date

LIST OF ATTACHMENTS

Attachment A: General Restrictions Chart
Attachment B: Traffic Counts

Attachment A to Level 2 TMP - Corridor - Ashaway

TRAFFIC-RELATED WORK RESTRICTIONS / General Restrictions:

			MINIMUM NUMBER OF LANES & SHOULDERS TO REMAIN OPEN TO TRAFFIC[1,2,3]						
	Time of Day		Day of Week						
Location	From	To	SUN	MON	TUES	WED	THURS	FRI	SAT
Laurel Street Potter Hill Road (During Bridge Replacement)	0:00	7:00	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR
	7:00	19:00	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR
	19:00	0:00	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR
Laurel Street Maxson Street Potter Hill Road (All Other Times)	0:00	7:00	ALL	1L - ALT	1L - ALT	1L - ALT	1L - ALT	1L - ALT	ALL
	7:00	9:00	ALL	ALL	ALL	ALL	ALL	ALL	ALL
	9:00	16:00	ALL	1L - ALT	1L - ALT	1L - ALT	1L - ALT	1L - ALT	ALL
	16:00	18:00	ALL	ALL	ALL	ALL	ALL	ALL	ALL
	18:00	0:00	1L - ALT	1L - ALT	1L - ALT	1L - ALT	1L - ALT	ALL	ALL

LEGEND

ALL	All travel lanes and shoulders shall remain open to traffic
1L	A minimum of one 11- foot wide travel lane in each direction shall remain open to traffic
2L	A minimum of two 11- foot wide travel lanes in each direction shall remain open to traffic
3L	A minimum of three 11- foot wide travel lanes in each direction shall remain open to traffic
1L - ALT	A minimum of one 11-foot wide travel lane shall remain open to alternating traffic
SHLDR	Shoulder closure only, all travel lanes shall remain open to traffic
DETOUR	All traffic to be detoured
CLOSED	All travel lanes and shoulders may be closed

Note: RIDOT reserves the right to rescind the approval of the above restrictions in the event of significant impacts to traffic operations.

Summary	
Study Name	239522-ATR-A (Potter Hill Road w/o River Street) ATR
Project	239522-Westerly RI
Project Code	
Channel Granularity	By Direction
Bin Size	15 minutes
Time Zone	America/New_York
Start Time	11/28/2023 0:00
End Time	11/30/2023 0:00
Location	Potter Hill Road w/o River Street
Latitude and Longitude	41.413821,-71.797312
Midday Peak	Nov 28 2023 12:30PM - 1:30 PM (0.783)
PM Peak (Overall Peak Hour)	Nov 28 2023 2:30PM - 3:30 PM (0.772)
AM Peak	Nov 29 2023 7:15AM - 8:15 AM (0.875)

Motorcycles			
Entry		n/a	n/a
Direction		Westbound	Eastbound
Start Time		Thru	Thru
	11/28/2023 0:00	0	0
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	0	0
	11/28/2023 1:00	0	0
	11/28/2023 1:15	0	0
	11/28/2023 1:30	0	0
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	0
	11/28/2023 2:15	0	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	0	0
	11/28/2023 3:45	0	0
	11/28/2023 4:00	0	0
	11/28/2023 4:15	0	0
	11/28/2023 4:30	0	0
	11/28/2023 4:45	0	0
	11/28/2023 5:00	0	0
	11/28/2023 5:15	0	0
	11/28/2023 5:30	0	0
	11/28/2023 5:45	0	0
	11/28/2023 6:00	0	0
	11/28/2023 6:15	0	0
	11/28/2023 6:30	0	0
	11/28/2023 6:45	0	0
	11/28/2023 7:00	0	0
	11/28/2023 7:15	0	0
	11/28/2023 7:30	0	0
	11/28/2023 7:45	0	0
	11/28/2023 8:00	0	0
	11/28/2023 8:15	0	0
	11/28/2023 8:30	0	0
	11/28/2023 8:45	0	0
	11/28/2023 9:00	0	0
	11/28/2023 9:15	0	0
	11/28/2023 9:30	0	0
	11/28/2023 9:45	0	0

11/28/2023 10:00	0	0
11/28/2023 10:15	0	0
11/28/2023 10:30	0	0
11/28/2023 10:45	0	0
11/28/2023 11:00	0	0
11/28/2023 11:15	0	0
11/28/2023 11:30	0	0
11/28/2023 11:45	0	0
11/28/2023 12:00	0	0
11/28/2023 12:15	0	0
11/28/2023 12:30	0	0
11/28/2023 12:45	0	0
11/28/2023 13:00	0	0
11/28/2023 13:15	0	0
11/28/2023 13:30	0	0
11/28/2023 13:45	0	0
11/28/2023 14:00	0	0
11/28/2023 14:15	0	0
11/28/2023 14:30	0	0
11/28/2023 14:45	0	0
11/28/2023 15:00	0	0
11/28/2023 15:15	0	0
11/28/2023 15:30	0	0
11/28/2023 15:45	0	0
11/28/2023 16:00	0	0
11/28/2023 16:15	0	0
11/28/2023 16:30	0	0
11/28/2023 16:45	0	0
11/28/2023 17:00	0	0
11/28/2023 17:15	0	0
11/28/2023 17:30	0	0
11/28/2023 17:45	0	0
11/28/2023 18:00	0	0
11/28/2023 18:15	0	0
11/28/2023 18:30	0	0
11/28/2023 18:45	0	0
11/28/2023 19:00	0	0
11/28/2023 19:15	0	0
11/28/2023 19:30	0	0
11/28/2023 19:45	0	0
11/28/2023 20:00	0	0
11/28/2023 20:15	0	0
11/28/2023 20:30	0	0
11/28/2023 20:45	0	0

11/28/2023 21:00	0	0
11/28/2023 21:15	0	0
11/28/2023 21:30	0	0
11/28/2023 21:45	0	0
11/28/2023 22:00	0	0
11/28/2023 22:15	0	0
11/28/2023 22:30	0	0
11/28/2023 22:45	0	0
11/28/2023 23:00	0	0
11/28/2023 23:15	0	0
11/28/2023 23:30	0	0
11/28/2023 23:45	0	0
11/29/2023 0:00	0	0
11/29/2023 0:15	0	0
11/29/2023 0:30	0	0
11/29/2023 0:45	0	0
11/29/2023 1:00	0	0
11/29/2023 1:15	0	0
11/29/2023 1:30	0	0
11/29/2023 1:45	0	0
11/29/2023 2:00	0	0
11/29/2023 2:15	0	0
11/29/2023 2:30	0	0
11/29/2023 2:45	0	0
11/29/2023 3:00	0	0
11/29/2023 3:15	0	0
11/29/2023 3:30	0	0
11/29/2023 3:45	0	0
11/29/2023 4:00	0	0
11/29/2023 4:15	0	0
11/29/2023 4:30	0	0
11/29/2023 4:45	0	0
11/29/2023 5:00	0	0
11/29/2023 5:15	0	0
11/29/2023 5:30	0	0
11/29/2023 5:45	0	0
11/29/2023 6:00	0	0
11/29/2023 6:15	0	0
11/29/2023 6:30	0	0
11/29/2023 6:45	0	0
11/29/2023 7:00	0	0
11/29/2023 7:15	0	0
11/29/2023 7:30	0	0
11/29/2023 7:45	0	0

11/29/2023 8:00	0	0
11/29/2023 8:15	0	0
11/29/2023 8:30	0	0
11/29/2023 8:45	0	0
11/29/2023 9:00	0	0
11/29/2023 9:15	0	0
11/29/2023 9:30	0	0
11/29/2023 9:45	0	0
11/29/2023 10:00	0	0
11/29/2023 10:15	0	0
11/29/2023 10:30	0	0
11/29/2023 10:45	0	0
11/29/2023 11:00	0	0
11/29/2023 11:15	0	0
11/29/2023 11:30	0	0
11/29/2023 11:45	0	0
11/29/2023 12:00	0	0
11/29/2023 12:15	0	0
11/29/2023 12:30	0	0
11/29/2023 12:45	0	0
11/29/2023 13:00	0	0
11/29/2023 13:15	0	0
11/29/2023 13:30	0	0
11/29/2023 13:45	0	0
11/29/2023 14:00	0	0
11/29/2023 14:15	0	0
11/29/2023 14:30	0	0
11/29/2023 14:45	0	0
11/29/2023 15:00	0	0
11/29/2023 15:15	0	0
11/29/2023 15:30	0	0
11/29/2023 15:45	0	0
11/29/2023 16:00	0	0
11/29/2023 16:15	0	0
11/29/2023 16:30	0	0
11/29/2023 16:45	0	0
11/29/2023 17:00	0	0
11/29/2023 17:15	0	0
11/29/2023 17:30	0	0
11/29/2023 17:45	0	0
11/29/2023 18:00	0	0
11/29/2023 18:15	0	0
11/29/2023 18:30	0	0
11/29/2023 18:45	0	0

11/29/2023 19:00	0	0
11/29/2023 19:15	0	0
11/29/2023 19:30	0	0
11/29/2023 19:45	0	0
11/29/2023 20:00	0	0
11/29/2023 20:15	0	0
11/29/2023 20:30	0	0
11/29/2023 20:45	0	0
11/29/2023 21:00	0	0
11/29/2023 21:15	0	0
11/29/2023 21:30	0	0
11/29/2023 21:45	0	0
11/29/2023 22:00	0	0
11/29/2023 22:15	0	0
11/29/2023 22:30	0	0
11/29/2023 22:45	0	0
11/29/2023 23:00	0	0
11/29/2023 23:15	0	0
11/29/2023 23:30	0	0
11/29/2023 23:45	0	0

Lights			
Entry		n/a	n/a
Direction		Westbound	Eastbound
Start Time		Thru	Thru
	11/28/2023 0:00	1	0
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	1	0
	11/28/2023 1:00	0	0
	11/28/2023 1:15	0	0
	11/28/2023 1:30	0	0
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	0
	11/28/2023 2:15	0	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	0	1
	11/28/2023 3:45	0	0
	11/28/2023 4:00	1	0
	11/28/2023 4:15	0	0
	11/28/2023 4:30	0	0
	11/28/2023 4:45	0	0
	11/28/2023 5:00	0	1
	11/28/2023 5:15	1	0
	11/28/2023 5:30	0	1
	11/28/2023 5:45	0	1
	11/28/2023 6:00	2	4
	11/28/2023 6:15	0	2
	11/28/2023 6:30	0	5
	11/28/2023 6:45	2	8
	11/28/2023 7:00	1	11
	11/28/2023 7:15	1	5
	11/28/2023 7:30	3	5
	11/28/2023 7:45	2	9
	11/28/2023 8:00	5	5
	11/28/2023 8:15	1	1
	11/28/2023 8:30	0	2
	11/28/2023 8:45	3	4
	11/28/2023 9:00	2	1
	11/28/2023 9:15	2	2
	11/28/2023 9:30	2	5
	11/28/2023 9:45	2	3

11/28/2023 10:00	1	7
11/28/2023 10:15	2	1
11/28/2023 10:30	0	3
11/28/2023 10:45	2	3
11/28/2023 11:00	4	3
11/28/2023 11:15	4	4
11/28/2023 11:30	1	2
11/28/2023 11:45	10	3
11/28/2023 12:00	2	5
11/28/2023 12:15	1	4
11/28/2023 12:30	4	5
11/28/2023 12:45	4	8
11/28/2023 13:00	2	5
11/28/2023 13:15	8	6
11/28/2023 13:30	3	2
11/28/2023 13:45	3	7
11/28/2023 14:00	8	2
11/28/2023 14:15	5	3
11/28/2023 14:30	12	4
11/28/2023 14:45	6	7
11/28/2023 15:00	9	5
11/28/2023 15:15	13	10
11/28/2023 15:30	6	8
11/28/2023 15:45	13	3
11/28/2023 16:00	8	1
11/28/2023 16:15	11	8
11/28/2023 16:30	16	6
11/28/2023 16:45	9	2
11/28/2023 17:00	4	5
11/28/2023 17:15	7	3
11/28/2023 17:30	8	2
11/28/2023 17:45	4	1
11/28/2023 18:00	2	3
11/28/2023 18:15	3	2
11/28/2023 18:30	1	6
11/28/2023 18:45	2	2
11/28/2023 19:00	3	2
11/28/2023 19:15	3	1
11/28/2023 19:30	3	4
11/28/2023 19:45	1	1
11/28/2023 20:00	5	2
11/28/2023 20:15	3	5
11/28/2023 20:30	4	0
11/28/2023 20:45	2	1

11/28/2023 21:00	6	2
11/28/2023 21:15	3	3
11/28/2023 21:30	1	1
11/28/2023 21:45	1	1
11/28/2023 22:00	1	0
11/28/2023 22:15	0	2
11/28/2023 22:30	1	0
11/28/2023 22:45	1	2
11/28/2023 23:00	1	1
11/28/2023 23:15	1	1
11/28/2023 23:30	1	0
11/28/2023 23:45	0	1
11/29/2023 0:00	0	0
11/29/2023 0:15	0	1
11/29/2023 0:30	0	0
11/29/2023 0:45	1	0
11/29/2023 1:00	0	0
11/29/2023 1:15	1	1
11/29/2023 1:30	0	0
11/29/2023 1:45	0	0
11/29/2023 2:00	0	0
11/29/2023 2:15	0	0
11/29/2023 2:30	0	0
11/29/2023 2:45	0	0
11/29/2023 3:00	0	0
11/29/2023 3:15	0	1
11/29/2023 3:30	0	0
11/29/2023 3:45	0	1
11/29/2023 4:00	0	1
11/29/2023 4:15	0	1
11/29/2023 4:30	0	1
11/29/2023 4:45	0	3
11/29/2023 5:00	0	3
11/29/2023 5:15	0	3
11/29/2023 5:30	1	2
11/29/2023 5:45	0	2
11/29/2023 6:00	1	4
11/29/2023 6:15	0	1
11/29/2023 6:30	1	12
11/29/2023 6:45	1	9
11/29/2023 7:00	1	6
11/29/2023 7:15	1	8
11/29/2023 7:30	3	6
11/29/2023 7:45	0	10

11/29/2023 8:00	6	6
11/29/2023 8:15	3	5
11/29/2023 8:30	1	2
11/29/2023 8:45	3	4
11/29/2023 9:00	2	0
11/29/2023 9:15	2	3
11/29/2023 9:30	0	2
11/29/2023 9:45	2	2
11/29/2023 10:00	2	0
11/29/2023 10:15	2	1
11/29/2023 10:30	5	2
11/29/2023 10:45	0	3
11/29/2023 11:00	3	0
11/29/2023 11:15	2	6
11/29/2023 11:30	1	4
11/29/2023 11:45	6	8
11/29/2023 12:00	2	2
11/29/2023 12:15	8	3
11/29/2023 12:30	6	5
11/29/2023 12:45	2	6
11/29/2023 13:00	5	1
11/29/2023 13:15	4	5
11/29/2023 13:30	6	7
11/29/2023 13:45	8	0
11/29/2023 14:00	2	3
11/29/2023 14:15	6	5
11/29/2023 14:30	7	6
11/29/2023 14:45	4	5
11/29/2023 15:00	10	9
11/29/2023 15:15	5	3
11/29/2023 15:30	8	3
11/29/2023 15:45	7	6
11/29/2023 16:00	10	2
11/29/2023 16:15	9	2
11/29/2023 16:30	7	1
11/29/2023 16:45	8	7
11/29/2023 17:00	4	5
11/29/2023 17:15	9	8
11/29/2023 17:30	5	2
11/29/2023 17:45	4	2
11/29/2023 18:00	5	2
11/29/2023 18:15	8	6
11/29/2023 18:30	2	5
11/29/2023 18:45	6	9

11/29/2023 19:00	4	4
11/29/2023 19:15	3	3
11/29/2023 19:30	2	1
11/29/2023 19:45	3	1
11/29/2023 20:00	5	2
11/29/2023 20:15	5	0
11/29/2023 20:30	0	0
11/29/2023 20:45	4	0
11/29/2023 21:00	4	4
11/29/2023 21:15	1	1
11/29/2023 21:30	0	0
11/29/2023 21:45	2	1
11/29/2023 22:00	0	0
11/29/2023 22:15	1	1
11/29/2023 22:30	1	0
11/29/2023 22:45	1	0
11/29/2023 23:00	2	1
11/29/2023 23:15	1	0
11/29/2023 23:30	1	0
11/29/2023 23:45	0	0

Single-Unit Trucks			
Entry		n/a	n/a
Direction		Westbound	Eastbound
Start Time		Thru	Thru
	11/28/2023 0:00	0	0
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	0	0
	11/28/2023 1:00	0	0
	11/28/2023 1:15	0	0
	11/28/2023 1:30	0	0
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	0
	11/28/2023 2:15	0	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	0	0
	11/28/2023 3:45	0	0
	11/28/2023 4:00	0	0
	11/28/2023 4:15	0	0
	11/28/2023 4:30	0	0
	11/28/2023 4:45	0	0
	11/28/2023 5:00	0	0
	11/28/2023 5:15	0	0
	11/28/2023 5:30	0	0
	11/28/2023 5:45	0	0
	11/28/2023 6:00	0	0
	11/28/2023 6:15	0	0
	11/28/2023 6:30	0	0
	11/28/2023 6:45	0	0
	11/28/2023 7:00	0	0
	11/28/2023 7:15	0	0
	11/28/2023 7:30	0	0
	11/28/2023 7:45	0	0
	11/28/2023 8:00	0	0
	11/28/2023 8:15	0	0
	11/28/2023 8:30	1	0
	11/28/2023 8:45	0	0
	11/28/2023 9:00	0	0
	11/28/2023 9:15	1	0
	11/28/2023 9:30	0	0
	11/28/2023 9:45	0	0

11/28/2023 10:00	0	0
11/28/2023 10:15	1	0
11/28/2023 10:30	1	1
11/28/2023 10:45	1	0
11/28/2023 11:00	0	1
11/28/2023 11:15	0	0
11/28/2023 11:30	0	0
11/28/2023 11:45	0	0
11/28/2023 12:00	1	0
11/28/2023 12:15	0	0
11/28/2023 12:30	0	0
11/28/2023 12:45	1	1
11/28/2023 13:00	1	1
11/28/2023 13:15	0	1
11/28/2023 13:30	1	0
11/28/2023 13:45	0	0
11/28/2023 14:00	0	1
11/28/2023 14:15	0	0
11/28/2023 14:30	0	0
11/28/2023 14:45	0	0
11/28/2023 15:00	0	1
11/28/2023 15:15	0	0
11/28/2023 15:30	0	0
11/28/2023 15:45	0	0
11/28/2023 16:00	0	0
11/28/2023 16:15	0	0
11/28/2023 16:30	0	0
11/28/2023 16:45	0	0
11/28/2023 17:00	0	0
11/28/2023 17:15	0	0
11/28/2023 17:30	0	0
11/28/2023 17:45	0	0
11/28/2023 18:00	0	0
11/28/2023 18:15	0	0
11/28/2023 18:30	0	0
11/28/2023 18:45	0	0
11/28/2023 19:00	0	0
11/28/2023 19:15	0	0
11/28/2023 19:30	0	0
11/28/2023 19:45	0	0
11/28/2023 20:00	0	0
11/28/2023 20:15	0	0
11/28/2023 20:30	0	0
11/28/2023 20:45	0	0

11/28/2023 21:00	0	0
11/28/2023 21:15	0	0
11/28/2023 21:30	0	0
11/28/2023 21:45	0	0
11/28/2023 22:00	0	0
11/28/2023 22:15	0	0
11/28/2023 22:30	0	0
11/28/2023 22:45	0	0
11/28/2023 23:00	0	0
11/28/2023 23:15	0	0
11/28/2023 23:30	0	0
11/28/2023 23:45	0	0
11/29/2023 0:00	0	0
11/29/2023 0:15	0	0
11/29/2023 0:30	0	0
11/29/2023 0:45	0	0
11/29/2023 1:00	0	0
11/29/2023 1:15	0	0
11/29/2023 1:30	0	0
11/29/2023 1:45	0	0
11/29/2023 2:00	0	0
11/29/2023 2:15	0	0
11/29/2023 2:30	0	0
11/29/2023 2:45	0	0
11/29/2023 3:00	0	0
11/29/2023 3:15	0	0
11/29/2023 3:30	0	0
11/29/2023 3:45	0	0
11/29/2023 4:00	0	0
11/29/2023 4:15	0	0
11/29/2023 4:30	0	0
11/29/2023 4:45	0	0
11/29/2023 5:00	0	0
11/29/2023 5:15	0	0
11/29/2023 5:30	0	0
11/29/2023 5:45	0	0
11/29/2023 6:00	0	0
11/29/2023 6:15	0	0
11/29/2023 6:30	0	0
11/29/2023 6:45	0	0
11/29/2023 7:00	0	0
11/29/2023 7:15	0	0
11/29/2023 7:30	1	0
11/29/2023 7:45	0	0

11/29/2023 8:00	0	0
11/29/2023 8:15	0	0
11/29/2023 8:30	0	0
11/29/2023 8:45	0	0
11/29/2023 9:00	0	0
11/29/2023 9:15	0	0
11/29/2023 9:30	1	0
11/29/2023 9:45	0	0
11/29/2023 10:00	1	0
11/29/2023 10:15	0	0
11/29/2023 10:30	1	0
11/29/2023 10:45	1	1
11/29/2023 11:00	2	0
11/29/2023 11:15	0	0
11/29/2023 11:30	0	0
11/29/2023 11:45	0	0
11/29/2023 12:00	1	2
11/29/2023 12:15	2	0
11/29/2023 12:30	0	0
11/29/2023 12:45	0	0
11/29/2023 13:00	0	0
11/29/2023 13:15	0	0
11/29/2023 13:30	0	0
11/29/2023 13:45	1	1
11/29/2023 14:00	0	1
11/29/2023 14:15	0	0
11/29/2023 14:30	0	1
11/29/2023 14:45	0	0
11/29/2023 15:00	0	0
11/29/2023 15:15	0	0
11/29/2023 15:30	0	0
11/29/2023 15:45	0	0
11/29/2023 16:00	0	0
11/29/2023 16:15	0	1
11/29/2023 16:30	0	0
11/29/2023 16:45	0	0
11/29/2023 17:00	0	1
11/29/2023 17:15	0	0
11/29/2023 17:30	0	1
11/29/2023 17:45	0	0
11/29/2023 18:00	0	0
11/29/2023 18:15	0	2
11/29/2023 18:30	0	0
11/29/2023 18:45	0	0

11/29/2023 19:00	0	0
11/29/2023 19:15	0	0
11/29/2023 19:30	0	0
11/29/2023 19:45	0	0
11/29/2023 20:00	0	0
11/29/2023 20:15	0	0
11/29/2023 20:30	0	0
11/29/2023 20:45	0	0
11/29/2023 21:00	0	0
11/29/2023 21:15	0	0
11/29/2023 21:30	0	0
11/29/2023 21:45	0	0
11/29/2023 22:00	0	0
11/29/2023 22:15	0	0
11/29/2023 22:30	0	0
11/29/2023 22:45	0	0
11/29/2023 23:00	0	0
11/29/2023 23:15	0	0
11/29/2023 23:30	0	0
11/29/2023 23:45	0	0

Articulated Trucks			
Entry		n/a	n/a
Direction		Westbound	Eastbound
Start Time		Thru	Thru
	11/28/2023 0:00	0	0
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	0	0
	11/28/2023 1:00	0	0
	11/28/2023 1:15	0	0
	11/28/2023 1:30	0	0
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	0
	11/28/2023 2:15	0	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	0	0
	11/28/2023 3:45	0	0
	11/28/2023 4:00	0	0
	11/28/2023 4:15	0	0
	11/28/2023 4:30	0	0
	11/28/2023 4:45	0	0
	11/28/2023 5:00	0	0
	11/28/2023 5:15	0	0
	11/28/2023 5:30	0	0
	11/28/2023 5:45	0	0
	11/28/2023 6:00	0	0
	11/28/2023 6:15	0	0
	11/28/2023 6:30	0	0
	11/28/2023 6:45	0	0
	11/28/2023 7:00	0	0
	11/28/2023 7:15	0	0
	11/28/2023 7:30	0	0
	11/28/2023 7:45	0	0
	11/28/2023 8:00	0	0
	11/28/2023 8:15	0	0
	11/28/2023 8:30	0	0
	11/28/2023 8:45	0	0
	11/28/2023 9:00	0	0
	11/28/2023 9:15	0	0
	11/28/2023 9:30	0	0
	11/28/2023 9:45	0	0

11/28/2023 10:00	0	0
11/28/2023 10:15	0	0
11/28/2023 10:30	0	0
11/28/2023 10:45	0	0
11/28/2023 11:00	0	0
11/28/2023 11:15	0	0
11/28/2023 11:30	0	0
11/28/2023 11:45	0	0
11/28/2023 12:00	0	0
11/28/2023 12:15	0	0
11/28/2023 12:30	0	0
11/28/2023 12:45	0	0
11/28/2023 13:00	0	0
11/28/2023 13:15	0	0
11/28/2023 13:30	0	0
11/28/2023 13:45	0	0
11/28/2023 14:00	0	0
11/28/2023 14:15	0	0
11/28/2023 14:30	0	0
11/28/2023 14:45	0	0
11/28/2023 15:00	0	0
11/28/2023 15:15	0	0
11/28/2023 15:30	0	0
11/28/2023 15:45	0	0
11/28/2023 16:00	0	0
11/28/2023 16:15	0	0
11/28/2023 16:30	0	0
11/28/2023 16:45	0	0
11/28/2023 17:00	0	0
11/28/2023 17:15	0	0
11/28/2023 17:30	0	0
11/28/2023 17:45	0	0
11/28/2023 18:00	0	0
11/28/2023 18:15	0	0
11/28/2023 18:30	0	0
11/28/2023 18:45	0	0
11/28/2023 19:00	0	0
11/28/2023 19:15	0	0
11/28/2023 19:30	0	0
11/28/2023 19:45	0	0
11/28/2023 20:00	0	0
11/28/2023 20:15	0	0
11/28/2023 20:30	0	0
11/28/2023 20:45	0	0

11/28/2023 21:00	0	0
11/28/2023 21:15	0	0
11/28/2023 21:30	0	0
11/28/2023 21:45	0	0
11/28/2023 22:00	0	0
11/28/2023 22:15	0	0
11/28/2023 22:30	0	0
11/28/2023 22:45	0	0
11/28/2023 23:00	0	0
11/28/2023 23:15	0	0
11/28/2023 23:30	0	0
11/28/2023 23:45	0	0
11/29/2023 0:00	0	0
11/29/2023 0:15	0	0
11/29/2023 0:30	0	0
11/29/2023 0:45	0	0
11/29/2023 1:00	0	0
11/29/2023 1:15	0	0
11/29/2023 1:30	0	0
11/29/2023 1:45	0	0
11/29/2023 2:00	0	0
11/29/2023 2:15	0	0
11/29/2023 2:30	0	0
11/29/2023 2:45	0	0
11/29/2023 3:00	0	0
11/29/2023 3:15	0	0
11/29/2023 3:30	0	0
11/29/2023 3:45	0	0
11/29/2023 4:00	0	0
11/29/2023 4:15	0	0
11/29/2023 4:30	0	0
11/29/2023 4:45	0	0
11/29/2023 5:00	0	0
11/29/2023 5:15	0	0
11/29/2023 5:30	0	0
11/29/2023 5:45	0	0
11/29/2023 6:00	0	0
11/29/2023 6:15	0	0
11/29/2023 6:30	0	0
11/29/2023 6:45	0	0
11/29/2023 7:00	0	0
11/29/2023 7:15	0	0
11/29/2023 7:30	0	0
11/29/2023 7:45	0	0

11/29/2023 8:00	0	0
11/29/2023 8:15	0	0
11/29/2023 8:30	0	0
11/29/2023 8:45	0	0
11/29/2023 9:00	0	0
11/29/2023 9:15	0	0
11/29/2023 9:30	0	0
11/29/2023 9:45	0	0
11/29/2023 10:00	0	0
11/29/2023 10:15	0	0
11/29/2023 10:30	0	0
11/29/2023 10:45	0	0
11/29/2023 11:00	0	0
11/29/2023 11:15	0	1
11/29/2023 11:30	0	0
11/29/2023 11:45	0	0
11/29/2023 12:00	0	0
11/29/2023 12:15	0	0
11/29/2023 12:30	0	0
11/29/2023 12:45	0	0
11/29/2023 13:00	0	0
11/29/2023 13:15	0	0
11/29/2023 13:30	0	0
11/29/2023 13:45	0	0
11/29/2023 14:00	0	0
11/29/2023 14:15	0	0
11/29/2023 14:30	0	0
11/29/2023 14:45	0	0
11/29/2023 15:00	0	0
11/29/2023 15:15	0	0
11/29/2023 15:30	0	0
11/29/2023 15:45	0	0
11/29/2023 16:00	0	0
11/29/2023 16:15	0	0
11/29/2023 16:30	0	0
11/29/2023 16:45	0	0
11/29/2023 17:00	0	0
11/29/2023 17:15	0	0
11/29/2023 17:30	0	0
11/29/2023 17:45	0	0
11/29/2023 18:00	0	0
11/29/2023 18:15	0	0
11/29/2023 18:30	0	0
11/29/2023 18:45	0	0

11/29/2023 19:00	0	0
11/29/2023 19:15	0	0
11/29/2023 19:30	0	0
11/29/2023 19:45	0	0
11/29/2023 20:00	0	0
11/29/2023 20:15	0	0
11/29/2023 20:30	0	0
11/29/2023 20:45	0	0
11/29/2023 21:00	0	0
11/29/2023 21:15	0	0
11/29/2023 21:30	0	0
11/29/2023 21:45	0	0
11/29/2023 22:00	0	0
11/29/2023 22:15	0	0
11/29/2023 22:30	0	0
11/29/2023 22:45	0	0
11/29/2023 23:00	0	0
11/29/2023 23:15	0	0
11/29/2023 23:30	0	0
11/29/2023 23:45	0	0

Buses			
Entry		n/a	n/a
Direction		Westbound	Eastbound
Start Time		Thru	Thru
	11/28/2023 0:00	0	0
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	0	0
	11/28/2023 1:00	0	0
	11/28/2023 1:15	0	0
	11/28/2023 1:30	0	0
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	0
	11/28/2023 2:15	0	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	0	0
	11/28/2023 3:45	0	0
	11/28/2023 4:00	0	0
	11/28/2023 4:15	0	0
	11/28/2023 4:30	0	0
	11/28/2023 4:45	0	0
	11/28/2023 5:00	0	0
	11/28/2023 5:15	0	0
	11/28/2023 5:30	0	0
	11/28/2023 5:45	0	0
	11/28/2023 6:00	0	0
	11/28/2023 6:15	0	0
	11/28/2023 6:30	0	0
	11/28/2023 6:45	0	1
	11/28/2023 7:00	0	0
	11/28/2023 7:15	0	0
	11/28/2023 7:30	0	1
	11/28/2023 7:45	0	0
	11/28/2023 8:00	0	0
	11/28/2023 8:15	1	0
	11/28/2023 8:30	0	0
	11/28/2023 8:45	0	0
	11/28/2023 9:00	0	0
	11/28/2023 9:15	0	0
	11/28/2023 9:30	0	0
	11/28/2023 9:45	0	0

11/28/2023 10:00	0	0
11/28/2023 10:15	0	0
11/28/2023 10:30	0	0
11/28/2023 10:45	0	0
11/28/2023 11:00	0	0
11/28/2023 11:15	0	0
11/28/2023 11:30	0	0
11/28/2023 11:45	0	0
11/28/2023 12:00	0	0
11/28/2023 12:15	0	0
11/28/2023 12:30	0	0
11/28/2023 12:45	0	0
11/28/2023 13:00	0	0
11/28/2023 13:15	0	0
11/28/2023 13:30	0	2
11/28/2023 13:45	0	0
11/28/2023 14:00	0	0
11/28/2023 14:15	0	0
11/28/2023 14:30	0	0
11/28/2023 14:45	4	0
11/28/2023 15:00	0	0
11/28/2023 15:15	0	0
11/28/2023 15:30	2	0
11/28/2023 15:45	0	0
11/28/2023 16:00	0	0
11/28/2023 16:15	2	0
11/28/2023 16:30	0	0
11/28/2023 16:45	0	0
11/28/2023 17:00	0	0
11/28/2023 17:15	0	0
11/28/2023 17:30	0	1
11/28/2023 17:45	0	0
11/28/2023 18:00	0	0
11/28/2023 18:15	0	0
11/28/2023 18:30	0	0
11/28/2023 18:45	0	0
11/28/2023 19:00	0	0
11/28/2023 19:15	0	0
11/28/2023 19:30	0	0
11/28/2023 19:45	0	0
11/28/2023 20:00	0	0
11/28/2023 20:15	0	0
11/28/2023 20:30	0	0
11/28/2023 20:45	0	0

11/28/2023 21:00	0	0
11/28/2023 21:15	0	0
11/28/2023 21:30	0	0
11/28/2023 21:45	0	0
11/28/2023 22:00	0	0
11/28/2023 22:15	0	0
11/28/2023 22:30	0	0
11/28/2023 22:45	0	0
11/28/2023 23:00	0	0
11/28/2023 23:15	0	0
11/28/2023 23:30	0	0
11/28/2023 23:45	0	0
11/29/2023 0:00	0	0
11/29/2023 0:15	0	0
11/29/2023 0:30	0	0
11/29/2023 0:45	0	0
11/29/2023 1:00	0	0
11/29/2023 1:15	0	0
11/29/2023 1:30	0	0
11/29/2023 1:45	0	0
11/29/2023 2:00	0	0
11/29/2023 2:15	0	0
11/29/2023 2:30	0	0
11/29/2023 2:45	0	0
11/29/2023 3:00	0	0
11/29/2023 3:15	0	0
11/29/2023 3:30	0	0
11/29/2023 3:45	0	0
11/29/2023 4:00	0	0
11/29/2023 4:15	0	0
11/29/2023 4:30	0	0
11/29/2023 4:45	0	0
11/29/2023 5:00	0	0
11/29/2023 5:15	0	0
11/29/2023 5:30	0	0
11/29/2023 5:45	0	0
11/29/2023 6:00	0	0
11/29/2023 6:15	0	0
11/29/2023 6:30	0	0
11/29/2023 6:45	0	1
11/29/2023 7:00	0	0
11/29/2023 7:15	0	0
11/29/2023 7:30	0	1
11/29/2023 7:45	0	0

11/29/2023 8:00	0	0
11/29/2023 8:15	1	0
11/29/2023 8:30	0	0
11/29/2023 8:45	0	0
11/29/2023 9:00	0	0
11/29/2023 9:15	0	0
11/29/2023 9:30	0	0
11/29/2023 9:45	0	0
11/29/2023 10:00	0	0
11/29/2023 10:15	0	0
11/29/2023 10:30	0	0
11/29/2023 10:45	0	0
11/29/2023 11:00	0	0
11/29/2023 11:15	0	0
11/29/2023 11:30	0	0
11/29/2023 11:45	0	0
11/29/2023 12:00	0	0
11/29/2023 12:15	0	0
11/29/2023 12:30	0	0
11/29/2023 12:45	0	0
11/29/2023 13:00	0	0
11/29/2023 13:15	0	0
11/29/2023 13:30	0	1
11/29/2023 13:45	0	0
11/29/2023 14:00	0	0
11/29/2023 14:15	0	0
11/29/2023 14:30	0	0
11/29/2023 14:45	2	0
11/29/2023 15:00	0	0
11/29/2023 15:15	0	0
11/29/2023 15:30	2	0
11/29/2023 15:45	0	0
11/29/2023 16:00	2	0
11/29/2023 16:15	0	0
11/29/2023 16:30	0	0
11/29/2023 16:45	0	0
11/29/2023 17:00	0	0
11/29/2023 17:15	0	0
11/29/2023 17:30	0	0
11/29/2023 17:45	0	0
11/29/2023 18:00	0	0
11/29/2023 18:15	0	0
11/29/2023 18:30	0	0
11/29/2023 18:45	0	0

11/29/2023 19:00	0	0
11/29/2023 19:15	0	0
11/29/2023 19:30	0	0
11/29/2023 19:45	0	0
11/29/2023 20:00	0	0
11/29/2023 20:15	0	0
11/29/2023 20:30	0	0
11/29/2023 20:45	0	0
11/29/2023 21:00	0	0
11/29/2023 21:15	0	0
11/29/2023 21:30	0	0
11/29/2023 21:45	0	0
11/29/2023 22:00	0	0
11/29/2023 22:15	0	0
11/29/2023 22:30	0	0
11/29/2023 22:45	0	0
11/29/2023 23:00	0	0
11/29/2023 23:15	0	0
11/29/2023 23:30	0	0
11/29/2023 23:45	0	0

Bicycles on Road			
Entry		n/a	n/a
Direction		Westbound	Eastbound
Start Time		Thru	Thru
	11/28/2023 0:00	0	0
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	0	0
	11/28/2023 1:00	0	0
	11/28/2023 1:15	0	0
	11/28/2023 1:30	0	0
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	0
	11/28/2023 2:15	0	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	0	0
	11/28/2023 3:45	0	0
	11/28/2023 4:00	0	0
	11/28/2023 4:15	0	0
	11/28/2023 4:30	0	0
	11/28/2023 4:45	0	0
	11/28/2023 5:00	0	0
	11/28/2023 5:15	0	0
	11/28/2023 5:30	0	0
	11/28/2023 5:45	0	0
	11/28/2023 6:00	0	0
	11/28/2023 6:15	0	0
	11/28/2023 6:30	0	0
	11/28/2023 6:45	0	0
	11/28/2023 7:00	0	0
	11/28/2023 7:15	0	0
	11/28/2023 7:30	0	0
	11/28/2023 7:45	0	0
	11/28/2023 8:00	0	0
	11/28/2023 8:15	0	0
	11/28/2023 8:30	0	0
	11/28/2023 8:45	0	0
	11/28/2023 9:00	0	0
	11/28/2023 9:15	0	0
	11/28/2023 9:30	0	0
	11/28/2023 9:45	0	0

11/28/2023 10:00	0	0
11/28/2023 10:15	0	0
11/28/2023 10:30	0	0
11/28/2023 10:45	0	0
11/28/2023 11:00	0	0
11/28/2023 11:15	0	0
11/28/2023 11:30	0	0
11/28/2023 11:45	0	0
11/28/2023 12:00	0	0
11/28/2023 12:15	0	0
11/28/2023 12:30	0	0
11/28/2023 12:45	0	0
11/28/2023 13:00	0	0
11/28/2023 13:15	0	0
11/28/2023 13:30	0	0
11/28/2023 13:45	0	0
11/28/2023 14:00	0	0
11/28/2023 14:15	0	0
11/28/2023 14:30	0	0
11/28/2023 14:45	0	0
11/28/2023 15:00	0	0
11/28/2023 15:15	0	0
11/28/2023 15:30	0	0
11/28/2023 15:45	0	0
11/28/2023 16:00	0	0
11/28/2023 16:15	0	0
11/28/2023 16:30	0	0
11/28/2023 16:45	0	0
11/28/2023 17:00	0	0
11/28/2023 17:15	0	0
11/28/2023 17:30	0	0
11/28/2023 17:45	0	0
11/28/2023 18:00	0	0
11/28/2023 18:15	0	0
11/28/2023 18:30	0	0
11/28/2023 18:45	0	0
11/28/2023 19:00	0	0
11/28/2023 19:15	0	0
11/28/2023 19:30	0	0
11/28/2023 19:45	0	0
11/28/2023 20:00	0	0
11/28/2023 20:15	0	0
11/28/2023 20:30	0	0
11/28/2023 20:45	0	0

11/28/2023 21:00	0	0
11/28/2023 21:15	0	0
11/28/2023 21:30	0	0
11/28/2023 21:45	0	0
11/28/2023 22:00	0	0
11/28/2023 22:15	0	0
11/28/2023 22:30	0	0
11/28/2023 22:45	0	0
11/28/2023 23:00	0	0
11/28/2023 23:15	0	0
11/28/2023 23:30	0	0
11/28/2023 23:45	0	0
11/29/2023 0:00	0	0
11/29/2023 0:15	0	0
11/29/2023 0:30	0	0
11/29/2023 0:45	0	0
11/29/2023 1:00	0	0
11/29/2023 1:15	0	0
11/29/2023 1:30	0	0
11/29/2023 1:45	0	0
11/29/2023 2:00	0	0
11/29/2023 2:15	0	0
11/29/2023 2:30	0	0
11/29/2023 2:45	0	0
11/29/2023 3:00	0	0
11/29/2023 3:15	0	0
11/29/2023 3:30	0	0
11/29/2023 3:45	0	0
11/29/2023 4:00	0	0
11/29/2023 4:15	0	0
11/29/2023 4:30	0	0
11/29/2023 4:45	0	0
11/29/2023 5:00	0	0
11/29/2023 5:15	0	0
11/29/2023 5:30	0	0
11/29/2023 5:45	0	0
11/29/2023 6:00	0	0
11/29/2023 6:15	0	0
11/29/2023 6:30	0	0
11/29/2023 6:45	0	0
11/29/2023 7:00	0	0
11/29/2023 7:15	0	0
11/29/2023 7:30	0	0
11/29/2023 7:45	0	0

11/29/2023 8:00	0	0
11/29/2023 8:15	0	0
11/29/2023 8:30	0	0
11/29/2023 8:45	0	0
11/29/2023 9:00	0	0
11/29/2023 9:15	0	0
11/29/2023 9:30	0	0
11/29/2023 9:45	0	0
11/29/2023 10:00	0	0
11/29/2023 10:15	0	0
11/29/2023 10:30	0	0
11/29/2023 10:45	0	0
11/29/2023 11:00	0	0
11/29/2023 11:15	0	0
11/29/2023 11:30	0	0
11/29/2023 11:45	0	0
11/29/2023 12:00	0	0
11/29/2023 12:15	0	0
11/29/2023 12:30	0	0
11/29/2023 12:45	1	0
11/29/2023 13:00	0	0
11/29/2023 13:15	0	0
11/29/2023 13:30	0	0
11/29/2023 13:45	0	0
11/29/2023 14:00	0	0
11/29/2023 14:15	0	0
11/29/2023 14:30	0	0
11/29/2023 14:45	0	0
11/29/2023 15:00	0	0
11/29/2023 15:15	0	0
11/29/2023 15:30	0	0
11/29/2023 15:45	0	0
11/29/2023 16:00	0	0
11/29/2023 16:15	0	0
11/29/2023 16:30	0	0
11/29/2023 16:45	0	0
11/29/2023 17:00	0	0
11/29/2023 17:15	0	0
11/29/2023 17:30	0	0
11/29/2023 17:45	0	0
11/29/2023 18:00	0	0
11/29/2023 18:15	0	0
11/29/2023 18:30	0	0
11/29/2023 18:45	0	0

11/29/2023 19:00	0	0
11/29/2023 19:15	0	0
11/29/2023 19:30	0	0
11/29/2023 19:45	0	0
11/29/2023 20:00	0	0
11/29/2023 20:15	0	0
11/29/2023 20:30	0	0
11/29/2023 20:45	0	0
11/29/2023 21:00	0	0
11/29/2023 21:15	0	0
11/29/2023 21:30	0	0
11/29/2023 21:45	0	0
11/29/2023 22:00	0	0
11/29/2023 22:15	0	0
11/29/2023 22:30	0	0
11/29/2023 22:45	0	0
11/29/2023 23:00	0	0
11/29/2023 23:15	0	0
11/29/2023 23:30	0	0
11/29/2023 23:45	0	0

Summary

Study Name	239522-ATR-B (Laurel Street n/o Maxson Street) ATR
Project	239522-Westerly RI
Project Code	
Channel Granularity	By Direction
Bin Size	15 minutes
Time Zone	America/New_York
Start Time	11/28/2023 0:00
End Time	11/30/2023 0:00
Location	Laurel Street n/o Maxson Street
Latitude and Longitude	41.414791,-71.795822

Midday Peak	Nov 28 2023 11:45AM - 12:45 PM (0.690)
PM Peak (Overall Peak Hour)	Nov 28 2023 2:45PM - 3:45 PM (0.833)
AM Peak	Nov 29 2023 7:45AM - 8:45 AM (0.580)

Motorcycles			
Entry		n/a	n/a
Direction		Southbound	Northbound
Start Time		Thru	Thru
	11/28/2023 0:00	0	0
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	0	0
	11/28/2023 1:00	0	0
	11/28/2023 1:15	0	0
	11/28/2023 1:30	0	0
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	0
	11/28/2023 2:15	0	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	0	0
	11/28/2023 3:45	0	0
	11/28/2023 4:00	0	0
	11/28/2023 4:15	0	0
	11/28/2023 4:30	0	0
	11/28/2023 4:45	0	0
	11/28/2023 5:00	0	0
	11/28/2023 5:15	0	0
	11/28/2023 5:30	0	0
	11/28/2023 5:45	0	0
	11/28/2023 6:00	0	0
	11/28/2023 6:15	0	0
	11/28/2023 6:30	0	0
	11/28/2023 6:45	0	0
	11/28/2023 7:00	0	0
	11/28/2023 7:15	0	0
	11/28/2023 7:30	0	0
	11/28/2023 7:45	0	0
	11/28/2023 8:00	0	0
	11/28/2023 8:15	0	0
	11/28/2023 8:30	0	0
	11/28/2023 8:45	0	0
	11/28/2023 9:00	0	0
	11/28/2023 9:15	0	0
	11/28/2023 9:30	0	0
	11/28/2023 9:45	0	0

11/28/2023 10:00	0	0
11/28/2023 10:15	0	0
11/28/2023 10:30	0	0
11/28/2023 10:45	0	0
11/28/2023 11:00	0	0
11/28/2023 11:15	0	0
11/28/2023 11:30	0	0
11/28/2023 11:45	0	0
11/28/2023 12:00	0	0
11/28/2023 12:15	0	0
11/28/2023 12:30	0	0
11/28/2023 12:45	1	0
11/28/2023 13:00	0	1
11/28/2023 13:15	0	0
11/28/2023 13:30	0	0
11/28/2023 13:45	0	0
11/28/2023 14:00	0	0
11/28/2023 14:15	0	0
11/28/2023 14:30	0	0
11/28/2023 14:45	0	0
11/28/2023 15:00	0	0
11/28/2023 15:15	0	0
11/28/2023 15:30	0	0
11/28/2023 15:45	0	0
11/28/2023 16:00	0	0
11/28/2023 16:15	0	0
11/28/2023 16:30	0	0
11/28/2023 16:45	0	0
11/28/2023 17:00	0	0
11/28/2023 17:15	0	0
11/28/2023 17:30	0	0
11/28/2023 17:45	0	0
11/28/2023 18:00	0	0
11/28/2023 18:15	0	0
11/28/2023 18:30	0	0
11/28/2023 18:45	0	0
11/28/2023 19:00	0	0
11/28/2023 19:15	0	0
11/28/2023 19:30	0	0
11/28/2023 19:45	0	0
11/28/2023 20:00	0	0
11/28/2023 20:15	0	0
11/28/2023 20:30	0	0
11/28/2023 20:45	0	0

11/28/2023 21:00	0	0
11/28/2023 21:15	0	0
11/28/2023 21:30	0	0
11/28/2023 21:45	0	0
11/28/2023 22:00	0	0
11/28/2023 22:15	0	0
11/28/2023 22:30	0	0
11/28/2023 22:45	0	0
11/28/2023 23:00	0	0
11/28/2023 23:15	0	0
11/28/2023 23:30	0	0
11/28/2023 23:45	0	0
11/29/2023 0:00	0	0
11/29/2023 0:15	0	0
11/29/2023 0:30	0	0
11/29/2023 0:45	0	0
11/29/2023 1:00	0	0
11/29/2023 1:15	0	0
11/29/2023 1:30	0	0
11/29/2023 1:45	0	0
11/29/2023 2:00	0	0
11/29/2023 2:15	0	0
11/29/2023 2:30	0	0
11/29/2023 2:45	0	0
11/29/2023 3:00	0	0
11/29/2023 3:15	0	0
11/29/2023 3:30	0	0
11/29/2023 3:45	0	0
11/29/2023 4:00	0	0
11/29/2023 4:15	0	0
11/29/2023 4:30	0	0
11/29/2023 4:45	0	0
11/29/2023 5:00	0	0
11/29/2023 5:15	0	0
11/29/2023 5:30	0	0
11/29/2023 5:45	0	0
11/29/2023 6:00	0	0
11/29/2023 6:15	0	0
11/29/2023 6:30	0	0
11/29/2023 6:45	0	0
11/29/2023 7:00	0	0
11/29/2023 7:15	0	0
11/29/2023 7:30	0	0
11/29/2023 7:45	0	0

11/29/2023 8:00	0	0
11/29/2023 8:15	0	0
11/29/2023 8:30	0	0
11/29/2023 8:45	0	0
11/29/2023 9:00	0	0
11/29/2023 9:15	0	0
11/29/2023 9:30	0	0
11/29/2023 9:45	0	0
11/29/2023 10:00	0	0
11/29/2023 10:15	0	0
11/29/2023 10:30	0	0
11/29/2023 10:45	0	0
11/29/2023 11:00	0	0
11/29/2023 11:15	0	0
11/29/2023 11:30	0	0
11/29/2023 11:45	0	0
11/29/2023 12:00	0	0
11/29/2023 12:15	0	0
11/29/2023 12:30	0	0
11/29/2023 12:45	0	0
11/29/2023 13:00	0	0
11/29/2023 13:15	0	0
11/29/2023 13:30	0	0
11/29/2023 13:45	0	0
11/29/2023 14:00	0	0
11/29/2023 14:15	0	0
11/29/2023 14:30	0	0
11/29/2023 14:45	0	0
11/29/2023 15:00	0	0
11/29/2023 15:15	0	0
11/29/2023 15:30	0	0
11/29/2023 15:45	0	0
11/29/2023 16:00	0	0
11/29/2023 16:15	0	0
11/29/2023 16:30	0	0
11/29/2023 16:45	0	0
11/29/2023 17:00	0	0
11/29/2023 17:15	0	0
11/29/2023 17:30	0	0
11/29/2023 17:45	0	0
11/29/2023 18:00	0	0
11/29/2023 18:15	0	0
11/29/2023 18:30	0	0
11/29/2023 18:45	0	0

11/29/2023 19:00	0	0
11/29/2023 19:15	0	0
11/29/2023 19:30	0	0
11/29/2023 19:45	0	0
11/29/2023 20:00	0	0
11/29/2023 20:15	0	0
11/29/2023 20:30	0	0
11/29/2023 20:45	0	0
11/29/2023 21:00	0	0
11/29/2023 21:15	0	0
11/29/2023 21:30	0	0
11/29/2023 21:45	0	0
11/29/2023 22:00	0	0
11/29/2023 22:15	0	0
11/29/2023 22:30	0	0
11/29/2023 22:45	0	0
11/29/2023 23:00	0	0
11/29/2023 23:15	0	0
11/29/2023 23:30	0	0
11/29/2023 23:45	0	0

Lights			
Entry		n/a	n/a
Direction		Southbound	Northbound
Start Time		Thru	Thru
	11/28/2023 0:00	0	1
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	1	0
	11/28/2023 1:00	0	0
	11/28/2023 1:15	0	0
	11/28/2023 1:30	1	0
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	0
	11/28/2023 2:15	0	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	0	1
	11/28/2023 3:45	0	0
	11/28/2023 4:00	2	0
	11/28/2023 4:15	0	0
	11/28/2023 4:30	0	1
	11/28/2023 4:45	0	1
	11/28/2023 5:00	1	0
	11/28/2023 5:15	2	0
	11/28/2023 5:30	0	2
	11/28/2023 5:45	1	1
	11/28/2023 6:00	2	2
	11/28/2023 6:15	4	3
	11/28/2023 6:30	3	9
	11/28/2023 6:45	3	8
	11/28/2023 7:00	7	7
	11/28/2023 7:15	5	2
	11/28/2023 7:30	8	7
	11/28/2023 7:45	3	4
	11/28/2023 8:00	6	4
	11/28/2023 8:15	3	2
	11/28/2023 8:30	3	3
	11/28/2023 8:45	7	9
	11/28/2023 9:00	4	0
	11/28/2023 9:15	6	1
	11/28/2023 9:30	2	7
	11/28/2023 9:45	2	6

11/28/2023 10:00	6	3
11/28/2023 10:15	10	3
11/28/2023 10:30	3	2
11/28/2023 10:45	3	4
11/28/2023 11:00	4	5
11/28/2023 11:15	3	6
11/28/2023 11:30	4	2
11/28/2023 11:45	6	8
11/28/2023 12:00	4	6
11/28/2023 12:15	8	12
11/28/2023 12:30	5	5
11/28/2023 12:45	8	5
11/28/2023 13:00	2	8
11/28/2023 13:15	6	5
11/28/2023 13:30	3	8
11/28/2023 13:45	3	10
11/28/2023 14:00	6	5
11/28/2023 14:15	4	7
11/28/2023 14:30	8	9
11/28/2023 14:45	11	9
11/28/2023 15:00	13	9
11/28/2023 15:15	11	8
11/28/2023 15:30	11	14
11/28/2023 15:45	10	5
11/28/2023 16:00	6	14
11/28/2023 16:15	9	4
11/28/2023 16:30	14	7
11/28/2023 16:45	10	7
11/28/2023 17:00	3	8
11/28/2023 17:15	8	4
11/28/2023 17:30	10	5
11/28/2023 17:45	4	5
11/28/2023 18:00	3	2
11/28/2023 18:15	2	4
11/28/2023 18:30	0	2
11/28/2023 18:45	4	7
11/28/2023 19:00	1	8
11/28/2023 19:15	4	4
11/28/2023 19:30	1	1
11/28/2023 19:45	2	2
11/28/2023 20:00	5	3
11/28/2023 20:15	1	5
11/28/2023 20:30	1	1
11/28/2023 20:45	1	1

11/28/2023 21:00	9	6
11/28/2023 21:15	1	1
11/28/2023 21:30	0	2
11/28/2023 21:45	2	1
11/28/2023 22:00	1	0
11/28/2023 22:15	2	1
11/28/2023 22:30	1	1
11/28/2023 22:45	1	1
11/28/2023 23:00	4	0
11/28/2023 23:15	1	2
11/28/2023 23:30	0	0
11/28/2023 23:45	1	1
11/29/2023 0:00	0	0
11/29/2023 0:15	1	1
11/29/2023 0:30	0	0
11/29/2023 0:45	0	0
11/29/2023 1:00	1	0
11/29/2023 1:15	1	0
11/29/2023 1:30	1	0
11/29/2023 1:45	0	0
11/29/2023 2:00	0	0
11/29/2023 2:15	1	0
11/29/2023 2:30	0	0
11/29/2023 2:45	0	0
11/29/2023 3:00	0	0
11/29/2023 3:15	0	0
11/29/2023 3:30	0	1
11/29/2023 3:45	0	0
11/29/2023 4:00	0	0
11/29/2023 4:15	0	0
11/29/2023 4:30	0	1
11/29/2023 4:45	0	2
11/29/2023 5:00	0	1
11/29/2023 5:15	0	1
11/29/2023 5:30	2	2
11/29/2023 5:45	1	1
11/29/2023 6:00	2	2
11/29/2023 6:15	3	5
11/29/2023 6:30	5	8
11/29/2023 6:45	3	4
11/29/2023 7:00	8	8
11/29/2023 7:15	5	3
11/29/2023 7:30	5	2
11/29/2023 7:45	1	7

11/29/2023 8:00	6	5
11/29/2023 8:15	12	8
11/29/2023 8:30	4	6
11/29/2023 8:45	3	4
11/29/2023 9:00	3	3
11/29/2023 9:15	3	5
11/29/2023 9:30	1	4
11/29/2023 9:45	7	2
11/29/2023 10:00	3	6
11/29/2023 10:15	4	3
11/29/2023 10:30	5	5
11/29/2023 10:45	4	6
11/29/2023 11:00	5	5
11/29/2023 11:15	3	6
11/29/2023 11:30	3	2
11/29/2023 11:45	5	5
11/29/2023 12:00	8	5
11/29/2023 12:15	10	5
11/29/2023 12:30	4	5
11/29/2023 12:45	3	11
11/29/2023 13:00	7	4
11/29/2023 13:15	5	6
11/29/2023 13:30	4	8
11/29/2023 13:45	8	5
11/29/2023 14:00	5	6
11/29/2023 14:15	2	9
11/29/2023 14:30	12	3
11/29/2023 14:45	9	10
11/29/2023 15:00	12	11
11/29/2023 15:15	7	7
11/29/2023 15:30	11	8
11/29/2023 15:45	12	8
11/29/2023 16:00	8	13
11/29/2023 16:15	9	10
11/29/2023 16:30	6	5
11/29/2023 16:45	8	8
11/29/2023 17:00	5	11
11/29/2023 17:15	7	9
11/29/2023 17:30	5	6
11/29/2023 17:45	6	4
11/29/2023 18:00	4	8
11/29/2023 18:15	5	8
11/29/2023 18:30	2	3
11/29/2023 18:45	3	10

11/29/2023 19:00	3	2
11/29/2023 19:15	4	4
11/29/2023 19:30	5	2
11/29/2023 19:45	0	4
11/29/2023 20:00	4	4
11/29/2023 20:15	5	0
11/29/2023 20:30	1	2
11/29/2023 20:45	2	2
11/29/2023 21:00	2	4
11/29/2023 21:15	1	1
11/29/2023 21:30	0	0
11/29/2023 21:45	2	1
11/29/2023 22:00	1	0
11/29/2023 22:15	0	1
11/29/2023 22:30	1	1
11/29/2023 22:45	1	1
11/29/2023 23:00	4	2
11/29/2023 23:15	0	1
11/29/2023 23:30	3	0
11/29/2023 23:45	0	0

Single-Unit Trucks

Entry	n/a	n/a
Direction	Southbound	Northbound
Start Time	Thru	Thru
11/28/2023 0:00	0	0
11/28/2023 0:15	0	0
11/28/2023 0:30	0	0
11/28/2023 0:45	0	0
11/28/2023 1:00	0	0
11/28/2023 1:15	0	0
11/28/2023 1:30	0	0
11/28/2023 1:45	0	0
11/28/2023 2:00	0	0
11/28/2023 2:15	0	0
11/28/2023 2:30	0	0
11/28/2023 2:45	0	0
11/28/2023 3:00	0	0
11/28/2023 3:15	0	0
11/28/2023 3:30	0	0
11/28/2023 3:45	0	0
11/28/2023 4:00	0	0
11/28/2023 4:15	0	0
11/28/2023 4:30	0	0
11/28/2023 4:45	0	0
11/28/2023 5:00	0	0
11/28/2023 5:15	0	0
11/28/2023 5:30	0	0
11/28/2023 5:45	0	0
11/28/2023 6:00	0	0
11/28/2023 6:15	0	0
11/28/2023 6:30	0	0
11/28/2023 6:45	0	0
11/28/2023 7:00	0	0
11/28/2023 7:15	0	0
11/28/2023 7:30	1	0
11/28/2023 7:45	0	0
11/28/2023 8:00	0	0
11/28/2023 8:15	0	0
11/28/2023 8:30	0	0
11/28/2023 8:45	0	0
11/28/2023 9:00	0	0
11/28/2023 9:15	1	0
11/28/2023 9:30	0	0
11/28/2023 9:45	0	0

11/28/2023 10:00	0	0
11/28/2023 10:15	1	0
11/28/2023 10:30	0	1
11/28/2023 10:45	1	0
11/28/2023 11:00	0	0
11/28/2023 11:15	0	0
11/28/2023 11:30	0	0
11/28/2023 11:45	0	2
11/28/2023 12:00	1	0
11/28/2023 12:15	0	1
11/28/2023 12:30	0	0
11/28/2023 12:45	0	1
11/28/2023 13:00	0	1
11/28/2023 13:15	0	1
11/28/2023 13:30	0	0
11/28/2023 13:45	0	0
11/28/2023 14:00	0	0
11/28/2023 14:15	0	0
11/28/2023 14:30	0	1
11/28/2023 14:45	0	0
11/28/2023 15:00	1	0
11/28/2023 15:15	0	0
11/28/2023 15:30	0	0
11/28/2023 15:45	0	2
11/28/2023 16:00	0	0
11/28/2023 16:15	0	0
11/28/2023 16:30	0	0
11/28/2023 16:45	0	0
11/28/2023 17:00	0	0
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11/28/2023 17:30	0	0
11/28/2023 17:45	0	0
11/28/2023 18:00	0	1
11/28/2023 18:15	0	0
11/28/2023 18:30	0	0
11/28/2023 18:45	1	0
11/28/2023 19:00	0	0
11/28/2023 19:15	0	0
11/28/2023 19:30	0	0
11/28/2023 19:45	0	0
11/28/2023 20:00	0	0
11/28/2023 20:15	0	0
11/28/2023 20:30	0	0
11/28/2023 20:45	0	0

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11/28/2023 21:15	0	0
11/28/2023 21:30	0	0
11/28/2023 21:45	0	0
11/28/2023 22:00	0	0
11/28/2023 22:15	0	0
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11/28/2023 22:45	0	0
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11/29/2023 0:30	0	0
11/29/2023 0:45	0	0
11/29/2023 1:00	0	0
11/29/2023 1:15	0	0
11/29/2023 1:30	0	0
11/29/2023 1:45	0	0
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11/29/2023 6:30	0	0
11/29/2023 6:45	0	0
11/29/2023 7:00	0	0
11/29/2023 7:15	1	0
11/29/2023 7:30	0	0
11/29/2023 7:45	0	0

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11/29/2023 8:15	0	0
11/29/2023 8:30	0	0
11/29/2023 8:45	0	0
11/29/2023 9:00	0	1
11/29/2023 9:15	0	0
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11/29/2023 9:45	0	0
11/29/2023 10:00	1	0
11/29/2023 10:15	1	1
11/29/2023 10:30	0	0
11/29/2023 10:45	1	0
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11/29/2023 13:15	0	0
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11/29/2023 13:45	0	1
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11/29/2023 17:45	0	0
11/29/2023 18:00	0	0
11/29/2023 18:15	0	1
11/29/2023 18:30	0	0
11/29/2023 18:45	0	0

11/29/2023 19:00	1	0
11/29/2023 19:15	0	0
11/29/2023 19:30	0	0
11/29/2023 19:45	0	0
11/29/2023 20:00	0	0
11/29/2023 20:15	0	0
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11/29/2023 21:45	0	0
11/29/2023 22:00	0	0
11/29/2023 22:15	0	0
11/29/2023 22:30	0	0
11/29/2023 22:45	0	0
11/29/2023 23:00	0	0
11/29/2023 23:15	0	0
11/29/2023 23:30	0	0
11/29/2023 23:45	0	0

Articulated Trucks			
Entry		n/a	n/a
Direction		Southbound	Northbound
Start Time		Thru	Thru
	11/28/2023 0:00	0	0
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	0	0
	11/28/2023 1:00	0	0
	11/28/2023 1:15	0	0
	11/28/2023 1:30	0	0
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	0
	11/28/2023 2:15	0	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	0	0
	11/28/2023 3:45	0	0
	11/28/2023 4:00	0	0
	11/28/2023 4:15	0	0
	11/28/2023 4:30	0	0
	11/28/2023 4:45	0	0
	11/28/2023 5:00	0	0
	11/28/2023 5:15	0	0
	11/28/2023 5:30	0	0
	11/28/2023 5:45	0	0
	11/28/2023 6:00	0	0
	11/28/2023 6:15	0	0
	11/28/2023 6:30	0	0
	11/28/2023 6:45	0	0
	11/28/2023 7:00	0	0
	11/28/2023 7:15	0	0
	11/28/2023 7:30	0	0
	11/28/2023 7:45	0	0
	11/28/2023 8:00	0	0
	11/28/2023 8:15	0	0
	11/28/2023 8:30	0	0
	11/28/2023 8:45	0	0
	11/28/2023 9:00	0	0
	11/28/2023 9:15	0	0
	11/28/2023 9:30	0	0
	11/28/2023 9:45	0	0

11/28/2023 10:00	0	0
11/28/2023 10:15	0	0
11/28/2023 10:30	0	0
11/28/2023 10:45	0	0
11/28/2023 11:00	0	0
11/28/2023 11:15	0	0
11/28/2023 11:30	0	0
11/28/2023 11:45	0	0
11/28/2023 12:00	0	0
11/28/2023 12:15	0	0
11/28/2023 12:30	0	0
11/28/2023 12:45	0	0
11/28/2023 13:00	0	0
11/28/2023 13:15	0	0
11/28/2023 13:30	0	0
11/28/2023 13:45	0	0
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11/28/2023 14:30	0	0
11/28/2023 14:45	0	0
11/28/2023 15:00	0	0
11/28/2023 15:15	0	0
11/28/2023 15:30	0	0
11/28/2023 15:45	0	0
11/28/2023 16:00	0	0
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11/28/2023 17:30	0	0
11/28/2023 17:45	0	0
11/28/2023 18:00	0	1
11/28/2023 18:15	0	0
11/28/2023 18:30	0	0
11/28/2023 18:45	0	0
11/28/2023 19:00	0	0
11/28/2023 19:15	0	0
11/28/2023 19:30	0	0
11/28/2023 19:45	0	0
11/28/2023 20:00	0	0
11/28/2023 20:15	0	0
11/28/2023 20:30	0	0
11/28/2023 20:45	0	0

11/28/2023 21:00	0	0
11/28/2023 21:15	0	0
11/28/2023 21:30	0	0
11/28/2023 21:45	0	0
11/28/2023 22:00	0	0
11/28/2023 22:15	0	0
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11/28/2023 23:00	0	0
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11/28/2023 23:30	0	0
11/28/2023 23:45	0	0
11/29/2023 0:00	0	0
11/29/2023 0:15	0	0
11/29/2023 0:30	0	0
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11/29/2023 1:00	0	0
11/29/2023 1:15	0	0
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11/29/2023 3:15	0	0
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11/29/2023 3:45	0	0
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11/29/2023 4:30	0	0
11/29/2023 4:45	0	0
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11/29/2023 5:15	0	0
11/29/2023 5:30	0	0
11/29/2023 5:45	0	0
11/29/2023 6:00	0	0
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11/29/2023 6:30	0	0
11/29/2023 6:45	0	0
11/29/2023 7:00	0	0
11/29/2023 7:15	0	0
11/29/2023 7:30	0	0
11/29/2023 7:45	0	0

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11/29/2023 8:15	0	0
11/29/2023 8:30	0	0
11/29/2023 8:45	0	0
11/29/2023 9:00	0	0
11/29/2023 9:15	0	0
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11/29/2023 9:45	0	0
11/29/2023 10:00	0	0
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11/29/2023 15:45	0	0
11/29/2023 16:00	0	0
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11/29/2023 17:30	0	0
11/29/2023 17:45	0	0
11/29/2023 18:00	0	0
11/29/2023 18:15	0	0
11/29/2023 18:30	0	0
11/29/2023 18:45	0	0

11/29/2023 19:00	0	0
11/29/2023 19:15	0	0
11/29/2023 19:30	0	0
11/29/2023 19:45	0	0
11/29/2023 20:00	0	0
11/29/2023 20:15	0	0
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11/29/2023 21:45	0	0
11/29/2023 22:00	0	0
11/29/2023 22:15	0	0
11/29/2023 22:30	0	0
11/29/2023 22:45	0	0
11/29/2023 23:00	0	0
11/29/2023 23:15	0	0
11/29/2023 23:30	0	0
11/29/2023 23:45	0	0

Buses			
Entry		n/a	n/a
Direction		Southbound	Northbound
Start Time		Thru	Thru
	11/28/2023 0:00	0	0
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	0	0
	11/28/2023 1:00	0	0
	11/28/2023 1:15	0	0
	11/28/2023 1:30	0	0
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	0
	11/28/2023 2:15	0	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	0	0
	11/28/2023 3:45	0	0
	11/28/2023 4:00	0	0
	11/28/2023 4:15	0	0
	11/28/2023 4:30	0	0
	11/28/2023 4:45	0	0
	11/28/2023 5:00	0	0
	11/28/2023 5:15	0	0
	11/28/2023 5:30	0	0
	11/28/2023 5:45	0	0
	11/28/2023 6:00	0	0
	11/28/2023 6:15	0	0
	11/28/2023 6:30	0	0
	11/28/2023 6:45	1	0
	11/28/2023 7:00	0	0
	11/28/2023 7:15	0	0
	11/28/2023 7:30	0	0
	11/28/2023 7:45	0	0
	11/28/2023 8:00	0	0
	11/28/2023 8:15	0	1
	11/28/2023 8:30	0	1
	11/28/2023 8:45	0	0
	11/28/2023 9:00	0	0
	11/28/2023 9:15	0	0
	11/28/2023 9:30	0	0
	11/28/2023 9:45	0	0

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11/28/2023 10:15	0	0
11/28/2023 10:30	0	0
11/28/2023 10:45	0	0
11/28/2023 11:00	0	0
11/28/2023 11:15	0	0
11/28/2023 11:30	0	0
11/28/2023 11:45	0	0
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11/28/2023 12:30	0	0
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11/28/2023 14:15	0	0
11/28/2023 14:30	0	0
11/28/2023 14:45	0	0
11/28/2023 15:00	0	1
11/28/2023 15:15	0	0
11/28/2023 15:30	2	0
11/28/2023 15:45	1	0
11/28/2023 16:00	0	0
11/28/2023 16:15	0	0
11/28/2023 16:30	0	0
11/28/2023 16:45	0	0
11/28/2023 17:00	0	0
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11/28/2023 17:30	0	0
11/28/2023 17:45	0	0
11/28/2023 18:00	0	0
11/28/2023 18:15	0	0
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11/28/2023 18:45	0	0
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11/28/2023 19:15	0	0
11/28/2023 19:30	0	0
11/28/2023 19:45	0	0
11/28/2023 20:00	0	0
11/28/2023 20:15	0	0
11/28/2023 20:30	0	0
11/28/2023 20:45	0	0

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11/28/2023 21:15	0	0
11/28/2023 21:30	0	0
11/28/2023 21:45	0	0
11/28/2023 22:00	0	0
11/28/2023 22:15	0	0
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11/28/2023 23:30	0	0
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11/29/2023 3:15	0	0
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11/29/2023 3:45	0	0
11/29/2023 4:00	0	0
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11/29/2023 4:30	0	0
11/29/2023 4:45	0	0
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11/29/2023 5:15	0	0
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11/29/2023 5:45	0	0
11/29/2023 6:00	0	0
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11/29/2023 6:30	0	0
11/29/2023 6:45	1	0
11/29/2023 7:00	0	0
11/29/2023 7:15	0	0
11/29/2023 7:30	0	0
11/29/2023 7:45	0	0

11/29/2023 8:00	0	0
11/29/2023 8:15	0	2
11/29/2023 8:30	0	0
11/29/2023 8:45	0	0
11/29/2023 9:00	0	0
11/29/2023 9:15	0	0
11/29/2023 9:30	0	0
11/29/2023 9:45	0	0
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11/29/2023 14:30	0	0
11/29/2023 14:45	0	0
11/29/2023 15:00	0	1
11/29/2023 15:15	0	0
11/29/2023 15:30	2	0
11/29/2023 15:45	0	0
11/29/2023 16:00	0	0
11/29/2023 16:15	0	0
11/29/2023 16:30	0	0
11/29/2023 16:45	0	0
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11/29/2023 17:15	0	0
11/29/2023 17:30	0	0
11/29/2023 17:45	0	0
11/29/2023 18:00	0	0
11/29/2023 18:15	0	0
11/29/2023 18:30	0	0
11/29/2023 18:45	0	0

11/29/2023 19:00	0	0
11/29/2023 19:15	0	0
11/29/2023 19:30	0	0
11/29/2023 19:45	0	0
11/29/2023 20:00	0	0
11/29/2023 20:15	0	0
11/29/2023 20:30	0	0
11/29/2023 20:45	0	0
11/29/2023 21:00	0	0
11/29/2023 21:15	0	0
11/29/2023 21:30	0	0
11/29/2023 21:45	0	0
11/29/2023 22:00	0	0
11/29/2023 22:15	0	0
11/29/2023 22:30	0	0
11/29/2023 22:45	0	0
11/29/2023 23:00	0	0
11/29/2023 23:15	0	0
11/29/2023 23:30	0	0
11/29/2023 23:45	0	0

Bicycles on Road			
Entry		n/a	n/a
Direction		Southbound	Northbound
Start Time		Thru	Thru
	11/28/2023 0:00	0	0
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	0	0
	11/28/2023 1:00	0	0
	11/28/2023 1:15	0	0
	11/28/2023 1:30	0	0
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	0
	11/28/2023 2:15	0	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	0	0
	11/28/2023 3:45	0	0
	11/28/2023 4:00	0	0
	11/28/2023 4:15	0	0
	11/28/2023 4:30	0	0
	11/28/2023 4:45	0	0
	11/28/2023 5:00	0	0
	11/28/2023 5:15	0	0
	11/28/2023 5:30	0	0
	11/28/2023 5:45	0	0
	11/28/2023 6:00	0	0
	11/28/2023 6:15	0	0
	11/28/2023 6:30	0	0
	11/28/2023 6:45	0	0
	11/28/2023 7:00	0	0
	11/28/2023 7:15	0	0
	11/28/2023 7:30	0	0
	11/28/2023 7:45	0	0
	11/28/2023 8:00	0	0
	11/28/2023 8:15	0	0
	11/28/2023 8:30	0	0
	11/28/2023 8:45	0	0
	11/28/2023 9:00	0	0
	11/28/2023 9:15	0	0
	11/28/2023 9:30	0	0
	11/28/2023 9:45	0	0

11/28/2023 10:00	0	0
11/28/2023 10:15	0	0
11/28/2023 10:30	0	0
11/28/2023 10:45	0	0
11/28/2023 11:00	0	0
11/28/2023 11:15	0	0
11/28/2023 11:30	0	0
11/28/2023 11:45	0	0
11/28/2023 12:00	0	0
11/28/2023 12:15	0	0
11/28/2023 12:30	0	0
11/28/2023 12:45	0	0
11/28/2023 13:00	0	0
11/28/2023 13:15	0	0
11/28/2023 13:30	0	0
11/28/2023 13:45	0	0
11/28/2023 14:00	0	0
11/28/2023 14:15	0	0
11/28/2023 14:30	0	0
11/28/2023 14:45	0	0
11/28/2023 15:00	0	0
11/28/2023 15:15	0	0
11/28/2023 15:30	0	0
11/28/2023 15:45	0	0
11/28/2023 16:00	0	0
11/28/2023 16:15	0	0
11/28/2023 16:30	0	0
11/28/2023 16:45	0	0
11/28/2023 17:00	0	0
11/28/2023 17:15	0	0
11/28/2023 17:30	0	0
11/28/2023 17:45	0	0
11/28/2023 18:00	0	0
11/28/2023 18:15	0	0
11/28/2023 18:30	0	0
11/28/2023 18:45	0	0
11/28/2023 19:00	0	0
11/28/2023 19:15	0	0
11/28/2023 19:30	0	0
11/28/2023 19:45	0	0
11/28/2023 20:00	0	0
11/28/2023 20:15	0	0
11/28/2023 20:30	0	0
11/28/2023 20:45	0	0

11/28/2023 21:00	0	0
11/28/2023 21:15	0	0
11/28/2023 21:30	0	0
11/28/2023 21:45	0	0
11/28/2023 22:00	0	0
11/28/2023 22:15	0	0
11/28/2023 22:30	0	0
11/28/2023 22:45	0	0
11/28/2023 23:00	0	0
11/28/2023 23:15	0	0
11/28/2023 23:30	0	0
11/28/2023 23:45	0	0
11/29/2023 0:00	0	0
11/29/2023 0:15	0	0
11/29/2023 0:30	0	0
11/29/2023 0:45	0	0
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11/29/2023 1:15	0	0
11/29/2023 1:30	0	0
11/29/2023 1:45	0	0
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11/29/2023 2:15	0	0
11/29/2023 2:30	0	0
11/29/2023 2:45	0	0
11/29/2023 3:00	0	0
11/29/2023 3:15	0	0
11/29/2023 3:30	0	0
11/29/2023 3:45	0	0
11/29/2023 4:00	0	0
11/29/2023 4:15	0	0
11/29/2023 4:30	0	0
11/29/2023 4:45	0	0
11/29/2023 5:00	0	0
11/29/2023 5:15	0	0
11/29/2023 5:30	0	0
11/29/2023 5:45	0	0
11/29/2023 6:00	0	0
11/29/2023 6:15	0	0
11/29/2023 6:30	0	0
11/29/2023 6:45	0	0
11/29/2023 7:00	0	0
11/29/2023 7:15	0	0
11/29/2023 7:30	0	0
11/29/2023 7:45	0	0

11/29/2023 8:00	0	0
11/29/2023 8:15	1	0
11/29/2023 8:30	0	0
11/29/2023 8:45	0	0
11/29/2023 9:00	0	0
11/29/2023 9:15	0	0
11/29/2023 9:30	0	0
11/29/2023 9:45	0	0
11/29/2023 10:00	0	0
11/29/2023 10:15	0	0
11/29/2023 10:30	0	0
11/29/2023 10:45	0	0
11/29/2023 11:00	0	0
11/29/2023 11:15	0	0
11/29/2023 11:30	0	0
11/29/2023 11:45	0	0
11/29/2023 12:00	0	0
11/29/2023 12:15	0	0
11/29/2023 12:30	0	0
11/29/2023 12:45	2	0
11/29/2023 13:00	0	0
11/29/2023 13:15	0	0
11/29/2023 13:30	0	0
11/29/2023 13:45	0	0
11/29/2023 14:00	0	0
11/29/2023 14:15	0	0
11/29/2023 14:30	0	0
11/29/2023 14:45	0	0
11/29/2023 15:00	0	0
11/29/2023 15:15	0	0
11/29/2023 15:30	0	0
11/29/2023 15:45	0	0
11/29/2023 16:00	0	0
11/29/2023 16:15	0	0
11/29/2023 16:30	0	0
11/29/2023 16:45	0	0
11/29/2023 17:00	0	0
11/29/2023 17:15	0	0
11/29/2023 17:30	0	0
11/29/2023 17:45	0	0
11/29/2023 18:00	0	0
11/29/2023 18:15	0	0
11/29/2023 18:30	0	0
11/29/2023 18:45	0	0

11/29/2023 19:00	0	0
11/29/2023 19:15	0	0
11/29/2023 19:30	0	0
11/29/2023 19:45	0	0
11/29/2023 20:00	0	0
11/29/2023 20:15	0	0
11/29/2023 20:30	0	0
11/29/2023 20:45	0	0
11/29/2023 21:00	0	0
11/29/2023 21:15	0	0
11/29/2023 21:30	0	0
11/29/2023 21:45	0	0
11/29/2023 22:00	0	0
11/29/2023 22:15	0	0
11/29/2023 22:30	0	0
11/29/2023 22:45	0	0
11/29/2023 23:00	0	0
11/29/2023 23:15	0	0
11/29/2023 23:30	0	0
11/29/2023 23:45	0	0

Summary

Study Name	239522-ATR-C (Maxson Street w/o Main Street) ATR
Project	239522-Westerly RI
Project Code	
Channel Granularity	By Direction
Bin Size	15 minutes
Time Zone	America/New_York
Start Time	11/28/2023 0:00
End Time	11/30/2023 0:00
Location	Maxson Street w/o Main Street
Latitude and Longitude	41.41539,-71.792671
PM Peak (Overall Peak Hour)	Nov 28 2023 3:30PM - 4:30 PM (0.803)
AM Peak	Nov 29 2023 7:30AM - 8:30 AM (0.719)
Midday Peak	Nov 29 2023 11:45AM - 12:45 PM (0.703)

Motorcycles			
Entry		n/a	n/a
Direction		Westbound	Eastbound
Start Time		Thru	Thru
	11/28/2023 0:00	0	0
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	0	0
	11/28/2023 1:00	0	0
	11/28/2023 1:15	0	0
	11/28/2023 1:30	0	0
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	0
	11/28/2023 2:15	0	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	0	0
	11/28/2023 3:45	0	0
	11/28/2023 4:00	0	0
	11/28/2023 4:15	0	0
	11/28/2023 4:30	0	0
	11/28/2023 4:45	0	0
	11/28/2023 5:00	0	0
	11/28/2023 5:15	0	0
	11/28/2023 5:30	0	0
	11/28/2023 5:45	0	0
	11/28/2023 6:00	0	0
	11/28/2023 6:15	0	0
	11/28/2023 6:30	0	0
	11/28/2023 6:45	0	0
	11/28/2023 7:00	0	0
	11/28/2023 7:15	0	0
	11/28/2023 7:30	0	0
	11/28/2023 7:45	0	0
	11/28/2023 8:00	0	0
	11/28/2023 8:15	0	0
	11/28/2023 8:30	0	0
	11/28/2023 8:45	0	0
	11/28/2023 9:00	0	0
	11/28/2023 9:15	0	0
	11/28/2023 9:30	0	0
	11/28/2023 9:45	0	0

11/28/2023 10:00	0	0
11/28/2023 10:15	0	0
11/28/2023 10:30	0	0
11/28/2023 10:45	0	0
11/28/2023 11:00	0	0
11/28/2023 11:15	0	0
11/28/2023 11:30	0	0
11/28/2023 11:45	0	0
11/28/2023 12:00	0	0
11/28/2023 12:15	0	0
11/28/2023 12:30	0	0
11/28/2023 12:45	0	0
11/28/2023 13:00	0	0
11/28/2023 13:15	0	0
11/28/2023 13:30	0	0
11/28/2023 13:45	0	0
11/28/2023 14:00	0	0
11/28/2023 14:15	0	0
11/28/2023 14:30	0	0
11/28/2023 14:45	0	0
11/28/2023 15:00	0	0
11/28/2023 15:15	0	0
11/28/2023 15:30	0	0
11/28/2023 15:45	0	0
11/28/2023 16:00	0	0
11/28/2023 16:15	0	0
11/28/2023 16:30	0	0
11/28/2023 16:45	0	0
11/28/2023 17:00	0	0
11/28/2023 17:15	0	0
11/28/2023 17:30	0	1
11/28/2023 17:45	0	0
11/28/2023 18:00	0	0
11/28/2023 18:15	0	0
11/28/2023 18:30	0	0
11/28/2023 18:45	0	0
11/28/2023 19:00	0	0
11/28/2023 19:15	0	0
11/28/2023 19:30	0	0
11/28/2023 19:45	0	0
11/28/2023 20:00	0	0
11/28/2023 20:15	0	0
11/28/2023 20:30	0	0
11/28/2023 20:45	0	0

11/28/2023 21:00	1	0
11/28/2023 21:15	0	0
11/28/2023 21:30	0	0
11/28/2023 21:45	0	0
11/28/2023 22:00	0	0
11/28/2023 22:15	0	0
11/28/2023 22:30	0	0
11/28/2023 22:45	0	0
11/28/2023 23:00	0	0
11/28/2023 23:15	0	0
11/28/2023 23:30	0	0
11/28/2023 23:45	0	0
11/29/2023 0:00	0	0
11/29/2023 0:15	0	0
11/29/2023 0:30	0	0
11/29/2023 0:45	0	0
11/29/2023 1:00	0	0
11/29/2023 1:15	0	0
11/29/2023 1:30	0	0
11/29/2023 1:45	0	0
11/29/2023 2:00	0	0
11/29/2023 2:15	0	0
11/29/2023 2:30	0	0
11/29/2023 2:45	0	0
11/29/2023 3:00	0	0
11/29/2023 3:15	0	0
11/29/2023 3:30	0	0
11/29/2023 3:45	0	0
11/29/2023 4:00	0	0
11/29/2023 4:15	0	0
11/29/2023 4:30	0	0
11/29/2023 4:45	0	0
11/29/2023 5:00	0	0
11/29/2023 5:15	0	0
11/29/2023 5:30	0	0
11/29/2023 5:45	0	0
11/29/2023 6:00	0	0
11/29/2023 6:15	0	0
11/29/2023 6:30	0	0
11/29/2023 6:45	0	0
11/29/2023 7:00	0	0
11/29/2023 7:15	0	0
11/29/2023 7:30	0	0
11/29/2023 7:45	0	0

11/29/2023 8:00	0	0
11/29/2023 8:15	0	0
11/29/2023 8:30	0	0
11/29/2023 8:45	0	0
11/29/2023 9:00	0	0
11/29/2023 9:15	0	0
11/29/2023 9:30	0	0
11/29/2023 9:45	0	0
11/29/2023 10:00	0	0
11/29/2023 10:15	0	0
11/29/2023 10:30	0	0
11/29/2023 10:45	0	0
11/29/2023 11:00	0	0
11/29/2023 11:15	0	0
11/29/2023 11:30	0	0
11/29/2023 11:45	0	0
11/29/2023 12:00	0	0
11/29/2023 12:15	0	0
11/29/2023 12:30	0	0
11/29/2023 12:45	0	0
11/29/2023 13:00	0	0
11/29/2023 13:15	0	0
11/29/2023 13:30	0	0
11/29/2023 13:45	0	0
11/29/2023 14:00	0	0
11/29/2023 14:15	0	0
11/29/2023 14:30	0	0
11/29/2023 14:45	0	0
11/29/2023 15:00	0	0
11/29/2023 15:15	0	0
11/29/2023 15:30	0	0
11/29/2023 15:45	0	0
11/29/2023 16:00	0	0
11/29/2023 16:15	0	0
11/29/2023 16:30	0	0
11/29/2023 16:45	0	0
11/29/2023 17:00	0	0
11/29/2023 17:15	0	0
11/29/2023 17:30	0	0
11/29/2023 17:45	0	0
11/29/2023 18:00	0	0
11/29/2023 18:15	0	0
11/29/2023 18:30	0	0
11/29/2023 18:45	0	0

11/29/2023 19:00	0	0
11/29/2023 19:15	0	0
11/29/2023 19:30	0	0
11/29/2023 19:45	0	0
11/29/2023 20:00	0	0
11/29/2023 20:15	0	0
11/29/2023 20:30	0	0
11/29/2023 20:45	0	0
11/29/2023 21:00	0	0
11/29/2023 21:15	0	0
11/29/2023 21:30	0	0
11/29/2023 21:45	0	0
11/29/2023 22:00	0	0
11/29/2023 22:15	0	0
11/29/2023 22:30	0	0
11/29/2023 22:45	0	0
11/29/2023 23:00	0	0
11/29/2023 23:15	0	0
11/29/2023 23:30	0	0
11/29/2023 23:45	0	0

Lights			
Entry		n/a	n/a
Direction		Westbound	Eastbound
Start Time		Thru	Thru
	11/28/2023 0:00	1	0
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	1	0
	11/28/2023 1:00	0	0
	11/28/2023 1:15	0	1
	11/28/2023 1:30	0	0
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	0
	11/28/2023 2:15	0	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	0	0
	11/28/2023 3:45	0	1
	11/28/2023 4:00	0	1
	11/28/2023 4:15	0	0
	11/28/2023 4:30	0	0
	11/28/2023 4:45	0	1
	11/28/2023 5:00	0	3
	11/28/2023 5:15	0	2
	11/28/2023 5:30	1	1
	11/28/2023 5:45	1	2
	11/28/2023 6:00	1	7
	11/28/2023 6:15	1	4
	11/28/2023 6:30	1	4
	11/28/2023 6:45	0	7
	11/28/2023 7:00	0	9
	11/28/2023 7:15	1	3
	11/28/2023 7:30	4	4
	11/28/2023 7:45	1	9
	11/28/2023 8:00	4	3
	11/28/2023 8:15	1	3
	11/28/2023 8:30	0	3
	11/28/2023 8:45	3	2
	11/28/2023 9:00	1	7
	11/28/2023 9:15	1	2
	11/28/2023 9:30	0	3
	11/28/2023 9:45	2	1

11/28/2023 10:00	3	6
11/28/2023 10:15	4	3
11/28/2023 10:30	1	3
11/28/2023 10:45	1	5
11/28/2023 11:00	3	1
11/28/2023 11:15	3	2
11/28/2023 11:30	2	4
11/28/2023 11:45	6	2
11/28/2023 12:00	2	3
11/28/2023 12:15	4	5
11/28/2023 12:30	3	4
11/28/2023 12:45	3	9
11/28/2023 13:00	3	3
11/28/2023 13:15	3	1
11/28/2023 13:30	6	2
11/28/2023 13:45	3	4
11/28/2023 14:00	4	5
11/28/2023 14:15	3	4
11/28/2023 14:30	7	4
11/28/2023 14:45	7	7
11/28/2023 15:00	1	5
11/28/2023 15:15	4	5
11/28/2023 15:30	9	8
11/28/2023 15:45	8	6
11/28/2023 16:00	12	2
11/28/2023 16:15	7	3
11/28/2023 16:30	10	8
11/28/2023 16:45	2	2
11/28/2023 17:00	4	2
11/28/2023 17:15	4	2
11/28/2023 17:30	4	6
11/28/2023 17:45	3	1
11/28/2023 18:00	2	1
11/28/2023 18:15	3	2
11/28/2023 18:30	2	1
11/28/2023 18:45	2	2
11/28/2023 19:00	2	1
11/28/2023 19:15	3	1
11/28/2023 19:30	1	2
11/28/2023 19:45	1	0
11/28/2023 20:00	0	1
11/28/2023 20:15	2	3
11/28/2023 20:30	2	0
11/28/2023 20:45	2	0

11/28/2023 21:00	2	0
11/28/2023 21:15	1	5
11/28/2023 21:30	0	0
11/28/2023 21:45	0	1
11/28/2023 22:00	0	0
11/28/2023 22:15	1	2
11/28/2023 22:30	0	1
11/28/2023 22:45	2	1
11/28/2023 23:00	2	1
11/28/2023 23:15	0	0
11/28/2023 23:30	1	0
11/28/2023 23:45	0	1
11/29/2023 0:00	0	0
11/29/2023 0:15	0	0
11/29/2023 0:30	0	0
11/29/2023 0:45	1	0
11/29/2023 1:00	0	0
11/29/2023 1:15	0	1
11/29/2023 1:30	0	0
11/29/2023 1:45	0	0
11/29/2023 2:00	0	0
11/29/2023 2:15	0	0
11/29/2023 2:30	0	0
11/29/2023 2:45	0	0
11/29/2023 3:00	0	0
11/29/2023 3:15	0	2
11/29/2023 3:30	0	0
11/29/2023 3:45	0	1
11/29/2023 4:00	0	1
11/29/2023 4:15	0	1
11/29/2023 4:30	0	0
11/29/2023 4:45	0	2
11/29/2023 5:00	0	2
11/29/2023 5:15	0	2
11/29/2023 5:30	0	0
11/29/2023 5:45	2	2
11/29/2023 6:00	0	5
11/29/2023 6:15	1	0
11/29/2023 6:30	0	4
11/29/2023 6:45	0	9
11/29/2023 7:00	1	3
11/29/2023 7:15	1	6
11/29/2023 7:30	4	5
11/29/2023 7:45	1	8

11/29/2023 8:00	6	5
11/29/2023 8:15	3	9
11/29/2023 8:30	1	2
11/29/2023 8:45	1	3
11/29/2023 9:00	1	2
11/29/2023 9:15	2	2
11/29/2023 9:30	2	4
11/29/2023 9:45	4	3
11/29/2023 10:00	2	2
11/29/2023 10:15	3	2
11/29/2023 10:30	5	1
11/29/2023 10:45	1	1
11/29/2023 11:00	1	2
11/29/2023 11:15	2	4
11/29/2023 11:30	1	2
11/29/2023 11:45	6	4
11/29/2023 12:00	6	8
11/29/2023 12:15	3	7
11/29/2023 12:30	4	2
11/29/2023 12:45	0	3
11/29/2023 13:00	5	1
11/29/2023 13:15	1	3
11/29/2023 13:30	3	1
11/29/2023 13:45	4	4
11/29/2023 14:00	1	3
11/29/2023 14:15	8	5
11/29/2023 14:30	9	6
11/29/2023 14:45	5	4
11/29/2023 15:00	1	8
11/29/2023 15:15	5	3
11/29/2023 15:30	6	2
11/29/2023 15:45	4	3
11/29/2023 16:00	10	5
11/29/2023 16:15	6	3
11/29/2023 16:30	7	1
11/29/2023 16:45	6	8
11/29/2023 17:00	4	4
11/29/2023 17:15	5	2
11/29/2023 17:30	4	3
11/29/2023 17:45	3	1
11/29/2023 18:00	3	2
11/29/2023 18:15	5	3
11/29/2023 18:30	3	2
11/29/2023 18:45	2	3

11/29/2023 19:00	4	3
11/29/2023 19:15	2	2
11/29/2023 19:30	1	1
11/29/2023 19:45	4	1
11/29/2023 20:00	7	1
11/29/2023 20:15	1	0
11/29/2023 20:30	1	0
11/29/2023 20:45	1	1
11/29/2023 21:00	2	2
11/29/2023 21:15	2	1
11/29/2023 21:30	0	0
11/29/2023 21:45	1	0
11/29/2023 22:00	1	0
11/29/2023 22:15	2	0
11/29/2023 22:30	0	1
11/29/2023 22:45	1	0
11/29/2023 23:00	1	0
11/29/2023 23:15	0	0
11/29/2023 23:30	0	0
11/29/2023 23:45	0	0

Single-Unit Trucks			
Entry		n/a	n/a
Direction		Westbound	Eastbound
Start Time		Thru	Thru
	11/28/2023 0:00	0	0
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	0	0
	11/28/2023 1:00	0	0
	11/28/2023 1:15	0	0
	11/28/2023 1:30	0	0
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	0
	11/28/2023 2:15	0	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	0	0
	11/28/2023 3:45	0	0
	11/28/2023 4:00	0	0
	11/28/2023 4:15	0	0
	11/28/2023 4:30	0	0
	11/28/2023 4:45	0	0
	11/28/2023 5:00	0	0
	11/28/2023 5:15	0	0
	11/28/2023 5:30	0	0
	11/28/2023 5:45	0	0
	11/28/2023 6:00	0	0
	11/28/2023 6:15	0	0
	11/28/2023 6:30	0	0
	11/28/2023 6:45	0	0
	11/28/2023 7:00	0	0
	11/28/2023 7:15	0	0
	11/28/2023 7:30	0	0
	11/28/2023 7:45	0	0
	11/28/2023 8:00	0	0
	11/28/2023 8:15	0	0
	11/28/2023 8:30	1	0
	11/28/2023 8:45	0	0
	11/28/2023 9:00	0	0
	11/28/2023 9:15	0	0
	11/28/2023 9:30	0	0
	11/28/2023 9:45	0	0

11/28/2023 10:00	0	0
11/28/2023 10:15	1	1
11/28/2023 10:30	1	0
11/28/2023 10:45	0	0
11/28/2023 11:00	0	1
11/28/2023 11:15	0	1
11/28/2023 11:30	0	0
11/28/2023 11:45	0	0
11/28/2023 12:00	0	0
11/28/2023 12:15	1	1
11/28/2023 12:30	0	0
11/28/2023 12:45	1	0
11/28/2023 13:00	1	0
11/28/2023 13:15	0	0
11/28/2023 13:30	0	0
11/28/2023 13:45	0	0
11/28/2023 14:00	0	1
11/28/2023 14:15	0	0
11/28/2023 14:30	0	1
11/28/2023 14:45	1	0
11/28/2023 15:00	0	0
11/28/2023 15:15	0	0
11/28/2023 15:30	0	0
11/28/2023 15:45	1	0
11/28/2023 16:00	0	0
11/28/2023 16:15	0	0
11/28/2023 16:30	0	0
11/28/2023 16:45	0	0
11/28/2023 17:00	0	0
11/28/2023 17:15	0	0
11/28/2023 17:30	0	0
11/28/2023 17:45	0	0
11/28/2023 18:00	0	0
11/28/2023 18:15	0	0
11/28/2023 18:30	0	0
11/28/2023 18:45	0	0
11/28/2023 19:00	0	0
11/28/2023 19:15	0	0
11/28/2023 19:30	0	0
11/28/2023 19:45	0	0
11/28/2023 20:00	0	0
11/28/2023 20:15	0	0
11/28/2023 20:30	0	0
11/28/2023 20:45	0	0

11/28/2023 21:00	0	0
11/28/2023 21:15	0	0
11/28/2023 21:30	0	0
11/28/2023 21:45	0	0
11/28/2023 22:00	0	0
11/28/2023 22:15	0	0
11/28/2023 22:30	0	0
11/28/2023 22:45	0	0
11/28/2023 23:00	0	0
11/28/2023 23:15	0	0
11/28/2023 23:30	0	0
11/28/2023 23:45	0	0
11/29/2023 0:00	0	0
11/29/2023 0:15	0	0
11/29/2023 0:30	0	0
11/29/2023 0:45	0	0
11/29/2023 1:00	0	0
11/29/2023 1:15	0	0
11/29/2023 1:30	0	0
11/29/2023 1:45	0	0
11/29/2023 2:00	0	0
11/29/2023 2:15	0	0
11/29/2023 2:30	0	0
11/29/2023 2:45	0	0
11/29/2023 3:00	0	0
11/29/2023 3:15	0	0
11/29/2023 3:30	0	0
11/29/2023 3:45	0	0
11/29/2023 4:00	0	0
11/29/2023 4:15	0	0
11/29/2023 4:30	0	0
11/29/2023 4:45	0	0
11/29/2023 5:00	0	0
11/29/2023 5:15	0	0
11/29/2023 5:30	0	0
11/29/2023 5:45	0	0
11/29/2023 6:00	0	0
11/29/2023 6:15	0	0
11/29/2023 6:30	0	0
11/29/2023 6:45	0	0
11/29/2023 7:00	0	0
11/29/2023 7:15	0	0
11/29/2023 7:30	1	0
11/29/2023 7:45	0	0

11/29/2023 8:00	0	0
11/29/2023 8:15	0	0
11/29/2023 8:30	0	0
11/29/2023 8:45	1	0
11/29/2023 9:00	0	1
11/29/2023 9:15	0	0
11/29/2023 9:30	0	0
11/29/2023 9:45	0	0
11/29/2023 10:00	0	0
11/29/2023 10:15	0	0
11/29/2023 10:30	0	0
11/29/2023 10:45	0	0
11/29/2023 11:00	0	0
11/29/2023 11:15	0	1
11/29/2023 11:30	0	0
11/29/2023 11:45	0	1
11/29/2023 12:00	2	0
11/29/2023 12:15	0	1
11/29/2023 12:30	0	1
11/29/2023 12:45	1	0
11/29/2023 13:00	0	0
11/29/2023 13:15	0	0
11/29/2023 13:30	0	0
11/29/2023 13:45	2	1
11/29/2023 14:00	0	0
11/29/2023 14:15	0	0
11/29/2023 14:30	0	1
11/29/2023 14:45	1	0
11/29/2023 15:00	0	0
11/29/2023 15:15	0	0
11/29/2023 15:30	0	1
11/29/2023 15:45	1	0
11/29/2023 16:00	0	0
11/29/2023 16:15	0	0
11/29/2023 16:30	0	0
11/29/2023 16:45	0	0
11/29/2023 17:00	0	0
11/29/2023 17:15	0	0
11/29/2023 17:30	0	0
11/29/2023 17:45	0	0
11/29/2023 18:00	0	0
11/29/2023 18:15	0	1
11/29/2023 18:30	0	0
11/29/2023 18:45	0	0

11/29/2023 19:00	0	0
11/29/2023 19:15	0	1
11/29/2023 19:30	0	0
11/29/2023 19:45	0	0
11/29/2023 20:00	0	0
11/29/2023 20:15	0	0
11/29/2023 20:30	0	0
11/29/2023 20:45	0	0
11/29/2023 21:00	0	0
11/29/2023 21:15	0	0
11/29/2023 21:30	0	0
11/29/2023 21:45	0	0
11/29/2023 22:00	0	0
11/29/2023 22:15	0	0
11/29/2023 22:30	0	0
11/29/2023 22:45	0	0
11/29/2023 23:00	0	0
11/29/2023 23:15	0	0
11/29/2023 23:30	0	0
11/29/2023 23:45	0	0

Articulated Trucks			
Entry		n/a	n/a
Direction		Westbound	Eastbound
Start Time		Thru	Thru
	11/28/2023 0:00	0	0
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	0	0
	11/28/2023 1:00	0	0
	11/28/2023 1:15	0	0
	11/28/2023 1:30	0	0
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	0
	11/28/2023 2:15	0	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	0	0
	11/28/2023 3:45	0	0
	11/28/2023 4:00	0	0
	11/28/2023 4:15	0	0
	11/28/2023 4:30	0	0
	11/28/2023 4:45	0	0
	11/28/2023 5:00	0	0
	11/28/2023 5:15	0	0
	11/28/2023 5:30	0	0
	11/28/2023 5:45	0	0
	11/28/2023 6:00	0	0
	11/28/2023 6:15	0	0
	11/28/2023 6:30	0	0
	11/28/2023 6:45	0	0
	11/28/2023 7:00	0	0
	11/28/2023 7:15	0	0
	11/28/2023 7:30	0	0
	11/28/2023 7:45	0	0
	11/28/2023 8:00	0	0
	11/28/2023 8:15	0	0
	11/28/2023 8:30	0	0
	11/28/2023 8:45	0	0
	11/28/2023 9:00	0	0
	11/28/2023 9:15	0	0
	11/28/2023 9:30	0	0
	11/28/2023 9:45	0	0

11/28/2023 10:00	0	0
11/28/2023 10:15	0	0
11/28/2023 10:30	0	0
11/28/2023 10:45	0	0
11/28/2023 11:00	0	0
11/28/2023 11:15	0	0
11/28/2023 11:30	0	0
11/28/2023 11:45	0	0
11/28/2023 12:00	0	0
11/28/2023 12:15	0	0
11/28/2023 12:30	0	0
11/28/2023 12:45	0	0
11/28/2023 13:00	0	0
11/28/2023 13:15	0	0
11/28/2023 13:30	0	0
11/28/2023 13:45	0	0
11/28/2023 14:00	0	0
11/28/2023 14:15	0	0
11/28/2023 14:30	0	0
11/28/2023 14:45	0	0
11/28/2023 15:00	0	0
11/28/2023 15:15	0	0
11/28/2023 15:30	0	0
11/28/2023 15:45	0	0
11/28/2023 16:00	0	0
11/28/2023 16:15	0	0
11/28/2023 16:30	0	0
11/28/2023 16:45	0	0
11/28/2023 17:00	0	0
11/28/2023 17:15	0	0
11/28/2023 17:30	0	0
11/28/2023 17:45	0	0
11/28/2023 18:00	0	0
11/28/2023 18:15	0	0
11/28/2023 18:30	0	0
11/28/2023 18:45	0	0
11/28/2023 19:00	0	0
11/28/2023 19:15	0	0
11/28/2023 19:30	0	0
11/28/2023 19:45	0	0
11/28/2023 20:00	0	0
11/28/2023 20:15	0	0
11/28/2023 20:30	0	0
11/28/2023 20:45	0	0

11/28/2023 21:00	0	0
11/28/2023 21:15	0	0
11/28/2023 21:30	0	0
11/28/2023 21:45	0	0
11/28/2023 22:00	0	0
11/28/2023 22:15	0	0
11/28/2023 22:30	0	0
11/28/2023 22:45	0	0
11/28/2023 23:00	0	0
11/28/2023 23:15	0	0
11/28/2023 23:30	0	0
11/28/2023 23:45	0	0
11/29/2023 0:00	0	0
11/29/2023 0:15	0	0
11/29/2023 0:30	0	0
11/29/2023 0:45	0	0
11/29/2023 1:00	0	0
11/29/2023 1:15	0	0
11/29/2023 1:30	0	0
11/29/2023 1:45	0	0
11/29/2023 2:00	0	0
11/29/2023 2:15	0	0
11/29/2023 2:30	0	0
11/29/2023 2:45	0	0
11/29/2023 3:00	0	0
11/29/2023 3:15	0	0
11/29/2023 3:30	0	0
11/29/2023 3:45	0	0
11/29/2023 4:00	0	0
11/29/2023 4:15	0	0
11/29/2023 4:30	0	0
11/29/2023 4:45	0	0
11/29/2023 5:00	0	0
11/29/2023 5:15	0	0
11/29/2023 5:30	0	0
11/29/2023 5:45	0	0
11/29/2023 6:00	0	0
11/29/2023 6:15	0	0
11/29/2023 6:30	0	0
11/29/2023 6:45	0	0
11/29/2023 7:00	0	0
11/29/2023 7:15	0	0
11/29/2023 7:30	0	0
11/29/2023 7:45	0	0

11/29/2023 8:00	0	0
11/29/2023 8:15	1	0
11/29/2023 8:30	0	0
11/29/2023 8:45	0	0
11/29/2023 9:00	0	0
11/29/2023 9:15	0	0
11/29/2023 9:30	0	0
11/29/2023 9:45	0	0
11/29/2023 10:00	0	0
11/29/2023 10:15	0	0
11/29/2023 10:30	0	0
11/29/2023 10:45	0	0
11/29/2023 11:00	0	0
11/29/2023 11:15	0	0
11/29/2023 11:30	0	0
11/29/2023 11:45	0	0
11/29/2023 12:00	0	0
11/29/2023 12:15	0	0
11/29/2023 12:30	0	0
11/29/2023 12:45	0	0
11/29/2023 13:00	0	0
11/29/2023 13:15	0	0
11/29/2023 13:30	0	0
11/29/2023 13:45	0	0
11/29/2023 14:00	0	0
11/29/2023 14:15	0	0
11/29/2023 14:30	0	0
11/29/2023 14:45	0	0
11/29/2023 15:00	0	0
11/29/2023 15:15	0	0
11/29/2023 15:30	0	0
11/29/2023 15:45	0	0
11/29/2023 16:00	0	0
11/29/2023 16:15	0	0
11/29/2023 16:30	0	0
11/29/2023 16:45	0	0
11/29/2023 17:00	0	1
11/29/2023 17:15	0	0
11/29/2023 17:30	0	0
11/29/2023 17:45	0	0
11/29/2023 18:00	0	0
11/29/2023 18:15	0	0
11/29/2023 18:30	0	0
11/29/2023 18:45	0	0

11/29/2023 19:00	0	0
11/29/2023 19:15	0	0
11/29/2023 19:30	0	0
11/29/2023 19:45	0	0
11/29/2023 20:00	0	0
11/29/2023 20:15	0	0
11/29/2023 20:30	0	0
11/29/2023 20:45	0	0
11/29/2023 21:00	0	0
11/29/2023 21:15	0	0
11/29/2023 21:30	0	0
11/29/2023 21:45	0	0
11/29/2023 22:00	0	0
11/29/2023 22:15	0	0
11/29/2023 22:30	0	0
11/29/2023 22:45	0	0
11/29/2023 23:00	0	0
11/29/2023 23:15	0	0
11/29/2023 23:30	0	0
11/29/2023 23:45	0	0

Buses			
Entry		n/a	n/a
Direction		Westbound	Eastbound
Start Time		Thru	Thru
	11/28/2023 0:00	0	0
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	0	0
	11/28/2023 1:00	0	0
	11/28/2023 1:15	0	0
	11/28/2023 1:30	0	0
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	0
	11/28/2023 2:15	0	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	0	0
	11/28/2023 3:45	0	0
	11/28/2023 4:00	0	0
	11/28/2023 4:15	0	0
	11/28/2023 4:30	0	0
	11/28/2023 4:45	0	0
	11/28/2023 5:00	0	0
	11/28/2023 5:15	0	0
	11/28/2023 5:30	0	0
	11/28/2023 5:45	0	0
	11/28/2023 6:00	0	0
	11/28/2023 6:15	0	0
	11/28/2023 6:30	1	0
	11/28/2023 6:45	0	1
	11/28/2023 7:00	0	0
	11/28/2023 7:15	0	0
	11/28/2023 7:30	0	0
	11/28/2023 7:45	0	0
	11/28/2023 8:00	0	0
	11/28/2023 8:15	2	0
	11/28/2023 8:30	1	0
	11/28/2023 8:45	0	0
	11/28/2023 9:00	0	0
	11/28/2023 9:15	0	0
	11/28/2023 9:30	0	0
	11/28/2023 9:45	0	0

11/28/2023 10:00	0	0
11/28/2023 10:15	0	0
11/28/2023 10:30	0	0
11/28/2023 10:45	0	0
11/28/2023 11:00	0	0
11/28/2023 11:15	0	0
11/28/2023 11:30	0	0
11/28/2023 11:45	0	0
11/28/2023 12:00	0	0
11/28/2023 12:15	0	0
11/28/2023 12:30	0	0
11/28/2023 12:45	0	0
11/28/2023 13:00	0	0
11/28/2023 13:15	0	0
11/28/2023 13:30	0	2
11/28/2023 13:45	0	0
11/28/2023 14:00	0	0
11/28/2023 14:15	0	0
11/28/2023 14:30	0	0
11/28/2023 14:45	2	0
11/28/2023 15:00	1	0
11/28/2023 15:15	0	0
11/28/2023 15:30	0	2
11/28/2023 15:45	0	1
11/28/2023 16:00	0	0
11/28/2023 16:15	2	0
11/28/2023 16:30	0	0
11/28/2023 16:45	0	0
11/28/2023 17:00	0	0
11/28/2023 17:15	0	0
11/28/2023 17:30	0	0
11/28/2023 17:45	0	0
11/28/2023 18:00	0	0
11/28/2023 18:15	0	0
11/28/2023 18:30	0	0
11/28/2023 18:45	0	0
11/28/2023 19:00	0	0
11/28/2023 19:15	0	0
11/28/2023 19:30	0	0
11/28/2023 19:45	0	0
11/28/2023 20:00	0	0
11/28/2023 20:15	0	0
11/28/2023 20:30	0	0
11/28/2023 20:45	0	0

11/28/2023 21:00	0	0
11/28/2023 21:15	0	0
11/28/2023 21:30	0	0
11/28/2023 21:45	0	0
11/28/2023 22:00	0	0
11/28/2023 22:15	0	0
11/28/2023 22:30	0	0
11/28/2023 22:45	0	0
11/28/2023 23:00	0	0
11/28/2023 23:15	0	0
11/28/2023 23:30	0	0
11/28/2023 23:45	0	0
11/29/2023 0:00	0	0
11/29/2023 0:15	0	0
11/29/2023 0:30	0	0
11/29/2023 0:45	0	0
11/29/2023 1:00	0	0
11/29/2023 1:15	0	0
11/29/2023 1:30	0	0
11/29/2023 1:45	0	0
11/29/2023 2:00	0	0
11/29/2023 2:15	0	0
11/29/2023 2:30	0	0
11/29/2023 2:45	0	0
11/29/2023 3:00	0	0
11/29/2023 3:15	0	0
11/29/2023 3:30	0	0
11/29/2023 3:45	0	0
11/29/2023 4:00	0	0
11/29/2023 4:15	0	0
11/29/2023 4:30	0	0
11/29/2023 4:45	0	0
11/29/2023 5:00	0	0
11/29/2023 5:15	0	0
11/29/2023 5:30	0	0
11/29/2023 5:45	0	0
11/29/2023 6:00	0	0
11/29/2023 6:15	0	0
11/29/2023 6:30	1	0
11/29/2023 6:45	0	1
11/29/2023 7:00	0	0
11/29/2023 7:15	0	0
11/29/2023 7:30	0	0
11/29/2023 7:45	0	0

11/29/2023 8:00	0	0
11/29/2023 8:15	3	0
11/29/2023 8:30	0	0
11/29/2023 8:45	0	0
11/29/2023 9:00	0	0
11/29/2023 9:15	0	0
11/29/2023 9:30	0	0
11/29/2023 9:45	0	0
11/29/2023 10:00	0	0
11/29/2023 10:15	0	0
11/29/2023 10:30	0	0
11/29/2023 10:45	0	0
11/29/2023 11:00	0	0
11/29/2023 11:15	0	0
11/29/2023 11:30	0	0
11/29/2023 11:45	0	0
11/29/2023 12:00	0	0
11/29/2023 12:15	0	0
11/29/2023 12:30	0	0
11/29/2023 12:45	0	0
11/29/2023 13:00	0	0
11/29/2023 13:15	0	0
11/29/2023 13:30	0	2
11/29/2023 13:45	0	0
11/29/2023 14:00	0	0
11/29/2023 14:15	0	0
11/29/2023 14:30	0	0
11/29/2023 14:45	1	0
11/29/2023 15:00	1	0
11/29/2023 15:15	0	0
11/29/2023 15:30	0	2
11/29/2023 15:45	0	1
11/29/2023 16:00	2	0
11/29/2023 16:15	0	0
11/29/2023 16:30	0	0
11/29/2023 16:45	0	0
11/29/2023 17:00	0	0
11/29/2023 17:15	0	0
11/29/2023 17:30	0	0
11/29/2023 17:45	0	0
11/29/2023 18:00	0	0
11/29/2023 18:15	0	0
11/29/2023 18:30	0	0
11/29/2023 18:45	0	0

11/29/2023 19:00	0	0
11/29/2023 19:15	0	0
11/29/2023 19:30	0	0
11/29/2023 19:45	0	0
11/29/2023 20:00	0	0
11/29/2023 20:15	0	0
11/29/2023 20:30	0	0
11/29/2023 20:45	0	0
11/29/2023 21:00	0	0
11/29/2023 21:15	0	0
11/29/2023 21:30	0	0
11/29/2023 21:45	0	0
11/29/2023 22:00	0	0
11/29/2023 22:15	0	0
11/29/2023 22:30	0	0
11/29/2023 22:45	0	0
11/29/2023 23:00	0	0
11/29/2023 23:15	0	0
11/29/2023 23:30	0	0
11/29/2023 23:45	0	0

Bicycles on Road			
Entry		n/a	n/a
Direction		Westbound	Eastbound
Start Time		Thru	Thru
	11/28/2023 0:00	0	0
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	0	0
	11/28/2023 1:00	0	0
	11/28/2023 1:15	0	0
	11/28/2023 1:30	0	0
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	0
	11/28/2023 2:15	0	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	0	0
	11/28/2023 3:45	0	0
	11/28/2023 4:00	0	0
	11/28/2023 4:15	0	0
	11/28/2023 4:30	0	0
	11/28/2023 4:45	0	0
	11/28/2023 5:00	0	0
	11/28/2023 5:15	0	0
	11/28/2023 5:30	0	0
	11/28/2023 5:45	0	0
	11/28/2023 6:00	0	0
	11/28/2023 6:15	0	0
	11/28/2023 6:30	0	0
	11/28/2023 6:45	0	0
	11/28/2023 7:00	0	0
	11/28/2023 7:15	0	0
	11/28/2023 7:30	0	0
	11/28/2023 7:45	0	0
	11/28/2023 8:00	0	0
	11/28/2023 8:15	0	0
	11/28/2023 8:30	0	0
	11/28/2023 8:45	0	0
	11/28/2023 9:00	0	0
	11/28/2023 9:15	0	0
	11/28/2023 9:30	0	0
	11/28/2023 9:45	0	0

11/28/2023 10:00	0	0
11/28/2023 10:15	0	0
11/28/2023 10:30	0	0
11/28/2023 10:45	0	0
11/28/2023 11:00	0	0
11/28/2023 11:15	0	0
11/28/2023 11:30	0	0
11/28/2023 11:45	0	0
11/28/2023 12:00	0	0
11/28/2023 12:15	0	0
11/28/2023 12:30	0	0
11/28/2023 12:45	0	0
11/28/2023 13:00	0	0
11/28/2023 13:15	0	0
11/28/2023 13:30	0	0
11/28/2023 13:45	0	0
11/28/2023 14:00	0	0
11/28/2023 14:15	0	0
11/28/2023 14:30	0	0
11/28/2023 14:45	0	0
11/28/2023 15:00	0	0
11/28/2023 15:15	0	0
11/28/2023 15:30	0	0
11/28/2023 15:45	0	0
11/28/2023 16:00	0	0
11/28/2023 16:15	0	0
11/28/2023 16:30	0	0
11/28/2023 16:45	0	0
11/28/2023 17:00	0	0
11/28/2023 17:15	0	0
11/28/2023 17:30	0	0
11/28/2023 17:45	0	0
11/28/2023 18:00	0	0
11/28/2023 18:15	0	0
11/28/2023 18:30	0	0
11/28/2023 18:45	0	0
11/28/2023 19:00	0	0
11/28/2023 19:15	0	0
11/28/2023 19:30	0	0
11/28/2023 19:45	0	0
11/28/2023 20:00	0	0
11/28/2023 20:15	0	0
11/28/2023 20:30	0	0
11/28/2023 20:45	0	0

11/28/2023 21:00	0	0
11/28/2023 21:15	0	0
11/28/2023 21:30	0	0
11/28/2023 21:45	0	0
11/28/2023 22:00	0	0
11/28/2023 22:15	0	0
11/28/2023 22:30	0	0
11/28/2023 22:45	0	0
11/28/2023 23:00	0	0
11/28/2023 23:15	0	0
11/28/2023 23:30	0	0
11/28/2023 23:45	0	0
11/29/2023 0:00	0	0
11/29/2023 0:15	0	0
11/29/2023 0:30	0	0
11/29/2023 0:45	0	0
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11/29/2023 1:15	0	0
11/29/2023 1:30	0	0
11/29/2023 1:45	0	0
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11/29/2023 2:15	0	0
11/29/2023 2:30	0	0
11/29/2023 2:45	0	0
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11/29/2023 3:15	0	0
11/29/2023 3:30	0	0
11/29/2023 3:45	0	0
11/29/2023 4:00	0	0
11/29/2023 4:15	0	0
11/29/2023 4:30	0	0
11/29/2023 4:45	0	0
11/29/2023 5:00	0	0
11/29/2023 5:15	0	0
11/29/2023 5:30	0	0
11/29/2023 5:45	0	0
11/29/2023 6:00	0	0
11/29/2023 6:15	0	0
11/29/2023 6:30	0	0
11/29/2023 6:45	0	0
11/29/2023 7:00	0	0
11/29/2023 7:15	0	0
11/29/2023 7:30	0	0
11/29/2023 7:45	0	0

11/29/2023 8:00	0	0
11/29/2023 8:15	0	0
11/29/2023 8:30	0	0
11/29/2023 8:45	0	0
11/29/2023 9:00	0	0
11/29/2023 9:15	0	0
11/29/2023 9:30	0	0
11/29/2023 9:45	0	0
11/29/2023 10:00	0	0
11/29/2023 10:15	0	0
11/29/2023 10:30	0	0
11/29/2023 10:45	0	0
11/29/2023 11:00	0	0
11/29/2023 11:15	0	0
11/29/2023 11:30	0	0
11/29/2023 11:45	0	0
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11/29/2023 12:15	0	0
11/29/2023 12:30	0	1
11/29/2023 12:45	0	0
11/29/2023 13:00	0	0
11/29/2023 13:15	0	0
11/29/2023 13:30	0	0
11/29/2023 13:45	0	0
11/29/2023 14:00	0	0
11/29/2023 14:15	0	0
11/29/2023 14:30	0	0
11/29/2023 14:45	0	0
11/29/2023 15:00	0	0
11/29/2023 15:15	0	0
11/29/2023 15:30	0	0
11/29/2023 15:45	0	0
11/29/2023 16:00	0	0
11/29/2023 16:15	0	0
11/29/2023 16:30	0	0
11/29/2023 16:45	0	0
11/29/2023 17:00	0	0
11/29/2023 17:15	0	0
11/29/2023 17:30	0	0
11/29/2023 17:45	0	0
11/29/2023 18:00	0	0
11/29/2023 18:15	0	0
11/29/2023 18:30	0	0
11/29/2023 18:45	0	0

11/29/2023 19:00	0	0
11/29/2023 19:15	0	0
11/29/2023 19:30	0	0
11/29/2023 19:45	0	0
11/29/2023 20:00	0	0
11/29/2023 20:15	0	0
11/29/2023 20:30	0	0
11/29/2023 20:45	0	0
11/29/2023 21:00	0	0
11/29/2023 21:15	0	0
11/29/2023 21:30	0	0
11/29/2023 21:45	0	0
11/29/2023 22:00	0	0
11/29/2023 22:15	0	0
11/29/2023 22:30	0	0
11/29/2023 22:45	0	0
11/29/2023 23:00	0	0
11/29/2023 23:15	0	0
11/29/2023 23:30	0	0
11/29/2023 23:45	0	0

Summary

Study Name	239522-ATR-D (Laurel Street s/o Lake Court) ATR
Project	239522-Westerly RI
Project Code	
Channel Granularity	By Direction
Bin Size	15 minutes
Time Zone	America/New_York
Start Time	11/28/2023 0:00
End Time	11/30/2023 0:00
Location	Laurel Street s/o Lake Court
Latitude and Longitude	41.423457,-71.791744

AM Peak	Nov 28 2023 6:30AM - 7:30 AM (0.688)
Midday Peak	Nov 29 2023 12:15PM - 1:15 PM (0.842)
PM Peak (Overall Peak Hour)	Nov 29 2023 3PM - 4 PM (0.772)

Motorcycles			
Entry		n/a	n/a
Direction		Southbound	Northbound
Start Time		Thru	Thru
	11/28/2023 0:00	0	0
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	0	0
	11/28/2023 1:00	0	0
	11/28/2023 1:15	0	0
	11/28/2023 1:30	0	0
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	0
	11/28/2023 2:15	0	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	0	0
	11/28/2023 3:45	0	0
	11/28/2023 4:00	0	0
	11/28/2023 4:15	0	0
	11/28/2023 4:30	0	0
	11/28/2023 4:45	0	0
	11/28/2023 5:00	0	0
	11/28/2023 5:15	0	0
	11/28/2023 5:30	0	0
	11/28/2023 5:45	0	0
	11/28/2023 6:00	0	0
	11/28/2023 6:15	0	0
	11/28/2023 6:30	0	0
	11/28/2023 6:45	0	0
	11/28/2023 7:00	0	0
	11/28/2023 7:15	0	0
	11/28/2023 7:30	0	0
	11/28/2023 7:45	0	0
	11/28/2023 8:00	0	0
	11/28/2023 8:15	0	0
	11/28/2023 8:30	0	0
	11/28/2023 8:45	0	0
	11/28/2023 9:00	0	0
	11/28/2023 9:15	0	0
	11/28/2023 9:30	0	0
	11/28/2023 9:45	0	0

11/28/2023 10:00	0	0
11/28/2023 10:15	0	0
11/28/2023 10:30	0	0
11/28/2023 10:45	0	0
11/28/2023 11:00	0	0
11/28/2023 11:15	0	0
11/28/2023 11:30	0	0
11/28/2023 11:45	0	0
11/28/2023 12:00	0	0
11/28/2023 12:15	0	0
11/28/2023 12:30	0	0
11/28/2023 12:45	1	0
11/28/2023 13:00	0	1
11/28/2023 13:15	0	0
11/28/2023 13:30	0	0
11/28/2023 13:45	0	0
11/28/2023 14:00	0	0
11/28/2023 14:15	0	0
11/28/2023 14:30	0	0
11/28/2023 14:45	0	0
11/28/2023 15:00	0	0
11/28/2023 15:15	0	0
11/28/2023 15:30	0	0
11/28/2023 15:45	0	0
11/28/2023 16:00	0	0
11/28/2023 16:15	0	0
11/28/2023 16:30	0	0
11/28/2023 16:45	0	0
11/28/2023 17:00	0	0
11/28/2023 17:15	0	0
11/28/2023 17:30	0	0
11/28/2023 17:45	0	0
11/28/2023 18:00	0	0
11/28/2023 18:15	0	1
11/28/2023 18:30	0	0
11/28/2023 18:45	0	0
11/28/2023 19:00	0	0
11/28/2023 19:15	0	0
11/28/2023 19:30	0	0
11/28/2023 19:45	0	1
11/28/2023 20:00	0	0
11/28/2023 20:15	0	0
11/28/2023 20:30	0	0
11/28/2023 20:45	0	0

11/28/2023 21:00	0	0
11/28/2023 21:15	0	0
11/28/2023 21:30	0	0
11/28/2023 21:45	0	0
11/28/2023 22:00	0	0
11/28/2023 22:15	0	0
11/28/2023 22:30	0	0
11/28/2023 22:45	0	0
11/28/2023 23:00	0	0
11/28/2023 23:15	0	0
11/28/2023 23:30	0	0
11/28/2023 23:45	0	0
11/29/2023 0:00	0	0
11/29/2023 0:15	0	0
11/29/2023 0:30	0	0
11/29/2023 0:45	0	0
11/29/2023 1:00	0	0
11/29/2023 1:15	0	0
11/29/2023 1:30	0	0
11/29/2023 1:45	0	0
11/29/2023 2:00	0	0
11/29/2023 2:15	0	0
11/29/2023 2:30	0	0
11/29/2023 2:45	0	0
11/29/2023 3:00	0	0
11/29/2023 3:15	0	0
11/29/2023 3:30	0	0
11/29/2023 3:45	0	0
11/29/2023 4:00	0	0
11/29/2023 4:15	0	0
11/29/2023 4:30	0	0
11/29/2023 4:45	0	0
11/29/2023 5:00	0	0
11/29/2023 5:15	0	0
11/29/2023 5:30	0	0
11/29/2023 5:45	0	0
11/29/2023 6:00	0	0
11/29/2023 6:15	0	0
11/29/2023 6:30	0	0
11/29/2023 6:45	0	0
11/29/2023 7:00	0	0
11/29/2023 7:15	0	0
11/29/2023 7:30	0	0
11/29/2023 7:45	0	0

11/29/2023 8:00	0	0
11/29/2023 8:15	0	0
11/29/2023 8:30	0	0
11/29/2023 8:45	0	0
11/29/2023 9:00	0	0
11/29/2023 9:15	0	0
11/29/2023 9:30	0	0
11/29/2023 9:45	0	0
11/29/2023 10:00	0	0
11/29/2023 10:15	0	0
11/29/2023 10:30	0	0
11/29/2023 10:45	0	0
11/29/2023 11:00	0	0
11/29/2023 11:15	0	0
11/29/2023 11:30	0	0
11/29/2023 11:45	0	0
11/29/2023 12:00	0	0
11/29/2023 12:15	0	0
11/29/2023 12:30	0	0
11/29/2023 12:45	0	0
11/29/2023 13:00	0	0
11/29/2023 13:15	0	0
11/29/2023 13:30	0	0
11/29/2023 13:45	0	0
11/29/2023 14:00	0	0
11/29/2023 14:15	0	0
11/29/2023 14:30	0	0
11/29/2023 14:45	0	0
11/29/2023 15:00	0	0
11/29/2023 15:15	0	0
11/29/2023 15:30	0	0
11/29/2023 15:45	0	0
11/29/2023 16:00	0	0
11/29/2023 16:15	0	0
11/29/2023 16:30	0	0
11/29/2023 16:45	0	0
11/29/2023 17:00	0	0
11/29/2023 17:15	0	0
11/29/2023 17:30	0	0
11/29/2023 17:45	0	0
11/29/2023 18:00	0	0
11/29/2023 18:15	0	0
11/29/2023 18:30	0	0
11/29/2023 18:45	0	0

11/29/2023 19:00	0	0
11/29/2023 19:15	0	0
11/29/2023 19:30	0	0
11/29/2023 19:45	0	0
11/29/2023 20:00	0	0
11/29/2023 20:15	0	0
11/29/2023 20:30	0	0
11/29/2023 20:45	0	0
11/29/2023 21:00	0	0
11/29/2023 21:15	0	0
11/29/2023 21:30	0	0
11/29/2023 21:45	0	0
11/29/2023 22:00	0	0
11/29/2023 22:15	0	0
11/29/2023 22:30	0	0
11/29/2023 22:45	0	0
11/29/2023 23:00	0	0
11/29/2023 23:15	0	0
11/29/2023 23:30	0	0
11/29/2023 23:45	0	0

Lights			
Entry		n/a	n/a
Direction		Southbound	Northbound
Start Time		Thru	Thru
	11/28/2023 0:00	0	1
	11/28/2023 0:15	1	0
	11/28/2023 0:30	1	0
	11/28/2023 0:45	1	0
	11/28/2023 1:00	0	1
	11/28/2023 1:15	0	0
	11/28/2023 1:30	1	0
	11/28/2023 1:45	0	1
	11/28/2023 2:00	1	0
	11/28/2023 2:15	0	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	1	1
	11/28/2023 3:45	1	0
	11/28/2023 4:00	2	0
	11/28/2023 4:15	1	0
	11/28/2023 4:30	0	1
	11/28/2023 4:45	1	2
	11/28/2023 5:00	0	1
	11/28/2023 5:15	2	0
	11/28/2023 5:30	1	4
	11/28/2023 5:45	1	1
	11/28/2023 6:00	4	1
	11/28/2023 6:15	2	4
	11/28/2023 6:30	9	9
	11/28/2023 6:45	12	11
	11/28/2023 7:00	5	8
	11/28/2023 7:15	5	6
	11/28/2023 7:30	7	8
	11/28/2023 7:45	2	4
	11/28/2023 8:00	5	5
	11/28/2023 8:15	6	5
	11/28/2023 8:30	6	8
	11/28/2023 8:45	3	8
	11/28/2023 9:00	5	1
	11/28/2023 9:15	6	3
	11/28/2023 9:30	2	10
	11/28/2023 9:45	1	6

11/28/2023 10:00	8	4
11/28/2023 10:15	9	3
11/28/2023 10:30	3	3
11/28/2023 10:45	0	6
11/28/2023 11:00	5	2
11/28/2023 11:15	2	6
11/28/2023 11:30	5	3
11/28/2023 11:45	7	7
11/28/2023 12:00	5	9
11/28/2023 12:15	8	5
11/28/2023 12:30	4	5
11/28/2023 12:45	7	2
11/28/2023 13:00	3	10
11/28/2023 13:15	7	8
11/28/2023 13:30	3	6
11/28/2023 13:45	5	9
11/28/2023 14:00	6	4
11/28/2023 14:15	8	7
11/28/2023 14:30	6	7
11/28/2023 14:45	12	7
11/28/2023 15:00	12	16
11/28/2023 15:15	14	9
11/28/2023 15:30	7	15
11/28/2023 15:45	8	10
11/28/2023 16:00	9	12
11/28/2023 16:15	11	6
11/28/2023 16:30	15	7
11/28/2023 16:45	8	10
11/28/2023 17:00	8	8
11/28/2023 17:15	7	4
11/28/2023 17:30	7	9
11/28/2023 17:45	6	4
11/28/2023 18:00	5	3
11/28/2023 18:15	3	2
11/28/2023 18:30	1	2
11/28/2023 18:45	3	6
11/28/2023 19:00	4	6
11/28/2023 19:15	3	4
11/28/2023 19:30	3	1
11/28/2023 19:45	3	2
11/28/2023 20:00	5	3
11/28/2023 20:15	3	2
11/28/2023 20:30	3	2
11/28/2023 20:45	2	3

11/28/2023 21:00	6	4
11/28/2023 21:15	2	2
11/28/2023 21:30	1	2
11/28/2023 21:45	2	0
11/28/2023 22:00	1	0
11/28/2023 22:15	2	1
11/28/2023 22:30	2	0
11/28/2023 22:45	1	0
11/28/2023 23:00	1	4
11/28/2023 23:15	1	2
11/28/2023 23:30	0	0
11/28/2023 23:45	1	0
11/29/2023 0:00	0	0
11/29/2023 0:15	1	0
11/29/2023 0:30	1	0
11/29/2023 0:45	0	1
11/29/2023 1:00	0	1
11/29/2023 1:15	2	0
11/29/2023 1:30	1	0
11/29/2023 1:45	0	0
11/29/2023 2:00	0	0
11/29/2023 2:15	1	0
11/29/2023 2:30	0	0
11/29/2023 2:45	1	0
11/29/2023 3:00	0	0
11/29/2023 3:15	0	0
11/29/2023 3:30	0	1
11/29/2023 3:45	0	0
11/29/2023 4:00	1	0
11/29/2023 4:15	0	0
11/29/2023 4:30	0	1
11/29/2023 4:45	1	2
11/29/2023 5:00	0	1
11/29/2023 5:15	1	3
11/29/2023 5:30	2	2
11/29/2023 5:45	1	2
11/29/2023 6:00	3	2
11/29/2023 6:15	4	6
11/29/2023 6:30	12	8
11/29/2023 6:45	9	6
11/29/2023 7:00	8	11
11/29/2023 7:15	4	4
11/29/2023 7:30	8	3
11/29/2023 7:45	3	5

11/29/2023 8:00	7	11
11/29/2023 8:15	7	7
11/29/2023 8:30	3	11
11/29/2023 8:45	4	3
11/29/2023 9:00	6	6
11/29/2023 9:15	2	6
11/29/2023 9:30	0	4
11/29/2023 9:45	8	2
11/29/2023 10:00	4	1
11/29/2023 10:15	5	6
11/29/2023 10:30	6	4
11/29/2023 10:45	4	5
11/29/2023 11:00	4	2
11/29/2023 11:15	3	8
11/29/2023 11:30	4	5
11/29/2023 11:45	2	2
11/29/2023 12:00	8	7
11/29/2023 12:15	9	7
11/29/2023 12:30	4	6
11/29/2023 12:45	8	9
11/29/2023 13:00	7	9
11/29/2023 13:15	3	7
11/29/2023 13:30	2	5
11/29/2023 13:45	6	4
11/29/2023 14:00	5	5
11/29/2023 14:15	4	7
11/29/2023 14:30	14	4
11/29/2023 14:45	10	9
11/29/2023 15:00	11	21
11/29/2023 15:15	10	8
11/29/2023 15:30	8	13
11/29/2023 15:45	17	12
11/29/2023 16:00	8	22
11/29/2023 16:15	7	10
11/29/2023 16:30	8	6
11/29/2023 16:45	7	7
11/29/2023 17:00	2	11
11/29/2023 17:15	10	6
11/29/2023 17:30	8	5
11/29/2023 17:45	7	4
11/29/2023 18:00	6	4
11/29/2023 18:15	6	7
11/29/2023 18:30	2	2
11/29/2023 18:45	4	9

11/29/2023 19:00	5	4
11/29/2023 19:15	4	2
11/29/2023 19:30	4	1
11/29/2023 19:45	1	5
11/29/2023 20:00	3	3
11/29/2023 20:15	4	5
11/29/2023 20:30	2	2
11/29/2023 20:45	1	2
11/29/2023 21:00	2	3
11/29/2023 21:15	3	0
11/29/2023 21:30	0	0
11/29/2023 21:45	2	2
11/29/2023 22:00	2	0
11/29/2023 22:15	0	1
11/29/2023 22:30	2	0
11/29/2023 22:45	1	1
11/29/2023 23:00	1	6
11/29/2023 23:15	0	1
11/29/2023 23:30	2	0
11/29/2023 23:45	0	0

Single-Unit Trucks			
Entry		n/a	n/a
Direction		Southbound	Northbound
Start Time		Thru	Thru
	11/28/2023 0:00	0	0
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	0	0
	11/28/2023 1:00	0	0
	11/28/2023 1:15	0	0
	11/28/2023 1:30	0	0
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	0
	11/28/2023 2:15	0	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	0	0
	11/28/2023 3:45	0	0
	11/28/2023 4:00	0	0
	11/28/2023 4:15	0	0
	11/28/2023 4:30	0	0
	11/28/2023 4:45	0	0
	11/28/2023 5:00	0	0
	11/28/2023 5:15	0	0
	11/28/2023 5:30	0	0
	11/28/2023 5:45	0	0
	11/28/2023 6:00	0	0
	11/28/2023 6:15	0	0
	11/28/2023 6:30	0	0
	11/28/2023 6:45	0	0
	11/28/2023 7:00	0	0
	11/28/2023 7:15	0	0
	11/28/2023 7:30	0	0
	11/28/2023 7:45	0	0
	11/28/2023 8:00	0	0
	11/28/2023 8:15	0	0
	11/28/2023 8:30	0	0
	11/28/2023 8:45	1	1
	11/28/2023 9:00	0	1
	11/28/2023 9:15	1	0
	11/28/2023 9:30	0	1
	11/28/2023 9:45	0	1

11/28/2023 10:00	2	0
11/28/2023 10:15	0	0
11/28/2023 10:30	0	0
11/28/2023 10:45	0	0
11/28/2023 11:00	0	0
11/28/2023 11:15	0	0
11/28/2023 11:30	0	1
11/28/2023 11:45	0	0
11/28/2023 12:00	2	0
11/28/2023 12:15	0	0
11/28/2023 12:30	0	1
11/28/2023 12:45	2	0
11/28/2023 13:00	0	2
11/28/2023 13:15	1	1
11/28/2023 13:30	0	0
11/28/2023 13:45	0	0
11/28/2023 14:00	0	0
11/28/2023 14:15	0	1
11/28/2023 14:30	1	1
11/28/2023 14:45	1	0
11/28/2023 15:00	0	0
11/28/2023 15:15	1	2
11/28/2023 15:30	1	0
11/28/2023 15:45	1	0
11/28/2023 16:00	1	1
11/28/2023 16:15	0	0
11/28/2023 16:30	0	1
11/28/2023 16:45	0	0
11/28/2023 17:00	1	0
11/28/2023 17:15	0	0
11/28/2023 17:30	0	1
11/28/2023 17:45	0	0
11/28/2023 18:00	0	1
11/28/2023 18:15	0	1
11/28/2023 18:30	0	0
11/28/2023 18:45	1	0
11/28/2023 19:00	0	0
11/28/2023 19:15	0	0
11/28/2023 19:30	0	0
11/28/2023 19:45	0	0
11/28/2023 20:00	0	0
11/28/2023 20:15	0	0
11/28/2023 20:30	0	0
11/28/2023 20:45	1	1

11/28/2023 21:00	0	0
11/28/2023 21:15	0	0
11/28/2023 21:30	0	0
11/28/2023 21:45	0	0
11/28/2023 22:00	0	0
11/28/2023 22:15	0	0
11/28/2023 22:30	0	0
11/28/2023 22:45	0	0
11/28/2023 23:00	0	0
11/28/2023 23:15	0	0
11/28/2023 23:30	0	0
11/28/2023 23:45	0	0
11/29/2023 0:00	0	0
11/29/2023 0:15	0	0
11/29/2023 0:30	0	0
11/29/2023 0:45	0	0
11/29/2023 1:00	0	0
11/29/2023 1:15	0	0
11/29/2023 1:30	0	0
11/29/2023 1:45	0	0
11/29/2023 2:00	0	0
11/29/2023 2:15	0	0
11/29/2023 2:30	0	0
11/29/2023 2:45	0	0
11/29/2023 3:00	0	0
11/29/2023 3:15	0	0
11/29/2023 3:30	0	0
11/29/2023 3:45	0	0
11/29/2023 4:00	0	0
11/29/2023 4:15	0	0
11/29/2023 4:30	0	0
11/29/2023 4:45	0	0
11/29/2023 5:00	0	0
11/29/2023 5:15	0	0
11/29/2023 5:30	0	0
11/29/2023 5:45	0	0
11/29/2023 6:00	0	0
11/29/2023 6:15	0	0
11/29/2023 6:30	0	0
11/29/2023 6:45	0	0
11/29/2023 7:00	0	0
11/29/2023 7:15	1	0
11/29/2023 7:30	0	0
11/29/2023 7:45	0	0

11/29/2023 8:00	0	0
11/29/2023 8:15	1	0
11/29/2023 8:30	0	1
11/29/2023 8:45	0	0
11/29/2023 9:00	1	1
11/29/2023 9:15	0	1
11/29/2023 9:30	1	1
11/29/2023 9:45	1	0
11/29/2023 10:00	0	0
11/29/2023 10:15	0	0
11/29/2023 10:30	0	0
11/29/2023 10:45	2	2
11/29/2023 11:00	0	0
11/29/2023 11:15	0	1
11/29/2023 11:30	0	0
11/29/2023 11:45	0	1
11/29/2023 12:00	0	0
11/29/2023 12:15	2	0
11/29/2023 12:30	0	1
11/29/2023 12:45	1	0
11/29/2023 13:00	0	0
11/29/2023 13:15	0	0
11/29/2023 13:30	0	0
11/29/2023 13:45	0	1
11/29/2023 14:00	1	1
11/29/2023 14:15	1	1
11/29/2023 14:30	0	0
11/29/2023 14:45	0	0
11/29/2023 15:00	0	1
11/29/2023 15:15	1	0
11/29/2023 15:30	0	1
11/29/2023 15:45	0	0
11/29/2023 16:00	0	0
11/29/2023 16:15	0	0
11/29/2023 16:30	0	0
11/29/2023 16:45	0	0
11/29/2023 17:00	0	0
11/29/2023 17:15	0	0
11/29/2023 17:30	0	1
11/29/2023 17:45	0	1
11/29/2023 18:00	0	0
11/29/2023 18:15	0	0
11/29/2023 18:30	0	0
11/29/2023 18:45	0	0

11/29/2023 19:00	0	0
11/29/2023 19:15	0	0
11/29/2023 19:30	0	0
11/29/2023 19:45	0	0
11/29/2023 20:00	0	0
11/29/2023 20:15	0	0
11/29/2023 20:30	0	0
11/29/2023 20:45	0	0
11/29/2023 21:00	0	0
11/29/2023 21:15	0	1
11/29/2023 21:30	0	0
11/29/2023 21:45	1	0
11/29/2023 22:00	0	0
11/29/2023 22:15	0	0
11/29/2023 22:30	0	0
11/29/2023 22:45	0	0
11/29/2023 23:00	0	0
11/29/2023 23:15	0	0
11/29/2023 23:30	0	0
11/29/2023 23:45	0	0

Articulated Trucks			
Entry		n/a	n/a
Direction		Southbound	Northbound
Start Time		Thru	Thru
	11/28/2023 0:00	0	0
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	0	0
	11/28/2023 1:00	0	0
	11/28/2023 1:15	0	0
	11/28/2023 1:30	0	0
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	0
	11/28/2023 2:15	0	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	0	0
	11/28/2023 3:45	0	0
	11/28/2023 4:00	0	0
	11/28/2023 4:15	0	0
	11/28/2023 4:30	0	0
	11/28/2023 4:45	0	0
	11/28/2023 5:00	0	0
	11/28/2023 5:15	0	0
	11/28/2023 5:30	0	0
	11/28/2023 5:45	0	0
	11/28/2023 6:00	0	0
	11/28/2023 6:15	0	0
	11/28/2023 6:30	0	0
	11/28/2023 6:45	0	0
	11/28/2023 7:00	0	0
	11/28/2023 7:15	0	0
	11/28/2023 7:30	0	0
	11/28/2023 7:45	0	0
	11/28/2023 8:00	0	0
	11/28/2023 8:15	0	0
	11/28/2023 8:30	0	0
	11/28/2023 8:45	0	0
	11/28/2023 9:00	0	0
	11/28/2023 9:15	0	0
	11/28/2023 9:30	0	0
	11/28/2023 9:45	0	0

11/28/2023 10:00	0	0
11/28/2023 10:15	0	0
11/28/2023 10:30	0	1
11/28/2023 10:45	0	0
11/28/2023 11:00	0	0
11/28/2023 11:15	0	0
11/28/2023 11:30	0	0
11/28/2023 11:45	0	0
11/28/2023 12:00	0	0
11/28/2023 12:15	0	0
11/28/2023 12:30	0	0
11/28/2023 12:45	0	0
11/28/2023 13:00	0	0
11/28/2023 13:15	0	0
11/28/2023 13:30	0	0
11/28/2023 13:45	0	0
11/28/2023 14:00	0	0
11/28/2023 14:15	0	0
11/28/2023 14:30	0	0
11/28/2023 14:45	0	0
11/28/2023 15:00	0	0
11/28/2023 15:15	0	0
11/28/2023 15:30	0	0
11/28/2023 15:45	0	0
11/28/2023 16:00	0	0
11/28/2023 16:15	0	0
11/28/2023 16:30	0	0
11/28/2023 16:45	0	0
11/28/2023 17:00	0	0
11/28/2023 17:15	0	0
11/28/2023 17:30	0	0
11/28/2023 17:45	0	0
11/28/2023 18:00	0	0
11/28/2023 18:15	0	0
11/28/2023 18:30	0	0
11/28/2023 18:45	0	0
11/28/2023 19:00	0	0
11/28/2023 19:15	0	0
11/28/2023 19:30	0	0
11/28/2023 19:45	0	0
11/28/2023 20:00	0	0
11/28/2023 20:15	0	0
11/28/2023 20:30	0	0
11/28/2023 20:45	0	0

11/28/2023 21:00	0	0
11/28/2023 21:15	0	0
11/28/2023 21:30	0	0
11/28/2023 21:45	0	0
11/28/2023 22:00	0	0
11/28/2023 22:15	0	0
11/28/2023 22:30	0	0
11/28/2023 22:45	0	0
11/28/2023 23:00	0	0
11/28/2023 23:15	0	0
11/28/2023 23:30	0	0
11/28/2023 23:45	0	0
11/29/2023 0:00	0	0
11/29/2023 0:15	0	0
11/29/2023 0:30	0	0
11/29/2023 0:45	0	0
11/29/2023 1:00	0	0
11/29/2023 1:15	0	0
11/29/2023 1:30	0	0
11/29/2023 1:45	0	0
11/29/2023 2:00	0	0
11/29/2023 2:15	0	0
11/29/2023 2:30	0	0
11/29/2023 2:45	0	0
11/29/2023 3:00	0	0
11/29/2023 3:15	0	0
11/29/2023 3:30	0	0
11/29/2023 3:45	0	0
11/29/2023 4:00	0	0
11/29/2023 4:15	0	0
11/29/2023 4:30	0	0
11/29/2023 4:45	0	0
11/29/2023 5:00	0	0
11/29/2023 5:15	0	0
11/29/2023 5:30	0	0
11/29/2023 5:45	0	0
11/29/2023 6:00	0	0
11/29/2023 6:15	0	0
11/29/2023 6:30	0	0
11/29/2023 6:45	0	0
11/29/2023 7:00	0	0
11/29/2023 7:15	0	0
11/29/2023 7:30	0	0
11/29/2023 7:45	0	0

11/29/2023 8:00	0	0
11/29/2023 8:15	0	0
11/29/2023 8:30	0	0
11/29/2023 8:45	0	0
11/29/2023 9:00	0	0
11/29/2023 9:15	0	0
11/29/2023 9:30	0	0
11/29/2023 9:45	0	0
11/29/2023 10:00	0	0
11/29/2023 10:15	0	0
11/29/2023 10:30	0	0
11/29/2023 10:45	0	0
11/29/2023 11:00	0	0
11/29/2023 11:15	0	0
11/29/2023 11:30	0	0
11/29/2023 11:45	0	0
11/29/2023 12:00	0	0
11/29/2023 12:15	0	0
11/29/2023 12:30	0	0
11/29/2023 12:45	1	0
11/29/2023 13:00	0	0
11/29/2023 13:15	0	0
11/29/2023 13:30	0	0
11/29/2023 13:45	0	0
11/29/2023 14:00	0	0
11/29/2023 14:15	0	0
11/29/2023 14:30	1	0
11/29/2023 14:45	0	0
11/29/2023 15:00	0	1
11/29/2023 15:15	0	0
11/29/2023 15:30	0	0
11/29/2023 15:45	0	0
11/29/2023 16:00	0	0
11/29/2023 16:15	0	0
11/29/2023 16:30	0	0
11/29/2023 16:45	0	0
11/29/2023 17:00	0	0
11/29/2023 17:15	0	0
11/29/2023 17:30	0	0
11/29/2023 17:45	0	0
11/29/2023 18:00	0	0
11/29/2023 18:15	0	0
11/29/2023 18:30	0	0
11/29/2023 18:45	0	0

11/29/2023 19:00	0	0
11/29/2023 19:15	0	0
11/29/2023 19:30	0	0
11/29/2023 19:45	0	0
11/29/2023 20:00	0	0
11/29/2023 20:15	0	0
11/29/2023 20:30	0	0
11/29/2023 20:45	0	0
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11/29/2023 21:45	0	0
11/29/2023 22:00	0	0
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11/29/2023 22:30	0	0
11/29/2023 22:45	0	0
11/29/2023 23:00	0	0
11/29/2023 23:15	0	0
11/29/2023 23:30	0	0
11/29/2023 23:45	0	0

Buses			
Entry		n/a	n/a
Direction		Southbound	Northbound
Start Time		Thru	Thru
	11/28/2023 0:00	0	0
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	0	0
	11/28/2023 1:00	0	0
	11/28/2023 1:15	0	0
	11/28/2023 1:30	0	0
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	0
	11/28/2023 2:15	0	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	0	0
	11/28/2023 3:45	0	0
	11/28/2023 4:00	0	0
	11/28/2023 4:15	0	0
	11/28/2023 4:30	0	0
	11/28/2023 4:45	0	0
	11/28/2023 5:00	0	0
	11/28/2023 5:15	0	0
	11/28/2023 5:30	0	0
	11/28/2023 5:45	0	0
	11/28/2023 6:00	0	0
	11/28/2023 6:15	0	0
	11/28/2023 6:30	0	0
	11/28/2023 6:45	1	0
	11/28/2023 7:00	0	0
	11/28/2023 7:15	0	0
	11/28/2023 7:30	0	0
	11/28/2023 7:45	0	0
	11/28/2023 8:00	0	0
	11/28/2023 8:15	1	0
	11/28/2023 8:30	0	0
	11/28/2023 8:45	0	0
	11/28/2023 9:00	0	0
	11/28/2023 9:15	0	0
	11/28/2023 9:30	0	0
	11/28/2023 9:45	0	0

11/28/2023 10:00	0	0
11/28/2023 10:15	0	0
11/28/2023 10:30	0	0
11/28/2023 10:45	0	0
11/28/2023 11:00	0	0
11/28/2023 11:15	0	0
11/28/2023 11:30	0	0
11/28/2023 11:45	0	0
11/28/2023 12:00	0	0
11/28/2023 12:15	0	0
11/28/2023 12:30	0	0
11/28/2023 12:45	0	0
11/28/2023 13:00	0	0
11/28/2023 13:15	0	0
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11/28/2023 13:45	0	0
11/28/2023 14:00	0	0
11/28/2023 14:15	0	0
11/28/2023 14:30	1	0
11/28/2023 14:45	0	0
11/28/2023 15:00	0	0
11/28/2023 15:15	0	0
11/28/2023 15:30	0	1
11/28/2023 15:45	0	0
11/28/2023 16:00	0	0
11/28/2023 16:15	0	0
11/28/2023 16:30	0	0
11/28/2023 16:45	0	0
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11/28/2023 19:30	0	0
11/28/2023 19:45	0	0
11/28/2023 20:00	0	0
11/28/2023 20:15	0	0
11/28/2023 20:30	0	0
11/28/2023 20:45	0	0

11/28/2023 21:00	0	0
11/28/2023 21:15	0	0
11/28/2023 21:30	0	0
11/28/2023 21:45	0	0
11/28/2023 22:00	0	0
11/28/2023 22:15	0	0
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11/29/2023 0:00	0	0
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11/29/2023 0:30	0	0
11/29/2023 0:45	0	0
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11/29/2023 1:15	0	0
11/29/2023 1:30	0	0
11/29/2023 1:45	0	0
11/29/2023 2:00	0	0
11/29/2023 2:15	0	0
11/29/2023 2:30	0	0
11/29/2023 2:45	0	0
11/29/2023 3:00	0	0
11/29/2023 3:15	0	0
11/29/2023 3:30	0	0
11/29/2023 3:45	0	0
11/29/2023 4:00	0	0
11/29/2023 4:15	0	0
11/29/2023 4:30	0	0
11/29/2023 4:45	0	0
11/29/2023 5:00	0	0
11/29/2023 5:15	0	0
11/29/2023 5:30	0	0
11/29/2023 5:45	0	0
11/29/2023 6:00	0	0
11/29/2023 6:15	0	0
11/29/2023 6:30	0	0
11/29/2023 6:45	1	0
11/29/2023 7:00	0	0
11/29/2023 7:15	0	0
11/29/2023 7:30	0	0
11/29/2023 7:45	0	0

11/29/2023 8:00	0	0
11/29/2023 8:15	0	0
11/29/2023 8:30	1	0
11/29/2023 8:45	0	0
11/29/2023 9:00	0	0
11/29/2023 9:15	0	0
11/29/2023 9:30	0	0
11/29/2023 9:45	0	0
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11/29/2023 14:30	1	0
11/29/2023 14:45	0	0
11/29/2023 15:00	0	0
11/29/2023 15:15	0	0
11/29/2023 15:30	0	1
11/29/2023 15:45	0	0
11/29/2023 16:00	0	0
11/29/2023 16:15	0	0
11/29/2023 16:30	0	0
11/29/2023 16:45	0	0
11/29/2023 17:00	0	0
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11/29/2023 17:45	0	0
11/29/2023 18:00	0	0
11/29/2023 18:15	0	1
11/29/2023 18:30	0	0
11/29/2023 18:45	0	0

11/29/2023 19:00	0	0
11/29/2023 19:15	0	0
11/29/2023 19:30	0	0
11/29/2023 19:45	0	0
11/29/2023 20:00	0	0
11/29/2023 20:15	0	0
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11/29/2023 20:45	0	0
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11/29/2023 21:30	0	0
11/29/2023 21:45	0	0
11/29/2023 22:00	0	0
11/29/2023 22:15	0	0
11/29/2023 22:30	0	0
11/29/2023 22:45	0	0
11/29/2023 23:00	0	0
11/29/2023 23:15	0	0
11/29/2023 23:30	0	0
11/29/2023 23:45	0	0

Bicycles on Road			
Entry		n/a	n/a
Direction		Southbound	Northbound
Start Time		Thru	Thru
	11/28/2023 0:00	0	0
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	0	0
	11/28/2023 1:00	0	0
	11/28/2023 1:15	0	0
	11/28/2023 1:30	0	0
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	0
	11/28/2023 2:15	0	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	0	0
	11/28/2023 3:45	0	0
	11/28/2023 4:00	0	0
	11/28/2023 4:15	0	0
	11/28/2023 4:30	0	0
	11/28/2023 4:45	0	0
	11/28/2023 5:00	0	0
	11/28/2023 5:15	0	0
	11/28/2023 5:30	0	0
	11/28/2023 5:45	0	0
	11/28/2023 6:00	0	0
	11/28/2023 6:15	0	0
	11/28/2023 6:30	0	0
	11/28/2023 6:45	0	0
	11/28/2023 7:00	0	0
	11/28/2023 7:15	0	0
	11/28/2023 7:30	0	0
	11/28/2023 7:45	0	0
	11/28/2023 8:00	0	0
	11/28/2023 8:15	0	0
	11/28/2023 8:30	0	0
	11/28/2023 8:45	0	0
	11/28/2023 9:00	0	0
	11/28/2023 9:15	0	0
	11/28/2023 9:30	0	0
	11/28/2023 9:45	0	0

11/28/2023 10:00	0	0
11/28/2023 10:15	0	0
11/28/2023 10:30	0	0
11/28/2023 10:45	0	0
11/28/2023 11:00	0	0
11/28/2023 11:15	0	0
11/28/2023 11:30	0	0
11/28/2023 11:45	0	0
11/28/2023 12:00	0	0
11/28/2023 12:15	0	0
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11/28/2023 12:45	0	0
11/28/2023 13:00	0	0
11/28/2023 13:15	0	0
11/28/2023 13:30	0	0
11/28/2023 13:45	0	0
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11/28/2023 14:15	0	0
11/28/2023 14:30	0	0
11/28/2023 14:45	0	0
11/28/2023 15:00	0	0
11/28/2023 15:15	0	0
11/28/2023 15:30	0	0
11/28/2023 15:45	0	0
11/28/2023 16:00	0	0
11/28/2023 16:15	0	1
11/28/2023 16:30	0	0
11/28/2023 16:45	0	0
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11/28/2023 17:15	0	0
11/28/2023 17:30	0	0
11/28/2023 17:45	0	0
11/28/2023 18:00	0	0
11/28/2023 18:15	0	0
11/28/2023 18:30	0	0
11/28/2023 18:45	1	0
11/28/2023 19:00	0	0
11/28/2023 19:15	0	0
11/28/2023 19:30	0	0
11/28/2023 19:45	0	0
11/28/2023 20:00	0	0
11/28/2023 20:15	0	0
11/28/2023 20:30	1	0
11/28/2023 20:45	0	0

11/28/2023 21:00	0	0
11/28/2023 21:15	0	0
11/28/2023 21:30	0	0
11/28/2023 21:45	0	1
11/28/2023 22:00	0	0
11/28/2023 22:15	1	0
11/28/2023 22:30	0	0
11/28/2023 22:45	0	0
11/28/2023 23:00	0	0
11/28/2023 23:15	0	0
11/28/2023 23:30	0	0
11/28/2023 23:45	0	0
11/29/2023 0:00	0	0
11/29/2023 0:15	0	0
11/29/2023 0:30	0	0
11/29/2023 0:45	0	0
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11/29/2023 1:15	0	0
11/29/2023 1:30	0	0
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11/29/2023 3:15	0	0
11/29/2023 3:30	0	0
11/29/2023 3:45	0	0
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11/29/2023 4:15	0	0
11/29/2023 4:30	0	0
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11/29/2023 5:00	0	0
11/29/2023 5:15	0	0
11/29/2023 5:30	0	0
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11/29/2023 6:30	0	0
11/29/2023 6:45	0	0
11/29/2023 7:00	0	0
11/29/2023 7:15	0	0
11/29/2023 7:30	0	0
11/29/2023 7:45	0	0

11/29/2023 8:00	0	0
11/29/2023 8:15	0	0
11/29/2023 8:30	0	0
11/29/2023 8:45	0	0
11/29/2023 9:00	0	0
11/29/2023 9:15	0	0
11/29/2023 9:30	0	0
11/29/2023 9:45	0	0
11/29/2023 10:00	0	0
11/29/2023 10:15	0	0
11/29/2023 10:30	0	0
11/29/2023 10:45	0	0
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11/29/2023 11:15	0	0
11/29/2023 11:30	0	0
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11/29/2023 12:45	0	0
11/29/2023 13:00	0	0
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11/29/2023 13:30	0	0
11/29/2023 13:45	0	0
11/29/2023 14:00	0	0
11/29/2023 14:15	0	0
11/29/2023 14:30	0	0
11/29/2023 14:45	0	0
11/29/2023 15:00	0	1
11/29/2023 15:15	0	0
11/29/2023 15:30	0	0
11/29/2023 15:45	0	0
11/29/2023 16:00	0	0
11/29/2023 16:15	0	0
11/29/2023 16:30	0	0
11/29/2023 16:45	0	0
11/29/2023 17:00	0	0
11/29/2023 17:15	0	0
11/29/2023 17:30	0	0
11/29/2023 17:45	0	0
11/29/2023 18:00	0	0
11/29/2023 18:15	0	0
11/29/2023 18:30	0	0
11/29/2023 18:45	0	0

11/29/2023 19:00	0	0
11/29/2023 19:15	0	0
11/29/2023 19:30	0	0
11/29/2023 19:45	0	0
11/29/2023 20:00	0	0
11/29/2023 20:15	0	0
11/29/2023 20:30	0	0
11/29/2023 20:45	0	0
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11/29/2023 21:15	0	0
11/29/2023 21:30	0	0
11/29/2023 21:45	0	0
11/29/2023 22:00	0	0
11/29/2023 22:15	0	0
11/29/2023 22:30	0	0
11/29/2023 22:45	0	0
11/29/2023 23:00	0	0
11/29/2023 23:15	0	0
11/29/2023 23:30	0	0
11/29/2023 23:45	0	0

Summary

Study Name	239522-ATR-E (High Street e/o Laurel Street) ATR
Project	239522-Westerly RI
Project Code	
Channel Granularity	By Direction
Bin Size	15 minutes
Time Zone	America/New_York
Start Time	11/28/2023 0:00
End Time	11/30/2023 0:00
Location	High Street e/o Laurel Street
Latitude and Longitude	41.424879,-71.789613

AM Peak	Nov 28 2023 8AM - 9 AM (0.861)
Midday Peak	Nov 29 2023 11:30AM - 12:30 PM (0.870)
PM Peak (Overall Peak Hour)	Nov 29 2023 4PM - 5 PM (0.920)

Motorcycles			
Entry		n/a	n/a
Direction		Westbound	Eastbound
Start Time		Thru	Thru
	11/28/2023 0:00	0	0
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	0	0
	11/28/2023 1:00	0	0
	11/28/2023 1:15	0	0
	11/28/2023 1:30	0	0
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	0
	11/28/2023 2:15	0	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	0	0
	11/28/2023 3:45	0	0
	11/28/2023 4:00	0	0
	11/28/2023 4:15	0	0
	11/28/2023 4:30	0	0
	11/28/2023 4:45	0	0
	11/28/2023 5:00	0	0
	11/28/2023 5:15	0	0
	11/28/2023 5:30	0	0
	11/28/2023 5:45	0	0
	11/28/2023 6:00	0	0
	11/28/2023 6:15	0	0
	11/28/2023 6:30	0	0
	11/28/2023 6:45	0	0
	11/28/2023 7:00	0	0
	11/28/2023 7:15	0	0
	11/28/2023 7:30	0	0
	11/28/2023 7:45	0	0
	11/28/2023 8:00	0	0
	11/28/2023 8:15	0	0
	11/28/2023 8:30	0	0
	11/28/2023 8:45	1	0
	11/28/2023 9:00	0	0
	11/28/2023 9:15	0	0
	11/28/2023 9:30	0	0
	11/28/2023 9:45	0	0

11/28/2023 10:00	0	0
11/28/2023 10:15	0	0
11/28/2023 10:30	0	0
11/28/2023 10:45	0	0
11/28/2023 11:00	0	0
11/28/2023 11:15	0	0
11/28/2023 11:30	0	0
11/28/2023 11:45	0	0
11/28/2023 12:00	0	0
11/28/2023 12:15	0	0
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11/28/2023 12:45	0	0
11/28/2023 13:00	0	0
11/28/2023 13:15	0	0
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11/28/2023 14:15	0	0
11/28/2023 14:30	0	0
11/28/2023 14:45	0	0
11/28/2023 15:00	0	0
11/28/2023 15:15	0	0
11/28/2023 15:30	0	0
11/28/2023 15:45	0	0
11/28/2023 16:00	0	0
11/28/2023 16:15	0	0
11/28/2023 16:30	0	0
11/28/2023 16:45	0	0
11/28/2023 17:00	0	0
11/28/2023 17:15	0	0
11/28/2023 17:30	0	0
11/28/2023 17:45	0	0
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11/28/2023 18:15	0	0
11/28/2023 18:30	0	0
11/28/2023 18:45	0	0
11/28/2023 19:00	0	0
11/28/2023 19:15	0	0
11/28/2023 19:30	0	0
11/28/2023 19:45	0	0
11/28/2023 20:00	0	0
11/28/2023 20:15	0	0
11/28/2023 20:30	0	0
11/28/2023 20:45	0	0

11/28/2023 21:00	0	0
11/28/2023 21:15	0	0
11/28/2023 21:30	0	0
11/28/2023 21:45	0	0
11/28/2023 22:00	0	0
11/28/2023 22:15	0	0
11/28/2023 22:30	0	0
11/28/2023 22:45	0	0
11/28/2023 23:00	0	0
11/28/2023 23:15	0	0
11/28/2023 23:30	0	0
11/28/2023 23:45	0	0
11/29/2023 0:00	0	0
11/29/2023 0:15	0	0
11/29/2023 0:30	0	0
11/29/2023 0:45	0	0
11/29/2023 1:00	0	0
11/29/2023 1:15	0	0
11/29/2023 1:30	0	0
11/29/2023 1:45	0	0
11/29/2023 2:00	0	0
11/29/2023 2:15	0	0
11/29/2023 2:30	0	0
11/29/2023 2:45	0	0
11/29/2023 3:00	0	0
11/29/2023 3:15	0	0
11/29/2023 3:30	0	0
11/29/2023 3:45	0	0
11/29/2023 4:00	0	0
11/29/2023 4:15	0	0
11/29/2023 4:30	0	0
11/29/2023 4:45	0	0
11/29/2023 5:00	0	0
11/29/2023 5:15	0	0
11/29/2023 5:30	0	0
11/29/2023 5:45	0	0
11/29/2023 6:00	0	0
11/29/2023 6:15	0	0
11/29/2023 6:30	0	0
11/29/2023 6:45	0	0
11/29/2023 7:00	0	0
11/29/2023 7:15	0	0
11/29/2023 7:30	0	0
11/29/2023 7:45	0	0

11/29/2023 8:00	0	0
11/29/2023 8:15	0	0
11/29/2023 8:30	0	0
11/29/2023 8:45	0	0
11/29/2023 9:00	0	0
11/29/2023 9:15	0	0
11/29/2023 9:30	0	0
11/29/2023 9:45	0	0
11/29/2023 10:00	0	0
11/29/2023 10:15	0	0
11/29/2023 10:30	0	0
11/29/2023 10:45	0	0
11/29/2023 11:00	0	0
11/29/2023 11:15	0	0
11/29/2023 11:30	0	0
11/29/2023 11:45	0	0
11/29/2023 12:00	0	0
11/29/2023 12:15	0	0
11/29/2023 12:30	0	0
11/29/2023 12:45	0	0
11/29/2023 13:00	0	0
11/29/2023 13:15	0	0
11/29/2023 13:30	0	0
11/29/2023 13:45	0	0
11/29/2023 14:00	0	0
11/29/2023 14:15	0	0
11/29/2023 14:30	0	0
11/29/2023 14:45	0	0
11/29/2023 15:00	0	0
11/29/2023 15:15	0	0
11/29/2023 15:30	0	0
11/29/2023 15:45	0	0
11/29/2023 16:00	0	0
11/29/2023 16:15	0	0
11/29/2023 16:30	0	0
11/29/2023 16:45	0	0
11/29/2023 17:00	0	0
11/29/2023 17:15	0	0
11/29/2023 17:30	0	0
11/29/2023 17:45	0	0
11/29/2023 18:00	0	0
11/29/2023 18:15	0	0
11/29/2023 18:30	0	1
11/29/2023 18:45	0	0

11/29/2023 19:00	0	0
11/29/2023 19:15	0	0
11/29/2023 19:30	0	0
11/29/2023 19:45	0	0
11/29/2023 20:00	0	0
11/29/2023 20:15	0	0
11/29/2023 20:30	0	0
11/29/2023 20:45	0	0
11/29/2023 21:00	0	0
11/29/2023 21:15	0	0
11/29/2023 21:30	0	0
11/29/2023 21:45	0	0
11/29/2023 22:00	0	0
11/29/2023 22:15	0	0
11/29/2023 22:30	0	0
11/29/2023 22:45	0	0
11/29/2023 23:00	0	0
11/29/2023 23:15	0	0
11/29/2023 23:30	0	0
11/29/2023 23:45	0	0

Lights			
Entry		n/a	n/a
Direction		Westbound	Eastbound
Start Time		Thru	Thru
	11/28/2023 0:00	1	3
	11/28/2023 0:15	1	5
	11/28/2023 0:30	0	3
	11/28/2023 0:45	0	0
	11/28/2023 1:00	0	5
	11/28/2023 1:15	0	1
	11/28/2023 1:30	0	1
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	0
	11/28/2023 2:15	0	1
	11/28/2023 2:30	1	3
	11/28/2023 2:45	0	0
	11/28/2023 3:00	2	0
	11/28/2023 3:15	1	0
	11/28/2023 3:30	1	1
	11/28/2023 3:45	1	0
	11/28/2023 4:00	5	1
	11/28/2023 4:15	6	2
	11/28/2023 4:30	4	3
	11/28/2023 4:45	10	2
	11/28/2023 5:00	11	5
	11/28/2023 5:15	6	3
	11/28/2023 5:30	15	6
	11/28/2023 5:45	16	5
	11/28/2023 6:00	20	4
	11/28/2023 6:15	15	5
	11/28/2023 6:30	15	15
	11/28/2023 6:45	21	15
	11/28/2023 7:00	19	17
	11/28/2023 7:15	19	18
	11/28/2023 7:30	28	13
	11/28/2023 7:45	21	26
	11/28/2023 8:00	15	23
	11/28/2023 8:15	20	17
	11/28/2023 8:30	21	25
	11/28/2023 8:45	24	27
	11/28/2023 9:00	18	20
	11/28/2023 9:15	25	12
	11/28/2023 9:30	20	18
	11/28/2023 9:45	14	12

11/28/2023 10:00	10	20
11/28/2023 10:15	20	19
11/28/2023 10:30	13	9
11/28/2023 10:45	12	23
11/28/2023 11:00	13	14
11/28/2023 11:15	11	16
11/28/2023 11:30	20	24
11/28/2023 11:45	20	25
11/28/2023 12:00	19	13
11/28/2023 12:15	19	26
11/28/2023 12:30	24	20
11/28/2023 12:45	16	19
11/28/2023 13:00	20	16
11/28/2023 13:15	13	22
11/28/2023 13:30	14	19
11/28/2023 13:45	16	24
11/28/2023 14:00	18	16
11/28/2023 14:15	28	40
11/28/2023 14:30	26	23
11/28/2023 14:45	32	41
11/28/2023 15:00	23	28
11/28/2023 15:15	26	32
11/28/2023 15:30	25	32
11/28/2023 15:45	33	33
11/28/2023 16:00	31	36
11/28/2023 16:15	23	44
11/28/2023 16:30	26	29
11/28/2023 16:45	35	37
11/28/2023 17:00	31	34
11/28/2023 17:15	30	40
11/28/2023 17:30	18	22
11/28/2023 17:45	13	22
11/28/2023 18:00	19	18
11/28/2023 18:15	17	15
11/28/2023 18:30	21	17
11/28/2023 18:45	19	22
11/28/2023 19:00	12	14
11/28/2023 19:15	7	15
11/28/2023 19:30	8	12
11/28/2023 19:45	6	11
11/28/2023 20:00	9	8
11/28/2023 20:15	9	11
11/28/2023 20:30	9	6
11/28/2023 20:45	6	17

11/28/2023 21:00	3	10
11/28/2023 21:15	0	5
11/28/2023 21:30	3	10
11/28/2023 21:45	4	6
11/28/2023 22:00	7	4
11/28/2023 22:15	5	3
11/28/2023 22:30	1	4
11/28/2023 22:45	3	2
11/28/2023 23:00	2	10
11/28/2023 23:15	0	5
11/28/2023 23:30	0	1
11/28/2023 23:45	4	6
11/29/2023 0:00	0	0
11/29/2023 0:15	0	3
11/29/2023 0:30	1	0
11/29/2023 0:45	0	1
11/29/2023 1:00	0	1
11/29/2023 1:15	0	1
11/29/2023 1:30	1	0
11/29/2023 1:45	1	1
11/29/2023 2:00	0	2
11/29/2023 2:15	0	1
11/29/2023 2:30	2	1
11/29/2023 2:45	0	0
11/29/2023 3:00	2	0
11/29/2023 3:15	2	1
11/29/2023 3:30	3	2
11/29/2023 3:45	1	0
11/29/2023 4:00	5	1
11/29/2023 4:15	7	3
11/29/2023 4:30	4	0
11/29/2023 4:45	9	3
11/29/2023 5:00	9	2
11/29/2023 5:15	10	4
11/29/2023 5:30	15	4
11/29/2023 5:45	11	8
11/29/2023 6:00	13	7
11/29/2023 6:15	18	6
11/29/2023 6:30	19	13
11/29/2023 6:45	18	8
11/29/2023 7:00	23	18
11/29/2023 7:15	20	18
11/29/2023 7:30	24	24
11/29/2023 7:45	20	18

11/29/2023 8:00	25	16
11/29/2023 8:15	24	18
11/29/2023 8:30	16	24
11/29/2023 8:45	12	15
11/29/2023 9:00	18	8
11/29/2023 9:15	10	21
11/29/2023 9:30	23	18
11/29/2023 9:45	10	16
11/29/2023 10:00	22	10
11/29/2023 10:15	22	20
11/29/2023 10:30	13	19
11/29/2023 10:45	15	19
11/29/2023 11:00	18	14
11/29/2023 11:15	12	19
11/29/2023 11:30	24	21
11/29/2023 11:45	21	19
11/29/2023 12:00	24	25
11/29/2023 12:15	17	20
11/29/2023 12:30	19	28
11/29/2023 12:45	17	20
11/29/2023 13:00	15	22
11/29/2023 13:15	20	23
11/29/2023 13:30	16	21
11/29/2023 13:45	18	20
11/29/2023 14:00	26	12
11/29/2023 14:15	24	31
11/29/2023 14:30	23	23
11/29/2023 14:45	19	40
11/29/2023 15:00	27	35
11/29/2023 15:15	28	34
11/29/2023 15:30	27	37
11/29/2023 15:45	31	29
11/29/2023 16:00	39	38
11/29/2023 16:15	29	45
11/29/2023 16:30	31	34
11/29/2023 16:45	29	40
11/29/2023 17:00	33	32
11/29/2023 17:15	25	35
11/29/2023 17:30	11	32
11/29/2023 17:45	15	20
11/29/2023 18:00	25	17
11/29/2023 18:15	21	18
11/29/2023 18:30	23	19
11/29/2023 18:45	19	16

11/29/2023 19:00	12	21
11/29/2023 19:15	10	10
11/29/2023 19:30	9	8
11/29/2023 19:45	7	7
11/29/2023 20:00	5	9
11/29/2023 20:15	11	7
11/29/2023 20:30	7	15
11/29/2023 20:45	8	14
11/29/2023 21:00	6	16
11/29/2023 21:15	1	8
11/29/2023 21:30	5	6
11/29/2023 21:45	3	7
11/29/2023 22:00	3	5
11/29/2023 22:15	3	1
11/29/2023 22:30	6	1
11/29/2023 22:45	1	4
11/29/2023 23:00	2	8
11/29/2023 23:15	2	4
11/29/2023 23:30	2	2
11/29/2023 23:45	0	7

Single-Unit Trucks			
Entry		n/a	n/a
Direction		Westbound	Eastbound
Start Time		Thru	Thru
	11/28/2023 0:00	0	0
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	0	0
	11/28/2023 1:00	0	0
	11/28/2023 1:15	0	0
	11/28/2023 1:30	0	0
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	1
	11/28/2023 2:15	1	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	0	0
	11/28/2023 3:45	0	0
	11/28/2023 4:00	0	0
	11/28/2023 4:15	0	0
	11/28/2023 4:30	0	1
	11/28/2023 4:45	0	0
	11/28/2023 5:00	0	0
	11/28/2023 5:15	0	0
	11/28/2023 5:30	0	0
	11/28/2023 5:45	0	1
	11/28/2023 6:00	0	1
	11/28/2023 6:15	0	0
	11/28/2023 6:30	0	2
	11/28/2023 6:45	0	0
	11/28/2023 7:00	1	4
	11/28/2023 7:15	0	1
	11/28/2023 7:30	0	2
	11/28/2023 7:45	1	0
	11/28/2023 8:00	1	0
	11/28/2023 8:15	2	5
	11/28/2023 8:30	0	1
	11/28/2023 8:45	0	2
	11/28/2023 9:00	1	1
	11/28/2023 9:15	1	2
	11/28/2023 9:30	2	2
	11/28/2023 9:45	3	1

11/28/2023 10:00	0	2
11/28/2023 10:15	1	0
11/28/2023 10:30	3	0
11/28/2023 10:45	1	1
11/28/2023 11:00	0	1
11/28/2023 11:15	0	0
11/28/2023 11:30	2	1
11/28/2023 11:45	1	0
11/28/2023 12:00	2	0
11/28/2023 12:15	3	0
11/28/2023 12:30	0	0
11/28/2023 12:45	0	0
11/28/2023 13:00	1	0
11/28/2023 13:15	2	0
11/28/2023 13:30	0	1
11/28/2023 13:45	0	1
11/28/2023 14:00	1	0
11/28/2023 14:15	1	0
11/28/2023 14:30	0	1
11/28/2023 14:45	0	1
11/28/2023 15:00	1	0
11/28/2023 15:15	1	3
11/28/2023 15:30	2	0
11/28/2023 15:45	1	0
11/28/2023 16:00	1	1
11/28/2023 16:15	1	1
11/28/2023 16:30	1	0
11/28/2023 16:45	1	0
11/28/2023 17:00	0	1
11/28/2023 17:15	0	1
11/28/2023 17:30	0	0
11/28/2023 17:45	1	1
11/28/2023 18:00	0	0
11/28/2023 18:15	0	0
11/28/2023 18:30	0	0
11/28/2023 18:45	0	0
11/28/2023 19:00	0	0
11/28/2023 19:15	0	0
11/28/2023 19:30	0	0
11/28/2023 19:45	0	0
11/28/2023 20:00	0	0
11/28/2023 20:15	0	0
11/28/2023 20:30	0	0
11/28/2023 20:45	0	0

11/28/2023 21:00	0	0
11/28/2023 21:15	0	0
11/28/2023 21:30	0	0
11/28/2023 21:45	0	0
11/28/2023 22:00	0	0
11/28/2023 22:15	0	0
11/28/2023 22:30	0	0
11/28/2023 22:45	0	0
11/28/2023 23:00	0	0
11/28/2023 23:15	0	0
11/28/2023 23:30	0	0
11/28/2023 23:45	0	0
11/29/2023 0:00	0	0
11/29/2023 0:15	0	0
11/29/2023 0:30	0	0
11/29/2023 0:45	0	0
11/29/2023 1:00	0	0
11/29/2023 1:15	0	0
11/29/2023 1:30	0	0
11/29/2023 1:45	0	0
11/29/2023 2:00	0	0
11/29/2023 2:15	0	0
11/29/2023 2:30	0	0
11/29/2023 2:45	0	0
11/29/2023 3:00	0	0
11/29/2023 3:15	0	0
11/29/2023 3:30	0	0
11/29/2023 3:45	0	0
11/29/2023 4:00	0	1
11/29/2023 4:15	0	0
11/29/2023 4:30	0	0
11/29/2023 4:45	0	0
11/29/2023 5:00	0	0
11/29/2023 5:15	0	0
11/29/2023 5:30	0	0
11/29/2023 5:45	0	0
11/29/2023 6:00	0	0
11/29/2023 6:15	0	0
11/29/2023 6:30	0	0
11/29/2023 6:45	1	0
11/29/2023 7:00	2	2
11/29/2023 7:15	0	1
11/29/2023 7:30	0	2
11/29/2023 7:45	0	0

11/29/2023 8:00	1	0
11/29/2023 8:15	0	1
11/29/2023 8:30	2	0
11/29/2023 8:45	0	1
11/29/2023 9:00	1	2
11/29/2023 9:15	1	4
11/29/2023 9:30	0	1
11/29/2023 9:45	0	0
11/29/2023 10:00	0	0
11/29/2023 10:15	1	1
11/29/2023 10:30	1	0
11/29/2023 10:45	1	1
11/29/2023 11:00	3	1
11/29/2023 11:15	2	1
11/29/2023 11:30	1	2
11/29/2023 11:45	1	1
11/29/2023 12:00	1	2
11/29/2023 12:15	2	0
11/29/2023 12:30	0	1
11/29/2023 12:45	1	0
11/29/2023 13:00	1	1
11/29/2023 13:15	0	1
11/29/2023 13:30	1	0
11/29/2023 13:45	0	1
11/29/2023 14:00	1	1
11/29/2023 14:15	1	0
11/29/2023 14:30	1	3
11/29/2023 14:45	3	1
11/29/2023 15:00	1	2
11/29/2023 15:15	1	0
11/29/2023 15:30	0	0
11/29/2023 15:45	2	2
11/29/2023 16:00	1	0
11/29/2023 16:15	1	0
11/29/2023 16:30	0	0
11/29/2023 16:45	0	0
11/29/2023 17:00	1	0
11/29/2023 17:15	0	0
11/29/2023 17:30	1	1
11/29/2023 17:45	0	0
11/29/2023 18:00	1	1
11/29/2023 18:15	0	0
11/29/2023 18:30	0	1
11/29/2023 18:45	0	0

11/29/2023 19:00	0	0
11/29/2023 19:15	0	0
11/29/2023 19:30	0	0
11/29/2023 19:45	0	0
11/29/2023 20:00	0	0
11/29/2023 20:15	0	0
11/29/2023 20:30	0	0
11/29/2023 20:45	0	0
11/29/2023 21:00	0	0
11/29/2023 21:15	0	0
11/29/2023 21:30	0	0
11/29/2023 21:45	0	0
11/29/2023 22:00	0	0
11/29/2023 22:15	0	0
11/29/2023 22:30	0	0
11/29/2023 22:45	0	0
11/29/2023 23:00	0	0
11/29/2023 23:15	0	0
11/29/2023 23:30	0	0
11/29/2023 23:45	0	0

Articulated Trucks			
Entry		n/a	n/a
Direction		Westbound	Eastbound
Start Time		Thru	Thru
	11/28/2023 0:00	0	0
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	0	0
	11/28/2023 1:00	0	2
	11/28/2023 1:15	0	0
	11/28/2023 1:30	0	0
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	0
	11/28/2023 2:15	0	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	0	0
	11/28/2023 3:45	0	0
	11/28/2023 4:00	0	0
	11/28/2023 4:15	0	0
	11/28/2023 4:30	1	0
	11/28/2023 4:45	0	0
	11/28/2023 5:00	0	0
	11/28/2023 5:15	0	0
	11/28/2023 5:30	0	0
	11/28/2023 5:45	1	0
	11/28/2023 6:00	0	0
	11/28/2023 6:15	0	0
	11/28/2023 6:30	0	1
	11/28/2023 6:45	0	0
	11/28/2023 7:00	0	0
	11/28/2023 7:15	0	0
	11/28/2023 7:30	0	0
	11/28/2023 7:45	0	0
	11/28/2023 8:00	0	0
	11/28/2023 8:15	1	0
	11/28/2023 8:30	0	0
	11/28/2023 8:45	0	0
	11/28/2023 9:00	0	0
	11/28/2023 9:15	1	0
	11/28/2023 9:30	0	0
	11/28/2023 9:45	0	0

11/28/2023 10:00	0	0
11/28/2023 10:15	0	0
11/28/2023 10:30	0	0
11/28/2023 10:45	0	0
11/28/2023 11:00	0	0
11/28/2023 11:15	0	0
11/28/2023 11:30	0	0
11/28/2023 11:45	0	0
11/28/2023 12:00	0	0
11/28/2023 12:15	0	1
11/28/2023 12:30	0	0
11/28/2023 12:45	1	0
11/28/2023 13:00	0	0
11/28/2023 13:15	0	0
11/28/2023 13:30	0	0
11/28/2023 13:45	0	0
11/28/2023 14:00	0	1
11/28/2023 14:15	0	0
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11/28/2023 15:30	0	0
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11/28/2023 16:45	0	0
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11/28/2023 20:45	0	0

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11/28/2023 21:30	0	0
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11/29/2023 6:30	0	0
11/29/2023 6:45	0	0
11/29/2023 7:00	0	0
11/29/2023 7:15	0	0
11/29/2023 7:30	0	0
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11/29/2023 8:30	0	1
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11/29/2023 23:15	0	0
11/29/2023 23:30	0	0
11/29/2023 23:45	0	0

Buses			
Entry		n/a	n/a
Direction		Westbound	Eastbound
Start Time		Thru	Thru
	11/28/2023 0:00	0	0
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	0	0
	11/28/2023 1:00	0	0
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	11/28/2023 1:45	0	0
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	11/28/2023 3:45	0	0
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	11/28/2023 6:45	0	0
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	11/28/2023 8:30	0	0
	11/28/2023 8:45	0	0
	11/28/2023 9:00	0	0
	11/28/2023 9:15	0	0
	11/28/2023 9:30	0	0
	11/28/2023 9:45	0	0

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11/28/2023 10:15	0	0
11/28/2023 10:30	0	0
11/28/2023 10:45	0	0
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11/28/2023 20:15	0	0
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11/28/2023 21:15	0	0
11/28/2023 21:30	0	0
11/28/2023 21:45	0	0
11/28/2023 22:00	0	0
11/28/2023 22:15	0	0
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11/29/2023 7:00	0	0
11/29/2023 7:15	0	0
11/29/2023 7:30	0	0
11/29/2023 7:45	0	1

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11/29/2023 9:00	0	0
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11/29/2023 17:30	0	0
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11/29/2023 18:15	0	0
11/29/2023 18:30	0	0
11/29/2023 18:45	0	0

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11/29/2023 19:15	0	0
11/29/2023 19:30	0	0
11/29/2023 19:45	0	0
11/29/2023 20:00	0	0
11/29/2023 20:15	0	0
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11/29/2023 22:30	0	0
11/29/2023 22:45	0	0
11/29/2023 23:00	0	0
11/29/2023 23:15	0	0
11/29/2023 23:30	0	0
11/29/2023 23:45	0	0

Bicycles on Road			
Entry		n/a	n/a
Direction		Westbound	Eastbound
Start Time		Thru	Thru
	11/28/2023 0:00	0	0
	11/28/2023 0:15	0	0
	11/28/2023 0:30	0	0
	11/28/2023 0:45	0	0
	11/28/2023 1:00	0	0
	11/28/2023 1:15	0	0
	11/28/2023 1:30	0	0
	11/28/2023 1:45	0	0
	11/28/2023 2:00	0	0
	11/28/2023 2:15	0	0
	11/28/2023 2:30	0	0
	11/28/2023 2:45	0	0
	11/28/2023 3:00	0	0
	11/28/2023 3:15	0	0
	11/28/2023 3:30	0	0
	11/28/2023 3:45	0	0
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	11/28/2023 8:30	0	0
	11/28/2023 8:45	0	0
	11/28/2023 9:00	0	0
	11/28/2023 9:15	0	0
	11/28/2023 9:30	0	0
	11/28/2023 9:45	0	0

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11/28/2023 10:15	0	0
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11/28/2023 10:45	0	0
11/28/2023 11:00	0	0
11/28/2023 11:15	0	0
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11/28/2023 11:45	0	0
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11/28/2023 22:00	0	0
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11/29/2023 6:30	0	0
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11/29/2023 9:15	0	0
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11/29/2023 22:30	0	0
11/29/2023 22:45	0	0
11/29/2023 23:00	0	0
11/29/2023 23:15	0	0
11/29/2023 23:30	0	0
11/29/2023 23:45	0	0

Summary	
Study Name	239522-A (Potter Hill Road at River Road) TMC
Project	239522-Westerly RI
Project Code	
Legs and Movements	All Processed Legs & Movements
Bin Size	15 minutes
Time Zone	America/New_York
Start Time	11/28/2023 7:00
End Time	11/28/2023 19:00
Location	Potter Hill Road at River Road
Latitude and Longitude	41.413712,-71.796865
AM Peak	7 AM - 8 AM (0.841)
Midday Peak	11:45 AM - 12:45 PM (0.820)
PM Peak (Overall Peak Hour)	3 PM - 4 PM (0.944)
Lights	

Entry	Potter Hill Road					River Road					Potter Hill Road				
Direction	Southbound					Northbound					Eastbound				
Start Time	Right	Thru	U-Turn	Peds CW	Peds CCW	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Left	U-Turn	Peds CW	Peds CCW
11/28/2023 7:00	0	7	0	0	0	3	1	0	0	0	1	10	0	0	0
11/28/2023 7:15	1	5	0	0	0	3	0	0	0	0	1	3	0	0	0
11/28/2023 7:30	3	8	0	0	0	3	0	0	0	0	0	6	0	0	0
11/28/2023 7:45	1	4	0	0	0	2	1	0	0	0	0	9	0	0	0
11/28/2023 8:00	5	3	0	0	0	1	0	0	0	0	0	5	0	0	0
11/28/2023 8:15	1	3	0	0	0	3	0	0	0	0	0	1	0	0	0
11/28/2023 8:30	0	3	0	0	0	2	0	0	0	0	0	2	0	0	0
11/28/2023 8:45	3	8	0	0	0	7	0	0	0	0	0	6	0	0	0
11/28/2023 9:00	2	2	0	0	0	2	0	0	0	0	0	4	0	0	0
11/28/2023 9:15	2	5	0	0	0	1	0	0	0	0	1	2	0	0	0
11/28/2023 9:30	2	0	0	0	0	3	0	0	0	0	1	8	0	0	0
11/28/2023 9:45	2	2	0	0	0	3	0	0	0	0	0	3	0	0	0
11/28/2023 10:00	1	5	0	0	0	2	0	0	0	0	0	7	0	0	0
11/28/2023 10:15	2	7	0	0	0	3	0	0	0	0	1	0	0	0	0
11/28/2023 10:30	0	3	0	0	0	2	0	0	0	0	1	2	0	0	0
11/28/2023 10:45	0	4	0	0	0	4	2	0	0	0	1	2	0	0	0
11/28/2023 11:00	4	1	0	0	0	2	0	0	0	0	0	3	0	0	0
11/28/2023 11:15	2	3	0	0	0	4	2	0	0	0	1	4	0	0	0
11/28/2023 11:30	1	3	0	0	0	2	0	0	0	0	2	0	0	0	0
11/28/2023 11:45	8	4	0	0	0	5	2	0	0	0	2	2	0	0	0
11/28/2023 12:00	1	4	0	0	0	6	1	1	0	0	2	3	0	0	0
11/28/2023 12:15	1	6	0	0	0	8	0	0	0	0	2	2	0	0	0
11/28/2023 12:30	2	3	0	0	0	4	1	0	0	0	1	7	0	0	0
11/28/2023 12:45	4	5	0	0	0	2	0	0	0	0	2	7	0	0	0
11/28/2023 13:00	1	1	0	0	0	5	1	0	0	0	1	4	0	0	0
11/28/2023 13:15	7	2	0	0	0	0	1	0	0	0	0	6	0	0	0
11/28/2023 13:30	3	2	0	0	0	7	0	0	0	0	0	1	0	0	0
11/28/2023 13:45	2	2	0	0	0	8	1	0	0	0	1	6	0	0	0
11/28/2023 14:00	8	1	0	0	0	5	0	0	0	0	0	4	0	0	0
11/28/2023 14:15	5	2	0	0	0	5	0	0	0	0	0	3	0	0	0
11/28/2023 14:30	10	3	0	0	0	7	2	0	0	0	1	5	0	0	0
11/28/2023 14:45	5	5	0	0	0	3	1	0	0	0	0	9	0	0	0
11/28/2023 15:00	9	5	0	0	0	4	0	0	0	0	0	8	0	0	0
11/28/2023 15:15	10	3	0	0	0	3	3	0	0	0	1	9	0	0	0
11/28/2023 15:30	5	5	0	0	0	6	1	0	0	0	0	11	0	0	0
11/28/2023 15:45	13	5	0	0	0	4	1	0	0	0	1	3	0	0	0
11/28/2023 16:00	8	3	0	0	0	8	0	0	0	0	0	3	0	0	0
11/28/2023 16:15	8	3	0	0	0	4	3	0	0	0	3	5	0	0	0
11/28/2023 16:30	15	7	0	0	0	6	1	0	0	0	0	6	0	0	0
11/28/2023 16:45	8	5	1	0	0	4	1	0	0	0	1	1	0	0	0
11/28/2023 17:00	4	3	0	0	0	6	0	0	0	0	1	4	0	0	0
11/28/2023 17:15	7	4	0	0	0	2	2	0	0	0	1	2	0	0	0
11/28/2023 17:30	7	6	0	0	0	5	2	0	0	0	0	6	0	0	0
11/28/2023 17:45	5	1	0	0	0	5	0	0	0	0	0	1	0	0	0
11/28/2023 18:00	3	2	0	0	0	2	0	0	0	0	1	1	0	0	0
11/28/2023 18:15	2	2	0	0	0	2	1	0	0	0	0	4	0	0	0
11/28/2023 18:30	1	0	0	0	0	0	0	0	0	0	4	2	0	0	0
11/28/2023 18:45	1	4	0	0	0	3	2	0	0	0	1	3	0	0	0

Single-Unit Trucks

Entry	Potter Hill Road					River Road					Potter Hill Road				
Direction	Southbound					Northbound					Eastbound				
Start Time	Right	Thru	U-Turn	Peds CW	Peds CCW	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Left	U-Turn	Peds CW	Peds CCW
11/28/2023 7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
11/28/2023 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:45	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
11/28/2023 12:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
11/28/2023 13:00	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0
11/28/2023 13:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
11/28/2023 13:30	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
11/28/2023 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:30	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
11/28/2023 14:45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:00	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0
11/28/2023 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:45	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
11/28/2023 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Articulated Trucks

Entry	Potter Hill Road					River Road					Potter Hill Road				
Direction	Southbound					Northbound					Eastbound				
Start Time	Right	Thru	U-Turn	Peds CW	Peds CCW	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Left	U-Turn	Peds CW	Peds CCW
11/28/2023 7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
11/28/2023 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Buses

Entry		Potter Hill Road					River Road					Potter Hill Road				
Direction		Southbound					Northbound					Eastbound				
Start Time		Right	Thru	U-Turn	Peds CW	Peds CCW	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Left	U-Turn	Peds CW	Peds CCW
	11/28/2023 7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 7:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	11/28/2023 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 8:15	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
	11/28/2023 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 11:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	11/28/2023 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 13:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
	11/28/2023 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 14:45	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	11/28/2023 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 15:30	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0
	11/28/2023 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 16:15	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

Entry	Potter Hill Road					River Road					Potter Hill Road				
Direction	Southbound					Northbound					Eastbound				
Start Time	Right	Thru	U-Turn	Peds CW	Peds CCW	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Left	U-Turn	Peds CW	Peds CCW
11/28/2023 7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
11/28/2023 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
11/28/2023 13:30	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Road

Entry	Potter Hill Road					River Road					Potter Hill Road				
Direction	Southbound					Northbound					Eastbound				
Start Time	Right	Thru	U-Turn	Peds CW	Peds CCW	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Left	U-Turn	Peds CW	Peds CCW
11/28/2023 7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

Entry	Potter Hill Road					River Road					Potter Hill Road				
Direction	Southbound					Northbound					Eastbound				
Start Time	Right	Thru	U-Turn	Peds CW	Peds CCW	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Left	U-Turn	Peds CW	Peds CCW
11/28/2023 7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Summary

Study Name	239522-B (Laurel Street at Maxson Street) TMC
Project	239522-Westerly RI
Project Code	
Legs and Movements	All Processed Legs & Movements
Bin Size	15 minutes
Time Zone	America/New_York
Start Time	11/28/2023 7:00
End Time	11/28/2023 19:00
Location	Laurel Street at Maxson Street
Latitude and Longitude	41.414483,-71.795807

AM Peak	7 AM - 8 AM (0.717)
Midday Peak	12:15 PM - 1:15 PM (0.830)
PM Peak (Overall Peak Hour)	2:45 PM - 3:45 PM (0.861)

Lights

Entry	Laurel Street						Maxson Street						Driveway						Potter Hill Road					
Direction	Southbound						Westbound						Northbound						Eastbound					
Start Time	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW
11/28/2023 7:00	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	7	0	0	0
11/28/2023 7:15	4	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0
11/28/2023 7:30	7	0	1	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	4	6	0	0	0
11/28/2023 7:45	3	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	7	2	0	0	0
11/28/2023 8:00	5	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	4	0	0	0
11/28/2023 8:15	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0
11/28/2023 8:30	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	0	0	0
11/28/2023 8:45	6	0	0	0	0	0	0	5	0	0	0	0	0	0	1	0	0	0	0	4	9	0	0	0
11/28/2023 9:00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0
11/28/2023 9:15	6	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0
11/28/2023 9:30	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	7	0	0	0
11/28/2023 9:45	1	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0
11/28/2023 10:00	4	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	6	3	0	0	0
11/28/2023 10:15	8	0	2	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0
11/28/2023 10:30	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0
11/28/2023 10:45	3	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	3	3	0	0	0
11/28/2023 11:00	2	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1	4	0	0	0
11/28/2023 11:15	3	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3	4	0	0	0
11/28/2023 11:30	3	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0
11/28/2023 11:45	6	0	0	0	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	1	7	0	0	0
11/28/2023 12:00	4	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	3	5	0	0	0
11/28/2023 12:15	6	0	2	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	2	9	0	0	0
11/28/2023 12:30	3	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	6	5	0	0	0
11/28/2023 12:45	6	0	3	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	5	4	0	0	0
11/28/2023 13:00	2	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	2	7	0	0	0
11/28/2023 13:15	5	0	1	0	0	0	0	4	0	0	0	0	0	0	1	0	0	0	0	2	4	0	0	0
11/28/2023 13:30	2	0	1	0	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	2	6	0	0	0
11/28/2023 13:45	3	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	5	9	0	0	0
11/28/2023 14:00	4	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	5	0	0	0
11/28/2023 14:15	3	0	1	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	2	7	0	0	0
11/28/2023 14:30	8	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	3	9	0	0	0
11/28/2023 14:45	9	0	2	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	6	6	0	0	0
11/28/2023 15:00	12	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	9	0	0	0
11/28/2023 15:15	10	1	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	6	6	0	0	0
11/28/2023 15:30	6	1	4	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	5	10	0	0	0
11/28/2023 15:45	10	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	4	5	0	0	0
11/28/2023 16:00	5	0	1	0	0	0	3	6	0	0	0	0	0	0	1	0	0	0	0	0	10	0	0	0
11/28/2023 16:15	7	1	1	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5	4	0	0	0
11/28/2023 16:30	13	0	1	0	0	0	1	10	0	0	0	0	0	0	0	0	0	0	0	6	6	0	0	0
11/28/2023 16:45	9	0	1	0	0	0	1	2	0	0	0	0	0	0	0	1	0	0	0	0	6	0	0	0
11/28/2023 17:00	3	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	2	8	0	0	0
11/28/2023 17:15	8	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0
11/28/2023 17:30	8	0	1	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	6	5	0	0	0
11/28/2023 17:45	3	0	1	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	2	4	0	0	0
11/28/2023 18:00	3	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	4	0	0	0
11/28/2023 18:15	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	4	0	0	0
11/28/2023 18:30	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
11/28/2023 18:45	5	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	4	0	0	0

Single-Unit Trucks

Entry	Laurel Street						Maxson Street						Driveway						Potter Hill Road					
Direction	Southbound						Westbound						Northbound						Eastbound					
Start Time	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW
11/28/2023 7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:30	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:30	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
11/28/2023 10:45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
11/28/2023 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
11/28/2023 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
11/28/2023 12:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:15	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:45	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
11/28/2023 13:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
11/28/2023 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
11/28/2023 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
11/28/2023 14:45	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
11/28/2023 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:45	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
11/28/2023 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Articulated Trucks

Entry	Laurel Street						Maxson Street						Driveway						Potter Hill Road					
Direction	Southbound						Westbound						Northbound						Eastbound					
Start Time	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW
11/28/2023 7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:15	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Buses

Entry	Laurel Street						Maxson Street						Driveway						Potter Hill Road					
Direction	Southbound						Westbound						Northbound						Eastbound					
Start Time	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW
11/28/2023 7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:15	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:30	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
11/28/2023 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:45	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:30	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
11/28/2023 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:15	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

Entry	Laurel Street						Maxson Street						Driveway						Potter Hill Road					
Direction	Southbound						Westbound						Northbound						Eastbound					
Start Time	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW
11/28/2023 7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:30	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
11/28/2023 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:45	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
11/28/2023 14:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
11/28/2023 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Road

Entry	Laurel Street						Maxson Street						Driveway						Potter Hill Road					
Direction	Southbound						Westbound						Northbound						Eastbound					
Start Time	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW
11/28/2023 7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:15	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:30	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

Entry	Laurel Street						Maxson Street						Driveway						Potter Hill Road					
Direction	Southbound						Westbound						Northbound						Eastbound					
Start Time	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW
11/28/2023 7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
11/28/2023 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Summary

Study Name	239522-C (Main Street at Oak Street) TMC
Project	239522-Westerly RI
Project Code	
Legs and Movements	All Processed Legs & Movements
Bin Size	15 minutes
Time Zone	America/New_York
Start Time	11/28/2023 7:00
End Time	11/28/2023 19:00
Location	Main Street at Oak Street
Latitude and Longitude	41.415947,-71.790946

AM Peak	7:30 AM - 8:30 AM (0.861)
Midday Peak	12:30 PM - 1:30 PM (0.936)
PM Peak (Overall Peak Hour)	3:45 PM - 4:45 PM (0.955)

Lights

Entry	Main Street						Oak Street						Main Street						Maxson Street					
Direction	Southbound						Westbound						Northbound						Eastbound					
Start Time	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW
11/28/2023 7:00	0	71	1	0	0	0	3	0	4	0	0	0	0	64	0	0	0	0	1	0	9	0	0	0
11/28/2023 7:15	1	62	0	0	0	0	3	1	0	0	0	0	0	68	0	0	0	0	1	0	3	0	0	0
11/28/2023 7:30	4	83	1	0	0	0	4	2	0	0	0	0	0	66	0	0	0	0	1	0	3	0	0	0
11/28/2023 7:45	2	90	3	0	0	0	1	0	2	0	0	0	0	73	0	0	0	0	1	0	11	0	0	0
11/28/2023 8:00	7	77	1	0	0	0	4	0	2	0	0	0	1	50	0	0	0	0	0	0	3	0	0	0
11/28/2023 8:15	1	72	0	0	0	0	2	0	0	0	0	0	0	61	0	0	0	0	0	2	1	0	0	0
11/28/2023 8:30	1	73	1	0	0	0	2	0	3	0	0	0	0	59	0	0	0	0	0	1	0	0	0	0
11/28/2023 8:45	1	88	1	0	0	0	1	1	1	0	0	0	1	57	1	0	0	0	0	0	3	0	0	0
11/28/2023 9:00	2	59	2	0	0	0	0	0	1	0	0	0	1	53	0	0	0	0	1	0	8	0	0	0
11/28/2023 9:15	2	62	0	0	0	0	1	0	0	0	0	0	1	64	0	0	0	0	0	0	3	0	0	0
11/28/2023 9:30	2	63	0	0	0	0	3	0	2	0	0	0	1	58	0	0	0	0	1	0	5	0	0	0
11/28/2023 9:45	3	64	2	0	0	0	1	0	3	0	0	0	1	49	0	0	0	0	0	0	1	0	0	0
11/28/2023 10:00	5	59	1	0	0	0	1	0	0	0	0	0	2	68	0	0	0	0	0	0	8	0	0	0
11/28/2023 10:15	3	54	2	0	0	0	0	0	1	0	0	0	0	59	1	0	0	0	1	0	4	0	0	0
11/28/2023 10:30	1	64	1	0	0	0	2	0	2	0	0	0	1	53	1	0	0	0	1	0	2	0	0	0
11/28/2023 10:45	1	60	0	0	0	0	3	0	2	0	0	0	0	58	0	0	0	0	0	0	4	0	0	0
11/28/2023 11:00	2	57	1	0	0	0	1	0	1	0	0	0	0	53	3	0	0	0	1	0	0	0	0	0
11/28/2023 11:15	2	46	0	0	0	0	2	1	0	0	0	0	1	45	1	0	0	0	1	1	2	0	0	0
11/28/2023 11:30	1	63	1	0	0	0	1	1	0	0	0	0	1	61	0	0	0	0	1	0	3	0	0	0
11/28/2023 11:45	5	47	0	0	0	0	0	1	1	0	0	0	3	62	1	0	0	0	0	0	1	0	0	0
11/28/2023 12:00	2	49	0	0	0	0	1	0	1	0	0	0	4	57	0	0	0	0	0	0	4	0	0	0
11/28/2023 12:15	6	59	1	0	0	0	0	0	3	0	0	0	2	70	0	0	0	0	1	0	5	0	0	0
11/28/2023 12:30	3	70	2	0	0	0	0	1	3	0	0	0	4	90	1	0	0	0	1	0	1	0	0	0
11/28/2023 12:45	5	57	2	0	0	0	1	0	0	0	0	0	0	78	0	0	0	0	0	0	7	0	0	0
11/28/2023 13:00	6	70	2	0	0	0	5	0	2	0	0	0	2	65	0	0	0	0	1	0	6	0	0	0
11/28/2023 13:15	5	63	1	0	0	0	1	2	1	0	0	0	5	79	0	0	0	0	1	1	2	0	0	0
11/28/2023 13:30	3	54	1	0	0	0	0	1	2	0	0	0	2	58	0	0	0	0	0	1	0	0	0	0
11/28/2023 13:45	3	52	2	0	0	0	1	0	0	0	0	0	1	60	0	0	0	0	1	2	4	0	0	0
11/28/2023 14:00	5	63	0	0	0	0	0	0	0	0	0	0	2	79	1	0	0	0	0	0	2	0	0	0
11/28/2023 14:15	2	60	1	0	0	0	1	1	0	0	0	0	2	84	0	0	0	0	0	0	8	0	0	0
11/28/2023 14:30	7	71	0	0	0	0	0	1	2	0	0	0	4	90	2	0	0	0	0	2	2	0	0	0
11/28/2023 14:45	1	59	2	0	0	0	7	1	0	0	0	0	1	82	3	0	0	0	1	1	3	0	0	0
11/28/2023 15:00	3	71	2	0	0	0	1	0	4	0	0	0	3	100	0	0	0	0	0	0	7	0	0	0
11/28/2023 15:15	4	76	1	0	0	0	3	1	2	0	0	0	6	95	0	0	0	0	0	0	4	0	0	0
11/28/2023 15:30	9	99	5	0	0	0	5	0	1	0	0	0	7	91	1	0	0	0	2	0	7	0	0	0
11/28/2023 15:45	9	72	3	0	0	0	4	0	3	0	0	0	2	104	0	0	0	0	2	3	3	0	0	0
11/28/2023 16:00	11	87	3	0	0	0	3	2	0	0	0	0	1	113	0	0	0	0	1	0	3	0	0	0
11/28/2023 16:15	9	96	6	0	0	0	1	1	1	0	0	0	2	115	0	0	0	0	0	0	3	0	0	0
11/28/2023 16:30	10	108	6	0	0	0	4	1	1	0	0	0	4	99	0	0	0	0	1	0	8	0	0	0
11/28/2023 16:45	5	74	0	0	0	0	2	0	2	0	0	0	2	85	0	0	0	0	0	0	2	0	0	0
11/28/2023 17:00	4	71	4	0	0	0	1	0	0	0	0	0	3	89	0	0	0	0	1	0	2	0	0	0
11/28/2023 17:15	4	99	3	0	0	0	3	0	1	0	0	0	1	95	2	0	0	0	0	0	2	0	0	0
11/28/2023 17:30	3	62	2	0	0	0	1	1	2	0	0	0	4	68	0	0	0	0	1	1	4	0	0	0
11/28/2023 17:45	4	60	3	0	0	0	3	0	2	0	0	0	2	57	0	0	0	0	0	0	1	0	0	0
11/28/2023 18:00	2	48	3	0	0	0	0	0	3	0	0	0	1	56	0	0	0	0	0	0	1	0	0	0
11/28/2023 18:15	2	52	0	0	0	0	0	0	2	0	0	0	0	43	1	0	0	0	0	1	1	0	0	0
11/28/2023 18:30	2	35	3	0	0	0	0	0	2	0	0	0	2	44	1	0	0	0	0	0	1	0	0	0
11/28/2023 18:45	1	35	1	0	0	0	1	0	1	0	0	0	5	28	0	0	0	0	0	1	1	1	0	0

Single-Unit Trucks

Entry	Main Street						Oak Street						Main Street						Maxson Street					
Direction	Southbound						Westbound						Northbound						Eastbound					
Start Time	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW
11/28/2023 7:00	0	7	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:15	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:30	0	4	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
11/28/2023 7:45	0	4	1	0	0	0	0	0	1	0	0	0	0	4	0	0	0	0	0	0	1	0	0	0
11/28/2023 8:00	0	10	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:15	0	6	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:30	0	6	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:45	0	5	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:00	0	4	0	0	0	0	0	0	1	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:15	0	2	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:30	0	2	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:45	0	6	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:00	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:15	1	2	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	1	0	0	0	0	0
11/28/2023 10:30	0	8	0	0	0	0	0	0	1	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:45	0	2	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:00	0	4	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0
11/28/2023 11:15	0	3	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0
11/28/2023 11:30	0	2	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:45	0	4	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:15	0	3	0	0	0	0	1	0	0	0	0	0	0	3	1	0	0	0	0	0	1	0	0	0
11/28/2023 12:30	0	3	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:45	0	6	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	1	0	0	0	0	0
11/28/2023 13:00	1	3	0	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:15	0	4	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:45	0	6	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:00	0	3	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	1	0	0	0
11/28/2023 14:15	0	2	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	1	0	0	0
11/28/2023 14:45	1	6	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:00	1	2	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:15	0	1	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:30	0	1	0	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:45	0	3	0	0	0	0	0	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:00	0	1	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:15	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:30	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0
11/28/2023 17:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:45	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0

Articulated Trucks

Entry	Main Street						Oak Street						Main Street						Maxson Street					
Direction	Southbound						Westbound						Northbound						Eastbound					
Start Time	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW
11/28/2023 7:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:45	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:15	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:30	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:00	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:00	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:30	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:15	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:30	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:45	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:00	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:30	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:00	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:45	0	1	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:45	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:45	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Buses

Entry	Main Street						Oak Street						Main Street						Maxson Street					
Direction	Southbound						Westbound						Northbound						Eastbound					
Start Time	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW
11/28/2023 7:00	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
11/28/2023 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
11/28/2023 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:45	2	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:15	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0
11/28/2023 15:45	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0
11/28/2023 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:15	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0

Pedestrians

Entry	Main Street						Oak Street						Main Street						Maxson Street					
Direction	Southbound						Westbound						Northbound						Eastbound					
Start Time	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW
11/28/2023 7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11/28/2023 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Road

Entry	Main Street						Oak Street						Main Street						Maxson Street					
Direction	Southbound						Westbound						Northbound						Eastbound					
Start Time	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW
11/28/2023 7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

Entry	Main Street						Oak Street						Main Street						Maxson Street					
Direction	Southbound						Westbound						Northbound						Eastbound					
Start Time	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	Left	U-Turn	Peds CW	Peds CCW
11/28/2023 7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
11/28/2023 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11/28/2023 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Summary	
Study Name	239522-D (Laurel Street at High Street) TMC
Project	239522-Westerly RI
Project Code	
Legs and Movements	All Processed Legs & Movements
Bin Size	15 minutes
Time Zone	America/New_York
Start Time	11/28/2023 7:00
End Time	11/28/2023 19:00
Location	Laurel Street at High Street
Latitude and Longitude	41.42504,-71.790168
AM Peak	8 AM - 9 AM (0.915)
Midday Peak	11:30 AM - 12:30 PM (0.885)
PM Peak (Overall Peak Hour)	3:30 PM - 4:30 PM (0.968)
Lights	

Entry	High Street						Laurel Street						High Street			
Direction	Westbound						Northbound						Eastbound			
Start Time	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	U-Turn	Peds CW	Peds CCW	
11/28/2023 7:00	19	0	0	0	0	2	7	0	0	0	5	14	0	0	0	
11/28/2023 7:15	19	0	0	0	0	2	3	0	0	0	5	17	0	0	0	
11/28/2023 7:30	28	0	0	0	0	0	7	0	0	0	6	13	0	0	0	
11/28/2023 7:45	20	1	0	0	0	1	3	0	0	0	1	23	0	0	0	
11/28/2023 8:00	14	1	0	0	0	3	5	0	0	0	6	20	0	0	0	
11/28/2023 8:15	18	2	0	0	0	2	3	0	0	0	5	16	0	0	0	
11/28/2023 8:30	21	0	0	0	0	0	7	0	0	0	6	24	0	0	0	
11/28/2023 8:45	25	0	0	0	0	2	6	0	0	0	2	26	0	0	0	
11/28/2023 9:00	16	2	0	0	0	0	2	0	0	0	5	18	0	0	0	
11/28/2023 9:15	25	1	0	0	0	0	3	0	0	0	5	13	0	0	0	
11/28/2023 9:30	20	0	0	0	0	2	7	0	0	0	2	17	0	0	0	
11/28/2023 9:45	14	0	0	0	0	1	4	0	0	0	1	11	0	0	0	
11/28/2023 10:00	9	0	0	0	0	1	2	0	0	0	6	19	0	0	0	
11/28/2023 10:15	19	1	0	0	0	0	3	0	0	0	8	19	0	0	0	
11/28/2023 10:30	14	0	0	0	0	0	3	0	0	0	3	9	0	0	0	
11/28/2023 10:45	12	0	0	0	0	0	5	0	0	0	0	22	0	0	0	
11/28/2023 11:00	13	0	0	0	0	0	1	0	0	0	4	14	0	0	0	
11/28/2023 11:15	10	1	0	0	0	3	6	0	0	0	1	13	0	0	0	
11/28/2023 11:30	20	0	0	0	0	0	3	0	0	0	5	24	0	0	0	
11/28/2023 11:45	20	1	0	0	0	2	4	0	0	0	7	23	0	0	0	
11/28/2023 12:00	16	2	0	0	0	0	9	0	0	0	5	12	0	0	0	
11/28/2023 12:15	19	0	0	0	0	1	4	0	0	0	10	24	0	0	0	
11/28/2023 12:30	22	2	0	0	0	2	4	0	0	0	3	18	0	0	0	
11/28/2023 12:45	15	1	0	0	0	0	2	0	0	0	7	19	0	0	0	
11/28/2023 13:00	20	0	0	0	0	1	8	0	0	0	4	15	0	0	0	
11/28/2023 13:15	10	3	0	0	0	2	6	0	0	0	3	20	0	0	0	
11/28/2023 13:30	13	1	0	0	0	0	5	0	0	0	2	19	0	0	0	
11/28/2023 13:45	16	0	0	0	0	3	9	0	0	0	3	21	0	0	0	
11/28/2023 14:00	18	0	0	0	0	0	3	0	0	0	5	16	0	0	0	
11/28/2023 14:15	26	2	0	0	0	0	6	0	0	0	6	40	0	0	0	
11/28/2023 14:30	22	2	0	0	0	3	4	0	0	0	4	20	0	0	0	
11/28/2023 14:45	28	4	0	0	0	1	5	0	0	0	10	40	0	0	0	
11/28/2023 15:00	21	2	0	0	0	10	14	0	0	0	9	18	0	0	0	
11/28/2023 15:15	23	3	0	0	0	0	8	0	0	0	11	32	0	0	0	
11/28/2023 15:30	24	2	0	0	0	4	12	0	0	0	6	28	0	0	0	
11/28/2023 15:45	30	3	0	0	0	4	7	0	0	0	8	29	0	0	0	
11/28/2023 16:00	29	2	0	0	0	1	10	0	0	0	5	35	0	0	0	
11/28/2023 16:15	21	2	0	0	0	2	5	0	0	0	9	42	0	0	0	
11/28/2023 16:30	22	2	0	0	0	0	7	0	0	0	12	29	0	0	0	
11/28/2023 16:45	33	2	0	0	0	1	8	0	0	0	6	35	0	0	0	
11/28/2023 17:00	31	0	0	0	0	2	6	0	0	0	8	32	0	0	0	
11/28/2023 17:15	29	1	0	0	0	2	3	0	0	0	7	38	0	0	0	
11/28/2023 17:30	17	1	0	0	0	0	7	0	0	0	6	22	0	0	0	
11/28/2023 17:45	11	2	0	0	0	2	3	0	0	0	5	20	0	0	0	
11/28/2023 18:00	19	1	0	0	0	0	3	0	0	0	5	18	0	0	0	
11/28/2023 18:15	16	1	0	0	0	2	0	0	0	0	3	13	0	0	0	
11/28/2023 18:30	20	1	0	0	0	1	2	0	0	0	0	16	0	0	0	
11/28/2023 18:45	17	1	0	0	0	1	5	0	0	0	5	21	0	0	0	

Single-Unit Trucks

Entry	High Street						Laurel Street						High Street			
Direction	Westbound						Northbound						Eastbound			
Start Time	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	U-Turn	Peds CW	Peds CCW	
11/28/2023 7:00	1	0	0	0	0	0	0	0	0	0	0	3	0	0	0	
11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
11/28/2023 7:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	
11/28/2023 7:45	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
11/28/2023 8:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 8:15	3	0	0	0	0	0	0	0	0	0	0	4	0	0	0	
11/28/2023 8:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	
11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
11/28/2023 9:00	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	
11/28/2023 9:15	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	
11/28/2023 9:30	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
11/28/2023 9:45	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	
11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	
11/28/2023 10:15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 10:30	3	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
11/28/2023 10:45	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
11/28/2023 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 11:30	2	0	0	0	0	0	1	0	0	0	0	1	0	0	0	
11/28/2023 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 12:00	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 12:15	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 12:45	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
11/28/2023 13:00	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	
11/28/2023 13:15	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
11/28/2023 13:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
11/28/2023 13:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
11/28/2023 14:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 14:30	1	0	0	0	0	0	1	0	0	0	0	1	0	0	0	
11/28/2023 14:45	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	
11/28/2023 15:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 15:15	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	
11/28/2023 15:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 15:45	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
11/28/2023 16:00	1	0	0	0	0	0	1	0	0	0	1	1	0	0	0	
11/28/2023 16:15	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
11/28/2023 16:30	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
11/28/2023 16:45	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
11/28/2023 17:00	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 17:45	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	
11/28/2023 18:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
11/28/2023 18:15	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

11/28/2023 18:45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Articulated Trucks

Entry	High Street						Laurel Street						High Street			
Direction	Westbound						Northbound						Eastbound			
Start Time	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	U-Turn	Peds CW	Peds CCW	
11/28/2023 7:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 7:30	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
11/28/2023 7:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
11/28/2023 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 12:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 12:45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 14:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 15:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	
11/28/2023 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 15:45	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
11/28/2023 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 16:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

	11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Buses

Entry		High Street						Laurel Street					High Street			
Direction		Westbound						Northbound					Eastbound			
Start Time		Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	U-Turn	Peds CW	Peds CCW
	11/28/2023 7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 8:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 8:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	11/28/2023 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 14:30	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	11/28/2023 14:45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 15:30	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	11/28/2023 15:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	11/28/2023 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

Entry	High Street					Laurel Street					High Street				
Direction	Westbound					Northbound					Eastbound				
Start Time	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	U-Turn	Peds CW	Peds CCW
11/28/2023 7:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
11/28/2023 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
11/28/2023 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11/28/2023 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:45	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0
11/28/2023 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2
11/28/2023 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
11/28/2023 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
11/28/2023 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
11/28/2023 16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Road

Entry	High Street					Laurel Street					High Street				
Direction	Westbound					Northbound					Eastbound				
Start Time	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	U-Turn	Peds CW	Peds CCW
11/28/2023 7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
11/28/2023 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

Entry	High Street					Laurel Street					High Street				
Direction	Westbound					Northbound					Eastbound				
Start Time	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Left	U-Turn	Peds CW	Peds CCW	Right	Thru	U-Turn	Peds CW	Peds CCW
11/28/2023 7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Summary

Study Name	239522-E (Knight Street at High Street) TMC
Project	239522-Westerly RI
Project Code	
Legs and Movements	All Processed Legs & Movements
Bin Size	15 minutes
Time Zone	America/New_York
Start Time	11/28/2023 7:00
End Time	11/28/2023 19:00
Location	Knight Street at High Street
Latitude and Longitude	41.424367,-71.788374
AM Peak	8 AM - 9 AM (0.868)
Midday Peak	11:30 AM - 12:30 PM (0.882)
PM Peak (Overall Peak Hour)	3:30 PM - 4:30 PM (0.932)
Lights	

Entry	High Street					High Street					Knight Street				
Direction	Southbound					Northbound					Eastbound				
Start Time	Right	Thru	U-Turn	Peds CW	Peds CCW	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Left	U-Turn	Peds CW	Peds CCW
11/28/2023 7:00	0	16	0	0	0	17	0	0	0	0	0	0	0	0	0
11/28/2023 7:15	0	19	0	0	0	20	0	0	0	0	0	0	0	0	0
11/28/2023 7:30	0	10	0	0	0	28	0	0	0	0	0	0	0	0	0
11/28/2023 7:45	1	26	0	0	0	21	0	0	0	0	1	0	0	0	0
11/28/2023 8:00	0	23	0	0	0	17	0	0	0	0	0	0	0	0	0
11/28/2023 8:15	0	19	0	0	0	22	0	0	0	0	0	1	0	0	0
11/28/2023 8:30	0	24	0	0	0	20	0	0	0	0	0	0	0	0	0
11/28/2023 8:45	0	27	0	0	0	26	1	0	0	0	0	0	0	0	0
11/28/2023 9:00	0	21	0	0	0	18	0	0	0	0	0	0	0	0	0
11/28/2023 9:15	1	11	0	0	0	22	0	0	0	0	0	0	0	0	0
11/28/2023 9:30	0	18	0	0	0	21	0	0	0	0	0	0	0	0	0
11/28/2023 9:45	0	12	0	0	0	13	0	0	0	0	1	0	0	0	0
11/28/2023 10:00	0	20	0	0	0	10	0	0	0	0	0	0	0	0	0
11/28/2023 10:15	2	16	0	0	0	19	0	0	0	0	2	1	0	0	0
11/28/2023 10:30	0	10	0	0	0	13	0	0	0	0	0	0	0	0	0
11/28/2023 10:45	1	21	0	0	0	13	1	0	0	0	0	0	0	0	0
11/28/2023 11:00	0	15	0	0	0	12	1	0	0	0	0	0	0	0	0
11/28/2023 11:15	0	16	0	0	0	11	1	0	0	0	1	0	0	0	0
11/28/2023 11:30	1	24	0	0	0	20	1	0	0	0	0	1	0	0	0
11/28/2023 11:45	0	24	0	0	0	20	0	0	0	0	0	1	0	0	0
11/28/2023 12:00	0	13	0	0	0	20	0	0	0	0	0	0	0	0	0
11/28/2023 12:15	0	25	0	0	0	20	1	0	0	0	0	0	0	0	0
11/28/2023 12:30	0	22	0	0	0	21	0	0	0	0	0	0	0	0	0
11/28/2023 12:45	0	18	0	0	0	16	0	0	0	0	1	0	0	0	0
11/28/2023 13:00	1	14	0	0	0	20	1	0	0	0	1	0	0	0	0
11/28/2023 13:15	0	21	0	0	0	13	0	0	0	0	0	0	0	0	0
11/28/2023 13:30	1	16	0	0	0	14	0	0	0	0	0	0	0	0	0
11/28/2023 13:45	0	20	0	0	0	16	0	0	0	0	0	0	0	0	0
11/28/2023 14:00	0	15	0	0	0	15	1	0	0	0	0	2	0	0	0
11/28/2023 14:15	2	38	0	0	0	28	2	0	0	0	1	0	0	0	0
11/28/2023 14:30	1	21	0	0	0	24	2	0	0	0	2	0	0	0	0
11/28/2023 14:45	0	40	0	0	0	32	0	0	0	0	0	1	0	0	0
11/28/2023 15:00	0	29	0	0	0	22	1	0	0	0	0	1	0	0	0
11/28/2023 15:15	2	33	0	0	0	26	1	0	0	0	0	0	0	0	0
11/28/2023 15:30	0	32	0	0	0	26	2	0	0	0	0	0	0	0	0
11/28/2023 15:45	2	31	0	0	0	34	2	0	0	0	3	0	0	0	0
11/28/2023 16:00	2	33	0	0	0	30	1	0	0	0	1	1	0	0	0
11/28/2023 16:15	2	41	0	0	0	23	1	0	0	0	1	0	0	0	0
11/28/2023 16:30	3	26	0	0	0	25	1	0	0	0	0	0	0	0	0
11/28/2023 16:45	1	35	0	0	0	33	0	0	0	0	0	0	0	0	0
11/28/2023 17:00	0	34	0	0	0	29	2	0	0	0	1	1	0	0	0
11/28/2023 17:15	0	40	0	0	0	30	0	0	0	0	0	0	0	0	0
11/28/2023 17:30	1	24	0	0	0	18	4	0	0	0	0	0	0	0	0
11/28/2023 17:45	0	21	0	0	0	13	1	0	0	0	0	0	0	0	0
11/28/2023 18:00	0	17	0	0	0	18	2	0	0	0	1	1	0	0	0
11/28/2023 18:15	0	16	0	0	0	15	1	0	0	0	0	2	0	0	0
11/28/2023 18:30	1	17	0	0	0	22	1	0	0	0	0	0	0	0	0
11/28/2023 18:45	1	19	0	0	0	18	0	0	0	0	1	0	0	0	0

Single-Unit Trucks

Entry		High Street					High Street					Knight Street				
Direction		Southbound					Northbound					Eastbound				
Start Time		Right	Thru	U-Turn	Peds CW	Peds CCW	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Left	U-Turn	Peds CW	Peds CCW
	11/28/2023 7:00	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0
	11/28/2023 7:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 7:30	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 7:45	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
	11/28/2023 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 8:15	0	5	0	0	0	2	0	0	0	0	0	0	0	0	0
	11/28/2023 8:30	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 8:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 9:00	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
	11/28/2023 9:15	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
	11/28/2023 9:30	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0
	11/28/2023 9:45	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0
	11/28/2023 10:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 10:15	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
	11/28/2023 10:30	0	0	0	0	0	4	0	0	0	0	1	0	0	0	0
	11/28/2023 10:45	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
	11/28/2023 11:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 11:15	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	11/28/2023 11:30	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
	11/28/2023 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 12:00	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
	11/28/2023 12:15	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0
	11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 13:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	11/28/2023 13:15	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
	11/28/2023 13:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 13:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 14:00	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
	11/28/2023 14:15	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	11/28/2023 14:30	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
	11/28/2023 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 15:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	11/28/2023 15:15	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
	11/28/2023 15:30	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	11/28/2023 15:45	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	11/28/2023 16:00	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
	11/28/2023 16:15	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
	11/28/2023 16:30	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
	11/28/2023 16:45	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0
	11/28/2023 17:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:45	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
	11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0

Articulated Trucks

Entry	High Street					High Street					Knight Street				
Direction	Southbound					Northbound					Eastbound				
Start Time	Right	Thru	U-Turn	Peds CW	Peds CCW	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Left	U-Turn	Peds CW	Peds CCW
11/28/2023 7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:15	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 12:45	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
11/28/2023 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Buses

Entry		High Street					High Street					Knight Street				
Direction		Southbound					Northbound					Eastbound				
Start Time		Right	Thru	U-Turn	Peds CW	Peds CCW	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Left	U-Turn	Peds CW	Peds CCW
	11/28/2023 7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 8:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	11/28/2023 8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 14:30	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0
	11/28/2023 14:45	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	11/28/2023 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 15:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrians

Entry		High Street					High Street					Knight Street				
Direction		Southbound					Northbound					Eastbound				
Start Time		Right	Thru	U-Turn	Peds CW	Peds CCW	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Left	U-Turn	Peds CW	Peds CCW
	11/28/2023 7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	11/28/2023 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1
	11/28/2023 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3
	11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	11/28/2023 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	11/28/2023 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	11/28/2023 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	11/28/2023 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 13:00	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
	11/28/2023 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
	11/28/2023 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	11/28/2023 16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Road

Entry		High Street					High Street					Knight Street				
Direction		Southbound					Northbound					Eastbound				
Start Time		Right	Thru	U-Turn	Peds CW	Peds CCW	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Left	U-Turn	Peds CW	Peds CCW
	11/28/2023 7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 12:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles on Crosswalk

Entry		High Street					High Street					Knight Street				
Direction		Southbound					Northbound					Eastbound				
Start Time		Right	Thru	U-Turn	Peds CW	Peds CCW	Thru	Left	U-Turn	Peds CW	Peds CCW	Right	Left	U-Turn	Peds CW	Peds CCW
	11/28/2023 7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11/28/2023 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

APPENDIX C

MATERIAL TESTING BREAKDOWNS

CONTROL OF MATERIAL – MATERIAL TESTING BREAKDOWNS

In accordance with **Section 106.01, CERTIFICATION OF MATERIALS** the Contract Items on the Standard Item Breakdown List (PMP - Documents - Construction Project Docs) and following Job Specific Items in this Contract require Material Testing Breakdowns:

Item Code	Item Description	Unit of Measure
203.0510	COFFERDAMS	LS
212.2200	MAINTENANCE AND CLEANING OF EROSION, SEDIMENT, AND POLLUTION PREVENTION CONTROLS	LS
711.0400	WATERWAY	SY
800.9901	PROPOSED BRIDGE NO. 005001	LS
800.9902	PROPOSED BRIDGE NO. 005101	LS
800.9903	PROPOSED BRIDGE NO. 005201	LS
901.1200	GUARDRAIL END TREATMENT PLATFORM	EA
905.1000	PORTLAND CEMENT CONCRETE SIDEWALKS AND DRIVEWAYS	SY
905.2000	ASPHALT CONCRETE SIDEWALKS AND DRIVEWAYS	SY

APPENDIX D

STRUCTURAL DISPOSITION LIST

STRUCTURAL DISPOSITION LIST

Structure ID	Baseline Location	Description	Encroachment Status	Disposition
SD-2-1	Laurel St, Sta. 105+45, Rt. to Sta. 105+55, Rt.	6’ Wood Stockade Privacy Fence	Encroachment	Remove by others
SD-8-1	Laurel St, Sta. 145+16, Rt.	1 Deciduous Tree, 12” cal.	Encroachment	Remove & Dispose
SD-10-1	Maxson St, Sta. 413+67, Rt.	1 Evergreen Tree, 12” cal.	Encroachment	Remove & Dispose

APPENDIX E

STORMWATER POLLUTION PREVENTION PLAN

STORMWATER POLLUTION PREVENTION PLAN
(SOIL EROSION AND SEDIMENT CONTROL PLAN)
FOR
CORRIDOR ASHAWAY
POTTER HILL ROAD, LAUREL STREET, MAXSON STREET
HOPKINTON, RHODE ISLAND

PREPARATION DATE: OCTOBER 2025

•Civil
•Transportation
•Environmental
•Site Planning
•Surveying
•Permitting
•Landscape Architecture

CROSSMAN ENGINEERING

Rhode Island
100 Jefferson Blvd., Suite 200
Warwick, RI 02888
Phone: (401) 738-5660

Massachusetts
1 George Leven Drive, Suite 200
North Attleboro, MA 02760
Phone: (508) 695-1700

Stormwater Pollution Prevention Plan

For:

Corridor Ashaway

Potter Hill Road, Laurel Street, Maxson Street

Hopkinton, Rhode Island

Owner:	**RI DEPARTMENT OF TRANSPORTATION** Alisa Diaz Richardson 2 CAPITOL HILL PROVIDENCE, RI 02903 401-222-2468
Operator:	To be determined upon contract award
Estimated Project Dates:	Start Date: April 2026 Completion Date: April 2028
SWPPP Prepared By:	Crossman Engineering 100 Jefferson Blvd, Suite 200 Warwick, RI 02888 401-738-5660
SWPPP Preparation Date:	October 2025

OWNER CERTIFICATION

RIPDES Construction General Permit – Section V.G

I certify under penalty of law that this document and all attachments were prepared under the direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I am aware that it is the responsibility of the owner/operator to implement and amend the SWPPP as appropriate in accordance with the requirements of the RIPDES Construction General Permit.

Owner Signature: **12/24/25** Date

Owner Name: Alisa Diaz Richardson, PE
Owner Title: Administrator, Environmental Division
Company Name: **Rhode Island Department of Transportation**

Table of Contents

OWNER CERTIFICATION ii
Table of Contents iii
INTRODUCTION 1
ADDITIONAL RESOURCES 2
SECTION 1: SITE DESCRIPTION 3
1.1 Project/Site Information 3
1.2 Nature and Sequence of Construction Activity 4
1.3 Existing and Proposed Soils, Slopes, Vegetation, and Drainage Patterns 4
1.4 Construction Site Estimates 4
1.5 Receiving Waters 5
1.6 Allowable Non-Storm Water Discharges 6
1.7 Existing Data of Known Discharges from Site 6
1.8 Endangered Species Certification/Natural Heritage Areas 7
1.9 Historic Preservation/Cultural Resources 7
1.10 Site Features and Sensitive Areas to be Protected 7
1.11 Potential Sources of Pollution 8
1.12 Site Plans 9
SECTION 2: EROSION AND SEDIMENTATION CONTROLS 10
2.1 Minimize Disturbed Area and Protect Natural Features and Soil 10
2.2 Phase Construction Activity 10
2.3 Control Stormwater Flowing Onto and Through the Project 11
2.4 Stabilizing Soils 11
2.5 Protect Slopes 12
2.6 Protect Storm Drain Inlets 12
2.7 Protect Storm Drain Outfalls 13
2.8 Establish Perimeter Controls and Sediment Barriers 13
2.9 Retain Sediment On-Site and Control Dewatering Practices 13
2.10 Monitoring Weather Conditions 14
2.11 Additional BMPs 14
2.12 Construction Site Erosion and Sediment Control BMPs 14
SECTION 3: GOOD HOUSEKEEPING BMPS 15
3.1 Off-site Tracking of Sediments 15
3.2 Waste Disposal 15
3.3 Spill Prevention and Control Plan 16
3.4 Control of Allowable Non-Storm Water Discharges 16
3.5 Establish Proper Building Material Staging Areas 16
3.6 Designate Washout Areas 17
3.7 Establish Proper Equipment/Vehicle Fueling and Maintenance Practices 17
3.8 Dust Control 17
3.9 Sweeping 18
3.10 Additional BMPs 18
3.11 Construction Site Good Housekeeping BMPs 18
SECTION 4: POST-CONSTRUCTION BMPs 19

4.1 Post-Construction BMPs 19
SECTION 5: MAINTENANCE and INSPECTIONS 20
5.1 Maintenance 20
5.2 Inspections 20
5.3 Corrective Actions 22
SECTION 6: Amendments 23
SECTION 7: Recordkeeping 24
SECTION 8: Party Certifications 25
SWPPP APPENDICES 27
Attachment A – General Location Map .....
Attachment B – Soil Erosion and Sediment Control Plans .....
Attachment C – Inspection Form .....
Attachment D – Amendments Log .....
Attachment E – Additional Information (i.e. documentation) .....

INTRODUCTION

This Construction Site Storm Water Pollution Prevention Plan (SWPPP) has been prepared for the State of Rhode Island Department of Transportation (RIDOT) pursuant to the Rhode Island Department of Environmental Management (RIDEM) Rhode Island Pollutant Discharge Elimination System (RIPDES) Program regulations (amended February 5, 2003). Pursuant to Rule 32 of the RIPDES Regulations, projects proposing to discharge storm water must seek authorization under a RIPDES General Permit. In accordance with the General Permit for Storm Water Discharge Associated with Construction Activity (General Permit), projects that disturb one (1) or more acres require the preparation of a SWPPP and RIDEM authorization following RIPDES review of a Notice of Intent (NOI). This SWPPP provides guidance for complying with the terms and conditions required under the General Permit, however, this document does not negate or eliminate the need to understand and adhere to all applicable RIPDES regulations.

The purpose of erosion and sedimentation best management practices (BMPs) is to prevent pollutants from leaving the construction site and entering waterways or environmentally sensitive areas during and after construction. This SWPPP has been prepared prior to the initiation of construction activities to address anticipated worksite conditions. The best management practices (BMPs) depicted on the site plan and described in this narrative should be considered the minimum measures required to control erosion, sedimentation, and stormwater runoff at the site. Since construction is a dynamic process with changing site conditions, it is the operator's responsibility to manage the site during the construction phases to prevent pollutants from leaving the site. This may require the owner or operator to revise and amend the SWPPP during construction to address varying site and/or weather conditions, such as by adding or realigning erosion or sediment controls, to ensure the SWPPP remains compliant with the General Permit. Records of these changes must be added to the amendment log attached to the SWPPP, and to the site plans as "red-lined" drawings.

The RIDOT Construction Manager and certified Inspector are required to review the SWPPP and sign the Party Certification pages (Section 8). The prime contractor and all subcontractors involved in earthwork or exterior construction activities are also required to review the SWPPP and sign the certification pages before construction begins.

It is the responsibility of the RIDOT Construction Manager to maintain the SWPPP, including all attachments, amendments and inspection records, at the project field office and to make all records available for inspection by RIDEM during construction. (RIPDES Construction General Permit – Section II.A.)

Any questions regarding the SWPPP, BMPs, inspection requirements, or any other facet of this document may be addressed to the RIDOT Environmental Division at 401-734-4892.

Please note: Even if practices are correctly installed on a site according to the approved plan, the site is only in compliance when erosion and sedimentation are effectively controlled throughout the entire site.

ADDITIONAL RESOURCES

Rhode Island Department of Transportation
Environmental Division
360 Lincoln Avenue
Warwick, RI 02888
401-734-4892
http://www.dot.ri.gov/about/stormwater.php

Rhode Island Department of Environmental Management
Office of Water Resources
235 Promenade Street
Providence, RI 02908
(401) 222-3961
http://www.dem.ri.gov/programs/water/

RIDEM RIPDES website
http://www.dem.ri.gov/programs/water/permits/ripdes/

RIDEM Water Quality website (for 303(d) and TMDL listings)
http://www.dem.ri.gov/programs/water/quality/restoration-studies/

RINHS "Natural Heritage" Species
https://rinhs.org/biodiversity-data/info-on-rare-species-in-ri/

RIDEM Geographic Data Viewer – Environmental Resource Map
http://www.dem.ri.gov/maps/index.htm

RIDEM *RI Stormwater Design and Installation Standards Manual* (as amended)
http://www.dem.state.ri.us/programs/benviron/water/permits/ripdes/stwater/t4guide/desman.htm

RIDEM, USDA Soil Conservation Service, and RI State Conservation Committee *Soil Erosion and Sediment Control Handbook* (as amended)
http://www.dem.ri.gov/programs/bnatres/water/pdf/riesc-handbook16.pdf

Rhode Island Department of Transportation *Standard Specifications for Road and Bridge Design and Other Specifications* and *Standard Details*
http://www.dot.ri.gov/business/bluebook.php

Natural Resources Conservation Service - Rhode Island Soil Survey Program
http://www.ri.nrcs.usda.gov/technical/soils.html

EPA NPDES SWPPP website
https://www.epa.gov/npdes/developing-stormwater-pollution-prevention-plan-swppp

EPA National Menu of Stormwater Best Management Practices
https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#edu

SECTION 1: SITE DESCRIPTION

RIPDES Construction General Permit – Section IV.E.1

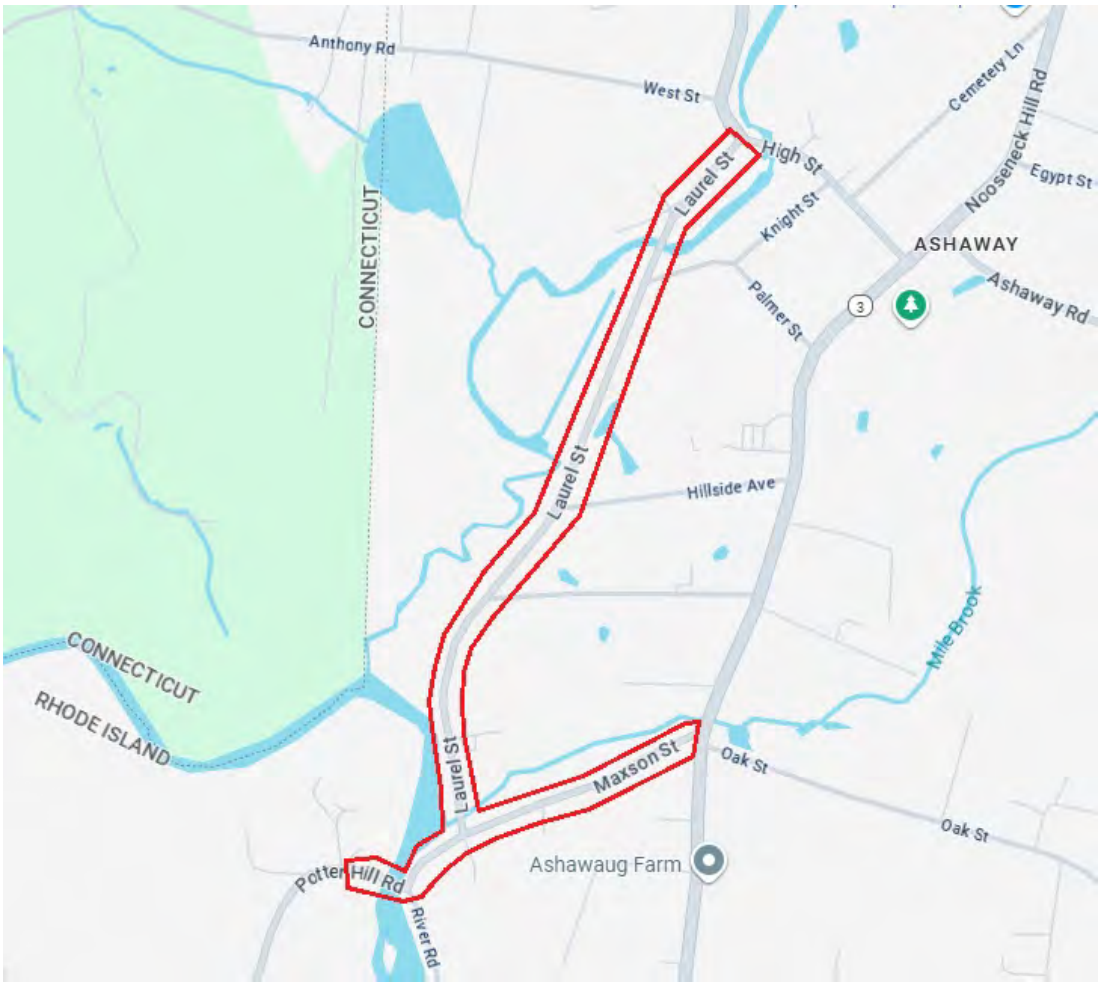
1.1 Project/Site Information

Project/Site Name:

- Corridor Ashaway
- Roadway, Bridge, and Stormwater Improvements

Project Street/Location:

- Potter Hill Road, Laurel Street, Maxson Street
- Hopkinton, RI



1.2 Nature and Sequence of Construction Activity

RIPDES Construction General Permit – IV.E.1.b

Estimated Project Start Date:	April 2026
Estimated Project Completion Date:	April 2028
Estimated Number of Months:	24

1.3 Existing and Proposed Soils, Slopes, Vegetation, and Drainage Patterns

Soil type(s):
RIPDES Construction General Permit – IV.E.1.e

- Cec: Canton and Charlton fine sandy loams, 3-15% slopes, very rocky
- MmA: Merrimac fine sandy loam, 0-3% slopes
- MmB: Merrimac fine sandy loam, 3-8% slopes
- Pp: Pootatuck fine sandy loam
- Rp: Rock outcrop-Canton complex, 0-35% slopes, very stony
- Ru: Rippowam fine sandy loam
- SwA: Swansea muck, 0-1% slopes

Slopes:

- Existing: Roadway slopes are relatively flat, with perimeter/side slopes varying from 5-50%
- Proposed: Proposed slopes will generally mimic existing conditions

Vegetation/Impervious Area:

- Existing: Impervious roadway pavement structures with grass and vegetation along the perimeter
- Proposed: Proposed impervious and vegetative cover shall maintain existing cover to the greatest extent practicable

Drainage Patterns:

- Existing: Stormwater runoff generated onsite drains to numerous existing drainage systems with pipes and outfalls discharging runoff to numerous design points project wide.
- Proposed: Post-development stormwater conditions shall generally maintain and mimic existing conditions

1.4 Construction Site Estimates

RIPDES Construction General Permit – IV.E.1.c & IV.E.1.d

The following are estimates of the construction site:

Total Project Area	±7 acres
Construction Site Area to be disturbed	±6.57 acres
Percentage impervious area before construction	58 %
Runoff coefficient before construction	90
Percentage impervious area after construction	58 %
Runoff coefficient after construction	90

1.5 Receiving Waters

Receiving waters:

RIPDES Construction General Permit – III.A.7

List/description of receiving waters:

- Ashaway River
- Pawcatuck River
- Mile Brook

Storm sewer systems:

RIPDES Construction General Permit – III.A.7

Will construction site stormwater flow to any separate storm sewer systems?

☑Yes ☐ No

If yes, list the separate storm sewer systems and if permits/permission is required:

- Existing RIDOT and Hopkinton drainage systems

303(d)/TMDL waters:

RIPDES Construction General Permit – Section IV

Will project site stormwater flow to any 303(d) listed or TMDL water body (include both active construction and post-construction flow)?

☑Yes ☐ No

If yes, list & provide description of 303(d)/TMDL waters and applicable TMDL requirements:

- Ashaway River - Enterococcus
- Pawcatuck River – Enterococcus, Non-Native Aquatic Plants, Lead
- Mile Brook – Enterococcus, Iron

Special Resource Protection Waters (SRPWs):

Will construction site stormwater flow to any Special Resource Protection Waters (include both active construction and post-construction flow)?

☑Yes ☐ No

If yes, list & provide description of Special Resource Protection Waters:

- Tomaquag Brook-Pawcatuck River

Cold Water Fisheries:

Will construction site stormwater flow to any cold water fishery water body (include both active construction and post-construction flow)?

☑Yes ☐ No

If yes, list & provide description of Cold Water Fisheries:

- Ashaway River and Pawcatuck River

1.6 Allowable Non-Storm Water Discharges

RIPDES Construction General Permit – IV.E.1.g

Are there allowable non-storm water discharges on or near the project area?

☒ Yes ☐ No

List of allowable non-stormwater discharges:

- Water for dust control

Are there any known or contaminated discharges, including dewatering operations, on or near the project area?
☐ Yes ☒ No

If yes, list the discharges and the RIPDES individual permit number(s) or RIPDES Remediation General Permit Authorization number(s) associated with these discharges.

- RIPDES individual permit number:
- RIPDES Remediation General Permit Authorization number:

1.7 Existing Data of Known Discharges from Site

RIPDES Construction General Permit – IV.E.1.h

Are there known storm water discharges from the project area?

☑ Yes ☐ No

Describe how this determination was made:

- Existing conditions survey and record plan review

If yes, list discharges and locations:

- Existing stormwater system outfalls project wide generated from onsite and upstream offsite areas

Is there existing data on the quality of the known storm water discharges?

☐ Yes ☑ No

If yes, provide data:

- N/A

1.8 Endangered Species Certification/Natural Heritage Areas

RIPDES Construction General Permit – Section V

Are there any Natural Heritage Areas being disturbed by the construction activity or will discharges be directed to the Natural Heritage Area as a result of the construction activity?

☒ Yes ☐ No

If yes, describe or refer to documentation which determines the likelihood of an impact on this area and the steps that will be taken to address any impacts.

- A Natural Hertige Area exists along the southern limits of the project on Maxson Street, Laurel Street, and Potter Hill Road. The limit of work is generally restricted to existing developed roadway corridors to be encompassed by erosion control measures. No impacts are expected to the natural heritage area.

1.9 Historic Preservation/Cultural Resources

Are there any historic properties, historic cemeteries or cultural resources on or near the construction site?

☐ Yes ☑ No

Describe how this determination was made and summarize RIDOT-CRU review comments:

- Existing conditions survey, RI Historical Cemeteries database, and site observations

If yes, describe or refer to documentation which determines the likelihood of an impact on this historic property, historic cemetery or cultural resource and the steps taken to address that impact including any conditions or mitigation measures that were approved by other parties.

- N/A

1.10 Site Features and Sensitive Areas to be Protected

Sensitive areas and measures that will be implemented to protect them:

- Steep slopes, wetlands, and existing drainage infrastructure along the roadway are essential to preserve. Perimeter erosion controls and catchbasin inlet sedimentary control devices shall be installed project wide in order to preserve these site features and the stormwater runoff quality to the greatest extent practicable

1.11 Potential Sources of Pollution

RIPDES Construction General Permit – IV.E.1.f

Anticipated on this Project	Operation/ Location	Stormwater Pollutants
X	Clearing, grading, excavating, and unstabilized areas	Sediment; Trash/Debris
X	Construction Entrance	Sediment
X	Soil Stockpiles	Sediment
X	Paving operations	Sediment; Trash/Debris
X	Concrete washout and waste	Heavy metals; pH; Trash/Debris
X	Structure construction/ painting/ cleaning	Nutrients; pH; Trash/Debris; Toxic chemicals
X	Demolition and debris disposal	Sediment; Trash/Debris
X	Dewatering operations	Sediment; Nutrients
X	Drilling and blasting operations	Sediment; pH; Trash/Debris
X	Material delivery and storage	Sediment; Nutrients; Heavy metals; pH; Pesticides/Herbicides; Oil/Grease; Trash/Debris; Toxic chemicals
	Material use during building process	Nutrients; heavy metals; pH; pesticides/herbicides; oil/grease; trash/debris; toxic chemicals
X	Solid waste/ trash/ debris	trash/debris; toxic chemicals
	Hazardous waste	heavy metals; pH; pesticides/herbicides; oil/grease; toxic chemicals
	Contaminated spills	Nutrients; heavy metals; pH; pesticides/herbicides; oil/grease; toxic chemicals
X	Sanitary/septic waste (porta potty)	Nutrients; pH; Bacteria/Viruses; toxic chemicals
X	Vehicle/equipment fueling and maintenance	Oil/Grease; Toxic chemicals
X	Vehicle/equipment use and storage	Oil/Grease; Toxic chemicals
X	Landscaping operations	Sediment; Nutrients; Trash/Debris
	Off-site LUHPPL run-on	Industrial toxins; oil/grease; heavy metals; fuel; salt; hazardous materials
	Other:	

1.12 Site Plans

RIPDES Construction General Permit – IV.E.1.a

TITLE & DATE OF PLAN SET(S): State of Rhode Island Department of Transportation – Plan, Profile, and Sections of Proposed State Highway – Ashaway Corridor - Volume 1 – Permit Submission October 2025

Plan/Sheet #(s)	Required Information
General Plans & Drainage Plans	Total **Project Area**, including all **grading** and/or **excavation**, and a defined **Limit of Disturbance.**
Drainage Plans & Drainage Report	Pre- and post-development **drainage patterns** including (but not limited to): **sub-watershed** limits, direction(s) of **stormwater flow,** locations of storm drain **inlets and outfalls**, existing and proposed **conveyance systems** (i.e. grass channels, swales, closed drainage system)
Drainage Report	The location and name of the **receiving waters** &/or separate storm sewer system and the ultimate receiving waters (i.e. name of major watershed basin)
General Plans & Drainage Plans	Location of **resource protection areas** including waters of the State, wetlands lakes, ponds, coastal shoreline features and required setbacks (e.g. buffers, water supply wells, septic systems). Indicate below whether or not the areas have been verified in the field.
General Plans & Drainage Plans	Location of **environmentally sensitive features**/areas to be preserved &/or protected (i.e. endangered species habitats, historic sites, natural heritage areas, Qualified Pervious Areas (QPAs)) (Section 1.10)
General Plans & Drainage Plans	Boundaries of **existing vegetation** to remain undisturbed
General Plans & Drainage Plans	The location of all **impervious structures** (existing and proposed roads, buildings, and other structures)
General Plans & Drainage Plans	Locations and timing of **stabilization measures** including phased clearing and grubbing based on scheduled activities
General Plans, Drainage Plans, & SESC Plans	The location of all **structural** erosion, sediment and runoff control **BMPs** (i.e. sediment basins, outlet protection, etc.)
General Plans, Drainage Plans, & SESC Plans	Locations of all **non-structural BMPs** (i.e. perimeter controls, check dams, storm drain protection, etc.)
Drainage Plans & Drainage Detail Plans	The location of all permanent **post-construction BMPs** (i.e. WVTS, filtration systems, etc)
Soil Erosion and Sediment Control Plans	**Constraint Map,** indicating areas within the project limits which are unsuitable for material storage areas, equipment storage areas, designated concrete washout areas, dumpsters, stockpiles, fueling locations, etc. (i.e. locations where these activities will not occur, and recommendations of where they may occur) **(RECOMMEND SEPARATE PLAN SHEET)** Designated areas will not be within regulated wetlands, or within 50-feet of the storm drain system.
	The location of **spill prevention and response equipment**

FIELD VERIFICATION INFORMATION	
Date: **Verified by DEM**: ☐ N/A ☐ No ☐ Yes	**By**: **Wetland Permit Issued**: ☐ No ☐ Yes # _____

SECTION 2: EROSION AND SEDIMENTATION CONTROLS

RIPDES Construction General Permit – Section IV.E.2.a

The purpose of erosion controls is to prevent sediment from moving onto, around, or off of the construction site. Properly installed and maintained erosion controls are the primary defense against sediment pollution.

Sedimentation controls are a second line of defense against moving sediment. The purpose is to prevent moving sediment from leaving the construction site and entering environmentally important areas.

Runoff controls are used to slow the velocity of concentrated water flows. By intercepting and diverting stormwater runoff to a stabilized outlet or treatment BMP, erosion and sedimentation are reduced.

Please note: **Even if practices are correctly installed on a site according to the approved plan, the site is only in compliance when sediment and pollutants are effectively controlled throughout the entire site. If controls are repeatedly failing, it is the responsibility of the Construction Manager and Construction Contractor to develop a corrective action plan that may include different controls than is depicted on the Approved Plan Set.**

☒*2.1 Minimize Disturbed Area and Protect Natural Features and Soil*

As far as is practicable, existing vegetation will be protected and left in place, in accordance with the clearing limits shown on the approved Plans. Prior to any land disturbance activities commencing on the site, the Contractor will physically mark limits of disturbance (LOD) on the site and any areas to be protected within the site, so that workers can see the areas to be protected.

- Refer to the Soil Erosion and Sediment Control Plans

☒*2.2 Phase Construction Activity*

Proper sequencing of construction activities is essential to maximize the effectiveness of erosion and sediment control measures. The purpose is to reduce the amount and duration of soil exposed to erosion by wind, rain, runoff, and vehicle tracking.

Construction sequencing and phasing of construction activities will include:

1. Installation of all erosion and sediment controls that are required to be in place and functional before any earthwork begins. This will be done in accordance with Sections 201, 206 through 211 of the RIDOT Standard Specifications.
2. Upon acceptable completion of site preparation and installation of erosion and sediment controls, site construction activities may commence. Routine inspection and maintenance and/or modification of erosion and sediment controls while earthwork is being done is required. Upon commencement of site construction activities, the operator shall initiate appropriate stabilization practices on all disturbed areas as soon as possible, but not more than fourteen (14) days after the construction activity in that area has temporarily or permanently ceased. Such temporary or permanent soil stabilization measures must be installed prior to initiating land disturbance in subsequent phases.

3. Construction of new highway ramp and realignment. This activity includes but not limited to: earthwork, grading, paving, and drainage improvements. Upon completion, redirecting traffic to new highway lanes.
4. Pavement removal of existing highway lanes no longer in use. Adjusting of existing drainage structures to remain. All storm drain inlets within the project limits shall require silt sack inlet protection to prevent sediment from construction activities from entering the drainage system. Storm drain inlets located not in pavement shall be protected with haybales or compost filter socks
5. Routine inspection and maintenance and/or modification of erosion, runoff, and sediment controls and temporary pollution prevention measures while earthwork is ongoing is required.
6. Final site stabilization of any disturbed areas after earthwork has been completed and removal of temporary erosion, runoff, and sediment controls and temporary pollution prevention measures.

☒*2.3 Control Stormwater Flowing Onto and Through the Project*

Structural BMPs will be used to prevent stormwater flow from coming onto the project area, and to divert and slow on-site stormwater flow from exposed soils to limit erosion, runoff, and the discharge of pollutants from the site.

Control measures &/or methods that may be used include diversion ditches or berms, compost filter socks, fiber rolls, gravel bag berms, slope drains, check dams, and riprap.

- Existing drainage patterns shall be maintained throughout the construction site. The proposed construction activity is dependent on the functionality of the existing drainage infrastructure. The contractor shall direct stormwater runoff flows to the existing (and proposed) catchbasins to the greatest extent practicable

☒*2.4 Stabilizing Soils*

Phased Clearing & Grubbing:

Only areas that can be reasonably expected to have active construction work being performed within 21-days of disturbance will be cleared/grubbed at any one time. It is NOT acceptable to clear and grub the entire construction site if disturbed portions will not be active within the 21-day time-frame.

Clearing/Grubbing will not take place during a rain event if erosion is likely to occur; nor will it occur if a rain event is forecasted and appropriate erosion controls cannot be installed prior to the storm and in accordance with section 201, 206 through 211 of the RIDOT standard specifications.

No undisturbed areas will be cleared of existing vegetation after October 15th of any calendar year or during any period of full or limited winter shutdown. All disturbed soils exposed prior to October 15 of any calendar year will be seeded or protected by that date. Any such areas that do not have adequate vegetative stabilization, as determined by the Construction Manager or environmental inspector, by November 15 of any calendar year, must be stabilized through the use of erosion control matting or hay mulch, in accordance with specifications contained within the RI Soil Erosion and Sediment Control Handbook (as amended). If work continues within any of these areas during the period from October 15 through April 15, care must be taken to ensure that only the area required for that Day's work is exposed, and all erodible soil must be restabilized within 5 working days.

As per RIDOT Standard Specification 201.03.1 – Clearing and Grubbing:
After clearing, and by the end of each day's grubbing operation, the Contractor will install erosion control measures that are indicated on the Plans or as directed by the Construction Manager. Such erosion

control measures will be installed in strict accordance with the requirements of **SECTIONS 206, 207,** and **208** of these Specifications, **PERIMETER EROSION CONTROLS, CHECK DAMS**, and **TEMPORARY DEWATERING BASINS**, respectively.

Initiating Stabilization Practices

As per RIPDES General Permit (Construction Activity) Section IV.E.2.a: Upon completion and acceptance of site preparation and initial installation of erosion and sediment controls the operator will initiate appropriate stabilization practices during all phases of construction on all disturbed areas as soon as possible but not more than fourteen (14) days after the construction activity in that area has temporarily or permanently ceased, unless the activity is to resume within twenty one (21) days.

Any disturbed areas that will not have active construction activity occurring within twenty one (21) days must be stabilized using the BMPs depicted on the approved plan set and in accordance with RIDOT Standard Specifications Section L.02 – Seeding, Section L.05 - Seed Stabilizers and Section M.18 – Landscape Materials (M.18.08 – Mulch and M.18.09 – Seed Stabilizer Materials).

Maintaining Stabilization

Controls and methods that may be used to maintain soil stabilization include the placement of geotextiles, erosion control blankets/mats, and temporary seeding. If the stabilization BMPs fail and erosion occurs, then alternative control measures &/or methods may need to be substituted, with approval of the RIDOT Construction Manager and the RIDOT Environmental Division.

☒*2.5 Protect Slopes*

Controls will be used to protect slopes from erosion from concentrated stormwater flow.

Slopes that will have concentrated stormwater flow will be protected using the BMPs depicted on the approved plan set and in accordance with RIDOT Standard Specifications Sections 202, 206 – 211, or any method approved of by the RIDOT Construction Manager and the RIDOT Office of Stormwater Management.

Control measures &/or methods that may be used to protect slopes include pipe slope drains, compost filter socks, fiber rolls, gravel bag berms, erosion control mats/blankets, and temporary vegetative cover.

- Erosion control blankets shall be utilized on an as needed basis. The majority of the steep slopes on site are existing vegetated slopes. If/when evidence of erosion is present along these slopes (disturbed or undisturbed from construction) erosion control blankets shall be installed as deemed necessary by the designated site inspector or RIDOT Resident Engineer. The toes of slopes shall be protected with compost filter sock and concrete barriers where shown in the Site Plans.

☒*2.6 Protect Storm Drain Inlets*

Storm drain inlet protection measures will be used to prevent soil and debris from entering storm drain inlets. These measures are usually temporary and are implemented before a site is disturbed. ALL stormwater inlets &/or catchbasins that are operational during construction and may receive sediment-laden stormwater flow from the construction site must be protected using any of the BMPs outlined in the RIDOT Standard Specifications Section 209 – Storm Drain Protection, or any method approved of by the RIDOT Construction Manager and the RIDOT Environmental Division.

Control measures &/or methods that may be used include compost filter socks, fiber rolls, gravel bag berms, or catch basin inserts.

- Storm drain inlets shall be protected with silt sacks, and any additional measures as deemed necessary by the designated site inspector or RIDOT Resident Engineer. These erosion control devices shall be maintained as required throughout the construction process.

☒*2.7 Protect Storm Drain Outfalls*

Outfall protection will be used to prevent scour or severe erosion at discharge points. Outfalls often have high velocity, high volume flows, and require strong materials that will withstand the forces of the water. The function of these BMPs is to protect the soil surface, reduce velocity, and promote infiltration. Storm drain outlet BMPs also offer a last line of protection against sediment entering environmentally sensitive areas.

All stormwater outfalls that may discharge sediment-laden stormwater flow from the construction site must be protected.

Control measures &/or methods that may be used include compost filter socks, fiber rolls, gravel bag berms, or silt fence.

- Compost filter sock shall be installed around all existing and proposed stormwater outfalls where shown on the Drainage & Utility Plans, and Soil Erosion and Sediment Control Plans.

☒*2.8 Establish Perimeter Controls and Sediment Barriers*

Perimeter controls will be used to prevent soil erosion and stop sediment from leaving the site. Perimeter controls will be installed, and maintained, as depicted on the approved plan set and in accordance with RIDOT Standard Specifications Section 201, 206 – 211, Perimeter Erosion Controls (installation) and Section 212 – Maintenance and Cleaning of Erosion and Pollution Controls (maintenance).

Control measures &/or methods that may be used include compost filter socks, fiber rolls, gravel bag berms, or silt fence.

- Compost filter sock shall be installed along the site perimeter where shown on the Soil Erosion and Sediment Control Plans. In addition, inlet sediment control devices shall be installed in the existing and proposed catchbasins within the project limits.

☒*2.9 Retain Sediment On-Site and Control Dewatering Practices*

Sediment traps, basins, and barriers are used to retain sediment on the site to protect streams, lakes, drainage systems, and adjacent property. These devices are used at the outlets of channels, diversions, and other runoff conveyance measures to allow sediment-filled water to pool and sediment to settle. These measures are often used as the last line of defense to stop sediment from leaving the site.

The dewatering of non-contaminated non-stormwater (i.e. groundwater) or accumulated precipitation discharge of sediment-laden water into storm drains, streams, lakes or wetlands prior to sediment removal is prohibited.

The dewatering of contaminated non-stormwater cannot be discharged without prior notice and approval from either (RIDEM) or the Coastal Resources Management Council (CRMC). Should dewatering of contaminated water be occurring on this construction project, appropriate permits will have been obtained, and will be included as part of the Contract Documents.

- Great care and attention shall be made to the inlet sediment control devices and perimeter erosion controls to prevent sediment and debris from leaving the construction site and entering the existing and proposed drainage systems or wetlands.

☒*2.10 Monitoring Weather Conditions*

Care will be taken to avoid having unstabilized areas exposed during precipitation events. Weather forecasts will be routinely checked, and in the case of an expected precipitation event of over 0.25-inches over a 24-hour period, all BMPs will be inspected, and maintained as necessary, prior to the weather event.

In the case of an extreme weather forecast (greater than one-inch of rain over a 24-hour period), additional erosion/sediment controls will be installed where appropriate.

https://www.wunderground.com/weather/us/ri/hopkinton

☒*2.11 Additional BMPs*

The project includes a series of numerous permanent post-development stormwater best management practices (BMPs). The BMP footprints will generally require protection measures from compaction from heavy construction equipment and vehicles and perimeter erosion controls as depicted on the Soil Erosion and Sediment Control Plans. The BMP locations and types are provided below:

- STU-A1: Crushed Stone Trench, west shoulder of Laurel Street, west of Church Street intersection
- STU-A2: Crushed Stone Trench, west shoulder of Laurel Street, west of Church Street intersection
- STU-A3: Hydrodynamic Separator west shoulder of Laurel Street, south of High Street intersection
- STU-P1: Crushed Stone Trench, west shoulder of Laurel Street, north of Maxson Street intersection
- STU-M1: Crushed Stone Trench, west shoulder of Maxson Street, south of Nooseneck Hill Road intersection

☒*2.12 Construction Site Erosion and Sediment Control BMPs*

It is expected that this table will be amended as needed throughout the construction project.

Location/Station	BMP Description/ Standard Spec Ref	Maintenance Requirement	Phase
Site Wide	Silt fence Compost filter sock	Inspection should be made after each storm event or 1/week and repair or replacement should be made promptly as needed. Cleanout of accumulated sediment behind the filter sock / silt fence if sediment accumulates to at least ½ the distance between the top and ground surface.	All Phases
Site Wide	Silt sacks/inlet sediment control devices	Inspect and maintain inlet protection devices are every rain event and/or weekly as required. Sediment should be removed when 50% of the storage volume is achieved. Dispose of sediment properly.	All Phases

SECTION 3: GOOD HOUSEKEEPING BMPS

RIPDES Construction General Permit – Section IV.E.2.c

The purpose of good housekeeping is to prevent daily construction activities from causing pollution.

Describe the key good housekeeping and pollution prevention measures that will be implemented to control pollutants in stormwater. Examples BMPs include the proper management of waste, material handling and storage, and equipment/vehicle fueling/washing/maintenance operations.

Include RIDOT Standard Specification or Standard Detail reference with maintenance requirements.

☒*3.1 Off-site Tracking of Sediments*

RIPDES Construction General Permit – IV.E.2.c.i

Any construction site access point will employ the BMPs depicted on the approved plan set and in accordance with RIDOT Standard Specifications Section 211 – Construction Accesses, or any method approved of by the RIDOT Construction Manager and the RIDOT Environmental Division. Construction accesses will be used in conjunction with the stabilization of construction roads to reduce the amount of mud picked up by construction vehicles. All RI STD 9.9.0 Construction Access roads will be constructed prior to any roadway accepting construction traffic.

If a Construction Access BMP is not designated on the plans, it is still the responsibility of the Operator to ensure that no sediment is tracked off of the construction site by any vehicles leaving the site. Additional control measures that may be used, upon approval, include a vehicle washing station and daily street sweeping.

The Operator will remain responsible for the clean-up of any mud or dirt that is tracked onto streets or paved areas, even with the installation of gravel construction entrances. Inspect access for excessive sediment build up. Remove sediment and rebuild the exit as necessary to retain effectiveness and prevent off-site tracking. Additional street cleaning may be required if unable to retain sediment on site.

☒*3.2 Waste Disposal*

RIPDES Construction General Permit – IV.E.2.c.ii

Building materials and other construction site wastes will be properly managed and disposed of to prevent the discharge of solid materials from wind and precipitation. All types of waste generated at the site will be disposed of in a manner consistent with State Law and/or regulations.

- The waste collection area will not be within any of the constraint areas located on the “Constraint Map” (Section 1.12) and will be approved by the RIDOT Construction Manager.
- All waste containers will be covered to avoid contact with wind and precipitation.
- Waste collection will be scheduled frequently enough to prevent containers from overfilling.
- All construction site wastes will be collected, removed, and disposed of in accordance with applicable regulatory requirements and only at authorized disposal sites.
- Equipment and containers will be checked for leaks, corrosion, support or foundation failure, or other signs of deterioration. Those that are found to be defective will be immediately repaired or replaced.

☒*3.3 Spill Prevention and Control Plan*

RIPDES Construction General Permit – IV.E.2.c.iii

Spills and leaks will be avoided through frequent inspection of equipment and material storage areas. Heavy equipment and other vehicles will be routinely inspected for leaks and repaired as necessary. Material storage areas will be routinely inspected for leaky containers, open containers, or improper storage techniques that may lead to spills or leaks. Appropriate cleanup procedures and supplies will be available on-site.

Spills will be cleaned up immediately and following proper response procedures and in accordance with any applicable regulatory requirements. At no time will spills be cleaned and flushed down storm drains or in to any environmentally sensitive area (i.e. stream, pond, wetland).

Equipment/vehicle fueling and repair/maintenance operations or hazardous material storage will not take place within any of the constraint areas located on the "Constraint Map" (Section 1.12) and will be approved by the RIDOT Construction Manager.

☒*3.4 Control of Allowable Non-Storm Water Discharges*

RIPDES Construction General Permit – IV.E.2.c.iv

Non-storm water discharges must also be controlled to reduce the likelihood of contamination of the 'clean' water. Allowable discharges should be kept separate from stormwater flow through the use of BMPs.

For contaminated non-stormwater discharge(s), the requirements and regulations of the associated RIPDES individual permit or RIPDES Remediation General Permit must be adhered to at all times.

☒*3.5 Establish Proper Building Material Staging Areas*

RIPDES Construction General Permit – IV.E.2.c.v

Stock pile management consists of procedures and practices designed to minimize or eliminate the discharge of stockpiled material (soil, topsoil, base material, rubble) from entering drainage systems or water courses.

Stock piles will not be located within any of the constraint areas located on the "Constraint Map" (Section 1.12) and will be approved by the RIDOT Construction Manager. They will have side slopes no greater than 30% and stockpiles of erodible material will be seeded and ringed with RI STD 9.1.0 to stabilize (or RIDOT approved equivalent: berms, dikes, fiber rolls, compost socks, sandbag, gravel bags).

If soil stockpiles are not stabilized with vegetation, then they must be securely covered at the end of each workday.

All chemicals and/or hazardous waste material must be stored properly and legally in covered areas, with containment systems constructed in or around the storage areas. Areas must be designated for materials delivery and storage. Designated areas will not be located within any of the constraint areas located on the "Constraint Map" (Section 1.12) and will be approved by the RIDOT Construction Manager.

- Potential staging and stockpile areas are depicted on the Soil Erosion and Sediment Control Plans and shall be protected with the required pollution prevention measures

☒3.6 Designate Washout Areas

RIPDES Construction General Permit – IV.E.2.c.v

Concrete mixer trucks and chutes will be washed in a designated area or concrete wastes will be properly disposed of off-site. Washout areas for concrete, paint or any other material will not be within any of the constraint areas located on the "Constraint Map" (Section 1.12) and will be approved by the RIDOT Construction Manager.

Temporary concrete washout areas must be constructed and maintained to contain all water and concrete waste generated by washout operations. A sign should be placed at the washout site to inform concrete equipment operators of the facility location. Facilities must be cleaned or replaced when they reach 75% capacity.

At no time will any material (concrete, paint, chemicals) be washed into storm drains, open ditches, streets, streams, wetlands, or any environmentally sensitive area. The site operator must ensure that construction waste is properly and legally disposed of, to avoid exposure to precipitation, at the end of each working day. Designated areas will not be located within any of the constraint areas located on the "Constraint Map" (Section 1.12) and will be approved by the RIDOT Construction Manager.

- Potential washout areas are depicted on the Soil Erosion and Sediment Control Plans with required pollution prevention measures

☒3.7 Establish Proper Equipment/Vehicle Fueling and Maintenance Practices

RIPDES Construction General Permit – IV.E.2.c.v

Vehicle fueling, maintenance and/or washing will occur off-site, or in designated areas. Designated areas will not be located within any of the constraint areas located on the "Constraint Map" (Section 1.12) and will be approved by the RIDOT Construction Manager.

Areas will be clearly designated, and berms, sandbags, or other barriers will be used around the perimeter of the maintenance area to prevent storm water contamination.

Construction vehicles will be inspected frequently for leaks. Repairs will take place immediately. Disposal of all used oil, antifreeze, solvents and other automotive-related chemicals will be according to applicable regulations; at no time will any material be washed down the storm drain or in to any environmentally sensitive area.

- Equipment/Vehicle fueling and maintenance areas are depicted on the Soil Erosion and Sediment Control Plans with the required pollution prevention measures

☒3.8 Dust Control

RIPDES Construction General Permit – IV.E.2.c.v

Dust control procedures and practices will be used to suppress dust on a construction site during the construction process, as applicable. Precipitation, temperature, humidity, wind velocity and direction will determine amount and frequency of applications. However, the best method of controlling dust is to prevent dust production. This can best be accomplished by limiting the amount of bare soil exposed at one time. RIDOT Standard Specifications Section 907 – Dust Control – will be followed.

Dust Control methods may include watering, surface roughening, wind barriers, walls, and covers.

- Water for dust control will be used on an as needed basis and in accordance with the Rhode Island Soil Erosion and Sediment Control Handbook and RIDOT Standard Specifications.

☒*3.9 Sweeping*

RIPDES Construction General Permit – IV.E.2.c.v

Sweeping of streets, roads, highways and parking lots that have accumulated significant amounts of pollutants (construction site sediment, trash, debris) will be done as necessary, or as directed by the RIDOT Construction Manager. When construction exits are not keeping construction site sediment from the roadway, sweeping will be done on a daily basis. Disposal of collected sweeping material will follow RIDOT Standard Specifications Section 931 – Cleaning and Sweeping Pavement.

- The contractor shall sweep adjacent streets, roads, highways, and parking areas on a weekly basis as required in the contract.

☒*3.10 Additional BMPs*

- N/A

☒*3.11 Construction Site Good Housekeeping BMPs*

It is expected that this table will be amended as needed throughout the construction project.

Location/Station	BMP Description/ Standard Spec Ref	Maintenance Requirement	Phase
Construction Site Entrance/Exit	Rock/RipRap entrance pad **211.03/9.9.0**	Replenish/Replace aggregate if it becomes clogged with sediment and is no longer effectively preventing sediment from being tracked into street	All Phases
Adjacent Roads	Public roads adjacent to a construction site will be clean at the end of each day **211.01.1**	Street Sweep if construction site sediment is visible	All Phases
Site Wide	Pick up of construction trash and debris	All loose trash and debris must be disposed of properly at the end of each working day	All Phases

SECTION 4: POST-CONSTRUCTION BMPs

RIPDES Construction General Permit – Section IV.E.2.b

Post-Construction Best Management Practices are BMPs that are installed during the Construction Phase of a project to manage storm water flow after the construction project is completed.

Measures must be installed during the construction project to protect permanent or long term BMPs as they are installed so that they will function properly when they are brought online at the end of the construction phase.

Such long-term BMPs may include: infiltration basins, open vegetated swales and natural depressions, vegetated buffer strips, and detention/ retention structures. Controls may also be needed to prevent or minimize erosion at outfall locations or along the length of vegetated channels to reduce velocity flow from the structure to the receiving waters.

Control measures that may need to be implemented during the construction phase typically include measures to ensure proper installation of the long-term BMPs. Examples include: ensuring proper material staging areas, equipment routing (i.e. do not allow construction equipment to compact areas where infiltration BMPs will be installed), and final cleaning of structural BMPs before construction finalization.

☒*4.1 Post-Construction BMPs*

- Following construction, the owner (RIDOT) shall assume operation and maintenance of the post-construction BMPs. Refer to the Long-Term Operation and Maintenance Plan for BMP specific inspection and maintenance requirements.

Location/Station	BMP Description/ Standard Spec Ref	Protective Measures	Phase
Laurel Street 106+50 – 109+00, LT	Infiltration Trench (STU P1) RI Stormwater Design & Installation Standards Manual	Do not allow construction vehicles to compact soils where trench is to be installed. Do not stockpile materials on trench site. Remove sediment following site stabilization.	All
Laurel Street 116+50 – 118+50, LT	Infiltration Trench (STU A1) RI Stormwater Design & Installation Standards Manual	Do not allow construction vehicles to compact soils where trench is to be installed. Do not stockpile materials on trench site. Remove sediment following site stabilization.	All
Laurel Street 119+00 – 120+50, LT	Infiltration Trench (STU A2) RI Stormwater Design & Installation Standards Manual	Do not allow construction vehicles to compact soils where trench is to be installed. Do not stockpile materials on trench site. Remove sediment following site stabilization.	All
Laurel Street 141+00, LT	Hydrodynamic Separator (STU A3) RI Stormwater Design & Installation Standards Manual	Clean and remove sediment following site stabilization.	All
Maxson Street 409+50 – 410+50, LT	Infiltration Trench (STU M1) RI Stormwater Design & Installation Standards Manual	Do not allow construction vehicles to compact soils where trench is to be installed. Do not stockpile materials on trench site. Remove sediment following site stabilization.	All

SECTION 5: MAINTENANCE and INSPECTIONS

RIPDES Construction General Permit – Section IV.E.2.d

5.1 Maintenance

Maintenance procedures for erosion and sedimentation controls and stormwater management structures/facilities are described on the plans, in **Section 212** of the RHODE ISLAND DEPARTMENT OF TRANSPORTATION *Standard Specifications for Road and Bridge Construction* 2004 EDITION (as amended), and in the Stormwater Management Analysis documentation.

As cited:

> **212.03 CONSTRUCTION METHODS**. Erosion and pollution controls will be maintained by the Contractor to the satisfaction of the Construction Manager. Erosion and pollution controls must be able to prevent, under normal weather conditions, both the movement of soil materials and the intrusion of sediment-laden discharges into environmentally sensitive areas.
>
> Construction will not commence or continue until all specified erosion and pollution controls are in place, properly installed and accepted by the Construction Manager.
>
> Erosion and pollution controls will be routinely inspected by the SWPPP Inspector. The SWPPP Inspector or Construction Manager will notify the Contractor immediately if problems develop. The Contractor will commence cleaning and maintenance measures no later than the next consecutive calendar day after receiving a directive from the Construction Manager to perform such measures. The Contractor will aggressively and expeditiously perform such cleaning and maintenance work until the original problem is remedied to the complete satisfaction of the Construction Manager. In the event of a weekend storm, the Contractor must have resources available to restore, and, if necessary, to replace any damaged controls.

5.2 Inspections

RIPDES Construction General Permit – Section II.B & Section II.D

Minimum Monitoring and Reporting Requirements

All storm water control measures, disturbed areas, areas used for the storage of materials that are exposed to precipitation (including unstabilized soil stockpiles), discharge locations, and locations where vehicles enter or exit the site must be inspected at least once every seven (7) calendar days and within twenty-four (24) hours after any storm event which generates at least 0.25-inches of precipitation per twenty four (24) hour period and/or after a significant amount of runoff or snowmelt. An appropriate rain gauge (as identified in Section 2.4 of this SWPPP)) will be utilized for the determination of the storm events.

Please Note: The contractor is required to have a full-time, on-site designated contact person responsible for working with the RIDOT Construction Manager and the RIDOT designated Environmental Compliance Manager (EMC) to resolve SWPPP-related issues.

General Notes

- The RIDOT Designated Inspector will prepare a separate inspection report for each inspection.
- The Inspection Reference Number will be a combination of the Construction Contract Number - consecutively numbered inspections.
  ex/ Inspection reference number for the **4**th inspection of a project would be:
  2025-AA-BBB-**4**
- Each report will be signed and dated by the Inspector and forwarded to the Construction Manager within 24 hours of the inspection.
- Each report will be signed and dated by the Construction Manager and forwarded to the Contractor's designated representative.
- Each report will be signed and dated by the Contractor upon receipt.
- If Corrective Actions are required, the Contractor will initiate appropriate measures within 24 hours of receiving of the inspection report.
- It is the responsibility of the RIDOT Construction Manager to maintain a copy of the SWPPP, copies of all completed inspection reports, and amendments as part of the SWPPP documentation at the project field office during construction.

Submitting Reports to the ED

- On a monthly basis, the inspector must electronically submit a PDF of the Inspection Reports to the Environmental Division (ED). Please submit SWPPP Inspection Reports to: dot.swppp@dot.ri.gov .

Monthly submission:

- must include each completed, dated, and signed inspection report, including any associated photos.
- must be submitted no later than the 10th of the month following the end of the reporting period.
- must include a copy of the daily rainfall summary data for the month as reported by the selected rain gauge (ex/ the monthly calendar from www.wunderground.com).
- may have the report content, frequency, &/or submission format changed with approval from the ED.

A copy of the inspection report is attached in the Appendix.

5.3 Corrective Actions

RIPDES Construction General Permit – Section II.C

If, in the opinion of the Construction Manager, corrective action is required, the Construction Manager will note it on the inspection report and will notify and direct the Contractor to take corrective action and make all necessary repairs whenever maintenance of the erosion and pollution controls is required.

In accordance with the SWPPP and Section 212 of the RIDOT Standard Specifications, the Contractor will commence with the requisite cleaning and maintenance measures no later than the next consecutive calendar day after receiving such a directive from the Construction Manager, and will aggressively and expeditiously perform such cleaning and maintenance work until the original problem is remedied to the complete satisfaction of the Construction Manager.

In accordance with the General Permit and the SWPPP, non-compliance issues will be addressed no later than seven (7) calendar days from the date of inspection.

If the Construction Manager decides on any given day that those erosion and pollution controls specified in the Contract are not in place or have not been adequately maintained as specified in this Section, the daily charge set forth in **Section 212** will be deducted from monies due the Contractor as a charge for failure to comply with this Specification. Moreover, the stated daily charge will continue each consecutive calendar day thereafter until the deficiencies noted have been corrected to the complete satisfaction of the Construction Manager.

SECTION 6: Amendments

RIPDES Construction General Permit – Section IV.D

This SWPPP is intended to be a working document. It is expected that amendments will be required throughout the construction of the project. **Even if practices are installed on a site according to the approved plan, the site is only in compliance when erosion and sedimentation are effectively controlled throughout the entire site.**

The SWPPP will be amended whenever there is a change in design, construction, operation, maintenance or other procedure which has a significant effect on the potential for the discharge of pollutants, or if the SWPPP proves to be ineffective in achieving its objectives (i.e. the selected BMPs are not effective in controlling erosion or sedimentation).

All revisions must be recorded in the Record of Amendments Log Sheet within the SWPPP, and dated red-line drawings and/or a detailed written description must be appended to the SWPPP. Inspection Forms must be revised to reflect all amendments. Update the Revision Date and the Version # in the footer of the Report to reflect amendments made.

All SWPPP Amendments, except minor non-technical revisions, must be approved by the Construction Manager.

A copy of the Amendment log is attached in the Appendix.

SECTION 7: Recordkeeping

RIPDES Construction General Permit – Section II.A & Section II.D

It is the RIDOT Construction Manager's responsibility to have the following documents at the Field Office and immediately available for RIDEM review upon request:

- A copy of the fully signed and dated SWPPP, which includes:
    - The signed and certified NOI form or permit application form
      INCLUDED AS ATTACHMENT _____
    - A copy of the RIPDES General Permit
      INCLUDED AS ATTACHMENT _____
    - A copy of any regulatory permits (RIDEM Freshwater Wetlands Permit, CRMC, RIDEM Water Quality, etc)
      INCLUDED AS ATTACHMENT _____
    - SWPPP Amendment Log
      INCLUDED AS ATTACHMENT _____

- Copies of <u>all</u> signed and dated Inspection reports

SECTION 8: Party Certifications

RIPDES Construction General Permit – Section V.G

All parties working for the Rhode Island Department of Transportation are required to comply with the Stormwater Pollution Prevention Plan (SWPPP) for any work that is performed on-site. Any person or group who violates any condition of the SWPPP may be subject to substantial penalties or loss of contract. Contractors and Sub-Contractors are encouraged to advise all employees working on this project of the requirements of the SWPPP. A copy of the SWPPP is available for your review at the RIDOT Field Office, or may be found in your contract documents.

The prime contractor and each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement.

I acknowledge that I have read and understand the terms and conditions of the SWPPP for the above designated project and agree to follow the BMPs and practices described in the SWPPP.

RIDOT Construction Manager:

_____
signature/date

Contractor's Certified SWPPP Inspector:

_____
signature/date & certification w/#

Contractor SWPPP Contact:

_____
signature/date

Subcontractor SWPPP Contact:

_____
signature/date

SWPPP APPENDICES

Attach the following documentation to the SWPPP:

Attachment A – General Location Map

Attachment B – Soil Erosion and Sediment Control Plans

Attachment C – Inspection Form

Attachment D – Amendments Log

Attachment E – Additional Information (i.e. documentation)

- Civil
- Transportation
- Environmental
- Site Planning
- Surveying
- Permitting
- Landscape Architecture

CROSSMAN ENGINEERING

Rhode Island
100 Jefferson Boulevard, Suite 200
Warwick, RI 02888 Phone: (401) 738-5660

Massachusetts
1 George Leven Drive, Suite 200
North Attleboro, MA 02760 Phone: (508) 695-1700
Email: cek@crossmaneng.com

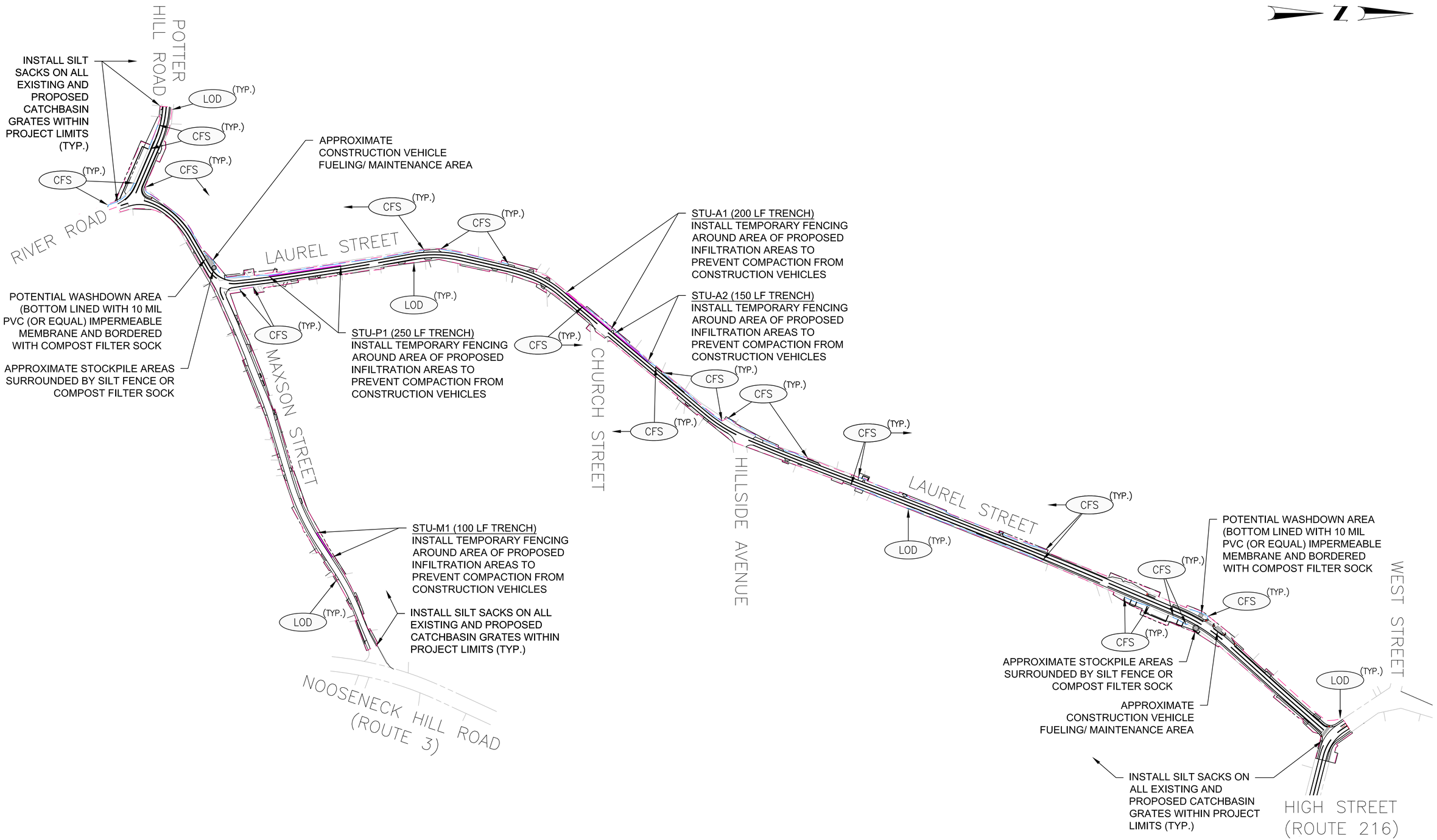
CORRIDOR ASHAWAY
HOPKINTON, RI

LOCUS MAP

NOT TO SCALE

DATE: OCTOBER 2025

RHODE ISLAND CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
XXXX-XX-XXX	2025	1	1



CROSSMAN ENGINEERING
100 Jefferson Blvd, Suite 200 | Warwick, Rhode Island 02888

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

DESIGNED BY:	CC
CHECKED BY:	RK
DATE:	10/2025
SHEET:	1
OF:	1

SCALE: 1"=150'

REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY

CORRIDOR - ASHAWAY

HOPKINTON/WESTERLY RHODE ISLAND

SOIL EROSION AND SEDIMENT CONTROL PLAN

0013Q_SESC.DWG

Department of Transportation
Two Capitol Hill
Providence, RI 02903

Office 401-222-2450
Fax 401-222-3905

Large-Site SWPPP Inspection Report Instructions

For all projects with **one (1) acre or greater of soil disturbance**, RIDOT is required to develop and enforce a Site-Specific Stormwater Pollution Prevention Plan (SWPPP) in order to remain in compliance with the Rhode Island Pollutant Discharge Elimination System General Permit for Stormwater Discharges Associated with Construction Activities (RIPDES Construction General Permit). As part of the SWPPP, a site-specific inspection report must be created and utilized.

ALL RIDOT staff, Contractors, and Sub-Contractors who are responsible for Erosion and Sediment Control on RIDOT construction sites are required to understand the RIPDES Construction General Permit requirements and the SWPPP.

Preparing the Inspection Report

This inspection report template has been provided by RIDOT for the development of the site-specific SWPPP Inspection Report. It must be customized for each individual Project to meet the requirements of the RIPDES Construction General Permit (CGP).

It is expected that this Inspection Report will be prepared as part of the preparation of the site-specific SWPPP. This inspection report template is designed to be customized according to the SWPPP document (initially) and then customized based on conditions at the site.

Review the site-specific SWPPP and the Plans to develop the inspection report. **On a copy of the site plan, number all stormwater BMPs and areas of the site that will be inspected.** Include both structural (basins, outlet protection, swales, etc) and non-structural (construction entrances, perimeter barriers, trash areas, etc) BMPs and areas that will be inspected. Also, identify all point source outfalls, areas of highly erodible soils, and the priority natural resource areas (i.e. streams, wetlands, mature trees, etc). List each BMP or area to be inspected separately in the site-specific BMP section of the inspection report.

An appropriate rain gauge must be identified and utilized for the determination of the storm events. Rain gauges may be found on www.wunderground.com, www.nws.noaa.gov (or similar sites).

SWPPP Inspection Report Instructions for:

RIDOT ENVIRONMENTAL DIVISION

- The RIDOT Administrator of the Environmental Division must review the SWPPP and sign the Certification Statement as the site OWNER on p. ii of the SWPPP.

CONSTRUCTION MANAGER

- The RIDOT Construction Manager (CM) must review the SWPPP and sign the Certification Statement for RIDOT Construction Manager in Section 8. If the RE has any questions, contact the RIDOT Environmental Division (ED) at 401-734-4892.
- **It is the responsibility of the RIDOT Construction Manager to ensure that the SWPPP Inspections start BEFORE EARTHWORK BEGINS. Earthwork is NOT allowed to proceed until a SWPPP Inspection of the site has been completed**.
- After an inspection has been performed, the CM must sign the 'acknowledgement' certification on Page 1 of the Inspection Report at time of receipt from the Inspector.
- The CM must review the Inspection Report within 24-hours of receipt.
    - If the CM agrees with the Inspection report, the CM must:
        - Fill out the "NOTICE TO CONTACTOR" box on the last page of the Report
        - Have the Contractor sign the 'acknowledgement' certification on Page 1 of Report
        - Make a copy of the Inspection Report with all 3 signatures for the Contractor's use AND provide a copy to the Inspector
    - If the CM disagrees with a corrective action item, the CM must:
        - Document objection with each item and provide justifiable reason in the inspection report. The contractor will not responsible for initiating corrective actions for such items. RIDOT's ED will review such items if warranted.
        - Fill out the "NOTICE TO CONTACTOR" box on the last page of the Report
        - Have the Contractor sign the 'acknowledgement' certification on Page 1
        - Make a copy of the Inspection Report with all 3 signatures for the Contractor's use AND provide a copy to the Inspector
- It is the responsibility of the RIDOT Construction Manager to maintain a copy of the SWPPP, copies of all completed & signed inspection reports, amendments, and Corrective Action Log as part of the SWPPP documentation at the project field office during construction.
- **The Inspection Report serves as the RIDOT directive to the Contractor to proceed with corrective actions.**
- **Progress on Corrective Action items will be documented by the CM in subsequent inspections.**
- On a monthly basis, the CM must electronically submit a PDF of the Inspection Reports to the Environmental Division (ED). Please submit reports to: dot.swppp@dot.ri.gov .

Monthly submission:

- must include each completed, dated, and signed inspection report, including any associated photos.
- must be submitted no later than the 10th of the month following the end of the reporting period.
- must include a copy of the daily rainfall summary data for the month as reported by the selected rain gauge (ex/ the monthly calendar from www.wunderground.com).
- may have the report content, frequency, &/or submission format changed with approval from the ED.

CERTIFIED SWPPP INSPECTORS

- The Contractor-designated certified inspector must sign the Certification Statement for Certified SWPPP Inspector in Section 8 of the SWPPP.
- A separate inspection report will be prepared for each inspection.
- Complete any items that will remain constant, such as the project information and BMP locations and descriptions. Then print out multiple copies (double-sided!) of this customized inspection report to use during the inspections *or save the file for future use on a computer*.
- The Inspection Reference Number shall be a combination of the Construction Contract Number - consecutively numbered inspections.
  ex. Inspection reference number for the **4**th inspection of a project would be:
  2006-AA-BBB-**4**
- Check the rain gauge for past & future weather data prior to inspection.
- Minimum Monitoring and Reporting Requirements

  "…the site must be inspected at least once every seven (7) calendar days and within twenty-four (24) hours after any storm event which generates at least 0.25-inches of precipitation per twenty-four (24) hour period and/or after a significant amount of runoff or snowmelt." (per RIPDES CGP)
- When conducting the inspection, walk the site by following the site map and numbered BMPs locations for inspection. Also, note whether the overall site issues have been addressed.
- Take photos to document issues, completed required maintenance/corrective actions – each photo should be dated and have a unique identification # and written description indicating where it is located within the project area. If a close-up photo is required, it should be preceded with a photo including both the detail area and some type of visible fixed reference point. Photos should be annotated with Station numbers and other identifying information where needed.
- For each inspection, the Inspector must determine if the Construction site is in compliance with the CGP, or not. The Inspector must check the appropriate check-box on Page 1 of the inspection report.
- Each report must be signed and dated by the Inspector, and forwarded to the Construction Manager within 24-hours of the inspection.

SWPPP Inspection Report Instructions for:

CONTRACTOR

- The Contractor must review the SWPPP and sign the Certification Statement for Contractor in Section 8.
- The Contractor shall designate a certified SWPPP Inspector, per the latest RIDOT Specifications.
- After an inspection has been performed, the Contractor must sign the 'acknowledgement' certification on Page 1 of the Inspection Report at time of receipt from the Construction Manager.
- The RE will provide a copy of the signed Inspection Report to the Contractor.
- **The Inspection Report serves as your RIDOT directive to proceed with corrective actions.**
- In accordance with the SWPPP and Section 212 of the RIDOT Standard Specifications, the **Contractor will commence with the requisite cleaning and maintenance measures no later than the next consecutive calendar day after receiving such a directive from the Construction Manager, and will aggressively and expeditiously perform such cleaning and maintenance work until the original problem is remedied to the complete satisfaction of the Construction Manager.**
- The CONTRACTOR is responsible for maintaining the CORRECTIVE ACTION LOG.

SWPPP INSPECTOR, CONSTRUCTION MANAGER, & CONTRACTOR

Amendments

The SWPPP shall be amended whenever there is a change in design, construction, operation, maintenance or other procedure which has a significant effect on the potential for the discharge of pollutants, or if the SWPPP proves to be ineffective in achieving its objectives.

SWPPP Amendments may be recommended by any party, but all amendments must be approved by the Construction Manager. The revision must be recorded in the Record of Amendments Log Sheet within the SWPPP, and dated red-line drawings and/or a detailed written description must be appended to the SWPPP. Inspection Forms must be revised to reflect all amendments by the Inspector.

Questions

Questions may be addressed to the RIDOT Environmental Division, 360 Lincoln Ave., Warwick, RI 02888, 401-734-4892, dot.swppp@dot.ri.gov .

RIC No: Inspection Reference No:

RIDOT Large Site SESC Inspection Report

(February 2022)

Project Information

Project Name & RIC#:				
Environmental Permits	**Check all applicable to project site:**			**Permit Number**
	☐Yes	**RIPDES CGP (construction)**		
	☐Yes	**RIPDES RGP (contaminated dewatering)**		
	☐Yes	**Freshwater Wetlands/CRMC**		
	☐Yes	**Contaminated Soils?**		Soil Management Plan ☐Yes ☐No
RIDOT Project Manager	**Name**		**Phone**	**Email**
RIDOT Construction Mgr	**Name**		**Phone**	**Email**
Operator/Contractor	**Name**		**Phone**	**Email**
Contractor SESC Contact	**Name**		**Phone**	**Email**

Inspection Information

Certified SWPPP Inspector	**Name & Certification/#**	**Phone**	**Email**
Inspection Date		**Start/End Time**	

Inspection Type

☐Weekly ☐Pre-storm Event ☐During Storm Event ☐Post-Storm Event ☐Other

Weather Information

Last Rain Event
Date: **Duration (in hrs):** **Approximate Rainfall (in):**

Rain Gauge Location & Source:

Weather at time of this inspection:

Certification Statements

Check statement that applies then sign and date below:

☐ **I, as the designated SWPPP Inspector, certify that this site has been inspected as required by regulation and I have determined that maintenance and corrective actions *are not required now*.**

☐ **I, as the designated SWPPP Inspector, certify that this site has been inspected as required by regulation and I have made the determination that the site *requires corrective actions*. The required corrective actions are noted within this inspection report.**

Inspector	**Print Name**	**Signature**	**Date**

The Site Operator & RIDOT Construction Manager acknowledges by his/her signature, the receipt of this SWPPP inspection report and its findings. He/she acknowledges that all recommended corrective actions must be completed and documentation of all such corrective actions must be made in this inspection report per applicable regulations.

Operator	**Print Name**	**Signature**	**Date**
RIDOT CM	**Print Name**	**Signature**	**Date**

Section A: Soil Erosion, Runoff, Sedimentation, & Pollution Prevention Control Measures			
Permit Requirements			**If "No", corrective action is required. Specify action/date & INCLUDE PHOTO #.**
Minimize Area of Disturbance			
A1	Has the operator marked and **adhered to** the approved LOD on site, including sensitive areas?	☐Yes ☐No	
Establish Sediment Barriers			
A2	Has the operator **properly installed and maintained sediment barriers** as required along the LOD to retain sediment on site?	☐Yes ☐No	
Protect Storm Drain Inlets			
A3	Has the operator protected **all storm drain inlets/grates** from construction runoff?	☐Yes ☐No ☐No inlets in project area	
A4	Has the operator cleaned and maintained **inlet protection measures** to maintain performance?	☐Yes ☐No	
A5	Has the operator **removed accumulated sediment** adjacent to inlets within 24 hours of detection?	☐Yes ☐No	
Establish Temporary Controls for the Protection of Post-construction Stormwater Control Measures			
A6	Has the operator protected all areas for proposed infiltration/STUs from compaction, **excluded them from work/staging areas**, & installed sediment barriers around them?	☐Yes ☐No ☐No STU proposed	
Preserve Topsoil / Protect Stockpiles			
A7	Has the operator **covered and/or installed sediment barriers around any stockpiles on site**?	☐Yes ☐No ☐No stockpiles	
Divert or Manage Run-on from Up-gradient Areas			
A8	Is the operator **preventing water** from outside the approved LOD/project area from entering the construction site?	☐Yes ☐No	
Properly Design Constructed Stormwater Conveyance Channels			
A9	Did the operator correctly **install and maintain temporary measures**, as necessary, to control stormwater traveling through or around the site?	☐Yes ☐No ☐N/A	
Retain Sediment On-site			
A10	Is the operator **retaining all sediment on-site**?	☐Yes ☐No	
A11	Has the operator properly constructed and maintained **construction entrances**?	☐Yes ☐No	
A12	Has the operator properly installed and	☐Yes	

	maintained **sediment barriers** at the proper interval to protect long, steep slopes from rill and gully erosion?	☐No ☐No steep slopes	
A13	Has the operator provided an effective **sediment trap** for locations that drain more than 1 acre of unstabilized soil?	☐Yes ☐No ☐N/A	
Stabilize Soils			
A14	Has the operator properly **stabilized exposed soils** where earth disturbance activities have ceased and will not resume within 14 days?	☐Yes ☐No ☐Working in all areas	
Construction Activity Pollution Prevention Control Measures			
A15	If concrete is used on-site, has the operator properly installed, signed, and maintained a **washout area** within the approved LOD & **50' from wetlands**?	☐Yes ☐No ☐No concrete	
A16	Is the operator properly **controlling dust**?	☐Yes ☐No	
A17	Has the operator **prevented the release of washout** from construction materials?	☐Yes ☐No	
A18	Is the operator **preventing the discharge of fuels or oils** used in vehicle operation through proper storage, availability of **spill kits and good operating practices**?	☐Yes ☐No	
A19	Is the operator properly **storing and covering any construction materials & chemicals** that have the potential to contaminate stormwater?	☐Yes ☐No	
A20	Does the operator have **covered designated receptacles** for trash and construction debris?	☐Yes ☐No ☐Removed daily	
A21	Is the operator **removing all construction debris/waste material piles created by the project** (i.e. chipped concrete, asphalt, spoils) from the site within 7 days?	☐Yes ☐No	
A22	Is the operator **street sweeping** to prevent accumulated trash and sediment, including track-out, from entering storm drains?	☐Yes ☐No ☐No storm drains	

Section B: Non-Contaminated Construction Dewatering

	Permit Requirements		If "No", corrective action is required. Specify action/date & INCLUDE PHOTO #.
B1	If the project has a RIPDES *RGP* and *contaminated* dewatering is occurring, is the required treatment system properly installed and maintained **per plan?**	☐Yes ☐No ☐No contaminated soils/water	
B2	If **non-contaminated** dewatering is occurring on site, is discharge clear and free from turbidity, sediment, foam, or floating solids?	☐Yes ☐No ☐No dewatering	*If no dewatering*, Section B of checklist is complete.
B3	Is the operator **discharging the treated water to an upland area** (not biological wetland) for infiltration?	☐Yes ☐No	
B3a	If no, is it because it is infeasible to discharge to an upland area? Explain why.	☐Yes ☐No	
B4	Has the operator **protected all discharge points** from erosion?	☐Yes ☐No	
B5	Is the operator **preventing the captured sediment from being discharged** into drains or surface waters?	☐Yes ☐No	

Section C: Documentation

	Permit Requirements		If "No", corrective action is required. Specify action/date.
C1	Are stormwater inspections taking place at least every 7-days & after storm events?	☐Yes ☐No	
C2	Have previous Corrective Actions been initiated & completed by the Contractor?	☐Yes ☐No	

Notes:

Site-specific BMPs/Control Measures

Number the structural and non-structural BMPs identified in the SESC Plan on the SESC site plan and list them below. This list may change during construction.

Note: Corrective Actions are REQUIRED if BMP is not installed or operating properly, or if maintenance is needed to keep BMP from failing.

	Location and/or Station	BMP Description	Installed & Operating Properly?	Assoc. Photo #	Corrective Action (CA)	Date Operator Addressed CA
1			☐Yes ☐No			
2			☐Yes ☐No			
3			☐Yes ☐No			
4			☐Yes ☐No			
5			☐Yes ☐No			
6			☐Yes ☐No			
7			☐Yes ☐No			
8			☐Yes ☐No			
9			☐Yes ☐No			
10			☐Yes ☐No			

Copy & add more rows if needed.

Photo Log:

(Associated photos – each photo should be dated and have a unique identification # and written description indicating where it is located within the project area. If a close-up photo is required, it should be preceded with a photo including both the detail area and some type of visible fixed reference point. Photos should be annotated with Station numbers and other identifying information where needed.)

Photo #:	Station:
	Description:

Photo #:	Station:
	Description:

Photo #:	Station:
	Description:

Photo #:	Station:
	Description:

Photo #:	Station:
	Description:

Photo #:	Station:
	Description:

(copy/paste/add more as necessary)

TO BE FILLED OUT BY RIDOT CONSTRUCTION MANAGER

OUTSTANDING CORRECTIVE ACTIONS

Were **CORRECTIVE ACTIONS** reported in the previous inspection report?

☐ **NO**	No Corrective Actions were issued in *previous inspection report*.	
☐ **YES**	☐ All Corrective Actions have been addressed	
	Date work began:	Date work completed:
	☐ Corrective Actions remain and are noted in this inspection report. *WHY did they not get addressed w/in 7-days?*	

NOTICE TO CONTRACTOR

This SWPPP Inspection Report, completed by a Contractor-designated certified SWPPP inspector, indicates that this construction site is:

☐ **COMPLIANT**	☐ No immediate actions are required, other than keeping up the good work! (No corrective actions necessary at this time.) ☐ **Work is required to maintain site compliance. Corrective Actions are necessary. See below for additional details.**
☐ **NON-COMPLIANT**	**This document serves as your RIDOT directive to proceed with CORRECTIVE ACTIONS that have been outlined above.** In accordance with the RIPDES CGP, the SWPPP and Section 212 of the RIDOT Standard Specifications, for routine maintenance: **the Contractor will initiate work to clean and maintain measures immediately after discovering the problem, and complete the work by close of the next work day after receiving such a directive from the Construction Manager.** When installation of a new control or a significant repair is needed, **site Contractor must ensure that the new or modified control practice is installed and made operational by no later than seven (7) calendar days from the time of discovery where feasible.**
	Date work to begin: Click or tap to enter a date.
	Date work to be completed: Click or tap to enter a date.

CM Initials: _____ CM Comments:

Date:

Corrective Action Log

TO BE FILLED OUT BY SITE OPERATOR FOR EVERY INSPECTION

	Location/Station	Corrective Action	Date Notified	Date Completed	RIDOT Initial
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
Operator Signature:			**Date:**		

APPENDIX F

ENVIRONMENTAL PERMITS

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT OFFICE
696 VIRGINIA ROAD
CONCORD, MA 01742

June 26, 2026

Regulatory Division
Regulatory File No. NAE-2026-00220

Alisa Richardson
Rhode Island Department of Transportation
360 Lincoln Avenue
Warwick, Rhode Island 02888
Via Email: dot.nru@dot.ri.gov

Dear Alisa Richardson:

The U.S. Army Corps of Engineers (Corps) has reviewed your request to discharge fill material in waters of the U.S. associated with the rehabilitation and replacement of three bridges at three separate locations associated with the Rhode Island Department of Transportation (RIDOT) Ashaway Corridor Project located where Potter Hill Road is conveyed over the Pawcatuck River at approximately latitude 41.4138 and longitude -71.7972; where Laurel Street is conveyed over Mile Brook at approximately latitude 41.4148, longitude -71.7958; and where Laurel Street is conveyed over the Ashaway River at approximately latitude 41.4234, longitude -71.7918, in Hopkinton, Washington County, Rhode Island. The proposed regulated activities associated with this project are detailed on the attached drawings titled, "DEPARTMENT OF TRANSPORTATION PLAN, PROFILE AND SECTIONS OF PROPOSED STATE HIGHWAY CORRIDOR – ASHAWAY REHABILITAITON AND REPLACEMENT OF BRIDGE NOS. 005001, 005101, 005201 VOLUME 2 VRUDGE BI. 005001 LAUREL STREET OVER ASHAWAY RIVER BRIDGE NO. 005101 LAUREL STREET OVER MILE BROOK BRIDGE NO. 005201 POTTER HILL ROAD OVER PAWCATUCK RIVER TOWN OF HOPKINTON COUNTY OF WASHINGTON R.I CONTRACT NO. 2026-CB-019 F.A. PROJECT NO. XXXXXXXXXX 1.62 MILES," on four sheets dated May 2026.

Across the three bridge locations spanning the Ashaway River, Mile Brook, and the Pawcatuck River, there will be a permanent discharge of fill material into a total of 0.14 acre below the ordinary high water (OHW) mark of approximately 183.10 linear feet of stream and within 0.04 acre of wetlands associated with grading and installation of scour protection. Temporary discharges of fill will total 0.05 acre for dewatering and installation of erosion controls to facilitate the rehabilitation and replacement of three bridges.

Based on the information provided, the Corps has verified that the proposed actions are authorized under Nationwide Permit (NWP) NWP 14, Linear Transportation Projects, pursuant to authorities under Section 404 of the Clean Water Act (33 U.S.C. § 1344). You can find a copy of these permits at:

https://www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/. You must ensure the proposed work is performed in accordance with the enclosed applicable terms and conditions.

Special Conditions

In addition, this verification is subject to the following special conditions:

1. The permittee shall complete and return the enclosed Completion Certification Form to this office at least one month following the completion of the authorized work.

2. All construction shall be completed in accordance with the limits of construction and construction sequences detailed on the enclosed plans titled "A"DEPARTMENT OF TRANSPORATION PLAN, PROFILE AND SECTIONS OF PROPOSED STATE HIGHWAY CORRIDOR – ASHAWAY REHABILITAITON AND REPLACEMENT OF BRIDGE NOS. 005001, 005101, 005201 VOLUME 2 VRUDGE BI. 005001 LAUREL STREET OVER ASHAWAY RIVER BRIDGE NO. 005101 LAUREL STREET OVER MILE BROOK BRIDGE NO. 005201 POTTER HILL ROAD OVER PAWCATUCK RIVER TOWN OF HOPKINTON COUNTY OF WASHINGTON R.I CONTRACT NO. 2026-CB-019 F.A. PROJECT NO. XXXXXXXXXX 1.62 MILES" on four sheets dated May 2026. If there are changes to the plans or construction methods for work within or adjacent to waters of the U.S., the permittee shall contact the Corps to discuss modification of this authorization. The Corps must approve any changes before they are undertaken.

3. Turbidity control measures must be properly installed, secured and regularly monitored to ensure aquatic species are not entangled or trapped in the project area.

4. No new permanent surface water withdrawal, water intakes, or water diversions shall be constructed.

5. Temporary intakes shall be installed and operated in accordance with the NMFS GARFO/FHWA Best Management Practices Manual. Intakes shall be equipped with mesh size screening and approach velocity appropriate for the species and life stage anticipated to be present during construction. Temporary pumping/ intakes related to construction water handling will be based on the resource present and in accordance with state fisheries consultation (with documenting provided) where such consultation is available.
    a. Per the NMFS Anadromous Salmonid Passage Facility Desing manual, screen openings must not exceed 3/32 inch and screen approach velocity must be less than 0.24 feet per second in waters supporting anadromous salmonids.

b. The use of 2-millimeter wedge wire screens must be used with a maximum intake velocity of 0.5 feet per second.

6. Erosion, sediment, and turbidity controls shall be maintained in effective operating conditions during construction. Controls shall be removed upon completion of work, after all exposed soil and other fills, as well as any work waterward of the ordinary high water mark is permanently stabilized.

7. Construction debris and sediment shall be prevented from entering aquatic areas. All construction debris and excess materials shall be disposed of in an appropriate upland area.

8. Dredged and/or excavated materials, including fine-grained materials, shall be moved to an upland location and stabilize to prevent reentry into the waterway or disposed of at a previously approved disposal site.

9. Raw concrete shall not contact the water; wet pours of concrete shall be confined within sealed forms until the concrete is set or pre-cast members installed. Grout bags shall be watertight.

10. Install and remove any in-water soil erosion, sediment, and turbidity controls outside of the TOY restrictions listed in Appendix C of the FHWA/NMFS GARFO EFH Programmatic Consultation dated 01/16/2024.

11. Conduct in-water work that produces turbidity sedimentation in diadromous streams or EFH outside of the TOY restrictions in Appendix C of the FHWA/NMFS GARFO EFH Programmatic Consultation dated 01/16/2024.

12. Temporary and/or obsolete structures and fills shall be removed in their entirety.

13. Areas impacted by temporary activities or structures shall be returned to pre-construction conditions, including elevations and substrate.

14. Any fill must be free of all non-native or invasive species and/or contaminants.

15. If the authorized work is not complete before the monarch butterfly (*Danaus plexippus*) or tricolored bat is listed under the Endangered Species Act (ESA), the permittee shall contact FHWA/USACE to initiate ESA Section 7 consultation with the U.S Fish and Wildlife Service.

16. No hay bales shall be used for erosion and sediment controls; certified weed-free, chemical-free straw bales are acceptable.

17. Woven and mechanically bound biodegradable erosion control matting shall be used to stabilize all slopes steeper than 3H:1V. No plastic netting or welded joint poly-based matting shall be used.

18. Downstream flows shall always be maintained, with water from dewatering operations filtered to remove excessive sediments and discharged in a manner that prevents a release of turbid water into downstream areas. Entrapped fish or mussels shall be timely collected and relocated to the stream channel in a manner that promotes their safe recovery.

19. Prior to moving construction equipment into the project area, the contractor must take reasonable measures to ensure that each piece of equipment is free of soil, seeds, vegetative matter, or other debris that may contain seeds of non-native terrestrial and aquatic invasive species.

20. If painting, sand or water blasting any portion of the bridge is necessary, appropriate aprons shall be utilized to provide for complete containment of all paint, and/or sealant over-spray particles and other debris during bridge removal, installation, or maintenance operations.

21. Aprons, tarps, shrouds, and/or other containment devices must be in place during bridge demolition, bridge maintenance, bridge construction and/or bridge surfacing activities to capture falling debris, paints, welding slag, sealant overspray, asphalt deck materials, or other debris.

22. All concrete chunks, asphalt, grindings, concrete materials, wood, rebar, and other debris generated during demolition or construction that enters the river shall be immediately removed and taken to an appropriate disposal facility outside of the floodplain.

23. All fueling operations, lubricating, hydraulic topping off, fuel tank purging, and equipment maintenance/repairs shall be performed at an upland site outside of the one-hundred-year floodplain.

24. All tools, equipment, barricades, signs, surplus materials, and rubbish from the project work limits shall be removed upon project completion. All construction debris and litter must be completely removed off site and disposed of properly upon completion of the project

A change in location or project plans may require re-evaluation of your project. Proposed changes should be coordinated with this office prior to construction. Failure to comply with all terms and conditions of these permits (NWP) invalidate this authorization and could result in a violation of Section 301 of the Clean Water Act or Section 10 of the Rivers and Harbors Act of 1899. You must also obtain all local, state, Tribal, and other Federal permits that apply to this project.

Water Quality Certification (WQC)

The State of Rhode Island issued a general WQC decision for NWP 14, Linear Transportation Projects (enclosed). You must comply with the conditions specified in the WQC decision for this NWP authorization to be valid.

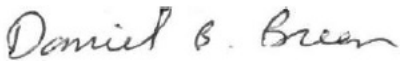
Permit Expiration

The Corps verification of this NWP authorization is valid until March 14, 2031, unless the NWP is modified, reissued, or revoked prior to that date. If the authorized work for the NWP authorization has not been completed by that date and you have commenced or are under contract to commence this activity before March 14, 2031, you will have until March 14, 2032, to complete the activity under the enclosed terms and conditions of this NWP.

Contact Information

If you have any questions, please contact Kevin Newton at 978-318-8044, or by email at kevin.m.newton@usace.army.mil. To better serve you, please complete the Customer Service Survey located at: https://regulatory.ops.usace.army.mil/customer-service-survey/.

Sincerely,



Daniel B. Breen
Chief, Transportation and Utilities Section
Regulatory Division

Enclosures:
Project Plans
Compliance Certification Form
Water Quality Certification
NWP 14, Linear Transportation Projects and General/Regional Conditions

cc (w/enclosures):
Neal Personeus, RIDEM (via neal.personeus@dem.ri.gov)
Robert Kalunian, Crossman Engineering (via kalunian@crossmaneng.com)
Lauren Bonatakis, National Park Service (via lauren_bonatakis@nps.gov)
Alisa Richardson, RIDOT (via alisa.richardson@dot.ri.gov)

U.S. Army Corps of Engineers (USACE)

CERTIFICATION OF COMPLIANCE WITH DEPARTMENT OF THE ARMY PERMIT

For use of this form, see Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act of 1899, and Section 103 of the Marine Protection, Research, and Sanctuaries Act; the proponent agency is CECW-COR.

Form Approved - OMB No. 0710-0003 Expires 2027-10-31

The Agency Disclosure Notice (ADN)

The Public reporting burden for this collection of information, 0710-0003, is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

PURPOSE: This form is used by recipients of U.S. Army Corps of Engineer Regulatory permits to certify compliance with the permit terms and conditions.

Your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with this permit, you are subject to permit suspension, modification, or revocation.

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the U.S. Army Corps of Engineers, New England District Office.

The certification can be submitted by email at cenae-r-tu@usace.army.mil or by mail at the below address:

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the U.S. Army Corps of Engineers, New England District Office.

U.S. Army Corps of Engineers
New England District
Regulatory Division
696 Virginia Road
Concord, MA 01742-2751

COMPLETED BY THE CORPS

Corps Action Number:	NAE-2026-00220
Permit Type:	Nationwide Permit 14 (2026 NWPs)
General Permit Number and Name (*if applicable*):	
Name of Permittee:	Rhode Island Department of Transportation
Project Name:	RI DOT-0013Q Corridor-Ashaway
Project Location (*physical address*):	Latitude 41.4148 and Longitude -71.7958; Hopkinton, 89 Laurel Street, Washington County, Rhode Island.

PERMITTEE'S CERTIFICATION

Date Work Started: _____

Date Work Completed: _____

Enclose photographs showing the completed project (*if available*).

I _____ hereby certify that the work authorized by the above referenced permit has been completed in accordance with all of the permit terms and conditions, and that any required compensatory mitigation has been completed in accordance with the permit conditions.

Name	Date	Signature

14. Linear Transportation Projects.
Activities required for crossings of waters of the United States associated with the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, driveways, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge of dredged or fill material cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge of dredged or fill material cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to preconstruction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10-acre; or (2) there is a discharge of dredged or fill material in a special aquatic site, including wetlands. (See general condition 32.) (Authorities: Sections 10 and 404)

Note 1: For linear transportation projects crossing a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. Linear transportation projects must comply with 33 CFR 330.6(d).

Note 2: Some discharges of dredged or fill material for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

Note 3: For NWP 14 activities that require pre-construction notification, the PCN must include any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings that require Department of the Army

authorization but do not require pre-construction notification (see paragraph (b)(4) of general condition 32). The district engineer will evaluate the PCN in accordance with Section D, “District Engineer’s Decision.” The district engineer may require mitigation to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see general condition 23).

2026 Nationwide Permits General Conditions

1. Navigation

a) No activity may cause more than a minimal adverse effect on navigation.

b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

NAE Note: *Compliance with this condition can be achieved by ensuring no unreasonable interference with navigation by the existence or use of any activity authorized by any Nationwide Permit (NWP), and no attempt made by a permittee to prevent the full and free use by the public of all navigable waters at or adjacent to any activity authorized by any NWP.*

2. Aquatic Life Movements

No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

NAE Note: *Compliance with this condition may be achieved by ensuring that during in-stream work, the low flow channel/thalweg remains unobstructed during periods of low flow, except when it is necessary to perform the authorized work. Additionally, for work in tidal waters, in-stream controls should be installed in such a manner that do not obstruct fish passage.*

3. Spawning Areas

Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (*e.g.,* through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas
Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds
No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

Maine Note: *Contact the Maine Department of Marine Resource (ME DMR) for further conservation measures if a proposed activity would result in excess turbidity (i.e., dredging) and is located within 100 feet of ME DMR shellfish areas. Reference material can be found at: https://dmr-maine.opendata.arcgis.com/datasets/mainedmr-molluscan-shellfish-2010/explore?location=43.733484%2C-69.767928%2C10.43 and https://mgs-maine.opendata.arcgis.com/datasets/maine-coastal-marine-geologic-environments/explore.*

6. Suitable Material
No activity may use unsuitable material (*e.g.,* trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

7. Water Supply Intakes
No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects from Impoundments
If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows
To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows, including tidal flows. The activity must not restrict or impede the passage of normal or high flows including tidal flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (*e.g.,* stream restoration or relocation activities).

10. Fills Within 100-year Floodplains
The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

Massachusetts Note: *For activities located within the Commonwealth of Massachusetts, activities may be required to comply with the Bordering Lands Subject to Flooding provisions of the Commonwealth's Wetland Protection Act. Applicants should contact Massachusetts Department of Environmental Protection to determine whether this provision applies to their proposed activity/ies.*

11. Equipment
Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

If mats are used to minimize soil disturbance, the affected areas must be returned to pre-construction elevations, and revegetated as appropriate. In circumstances where the use of mats has caused significant soil compaction efforts using techniques (*e.g.,* soil reaeration techniques) to break up the compaction should be employed to return the soil to a pre-construction state prior to returning to pre-construction elevations.

NAE Notes: *(1) Compliance with this condition may be achieved through the implementation of best management practices outline in NAE's "Construction Mat Best Management Practices" document available at https://www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/Permit-Resources/.*

(2) Compliance with this condition may be achieved by ensuring that construction equipment such as barges in tidal waters always provide adequate clearance above the substrate to avoid impacts to SAS during all tides.

(3) Compliance with this condition may be achieved by ensuring that construction equipment that would cross or access streams utilizes temporary bridges, spans, construction mats, culverts, or cofferdams to minimize disturbance to the waterway.

12. Soil Erosion and Sediment Controls
Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

NAE Note: *Compliance with this condition may be achieved by ensuring that all discharge points back into waters of the U.S., including wetlands use appropriate energy dissipaters and erosion and sedimentation control BMPs. Controls that are biodegradable can be left in place, but should be removed if they are not biodegradable.*

Temporary controls should be removed upon completion of work, but not before all exposed soil and other fills and any work waterward of the OHWM are permanently stabilized. Once permanently stabilized, temporary controls should be removed as soon as possible. Sediment and debris collected by these controls should be removed and placed at an upland location and in a manner that will prevent its later erosion into a waterway or wetland.

Massachusetts Note: *In Massachusetts, compliance with this condition may be achieved by ensuring, as applicable, that all activities are compliant with the State of Massachusetts' Stormwater Management Standards at 314 CMR 9.06(6)(a)-(f) and the State of Massachusetts' Stormwater Handbook.*

13. Removal of Temporary Structures and Fills
Temporary structures must be removed to the maximum extent practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

NAE Note: *Compliance with this general condition may be achieved by underlying temporary fills with geotextile fabric which may help to facilitate the restoration to pre-construction elevations.*

14. Proper Maintenance
Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

NAE Note: *Compliance with this general condition may be achieved by the complete removal, cutting, and/or driving to three feet below the substrate of* d*erelict, degraded, or abandoned piles and sheet piles located in navigable waters of the U.S., except for those inside existing work footprints for piers to prevent interference with navigation. Existing creosote piles that are affected by project activities may be completely removed if practicable. In areas of fine-grained substrates, piles may be removed by the direct, vibratory or clamshell pull method to minimize sedimentation, and turbidity impacts and prevent interference with navigation from cut piles. Removed piles should be disposed of in an upland location landward of MHW or OHW and not in wetlands, tidal wetlands, their substrate, or mudflats.*

15. Single and Complete Project
The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers
a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the

appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. Permittees shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or Study River (*e.g.*, National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: http://www.rivers.gov/.

NAE Note: *See also: Regional Condition C, Additional PCN Requirement (Wild and Scenic Rivers).*

17. Tribal Rights
No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. Endangered Species
a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of "effects of the action" for the purposes of ESA section 7 consultation.

b) Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If pre-construction notification is required for the proposed activity, the federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective Federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat or critical habitat proposed for such designation, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect federally-listed endangered or threatened species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation), the pre-construction notification must include the name(s) of the endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or that utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. For activities where the non-federal applicant has identified listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have "no effect" on listed species (or species proposed for listing or designated critical habitat (or critical habitat proposed for such designation), or until ESA section 7 consultation or conference has been completed. If the non-federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

d) As a result of formal or informal consultation or conference with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.

e) Authorization of an activity by an NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (*e.g.*, an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal permittee should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this

general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their web pages at http://www.fws.gov/ or http:// www.fws.gov/ipac and http://www.nmfs.noaa.gov/pr/species/esa/ respectively.

NAE Note: *For information on how to comply with General Condition 18, please visit our website at https://www.nae.usace.army.mil/missions/regulatory/endangered-species-act/.*

Maine Note: *Federal agencies should refer to "Multiple Federal Agency & Lead Federal Agency Best Practices" when a Corps permit is required, which can be found on the Corps' webpage at: www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/Maine-General-Permit. (This is a pending document and will be published on our website when completed.)*

19. Migratory Birds and Bald and Golden Eagles

The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties

a) No activity is authorized under any NWP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)(1)). If pre-construction notification is required for the proposed NWP activity, the federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district

engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective Federal agency is responsible for fulfilling its obligation to comply with section 106.

c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect.

d) Where the non-federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and so notified the Corps, the non-federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects on historic properties or that NHPA section 106 consultation has been completed. For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

NAE Note: *The following link to the Corps' website provides SHPO and THPO contact information and additional procedures to expedite Corps regulatory review regarding the NHPA. Please contact the appropriate SHPO and/or THPO based on the geographic location of the regulated activity: https://www.nae.usace.army.mil/Missions/Regulatory/Historic-and-Tribal-Resources/.*

21. Discovery of Previously Unknown Remains and Artifacts
Permittees that discover any previously unknown historic, cultural or archaeological remains and artifacts while accomplishing the activity authorized by an NWP, they must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters
Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57, and 58 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after she or he determines that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation

The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (*i.e.*, on site).

b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

d) Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 3/100-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require pre-construction notification, the district engineer may determine on a case-by case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (*e.g.*, conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (*e.g*., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the

NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). If permittee-responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another Federal agency holds an easement, the district engineer will coordinate with that Federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.

5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided (see 33 CFR 332.4(c)(1)(ii)).

6) Compensatory mitigation requirements (*e.g.*, resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or

scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

NAE Note: *Applicants are encouraged to utilize the Regulatory In-lieu Fee and Bank Information Tracking System (RIBITS) in order to determine which in-lieu fee programs and/or mitigation banks have a sufficient amount of appropriate and available credits which they may propose to use to offset their proposed activity's unavoidable impacts to waters of the U.S., including wetlands. RIBITS is available at https://ribits.ops.usace.army.mil/ords/f?p=107:2::::::. See also: Regional Condition I, Compensatory Mitigation.*

24. Safety of Impoundment Structures
To ensure that all impoundment structures are safely designed, the district engineer may require non-federal applicants to demonstrate that the structures comply with established state or Federal dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality
a) Where the certifying authority (state, authorized tribe, or EPA, as appropriate) has not previously certified compliance of an NWP with CWA section 401, a CWA section 401 water quality certification for the proposed activity which may result in any discharge from a point source into waters of the United States must be obtained or waived (see 33 CFR 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed activity which may result in any discharge from a point source into waters of the United States in order for the activity to be authorized by an NWP.

b) If the NWP activity requires pre-construction notification and the certifying authority has not previously certified compliance of an NWP with CWA section 401, the proposed activity which may result in any discharge from a point source into waters of the United States is not authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge into waters of the United States, the permittee must submit a copy of the certification to the district engineer. The discharge into waters of the United States is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied (*i.e.,* by the issuance of a water quality certification or a waiver and completion of the Section 401(a)(2) process).

c) The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

NAE Note: *For information concerning how to apply to EPA for a Water Quality Certification for activities located within Tribal lands or within lands of exclusive Federal jurisdiction, please see: https://www.epa.gov/cwa-401/resources-when-epa-acts-certifying-authority-under-section-401 and/or contact: R1CWA401@epa.gov.*

Connecticut Note: *For information concerning how to apply to CTDEEP for a Water Quality Certification, please see: https://portal.ct.gov/deep/permits-and-licenses/factsheets-inland-water/401-water-quality-certification-fact-sheet.*

Maine Note: *For information concerning how to apply to LUPC or MEDEP for a Water Quality Certification, please see: https://www.maine.gov/dep/water/wd/wqc/.*

Massachusetts Note: *For information concerning how to apply to MassDEP for a Water Quality Certification, please see: https://www.mass.gov/lists/wetlands-permitting-forms.*

New Hampshire Note: *For information concerning how to apply to NHDES for a Water Quality Certification, please see: https://www.des.nh.gov/water/rivers-and-lakes/water-quality-certification.*

Rhode Island Note: *For information concerning how to apply to RIDEM for a Water Quality Certification, please see: https://dem.ri.gov/sites/g/files/xkgbur861/files/2025-06/wqcheck.pdf.*

Vermont Note: *For information concerning how to apply to VTDEC for a Water Quality Certification, please see: https://dec.vermont.gov/act250/watershed/business-support/water-quality-certification-section-401.*

26. Coastal Zone Management

In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). If the permittee cannot comply with all conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual coastal zone management consistency concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

NAE Note: *If an individual state coastal zone management consistency concurrence is required, applicants should submit a consistency certification to the state (see 15 CFR 930.31(d)) at the same time as the PCN is submitted to the Corps, or shortly thereafter.*

Connecticut Note: *For information concerning how to apply to CTDEEP for a coastal zone management consistency certification, please see: https://portal.ct.gov/deep/coastal-resources/coastal-permitting/coastal-consistency.*

Maine Note: *For information concerning how to apply to the Maine Office of Community Affairs for a coastal zone management consistency certification, please see: https://www.maine.gov/dmr/programs/maine-coastal-program/federal-consistency-review.*

Massachusetts Note: *For information concerning how to apply to Mass CZM for a coastal zone management consistency certification, please see: https://www.mass.gov/federal-consistency-review-program.*

New Hampshire Note: *For information concerning how to apply to NHDES for a coastal zone management consistency certification, please see: https://www.des.nh.gov/water/coastal-waters/federal-consistency.*

Rhode Island Note: *For information concerning how to apply to CRMC for projects within the coastal zone, please see: https://www.crmc.ri.gov/applicationforms.html and https://www.crmc.ri.gov/regulations/fed_consistency.pdf.*

27. Regional and Case-by-Case Conditions
The activity must comply with any regional conditions that may have been added by the division engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its CWA section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits
The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:

a) The total acreage of loss of waters of the United States for a single and complete project cannot exceed the acreage limit of the NWP with the highest specified acreage limit when multiple NWPs are used to authorize an activity.

b) If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States for that single and complete project cannot exceed that specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14 (which has an acreage limit of 1/3-acre in tidal waters), with associated bank stabilization authorized by NWP 13 (which does not have a specified acreage limit), the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

c) If two or more of the NWPs used to authorize the single and complete project have specified acreage limits, the acreage loss of waters of the United States authorized by each of those NWPs cannot exceed the specified acreage limits of each of those NWPs. For example, if a commercial development is constructed under NWP 39 (which has a 1/2-acre limit), and the single and complete project

includes the filling of a ditch authorized by NWP 46 (which has a 1-acre limit), the maximum acreage loss of waters of the United States for the construction of the commercial development under NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States caused by the combination of the NWP 39 and 46 activities cannot exceed 1 acre.

29. Transfer of Nationwide Permit Verifications

If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

_____

(Transferee)

_____

(Date)

30. Compliance Certification

Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The successful completion of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States
If an NWP activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission and/or review is not authorized by an NWP until the appropriate Corps office issues the section 408 permission or completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

NAE Note: *Refer to the New England District's Section 408 Program webpage that can be found at: https://www.nae.usace.army.mil/Missions/Section-408/. See also: Regional Condition B, Additional PCN Requirement (Federal Projects).*

32. Pre-Construction Notification
a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential

to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

b) Contents of the Pre-Construction Notification: The PCN must be in writing and include the following information:

1) Name, address and telephone numbers of the prospective permittee;

2) Location of the proposed activity;

3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

4) (i) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.

(ii) For linear projects where one or more single and complete crossings require pre-construction notification, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters (including those single and complete crossings authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project, and does not change those non-PCN NWP activities into NWP PCNs.

(iii) Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (*e.g.,* a conceptual plan), but do not need to be detailed engineering plans);

5) The PCN must include a delineation of waters, wetlands, and other special aquatic sites on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate. For NWP 27 activities that require PCNs because of other general conditions or regional conditions imposed by division engineers, see Note 2 of that NWP;

NAE Note: *To comply with the above GC 32(5), the following methodologies should be utilized:*

(a) Wetlands should be delineated in accordance with the Corps Wetlands Delineation Manual and the most recent Northcentral/Northeast Regional Supplement. Wetland delineation and jurisdiction information can be found at: www.nae.usace.army.mil/missions/regulatory/jurisdiction-and-wetlands and https://www.usace.army.mil/Media/Announcements/Article/4262089/1-august-2025-us-army-corps-of-engineers-enhances-aquatic-resource-delineation/*.*

(b) Refer to the "Best Practices for Jurisdictional Determinations and Wetland Delineations," which can be found on the Corps webpage at: https://www.nae.usace.army.mil/missions/regulatory/state-general-permits/maine-general-permit/. (This is a pending document and will be published on our website when completed.)

(c) The ordinary high water mark should be delineated (on both sides) when streams, rivers, non-tidal open waters are present on the project site. Ordinary high water mark guidance can be found in RGL 05-05 (https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll9/id/1253). For complex, atypical, or problematic sites see: https://www.erdc.usace.army.mil/Media/Fact-Sheets/Fact-Sheet-Article-View/Article/486085/ordinary-high-water-mark-ohwm-research-development-and-training/.

(d) Vegetated shallows should be delineated when present on the project site. Vegetated shallow survey guidance and maps can be found on the Corps webpage at: https://www.nae.usace.army.mil/Missions/Regulatory/Jurisdiction-and-Wetlands/.

(e) All Essential Fish Habitat should be delineated when present on the project site. EFH survey guidance can be found in the current EFH programmatic, which can be found on the Corps webpage at https://www.nae.usace.army.mil/Missions/Regulatory/Essential-Fish-Habitat/.

6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the compensatory mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

7) For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the name(s) of those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the “study river” (see general condition 16); and

10) For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project.

c) Form of Pre-Construction Notification: The nationwide permit pre-construction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

d) Agency Coordination:

(1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for:

(i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States;

(ii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and

(iii) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

Maine Note: *The Corps will additionally coordinate with the State of Maine on all activities that require a waiver.*

(3) When agency coordination is required, the district engineer will immediately provide (*e.g.,* via email, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or email that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

The U.S. Army Corps of Engineers (Corps) New England District Regulatory Division issues the following Regional Conditions (RCs) to ensure that activities authorized by the 2026 Nationwide Permits (NWPs) in the New England states of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont will not cause more than minimal adverse environmental impacts, both individually and cumulatively. Before the New England District will verify an activity under one or more NWPs, the activity must be demonstrated to comply with the applicable NWP terms and all applicable NWP General Conditions (GCs) and RCs. Prior to commencement of a "non-notifying" activity (i.e., activities authorized by NWPs which do not require submission of a pre-construction notification [PCN]), the proponent (i.e., the person and/or the entity performing the work) is responsible for ensuring the activity meets all applicable:

- Terms of the NWP
- GCs
- RCs
- State Water Quality Certification, if applicable
- State Coastal Zone Consistency, if applicable

PCN Summary Table. The following activities may require a PCN regardless of the terms of the applicable NWP. Please read the applicable RCs to determine if a PCN is required.

Applicable to All New England States	
Exceedance of loss thresholds within streams, tidal/non-tidal wetlands, tidal submerged aquatic vegetation, mudflats, and intertidal areas	See RC A
Located within, or within the vicinity of a Federal Project	See RC B
Located within, or within the vicinity of a Wild and Scenic River	See RC C
Involving discharges of temporary fill material	See RC D
Involving slip lining	See RC E
Involving stream crossings	See RC F
Located within Essential Fish Habitat	See RC J
Applicable to Specific New England States	
Activities within Time-of-Year Restrictions	See RCs N, O, S, U, V, W
Located within the Saint John and Saint Croix River basins (Maine)	See RC P
Authorized by NWP 48, Commercial Shellfish Mariculture Activities and within the State of Maine > 5 acres	See RC Q
Located within Important or Rare Resources within the State of Maine	See RC R
Discharges of fill >10 cubic yards in Lake Champlain and Lake Memphremagog and/or their adjacent wetlands (Vermont)	See RC X

Regional Conditions

The following RCs apply to all applicable NWPs in **all New England States** (unless otherwise specified):

A. Additional PCN Requirement (Specific Resources): A PCN is required for any proposed activities that would result in the loss of waters of the U.S. that exceed the listed thresholds to the following aquatic resources if a PCN is not already required by the NWP.

Aquatic Resource	**Threshold**
Non-tidal Wetlands	4,356 square feet (1/10-acre)
Tidal and Non-Tidal Stream	200 linear feet or 3/100-acre (whichever is less)
Tidal Wetland	500 square feet
Tidal Submerged Aquatic Vegetation (SAV)	25 square feet
Mudflat	1,000 square feet
Intertidal	1,000 square feet

B. Additional PCN Requirement (Federal Projects): A PCN is required for any proposed activities that would involve the temporary or permanent occupation of, or alteration of, a federal project (including, but not limited to, a levee, dike, floodwall, channel, anchorage, breakwater, seawall, bulkhead, jetty, wharf, pier, or other work built or maintained but not necessarily owned by the United States). This includes all structures and work in, over, or under a Corps' federal navigation project (FNP) or in the FNP's buffer zone. The buffer zone is an area that extends from the horizontal limits of the FNP to a distance three times the FNP's authorized depth.

The activity may also require review and approval by the Corps pursuant to 33 USC 408 (Section 408 Permission). The applicant may reach out to the points of contact listed here: https://www.nae.usace.army.mil/Missions/Section-408/ and https://www.nan.usace.army.mil/Missions/Regulatory/Section-408/ (for activities located within the Lake Champlain watershed) and consult the National Channel Framework mapper: https://experience.arcgis.com/experience/b413139f18c046009ebcf62abea941dd/page/Map/. For activities which require a Section 408 permission, verification under an NWP will not be issued prior to the decision the Section 408 permission requires. Any structure or work constructed in an FNP, or its buffer zone shall be subject to removal at the owner's expense prior to any future Corps dredging or hydrographic surveys.

Applicants should contact the Corps Real Estate Division (https://www.nae.usace.army.mil/Missions/Real-Estate-Division/) at (978) 318-8585 for work that would occur on or would potentially affect a Corps property (or properties) and/or Corps-controlled easements. Work may not commence on Corps properties and/or Corps-controlled easements until they have received any required

Corps real estate documents demonstrating site-specific permission to perform work.

A PCN is not required if an applicant has previously obtained a Section 408 permission for their proposed activities, or a determination from the Corps that a Section 408 permission is not required for their proposed activities, and the proposed activities qualify for a non-notifying NWP.

C. Additional PCN Requirement (Wild and Scenic Rivers): A PCN is required under NWP GC 16, Wild and Scenic Rivers, and for: 1) any proposed activities that would be located in and within 1/4-mile up- or downstream of a Wild and Scenic River (WSR) segment, or in tributaries within 1/4-mile of a WSR segment; 2) any proposed activities that would be located in wetlands within 1/4-mile of a WSR segment; and 3) any proposed activities that have the potential to alter free-flowing characteristics in a WSR segment. Applicants should utilize http://www.rivers.gov/ for the most up-to-date WSR designations.

   Note: Applicants may coordinate with the Federal agency that has direct management responsibility of the WSR segment or tributary their proposed activity would be within 1/4-mile of prior to submitting a PCN to the Corps. This regional condition does not require a PCN to be submitted if that Federal agency determines that the proposed activity would not adversely affect the subject WSR.

D. Additional PCN Requirement (Temporary Fills): A PCN is required for any proposed activities that would involve the discharge of temporary fill (33 CFR 323.2(e) and (f)) greater than 1/10-acre to be left in place in non-tidal wetlands for more than one growing season. The growing season is generally defined as April 1 to September 30 (See the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* for more information about determining growing season. https://www.nae.usace.army.mil/Missions/Regulatory/Jurisdiction-and-Wetlands/Wetland-Delineation-Manual/).

   Note 1: The Corps will determine on a case-by-case basis, after evaluating site-specific and activity-specific circumstances whether temporary construction mats proposed for use are considered as temporary fill.

   Note 2: For linear projects, crossing a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization (33 CFR 330.2(i)). Therefore, each crossing of a water of the U.S., including wetlands could have up to 1/10-acre of temporary fill without requiring the submittal of a PCN. *Applicants should be aware that the definition of what constitutes a single and complete project per state regulations may differ from the Corps' definition. Applicants should consult with the state in order to determine state requirements. *

E. Additional PCN Requirement (Slip Lining): A PCN is required for any proposed activity that involves slip lining a stream crossing that is not currently meeting the stream crossing BMPs found in Regional Condition F (e.g., slip lining and invert-lining).

F. Additional PCN Requirement (Stream Crossing Standards): A PCN is required for any proposed stream crossing activities that cannot comply with the below "Stream Crossing Best Management Practices (BMPs)" unless the district engineer provides the applicant written verification removing the below requirements.

1. The width of the crossing shall be greater than or equal to 1.2 times the bank full width.
2. The crossing shall be embedded greater than or equal to 2 feet and/or at least 25 percent of the conveyance's height.
3. The crossing shall be constructed with a natural bottom substrate, as applicable.
4. The crossing shall match the gradient (i.e., slope) of the natural stream channel profile.
5. The crossing shall meet an openness ratio of greater than 0.82 feet.

Regardless of whether a proposed crossing can implement the above BMPs, the applicant should first coordinate with the appropriate state office to obtain required or recommended alternate stream crossing BMPs, prior to submitting a PCN to the Corps. If a stream crossing is designed to meet the standards required or recommended by the appropriate state agency for which the proposed activity is located within, those standards can serve in-lieu of these BMPs and submittal of a PCN is not required.

Note: Below are links to the stream crossing standards/guidelines for those New England states that have published such standards/guidelines. Applicants are highly encouraged to contact their state for additional information regarding those requirements and/or recommendations, as state requirements may be more stringent than the above listed BMPs.

Connecticut: CTDEEP Inland Fisheries Division Habitat Conservation and Enhancement Program's Stream Crossing Guidelines (https://portal.ct.gov/-/media/DEEP/fishing/restoration/StreamCrossingGuidelinespdf.pdf)

Maine: Maine Interagency Stream Crossing Guidelines: (https://www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/Maine-General-Permit/) and CoastWise (https://www.maine.gov/dmr/sites/maine.gov.dmr/files/inline-files/CoastWiseManualJuly2023_updated.pdf)

Massachusetts: Massachusetts River and Stream Crossing Standards as implemented through 314 CMR 9.06(2)(b).

(https://www.mass.gov/doc/massachusetts-river-and-stream-crossing-standards/download)

New Hampshire: New Hampshire RSA 482-A (https://www.gc.nh.gov/rsa/html/L/482-A/482-A-mrg.htm)

Rhode Island: Regardless of whether a proposed crossing can meet the above BMP's, all wetland and watercourse crossings in Rhode Island are evaluated on a site-by-site basis that account for on-site environmental characteristics by the state. For freshwater crossings, please contact them using the following link: https://dem.ri.gov/environmental-protection-bureau/customer-and-technical-assistance/pre-application-meetings. If a proposed crossing is within the coastal zone and under the jurisdiction of CRMC, please contact them using the following link: https://www.crmc.ri.gov/contact.html.

Vermont: *Vermont Stream Alteration Rule and General Permit* available at https://dec.vermont.gov/watershed/rivers/river-management#rules.

G. Aquaculture: Applicants proposing new aquaculture operations or modifications of existing aquaculture operations are required to coordinate with the appropriate U.S. Coast Guard (USCG) Sector for siting review, Navigation Risk Assessment (NRA), and navigation risk mitigation needs.

1. Coordination with the USCG can be completed by contacting via email:

   Sector Northern New England: (Maine, New Hampshire, Vermont, and Northeastern New York, Lake Champlain) D01-SMB-SecNNE-Waterways@uscg.mil

   Sector Boston: (New Hampshire border southward to Plymouth, Massachusetts) D01-SMB-SECBOSWaterways@uscg.mil

   Sector Southeastern New England: (Rhode Island and Southeastern Massachusetts, Cape Cod, and Islands) SENEWWM@uscg.mil

   Sector Long Island Sound: (New York to Connecticut border at Port Chester, Connecticut to Rhode Island border at Watch Hill) SECLISSPWMarineEvent@uscg.mil

   Sector New York: (Sandy Hook, New Jersey north through Port of New York/New Jersey, Hudson River to Whitehall, NY (south of Lake Champlain) D01-SMB-SecNY-Waterways@uscg.mil

   The applicant shall provide the following information to facilitate completion of the NRA: applicant name/company affiliation, license/lease type (commercial, research, shellfish, kelp, new or modified), nautical chart, detailed drawing with

dimensions, time of year, potential lighting/marking, types/materials of structures in water, planned anchoring, cultivation techniques (number of weekly/monthly visits, vessel tending/type), and any other significant information.

If the applicant receives a medium or high-risk assessment, they shall coordinate with the Corps and apply safety risk mitigations. The USCG will refer the project to the Corps unless the Corps makes the determination that it may proceed.

Any safety lights and signals prescribed by the USCG, through regulations or otherwise, must be installed and maintained at the permittee's expense. For required permitting, the applicant shall contact USCG First District Private Aid Program Manager through D01-SMB-D01PrivateAtoN@uscg.mil. Only actual AtoNs are permitted; floats, balls, markers, mooring balls and 'highflier flags' are not considered Aids to Navigation (AtoN). See: http://www.usharbormaster.com.

Applicants shall notify NOAA's National Ocean Service (NOS) Nautical Data Branch Office of Coast Survey to initiate chart and Coast Pilot corrections. See: https://nauticalcharts.noaa.gov/. Applicants must also notify NOAA on removal. See Note 2.

2. For marine safety information during construction or other significant periods, applicants may use the First District's Marine Safety Information form and email to: D01-SMB-LNM@uscg.mil.

Note 1: If a PCN is required, applicants shall include documentation of all required coordination with their PCN.

Note 2: For nautical chart and coast pilot updates, activities owners should use the status report form at https://nauticalcharts.noaa.gov/charts/docs/charts-updates/USACE+Permit+Status+Report.pdf. For aquaculture activities owners should use: https://nauticalcharts.noaa.gov/charts/docs/charts-updates/Artificial+Reef+Aquaculture+Status+Report.pdf to notify the Office of Coast Survey of the project completion. The form should be emailed to ocs.ndb@noaa.gov and should include a copy of as-built drawings.

H. Hydrology: Permanent wetland crossings shall be constructed in such a manner as to prevent excessive ponding or drying on either side of the authorized crossing after completion of the work. Measures shall be taken to maintain the existing hydrology. Such measures may include road cross drains such as culverts that are appropriately sized and placed at intervals to maintain the existing hydrology of the contiguous wetland.

I. Compensatory Mitigation: In addition to the requirements of NWP GC 23, Mitigation, compensatory mitigation requirements for unavoidable impacts to waters of the U.S. will be evaluated in accordance with the latest version of the *New England District Compensatory Mitigation Standard Operating Procedures* (https://www.nae.usace.army.mil/Missions/Regulatory/Mitigation/).

J. Essential Fish Habitat: Essential Fish Habitat (EFH) is defined as those waters and substrates necessary to fish for spawning, breeding, feeding or growth to maturity (16 U.S.C. 1802).

The following NWPs have been determined to result in no more than minimal adverse effects, provided the permittee complies with all terms and conditions of the NWP as applicable to the activity, including all activity thresholds and activity-specific Conservation Recommendations (CRs) identified in the current EFH and Fish and Wildlife Coordination Act (FWCA) Programmatic Consultation (https://www.nae.usace.army.mil/Missions/Regulatory/Essential-Fish-Habitat/). The National Marine Fisheries Service (NMFS) has granted General Concurrence (50 CFR 600.920(g)) for the below listed NWPs, and these activities do not require activity-specific EFH consultation.

Nationwide Permit	Authorized Activities with General Concurrence
NWPs: 1, 4, 5, 6, 9, 10, 11, 15, 16, 19, 20, 27, 28, 32, 35, & 41	All authorized activities
NWP 3	Parts (a) and (c) (i.e., non-notifying)
NWP 12	Section 404 only activities that do not result in the loss of greater than 1/10-acre and is not a new pipeline greater than 250 miles (i.e., non-notifying)
NWP 13	Activities less than 500 linear feet in length with a discharge of less than one (1) cubic yard per running foot below the ordinary high water mark or high tide line, and no discharges into special aquatic sites (i.e., non-notifying)
NWP 14	Activities less than 1/10-acre with no discharges into special aquatic sites (i.e., non-notifying)
NWP 18	Activities that discharge less than ten (10) cubic yards of fill material below the plane of the ordinary high water mark or high tide line with no discharges into special aquatic sites (i.e., non-notifying)
NWP 22	Activities associated with vessels that are not listed or eligible for listing on the National Register of Historic Places and not located within special aquatic sites (i.e., non-notifying)
NWP 23	Activities not identified as notifying within Regulatory Guidance Letter 05-07 (i.e., non-notifying)
NWP 33	Section 404 only activities (i.e., non-notifying)
NWP 36	Activities that discharge less than 50 cubic yards of fill material and are less than 20 feet wide (i.e., non-notifying)

NWP 43	Activities that do not involve the expansion or construction of a new stormwater management facility (i.e., non-notifying)
NWP 48	Activities that are not the installation of a new operation and do not directly affect greater than 1/2-acre of submerged aquatic vegetation (i.e., non-notifying)
NWPs: 51 & 60	Activities that do not result in the loss of greater than 1/10-acre (i.e., non-notifying)
NWP 54	Maintenance activities (i.e., non-notifying)
NWPs: 57 & 58	Section 404 only activities that do not result in the loss of greater than 1/10-acre (i.e., non-notifying)

For non-federal applicants whose proposed activities would be located within EFH and that do not require a PCN per the language of the NWP or per any other general or regional condition (i.e., non-notifying), the applicant shall review the current EFH and FWCA Programmatic Consultation (https://www.nae.usace.army.mil/Missions/Regulatory/Essential-Fish-Habitat/) to ensure their proposed activity complies with all applicable CRs.

1. A PCN is required for any proposed project that would exceed the activity thresholds that are included within the current EFH and FWCA Programmatic Consultation. Any proposed project that exceeds an activity threshold requires preliminary coordination/project-specific consultation.

2. For all activities that do not exceed the activity-based thresholds included within the current EFH and FWCA Programmatic Consultation, the project proponent shall implement the activity-specific applicable CRs. If the applicable CRs cannot be implemented, a PCN must be submitted to the Corps, and work may not commence until the Corps verifies the project under the applicable NWP(s).

Federal applicants should follow their own procedures for compliance with the Magnuson-Stevens Fishery Conservation and Management Act and Fish and Wildlife Coordination Act.

Note 1: For activities proposed for authorization by an NWP that requires the submittal of a PCN, applicants are encouraged to review the current EFH and FWCA Programmatic Consultation and design their proposed activities with the activity-based thresholds and incorporate applicable CRs.

Note 2: Applicants can utilize the NMFS EFH mapper to determine if their proposed activities are located within EFH: https://www.habitat.noaa.gov/apps/efhmapper/. Applicants can also utilize the current EFH and FWCA Programmatic Consultation (https://www.nae.usace.army.mil/Missions/Regulatory/Essential-Fish-Habitat/) for guidance on non-tidal waterbodies with diadromous fish.

K. Invasive Species: The introduction, spread, or the increased risk of invasion of invasive plant or animal species on the project site, into new or disturbed areas, or into areas adjacent to the project site caused by the site work shall be avoided. Native, non-invasive vegetation must be used unless otherwise authorized by the Corps, and shall not contain any species listed in Appendix K ("Invasive and Other Unacceptable Plant Species") of the current *New England District Compensatory Mitigation Standard Operating Procedures* located at: https://www.nae.usace.army.mil/Missions/Regulatory/Mitigation/. Equipment shall be thoroughly cleaned before and after project construction to prevent the spread of invasive species. This includes, but is not limited to, tire treads and construction mats. Information about how to avoid the spread of invasive species can be found at: https://www.nae.usace.army.mil/Missions/Regulatory/Invasive-Species.

L. NWP Documentation On-Site: The permittee shall ensure that a copy of their verification letter (for notifying NWPs only) and applicable NWP with all applicable GCs and RCs are at the worksite whenever work is being performed, and that all personnel performing work are fully aware of its terms and conditions.

M. Abandonment: If the permittee decides to abandon the activity authorized by an NWP, unless such abandonment is merely the transfer of property to another party, the permittee may be required to restore the area to the satisfaction of the Corps.

State-Specific Regional Conditions

The following RCs apply to all applicable NWPs in the **State of Connecticut**:

N. Regional Condition N is reserved for the State of Connecticut.

The following RCs apply to all applicable NWPs in the **State of Maine**:

O. Regional Condition O is reserved for the State of Maine.
P. Regional Condition P is reserved for the State of Maine.
Q. Regional Condition Q is reserved for the State of Maine.
R. Regional Condition R is reserved for the State of Maine.

The following RCs apply to all applicable NWPs in the **Commonwealth of Massachusetts**:

S. Regional Condition S is reserved for the Commonwealth of Massachusetts.
T. Regional Condition T is reserved for the Commonwealth of Massachusetts.

The following RCs apply to all applicable NWPs in the **State of New Hampshire**:

U. Regional Condition U is reserved for the State of New Hampshire.

The following Regional Conditions apply to all applicable NWPs in the **State of Rhode Island**:

V. Additional PCN Requirement and Time-of-Year Windows and Restrictions: A PCN is required for any proposed activity located in rivers/streams that deviates from the following time-of-year (TOY) work windows (i.e., work is allowed to occur), unless RIDEM and CRMC provide alternate TOY restrictions.

	TOY Work Restriction	**TOY Work Window**
Non-Tidal Waters	November 1 to June 30	July 1 to October 31
Tidal Waters	February 1 to October 14	October 15 to January 31
Anadromous Waters	March 1 to June 30	July 1 to February 28/29

For proposed activities that cannot follow the TOY windows/restrictions listed above, alternate work windows may be proposed under a PCN provided they are first coordinated with and authorized in writing by RIDEM. RIDEM may place additional constraints to protect anadromous fish species in the fall. In order to avoid delays in review, the applicant should include documentation of this coordination and authorization from RIDEM with the submittal of their PCN to the Corps.

Any proposed activity located in waters of the U.S. (excluding wetlands) shall be completed entirely "in-the-dry" or be isolated from active flows/the water column using temporary measures (i.e., cofferdams, sandbags, flume pipes, etc.) to the maximum extent practicable. The term "in-the-dry" means work that is done under dry conditions, e.g., work behind cofferdams or when the stream or tide is waterward of the work.

The following Regional Conditions apply to all applicable NWPs in the **State of Vermont**:

W. Regional Condition W is reserved for the State of Vermont.
X. Regional Condition X is reserved for the State of Vermont.

RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
235 Promenade Street, Providence, Rhode Island 02908-5767

Via email

December 15, 2025

Tammy R. Turley, Chief
U.S. Army Corps of Engineers
New England District, Regulatory Division
696 Virginia Road
Concord, MA 01742-2751

RE: 401 Water Quality Certificate Decision Letter for the Department of Army Nationwide Permits
WQC No. 25-086

Dear Ms. Turley:

The Rhode Island Department of Environmental Management Office of Water Resources (RIDEM OWR) has reviewed the proposed Nationwide Permits (NWPs) and accompanying General Conditions as published in the Federal Register, 90 Fed. Reg. 26100 (June 18, 2025). A request for Water Quality Certification was submitted to RIDEM OWR on the same date and accepted by RIDEM as a complete Certification Request under Application No. IA-0000008418. Included in the application documents was a detailed identification of which Nationwide Permits were not to be implemented in New England, as well as which Nationwide Permits you were seeking certification for. This "Proposal to Reissue and Modify Nationwide Permits" applies to all State waters that also meet the definition of Waters of the United States.

RIDEM OWR issued a Public Notice for the proposed reissuance and modifications to the Nationwide Permits on October 7, 2025, pursuant to Section 1.17(D) of the RIDEM Water Quality Regulations, 250-RICR-150-05-1. No public comments were received. RIDEM OWR has reviewed all materials submitted as part of the Certification Request pursuant to the procedures outlined in Section 1.17 of the Water Quality Regulations.

As noted in the cover letter dated June 18, 2025, that accompanied your Certification Request, the New England District has informed RIDEM that it intends not to implement the following NWPs in any of the New England States:

- NWP 2-Structures in Artificial Canals
- NWP 21-Surface Coal Mining Activities
- NWP 24-Indian Tribe or State Administered Section 404 Programs
- NWP 25-Structural Discharges
- NWP 30-Moist Soil Management for Wildlife
- NWP 49-Coal Remining Activities
- NWP 50-Underground Coal Mining Activities

Accordingly, RIDEM OWR has not reviewed those activities for certification, and as such none of the above-identified activities are granted Certification. Such activities would require Individual Applications to the US Army Corps of Engineers (USACE) and separate Requests for Certification to RIDEM OWR under Section 401 of the Clean Water Act (CWA).

As noted in the aforementioned June 18, 2025 cover letter, activities authorized under NWP 8 (Oil & Gas Structures on the Outer Continental Shelf) only involves activities seaward of the territorial seas and thus does not require State Certification pursuant to Section 401 of the CWA. Additionally, no activities are currently proposed for previous NWPs 26, 47 or 56, which are currently listed in the Federal Register as "Reserved".

USACE's New England District has opined that NWPs numbered 1, 9, 10, 11, 28, 35, and 55 could not reasonably be expected to result in a discharge into waters of the United States and the USACE does not deem certification to be necessary for this group of NWPs. Nevertheless, USACE has noted that the final decision of whether Certification is needed for any of these seven types of activities rests with the certifying authority, RIDEM. In reviewing these activities as published and described in the Federal Register, RIDEM is in agreement that activities authorized under NWPs 1 (Aids to Navigation), 10 (Mooring Buoys), 11 (Temporary Recreational Structures) and 28 (Modifications of Existing Marinas) would not result in discharges into Waters of the US and therefore do not require Certification under Section 401 if the CWA in order to be implemented in Rhode Island. We find, however, that certain activities authorized under Activities 9 (Structures in Fleeting and Anchorage Areas), 35 (Maintenance Dredging of Existing Basins) and 55 (Seaweed Mariculture Activities) could in fact result in discharges that may involve water quality impacts within Waters of the State that are also Waters of the US. We will therefore exercise our authority to make a Water Quality Certification Decision for those activities. Our decisions on these are detailed later in this decision letter.

In consideration of the above, and after due evaluation of the proposed reissuance and modifications to the Nationwide Permits pursuant to the Water Quality Regulations, the RIDEM OWR hereby conditionally grants the State's Water Quality Certification pursuant to Section 401 of the Clean Water Act for the following listed activities that meet the definition and requirements of Self Verification (SV) and Pre-Construction Notification (PCN) activities covered by the following Nationwide Permits as published in the Federal Register, 90 Fed. Reg. 26100 (Section B, "Nationwide Permits") on June 18, 2025:

- NWP 3 – Maintenance
- NWP 4 – Fish & Wildlife Harvesting, Enhancement, and Attraction Devices and Activities
- NWP 5 – Scientific Measurement Devices
- NWP 6 – Survey Activities
- NWP 7 – Outfall Structures and Associated Intake Structures
- NWP 9 – Structures in Fleeting and Anchorage Areas
- NWP 12 – Oil or Natural Gas Pipeline Activities
- NWP 13 – Bank Stabilization
- NWP 14 – Linear Transportation Projects
- NWP 15 – U.S. Coast Guard Approved Bridges
- NWP 16 – Return Water from Upland Contained Disposal Areas
- NWP 17 – Hydropower Projects
- NWP 18 – Minor Discharges
- NWP 19 – Minor Dredging
- NWP 20 – Response Operations for Oil or Hazardous Substances
- NWP 22 – Removal of Vessels
- NWP 23 – Approved Categorical Exclusions
- NWP 27 – Aquatic Ecosystem Restoration, Enhancement, and Establishment Activities
- NWP 29 – Residential Developments
- NWP 31 – Maintenance of Existing Flood Control Facilities
- NWP 33 – Temporary Construction, Access, and Dewatering
- NWP 34 – Cranberry Production Activities
- NWP 35 – Maintenance Dredging of Existing Basins
- NWP 36 – Boat Ramps
- NWP 37 – Emergency Watershed Protection and Rehabilitation
- NWP 38 – Cleanup of Hazardous and Toxic Waste
- NWP 39 – Commercial & Institutional Developments

- NWP 40 – Agricultural Activities
- NWP 41 – Reshaping Existing Drainage & Irrigation Ditches
- NWP 42 – Recreational Facilities
- NWP 44 – Mining Activities
- NWP 45 – Repair of Uplands Damaged by Discrete Events
- NWP 46 – Discharge in Ditches
- NWP 48 – Commercial Shellfish Mariculture Activities
- NWP 51 – Land-Based Renewable Energy Generation Facilities
- NWP 52 – Water-Based Renewable Energy Generation Pilot Projects
- NWP 53 – Removal of Low-Head Dams
- NWP 54 – Living Shorelines
- NWP 55 – Seaweed Mariculture Activities
- NWP 57 – Electric Utility Line and Telecommunication Activities
- NWP 58 – Utility Line Activities for Water and Other Substances
- NWP 59 – Water Reclamation and Reuse Facilities
- NWP A – Activities to Improve Passage of Fish and Other Aquatic Organisms.

All of the NWPs in the preceding list are granted Water Quality Certification subject to the following conditions:

1) The activity meets all requirements specified in the applicable NWP, including notification requirements if applicable, as well as all General Conditions (Section C, "Nationwide Permits General Conditions").

2) All project proponents/applicants have obtained all applicable State approvals as listed below:

    a. Freshwater Wetlands Approval under the "Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act", 250-RICR-150-15-3 (DEM FWW Rules) as applicable, pursuant to the Fresh Water Wetlands Act, RIGL Section 2-1-18 et seq.;"
    b. RIDEM approval under the "Rules and Regulations for Dam Safety", 250-RICR-130-05-1, pursuant to "Inspection of Dams and Reservoirs", RIGL Section 46-19-1.
    c. State Water Quality Certification approval under the "Water Quality Regulations", 250-RICR-150-05-1 pursuant to RIGL Sections 42-17.1 and 46-12-1 et seq.;
    d. Dredge Permit under the "Rules and Regulations for Dredging and the Management of Dredged Material", 250-RICR-150-05-2, pursuant to RIGL 46-6.1
    e. Freshwater Wetlands Approval under the "Coastal Resources Management Council – Rules and Regulations Governing the Protection and Management of Freshwater Wetlands in the Vicinity of the Coast", 650-RICR-20-00-9 (CRMC FWW Rules) as applicable.
    f. Assent from the RI Coastal Resources Management Council under the Red Book regulations, 650-RICR-20-00-1.

Water Quality Certification is hereby **waived** for any activities in freshwater non-tidal wetlands covered under the NWPs that are considered Exempt from permitting by RI DEM under the DEM FWW Rules, 250-RICR-150-15-3.6 as applicable; or that are considered exempt from permitting by the RI CRMC under the CRMC FWW Rules, 650-RICR-20-00-9.6 as applicable.

This Water Quality Certification **does not authorize** any activities under NWP 32 or NWP 43. Water Quality Certification for those two NWP's is **denied.**

NWP 32 for "Completed Enforcement Actions" would potentially allow significant discharges to remain within Waters of the US that are also Waters of the State under certain conditions. In all likelihood, in such instances, the State will be pursuing separate enforcement actions. In resolving such actions, RIDEM would not pursue a remedy to resolve the violations that would fail to meet the standards set forth in our Rules and Regulations. As currently set forth in NWP 32, it is our determination that this NWP could likely result in an outcome that would not satisfy our current Water Quality Standards set forth in either the Water Quality Regulations, 250-RICR-150-

05-1 or the Standards Applicable to Regulated Projects set forth in the Freshwater Wetlands Regulations, 250-RICR-150-15-3. Accordingly, Water Quality Certification for this NWP is denied, and such projects or activities will require an individual Water Quality Certification under Section 401 of the Clean Water Act prior to receiving a permit from USACE.

NWP 43 for "Stormwater Management Facilities" is inconsistent with RIDEM standards within the aforementioned Freshwater Wetlands Regulations that prohibits the placement of any structural stormwater best management practices within freshwater wetlands. It is the position of RIDEM that treatment of stormwater runoff should take place prior to any discharge of the stormwater towards wetlands or other waters and their buffers, and the filling of wetlands or waters for the placement of such structures reduces both the flowpath of the runoff prior to reaching the wetland resource as well as the wetland's/water's innate ability to provide further treatment of that treated runoff. This reduction in water quality treatment is inconsistent with RIDEM's water quality standards and is entirely avoidable. Accordingly, Water Quality Certification for this NWP is denied, and such projects or activities will require an individual Water Quality Certification under Section 401 of the Clean Water Act prior to receiving a permit from USACE. Note, however, that activities limited to maintenance of existing, approved stormwater management facilities may be Exempted from permitting and therefore waived as described above.

This Water Quality Certification also does not authorize any activity or proposed project that is determined to require an USACE Individual Permit. This Water Quality Certification shall be valid until such time as the Nationwide Permits are-individually or collectively-modified, suspended, revoked or re-issued.

If you have any questions regarding the contents of this Water Quality Certification decision letter, you may contact either Neal Personeus at neal.personeus@dem.ri.gov, or the undersigned at chuck.horbert@dem.ri.gov.

Sincerely,

Charles A. Horbert Digitally signed by Charles A. Horbert
Date: 2025.12.15 15:41:37 -05'00'

Charles A. Horbert, Deputy Administrator, Groundwater & Freshwater Wetlands Protection
Federal 401/State WQC Program
Office of Water Resources
Rhode Island Department of Environmental Management

ec: Terry Gray, Director, RIDEM
Eric Beck, Administrator for Groundwater & Freshwater Wetlands Protection
Ronald Gagnon, Chief, Office of Customer & Technical Assistance (Dredge)
Christina Hoefsmit, Deputy Administrator, Office of Compliance & Inspection (Dams)
Jeffrey Willis, Executive Director, RI CRMC
Amy Silva, RI CRMC
Neal Personeus, RIDEM WQC Program
Martin Wencek, RIDEM Freshwater Wetlands Program
Nancy Freeman, RIDEM Freshwater Wetlands Program
Andy Charpentier, RIDEM Freshwater Wetlands Program
Eric Schneider, RI DEM Division of Marine Fisheries
Lisa Rhodes, MA Department of Environmental Protection, Wetlands Program
Jeffrey Caiola, CT Department of Energy & Environmental Protection
Elizabeth Waterhouse, US Army Corps of Engineers, New England District
Erica Sachs, US EPA
Haley Miller, US EPA

State of Rhode Island
Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Road, Suite 116
Wakefield, RI 02879-1900

Phone (401) 783-3370
Fax (401) 783-3767

December 18, 2025

Ms. Elizabeth Waterhouse
Senior Project Manager, Regulatory Division
R.I. State Lead
New England District
U.S. Army Corps of Engineers

RE: **CRMC File 2025-06-071**
Federal Consistency Objection, Reissuance of the U.S. Army Corps of Engineers 2026 Nationwide Permits

Dear Ms. Waterhouse,

The Rhode Island Coastal Resources Management Council (CRMC) is in receipt of the federal consistency determination and supporting materials submitted by U.S. Army Corps of Engineers (ACOE) seeking CRMC concurrence for the above referenced Federal action. The federal consistency determination is dated and was received by this office via email on **June 24, 2025**. The Proposal to Reissue the Nationwide Permits was published in the Federal Register on June 18, 2025. The proposed action would reissue the AOCE's 2026 Nation Wide Permits (NWPs). NWPs 2, 21, 24, 25, 30, 49, and 50 will not be implemented in the New England District and have not been reviewed for federal consistency per the ACOE's June 24th submittal. If an activity subject to any of the above-mentioned NWPs is proposed, the activity will require an independent federal consistency review by the CRMC.

I. CRMC's Federal Consistency Review Authority

The proposed action is a direct Federal activity subject to the Coastal Zone Management Act (CZMA) at 16 U.S.C. § 1456(c) and the CZMA's implementing regulations at 15 C.F.R. Part 930 Subpart C. NWP activities will occur within and/or will affect the coastal zone of Rhode Island and must be "consistent to the maximum extent practicable" with the Rhode Island Coastal Resources Management Plan (RICRMP). The ACOE's Consistency Determination states that "activities authorized by the proposed NWPs will be undertaken in a manner consistent to the maximum extent practicable with the enforceable policies of the state's approved management program." The CRMC has determined that the ACOE's Consistency Determination is in accordance with 15 C.F.R. § 930 and is issuing an *objection* (in-part) in this matter.

II. Concurrence with Select NWPs

The CRMC has reviewed the proposed reissuance of the NWPs against the CRMP enforceable policies. All NWPs with the exception of NWPs 32 and 43, as discussed below, are consistent to the maximum extent practicable with the CRMC's Coastal Resources Management Plan. Furthermore, The CRMC *concurs* with activities in freshwater non-tidal wetlands covered under the NWPs that are considered Exempt from permitting by the RI CRMC under the CRMC Freshwater Wetland Rules, 650-RICR-20-00-9.6 as applicable; or that are considered Exempt from permitting by the RI DEM under the DEM FWW Rules, 250-RICR-150-15-3.6 as applicable.

This consistency decision does not authorize any activity or proposed project that is determined to require an IP from the USACE. Should the ACOE agree per 15 C.F.R. 930.41(d), this consistency decision shall be valid until such time as the Nationwide Permits are-individually or collectively modified, suspended, revoked or re-issued.

III. Objection to Select NWPs

This Federal Consistency Decision *objects* to any activities under NWP 32 or NWP 43.

NWP 32 for "Completed Enforcement Actions" would potentially allow structures, work, or discharge of dredged or fill material that are in violation of a CRMC permit to remain in place. In those cases, the CRMC would likely be pursuing separate enforcement actions under its enforceable policies/standards which would conflict NWP 32. At current, the NWP may reasonably result in outcomes that would be inconsistent with the standards in the CRMC's Rules and Regulations Governing the Protection and Management of Freshwater Wetlands in the Vicinity of the Coast, 650-RICR-20-00-9, and/or the standards set forth in the Coastal Resources Management Program (Red Book), 650-RICR-20-00-01. As such the CRMC objects to this NWP and any activities or projects will require a federal consistency decision from the CRMC prior to receiving a permit from the ACOE.

NWP 43 for "Stormwater Management Facilities" is inconsistent with standards in the CRMC's Freshwater Wetlands in the Vicinity of the Coast regulations that prohibit the placement of any structural stormwater best management practices within freshwater wetlands. The CRMC objects to such activities and projects which will require a separate federal consistency decision from the CRMC unless the project or activity is otherwise exempt from permitting.

Please contact Kevin Sloan (ksloan@crmc.ri.gov) should you have any questions regarding this concurrence.

Sincerely,

Jeffrey M. Willis, Executive Director
Coastal Resources Management Council

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2026-CB-019	2026	1	9

LIST OF VOLUMES

VOLUME 1 - CORRIDOR - ASHAWAY HIGHWAY DRAWINGS

VOLUME 2 - CORRIDOR - ASHAWAY REHABILITATION AND REPLACEMENT OF BRIDGE NOS. 005001, 005101, 005201

INDEX

SHEET NUMBER	SHEET DESCRIPTION
1	COVER
2	BR. 005001 GENERAL PLAN
3	BR. 005001 PROFILE
4	BR. 005001 TYPICAL SECTIONS
5	BR. 005101 GENERAL PLAN
6	BR. 005101 PROFILE
7	BR. 005201 GENERAL PLAN
8	BR. 005201 PROFILE
9	BR. 005201 TYPICAL SECTIONS

STATE OF RHODE ISLAND

DEPARTMENT OF TRANSPORTATION

PLAN, PROFILE AND SECTIONS OF PROPOSED

STATE HIGHWAY

CORRIDOR - ASHAWAY
REHABILITATION AND REPLACEMENT OF BRIDGE NOS. 005001, 005101, 005201

VOLUME 2

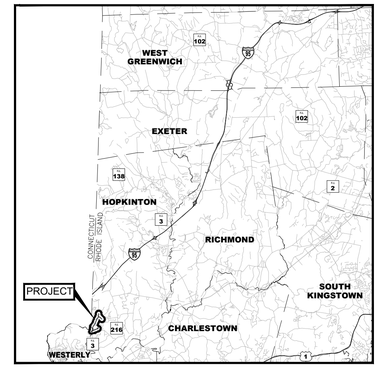
BRIDGE NO. 005001 LAUREL STREET OVER ASHAWAY RIVER
BRIDGE NO. 005101 LAUREL STREET OVER MILE BROOK
BRIDGE NO. 005201 POTTER HILL ROAD OVER PAWCATUCK RIVER

TOWN OF HOPKINTON

COUNTY OF WASHINGTON

R.I. CONTRACT NO. 2026-CB-019 F.A. PROJECT NO. XXXXXXXXXX

1.62 MILES

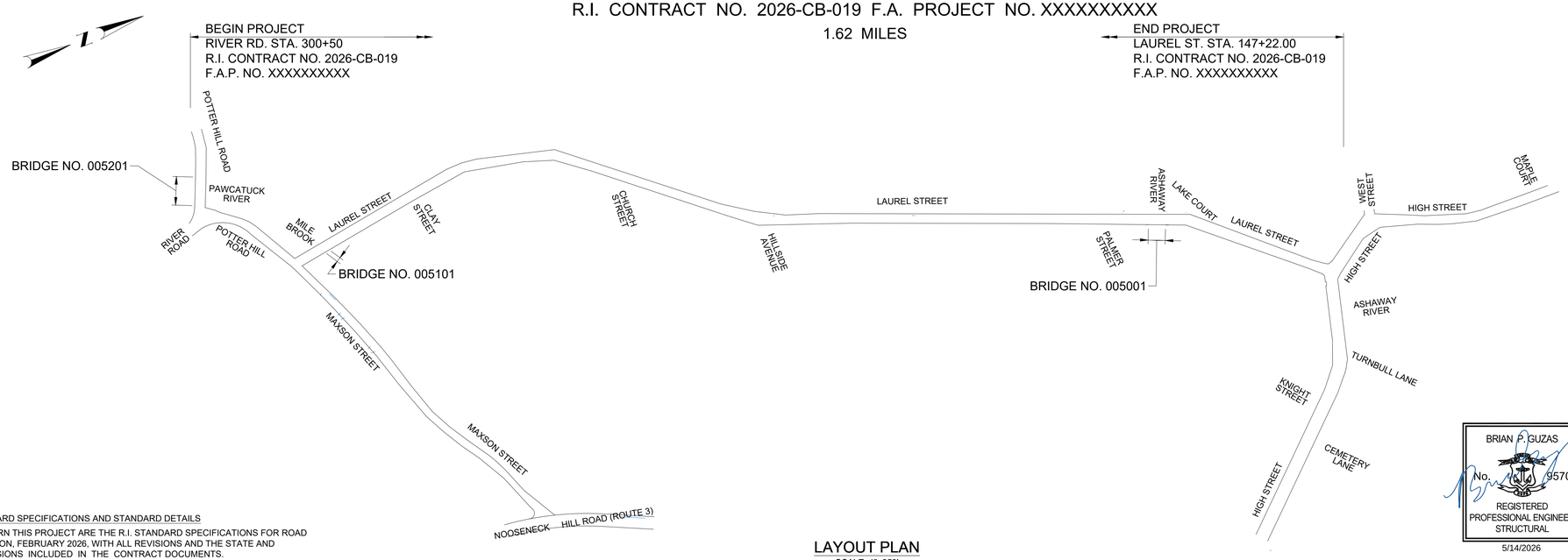


LOCATION MAP

SCALE: 1"=20,000'

DESIGN DESIGNATION

	HIGH STREET	LAUREL STREET	MAXSON STREET	POTTER HILL ROAD
2027 AADT	2,900 V.P.D.	1,000 V.P.D.	600 V.P.D.	700 V.P.D.
2047 AADT	3,000 V.P.D.	1,100 V.P.D.	600 V.P.D.	700 V.P.D.
D	52% EB	52% NB	54% EB	52% WB
K	9.9%	12.9%	11.0%	12.5%
T	3.9%	4.3%	5.8%	5.0%
2027 DHV	290 V.P.H.	130 V.P.H.	70 V.P.H.	90 V.P.H.
2047 DHV	300 V.P.H.	140 V.P.H.	70 V.P.H.	90 V.P.H.
DESIGN SPEED	30 M.P.H.	30 M.P.H.	30 M.P.H.	30 M.P.H.



LAYOUT PLAN

SCALE: 1"=250'

R.I. STANDARD SPECIFICATIONS AND STANDARD DETAILS

SPECIFICATIONS TO GOVERN THIS PROJECT ARE THE R.I. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, FEBRUARY 2026, WITH ALL REVISIONS AND THE STATE AND FEDERAL SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.

STANDARD DETAILS FOR THIS PROJECT ARE R.I. STANDARD DETAILS, 1998 EDITION, WITH ALL REVISIONS.

BASE OF LEVELS

VERTICAL DATUM: NAVD 88

HORIZONTAL DATUM: R.I. STATE PLANE, NAD 83 (2011) (EPOCH 2018.750)

BRIAN P. GUZAS
No. 9570
REGISTERED PROFESSIONAL ENGINEER
STRUCTURAL
5/14/2026

NOT FOR CONSTRUCTION

Contract Number 2026-CB-19

Number of Sheet 1

Total Sheets 80

PERMITTING SUBMISSION
MAY 2026

R.I. DEPARTMENT OF TRANSPORTATION

APPROVED

DIRECTOR, DIVISION OF PROJECT MANAGEMENT — DATE

APPROVED

CHIEF ENGINEER OF INFRASTRUCTURE — DATE

APPROVED

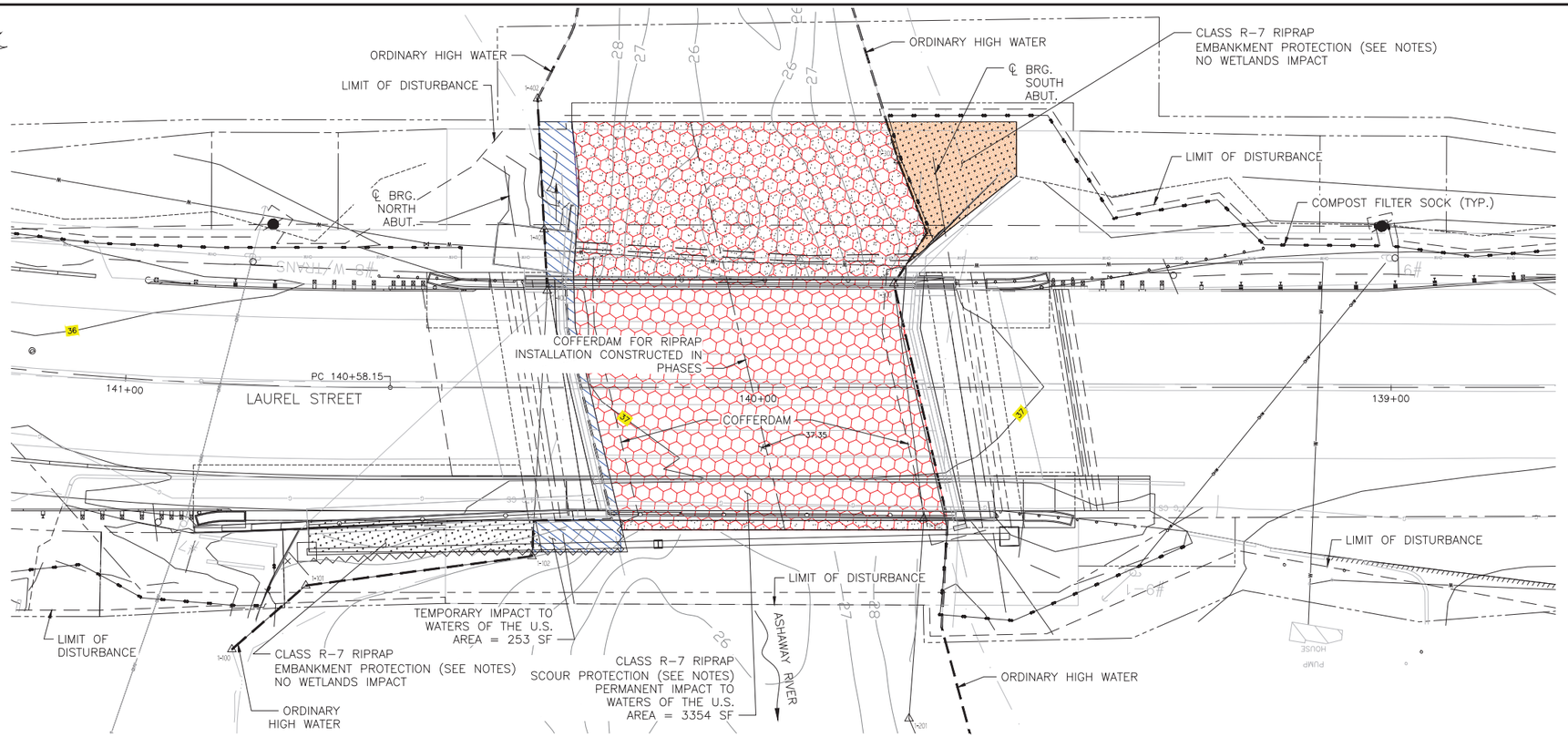
DIRECTOR — DATE

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED

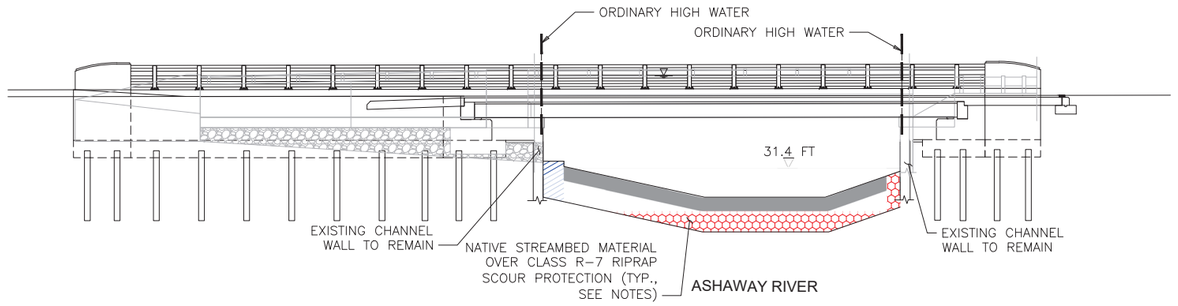
DIVISION ADMINISTRATOR — DATE

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2026-CB-019	2026	1	3



ASHAWAY RIVER BRIDGE NO. 005001 – GENERAL PLAN

SCALE: 1"=10'-0"



ASHAWAY RIVER BRIDGE NO. 005001 – WEST ELEVATION

SCALE: 1"=10'-0"

GENERAL NOTES:

1. CONTRACTOR TO ENSURE SUFFICIENT NETTING BENEATH BRIDGE SUPERSTRUCTURE DURING DEMOLITION OF EXISTING STRUCTURE.
2. TURBIDITY MONITORING MAY BE REQUIRED DURING CONSTRUCTION ACTIVITIES.
3. IF INSTREAM WORK IS REQUIRED, CONTRACTOR TO ISOLATE WORK AREAS IN WATER, AND DEWATER LOCAL AREA.
4. DEWATERING PROCEDURE TO FOLLOW ENVIRONMENTAL PERMIT PLANS.

CONTOUR/GRADE NOTE:

UPON COMPLETION OF THE BRIDGE REPLACEMENT, DISTURBED AREAS/SLOPES ADJACENT TO THE ROAD ARE TO BE GRADED TO MATCH ORIGINAL ELEVATIONS AND BLEND INTO THE UNDISTURBED AREAS. THE DEPICTED PROPOSED CONTOUR LINES ARE PROVIDED TO EXPRESS THAT INTENT. IT IS NOT THE DESIGN INTENT TO MODIFY EXISTING GRADING WITH PROJECT LIMITS.

NOTES:

1. EXCAVATE EXISTING GRADE ±60-INCH (AS DETERMINED PER NOTE 1 – RIPRAP PLACEMENT PLAN) VERTICALLY AND 25-FT HORIZONTALLY FROM FACE OF ABUTMENTS. DO NOT IMPACT BEDROCK. STOCKPILE EXCAVATED STREAMBED MATERIAL AT A RIDOT AUTHORIZED UPLAND LOCATION WITHIN THE PROJECT AREA. EXCAVATED STREAM BED MATERIAL SHALL NOT BE TEMPORARILY OR PERMANENTLY STOCKPILED IN ANY WETLAND AREA. SURROUND THE STOCKPILE AREA WITH COMPOST FILTER SOCK, SILT FENCE, OR APPROVED EQUAL. DEWATERING BASIN LOCATION(S) FOR STREAM BED EXCAVATION ACTIVITIES SHALL BE COORDINATED WITH RIDOT AND LOCATED IN A RIDOT AUTHORIZED UPLAND LOCATION WITHIN THE PROJECT VICINITY.
2. PLACE 60-INCH THICKNESS OF CLASS R-7 VOID FILLED RIPRAP AT THE FACE OF THE PROPOSED ABUTMENTS. PLACE THE RIPRAP 3-FT OFF THE NORTHERN FACE OF THE ABUTMENT AT ELEVATION 27.4' TO SERVE AS AN INSPECTION SHELF. PLACE THE RIPRAP 2-FT OFF THE FACE OF THE SOUTHERN ABUTMENT, TO MATCH THE EXISTING GRADE OF THE CHANNEL.
   PLACE 36-INCH OF CLASS R-7 VOID FILLED RIPRAP WITHIN THE STREAMBED EXCAVATION LIMITS. PLACE 24-INCH OF NATIVE STREAMBED MATERIAL FROM STOCKPILE ABOVE RIPRAP LAYER, FINAL GRADE TO MATCH EXISTING GRADE. WHERE 60-INCH VERTICAL EXCAVATION IS NOT POSSIBLE DUE TO BEDROCK, PLACE CLASS R-7 VOID FILLED RIPRAP ON TOP OF BEDROCK AT A THICKNESS SUCH THAT 24-INCH OF NATIVE STREAMBED MATERIAL SHALL BE PLACED ABOVE THE RIPRAP TO MATCH EXISTING GRADE OF THE CHANNEL. WHERE RIPRAP IS PLACED IN THE CHANNEL, PROVIDE 6-INCH FS-3 FILTER MATERIAL IF DIRECTED.
3. PROPOSED RIVERBED RIP RAP VOIDS SHALL BE FILLED WITH THE PROJECT'S EXCAVATED NATIVE STREAM BED MATERIAL. RIPRAP VOIDS ABOVE THE NORMAL WATER SURFACE AND NOT UNDER SUPERSTRUCTURE SHALL BE FILLED WITH NATIVE SOIL AND COVERED WITH PLANTABLE SOIL AND PLANTINGS. FOR LIVE STAKING AND SEEDING OVER RIPRAP DETAILS SEE MISCELLANEOUS DETAILS IN VOLUME 1.

LEGEND:

123 124 125	EDGE OF WETLAND
	WETLAND PERIMETER
B-X	APPROXIMATE RIVER EDGE
	100-YEAR FLOOD PLAIN
G	GAS MAIN
P.E.B.	PERMANENT EASEMENT LINE
T.E.B.	TEMPORARY EASEMENT LINE
	BORING LOCATION
	NATIVE STREAMBED MATERIAL OVER RIPRAP
	LIVE STAKING AND SEEDING OVER RIPRAP

AECOM

RI DOT

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

DESIGNED BY: -----
CHECKED BY: -----
DATE: MAY 2026
SHEET: X
OF: X

SCALE:

REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY

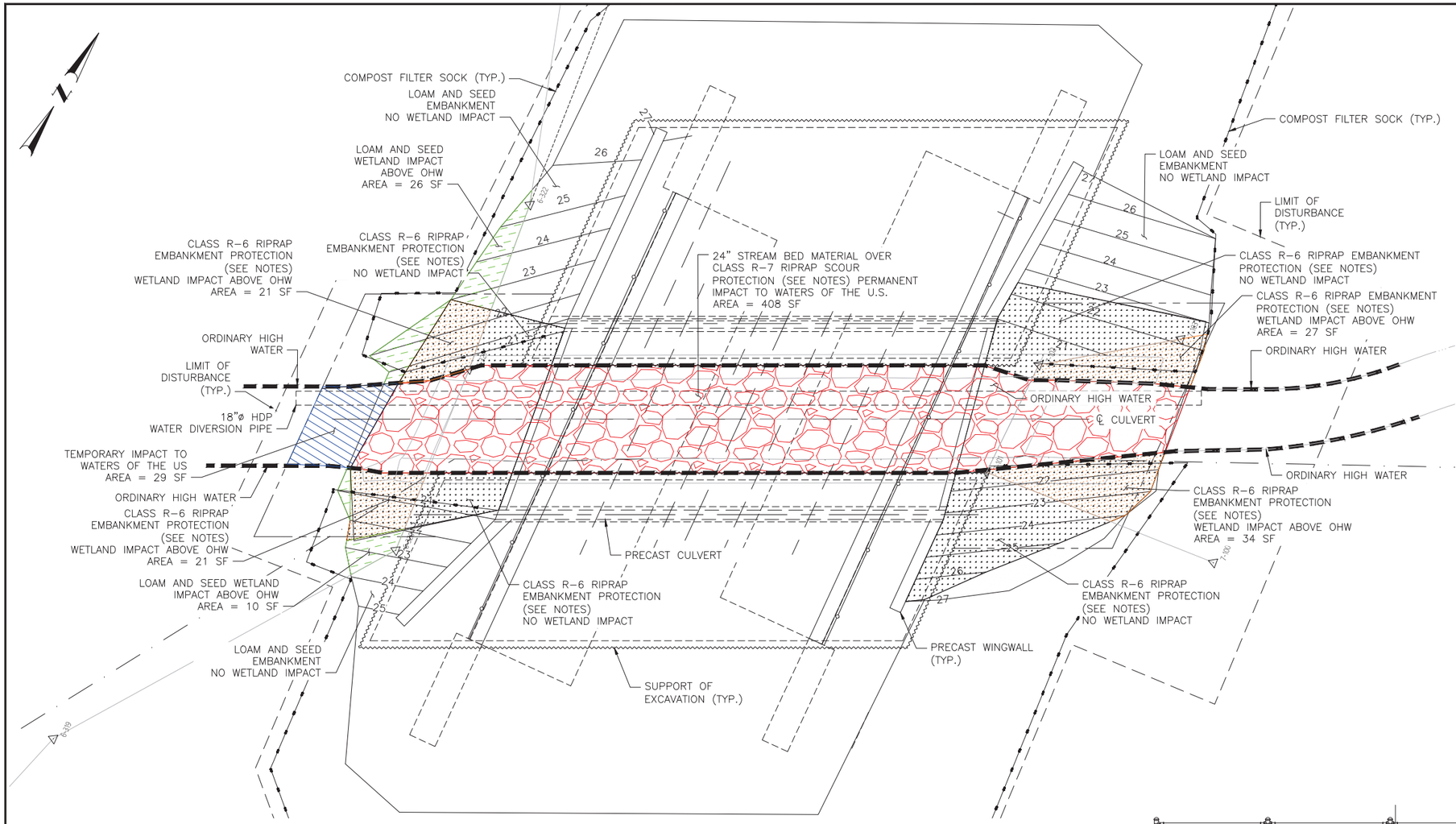
ASHAWAY - CORRIDOR
BRIDGE NO. 005001
VOLUME 2

HOPKINTON RHODE ISLAND

GENERAL PLAN AND ELEVATION

00130_V2_XXX_50_GENPLAN

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2026-CB-019	2026	2	3

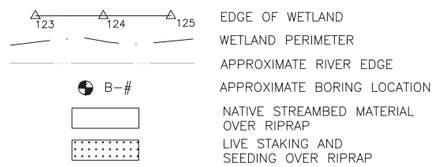


POTTER HILL CULVERT BRIDGE NO. 005101 – GENERAL PLAN
SCALE: 1/4"=1'-0"

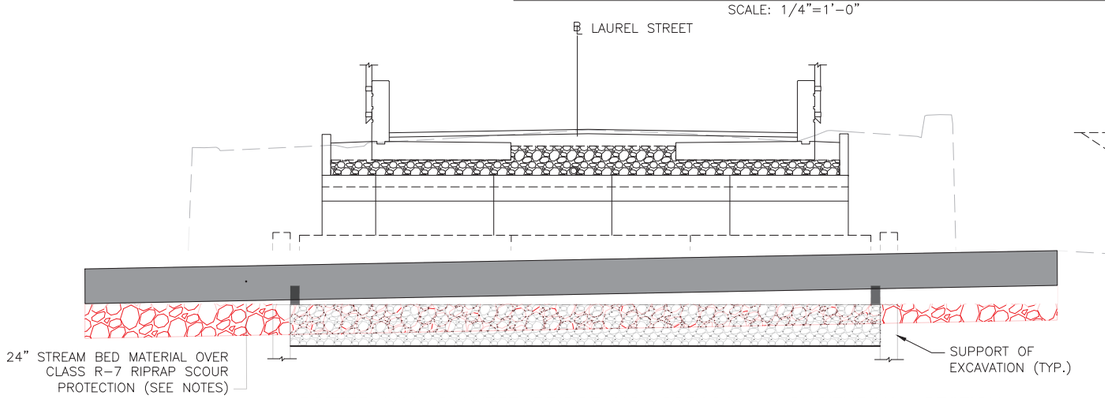
NOTE:
1. PLACE 2-FT DEPTH OF MILE BROOK PROPOSED STREAMBED MATERIAL WITHIN STREAM BED FOOTPRINT (ELEV. 21.5-FT AND BELOW). SHAPE CHANNEL BASED ON WEST ELEVATION.
2. PLACE 3-FT DEPTH OF R-7 RIPRAP UNDER PROPOSED STREAMBED MATERIAL.
3. PLACE 2-FT DEPTH OF R-6 RIPRAP ON SIDE SLOPE EMBANKMENT OUTSIDE OF STREAM BED FOOTPRINT. FILL EMBANKMENT PROTECTION VOIDS WITH NATIVE SOIL AND COVER WITH PLANTABLE SOIL AND NATIVE PLANTINGS.

MILE BROOK PROPOSED STREAMBED GRADATION	
PERCENT PASSING	RANGE (IN.)
0.990	4 TO 6
0.950	4 TO 6
0.840	3 TO 6
0.500	2 TO 4
0.300	1 TO 2
0.160	1 TO 1
0.050	0.1 TO 0.04

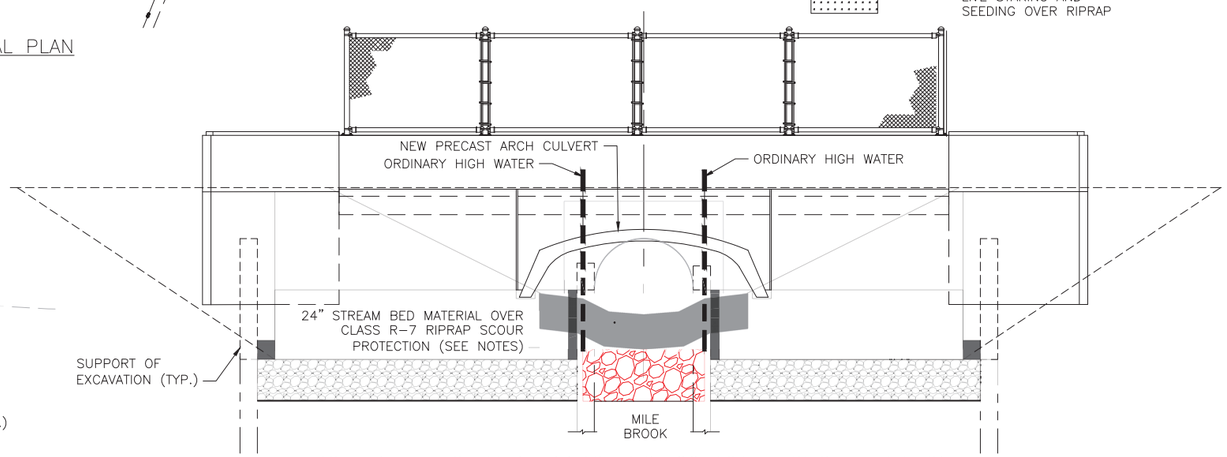
LEGEND:



EDGE OF WETLAND
WETLAND PERIMETER
APPROXIMATE RIVER EDGE
APPROXIMATE BORING LOCATION
NATIVE STREAMBED MATERIAL OVER RIPRAP
LIVE STAKING AND SEEDING OVER RIPRAP



POTTER HILL CULVERT BRIDGE NO. 005101 – LONGITUDINAL SECTION
SCALE: 1/4"=1'-0"



POTTER HILL CULVERT BRIDGE NO. 005101 – WEST ELEVATION
SCALE: 1/4"=1'-0"

AECOM

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

DESIGNED BY:	----
CHECKED BY:	----
DATE:	MAY 2026
SHEET:	X
OF:	X

SCALE:

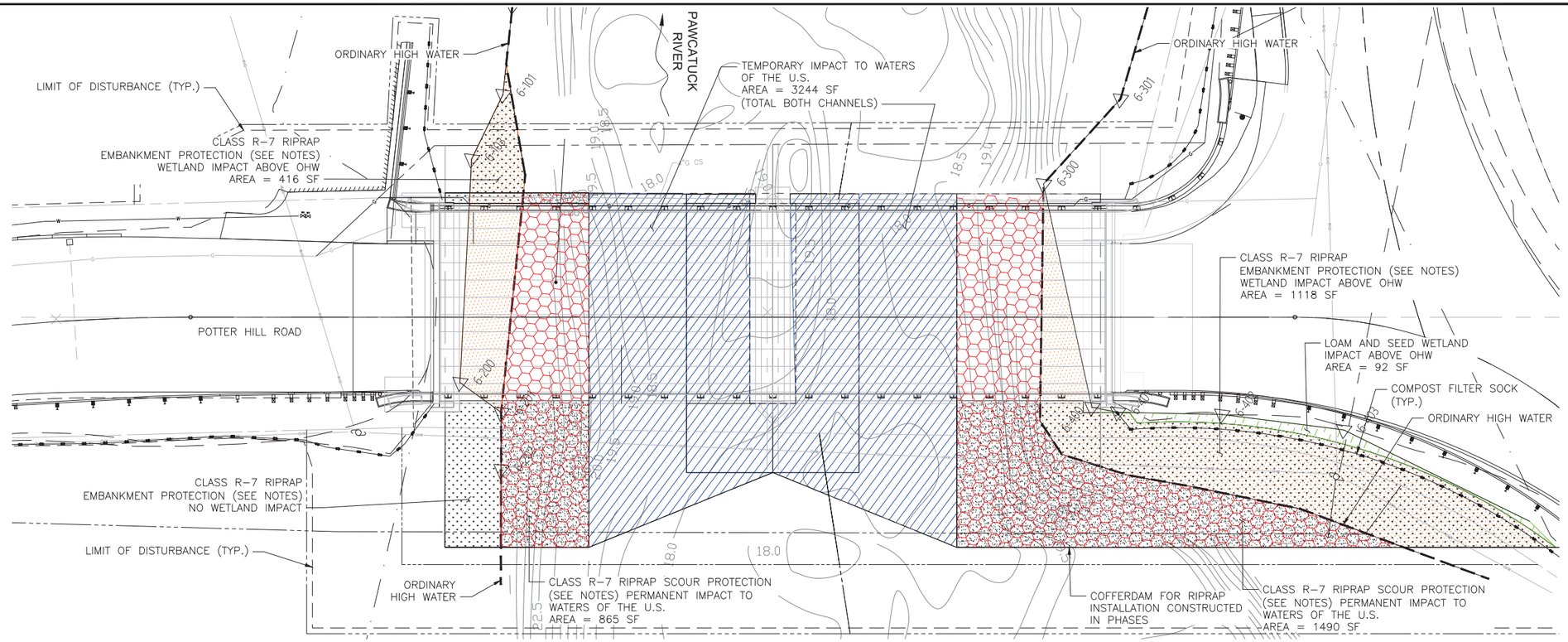
REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY

ASHAWAY - CORRIDOR
BRIDGE NO. 005101
VOLUME 2
HOPKINTON RHODE ISLAND

CULVERT PLAN

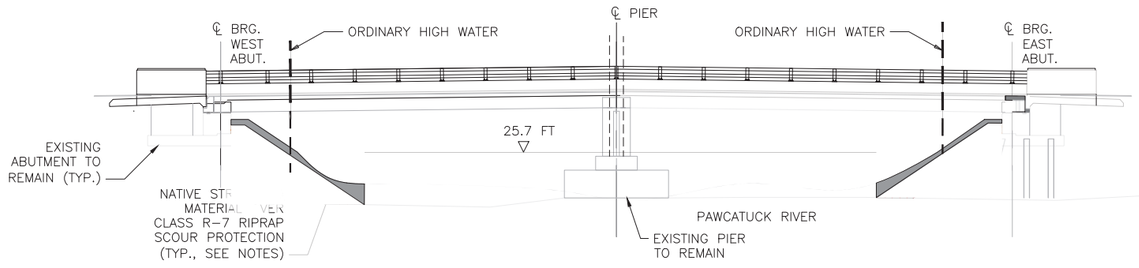
00130_V2_002_51_BGENERAL002_USACE.dwg

RI CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2026-CB-019	2026	3	3



POTTER HILL BRIDGE NO. 005201 – GENERAL PLAN

SCALE: 1" = 10'-0"



POTTER HILL BRIDGE NO. 005201 – SOUTH ELEVATION

SCALE: 1" = 10'-0"

NOTES:

1. EXCAVATE EXISTING MATERIAL AT ABUTMENTS, TO BOTTOM OF PILE CAP OR FOOTING AND FROM BOTTOM OF PILE CAP OR FOOTING TO BEDROCK AT 1.5H:1V SLOPE. DO NOT IMPACT BEDROCK. DO NOT IMPACT OR UNDERMINE PILE CAPS, PILES, OR FOOTINGS. DO NOT DISTURB SUBGRADE WITHIN 1–FT OF EXISTING PILES.
2. STOCKPILE EXCAVATED NATIVE STREAMBED MATERIAL AT A RIDOT AUTHORIZED UPLAND LOCATION WITHIN THE PROJECT AREA. EXCAVATED STREAM BED MATERIAL SHALL NOT BE TEMPORARILY OR PERMANENTLY STOCKPILED IN ANY WETLAND AREA. SURROUND THE STOCKPILE WITH COMPOST FILTER SOCK, SILT FENCE, OR APPROVED EQUAL. DEWATERING BASIN LOCATION(S) FOR STREAM BED EXCAVATION ACTIVITIES SHALL BE COORDINATED WITH RIDOT AND LOCATED IN A RIDOT AUTHORIZED UPLAND LOCATION WITHIN THE PROJECT VICINITY.
3. PLACE CLASS R–7 VOID FILLED RIPRAP BENCHED 2–FT FROM ABUTMENT FACE, AT 1.25–FT THICKNESS ON TOP OF PILE CAP/FOOTING AND OVER EDGE OF PILE CAP/FOOTING TO BOTTOM OF PILE CAP/FOOTING, TYP. DO NOT IMPACT PILES WHEN PLACING OR EXCAVATING MATERIALS.
4. PLACE 36–INCH OF CLASS R–7 VOID FILLED RIPRAP, WITHIN THE ABUTMENT EXCAVATION LIMITS, FROM BOTTOM OF PILE CAP/FOOTING TO BEDROCK AT 1.5:1 SLOPE. PLACE NATIVE STREAMBED MATERIAL FROM STOCKPILE ABOVE RIPRAP LAYER, SUCH THAT FINAL GRADE OF CHANNEL SHALL MATCH EXISTING GRADE. IF DIRECTED, PROVIDE 6–INCH FS–3 FILTER MATERIAL FOR RIPRAP.
5. FILL PROPOSED RIP RAP VOIDS WITH THE PROJECT'S EXCAVATED AND STOCKPILED NATIVE STREAM BED MATERIAL. RIPRAP VOIDS ABOVE THE NORMAL WATER SURFACE AND NOT UNDER SUPERSTRUCTURE SHALL BE FILLED WITH NATIVE SOIL AND COVERED WITH PLANTABLE SOIL AND PLANTINGS.

LEGEND:

123 124 125 — EDGE OF WETLAND

WETLAND PERIMETER

APPROXIMATE RIVER EDGE

100–YEAR FLOOD PLAIN

NATIVE STREAMBED MATERIAL OVER RIPRAP

LIVE STAKING AND SEEDING OVER RIPRAP

AECOM

RI DOT

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

DESIGNED BY: ----
CHECKED BY: ----
DATE: MAY 2026
SHEET:
OF:

SCALE:

REVISIONS			REVISIONS		
NO.	DATE	BY	NO.	DATE	BY

ASHAWAY - CORRIDOR
BRIDGE NO. 005201
VOLUME 2
HOPKINTON RHODE ISLAND

GENERAL PLAN

00130_V2_048_52_GENPLAN

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
235 Promenade Street
Providence, Rhode Island 02908

July 27, 2026

RI Department of Transportation
Alisa Richardson, Administrator
360 Lincoln Avenue
Warwick, RI 02888

Freshwater Wetlands Permit

RE: Freshwater Wetlands No. 26-0104, (IA-19030) and RIPDES No. RIR102959 for the property and project located:

> Along the full length of Laurel Street, the full length of Maxon Street, and the length of Potter Hill Road from its intersection with Maxon Street to approximately 160 feet west of the Potter Hill Road Bridge, Hopkinton RI

Dear Ms. Richardson,

Kindly be advised that the Department of Environmental Management's ("DEM") Freshwater Wetlands Program ("Program") has completed its review of your **Application for a Freshwater Wetlands Permit** as described in Rule 3.11 of the Rules and Regulations Governing the Administration and Enforcement of the Fresh Water Wetlands Act, 250-RICR-150-15-3 ("Rules"). This review included a site inspection of the above referenced property ("subject property") and an evaluation of the proposed road repaving, reconstruction of the Laurel Street Bridge over the Ashaway River (Bridge No. 005001), reconstruction of the Laurel Street Bridge over Mile Brook (Bridge No. 005101), reconstruction of the Potter Hill Road Bridge over the Pawcatuck River (Bridge No. 005201), stormwater treatment structures and associated landscaping as illustrated and detailed on site plans submitted with your application. The most recently revised site plans were received by this Program on July 27, 2026.

Our observations of the subject property, review of the site plans and evaluation of the proposed project reveals that alterations of jurisdictional areas are proposed. However, pursuant to Rule 3.7.3B of the Rules, this project meets the Variance Criteria for Public and Governmental Bodies, and a **Freshwater Wetlands Permit** may be issued under the following terms and conditions:

Terms and Conditions for **Wetlands Application No. 26-0104 and RIPDES No. RIR102959**:

1. This letter is the DEM's permit for this project under the R.I. Fresh Water Wetlands Act, R.I. Gen. Laws § 2-1-18 et seq.
2. This determination also includes your final authorization to discharge storm water associated with construction activity under the **2020 RIDPES General Permit for Stormwater Discharge During Construction Activity ("CGP")**. For future references and inquiry, your permit authorization number is RIPDES No. **RIR102959.** This **RIPDES CGP** permit is not transferable to any person except after written notice to the Director, in the form of a Permit Transfer Form available on the RIDEM Stormwater Construction Permitting website.
3. This permit is specifically limited to the project, site alterations and limits of disturbance as detailed on the site plans submitted with your application and received by the DEM on July 27, 2026. A copy of the site plans stamped approved by the DEM can be found on the Permit Search page on the OWR Application Portal by searching for any of the permit numbers listed above. Changes or revisions to the project that would alter freshwater wetlands are not authorized without a permit from the DEM.

4. Where the terms and conditions of the permit conflict with the approved site plans, these terms and conditions shall be deemed to supersede the site plans.
5. You must notify this Program of the anticipated start date, and of your contractor's contact information, by submitting a Notice of Start of Construction on the OWR Application Portal from the Requests Tab referencing this Freshwater Wetlands permit number prior to commencement of any permitted site alterations or construction activity. You must also notify this Program upon completion of the project by submitting a Notice of Termination from the Requests Tab on the OWR Application Portal.
6. A copy of the stamped approved site plans and a copy of this permit must be kept at the site at all times during site preparation, construction, and final stabilization. Copies of this permit and the stamped approved plans must be made available for review by any DEM or town representative upon request.
7. The effective date of this permit is the date this letter was issued. This permit expires five (5) years from the date of this letter unless renewed pursuant to the Rules.
8. Any material utilized in this project must be clean and free of matter that could pollute any jurisdictional area.
9. Prior to commencement of site alterations, you shall erect or post a sign resistant to the weather and at least twelve (12) inches wide and eighteen (18) inches long, which boldly identifies the initials "DEM" and the Permit Number 26-0104. This sign must be maintained at the site in a conspicuous location until such time that the project is complete.
10. All "laydown", stockpile, and storage areas must remain within the depicted and approved limit of disturbance or be properly located offsite outside of all wetland Jurisdictional Areas.
11. Both the owner and the contractor retained to undertake the construction activity are required to comply with all terms and conditions of the CGP. This includes maintaining the Soil Erosion and Sediment Control (SESC) Plan, performing the required inspections and maintenance of the selected Best Management Practices (BMPs), and retaining inspection records. Further information on the requirements of the CGP is available at: https://dem.ri.gov/sites/g/files/xkgbur861/files/2025-09/cgp-092625.pdf.
12. Temporary erosion and sediment controls detailed or described on the approved site plans shall be properly installed at the site prior to or commensurate with site alterations. Such controls shall be properly maintained, replaced, supplemented, or modified as necessary throughout the life of this project to minimize soil erosion and to prevent sediment from being deposited in any freshwater wetland, buffer, floodplain, area subject to storm flowage, or area subject to flooding or other jurisdictional areas not subject to disturbance under this permit. Upon permanent stabilization of all disturbed soils, temporary erosion and/or sediment controls must be removed.
13. You are responsible for the proper installation, operation, maintenance and stability of any mitigative features, stormwater treatment facilities, and systems of treatment and control that are installed or used in compliance with this permit to prevent harm to adjacent freshwater wetland, buffer or floodplain, area subject to storm flowage, or area subject to flooding or other jurisdictional areas until documentation is provided that this responsibility has been assigned to another entity. Operation and maintenance shall be as described in the plan entitled, "Long-Term Operation & Maintenance Plan, For, Corridor Ashway, Potter Hill Road, Laural Street, Maxson Street, Hopkinton, Rhode Island" bearing the latest revision date of April 2026, dated received May 28, 2026, prepared by: Crossman Engineering.
14. You are obligated to install, utilize, follow and maintain all best management practices detailed or described on the approved site plans in the construction of the project to minimize or prevent adverse impacts to any adjacent freshwater wetland, buffers, and floodplain, and the functions and values provided by such freshwater wetlands, buffers, and floodplain.
15. All construction activities involving soil disturbances and alterations within watercourses must be limited to the low flow period (i.e., the period from July 1 to October 31 of any calendar year). Soil disturbance in these watercourses must temporarily cease in the event of any abnormally high stormwater runoff event to prevent erosion and sedimentation within wetland Jurisdictional Areas.

16. Dewatering basins or similar dewatering devices must be properly implemented within the approved limit of disturbance to prevent sediments from reaching any area beyond the approved limit of disturbance.

17. All plantings of shrubs, trees or other forms of vegetation (including live staking) as shown or detailed on the approved plans, or detailed in this permit, must be installed as soon as possible after completion of final grading; weather and season permitting. **You must notify Hunter Trowbridge of this office (Phone: (401)-537-4363; email: Edward.trowbridge@dem.ri.gov) upon completion of the required plantings for a compliance inspection by a Program representative.**

18. Mitigation or screen plantings of trees and/or shrubs proposed between the project and any adjacent freshwater wetland areas and buffers must be allowed to develop naturally without being subjected to mowing or manicuring.

19. Any plantings which fail to survive one full growing season shall be replaced. All replacement plantings shall be similarly guaranteed for one full growing season also without being subjected to mowing or manicuring.

20. RIDOT shall notify this Program for an inspection of the coffer dams upon their installation prior to commencing in-River bridge-related work. **You must notify Hunter Trowbridge of this office (Phone: (401)-537-4363; email: Edward.trowbridge@dem.ri.gov) upon completion of the required coffer dam installations for a compliance inspection by a Program representative.** Sandbags/sand totes and/or steel sheet-piling will be utilized for the necessary coffer dams at each bridge subject of this application.

21. An environmental consultant, experienced in soil erosion and sediment control, and preferably a Certified Professional in Erosion & Sediment Control, must be employed prior to the commencement of site alterations to monitor this project and to ensure compliance with the terms and conditions of this permit as well as the implementation of the Soil Erosion & Sediment Control Plan. **This Program must be notified in writing of the consultant chosen to comply with this condition and must receive immediate written notification of any sedimentation or disturbance beyond the approved limits of disturbance, with a written explanation of all actions taken to correct such problems.** This certification can be sent via e-mail to DEM.FWW@dem.ri.gov.

22. You must provide written certification from a registered land surveyor or registered professional engineer that the stormwater drainage system including any and all basins, piping systems, catch basins, culverts, swales and any other stormwater management control features have been constructed/installed in accordance with the site plans approved by this permit. **This written certification must be submitted to this Program within twenty (20) days of its request or upon completion of the project** and can be sent via e-mail to DEM.FWW@dem.ri.gov.

Pursuant to the provisions in 250-RICR-150-15-3.8.13 and 250-RICR-150-15-3.14.4(A), *as applicable*, any properly recorded and valid Freshwater Wetlands Permit is automatically transferred to the new owner upon sale of the property.

You are required to comply with the terms and conditions of this permit and to carry out this project in compliance with the Rules at all times. Failure to do so may result in an enforcement action by this Department.

In permitting the proposed alterations, the DEM assumes no responsibility for damages resulting from faulty design or construction.

Kindly be advised that this permit is not equivalent to a verification of the type or extent of freshwater wetlands or jurisdictional areas on site. Should you wish to have the types and extent of freshwater wetlands verified, you may submit the appropriate application in accordance with 250-RICR-150-15-3.9.3.

This permit does not remove your obligation to obtain any local, state, or federal approvals or permits required by ordinance or law and does not relieve you from any duties owed to adjacent landowners with specific reference to any changes in drainage.

Please be aware that the RIDEM's Rules and Regulations Governing the Establishment of Various Fees (250-RICR-30-00-1) require that RIPDES CGP permit holders to pay an Annual Fee of $100.00. An invoice will be sent to the owner on record in May/June of each year if the construction was still active as of December 31st of the previous year. The owner will be responsible for the Annual Fee until the construction activity has been completed, the site has been properly stabilized, and a completed Notice of Termination (NOT) has been received by the RIPDES Program.

If you have not already done so, please contact the U.S. Army Corps of Engineers (Corps) to determine your federal permit requirements or check your review status. To ensure timely processing, all pre-application requests, pre-construction notifications/permit applications should be submitted via the **Regulatory Request System (RRS)** at rrs.usace.army.mil. You may also write the Corps' New England District, Regulatory Branch, at 696 Virginia Road, Concord, MA 01742-2751, or visit their website at www.nae.usace.army.mil [nae.usace.army.mil] for additional contact information. Please note that the Department of the Army authorization must be obtained before any work is initiated in areas subject to Corps jurisdiction.

Should you have any questions regarding this letter, please contact Hunter Trowbridge of this office at: email: Edward.trowbridge@dem.ri.gov or Phone: (401)-537-4363.

Sincerely,

martin wencek Digitally signed by martin wencek
Date: 2026.07.27 13:03:08 -04'00'

Martin D. Wencek, Environmental Scientist IV
Office of Water Resources
Freshwater Wetlands Program
MDW/ET/et

ec: Chris Cabral, Crossman Engineering
Heather Hamilton, RIDOT Environmental Division

APPENDIX G

SHOP DRAWINGS

SHOP DRAWINGS

The Contractor's attention is called to the following list of shop drawings for various pay items. The Contractor shall study the plans and specifications for shop drawing requirements. Every attempt has been made to make the following list as complete as possible. It is the Contractor's responsibility to ensure that all shop drawings are made in a timely manner even if they are not shown in the list below.

1) Temporary sheeting/shoring
2) Cofferdams
3) Micropiles
4) Reinforcing Steel, splicers, and inserts
5) Precast concrete substructures
6) Precast concrete culvert
7) Bridge Bearings
8) Bridge joint systems
9) Structural Steel
10) Miscellaneous Metals (SIP forms, etc.)
11) Temporary and permanent utility supports
12) Prefabricated Bridge Units (PBUs)
13) Steel Press-Brake- Formed Tub Girder (PBFTG)
14) Metal Bridge and Pedestrian Railing systems
15) Bridge Demolition, including detailed sequence of work
16) Bridge Erection Procedures
17) Cascade Separator CS-5

APPENDIX H

SUBMITTALS

SUBMITTALS

The Contractor's attention is called to the following list of submittals for various pay items. The Contractor shall study the plans and specifications for the submittal requirements. Every attempt has been made to make the following list as complete as possible. It is the Contractor's responsibility to ensure that all submittals are made in a timely manner even if they are not shown in the list below.

1) Cement Concrete for Curb
2) Cement Concrete for Sidewalk
3) Sequence of Construction
4) Pre and post-construction survey
5) Noise Control Plan
6) Control of water: Methods, Equipment and Detailed Sequence of Work
7) Temporary sheeting/shoring
8) Cofferdams
9) Micropiles
10) Micropile Load Test (Verification and proof)
11) Reinforcing Steel, splicers, and inserts
12) Precast concrete substructures
13) Precast concrete culvert
14) Bridge Bearings
15) Bridge joint systems
16) Structural Steel
17) Miscellaneous Metals (SIP forms, etc.)
18) Temporary and permanent utility supports
19) Prefabricated Bridge Units (PBUs)
20) Steel Press-Brake- Formed Tub Girder (PBFTG)
21) Ultra-High Performance Concrete (UHPC)
22) Metal Bridge and Pedestrian Railing systems
23) Bridge Demolition, including detailed sequence of work
24) Construction Noise and Vibration Pollution Controls
25) Debris Protection Plan
26) Concrete Mix Designs
27) Bridge Erection Procedures
28) Bridge deck waterproofing membrane
29) Protective screen (chain link fence)
30) Granite Identification Tablets
31) Material Cut Sheets
32) Structural Computations
33) Guardrail anchorage system
34) Cascade Separator CS-5

APPENDIX I

PAVEMENT CORES AND GRAVEL GRADATION REPORTS

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
MATERIALS AND QUALITY ASSURANCE
PAVEMENT CORE REPORT

File No: 4062 Lab No: 20230888 Date: 11/27/2023

Contract No: 2023-EH-007D FAP No: _____ PTSID: 0013Q Project: Corridor Ashaway Maxson Street

Town / City: Hopkinton Cored By: Colbert, DeOca, Nathan Bueno

Limits: Maxson St from Laurel St to RT3

P.E. ☑ Final ☐ Special Projects ☐

Comments:

Core ID	Cored On	Road / Station		Depth	Depth	Depth	Depth	Depth	Total Depth	Soil: From / To
Direction	LATITUDE	LONGITUDE	Composite Pavement	Material	Material	Material	Material	Material	Cored To	
Lane ID	Lateral Offset (ft.)		Curb Reveal (in.)	Qualifier	Qualifier	Qualifier	Qualifier	Qualifier	Core Notes	
C-01	11/27/2023	Maxson St at Pole #10		0.9"	1.8"	N/A	N/A	N/A	2.7"	3" 15"
EB	41.414846	-71.794522	Composite: No	3/8" HMA	3/8" HMA				Soil/Gravel	
TL	6 Right EOP				Cracked				L1/L2 Bond Break	
C-02	11/27/2023	Maxson St at Pole #5		1"	1.2"	N/A	N/A	N/A	2.2"	2" 14"
WB	41.415321	-71.792781	Composite: No	3/8" HMA	Sand Mix				Soil/Gravel	
TL	6 Right EOP				Broken				L1/L2 Bond Break	
			Average Depth:	0.9"	1.5"	N/A	N/A	N/A	2.4"	

Cores Requested By: Robert Soscia

Measured By (Print / Sign) 11/28/23 Date

Reviewed By (Print / Sign) 11/29/23 Date

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
MATERIALS AND QUALITY ASSURANCE
PAVEMENT CORE REPORT

File No: 4063 Lab No: 20230889 Date: 11/27/2023

Contract No: 2023-EH-007D FAP No: _____ PTSID: 0013Q Project: Corridor Ashaway Potter Hill Road

Town / City: Hopkinton Cored By: Colbert, DeOca, Nathan Bueno

Limits: Potter Hill Rd from River Rd to Laurel St

P.E. ☑ Final ☐ Special Projects ☐

Comments:

Core ID	Cored On	Road / Station		Depth	Depth	Depth	Depth	Depth	Total Depth	Soil: From / To
Direction	LATITUDE	LONGITUDE	Composite Pavement	Material	Material	Material	Material	Material	Cored To	
Lane ID	Lateral Offset (ft.)		Curb Reveal (in.)	Qualifier	Qualifier	Qualifier	Qualifier	Qualifier	Core Notes	
C-01	11/27/2023	Potter Hill Rd at Pole #40		2.5"	3.5"	N/A	N/A	N/A	6"	6" 18"
SB	41.413949	-71.796708	Composite: No	3/8" HMA	1/2" HMA				Soil/Gravel	
TL	5 Right EOP									
C-02	11/27/2023	Potter Hill Rd at Pole #39		3.3"	0.7"	2.2"	N/A	N/A	6.2"	6.5" 18.5"
NB	41.414216	-71.796328	Composite: No	3/8" HMA	Sand Mix	Sand Mix			Soil/Gravel	
TL	6 Right EOP					Chipped			L1/L2 Bond Break	
			Average Depth:	2.9"	2.1"	2.2"	N/A	N/A	6.1"	

Cores Requested By: Robert Soscia

Measured By (Print / Sign) 11/28/23 Date

Reviewed By (Print / Sign) Anita Marshall 11/29/23 Date

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
MATERIALS AND QUALITY ASSURANCE
PAVEMENT CORE REPORT

File No: 4064 Lab No: 20230890 Date: 11/27/2023

Contract No: 2023-EH-007D FAP No: _____ PTSID: 0013Q Project: Corridor Ashaway Laurel Street

Town / City: Hopkinton Cored By: Colbert, DeOca, Nathan Bueno

Limits: Laurel Street from High St to Maxson St

P.E. ☑ Final ☐ Special Projects ☐

Comments:

Core ID	Cored On	Road / Station		Depth	Depth	Depth	Depth	Depth	Total Depth	Soil: From / To	
Direction	LATITUDE	LONGITUDE	Composite Pavement	Material	Material	Material	Material	Material	Cored To		
Lane ID	Lateral Offset (ft.)		Curb Reveal (in.)	Qualifier	Qualifier	Qualifier	Qualifier	Qualifier	Core Notes		
C-01	11/27/2023	Laurel St at Pole #5		1.2"	8.1"	N/A	N/A	N/A	9.3"	9.2"	21.2"
SB	41.424001	-71.791341	Composite: No	3/8" HMA	3/4" HMA				Soil/Gravel		
TL	8 Right Curb		5								
C-02	11/27/2023	Laurel St at Pole #25		2"	3.2"	N/A	N/A	N/A	5.2"	5"	17"
NB	41.418456	-71.797828	Composite: No	3/8" Sandmix	1.5" HMA				Soil/Gravel		
TL	5 Right EOP			Broken	Broken				L1/L2 Bond Break		
			Average Depth:	1.5"	5.6"	N/A	N/A	N/A	7.2"		

Cores Requested By: Robert Soscia

Steven Tiernan 11/28/23
Measured By (Print / Sign) Date

Anita Marshall 11/29/23
Reviewed By (Print / Sign) Date

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
MATERIALS AND QUALITY ASSURANCE
PAVEMENT CORE REPORT

File No: 4065 Lab No: 20230891 Date: 11/27/2023

Contract No: 2023-EH-007D FAP No: _____ PTSID: 0013Q Project: Corridor Ashaway High Street (RT 216)

Town / City: Hopkinton Cored By: Colbert, DeOca, Nathan Bueno

Limits: High St from RT3 to Maple Ct

P.E. ☑ Final ☐ Special Projects ☐

Comments: C-1 has Crack Seal on top - crack went all the way through both layers

Core ID	Cored On	Road / Station		Depth	Depth	Depth	Depth	Depth	Total Depth	Soil: From / To
Direction	LATITUDE	LONGITUDE	Composite Pavement	Material	Material	Material	Material	Material	Cored To	
Lane ID	Lateral Offset (ft.)		Curb Reveal (in.)	Qualifier	Qualifier	Qualifier	Qualifier	Qualifier	Core Notes	
C-01	11/27/2023	High St at Pole #46		1.9"	1.2"	5"	N/A	N/A	8.1"	8" 20.2"
NB	41.423624	-71.787383	Composite: No	3/8" HMA	Sand Mix	Macadam			Soil/Gravel	
TL	8 Right Curb		5	Split	Split	2-3'" Stone			L1/L2 Bond Break	
C-02	11/27/2023	High St at Pole #43		2.4"	1.4"	5"	N/A	N/A	8.8"	8.6" 20.6"
SB	41.424309	-71.788280	Composite: No	3/8" HMA	3/8" HMA	Penetr. Macadam			Soil/Gravel	
TL	9 Right Curb		6			1.5-3" Stone				
			Average Depth:	2.1"	1.3"	5"	N/A	N/A	8.4"	

Cores Requested By: Robert Soscia

Measured By (Print / Sign) 11/28/23 Date

Reviewed By (Print / Sign) Anita Marshall 11/29/23 Date

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
MATERIALS AND QUALITY ASSURANCE
CORE GRAVEL GRADATION REPORT

Lab No: 20230891 File No: 4065

RI Contract No: 2023-EH-007D Date Tested:

F.A.P. No: Date Cored - Ini 11/27/2023

Project: Corridor Ashaway High Street (RT 2 Location: Hopkinton

☑ P.E. ☐ Final ☐ Acceptance ☐ Special Project

Sieve Size	1/2"	3/8"	# 4	# 10	# 40	# 200	Soil Class	Remarks
Spec	50 / 85	45 / 80	40 / 75	- - -	0 / 45	0 / 10		
C-1	45	41	34	27	16	3.0	A - 1 - a	Does Not Meet Gravel Borrow Spec.
C-2	49	45	37	31	15	3.0	A - 1 - a	Does Not Meet Gravel Borrow Spec.

Remarks :

12-A-23
Technician (Print / Sign) **Date**

Reviewed By (Print / Sign) 12/A/23 **Date**

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
MATERIALS AND QUALITY ASSURANCE
CORE GRAVEL GRADATION REPORT

Lab No: 20230890 File No: 4064

RI Contract No: 2023-EH-007D Date Tested:

F.A.P. No: Date Cored - Ini 11/27/2023

Project: Corridor Ashaway Laurel Street Location: Hopkinton

☑ P.E. ☐ Final ☐ Acceptance ☐ Special Project

Sieve Size	1/2"	3/8"	# 4	# 10	# 40	# 200	Soil Class	Remarks
Spec	50 / 85	45 / 80	40 / 75	- - -	0 / 45	0 / 10		
C-1	68	66	59	54	34	6.8	A - 1 - b	Meets Gravel Borrow Spec.
C-2	81	78	73	66	40	8.3	A - 1 - b	Meets Gravel Borrow Spec.

Remarks :

12-8-23
Technician (Print / Sign) **Date**

12/8/23
Reviewed By (Print / Sign) **Date**

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
MATERIALS AND QUALITY ASSURANCE
CORE GRAVEL GRADATION REPORT

Lab No: 20230889 File No: 4063

RI Contract No: 2023-EH-007D Date Tested:

F.A.P. No: Date Cored - Ini 11/27/2023

Project: Corridor Ashaway Potter Hill Road Location: Hopkinton

☑ P.E. ☐ Final ☐ Acceptance ☐ Special Project

Sieve Size	1/2"	3/8"	# 4	# 10	# 40	# 200	Soil Class	Remarks
Spec	**50 / 85**	**45 / 80**	**40 / 75**	**- - -**	**0 / 45**	**0 / 10**		
C-1	68	66	60	55	33	6.3	A - 1 - b	Meets Gravel Borrow Spec.
C-2	65	56	48	41	25	4.5	A - 1 - a	Meets Gravel Borrow Spec.

Remarks :

12-6-23 12/8/23

Technician (Print / Sign) **Date** **Reviewed By** (Print / Sign) **Date**

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
MATERIALS AND QUALITY ASSURANCE
CORE GRAVEL GRADATION REPORT

Lab No: 20230888 File No: 4062

RI Contract No: 2023-EH-007D Date Tested:

F.A.P. No: Date Cored - Ini 11/27/2023

Project: Corridor Ashaway Maxson Street Location: Hopkinton

☑ P.E. ☐ Final ☐ Acceptance ☐ Special Project

Sieve Size	1/2"	3/8"	# 4	# 10	# 40	# 200	Soil Class	Remarks
Spec	50 / 85	45 / 80	40 / 75	- - -	0 / 45	0 / 10		
C-1	64	58	42	35	17	2.6	A - 1 - a	Meets Gravel Borrow Spec.
C-2	**88**	**86**	**80**	74	**48**	9.3	A - 1 - b	Does Not Meet Gravel Borrow Spec.

Remarks :

12-6-23
Technician (Print / Sign) **Date**

12/8/23
Reviewed By (Print / Sign) **Date**

APPENDIX J

GEOTECHNICAL INVESTIGATION

Proactive by Design

GEOTECHNICAL DATA REPORT

RIDOT Ashaway Corridor
Ashaway River (Bridge No. 005001)
Hopkinton, Rhode Island

June 2024
File No. 03.0035302.00

PREPARED FOR:
Vanasse Hangen Brustlin, Inc
Providence, Rhode Island

GZA GeoEnvironmental, Inc.
188 Valley Street, Suite 300 | Providence, RI 02909
401-421-4140

Offices Nationwide

www.gza.com

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Built on trust.

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ENVIRONMENTAL
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WATER
CONSTRUCTION MANAGEMENT

188 Valley Street
Suite 300
Providence, RI 02909
T: 401.421.4140
F: 401.751.8613
www.gza.com

June 14, 2024
GZA File No. 03.0035302.00

Mr. Andrew Prezioso, P.E.
Vanasse Hangen Brustlin, Inc.
1 Cedar Street, Suite 400
Providence, RI 02903

Re: Geotechnical Data Report
RIDOT Ashaway Corridor
Ashaway River Bridge No. 005001 Replacement
Hopkinton, Rhode Island

Dear Mr. Prezioso:

We are pleased to provide you with this "Geotechnical Data Report" which presents a compilation of the findings of the subsurface explorations performed as part of this study to evaluate the subsurface conditions pertinent to the design of bridge foundations for the Rhode Island Department of Transportation's (RIDOT's) Ashaway River Bridge No. 005001 as part of the Ashaway Corridor project in Hopkinton, Rhode Island.

We appreciate the opportunity to have provided these services to VHB. If you have any questions or need additional information, please do not hesitate to contact the undersigned at your convenience.

Sincerely,

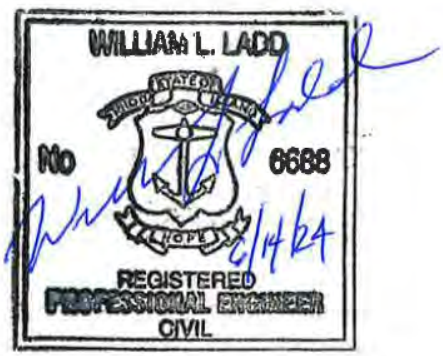
GZA GEOENVIRONMENTAL INC

Lindsay A. Cullen, E.I.T.
Assistant Project Manager

William L. Ladd, P.E.
Senior Consultant

David R. Carchedi, Ph.D., P.E.
Senior Principal

Russell J. Morgan, P.E.
Senior Principal



1.0 INTRODUCTION 1
1.1 GENERAL 1
1.2 PROJECT DESCRIPTION 1
1.3 EXISTING CONDITIONS 1
1.4 REPORT LIMITATIONS 1
2.0 BACKGROUND INFORMATION 2
2.1 PREVIOUS INVESTIGATIONS AND EXISTING DATA 2
2.2 REGIONAL GEOLOGIC SETTING 2
3.0 SUBSURFACE EXPLORATIONS 2
4.0 REFERENCES 3

FIGURES

FIGURE 1 – LOCUS
FIGURE 2 – EXPLORATION LOCATION PLAN

APPENDICES

APPENDIX A –TEST BORING LOGS

1.0 INTRODUCTION

1.1 GENERAL

This report presents the findings of the subsurface exploration program performed as part of this study to evaluate the subsurface conditions pertinent to the design of the replacement bridge structure for the RIDOT Bridge No. 005001 (Ashaway River) that carries Laurel Street over Ashaway River in Hopkinton, Rhode Island. GZA's scope of services included conducting a test boring program and the preparation of this report presenting our findings.

1.2 PROJECT DESCRIPTION

The goal of this project is to prepare 30 percent design plans for the replacement of Bridge No. 005001 Ashaway River. The existing bridge is a concrete deck with stone masonry abutments and has a span of approximately 55 feet. Plans for the new bridge have not been finalize. It is likely that the new foundations will be constructed behind the existing foundations on micropiles and the bridge span will be increased to a span of approximately 68 feet.

1.3 EXISTING CONDITIONS

The Ashaway River Bridge No. 005001 carries Laurel Street over the Ashaway River (reference Figure 1, ***Locus***). The project site is bounded to the east and west by the Ashaway River, and to the north and south by Laurel Street. All elevations referenced in this report are based upon the North American Vertical Datum 1988 (NAVD88).

The existing RIDOT Bridge No. 005001 was an old narrow, steel truss bridge that was reconstructed in 1977 to a concrete superstructure bearing on shallow foundations. It is presumed to be founded on stone spread footings, but size and depth are unknown. Ground surface elevations along the bridge surface range from 36.925 to 37.45 feet at the roadway surface, and the stream bed ranges from approximate elevation 25.90 to 28.96 feet.

1.4 REPORT LIMITATIONS

This report has been prepared for the specific application to the proposed Ashaway River Bridge (Bridge No. 005001) for the Ashaway Corridor project. This report was prepared in accordance with generally accepted soil and foundation engineering practices. No other warranty, express or implied, is made.

The data submitted in this report is based upon the information from widely spaced subsurface explorations. The nature and extent of variations between these explorations may not become evident until construction. If variations then appear evident, it will be necessary to reevaluate the information presented in this report.

Water level readings have been made in the drill holes at the times and under the conditions stated on the boring logs. This data has been reviewed and interpretations have been made in the text of this report. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall, temperature, season, and other factors occurring since the time measurements were made.

The scope of this study did not include an assessment of environmental conditions or the presence of hazardous materials.

2.0 BACKGROUND INFORMATION

2.1 PREVIOUS INVESTIGATIONS AND EXISTING DATA

No previous subsurface data at the site was available at the time of this report.

2.2 REGIONAL GEOLOGIC SETTING

Several United States Geologic Survey (USGS) publications were reviewed to obtain an understanding of the area geology. These publications included the "Surficial Geologic Map of the Ashaway Quadrangle, Connecticut-Rhode Island", dated 1968, and the "Bedrock Geology Map of the Ashaway Quadrangle, Connecticut-Rhode Island", dated 1965. A summary of the geologic conditions anticipated to be found at the site is presented in the following paragraphs.

The bedrock underlying the site is comprised of Plainfield Formation. The Plainfield Formation consists of medium-grained, gray feldspar-quartz-biotite gneiss and schitose gneiss.

The surficial soil deposits above the bedrock are predominantly glacial in origin. The northern end of the project site is alluvium deposits which consist of silt, sand, gravel, and boulders in floodplains of streams. The southern edge of the project site is mapped as glacial stream and lake deposits. The glacial stream and lake deposits are predominately gravel and sand, bedded and mostly well sorted with lenses of flow-till in some places. The particle size tends to decrease with increased depth. Glacial till is anticipated to underly the glacial stream and lake deposits. Glacial till was typically deposited directly over bedrock by glacial ice masses, and may vary considerably with location in thickness, density, and composition. In general, glacial till is an unsorted, heterogeneous mixture of sand, silt, clay, gravel, cobbles, and boulders, and may include lenses and irregular masses of sorted sand and gravel.

3.0 SUBSURFACE EXPLORATIONS

The following paragraphs describe test borings drilled as part of this study. Logs of these explorations are included in Appendix A, and the locations are shown on the attached Figure 2, ***Exploration Location Plan***.

Four test borings, designated B-1 through B-4, were drilled for this study by New England Boring Contractors, Inc. of East Taunton, Massachusetts between May 20 and May 29, 2024. The borings were advanced to depths ranging from 25 to 38 feet below ground surface using 4-inch casing. Casing was advanced using standard drive and wash techniques with rotary equipment.

Split spoon samples were generally obtained continuously to a depth of at least ten feet and then at 5-foot intervals thereafter in conformance with ASTM D-1586, the Standard Penetration Test, to obtain an indication of the relative density and consistency of the underlying soils. The Standard Penetration Test consists of driving a 1-3/8 inch inside diameter standard split spoon sampler at least 18 inches with a 140-pound hammer dropping from a height of 30 inches. The standard penetration value (N-value) is the number of blows required to drive the split spoon sampler from 6 to 18 inches of penetration.

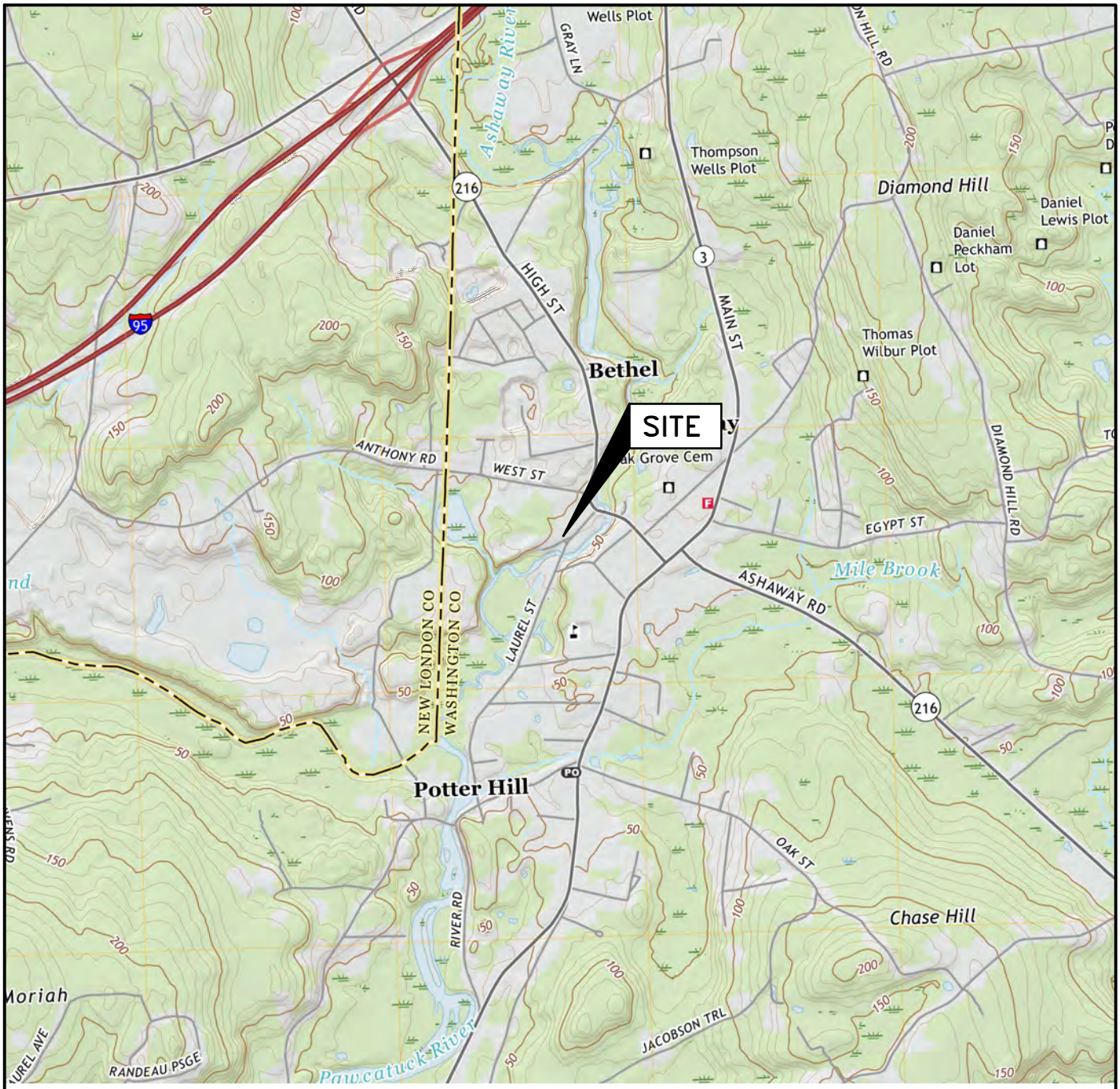
Ten feet of bedrock was cored in locations B-1 and B-4. The bedrock consisted of gray to tan granite gneiss.

No groundwater observation wells were installed as part of this project. Groundwater readings were taken in the boreholes at the time of drilling and was encountered at depths ranging from 5.9 feet to 6.67 feet, corresponding to elevations ranging from approximately 29.33 feet to 30.1 feet. The groundwater levels are anticipated to fluctuate with the river water level, with an extreme high equal to the flood level of the adjacent Pawcatuck River.

4.0 REFERENCES

1. "2000 Annual Book of ASTM Standards, Volume 04.08, Soil and Rock" American Society of Testing Materials, 2000.
2. "Surficial Geologic Map of the Ashaway Quadrangle, Connecticut-Rhode Island", USGS, dated 1968.
3. "Bedrock Geology Map of the Ashaway Quadrangle, Connecticut-Rhode Island", USGS, dated 1965.

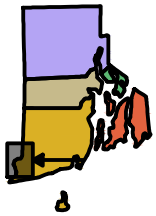
FIGURES



0 1000' 2000' 4000'

SCALE IN FEET

RHODE ISLAND



QUADRANGLE LOCATION

SOURCE:

BASE MAP FROM THE FOLLOWING USGS QUADRANGLE MAP:
ASHAWAY, RHODE ISLAND (2021)

DIGITAL TOPOGRAPHIC MAPS PROVIDED BY USGSSTORE.GOV.

CONTOUR ELEVATIONS REFERENCE NAVD 88,
CONTOURS ARE SHOWN IN FEET AT 10' INTERVALS

N
W E
S

UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

ASHAWAY CORRIDOR
ASHAWAY RIVER BRIDGE 50
ASHAWAY, RHODE ISLAND

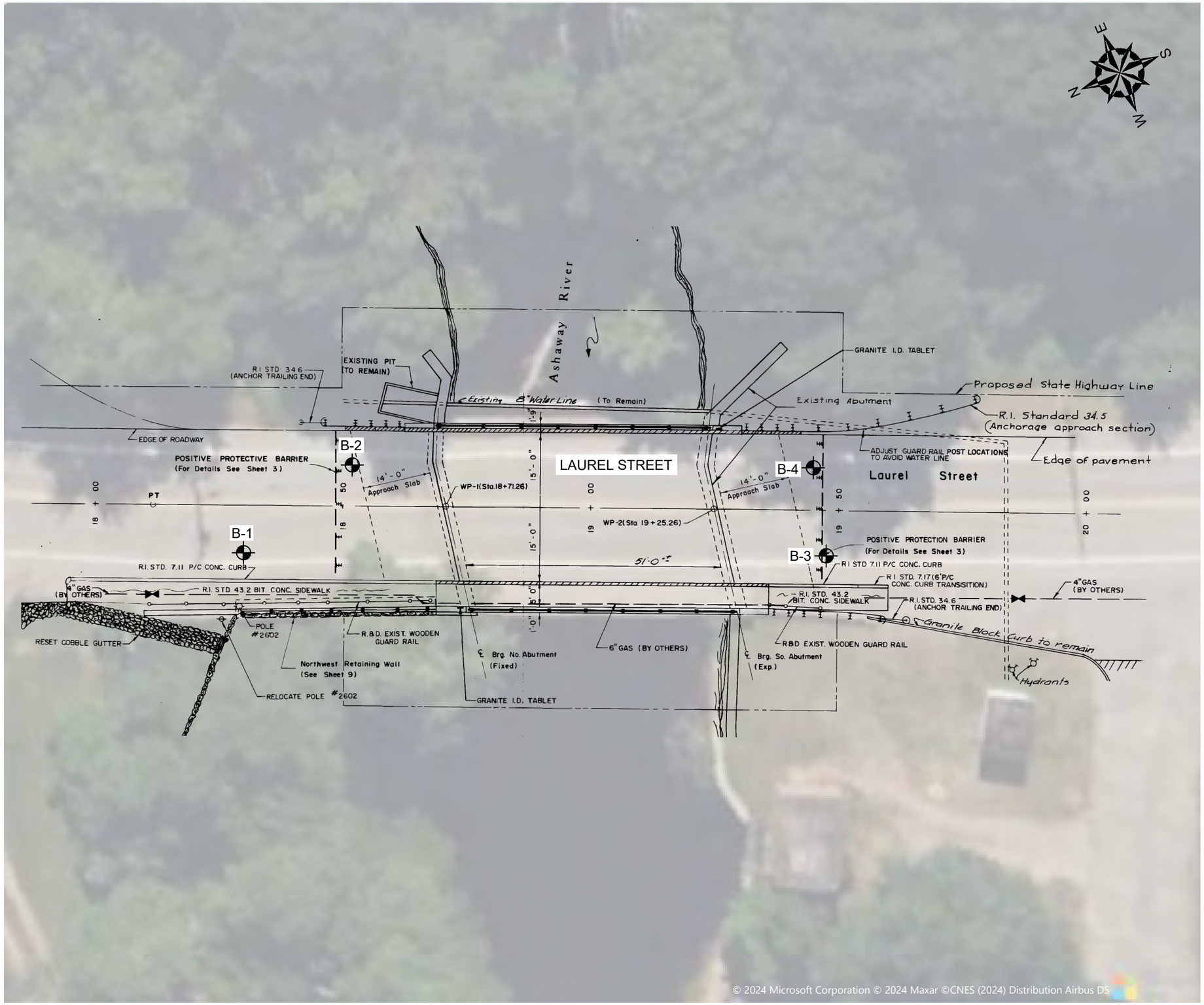
PREPARED BY:
GZA GeoEnvironmental, Inc.
Engineers and Scientists
www.gza.com

PREPARED FOR:
VANASSE HANGEN BRUSTLIN, INC.

LOCUS MAP

PROJ MGR: WLL	REVIEWED BY: DRC	CHECKED BY: --	FIGURE 1
DESIGNED BY: WLL	DRAWN BY: TRM	SCALE: AS NOTED	
DATE: MAY 2024	PROJECT NO. 35302.00	REVISION NO. 0	SHEET NO. 1 OF 2

© 2023 - GZA GeoEnvironmental, Inc. GZA-J:\GEO\35302.WLL\FIGURES\CAD\DWGS\35302_LOCUS MAP.DWG FIG. 1 JULY 13, 2023 TIMOTHY MARTIN



REFERENCE NOTES:

1. AERIAL BASE MAP DEVELOPED FROM AN ELECTRONIC IMAGE FILE PROVIDED BY MICROSOFT CORPORATION / MAXAR / CNES DISTRIBUTION AIRBUS DC IN 2024.
2. BASE MAP DEVELOPED FROM PDF OF RIDOT PLAN "ASHWAY RIVER BRIDGE NO 50, SUPER STRUCTURE REPLACEMENT, SHEET NO 6 OF 30, DATED 1977.
3. THE LOCATION OF THE BORINGS WERE APPROXIMATELY DETERMINED BY LINE OF SIGHT AND/OR TAPE MEASUREMENTS FROM EXISTING TOPOGRAPHIC AND MAN-MADE FEATURES, THE DATA SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.

LEGEND:

B-1 — INDICATES BORINGS DRILLED BETWEEN MAY 20 AND 28, 2024 BY NEW ENGLAND BORING CONTRACTORS, INC AND OBSERVED BY GZA PERSONNEL.

0 10' 20' 40'

SCALE IN FEET 1" = 20'

NO.	ISSUE/DESCRIPTION	BY	DATE

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ASHAWAY CORRIDOR
ASHAWAY RIVER BRIDGE 50
ASHAWAY, RHODE ISLAND

EXPLORATION LOCATION PLAN

PREPARED BY:
GZA GeoEnvironmental, Inc.
Engineers and Scientists
www.gza.com

PREPARED FOR:
VANASSE HANGEN BRUSTLIN, INC.

PROJ MGR: WLL	REVIEWED BY: DRC	CHECKED BY: --	FIGURE 2
DESIGNED BY: WLL	DRAWN BY: TRM	SCALE: AS NOTED	
DATE: MAY 2024	PROJECT NO. 35302.00	REVISION NO. 0	SHEET NO. 2 OF 2

© 2023 - GZA GeoEnvironmental, Inc. GZA-J:\GEO\35302.WLL\FIGURES\CAD\DWGS\35302.00_SITE-EXP PLAN.DWG FIG. 2 MAY 29, 2024 TIMOTHY MARTIN

APPENDIX A: TEST BORING LOGS

RIDOT SUBSURFACE EXPLORATION INFORMATION PAGE

Fill in what's in Green

Project Information	
RIDOT Project Name	RIDOT Ashaway Corridor
City/Town	Hopkinton, Rhode Island
PTSID No.	0013Q
RIDOT Design RIC Number	2023-EH-007D
RIDOT Construction RIC Number	N/A

Test Boring Information	
Drilling Company	New England Boring Contractors
Driller's Name	Chris Knight
Consultant Company	GZA GeoEnvironmental, Inc.
Inspector Name	Santiago Santos
Boring Number	B-1
Exploration Depth (ft)	36.0
Exploration Method:	Casing
Casing Diameter (in)	4"
Auger Diameter (in)	NA
Start Date	5/20/2024
End Date	5/20/2024
Northing Coordinate	124113.8
Easting Coordinate	248079.5
Ground Surface Elevation (ft)	36
Elevation Datum	NAVD88
Horizontal Datum	NAD83
Depth to Groundwater	6.5
Groundwater Elevation (ft)	29.5
Depth to Bedrock	24
Bedrock Elevation (ft)	12
Total Number of Boring Log Sheets	2

Test Pit Information	
Excavation Co.	
Operator Name:	
Consultant Company:	
Inspector Name:	
Equipment:	
Test Pit No.	
Exploration Depth (ft)	
Start Date	
End Date	
Northing Coordinate	
Easting Coordinate	
Ground Surface Elevation (ft)	
Elevation Datum	
Horizontal Datum	
Depth to Groundwater	
Groundwater Elevation (ft)	
Depth to Bedrock	
Bedrock Elevation (ft)	

Rhode Island Department of Transportation
Two Capitol Hill
Providence RI, 02903

RIDOT Project:	RIDOT Ashaway Corridor	**Boring No.**	B-1
City/Town:	Hopkinton, Rhode Island	**Sheet.**	1 OF 2
PTSID No.:	0013Q	**Date Start:**	5/20/2024
Design RIC No.:	2023-EH-007D	**Date End:**	5/20/2024
Construction RIC No.:	N/A		
Drilling Co.:	New England Boring Contractors	**N Coordinate:**	124113.8
Driller Name:	Chris Knight	**E Coordinate:**	248079.5
Consultant Co.:	GZA GeoEnvironmental, Inc.	**Ground Surface Elev.:**	36
Inspector:	Santiago Santos	**Elevation Datum:**	NAVD88

Sampler: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 In.

Casing: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 In.

Casing Size: 4" **Auger Size:** NA

GROUNDWATER READINGS

DATE	TIME	DEPTH	CASING	STABILIZATION TIME
5/20/2024	12:00	6.5'	26'	0 Minutes

DEPTH	CASING	BLOWS	SAMPLE NO.	PEN./ REC	DEPTH (Ft.)	BLOWS/6"				SAMPLE DESCRIPTION & BURMISTER CLASSIFICATION	REMKS	STRATUM DESCRIPTION
0			S1	24/13	0-2	14	11	11	9	S1: Medium dense, dark/light brown, fine to coarse SAND, some Silt, trace Gravel		0.67 CONCRETE
			S2	24/0	3-5	6	5	6	4	S2: NO RECOVERY		FILL
5			S3	24/16	5-7	6	3	5	4	S3: Loose, light brown, fine to coarse SAND, little fine to coarse Gravel, little Silt		
			S4	24/6	7-9	3	5	3	3	S4: Loose, light brown, fine to coarse SAND, little fine Gravel, trace Silt		8'
			S5	24/11	9-11	4	4	5	9	S5: Loose, brown, fine to coarse SAND, little fine Gravel, trace Roots		ALLUVIAL DEPOSITS 11'
10			S6	24/11	11-13	10	17	24	15	S6: Dense, dark/light brown, fine to coarse SAND, some fine to coarse Gravel, little Silt		SAND AND GRAVEL 13'
			S7	24/14	13-15	16	9	6	10	S7: Medium dense, light brown/gray, SILT, little fine to coarse Sand, little Gravel		SANDY SILT
15			S8	24/19	15-17	33	28	28	35	S8: Very dense, brown, fine to coarse SAND and SILT, little fine to coarse Gravel		18'
			S9	24/13	18-20	36	32	30	25	S9: Very dense, light brown, fine to medium SAND, some Silt, little fine to coarse Gravel		SILTY SAND WITH GRAVEL
20			S10	13/8	23-24.1	29	28	50/1"		S10: Very dense, light brown, fine to coarse SAND, some Silt, little fine to coarse Gravel		24'
25			C1	60/54	26-31	5:43	min/ft			C1: Medium, slightly weathered, moderately fractured, medium-grained, gray/tan, GNEISS (RQD=68.3%)		BEDROCK
						3:52	min/ft					
						3:09	min/ft					
						1:57	min/ft					
30						2:44	min/ft					

GRANULAR SOILS		COHESIVE SOILS	
Blows/Ft	Density	Blows/Ft	Density
0 - 4	V. LOOSE	<2	V. SOFT
4-10	LOOSE	2-4	SOFT
10-30	M. DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
>50	V. DENSE	15-30	V. STIFF
		>30	HARD

Observation Well Information:

Remarks:
1) Upon drilling completion, borehole was backfilled with drill cuttings and silica sand. The location was patched with a cold asphalt patch.

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DU DUE TO OTHER FACTOI OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

Rhode Island Department of Transportation
Two Capitol Hill
Providence RI, 02903

RIDOT Project:	RIDOT Ashaway Corridor	**Boring No.**	B-1
City/Town:	Hopkinton, Rhode Island	**Sheet.**	2 OF 2
PTSID No.:	0013Q	**Date Start:**	5/20/2024
Design RIC No.:	2023-EH-007D	**Date End:**	5/20/2024
Construction RIC No.:	N/A		
Drilling Co.:	New England Boring Contractors	**N Coordinate:**	124113.8
Driller Name:	Chris Knight	**E Coordinate:**	248079.5
Consultant Co.:	GZA GeoEnvironmental, Inc.	**Ground Surface Elev.:**	36
Inspector:	Santiago Santos	**Elevation Datum:**	NAVD88

Sampler: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 In.

Casing: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 In.

Casing Size: 4" **Auger Size:** NA

GROUNDWATER READINGS

DATE	TIME	DEPTH	CASING	STABILIZATION TIME
5/20/2024	12:00	6.5'	26'	0 Minutes

DEPTH	CASING	BLOWS	SAMPLE NO.	PEN./ REC	DEPTH (Ft.)	BLOWS/6"	SAMPLE DESCRIPTION & BURMISTER CLASSIFICATION	REMKS	STRATUM DESCRIPTION
30									
			C2	60/60	31-36	3:51 min/ft	C2: Medium hard, slightly weathered, slightly fractured, medium-grained, gray/tan, GNEISS (RQD=96.7%)		BEDROCK
						3:58 min/ft			
						4:12 min/ft			
						2:19 min/ft			
35						2:25 min/ft			36'
							Bottom of Boring 36'		
40									
45									
50									
55									
60									

GRANULAR SOILS		COHESIVE SOILS	
Blows/Ft	Density	Blows/Ft	Density
0 - 4	V. LOOSE	<2	V. SOFT
4-10	LOOSE	2-4	SOFT
10-30	M. DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
>50	V. DENSE	15-30	V. STIFF
		>30	HARD

Observation Well Information:

Remarks:

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTOR OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

RIDOT SUBSURFACE EXPLORATION INFORMATION PAGE

Fill in what's in Green

Project Information	
RIDOT Project Name	RIDOT Ashaway Corridor
City/Town	Hopkinton, Rhode Island
PTSID No.	0013Q
RIDOT Design RIC Number	2023-EH-007D
RIDOT Construction RIC Number	N/A

Test Boring Information	
Drilling Company	New England Boring Contractors
Driller's Name	Chris Knight
Consultant Company	GZA GeoEnvironmental, Inc.
Inspector Name	Andrew Pariseault
Boring Number	B-2
Exploration Depth (ft)	23.2
Exploration Method:	Casing
Casing Diameter (in)	4"
Auger Diameter (in)	NA
Start Date	5/28/2024
End Date	5/28/2024
Northing Coordinate	124086.7
Easting Coordinate	248087.1
Ground Surface Elevation (ft)	36
Elevation Datum	NAVD88
Horizontal Datum	NAD83
Depth to Groundwater	6.2
Groundwater Elevation (ft)	29.8
Depth to Bedrock	23
Bedrock Elevation (ft)	13
Total Number of Boring Log Sheets	1

Test Pit Information	
Excavation Co.	
Operator Name:	
Consultant Company:	
Inspector Name:	
Equipment:	
Test Pit No.	
Exploration Depth (ft)	
Start Date	
End Date	
Northing Coordinate	
Easting Coordinate	
Ground Surface Elevation (ft)	
Elevation Datum	
Horizontal Datum	
Depth to Groundwater	
Groundwater Elevation (ft)	
Depth to Bedrock	
Bedrock Elevation (ft)	

Rhode Island Department of Transportation
Two Capitol Hill
Providence RI, 02903

RIDOT Project:	RIDOT Ashaway Corridor	**Boring No.**	B-2
City/Town:	Hopkinton, Rhode Island	**Sheet.**	1 OF 1
PTSID No.:	0013Q	**Date Start:**	5/28/2024
Design RIC No.:	2023-EH-007D	**Date End:**	5/28/2024
Construction RIC No.:	N/A		
Drilling Co.:	New England Boring Contractors	**N Coordinate:**	124086.7
Driller Name:	Chris Knight	**E Coordinate:**	248087.1
Consultant Co.:	GZA GeoEnvironmental, Inc.	**Ground Surface Elev.:**	36
Inspector:	Andrew Pariseault	**Elevation Datum:**	NAVD88

Sampler: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 In.

Casing: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 In.

Casing Size: 4" **Auger Size:** NA

GROUNDWATER READINGS

DATE	TIME	DEPTH	CASING	STABILIZATION TIME
5/28/2024	11:30	5.9'	18'	10 Minutes
5/28/2024	11:45	6.2'	0'	15 Minutes

DEPTH	CASING	BLOWS	SAMPLE NO.	PEN./ REC	DEPTH (Ft.)	BLOWS/6"				SAMPLE DESCRIPTION & BURMISTER CLASSIFICATION	REMKS	STRATUM DESCRIPTION
0												0.67' ASPHALT
			S1	24/10	1-3	16	11	5	3	S1: Top 6": Light brown, fine to coarse SAND, some fine Gravel, trace Silt / Bottom 4": Brown, fine to medium SAND, little fine Gravel, little Silt		FILL
			S2	24/2	3-5	1	WOH	1	WOH	S2: Very loose, brown, fine to medium SAND, little fine Gravel, little Silt		
5			S3	24/10	5-7	1	WOH	1	WOH	S3: Very loose, brown, fine to medium SAND, little fine Gravel, trace Silt		7'
			S4	24/11	7-9	2	5	7	17	S4: Top 4": Gray, fine to medium SAND, little Silt, trace Roots Bottom 7": Brown/gray, fine to coarse SAND, little fine Gravel, trace Silt		ALLUVIAL SOILS
10			S5	24/12	9-11	11	17	19	15			11'
			S6	24/10	11-13	16	19	20	25	S5: Top 5": Brown, fine to coarse SAND, little fine Gravel, trace Silt / Mid Upper 2": Gray, fine to coarse SAND, little fine Gravel, trace Silt / Mid Lower 2": Brown, fine to coarse SAND little fine to coarse Gravel, little Silt, trace Roots / Bottom 3": Gray, fine to medium SAND, some fine to coarse Gravel, trace Silt	1	SAND AND GRAVEL
			S7	24/14	13-15	52	90	18	46			15.5'
15											1	16.25' BOULDER
			S8	24/7	18-20	27	21	33	15	S6: Dark gray, fine to coarse SAND and fine to coarse GRAVEL, trace Silt		SAND AND GRAVEL
										S7: Top 6": Gray, fine to coarse SAND, some fine Gravel, little Silt / Bottom 8": Brown, fine to medium SAND and fine to coarse GRAVEL, little Silt	1	
20												23'
			S9	2/0	23-23.2	100/2"				S8: Very dense, gray, fine to coarse SAND, some fine to coarse Gravel, little Silt	2	INFERRED BEDROCK
										S9: NO RECOVERY	3	25'
25												
30												

GRANULAR SOILS		COHESIVE SOILS	
Blows/Ft	Density	Blows/Ft	Density
0 - 4	V. LOOSE	<2	V. SOFT
4-10	LOOSE	2-4	SOFT
10-30	M. DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
>50	V. DENSE	15-30	V. STIFF
		>30	HARD

Observation Well Information:

Remarks:
1) Drill chatter observed.
2) Rollerbit advanced approximately 2' into apparent bedrock.
3) Upon drilling completion, borehole was backfilled with drill cuttings and silica sand. The location was patched with a cold asphalt patch.

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTOR OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

BORING No B-2

RIDOT SUBSURFACE EXPLORATION INFORMATION PAGE

Fill in what's in Green

Project Information	
RIDOT Project Name	RIDOT Ashaway Corridor
City/Town	Hopkinton, Rhode Island
PTSID No.	0013Q
RIDOT Design RIC Number	2023-EH-007D
RIDOT Construction RIC Number	N/A

Test Boring Information	
Drilling Company	New England Boring Contractors
Driller's Name	Chris Knight
Consultant Company	GZA GeoEnvironmental, Inc.
Inspector Name	Santiago Santos
Boring Number	B-3
Exploration Depth (ft)	28.0
Exploration Method:	Casing
Casing Diameter (in)	4"
Auger Diameter (in)	NA
Start Date	5/23/2024
End Date	5/23/2024
Northing Coordinate	124005.9
Easting Coordinate	248032.9
Ground Surface Elevation (ft)	36
Elevation Datum	NAVD88
Horizontal Datum	NAD83
Depth to Groundwater	6.5
Groundwater Elevation (ft)	29.5
Depth to Bedrock	28
Bedrock Elevation (ft)	8
Total Number of Boring Log Sheets	1

Test Pit Information	
Excavation Co.	
Operator Name:	
Consultant Company:	
Inspector Name:	
Equipment:	
Test Pit No.	
Exploration Depth (ft)	
Start Date	
End Date	
Northing Coordinate	
Easting Coordinate	
Ground Surface Elevation (ft)	
Elevation Datum	
Horizontal Datum	
Depth to Groundwater	
Groundwater Elevation (ft)	
Depth to Bedrock	
Bedrock Elevation (ft)	

Rhode Island Department of Transportation
Two Capitol Hill
Providence RI, 02903

RIDOT Project:	RIDOT Ashaway Corridor	**Boring No.**	B-3
City/Town:	Hopkinton, Rhode Island	**Sheet.**	1 OF 1
PTSID No.:	0013Q	**Date Start:**	5/23/2024
Design RIC No.:	2023-EH-007D	**Date End:**	5/23/2024
Construction RIC No.:	N/A		
Drilling Co.:	New England Boring Contractors	**N Coordinate:**	124005.9
Driller Name:	Chris Knight	**E Coordinate:**	248032.9
Consultant Co.:	GZA GeoEnvironmental, Inc.	**Ground Surface Elev.:**	36
Inspector:	Santiago Santos	**Elevation Datum:**	NAVD88

Sampler: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 In.

Casing: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 In.

Casing Size: 4" **Auger Size:** NA

GROUNDWATER READINGS

DATE	TIME	DEPTH	CASING	STABILIZATION TIME
5/23/2024	12:30	6.5'	28'	0 Minutes

DEPTH	CASING	BLOWS	SAMPLE NO.	PEN./ REC	DEPTH (Ft.)	BLOWS/6"				SAMPLE DESCRIPTION & BURMISTER CLASSIFICATION	REMKS	STRATUM DESCRIPTION
0												0.67' ASPHALT
			S1	24/13	1-3	30	33	19	12	S1: Very dense, light/dark brown, fine to coarse SAND, little fine to coarse Gravel, little Silt		
			S2	24/0	3-5	5	6	7	8	S2: NO RECOVERY		
5			S3	24/12	5-7	11	12	14	7	S3: Medium dense, brown, fine to coarse SAND, little fine to coarse Gravel, little Silt, trace Asphalt		FILL
			S4	24/19	7-9	11	18	41	57	S4: Very dense, brown, fine to coarse SAND, little Silt, little fine to coarse Gravel, trace Asphalt		9'
10			S5	24/14	9-11	11	16	32	32	S5: Dense, brown, fine to coarse SAND, little fine Gravel, trace Silt		SAND WITH GRAVEL
												12' SILT
			S6	24/16	13-15	5	3	5	21	S6: Loose, brown/gray, SILT, trace fine Sand, trace fine Gravel		14.5'
15												
			S7	24/18	18.5-20.5	39	23	24	29	S7: Dense, brown, fine to coarse SAND, some fine to coarse Gravel, little Silt (weathered rock)		SILTY SAND AND GRAVEL
20												
25												
			S8	0/0	28-28	90/0"				S8: NO RECOVERY		28'
30										**Bottom of Boring 28'**		

GRANULAR SOILS		COHESIVE SOILS	
Blows/Ft	Density	Blows/Ft	Density
0 - 4	V. LOOSE	<2	V. SOFT
4-10	LOOSE	2-4	SOFT
10-30	M. DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
>50	V. DENSE	15-30	V. STIFF
		>30	HARD

Observation Well Information:

Remarks:

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTOR OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

RIDOT SUBSURFACE EXPLORATION INFORMATION PAGE

Fill in what's in Green

Project Information	
RIDOT Project Name	RIDOT Ashaway Corridor
City/Town	Hopkinton, Rhode Island
PTSID No.	0013Q
RIDOT Design RIC Number	2023-EH-007D
RIDOT Construction RIC Number	N/A

Test Boring Information	
Drilling Company	New England Boring Contractors
Driller's Name	Chris Knight
Consultant Company	GZA GeoEnvironmental, Inc.
Inspector Name	Santiago Santos
Boring Number	B-4
Exploration Depth (ft)	38.0
Exploration Method:	Casing
Casing Diameter (in)	4"
Auger Diameter (in)	NA
Start Date	5/21/2024
End Date	5/22/2024
Northing Coordinate	124001.3
Easting Coordinate	248050.2
Ground Surface Elevation (ft)	36
Elevation Datum	NAVD88
Horizontal Datum	NAD83
Depth to Groundwater	6.67
Groundwater Elevation (ft)	29.33
Depth to Bedrock	28
Bedrock Elevation (ft)	8
Total Number of Boring Log Sheets	2

Test Pit Information	
Excavation Co.	
Operator Name:	
Consultant Company:	
Inspector Name:	
Equipment:	
Test Pit No.	
Exploration Depth (ft)	
Start Date	
End Date	
Northing Coordinate	
Easting Coordinate	
Ground Surface Elevation (ft)	
Elevation Datum	
Horizontal Datum	
Depth to Groundwater	
Groundwater Elevation (ft)	
Depth to Bedrock	
Bedrock Elevation (ft)	

Rhode Island Department of Transportation
Two Capitol Hill
Providence RI, 02903

RIDOT Project:	RIDOT Ashaway Corridor	**Boring No.**	B-4
City/Town:	Hopkinton, Rhode Island	**Sheet.**	1 OF 2
PTSID No.:	0013Q	**Date Start:**	5/21/2024
Design RIC No.:	2023-EH-007D	**Date End:**	5/22/2024
Construction RIC No.:	N/A		
Drilling Co.:	New England Boring Contractors	**N Coordinate:**	124001.3
Driller Name:	Chris Knight	**E Coordinate:**	248050.2
Consultant Co.:	GZA GeoEnvironmental, Inc.	**Ground Surface Elev.:**	36
Inspector:	Santiago Santos	**Elevation Datum:**	NAVD88

Sampler: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 In.

Casing: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 In.

Casing Size: 4" **Auger Size:** NA

GROUNDWATER READINGS

DATE	TIME	DEPTH	CASING	STABILIZATION TIME
5/22/2024	10:20	6.67'	28'	0 Minutes

DEPTH	CASING	BLOWS	SAMPLE NO.	PEN./ REC	DEPTH (Ft.)	BLOWS/6"				SAMPLE DESCRIPTION & BURMISTER CLASSIFICATION	REMKS	STRATUM DESCRIPTION
0			S1	24/9	0-2	20	20	18	15	S1: Dense, brown, fine to coarse SAND and fine to coarse GRAVEL		0.67' CONCRETE
			S2	24/4	3-5	5	5	5	2	S2: Loose, brown, fine to coarse SAND, some fine Gravel		FILL
5			S3	24/4	5-7	5	3	4	11	S3: Loose, light brown, fine to coarse SAND, some Silt		7'
			S4	24/11	7-9	18	26	40	25	S4: Very dense, light brown, fine to coarse SAND, some Gravel, little Silt		SAND AND GRAVEL
10			S5	24/13	9-11	25	25	28	14	S5: Very dense, light brown, fine to coarse SAND, some Gravel, little Silt		11'
			S6	24/16	11-13	12	14	16	15	S6: Medium dense, light brown, fine to coarse SAND and SILT, trace fine Gravel		SAND / SAND AND SILT
			S7	24/15	13-15	31	62	61	36	S7: Top 9": Brown, fine to medium SAND and SILT, trace Gravel / Bottom 6": Tan/brown, fine to coarse SAND, little Silt, trace decomposed Rock, trace Gravel		17'
15												
			S8	1/1	19-19.1	66/1"				S8: Very dense, brown, fine to coarse SAND and fine to coarse GRAVEL	1	WEATHERED BEDROCK
20												
			S9	7/7	23-23.6	72	40/1"			S9: Very dense, light brown/orange, fine to coarse SAND, little Silt, trace fine Gravel		
25												
											2	28'
			C1	60/56	28-33	3:42	min/ft			C1: Medium hard, moderate to severe weathering, slightly fractured, medium-grained, green/tan, GNEISS (RQD=66.7%)		BEDROCK
30						2:55	min/ft					

GRANULAR SOILS		COHESIVE SOILS	
Blows/Ft	Density	Blows/Ft	Density
0 - 4	V. LOOSE	<2	V. SOFT
4-10	LOOSE	2-4	SOFT
10-30	M. DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
>50	V. DENSE	15-30	V. STIFF
		>30	HARD

Observation Well Information:

Remarks:
1) Increased difficulty in driving casing beginning at 20' below ground surface.
2) Rig chatter observed at 28' below ground surface.

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DU DUE TO OTHER FACTOI OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

Rhode Island Department of Transportation
Two Capitol Hill
Providence RI, 02903

RIDOT Project:	RIDOT Ashaway Corridor	**Boring No.**	B-4
City/Town:	Hopkinton, Rhode Island	**Sheet.**	2 OF 2
PTSID No.:	0013Q	**Date Start:**	5/21/2024
Design RIC No.:	2023-EH-007D	**Date End:**	5/22/2024
Construction RIC No.:	N/A		
Drilling Co.:	New England Boring Contractors	**N Coordinate:**	124001.3
Driller Name:	Chris Knight	**E Coordinate:**	248050.2
Consultant Co.:	GZA GeoEnvironmental, Inc.	**Ground Surface Elev.:**	36
Inspector:	Santiago Santos	**Elevation Datum:**	NAVD88

Sampler: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 In.

Casing: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 In.

Casing Size: 4" **Auger Size:** NA

GROUNDWATER READINGS

DATE	TIME	DEPTH	CASING	STABILIZATION TIME
5/22/2024	10:20	6.67'	28'	0 Minutes

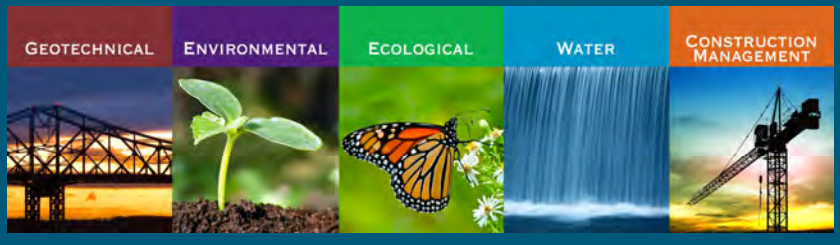
DEPTH	CASING	BLOWS	SAMPLE NO.	SAMPLE PEN./ REC	SAMPLE DEPTH (Ft.)	BLOWS/6"	SAMPLE DESCRIPTION & BURMISTER CLASSIFICATION	REMKS	STRATUM DESCRIPTION
30						2:50 min/ft			
						2:22 min/ft			
						5:00 min/ft			
			C2	60/52	33-38	4:12 min/ft	C2: Medium, moderate to severely weathered,		BEDROCK
						3:21 min/ft	extremely fractured, medium-grained, green/brown,		
35						3:13 min/ft	GNEISS (RQD=35%)		
						2:50 min/ft			
						3:35 min/ft			38'
							Bottom of Boring 38'		
40									
45									
50									
55									
60									

GRANULAR SOILS		COHESIVE SOILS	
Blows/Ft	Density	Blows/Ft	Density
0 - 4	V. LOOSE	<2	V. SOFT
4-10	LOOSE	2-4	SOFT
10-30	M. DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
>50	V. DENSE	15-30	V. STIFF
		>30	HARD

Observation Well Information:

Remarks:

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DU DUE TO OTHER FACTOI OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE



GZA GeoEnvironmental, Inc.

Proactive by Design

GEOTECHNICAL DATA REPORT

RIDOT Ashaway Corridor
Potter Hill Culvert (Bridge No. 005101)
Hopkinton, Rhode Island

May 2024
File No. 03.0035302.00

PREPARED FOR:
Vanasse Hangen Brustlin, Inc
Providence, Rhode Island

GZA GeoEnvironmental, Inc.
188 Valley Street, Suite 300 | Providence, RI 02909
401-421-4140

Offices Nationwide

www.gza.com

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May 15, 2024
GZA File No. 03.0035302.00

Mr. Andrew Prezioso, P.E.
Vanasse Hangen Brustlin, Inc.
1 Cedar Street, Suite 400
Providence, RI 02903

Re: Geotechnical Data Report
RIDOT Ashaway Corridor
Potter Hill Culvert Bridge No. 005101
Hopkinton, Rhode Island

Dear Mr. Prezioso:

We are pleased to provide you with this "Geotechnical Data Report" which presents a compilation of the findings of the subsurface explorations performed as part of this study to evaluate the subsurface conditions pertinent to the design of bridge foundations for the Rhode Island Department of Transportation's (RIDOT's) Potter Hill Culvert Bridge No. 005101 as part of the Ashaway Corridor project in Hopkinton, Rhode Island.

We appreciate the opportunity to have provided these services to VHB. If you have any questions or need additional information, please do not hesitate to contact the undersigned at your convenience.

Sincerely,

GZA GEOENVIRONMENTAL INC

Lindsay A. Cullen, E.I.T.
Assistant Project Manager

William L. Ladd, P.E.
Senior Consultant

1.0 INTRODUCTION 1
1.1 GENERAL 1
1.2 PROJECT DESCRIPTION 1
1.3 EXISTING CONDITIONS 1
1.4 REPORT LIMITATIONS 1
2.0 BACKGROUND INFORMATION 2
2.1 PREVIOUS INVESTIGATIONS AND EXISTING DATA 2
2.2 REGIONAL GEOLOGIC SETTING 2
3.0 SUBSURFACE EXPLORATIONS 2
4.0 REFERENCES 3

FIGURES

FIGURE 1 – LOCUS
FIGURE 2 – EXPLORATION LOCATION PLAN

APPENDICES

APPENDIX A –TEST BORING LOGS

1.0 INTRODUCTION

1.1 GENERAL

This report presents the findings of the subsurface exploration program performed as part of this study to evaluate the subsurface conditions pertinent to the design of the replacement bridge structure for the RIDOT Bridge No. 005101 (Potter Hill Culvert) that carries Laurel Street over Mile Brook in Hopkinton, Rhode Island. GZA's scope of services included conducting a test boring program and the preparation of this report presenting our findings.

1.2 PROJECT DESCRIPTION

The goal of this project is to prepare 30 percent design plans for the replacement of Bridge No. 005101 Potter Hill Culvert. The existing bridge is a concrete arch and stone masonry structure with a span of approximately six feet. New foundations will be constructed on both sides of the span, behind the existing footings. The hydraulic opening of the culvert is planned to be increased, with a new span of approximately 17 feet.

1.3 EXISTING CONDITIONS

The Potter Hill Culvert Bridge No. 005101 carries Laurel Street over Mile Brook (reference Figure 1, ***Locus***). The project site is bounded to the west by the Pawcatuck River, to the east by residential property, to the north and south by Laurel Street. All elevations referenced in this report are based upon the North American Vertical Datum 1988 (NAVD88).

The existing RIDOT Bridge No. 005101 was constructed in 1900 and reconstructed in 1978. It is presumed to be founded on spread footings. The bridge spans Mile Brook. Ground surface elevations along the bridge surface range from 27 feet at the roadway surface, and the stream bed is approximately elevation 20 feet.

1.4 REPORT LIMITATIONS

This report has been prepared for the specific application to the proposed Potter Hill Culvert Bridge (Bridge No. 005101) for the Ashaway Corridor project. This report was prepared in accordance with generally accepted soil and foundation engineering practices. No other warranty, express or implied, is made.

The data submitted in this report is based upon the information from widely spaced subsurface explorations. The nature and extent of variations between these explorations may not become evident until construction. If variations then appear evident, it will be necessary to reevaluate the information presented in this report.

Water level readings have been made in the drill holes and observation wells at the times and under the conditions stated on the boring logs. This data has been reviewed and interpretations have been made in the text of this report. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall, temperature, season, and other factors occurring since the time measurements were made.

The scope of this study did not include an assessment of environmental conditions or the presence of hazardous materials.

2.0 BACKGROUND INFORMATION

2.1 PREVIOUS INVESTIGATIONS AND EXISTING DATA

No previous subsurface data at the site was available at the time of this report.

2.2 REGIONAL GEOLOGIC SETTING

Several United States Geologic Survey (USGS) publications were reviewed to obtain an understanding of the area geology. These publications included the "Surficial Geologic Map of the Ashaway Quadrangle, Connecticut-Rhode Island", dated 1968, and the "Bedrock Geology Map of the Ashaway Quadrangle, Connecticut-Rhode Island", dated 1965. A summary of the geologic conditions anticipated to be found at the site is presented in the following paragraphs.

The bedrock underlying the site is comprised of Potter Hill Granite Gneiss. The granite gneiss is described as fine- to medium-grained, orange to pink, equigranular to rarely porphyritic, very strongly foliated granite gneiss. Fresh light gray rock is reported to be very scarce. Most outcrops are noted to be weathered, deeply stained, and somewhat crumbly, and tend to be slabby.

The surficial soil deposits above the bedrock are predominantly glacial in origin. The bedrock surface is generally covered by glacial stream and lake deposits underlain by glacial till. The glacial stream and lake deposits are predominately gravel and sand, bedded and mostly well sorted with lenses of flow-till in some places. The particle size tends to decrease with increased depth. Glacial till is anticipated to underly the glacial stream and lake deposits. Glacial till was typically deposited directly over bedrock by glacial ice masses, and may vary considerably with location in thickness, density, and composition. In general, glacial till is an unsorted, heterogeneous mixture of sand, silt, clay, gravel, cobbles, and boulders, and may include lenses and irregular masses of sorted sand and gravel.

3.0 SUBSURFACE EXPLORATIONS

The following paragraphs describe test borings drilled as part of this study. Logs of these explorations are included in Appendix A, and the locations are shown on the attached Figure 2, ***Exploration Location Plan***.

Two test borings, designated B-1 and B-2, were drilled for this study by New England Boring Contractors, Inc. of East Taunton, Massachusetts between October 30 and October 31, 2023. The borings were advanced to depths ranging from 34 to 37 feet below ground surface using 4-inch casing. Casing was advanced using standard drive and wash techniques with rotary equipment.

Split spoon samples were generally obtained continuously to a depth of ten feet and at 5-foot intervals thereafter in conformance with ASTM D-1586, the Standard Penetration Test, to obtain an indication of the relative density and consistency of the underlying soils. The Standard Penetration Test consists of driving a 1-3/8 inch inside diameter standard split spoon sampler at least 18 inches with a 140-pound hammer dropping from a height of 30 inches. The standard penetration value (N-value) is the number of blows required to drive the split spoon sampler from 6 to 18 inches of penetration.

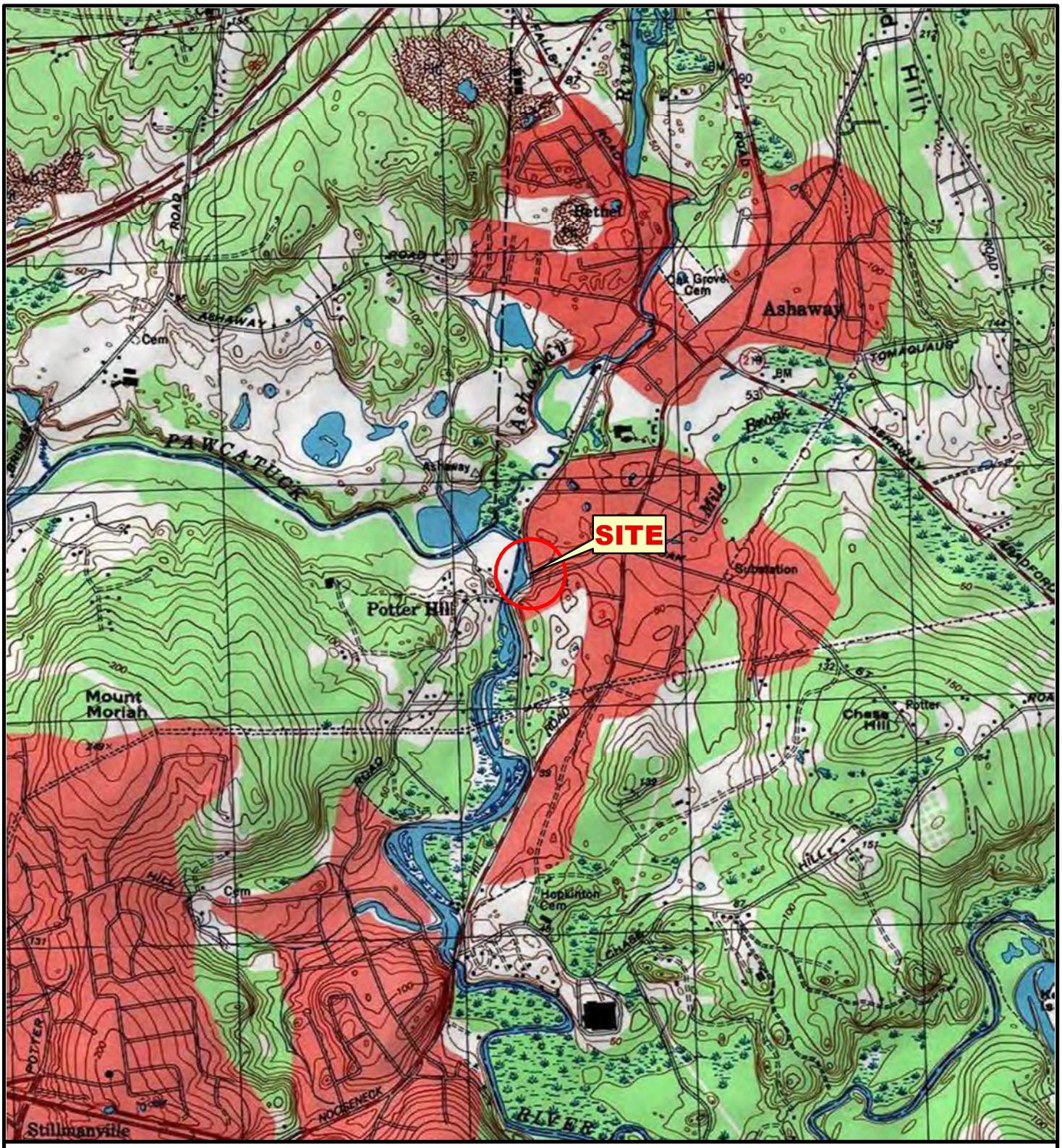
No groundwater observation wells were installed as part of this project. Groundwater readings were taken in the boreholes at the time of drilling, and was encountered at a depth of 6 feet, corresponding to an elevation of approximately

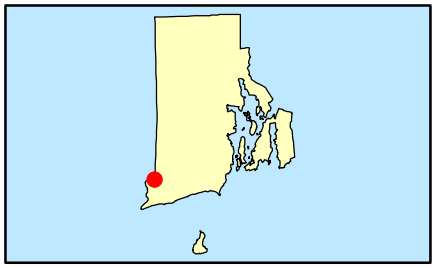
21 feet. The groundwater levels are anticipated to fluctuate with the stream water level, with an extreme high of the flood level of the adjacent Pawcatuck River.

4.0 REFERENCES

1. "2000 Annual Book of ASTM Standards, Volume 04.08, Soil and Rock" American Society of Testing Materials, 2000.
2. "Surficial Geologic Map of the Ashaway Quadrangle, Connecticut-Rhode Island", USGS, dated 1968.
3. "Bedrock Geology Map of the Ashaway Quadrangle, Connecticut-Rhode Island", USGS, dated 1965.

FIGURES





SOURCE : USGS TOPOGRAPHIC QUADRANGLES SCANNED BY THE NATIONAL GEOGRAPHIC SOCIETY & I-CUBED, COPYRIGHT 2011

Data Supplied by : esri

0 1,000 2,000 4,000 6,000

SCALE IN FEET

N

W E

S

GZA	PROJ. MGR.: WLL DESIGNED BY: LAC REVIEWED BY: DRC OPERATOR: LAC DATE: 04/16/2024	LOCUS SHOWING 500 FOOT OFFSET	JOB NO. 03.0035302.00
		POTTER HILL CULVERT LAUREL STREET HOPKINTON, RI	FIGURE NO. 1

© 2023 - GZA GeoEnvironmental, Inc., \\gzaprovidence\jobs\Geo\35302.wll\Reports\GIS\MXD\FIG_1_LOCUS_03_0035302_00.mxd, 11/29/2023, 3:33:13 PM, automap

LEGEND

EXSITING CULVERT

B-1

B-2

N

W E

S

0 15 30 60

ft

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the

UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR THE USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

POTTER HILL CULVERT
ASHAWAY CORRIDOR
HOPKINTON, RHODE ISLAND

EXPLORATION LOCATION PLAN

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: VANASSE HANGEN BRUSTLIN, INC. 1 CEDAR STREET, SUITE 400 PROVIDENCE, RHODE ISLAND	
PROJ MGR: WLL	REVIEWED BY: WLL	CHECKED BY: DRC	FIGURE 2
DESIGNED BY: LAC	DRAWN BY: LAC	SCALE: 1 " = 30 FEET	
DATE: 04/16/2024	PROJECT NO. 03.0035302.00	REVISION NO. 0	

C:\Users\ARCGIS~1.SER\AppData\Local\Temp\6348972001b848788c9d72e089064b6a0.mxd, 11/29/2023, 3:48:05 PM, arcgis.server

APPENDIX A
TEST BORING LOGS

Rhode Island Department of Transportation
Two Capitol Hill
Providence RI, 02903

RIDOT Project:	RIDOT Ashaway Cooridor	Boring No.	B-1
City/Town:	Hopkinton, Rhode Island	Sheet.	1 OF 2
PTSID No.:	0013Q	Date Start:	10/30/2023
Design RIC No.:	2023-EH-007D	Date End:	10/30/2023
Construction RIC No.:	N/A		
Drilling Co.:	New England Boring Contractors	N Coordinate:	120925.6
Driller Name:	Norman Studdard	E Coordinate:	246938.2
Consultant Co.:	GZA GeoEnvironmental, Inc.	Ground Surface Elev.:	27
Inspector:	Charles Troughton	Elevation Datum:	NAVD88

Sampler: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 In.

Casing: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 In.

Casing Size: 4" Auger Size: NA

GROUNDWATER READINGS

DATE	TIME	DEPTH	CASING	STABILIZATION TIME
10/30/2023	14:30	6.0'	27'	0 Minutes

DEPTH	CASING	BLOWS	SAMPLE NO.	PEN./ REC	DEPTH (Ft.)	BLOWS/6"				SAMPLE DESCRIPTION & BURMISTER CLASSIFICATION	REMKS	STRATUM DESCRIPTION
0			S1	24/13	0.5-2.5	9	8	10	8	S1: Medium dense, tan, fine to coarse SAND, trace fine Gravel, trace Silt, dry		
			S2	24/13	2.5-4.5	6	7	4	7	S2: Medium dense, tan, fine to coarse SAND, little fine Gravel, trace Silt, wet		FILL
5			S3	24/15	4.5-6.5	4	4	3	3	S3: Top 9": Loose, tan, fine to medium SAND, trace fine Gravel, trace Silt, wet. Bottom 7": Loose, tan/gray, SILT, some fine Sand, wet		
			S4	24/12	6.5-8.5	WOH	3	13	17	S4: Medium dense, tan/gray, fine to medium SAND, some Silt, little fine Gravel, wet	8.5'	
10			S5	24/5	8.5-10.5	7	3	4	3	S5: Loose, tan, fine to medium SAND, little fine Gravel, trace Silt, wet		SAND
											13'	
15			S6	24/7	14-16	12	17	12	18	S6: Medium dense, tan, fine to medium SAND, little fine Gravel, trace Silt, wet		SAND WITH GRAVEL
20			S7	24/5	19-21	9	5	11	34	S7: Medium dense, tan, fine to medium SAND, some fine Gravel, trace Silt, wet		
25			S8	23/0	24-25.9	6	8	11	50/5"	S8: NO RECOVERY		
											24'	
			C1	60/44	27-32	3:55	min/ft			C1: Hard, moderately weathered, slightly fractured, medium-grained, gray, GRANITE GNEISS, staining at fractures (RQD=73%)		BEDROCK
						3:22	min/ft					
30						4:42	min/ft					
						7:07	min/ft					
						7:32	min/ft					

GRANULAR SOILS		COHESIVE SOILS	
Blows/Ft	Density	Blows/Ft	Density
0 - 4	V. LOOSE	<2	V. SOFT
4-10	LOOSE	2-4	SOFT
10-30	M. DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
>50	V. DENSE	15-30	V. STIFF
		>30	HARD

Observation Well Information:

Remarks:

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTOR OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

Rhode Island Department of Transportation
Two Capitol Hill
Providence RI, 02903

RIDOT Project:	RIDOT Ashaway Cooridor	Boring No.	B-1
City/Town:	Hopkinton, Rhode Island	Sheet.	2 OF 0
PTSID No.:	0013Q	Date Start:	10/30/2023
Design RIC No.:	2023-EH-007D	Date End:	10/30/2023
Construction RIC No.:	N/A		
Drilling Co.:	New England Boring Contractors	N Coordinate:	120925.6
Driller Name:	Norman Studdard	E Coordinate:	246938.2
Consultant Co.:	GZA GeoEnvironmental, Inc.	Ground Surface Elev.:	27
Inspector:	Charles Troughton	Elevation Datum:	NAVD88

Sampler: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 In.

Casing: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 In.

Casing Size: 4" Auger Size: NA

GROUNDWATER READINGS

DATE	TIME	DEPTH	CASING	STABILIZATION TIME
10/30/2023	14:30	6.0'	27'	0 Minutes

DEPTH	CASING	BLOWS	SAMPLE NO.	SAMPLE PEN./REC	SAMPLE DEPTH (Ft.)	BLOWS/6"	SAMPLE DESCRIPTION & BURMISTER CLASSIFICATION	REMKS	STRATUM DESCRIPTION
30						7:07 min/ft			
						7:32 min/ft			
			C2	60/30	32-37	3:05 min/ft	C2: Medium hard to hard, weathered, fractured,		
						4:24 min/ft	medium-grained, gray, GRANITE GNEISS, staining		BEDROCK
						4:25 min/ft	at joints (RQD=90%)		
35						1:59 min/ft			
						3:02 min/ft			
							Bottom of Boring 37'		
40									
45									
50									
55									
60									

GRANULAR SOILS		COHESIVE SOILS	
Blows/Ft	Density	Blows/Ft	Density
0 - 4	V. LOOSE	<2	V. SOFT
4-10	LOOSE	2-4	SOFT
10-30	M. DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
>50	V. DENSE	15-30	V. STIFF
		>30	HARD

Observation Well Information:

Remarks:

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DI DUE TO OTHER FACTOI OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

BORING No B-1

Rhode Island Department of Transportation
Two Capitol Hill
Providence RI, 02903

RIDOT Project:	RIDOT Ashaway Cooridor	Boring No.	B-2
City/Town:	Hopkinton, Rhode Island	Sheet.	1 OF 2
PTSID No.:	0013Q	Date Start:	10/31/2023
Design RIC No.:	2023-EH-007D	Date End:	10/31/2023
Construction RIC No.:	N/A		
Drilling Co.:	New England Boring Contractors	N Coordinate:	120915.6
Driller Name:	Norman Studdard	E Coordinate:	246954.9
Consultant Co.:	GZA GeoEnvironmental, Inc.	Ground Surface Elev.:	27
Inspector:	Charles Troughton	Elevation Datum:	NAVD88

Sampler: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 In.

Casing: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 In.

Casing Size: 4" Auger Size: NA

GROUNDWATER READINGS

DATE	TIME	DEPTH	CASING	STABILIZATION TIME
10/31/2023	1400	6'	24'	0 hrs

DEPTH	CASING	BLOWS	SAMPLE NO.	PEN./ REC	DEPTH (Ft.)	BLOWS/6"				SAMPLE DESCRIPTION & BURMISTER CLASSIFICATION	REMKS	STRATUM DESCRIPTION
0			S1	24/13	0.5-2.5	15	15	7	9	S1: Medium dense, tan, fine to medium SAND, trace fine Gravel, trace Silt, dry		
			S2	24/15	2.5-4.5	14	11	13	8	S2: Medium dense, tan, fine to medium SAND, little fine Gravel, trace Silt, dry		
5			S3	24/12	4.5-6.5	4	4	5	5	S3: Loose, tan, fine to medium SAND, trace fine Gravel, trace Silt, wet		FILL
			S4	24/17	6.5-8.5	3	13	19	12	S4: Medium dense, tan, fine to medium SAND, trace fine Gravel, trace Silt, wet		
			S5	24/7	8.5-10.5	4	1	1	1	S5: Very loose, gray, fine to coarse SAND, trace fine Gravel, trace Silt, wet		
10			S6	24/13	10.5-12.5	8	5	5	10	S6: Medium dense, tan, fine to coarse SAND, trace fine Gravel, trace Silt, wet	10.5'	SAND
											13'	
15			S7	24/12	14-16	6	7	9	11	S7: Medium dense, tan, fine to coarse SAND, little fine Gravel, trace Silt, wet		SAND WITH GRAVEL
20			S8	15/10	19-20.3	60	54	45/3"		S8: Very dense, tan, fine to coarse SAND and fine GRAVEL, trace Silt, wet		
											24'	
25			C1	60/22	24-29	4:29	min/ft			C1: Hard, moderately weathered, moderately fractured, very coarse grained, tan/pink, GRANITE GNEISS (RQD=37%)		BEDROCK
						3:59	min/ft					
						5:09	min/ft					
						5:08	min/ft					
						5:09	min/ft					
30			C2	60/54	29-34	3:10	min/ft			C2: Hard, very slightly weathered, sound, medium-		

GRANULAR SOILS		COHESIVE SOILS	
Blows/Ft	Density	Blows/Ft	Density
0 - 4	V. LOOSE	<2	V. SOFT
4-10	LOOSE	2-4	SOFT
10-30	M. DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
>50	V. DENSE	15-30	V. STIFF
		>30	HARD

Observation Well Information:

Remarks:

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTOR OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

Rhode Island Department of Transportation
Two Capitol Hill
Providence RI, 02903

RIDOT Project:	RIDOT Ashaway Cooridor	Boring No.	B-2
City/Town:	Hopkinton, Rhode Island	Sheet.	2 OF 0
PTSID No.:	0013Q	Date Start:	10/31/2023
Design RIC No.:	2023-EH-007D	Date End:	10/31/2023
Construction RIC No.:	N/A		
Drilling Co.:	New England Boring Contractors	N Coordinate:	120915.6
Driller Name:	Norman Studdard	E Coordinate:	246954.9
Consultant Co.:	GZA GeoEnvironmental, Inc.	Ground Surface Elev.:	27
Inspector:	Charles Troughton	Elevation Datum:	NAVD88

Sampler: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 In.

Casing: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 In.

Casing Size: 4" Auger Size: NA

GROUNDWATER READINGS

DATE	TIME	DEPTH	CASING	STABILIZATION TIME
10/31/2023	1400	6'	24'	0 hrs

DEPTH	CASING	BLOWS	SAMPLE NO.	SAMPLE PEN./REC	SAMPLE DEPTH (Ft.)	BLOWS/6"	SAMPLE DESCRIPTION & BURMISTER CLASSIFICATION	REMKS	STRATUM DESCRIPTION
30						4:20 min/ft	grained, gray, GRANITE GNEISS (RQD=90%)		BEDROCK
						3:34 min/ft			
						3:01 min/ft			
						4:32 min/ft			
							Bottom of Boring at 34'		
35									
40									
45									
50									
55									
60									

GRANULAR SOILS Blows/Ft	Density	COHESIVE SOILS Blows/Ft	Density
0 - 4	V. LOOSE	<2	V. SOFT
4-10	LOOSE	2-4	SOFT
10-30	M. DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
>50	V. DENSE	15-30	V. STIFF
		>30	HARD

Observation Well Information:

Remarks:

NOTES: 1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DI DUE TO OTHER FACTOI OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

BORING No B-2

GZA GeoEnvironmental, Inc.

APPENDIX K

ENDANGERED SPECIES PROTECTION

USFWS NORTHERN LONG-EARED BAT AND TRICOLORED BAT PROTECTION

The U.S. Fish and Wildlife Service has listed the Northern long-eared bat (NLEB) under the Endangered Species Act (ESA) and the following requirements exist to protect the bat and its habitat. The U.S. Fish and Wildlife Service has proposed to list the tricolored bat (TCB) as Federally Endangered under the Endangered Species Act (ESA) and the following requirements exist to protect the bat and its habitat.

The Contractor shall ensure all personnel working on the project site are made aware of the potential presence and protected status of the NLEB and TCB. The Contractor shall ensure all personnel working on the project site are aware of all environmental commitments related to the NLEB and TCB. The NLEB and TCB flyer shall be made available to all personnel and posted on project bulletin boards.

Contact the RIDOT Natural Resources Unit (dot.nru@dot.ri.gov) for questions about project limits, restrictions, or conservation measures.

Compliance with the requirements below is necessary to ensure compliance with the ESA:

Bridge:

Bridge 005101 and 005201 do not require bridge bat surveys.

A bridge visual assessment was completed on June 3, 2026 for bridge 005001 and evidence of bats was not found. If bridge work is not completed before **June 3, 2028 on bridge 005001,** the Contractor shall hire a qualified consultant* for the inspection of **bridge 005001** for the presence of, or evidence of use by, bats. The Contractor shall notify the RIDOT Natural Resources Unit (NRU) no later than ninety (90) days prior to June 3, 2028 to provide adequate time for coordination with and approval by the NRU before surveys are performed. If bats are found to be present, or, if there is evidence of bat usage, work at the bridge shall not commence until after the NRU has completed coordination with the US Fish and Wildlife Service to determine the appropriate follow up or mitigation actions.

***Qualified consultant** is defined as individuals who have viewed the Virtual bat and transportation structures assessment training [youtube.com] and either:

a. Completed an intensive in-person course; OR
b. Has experience in performing surveys with another qualified individual for at least one bat active season.

Tree Cutting and Clearing Restriction:

All phases/aspects of the project (e.g., temporary work areas, alignments) will be modified, to the extent practicable, to avoid tree removal* in excess of what is required to implement the project safely.

All tree removal* shall be completed between *November 1st and April 14th*. The Contractor shall ensure tree removal is limited to that specified in project plans. Prior to tree removal the Contractor shall layout the clearing limits in the field (e.g. with bright orange flagging/fencing or another marking method, subsidiary to the Work) to ensure all tree clearing work is within the tree clearing limits.

***"Tree removal"** is defined by the USFWS as cutting down, harvesting, destroying, trimming, or manipulating in any other way the trees, saplings, snags, or any other form of woody vegetation likely to be used by bats.

Lighting:

Direct temporary lighting away from suitable habitat* during the active season (April 15th to October 31st). Use downward-facing, full cut-off lens lights, and direct lighting away from suitable habitat* when installing new or replacing existing permanent lights.

***away from suitable habitat** means only toward non-forested work site

Northern Long-Eared Bat

(*Myotis septentrionalis*)

NLEB Description:

The Northern Long-Eared Bat (NLEB) is between 3" and 3.7" long with a wingspan of 9" to 10". NLEB are medium to dark brown on back and have tawny to pale brown undersides. NLEB have long ears. NLEB are nocturnal, they are active at night and sleep during the day.

Hibernating NLEB by Ann Froschauer USFWS

Protection:

NLEB populations have been decimated by White-Nose Syndrome, a fungal disease that affects bats during hibernation. When a species experiences a significant population decline and is determined to be at risk, it may be listed under the Endangered Species Act (ESA). The NLEB was listed as endangered under the ESA in March of 2023. Endangered species are in danger of becoming extinct. This listing provides special protections for NLEB, which are intended to help the population recover.

Habitat:

NLEB habitat is found throughout Rhode Island. NLEB hibernate in caves and mines called hibernacula during winter. NLEB swarm in wooded areas surrounding hibernacula in fall. During late spring and summer NLEB roost and forage in upland forests. During the day NLEB roost under bark and in tree crevices of both live trees and snags (dead trees). NLEB sometimes also roost in caves and structures, like buildings and bridges.

RI DOT Conservation Measures:

RIDOT incorporates conservation measures into projects to protect the NLEB. The specific conservation measures for each project are found in the contract documents. Dead and sick bats of any species must immediately be reported to the RIDOT Natural Resources Unit (NRU), call 401-479-1327. Contact the RIDOT NRU for an explanation of NLEB conservation measures.

More NLEB Information:

To learn more about the NLEB visit the USFWS website and search for the species by name.

FHWA Programmatic Consultation Avoidance and Mitigation Measure (AMM) 1: Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all environmental commitments, including all applicable AMMs.

RIDOT NRU

Tricolored Bat

(*Perimyotis subflavus*)

TCB Description:

The tricolored bat (TCB) is between 3" and 3.5" long with a wingspan of 8" to 10". TCB is distinguished by its unique tricolored fur that appears dark at the base, lighter in the middle and dark at the tip. The TCB often appears yellowish, varying from pale yellow to nearly orange, but may also appear silvery-gray, chocolate brown or black. TCB are nocturnal, they are active at night and sleep during the day.

TCB by Pete Pattavina USFWS

Protection:

TCB populations have been decimated by White-Nose Syndrome, a fungal disease that affects bats during hibernation. When a species experiences a significant population decline and is determined to be at risk, it may be listed under the Endangered Species Act (ESA). The TCB is proposed as endangered under the ESA. Endangered species are in danger of becoming extinct. This listing provides special protections for TCB, which are intended to help the population recover.

Habitat:

TCB habitat is found throughout Rhode Island. TCB hibernate in caves and mines called hibernacula during winter. TCB swarm in wooded areas surrounding hibernacula in fall. During late spring and summer TCB roost and forage in upland forests. During the day TCB roost under bark and in tree crevices of both live trees and snags (dead trees). TCB sometimes also roost in caves and structures, like buildings and bridges.

RI DOT Conservation Measures:

RIDOT incorporates conservation measures into projects to protect the TCB. The specific conservation measures for each project are found in the contract documents. Dead and sick bats of any species must immediately be reported to the RIDOT Natural Resources Unit (NRU), call 401-479-1327. Contact the RIDOT NRU for an explanation of TCB conservation measures.

More TCB Information:

To learn more about the TCB visit the USFWS website and search for the species by name.

FHWA Programmatic Consultation Avoidance and Mitigation Measure (AMM) 1: Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all environmental commitments, including all applicable AMMs.

NATIONAL MARINE FISHERIES SERVICE (NMFS) ESSENTIAL FISH HABITAT (EFH) PROTECTION

1. General Requirements

Essential Fish Habitat (EFH) consultation under the Federal Highway Administration (FHWA) / National Marine Fisheries Service (NMFS) Greater Atlantic Fisheries Office (GARFO) Programmatic EFH has been completed for Bridges 005001, 005201, and 005101. The Contractor shall comply with all requirements outlined herein to maintain compliance with the programmatic EFH consultation.

The Contractor shall ensure that all operators, employees, subcontractors, and suppliers are fully informed of and comply with all FHWA and Rhode Island Department of Transportation (RIDOT) environmental commitments applicable to work in areas where EFH species may be present.

Questions regarding EFH restrictions or conservation measures shall be directed to the RIDOT Natural Resources Unit (NRU) at **dot.nru@dot.ri.gov**.

2. Time-of-Year (TOY) Restrictions

a. Activities requiring soil erosion, sediment, or turbidity controls shall not encroach more than 25 percent of the stream width, measured from the ordinary high-water mark.

b. The Contractor shall maintain safe, timely, and effective downstream fish passage at all times during construction.

c. Installation and removal of all in-water soil erosion, sediment, and turbidity control measures shall be performed outside the following TOY restriction period:

- **Spring TOY Restriction:** March 15 through June 30

d. Work may occur during the TOY restriction period only if conducted entirely in the dry behind fully installed and functioning water control measures that isolate the work area from flowing or tidal waters.

3. Water Quality and Turbidity Controls

a. All temporary discharges associated with construction activities shall meet applicable State water quality standards, including prohibitions against discharges of substances in concentrations that may cause acute or chronic adverse effects, as defined by U.S. Environmental Protection Agency (EPA) water quality criteria.

b. Turbidity control measures shall be properly installed, secured, inspected, and maintained to prevent aquatic species from becoming entangled or trapped within the project area.

c. The Contractor shall prevent construction debris, sediment, and pollutants from entering aquatic areas. All construction debris, excess material, and deteriorated control measures shall be promptly removed and disposed of in an upland location.

d. Raw concrete shall not contact surface waters. Wet concrete pours shall be fully confined within sealed forms until the concrete has set, or pre-cast concrete members shall be used.

4. Erosion and Sediment Control Measures

a. The Contractor shall install soil erosion, sediment, and turbidity controls prior to construction and maintain them in effective operating condition throughout construction activities.

b. All temporary erosion and sediment control measures shall be removed upon completion of work, after all exposed soils, fills, and areas waterward of ordinary high water or the high tide line are permanently stabilized.

c. A riprap bedding layer (e.g., gravel filter blanket or geotextile) shall be installed prior to riprap placement to prevent migration of underlying soils during high-flow conditions.

5. Restoration and Temporary Impacts

a. Areas affected by temporary activities, fills, or structures shall be restored to pre-construction or better condition, including restoration of original elevations and substrates, and replanted with native species.

b. All temporary and/or obsolete structures and fills shall be completely removed. Geotextile barriers shall be placed beneath temporary fill materials to ensure full removal.

c. Dredged or excavated materials, including fine-grained materials removed from within culverts, shall be transported to an upland location and stabilized to prevent reentry into the waterway, or disposed of at a previously approved disposal site.

d. If rock relocation is required, relocated material shall be placed in an area of equivalent depth and substrate type.

6. Temporary Pumping and Intake Structures

a. Temporary pumping systems and water intakes associated with construction and dewatering activities shall be installed and operated in accordance with the **NMFS/FHWA Best Management Practices (BMPs) Manual**.

b. Intakes shall be equipped with screening and operated at approach velocities appropriate for the aquatic species and life stages anticipated to be present during construction.

c. Temporary pumping and intake requirements shall be based on the aquatic resources present and shall comply with applicable state fisheries requirements, where available. Documentation of such coordination shall be provided to RIDOT NRU upon request.

d. All temporary intakes shall utilize 2-millimeter (mm) wedge wire screens and shall operate at a maximum intake velocity of 0.5 feet per second (ft/sec), unless a more restrictive requirement applies.

7. Fill Material and Invasive Species Prevention

a. All fill materials, including planting media and any placement of seed shellfish, spatted shell, or cultch, shall be free of non-native or invasive species and contaminants.

b. If the Contractor cannot guarantee that fill materials are free of invasive species, an Invasive Species Control Plan shall be submitted to and approved by RIDOT NRU prior to placement.

APPENDIX L

MIGRATORY BIRD TREATY ACT

PTSID 0013Q
3/23/26

PROTECTION UNDER THE MIGRATORY BIRD TREATY ACT

Under the Migratory Bird Treaty Act (MBTA), it is unlawful to intentionally or unintentionally take, capture or kill any migratory bird unless a Migratory Bird Permit is first obtained from the U.S. Fish and Wildlife Service (USFWS). The USFWS's rules define "take" for MBTA purposes to mean to "pursue, hunt, shoot, wound, kill, trap, capture, or collect." Each violation of the MBTA can result in a fine of $15,000, imprisonment for six months, or both.

Bird species that are protected under the MBTA include all waterfowl, herons, eagles, hawks, falcons, owls and songbirds (including species such as swallows, eastern phoebes and American robins). Nests typically may be found empty, with eggs, or chicks from March 1st to August 31st in trees, brush, open fields, and bridge structures. Raptors (hawks, falcon, owls, and eagles) nest as early as January 22nd through August 31st in or on trees, on telephone poles, open fields, or bridge structures.

There are few bird species that are not protected under the MBTA; they are Rock Doves (domestic pigeons), House Sparrows, and European Starlings. Although these species are not protected, they must be treated in a humane manner.

Regardless of protection status the Contractor must contact the RIDOT Natural Resources Unit (dot.nru@dot.ri.gov) if any active nests (completed or partially completed nests that contain eggs or chicks) are found/encountered within the work zone. The NRU will work with the Contractor to maintain compliance with the MBTA and reduce project disruption.

Clearing and Grubbing, Tree Removal, and Land Disturbing Activities

A variety of bird species nest in trees, shrubs and grass areas within the highway ROW. If clearing and grubbing, tree removal, staging areas or other land disturbing activities will occur during the migratory bird breeding season (March 1st- August 31st), the Contractor shall avoid any active bird nests. During the breeding season, the Contractor shall inspect the affected right-of-way for bird nests before commencing work. During the non-breeding season (September 1- February 28) the project is not subject to this restriction.

The Contractor shall not disturb any active nests. If *any* active nest is discovered and the nest and immediately surrounding area cannot be avoided, work shall stop, and the Contractor shall contact RIDOT Natural Resources Unit to evaluate the potential for disturbance of the nest. The project will avoid the removal and destruction of active bird nests except through federal and state approved options.

At no time should large nests of ospreys, hawks, falcons or eagles be destroyed or disturbed, as these species return to the same nest site year after year and reuse the same nest. If a raptor nest must be removed for work to take place, it can be moved only in cooperation with the USFWS.

All questions relating to migratory birds and nesting should be directed to the RIDOT Natural Resources Unit (dot.nru@dot.ri.gov).

Birds Nesting on or Under Bridges

A variety of bird species nest on or under bridges. Before commencing any bridge-related construction activities (including maintenance/cleaning) during the breeding season (March 1st-August 31st), the Contractor shall inspect the bridge(s) for bird nests. During the non-breeding season (September 1-February 28) the project is not subject to this restriction.

The Contractor shall not disturb any active nests (completed or partially completed nests that contain eggs or chicks). If any active nest is discovered and the nest cannot be avoided, work shall stop and the RIDOT Natural Resources Unit shall be contacted to evaluate the potential for disturbance of nests. The project will avoid the removal and destruction of active bird nests except through federal and state approved options.

At no time should large nests of ospreys, hawks, falcons or eagles be destroyed, as these species return to the same nest site year after year and reuse the same nest. If a raptor nest must be removed for work to take place, it can be moved only in cooperation with the USFWS.

All questions relating to migratory birds and nesting should be directed to the RIDOT Natural Resources Unit (dot.nru@dot.ri.gov).

Taking of a Migratory Bird

Any accidental or purposeful taking of a migratory bird shall be reported to the RIDOT Natural Resources Unit (dot.nru@dot.ri.gov). The Contractor shall be responsible for all penalties levied by the USFWS for the taking of a migratory bird. The USFWS's rules define “take” for MBTA purposes to mean to “pursue, hunt, shoot, wound, kill, trap, capture, or collect.”

All questions relating to migratory birds should be directed to the RIDOT Natural Resources Unit (dot.nru@dot.ri.gov).

APPENDIX M

RECORD PLANS

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	RI	BRO-0052(002)		1	36

(R-1)

INDEX

SHEET NO.	DESCRIPTION
1(R-1)	TITLE SHEET
2	PLAN SYMBOLS AND GENERAL LEGEND
3(R-1)	TYPICAL SECTION DETAILS, AND NOTES
4	POTTER HILL ROAD GENERAL PLAN AND PROFILE
5	DRAINAGE AND UTILITY PLAN
6	LOCATION PLAN
7	GRADING PLAN
8	SIGNING AND STRIPING PLAN
9	TEMPORARY CONSTRUCTION ZONE DETAILS
10	BRIDGE GENERAL PLAN AND ELEVATION
11(R-1)	GENERAL NOTES
12	PROFILE, FOUNDATION PLAN AND BRIDGE GRADING PLAN
13	TEMPORARY GAS MAIN SUPPORT STRUCTURE
14	DEMOLITION PLAN AND SECTIONS.
15	WEST ABUTMENT PLAN AND ELEVATION
16	PIER COFFERDAM DETAILS
17	PIER PLAN AND ELEVATION
18	EAST ABUTMENT PLAN AND ELEVATION
19	MISCELLANEOUS SUBSTRUCTURE DETAILS
20	FRAMING PLAN AND PRESTRESSED BOX BEAM SECTIONS
21	PRESTRESSED BOX BEAM DETAILS
22	TRANSVERSE SECTION AND SUPERSTRUCTURE DETAILS
23	ABUTMENT AND PIER ROADWAY DETAILS
24	NORTHERLY END POSTS
25	SOUTHERLY END POSTS
26(R-1)	BRIDGE RAILING DETAILS
27	BORING LOGS – 1
28	BORING LOGS – 2
29	BORING LOGS – 3
30	BORING LOGS – 4
31–36	CROSS SECTIONS

RHODE ISLAND STANDARD SPECIFICATIONS AND STANDARD DETAILS

SPECIFICATIONS TO GOVERN THIS PROJECT ARE THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 1997 EDITION, AND THE STATE AND FEDERAL SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS. STANDARD DETAILS FOR THIS PROJECT ARE RHODE ISLAND STANDARD DETAILS, JUNE 15, 1998 EDITION.

STATE OF RHODE ISLAND

DEPARTMENT OF TRANSPORTATION

PLAN, PROFILE AND SECTIONS OF PROPOSED

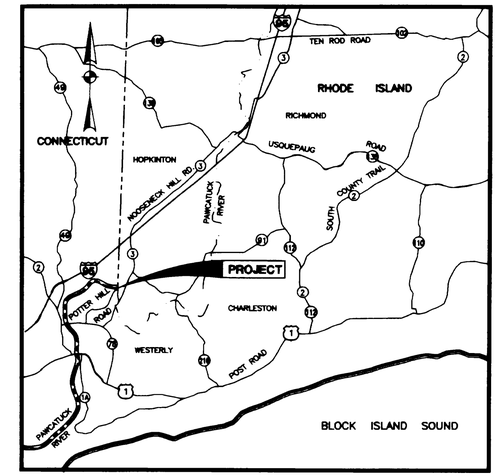
STATE HIGHWAY

BRIDGE REPLACEMENT - POTTER HILL BRIDGE NO. 52

POTTER HILL ROAD

TOWN OF WESTERLY/TOWN OF HOPKINTON, WASHINGTON COUNTY

RHODE ISLAND CONTRACT NO. 2000-CB-068 FEDERAL AID PROJECT NO. BRO-0052(002)



LOCATION MAP

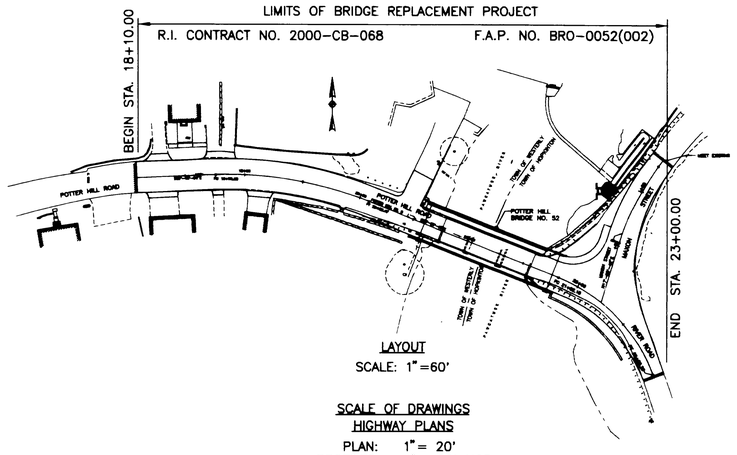
SCALE IN MILES

0 1 3 5

BITUMINOUS CONCRETE PAVEMENT

2" BIT.CONC. SURFACE COURSE, CLASS I-1
4" BITUMINOUS BASE COURSE
12" GRAVEL BORROW SUBBASE COURSE

LENGTH - 0.093 MILES



LAYOUT
SCALE: 1"=60'

SCALE OF DRAWINGS
HIGHWAY PLANS

PLAN: 1"= 20'
PROFILES: 1"= 20' HOR.
1"= 4' VERT.
CROSS SECTIONS: 1"= 4'

BRIDGE PLANS
AS NOTED

BASE OF LEVELS
N.G.V.D. 29

TRAFFIC DATA

ROADWAY CLASSIFICATION:	RURAL MINOR COLLECTOR (HOPKINTON) URBAN COLLECTOR (WESTERLY)
1998 AADT:	500
2018 AADT:	650
1998 DHV:	55
K:	11%
PERCENT TRUCKS:	4.0%
DIRECTIONAL SPLIT:	50% WB, 50% EB
DESIGN SPEED:	25 MPH

DOMENIC V. TUTELA
REGISTERED
PROFESSIONAL ENGINEER

ETA TUTELA ENGINEERING ASSOCIATES, INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE, RHODE ISLAND

Contract Number 2000CB068
Number of Sheet 1
Total Sheets 36

R.I. DEPARTMENT OF TRANSPORTATION

APPROVED _____ 8/18/00
CHIEF OF DESIGN DATE

APPROVED _____ 8-8-00
CHIEF ENGINEER DATE

APPROVED _____ 8/10/00
DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED _____
DIVISION ADMINISTRATOR DATE

E:\601\01 Mon Aug 7 08:50 37 2000 TUTELA ENGINEERING ASSOCIATES, INC (12-50)

80-01

PLAN SYMBOLS

EXISTING		NEW		
	EDGE OF PAVEMENT		1.4	CONCRETE CONNECTING COLLAR, R.I. STD. 1.4
	CURB		2.1	CONCRETE HEADWALL, R.I. STD. 2.1
	GUARDRAIL		2.11	ROCKFILL RIP-RAP AT HEADWALLS, R.I. STD. 2.11
	MAILBOX		2.12	ROCKFILL RIP-RAP AT FLARED END SECTIONS, R.I. STD. 2.12
NO.	UTILITY POLE	NO.	2.6 (DIA.)	PRECAST CONCRETE FLARED END SECTION, R.I. STD. 2.6
D.M.	POLE GUY OR DEADMAN	D.M.	3.1	MANHOLE-4' DIAMETER, R.I. STD. 3.1
	LUMINAIRE		3.2A	MANHOLE-BRICK, 5' DIAMETER, R.I. STD. 3.2
	SIGN		3.2B	MANHOLE-BRICK 6' DIAMETER, R.I. STD. 3.2
(SIZE)UD	UNDERDRAIN	(Length, Size, Material) UD	3.5	VERTICAL LINEAR FEET OF 12" WALL, M.H.&C.B., R.I. STD. 3.5
(SIZE) D	STORM DRAIN	(Length, Size, Material) D	4.1	CATCH BASIN TYPE "D" ROUND, R.I. STD. 4.1
(SIZE) S	SANITARY SEWER	(Length, Size, Material) S	4.11	DROP INLET, BRICK, R.I. STD. 4.11
(SIZE) W	WATER MAIN	(Length, Size, Material) W	4.12	PRECAST CONCRETE DROP INLET, R.I. STD. 4.12
(SIZE) G	GAS MAIN	(Length, Size, Material) G	4.13	PRECAST CONCRETE DROP INLET-LATERAL OUTLET, R.I. STD. 4.13
(SIZE) T	TELEPHONE DUCT	(Length, Size, Material) T	4.14	PERECAST CONCRETE DROP INLET-LONGITUDINAL OUTLET, R.I. STD. 4.14
(SIZE) E	ELECTRIC DUCT	(Length, Size, Material) E	4.16	DOUBLE GRATE CATCH BASIN, R.I. STD. 4.16
	FLARED END SECTION		4.17	CATCH BASIN WITH DOUBLE GRATES, R.I. STD. 4.17
	HEADWALL		4.2	CATCH BASIN-TYPE "D" SQUARE, R.I. STD. 4.2
WG	WATER GATE	W	4.3	CATCH BASIN-TYPE "F" ROUND, R.I. STD. 4.3
GG	GAS GATE	G	4.31	PRECAST CONCRETE CATCH BASIN 4', 5' OR 6' DIAMETER, R.I. STD. 4.31
	CATCH BASIN		4.4	CATCH BASIN-TYPE "F" SQUARE, R.I. STD. 4.4
	MANHOLE		4.5	CATCH BASIN WITH GUTTER INLET, R.I. STD. 4.5
	HYDRANT		4.6	CATCH BASIN TYPE "R", R.I. STD. 4.6
1+0 2+0	BASELINE OR CENTERLINE	1+0 2+0	4.70	FLUSH CATCH BASIN, BLOCK, R.I. STD. 4.70
S.H.L.(PLAT NO.)	STATE HIGHWAY LINE	S.H.L.	4.71	FLUSH CATCH BASIN, SQUARE, R.I. STD. 4.71
F.L.(PLAT NO.)	FREEWAY LINE	F.L.	4.8A (TYPE)	CATCH BASIN-5' DIAMETER, R.I. STD. 4.8
	PROPERTY LINE		4.8B (TYPE)	CATCH BASIN-6' DIAMETER, R.I. STD. 4.8
CITY NAME / TOWN NAME	CITY OR TOWN LINE		5.11	SQUARE FRAME AND ROUND COVER-LIGHT DUTY, R.I. STD. 5.11
P.W.W.	PAVED WATERWAY	P.W.W.	5.12 NUMBER (FLANGE)	SQUARE FRAME & GRATE, R.I. STD. 5.12
ELEV.	CONTOUR LINE	ELEV.	5.13 NUMBER (FLANGE)	SQUARE FRAME & GRATE, R.I. STD. 5.13
R.I.H.B.	OPEN DITCH	R.I.H.B.	5.14	ROUND FRAME & GRATE, R.I. STD. 5.14
S.B.	R.I. HIGHWAY BOUND		5.15 NUMBER (FLANGE)	HIGH CAPACITY FRAME & GRATE, R.I. STD. 5.15
	STONE BOUND		5.16 NUMBER (FLANGE)	HIGH CAPACITY FRAME & GRATE, R.I. STD. 5.16
	RETAINING WALL		5.17 NUMBER (FLANGE)	SQUARE FRAME & GRATE (BICYCLE SAFE) R.I. STD. 5.17
	FIELD STONE WALL		5.21	ROUND FRAME & COVER LIGHT DUTY, R.I. STD. 5.21
	LEDGE OR ROCK		5.22	ROUND FRAME & COVER HEAVY DUTY, R.I. STD. 5.22
	BORINGS	NO.	7.11S	PRECAST CONCRETE CURB-VERTICAL FACE, (STRAIGHT), R.I. STD. 7.11
	CORES	NO.	7.11C	PRECAST CONCRETE CURB-VERTICAL FACE, (CIRCULAR), R.I. STD. 7.11
TYPE	WIRE FENCE	TYPE	7.12	PRECAST CONCRETE INLET STONE, FOR SQUARE C.B., R.I. STD. 7.12
TYPE	FENCE	TYPE	7.13	PRECAST CONCRETE INLET STONE, FOR ROUND C.B., R.I. STD. 7.13
	HEDGE		7.14	PRECAST CONCRETE APRON STONE, FOR SQUARE C.B., R.I. STD. 7.14
	WOOD OR BRUSH LINE		7.15	PRECAST CONCRETE APRON STONE, FOR ROUND C.B., R.I. STD. 7.15
	TREES		7.16A	PRECAST 2' RADIUS CORNER, R.I. STD. 7.16
(NAME)	RIVER OR STREAM		7.16B	PRECAST 3' RADIUS CORNER, R.I. STD. 7.16
(NAME)	POND OR LAKE		7.17	PRECAST TRANSITION CURB-VERTICAL FACE, R.I. STD. 7.17
	SWAMP		7.18	PRECAST CONCRETE TRANSITION CURB, R.I. STD. 7.18
NO. TYPE MATERIAL	BUILDING		7.21S	PRECAST CONCRETE CURB-SLOPE FACE-(STRAIGHT), R.I. STD. 7.21
	FOUNDATION		7.21C	PRECAST CONCRETE CURB-SLOPE FACE-(CIRCULAR), R.I. STD. 7.21
	CEMETERY		7.24	PRECAST CONCRETE TRANSITION CURB-SLOPE FACE, R.I. STD. 7.24
	GAS PUMPS		7.41	BITUMINOUS CONCRETE LIP CURB, R.I. STD. 7.41
FD	FIRE CALL BOX		7.43	BITUMINOUS BERM, R.I. STD. 7.43
PD	POLICE CALL BOX		7.51S	GRANITE CURB QUARRY SPLIT, (STRAIGHT), R.I. STD. 7.51
	BILLBOARD		7.51C	GRANITE CURB QUARRY SPLIT, (CIRCULAR), R.I. STD. 7.51
	RAILROAD TRACKS		7.52	GRANITE INLET STONE, FOR SQUARE C.B., R.I. STD. 7.52
	CUT & MATCH		7.53	GRANITE INLET STONE, FOR ROUND C.B., R.I. STD. 7.53
	RIP-RAP		7.54	GRANITE APRON STONE, FOR SQUARE C.B., R.I. STD. 7.54
	CUT SLOPE	ROADWAY TOP OF SLOPE	7.55	GRANITE APRON STONE, FOR ROUND C.B., R.I. STD. 7.55
	FILL SLOPE	ROADWAY TOP OF SLOPE		
	UTILITY TO BE ABANDONED			
	AREA GRADED TO DRAIN	ELEV. ELEV.		

GENERAL LEGEND

7.56A	GRANITE CURB QUARRY SPLIT 2' RADIUS CORNER, R.I. STD. 7.56
7.56B	GRANITE CURB QUARRY SPLIT 3' RADIUS CORNER, R.I. STD. 7.55
7.57	GRANITE TRANSITION CURB, R.I. STD. 7.57
7.59	GRANITE WHEELCHAIR RAMP TRANSITION CURB (CIRCULAR AT SMALL RADIUS CORNER), R.I. STD. 7.59
8.2	BITUMINOUS CONCRETE DITCH, (3"), R.I. STD. 8.2
8.3	RIP-RAP DITCH, R.I. STD. 8.3
9.1	BALED HAY EROSION CHECK, R.I. STD. 9.1
9.2	BALED HAY DITCH EROSION CHECK, R.I. STD. 9.2
9.4	LOG & HAY CHECK DAM, R.I. STD. 9.4
9.5	BALED HAY EROSION CHECK, R.I. STD. 9.5
9.6	R.I. STD. 9.1 WITH SILT FENCE, R.I. STD. 9.6
10.1	WETSTONE MASONRY RETAINING WALL, R.I. STD. 10.1
10.2	CONCRETE RETAINING WALL, R.I. STD. 10.2
10.3	RUBBLE MASONRY WALL, R.I. STD. 10.3
10.9 (H")	PRECAST CEMENT CONCRETE LOT CURB, R.I. STD. 10.9
10.11	WET STONE MASONRY RETAINING WALL, R.I. STD. 10.11
10.12	STONE MASONRY STEPS, R.I. STD. 10.12
10.13	WET STONE MASONRY RETAINING WALL WITH RECESSED JOINTS, R.I. STD. 10.13
14.1	CONCRETE HIGHWAY BOUND, R.I. STD. 14.1
15.30	POST & MOUNTINGS FOR RURAL MAIL BOXES, R.I. STD. 15.30
26.15	(PVC) PLASTIC PIPE BARRICADE, R.I. STD. 26.15
26.5	POLYETHYLENE DRUM WITH MARKINGS, R.I. STD. 26.5
31.3	CHAIN LINK FENCE (5 FT.-6 FT.), R.I. STD. 31.3
34.0	STEEL BEAM GUARDRAIL, R.I. STD. 34.0 SERIES; TYPICAL INSTALLATION, R.I. STD. 34.1 STEEL BEAM GUARDRAIL, R.I. STDS. 34.32 & 34.33 STEEL BEAM GUARDRAIL FIXTURES, R.I. STD. 34.34 BACK-UP PLATE, R.I. STD. 34.35
34.3	GUARDRAIL-BURIED APPROACH TREATMENT, R.I. STD. 34.3
34.50	GUARDRAIL-ANCHORAGE APPROACH SECTION, R.I. STD. 34.50
34.6	GUARDRAIL-ANCHORAGE DETAIL-TRAILING END, R.I. STD. 34.6
40.5	PRECAST MEDIAN BARRIER FOR TEMPORARY TRAFFIC CONTROL, R.I. STD. 40.5
43.1	CEMENT CONCRETE SIDEWALK, R.I. STD. 43.1
43.2	BITUMINOUS CONCRETE SIDEWALK, R.I. STD. 43.2
43.31	CORNER WHEELCHAIR RAMP, R.I. STD. 43.31
43.32	WHEELCHAIR RAMP (NON-INTERSECTION), R.I. STD. 43.32
43.50	PORTLAND CEMENT CONCRETE DRIVEWAY, R.I. STD. 43.50
45.1	PRECAST CEMENT CONCRETE GORE MARKER, R.I. STD. 45.1
51.1	TREE PROTECTIVE DEVICE, R.I. STD. 51.1
51.2	SHRUB PROTECTION DEVICE, R.I. STD. 51.2
RCB	RECONSTRUCT CATCH BASIN, TYPE "D" TO CATCH BASIN WITH GUTTER INLET
CCB	CLEAN CATCH BASIN
CMH	CLEAN MANHOLE
CFP	CLEAN AND FLUSH PIPE
RHH	REMOVE HANDLE, HAUL, TRIM, RESET CURB EDGING, STRAIGHT, CIRCULAR ALL TYPES
P	NEW PAVEMENT STRUCTURE (SEE TYPICAL SECTION)

A / 9 — INDICATES SECTION OR DETAIL LETTER; INDICATES SHEET NO. (APPEARS ONLY WHEN SECTION OR DETAIL SHOWN ON ANOTHER SHEET)

ELEVATION, SECTION OR DETAIL TITLE — A / 9 — INDICATES SHEET WHERE SECTION OR DETAIL IS TAKEN FROM

WF12 — WETLAND FLAG & NUMBER

200' RIVER BANK WETLAND

TYPICAL SIGN DESIGNATION SYMBOL

- SIGN LOCATION NUMBER
- SIGN NUMBER (SIZE)
- SIGN MOUNTING (R.I. STD. NO.)

DSW	REMOVE AND DISPOSE SIDEWALK
DC	REMOVE AND DISPOSE CONCRETE CURB
DB	REMOVE AND DISPOSE BITUMINOUS CURB
DG	REMOVE AND DISPOSE GUARDRAIL
DF	REMOVE AND DISPOSE FENCE
DFP	REMOVE AND DISPOSE FLEXIBLE PAVEMENT
DP	REMOVE AND DISPOSE PIPE
DH	REMOVE AND DISPOSE HEADWALL
DCB	REMOVE AND DISPOSE CATCH BASIN
DDI	REMOVE AND DISPOSE DROP INLET
DMH	REMOVE AND DISPOSE MANHOLE
DS	REMOVE AND DISPOSE SIGN
SG	REMOVE AND STOCKPILE GRANITE CURB
SGR	REMOVE AND STOCKPILE GUARDRAIL
SS	REMOVE AND STOCKPILE SIGN
SF	REMOVE AND STOCKPILE FENCE
SH	REMOVE AND STOCKPILE HYDRANT
STS	REMOVE AND STOCKPILE TRAFFIC SIGNAL SYSTEM
CG	CLEARING AND GRUBBING
AW	ADJUST WATER GATE BOX TO GRADE
AG	ADJUST GAS GATE BOX TO GRADE
AC	ADJUST CURB STOP TO GRADE
AB	ADJUST CATCH BASIN TO GRADE
AS	ADJUST SANITARY SEWER MANHOLE TO GRADE
AT	ADJUST TELEPHONE MANHOLE TO GRADE
AE	ADJUST ELECTRICAL MANHOLE TO GRADE
AD	ADJUST DRAINAGE MANHOLE TO GRADE
ABM	ADJUST CATCH BASIN TO MANHOLE
BCD	BITUMINOUS CONCRETE DRIVEWAY 3" BITUMINOUS CONCRETE, CLASS I-1 SURFACE COURSE 8" GRAVEL BORROW SUBBASE COURSE
CCD	CEMENT CONCRETE DRIVEWAY 4" CEMENT CONCRETE CLASS "B" 6" GRAVEL BORROW SUBBASE COURSE
LS	4" LOAM AND SEED (RESIDENTIAL SEEDING (TYPE 2))
PS	4" PLANTABLE SOIL & SEED (GENERAL HIGHWAY SEEDING (TYPE 1))
SDS	STONE DUST SIDEWALK
GD	GRAVEL DRIVE
DDS	REMOVE AND DISPOSE DRY STONEWALL
DMS	REMOVE AND DISPOSE MASONRY STONEWALL
DRW	REMOVE AND DISPOSE RETAINING WALL
DW	REMOVE AND DISPOSE MASONRY WALL
DCI	REMOVE AND DISPOSE CURB INLET
RRS	REMOVE AND REBUILD DRY STONEWALL
RB	RECONSTRUCT CATCH BASIN
RBO	REMOVE BY OTHERS
RR	REMOVE AND RESET
RD	REMOVE AND DISPOSE
RS	REMOVE AND SALVAGE
RSS	REMOVE AND SALVAGE SIGN
ETR	EXISTING TO BE RETAINED

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	R.I.	BRO-0052(002)		2	36

REVISIONS		
NO.	DATE	BY

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON RHODE ISLAND

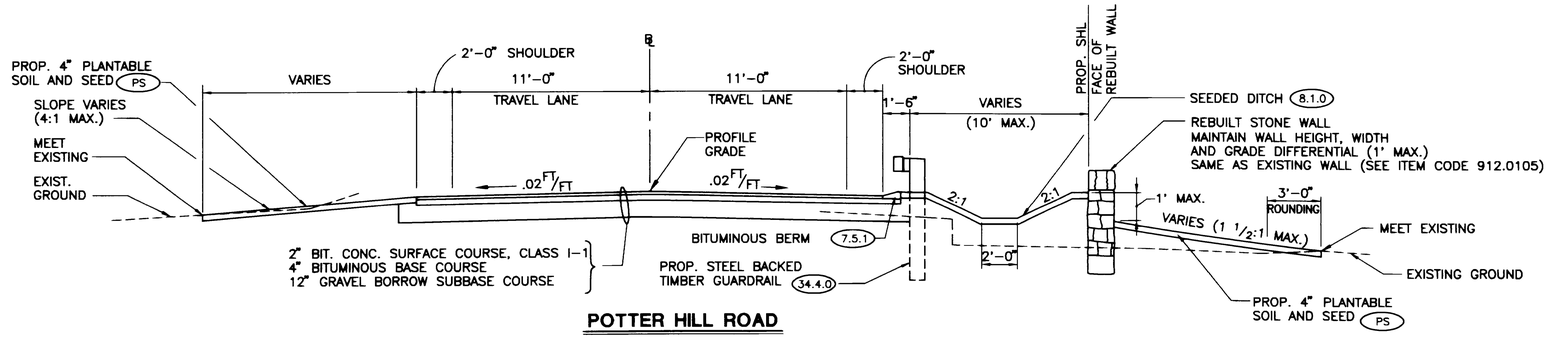
PLAN SYMBOLS & GENERAL LEGEND

CHECKED BY CB DATE 8/00 SCALE NO SCALE

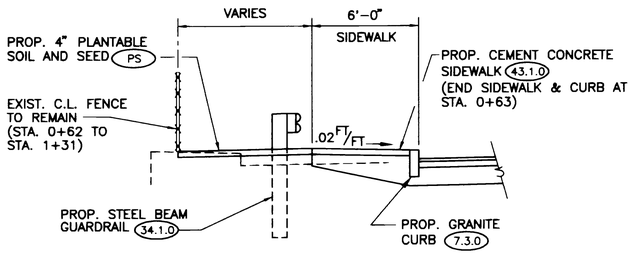
TUTELA ENGINEERING ASSOC., INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE RHODE ISLAND

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	RI	BRO-0052(002)		3	36

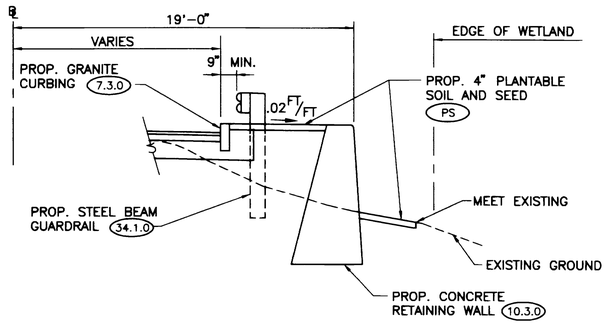
(R-1)



POTTER HILL ROAD



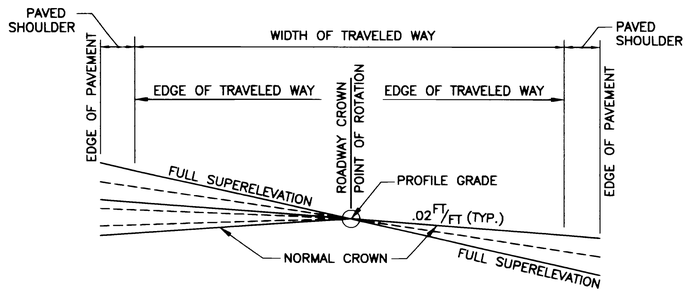
SECTION ALONG MAXON STREET



SECTION ALONG RIVER ROAD

NOTES:

1. THE ABOVE SECTION IS TYPICAL FOR POTTER HILL ROAD BETWEEN STA. 18+10 AND STA. 20+50±. RIVER ROAD, MAXON STREET AND THE SHORT SECTION OF POTTER HILL ROAD TO THE EAST OF THE BRIDGE, SHALL HAVE THE SAME PROPOSED PAVEMENT STRUCTURE.
2. FOR ROADWAY WIDTH DIMENSIONS REFER TO THE LOCATION PLAN, SHEET 6.
3. FOR THE ROADWAY CROSS SLOPES REFER TO THE GRADING PLAN, SHEET 7.
4. THE EXISTING PAVEMENT STRUCTURE ON POTTER HILL ROAD CONSISTS OF APPROXIMATELY 4 TO 5 INCHES OF BITUMINOUS CONCRETE ON 12 INCHES OF A GRAVEL BORROW SUBBASE.



SUPERELEVATION DETAILS

N.T.S.

NOTE:

1. FOR CROSS SLOPE AND LIMITS OF SUPERELEVATION, SEE GRADING PLAN, SHEET 7.

TYPICAL ROADWAY SECTIONS

SCALE = 1"=4'

GENERAL NOTES:

1. PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES, EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED AT THOSE AREAS INDICATED ON THE PLANS. CLEARING MAY OCCUR PRIOR TO INSTALLATION OF SUCH CONTROLS, HOWEVER NO GRUBBING, GRADING, FILLING OR OTHER SOIL DISTURBANCE SHALL OCCUR PRIOR TO INSTALLATION.
2. NO UNDISTURBED AREAS WILL BE CLEARED OF EXISTING VEGETATION AFTER OCTOBER 15 OF ANY CALENDAR YEAR.
3. NO UNDISTURBED AREAS WITHIN OR ADJACENT TO ANY WETLANDS WILL BE CLEARED OR GRADED AFTER OCTOBER 15 OF ANY CALENDAR YEAR, AND ALL DISTURBED SLOPES WITHIN AND ADJACENT TO WETLAND AREAS, EITHER NEWLY CREATED OR EXPOSED PRIOR TO OCTOBER 15, SHALL BE SEEDED OR PROTECTED BY THAT DATE. ANY SUCH AREAS WHICH DO NOT HAVE ADEQUATE VEGETATIVE STABILIZATION, AS DETERMINED BY THE ENGINEER, BY NOVEMBER 15 OF ANY CALENDAR YEAR, MUST BE STABILIZED THROUGH THE USE OF EROSION CONTROL MATTING OR HAY MULCH, IN ACCORDANCE WITH SPECIFICATIONS CONTAINED WITHIN THE RI SOIL EROSION AND SEDIMENT CONTROL HANDBOOK (1993). THERE SHALL BE NO SEPARATE PAYMENT FOR THIS PROVISION, IT SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION OPERATIONS.
4. DRIVING OF THE STEEL SHEET PILING FOR THE NEW PIER COFFERDAM SHALL NOT BE UNDERTAKEN DURING THE HEIGHT OF THE SPRING FISH RUN. TYPICALLY, THE PEAK PERIOD IS BETWEEN LATE APRIL AND EARLY JUNE. THE CONTRACTOR SHALL SCHEDULE ITS PILE DRIVING OPERATIONS SO AS NOT TO CONFLICT WITH THIS TIME PERIOD.
5. ALL HAYBALES AND SILT FENCE ARE TO BE INSTALLED WITH THE LOWER SIX INCHES BURIED AND BACKFILLED WITH COMPACTED SOIL MATERIAL. WHEN USED IN COMBINATION, A SUFFICIENT AMOUNT OF THE SILT FENCE SHALL BE PLACED IN THE TRENCH SO THAT THE HAYBALE STAKES ARE DRIVEN THROUGH THE FABRIC OF THE FENCE.
6. THE TOE OF ANY FILL SLOPE IS TO REMAIN AT LEAST ONE FOOT INSIDE OF ALL EROSION CONTROLS. UNDER NO CIRCUMSTANCE SHALL THE CONTRACTOR COVER ANY PORTION OF THE EROSION CONTROLS WITH FILL MATERIAL. ANY FILL MATERIAL WHICH IS PLACED ON ANY EROSION CONTROLS BY THE CONTRACTOR, SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR, AND ANY NECESSARY REPAIRS TO THE EROSION CONTROLS ACCOMPLISHED, AT NO COST TO THE STATE.
7. ADDITIONAL EROSION CONTROLS SHALL BE INSTALLED AS CONDITIONS WARRANT, OR AS DIRECTED BY THE RIDOT RESIDENT ENGINEER.
8. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL MAINTENANCE AND SHALL INSPECT/REPLACE ALL CONTROLS AS NEEDED. MAINTENANCE WILL BE CARRIED OUT IN ACCORDANCE WITH SECTION 212 OF THE RIDOT STANDARD SPECIFICATIONS, 1997 EDITION. THE CONTRACTOR IS RESPONSIBLE FOR CARRYING OUT NECESSARY MAINTENANCE DURING ALL PHASES OF PROJECT CONSTRUCTION, INCLUDING PERIODS OF "WINTER SHUTDOWN."
9. THE CONTRACTOR MAY UTILIZE AREAS BEYOND THE PROPOSED EDGE OF TRAVELLED WAY, BUT WITHIN THE EXISTING ROW OR TEB LINES ON THE NORTHERLY SIDE OF POTTER HILL ROAD AT EITHER END OF THE BRIDGE FOR TEMPORARY STOCKPILE OF SURPLUS EXCAVATED MATERIALS SUITABLE FOR REUSE. TEMPORARY STOCKPILE AREAS SHALL BE FULLY ENCLOSED BY STAKED HAY BALES, RIDOT STD. 9.1. UNSUITABLE EXCAVATED MATERIALS SHALL BE PROMPTLY REMOVED FROM THE SITE AND BE LEGALLY DISPOSED OF AT AN UPLAND LOCATION BY THE CONTRACTOR.
10. THIS PROJECT IS BEING CONSTRUCTED IN A SENSITIVE HISTORICAL AND ARCHAEOLOGICAL AREA. THE CONTRACTOR'S ATTENTION IS DIRECTED TO PARAGRAPH 7 ON PAGE GS-9 CONCERNING ANY PROJECT LIMIT CHANGES AND COORDINATION WITH THE OFFICE OF ENVIRONMENTAL PROGRAMS-RIDOT FOR ABUTMENT EXCAVATION.
11. IT MAY BE POSSIBLE TO LOWER THE WATER SURFACE OF THE PAWCATUCK RIVER DURING THE PERIOD BETWEEN JULY 15 AND OCTOBER 31. THE CONTRACTOR SHALL MAKE HIS OWN INVESTIGATIONS AS TO THE EXTENT BY WHICH LOWERING THE WATER LEVEL MAY BE OF BENEFIT. SEE PARAGRAPH 10, PAGE GS-9 OF THE CONTRACT DOCUMENTS FOR DETAILS.

REVISIONS		
NO.	DATE	BY
1	8/29/00	WJM

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON RHODE ISLAND

TYPICAL SECTION, DETAILS AND NOTES

CHECKED BY WJM DATE 8/00 SCALE AS NOTED

TUTELA ENGINEERING ASSOC., INC.

ENGINEERS • ARCHITECTS • PLANNERS

PROVIDENCE RHODE ISLAND

C:\601-09 Wed Aug 30 08:15:51 2000 TUTELA ENGINEERING ASSOCIATES, INC (15-50)

601-09

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	RI	BRO-00621(002)		4	36

FOR LOCATION OF THE (9.3.0) EROSION AND SEDIMENTATION CONTROLS, AND FOR EXISTING AND PROPOSED DRAINAGE AND UTILITY LOCATIONS, SEE DRAINAGE AND UTILITY PLAN, SHEET 5.

PROPOSED BRIDGE REPLACEMENT BRIDGE NO. 52, SEE BRIDGE PLANS

POTTER HILL ROAD

RIVER ROAD

MAXON STREET

LIMIT OF BRIDGE REPLACEMENT PROJECT
BEGIN STA. 18+10.00

LIMIT OF BRIDGE REPLACEMENT PROJECT
STA. 1+31.37

LIMIT OF BRIDGE REPLACEMENT PROJECT
END STA. 23+00.00

STA. 22+13.02 POTTER HILL ROAD ℄ = STA. 0+00.00 MAXON STREET ℄

EXISTING PIERS

℄ TEMP. GAS MAIN SUPPORT

STEEL BEAM BRIDGE CONNECTION TRAILING END (W/NESTED RAIL)

STEEL BEAM BRIDGE CONNECTION APPROACH END (W/O NESTED RAIL)

STEEL BACKED TIMBER GUARDRAIL BRIDGE CONNECTION TRAILING END

PROP. NEW CENTER PIER (SEE BRIDGE PLANS)

PROP. RIPRAP BANK PROTECTION (TYP. ALL 4 CORNERS - SEE BRIDGE PLANS)

EXIST. DOUBLE LEAF STEEL GATE (RELOCATE TO STA. 19+65, 23' RT ±)

PROPOSED LOCATION RELOCATED STEEL GATE

100 YEAR FLOOD EL. 32.2

200' RIVERBANK WETLAND

CONNECT TO EXISTING GUARDRAIL

CONNECT TO EXIST. GUARDRAIL

CUT AND MATCH

PROP. GUY POLE PGE

EXIST. GRAN. POSTS (TO REMAIN)

MEET EXIST. CURB

A.P. 8 Lot 16 Martin Sheldon

A.P. 8 Lot 17 Lloyd A. & Ann C. Baker

A.P. 8 Lot 18 Lloyd A. Baker

A.P. 8 Lot 23 Renewable Resources, Inc.

A.P. 8 Lot 24 Allison B. Goodsell

A.P. 24 Lot 162 Kenneth W. & Jody L. Dinwoodie

A.P. 8 Lot 25 Francis J. Hunt

A.P. 8 Lot 26 Allison B. Goodsell

A.P. 8 Lot 27 Lloyd A. & Ann C. Baker

A.P. 8 Lot 28 Joseph J. Gregory

TOWN OF WESTERLY / TOWN OF HOPKINTON

PATUCK RIVER

GENERAL PLAN
SCALE: 1"=20'

[1] CODE 912.0105 (SD-4)

PROFILE
SCALE: 1"=20' HORIZONTAL
1"=4' VERTICALLY

70' VERTICAL CURVE K=30 SSD=320'
80' VERTICAL CURVE K=22 SSD=184'
100' VERTICAL CURVE K=25 SSD=180'
130' VERTICAL CURVE K=23 SSD=184'
70' VERTICAL CURVE K=31 SSD=565'

PVI STA. 18+45.00 ELEV. 39.12
MEET EXISTING PVC STA. 18+10.00 ELEV. 40.1
PRVC STA. 18+80.00 ELEV. 37.32
PVI STA. 19+20.00 ELEV. 35.27
PCVC STA. 19+60.00 ELEV. 34.67
LOW POINT STA. 19+97.50 ELEV. 34.39
PVI STA. 20+10.00 ELEV. 33.92
PRVC STA. 20+60.00 ELEV. 35.18
PVI STA. 21+25.00 ELEV. 36.80
HIGH POINT STA. 21+18.04 ELEV. 35.90
PVI STA. 21+90.00 ELEV. 34.73
PVC STA. 22+25.00 ELEV. 33.70
PVI STA. 22+60.00 ELEV. 32.62
PVT STA. 22+95.00 ELEV. 32.52
MEET EXISTING ELEV. 32.3

-2.8% ± -2.80% -5.13% -5.13% -1.50% +2.50% -1.50% +2.50% -3.10% -3.10% -0.86% -0.6% ±

APPROX. EXISTING GRADE
100 YEAR FLOOD ELEV. 32.2
EL. 26.9 (11-16-93)

38.71 PROPOSED (TYP.)
38.9 EXISTING (TYP.)

REVISIONS		
NO.	DATE	BY

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON RHODE ISLAND

GENERAL PLAN AND PROFILE

CHECKED BY WJM DATE 8/00 SCALE HOR. 1"=20' VERT. 1"=4'

TUTELA ENGINEERING ASSOC., INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE RHODE ISLAND

C:\DWGS\POTTER1601-03 Mon Aug 7 09:52:46 2000 (TUTELA ENGINEERING ASSOCIATES, INC (12-50)

1601-03

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	RI	BRO-0052(002)		5	36

19+30
16' LT.
(NEW POLE)
(BY OTHERS)
POLE LOCATION MAY BE ADJUSTED UP TO 2 FEET NORTHERLY AS REQ'D TO PROVIDE 2 FT. MINIMUM CLEARANCE FROM EXIST. GAS MAIN

EXCAVATE TEST PIT TO LOCATE EXIST. GAS MAIN PRIOR TO SETTING POLE

EXISTING OVERHEAD ELEC. (RBO)

PROP. 4" GAS MAIN

CONNECT TO EXIST. 4" GAS (BY OTHERS)

TEMPORARY 2" STEEL GAS MAIN

TEMPORARY POLE & GUY FOR TEMP. O.H. ELECT., TEL., & CATV (BY OTHERS)

CONNECT TEMP. 2" GAS TO EXIST. GAS MAIN (BY OTHERS)

EXISTING 4" GAS MAIN ATTACHED TO SIDE OF BRIDGE (TO BE REMOVED)

POTTER HILL BRIDGE NO. 52

TEMP. GAS MAIN SUPPORT STRUCTURE

PROP. 4" GAS MAIN ATTACH TO BRIDGE

CONNECT TO EXISTING 4" GAS (BY OTHERS)

MEET EXISTING

LIMIT OF BRIDGE REPLACEMENT PROJECT
STA. 1+31.37

PROP. 4" GAS MAIN

EXIST. 4" GAS MAIN (TO BE ABANDONED)

TEMPORARY POLE FOR TEMP. O.H. ELEC., TEL., AND CATV (BY OTHERS)

CONNECT TEMP. 2" GAS TO EXISTING GAS MAIN (BY OTHERS)

MEET EXISTING

LIMIT OF BRIDGE REPLACEMENT PROJECT
BEGIN STA. 18+10.00

LIMIT OF BRIDGE REPLACEMENT PROJECT
END STA. 23+00.00

20+45
20' RT
(NEW POLE)
(BY OTHERS)

22+05
20' RT
(NEW LOCATION OF POLE)
(BY OTHERS)

EXISTING OVERHEAD ELEC. (RBO)

PROP. RIPRAP BANK PROTECTION (TYP. ALL 4 CORNERS – SEE BRIDGE PLANS)

TEMP. TYPE R-3 RIP RAP (TO BE REMOVED WHEN DEWATERING BASIN IS REMOVED)

POTTER HILL ROAD

MAXON STREET

RIVER ROAD

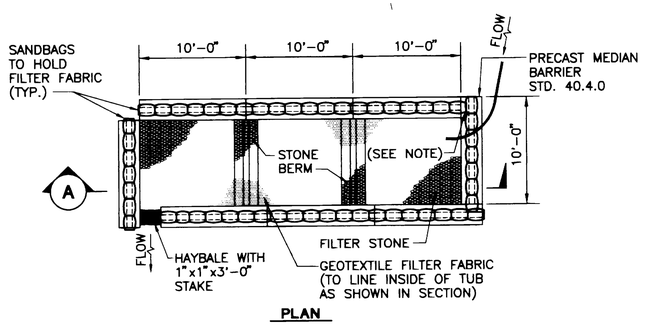
PAWCATUCK RIVER

TOWN OF WESTERLY / TOWN OF HOPKINTON

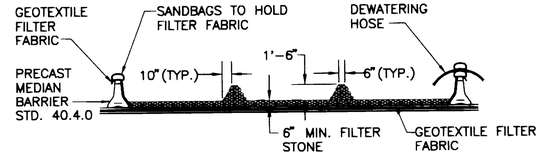
NOTES:

1. POLE OFFSETS ARE TO THE FRONT FACE OF THE POLE.
2. THE EXISTING GAS MAIN ATTACHED TO BRIDGE CAN NOT BE DEACTIVATED UNTIL TEMPORARY GAS MAIN IS INSTALLED AND ACTIVATED, SEE SPECIAL PROVISIONS.
3. CONNECTION OF TEMPORARY AND PROPOSED GAS MAIN TO EXISTING GAS MAIN BY OTHERS.
4. 2" AND 4" GAS MAIN FURNISHED BY PROVIDENCE GAS, INSTALLED BY CONTRACTOR.
5. EXISTING 4" GAS MAIN ON MAXON STREET MUST BE ABANDONED BEFORE NEW CHAIN LINK FENCE AND NEW GUARDRAIL CAN BE INSTALLED.

DRAINAGE AND UTILITY PLAN
SCALE: 1"=20'



PLAN



SECTION

NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 208 OF THE R.I. STANDARD SPECIFICATIONS.
2. PROVIDE ADDITIONAL SAND BAGS AS REQUIRED TO FILL SPACE BETWEEN ADJACENT BARRIERS.

DEWATERING BASIN R.I. STANDARD 9.7.0
N.T.S.

REVISIONS		
NO.	DATE	BY

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT
POTTER HILL BRIDGE NO. 52
WESTERLY/HOPKINTON RHODE ISLAND

DRAINAGE AND UTILITY PLAN

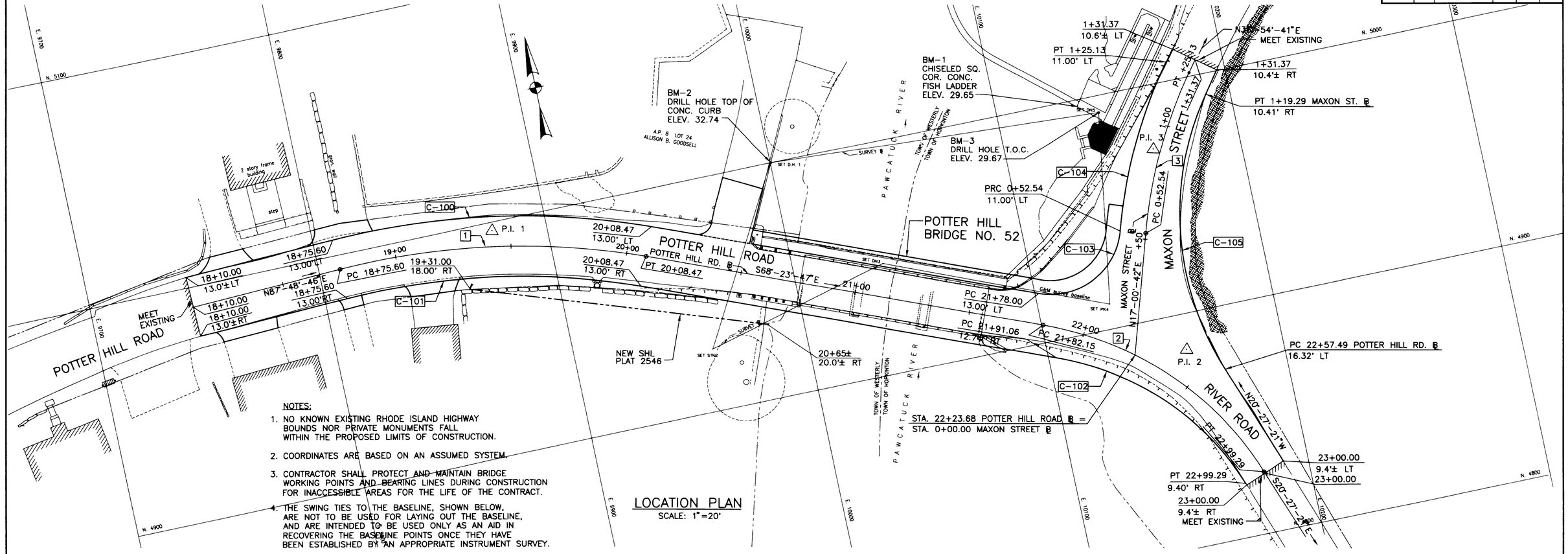
CHECKED BY WJM DATE 8/00 SCALE 1"=20'

TUTELA ENGINEERING ASSOC., INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE RHODE ISLAND

C:\DWGS\POTTER\601-11 Mon Aug 7 09:55:44 2000 TUTELA ENGINEERING ASSOCIATES, INC. (TC-501)

601-11

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	R.I.	BRO-0052(002)		6	36



LOCATION PLAN
SCALE: 1"=20'

NOTES:

1. NO KNOWN EXISTING RHODE ISLAND HIGHWAY BOUNDS NOR PRIVATE MONUMENTS FALL WITHIN THE PROPOSED LIMITS OF CONSTRUCTION.
2. COORDINATES ARE BASED ON AN ASSUMED SYSTEM.
3. CONTRACTOR SHALL PROTECT AND MAINTAIN BRIDGE WORKING POINTS AND BEARING LINES DURING CONSTRUCTION FOR INACCESSIBLE AREAS FOR THE LIFE OF THE CONTRACT.
4. THE SWING TIES TO THE BASELINE, SHOWN BELOW, ARE NOT TO BE USED FOR LAYING OUT THE BASELINE, AND ARE INTENDED TO BE USED ONLY AS AN AID IN RECOVERING THE BASELINE POINTS ONCE THEY HAVE BEEN ESTABLISHED BY AN APPROPRIATE INSTRUMENT SURVEY.

NOTES: COORDINATES ARE BASED ON AN ASSUMED SYSTEM.

CURVE DATA

CURVE NO.	RADIUS	DELTA	LENGTH	TANGENT
1	320.00'	23°-47'-27"	132.87'	67.41'
2	140.00'	47°-56'-26"	117.14'	62.25'
3	209.00	19°-53'-59"	72.59'	36.66'
C-100	333.00'	23°-47'-27"	138.27'	70.15'
C-101	307.00'	23°-47'-27"	127.48'	64.67'
C-102	119.69'	47°-56'-26"	100.15'	53.22'
C-103	30.00'	94°-35'-31"	49.53'	32.51'
C-104	220.00'	19°-53'-59"	76.41'	38.59'
C-105	125.00'	56°-56'-06"	124.21'	67.78'

ROADWAY VERTICAL CONTROL – BENCHMARKS

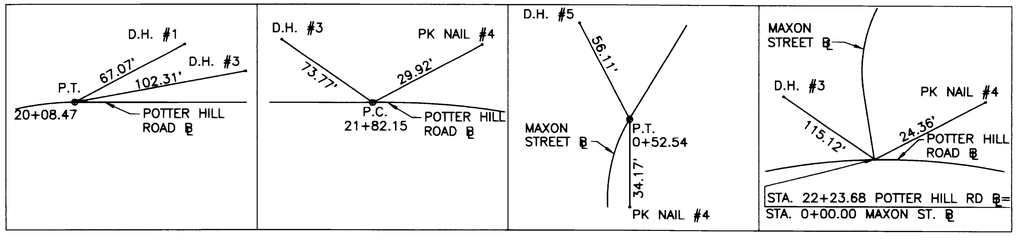
BENCHMARK NUMBER	BASELINE STATION	BASELINE OFFSET	ELEVATION	DESCRIPTION
BM-1	0+90	38' LEFT	29.65	CHISELED SQUARE CORNER ON CONCRETE FISH LADDER
BM-2	20+54	49' LEFT	32.74	DRILL HOLE #1
BM-3	0+93	35' LEFT	29.67	DRILL HOLE #5

ROADWAY HORIZONTAL CONTROL

POINT DESCRIPTION	CENTERLINE STATION	CENTERLINE OFFSET	COORDINATES NORTH	COORDINATES EAST
BEGIN PROJECT	18+10.00	———	4991.4161	9743.6227
P.C. POTTER HILL RD. ℄	18+75.60	———	4993.9197	9809.1749
P.T. POTTER HILL RD. ℄	20+08.47	———	4971.6739	9939.2063
P.C. POTTER HILL RD. ℄	21+82.15	———	4907.7293	10100.6821
P.T. POTTER HILL RD. ℄	22+99.29	———	4826.4918	10180.3084
℄ INTERSECTION	22+23.68	———	4886.9762	10136.4803
END PROJECT	23+00.00	———	4825.8266	10180.5565
P.C. MAXON ST. ℄	0+52.54	———	4937.2219	10151.8531
P.T. MAXON ST. ℄	1+25.13	———	5001.5966	10184.5992
END PROJECT	1+31.37	———	5006.5826	10188.3444
DRILL HOLE NO. 1	20+54.46	48.72' LT	5000.0000	10000.0000
STAKE NO. 2	20+43.35	34.47' RT	4926.7869	9958.9485
DRILL HOLE NO. 3	21+09.77	14.30' LT	4947.6679	10038.6625
PK NAIL NO. 4	22+06.18	15.90' LT	4910.5786	10130.4617
DRILL HOLE NO. 5	0+96.98	29.98' LT	4992.6461	10143.0857

P.I. COORDINATES

P.I. #	COORDINATES NORTH	COORDINATES EAST
1	4996.4926	9876.5338
2	4884.8075	10158.5669
3	4972.2995	10162.5933



SURVEY/℄ TIES
NOT TO SCALE

REVISIONS NO.	DATE	BY

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON RHODE ISLAND

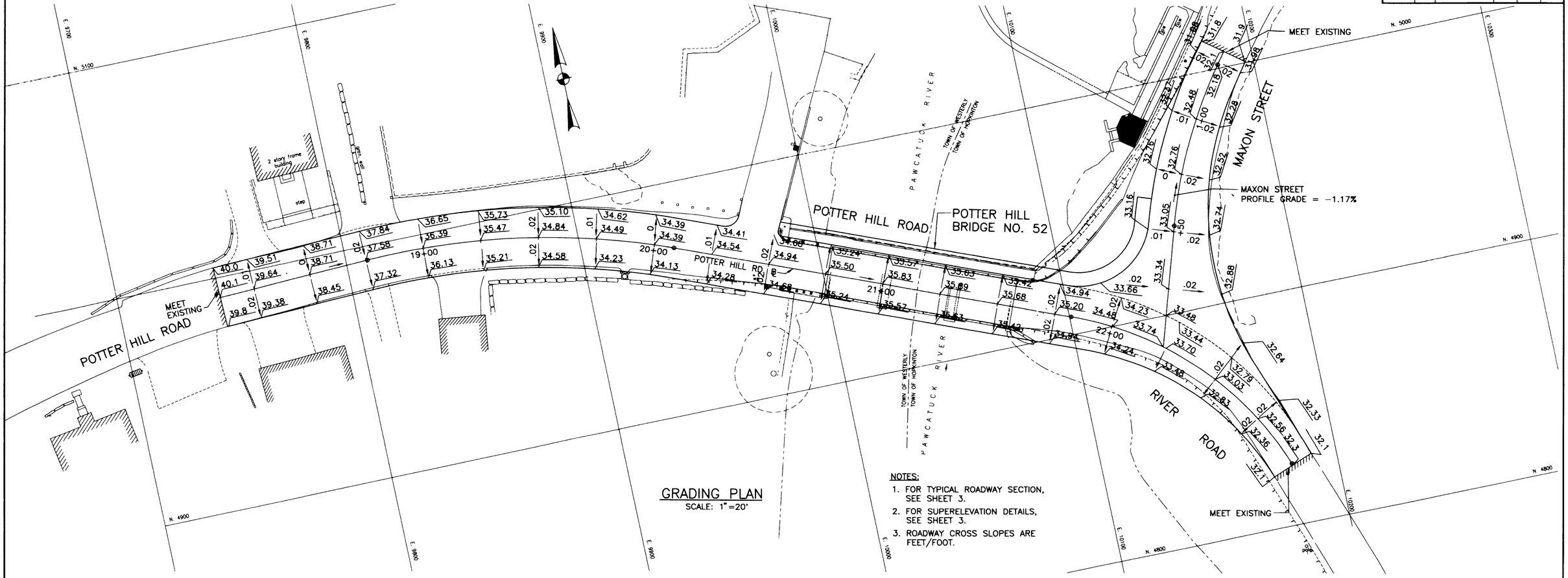
LOCATION PLAN

CHECKED BY WJM DATE 8/00 SCALE 1"=20'

TUTELA ENGINEERING ASSOC., INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE RHODE ISLAND

L:\DWGS\POTTER\601-05 Mon Aug 7 09:58:19 2006 TUTELA ENGINEERING ASSOCIATES, INC. 12-50\
601-05

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI	BRO-0052(002)		7	36



GRADING PLAN
SCALE: 1"=20'

NOTES:

1. FOR TYPICAL ROADWAY SECTION, SEE SHEET 3.
2. FOR SUPERELEVATION DETAILS, SEE SHEET 3.
3. ROADWAY CROSS SLOPES ARE FEET/FOOT.

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON RHODE ISLAND

GRADING PLAN

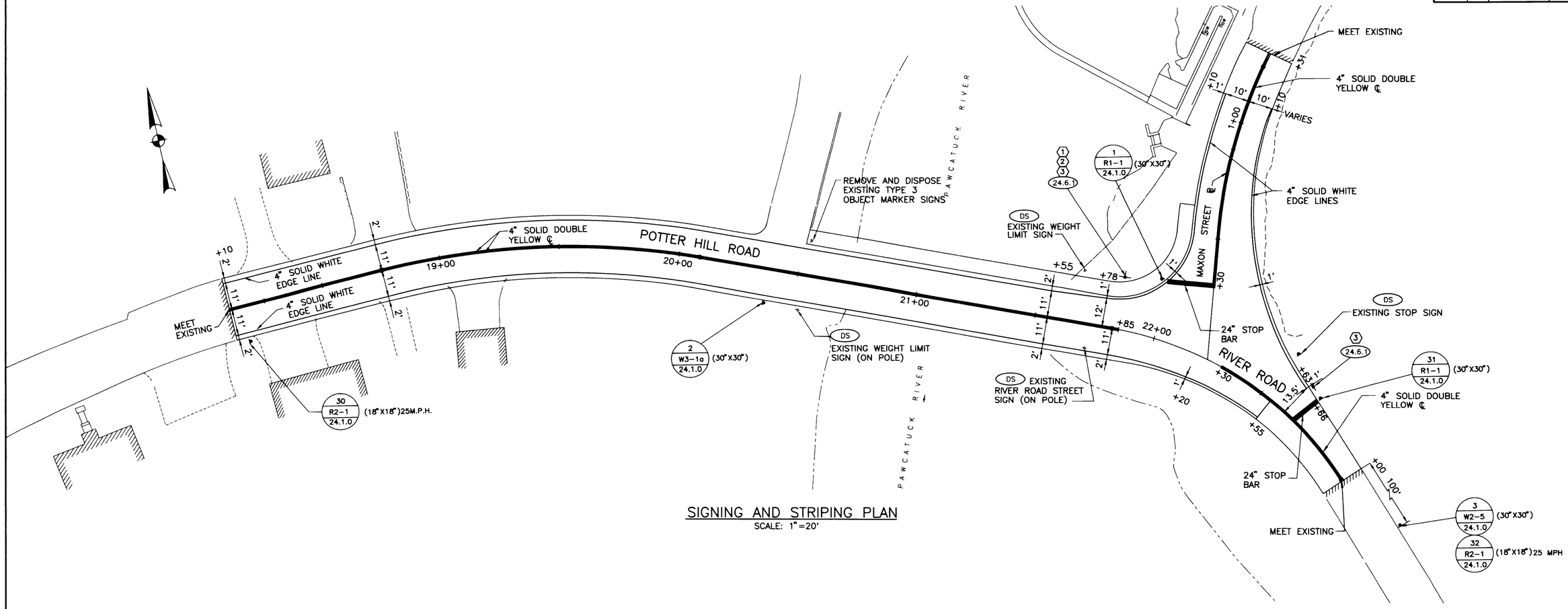
CHECKED BY WJM DATE 8/00 SCALE AS NOTED

TUTELA ENGINEERING ASSOC., INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE RHODE ISLAND

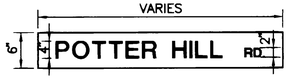
C:\DWGS\POTTER\601-04 Mon Aug 7 10:00:21 2000 TUTELA ENGINEERING ASSOCIATES, INC. (12-50)

601-04

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	R.I.	BRO-0052(002)		8	36



SIGNING AND STRIPING PLAN
SCALE: 1"=20'



TYPICAL STREET NAME SIGN
NOT TO SCALE

STREET SIGN DETAILS		NO.
NO.	SIGN LEGEND	REQUIRED
1	POTTER HILL RD.	1
2	MAXON ST.	1
3	RIVER RD.	2

NOTES:

1. ALL PERMANENT PAVEMENT MARKINGS TO BE EPOXY RESIN AS SPECIFIED UNDER ITEM CODE T20.2000, SEE SPECIAL PROVISIONS.
2. DOUBLE YELLOW CENTERLINE AND SOLID WHITE EDGE LINES AT THE PROJECT LIMITS MAY BE FIELD ADJUSTED TO MEET THE EXISTING PAVEMENT MARKINGS WITH THE APPROVAL OF THE ENGINEER.

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON RHODE ISLAND

SIGNING AND STRIPING PLAN

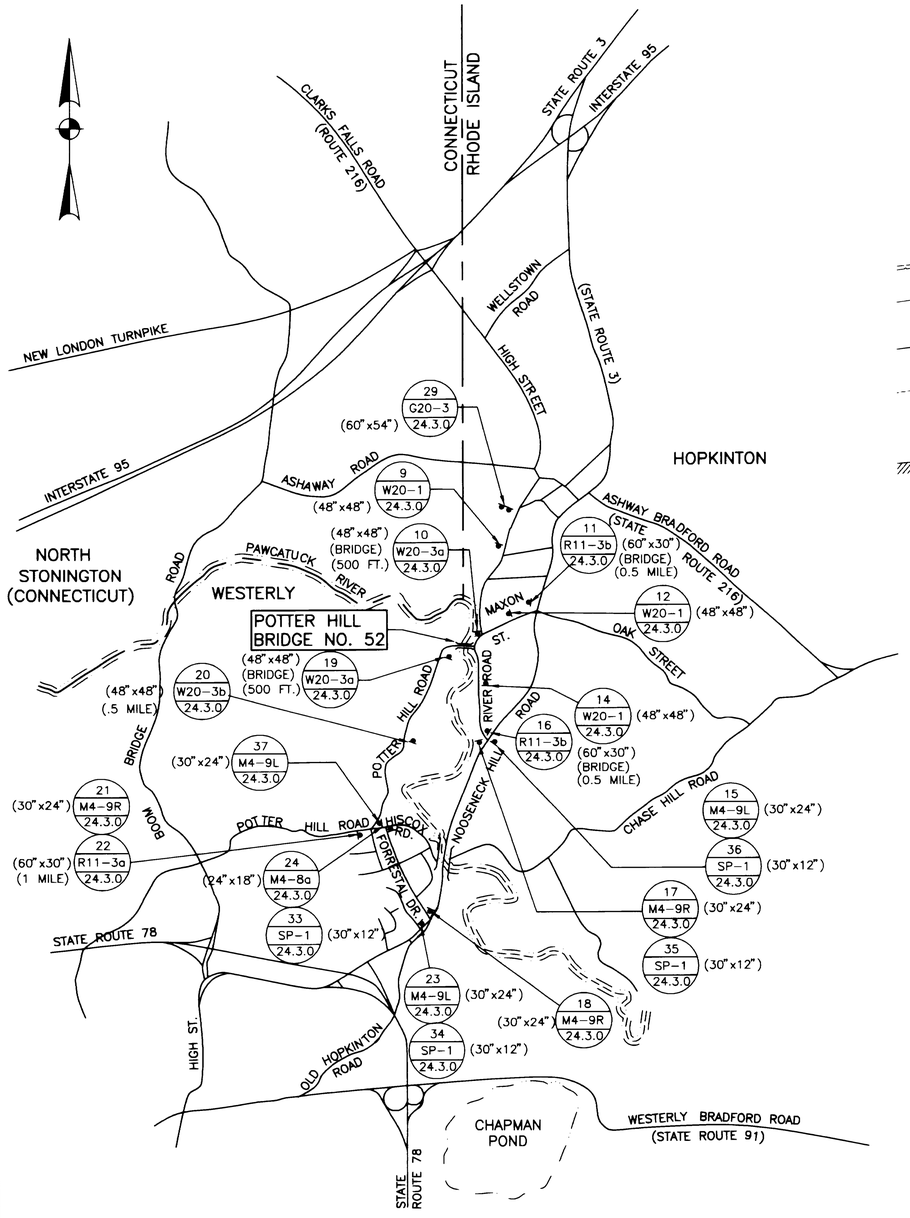
CHECKED BY WJM DATE 8/00 SCALE 1"=20'

TUTELA ENGINEERING ASSOC., INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE RHODE ISLAND

801-06

C:\DWGS\POTTER\801-06 Wed Aug 7 16 03:35 2000 TUTELA ENGINEERING ASSOCIATES, INC. (12-50)

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	R.I.	BRO-0052(002)		9	36



CONSTRUCTION/DETOUR SIGNING PLAN

SCALE: 1"=2000'

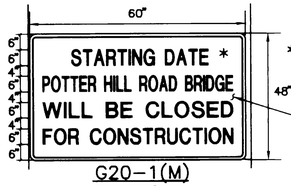
BRIDGE NO. 52 CONSTRUCTION ZONE

SCALE: 1"=20'

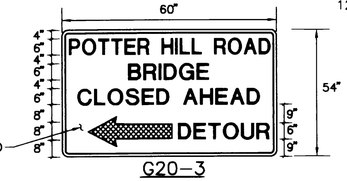
SIGN MOUNTING STANDARD SHOWN AS AN ASTERISK (*) INDICATES SIGN TO BE DIRECTLY MOUNTED ON THE TYPE III BARRICADE.

NOTES

1. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY; THE WESTERLY AND HOPKINTON POLICE DEPARTMENTS, THE ASHAWAY FIRE DEPARTMENT, AND THE WESTERLY AND HOPKINTON PUBLIC WORKS DEPARTMENTS, OF THE IMPENDING ROADWAY CLOSURE. THE WESTERLY POLICE DEPARTMENT CAN BE REACHED AT (401)596-2022, AND THE HOPKINTON POLICE AT (401)377-7750. THE TELEPHONE NUMBERS AND CONTACTS FOR THE OTHER AGENCIES CAN BE FOUND IN THE CONTRACT DOCUMENTS.
2. TEMPORARY PRECAST MEDIAN TRAFFIC BARRIERS ARE TO BE PLACED AT THE COMPLETION OF WORK EACH DAY. BARRIERS MAY BE MOVED DURING CONSTRUCTION HOURS WHEN WORK IS IN PROGRESS WITH THE APPROVAL OF THE ENGINEER.
3. WHERE POSSIBLE, 1 INCH DIAMETER REINFORCING BAR SHALL BE USED TO LINK ALL PRECAST MEDIAN BARRIERS.
4. THE CONTRACTOR MAY UTILIZE THE AREAS WITHIN THE BARRICADED WORK ZONE FOR TEMPORARY STORAGE.
5. PAYMENT FOR MOVEMENT OF TEMPORARY MEDIAN BARRIERS, CONES, BARRELS, SIGNS, ETC., TO BE PAID FOR UNDER ITEM 937.0200 "MAINTENANCE AND MOVEMENT OF TRAFFIC PROTECTION."
6. WHERE APPROVED BY THE ENGINEER, POSTS FOR THE TEMPORARY CHAIN LINK FENCE, R.R. STD. 31.2.0 MAY BE SET IN FIVE GALLON BUCKETS FILLED WITH CONCRETE.
7. EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH THE TRAFFIC CONTROL PLAN WITHIN THE PROJECT LIMITS AND OUTSIDE THE BARRICADED WORK ZONE SHALL BE REMOVED PRIOR TO SET UP OF THE CONSTRUCTION WORK ZONE.
8. ALL SIGNS TO CONFORM TO "THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", 1988, F.H.A., WITH ALL REVISIONS.
9. PAYMENT FOR REMOVAL OF TEMPORARY CHAIN LINK FENCE SHALL BE INCLUDED UNDER ITEM 201.0419, REMOVE AND DISPOSE FENCE.
10. TEMPORARY PAVEMENT MARKINGS SHALL BE FAST-DRYING WATERBORNE PAINT, SEE SPECIFICATIONS.
11. ALL TEMPORARY CONSTRUCTION SIGNING AND STRIPING SHALL BE INSTALLED TWO WEEKS PRIOR TO IMPLEMENTING THE DETOUR OR AS DIRECTED.
12. ALL EXISTING STOP CONTROLS ON RIVER ROAD AND MAXON STREET TO REMAIN DURING CONSTRUCTION.

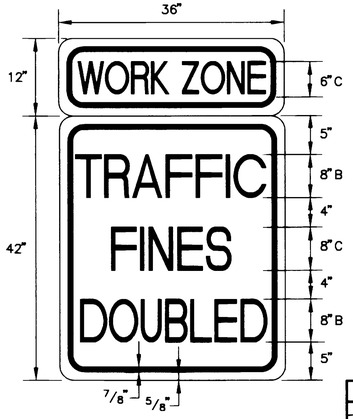


G20-1(M)
N.T.S.



G20-3
N.T.S.

SP-1
N.T.S.



G20-2(M) AND R2-5(M)
N.T.S.

REVISIONS		
NO.	DATE	BY

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON RHODE ISLAND

TEMPORARY CONSTRUCTION ZONE DETAILS

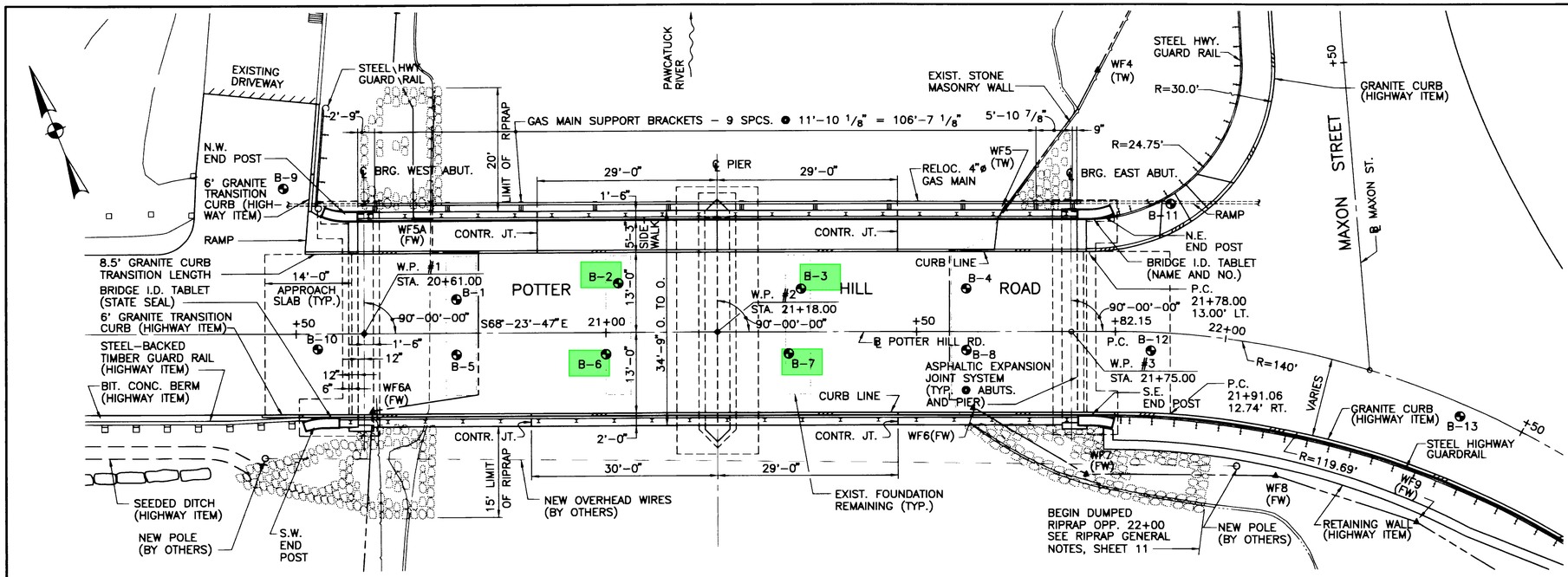
CHECKED BY WJM DATE 8/00 SCALE AS SHOWN

TUTELA ENGINEERING ASSOC., INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE RHODE ISLAND

C:\DWGS\PLOTTER\601-07 Mon Aug 7 10:08:21 2000 TUTELA ENGINEERING ASSOCIATES, INC. (12-50)

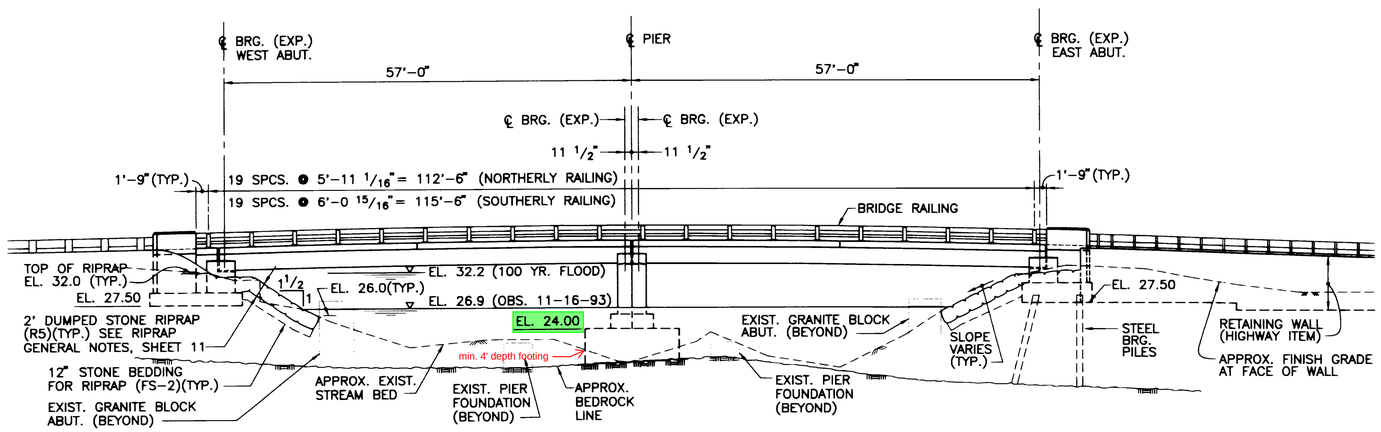
601-07

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	R.I.	BRO-0052(002)		10	36



BRIDGE GENERAL PLAN

SCALE: 1"=10'



SOUTHERLY ELEVATION

SCALE: 1"=10'

WORKING POINT COORDINATES

	NORTH	EAST
W.P.#1	4952.3344	9988.0434
W.P.#2	4931.3479	10041.0393
W.P.#3	4910.3615	10094.0352

INDEX OF BRIDGE SHEETS

SHEET NO.	TITLE
10	BRIDGE GENERAL PLAN AND ELEVATION
11	GENERAL NOTES
12	PROFILE, FOUNDATION PLAN AND BRIDGE GRADING PLAN
13	TEMPORARY GAS MAIN SUPPORT STRUCTURE
14	DEMOLITION PLAN AND SECTIONS
15	WEST ABUTMENT PLAN AND ELEVATION
16	PIER COFFERDAM DETAILS
17	PIER PLAN AND ELEVATION
18	EAST ABUTMENT PLAN AND ELEVATION
19	MISCELLANEOUS SUBSTRUCTURE DETAILS
20	FRAMING PLAN AND PRESTRESSED BOX BEAM SECTIONS
21	PRESTRESSED BOX BEAM DETAILS
22	TRANSVERSE SECTION AND SUPERSTRUCTURE DETAILS
23	ABUTMENT AND PIER ROADWAY DETAILS
24	NORTHERLY END POSTS
25	SOUTHERLY END POSTS
26	BRIDGE RAILING DETAILS
27	BORING LOGS – 1
28	BORING LOGS – 2
29	BORING LOGS – 3
30	BORING LOGS – 4

SUGGESTED SEQUENCE OF CONSTRUCTION

1. DETOUR TRAFFIC AND CLOSE THE BRIDGE.
2. CONSTRUCT TEMPORARY GAS MAIN SUPPORT STRUCTURE, AND INSTALL TEMPORARY UTILITY POLES. (TEMPORARY POLES INSTALLED BY OTHERS.)
3. RELOCATE GAS MAIN TO TEMPORARY GAS MAIN SUPPPORT STRUCTURE, AND OVERHEAD WIRES TO TEMPORARY POLES.
4. CONSTRUCT WATER CONTROL FACILITIES (SEDIMENTATION BASINS, DEWATERING STRUCTURES AND RIVER PROTECTION, ETC.) AS REQUIRED.
5. DEMOLISH THE EXISTING BRIDGE CENTER SPAN.
6. CONSTRUCT PIER COFFERDAM AND PIER.
7. DEMOLISH REMAINDER OF EXISTING BRIDGE.
8. CONSTRUCT ABUTMENTS AND PLACE RIPRAP.
9. ERECT THE BRIDGE SUPERSTRUCTURE.
10. COMPLETE THE BRIDGE AND ROADWAY APPROACH WORK.
11. RELOCATE THE GAS MAIN AND OVERHEAD WIRES AS REQUIRED.
12. REMOVE THE TEMPORARY SUPPORT STRUCTURE AND WATER CONTROL FACILITIES.
13. REMOVE TEMPORARY BARRIERS AND OPEN THE BRIDGE.

REVISIONS		
NO.	DATE	BY

TUTELA ENGINEERING ASSOC., INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE RHODE ISLAND

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON RHODE ISLAND

BRIDGE GENERAL PLAN AND ELEVATION

CHECKED BY CHK DATE 8/00 SCALE 1"=10'

5081-01

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	R.I.	BRO-0062(002)		11	36

(R-1)

GENERAL NOTES

1. ALL CONSTRUCTION INDICATED ON THESE PLANS SHALL BE IN ACCORDANCE WITH:

   THE SIXTEENTH EDITION OF THE STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES OF THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, DATED 1996, INCLUDING THE LATEST INTERIM SPECIFICATIONS.

   THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 1997 EDITION.

   THE SPECIFICATIONS ACCOMPANYING THESE PLANS.

   IN CASE OF CONFLICT, THE SPECIAL PROVISIONS OF THE SPECIFICATIONS ACCOMPANYING THESE PLANS SHALL GOVERN.
2. DIMENSIONS, STATIONS, AND ELEVATIONS ARE SHOWN TO THE NEAREST ONE-HUNDREDTH OF A FOOT OR ONE-EIGHTH OF AN INCH.
3. ALL ELEVATIONS ARE REFERENCED TO NGVD 29.
4. COORDINATES USED ON THESE PLANS ARE BASED ON AN ASSUMED GRID SYSTEM.
5. FOR BENCH MARKS AND TIES SEE SHEET 6.
6. ANGLES ARE SHOWN TO THE NEAREST SECOND.
7. ALL FOOTINGS SHALL BE APPROVED BY THE ENGINEER AS TO DIMENSIONS, ELEVATIONS, AND SUITABILITY OF FOUNDATION MATERIAL BEFORE THE PLACING OF CONCRETE.
8. ALL WORKING POINTS ARE SHOWN AT THE CENTERLINE OF BEARING OF ABUTMENTS AND CENTERLINE OF PIER.
9. ALL ABUTMENTS AND WALLS ARE DRAWN LOOKING AT THE EXPOSED FACES.

DESIGN DATA

SPECIFICATIONS:

THE SIXTEENTH EDITION OF THE STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES OF THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO), DATED 1996, INCLUDING THE LATEST INTERIM SPECIFICATIONS.

THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 1997 EDITION.

THE SPECIFICATIONS ACCOMPANYING THESE PLANS.

IN CASE OF CONFLICT, THE SPECIAL PROVISIONS OF THE SPECIFICATIONS ACCOMPANYING THESE PLANS SHALL GOVERN.

DESIGN MANUAL:

THE LATEST EDITION OF THE STATE OF RHODE ISLAND DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL, INCLUDING ALL REVISIONS TO DATE.

DESIGN LOADING:

AASHTO HS25-44 LOADING
RHODE ISLAND LEGAL LOAD
PEDESTRIAN LIVE LOAD - 85 PSF

MATERIALS

REINFORCING STEEL:
AASHTO DESIGNATION M 31 (ASTM DESIGNATION A 615) GRADE 60.

PRESTRESSING STEEL:
UNCOATED SEVEN-WIRE, LOW-RELAXATION STRAND, AASHTO DESIGNATION M 203 (ASTM DESIGNATION A 416) GRADE 270.

CONCRETE:

CLASS X(AE)	f'c = 6000 PSI	(PRESTRESSED BOX BEAMS)
CLASS X(AE)	f'c = 5000 PSI	(ABUTMENT BACKWALLS)
CLASS XX(AE)	f'c = 4000 PSI	(FOOTINGS, WALLS, ABUTMENTS, PIER, PARAPETS, END POSTS AND APPROACH SLABS)
CLASS A(AE)	f'c = 3000 PSI	(TREMIE SEAL)

FOUNDATIONS

MAXIMUM ALLOWABLE SOIL BEARING CAPACITY:

WALLS AND ABUTMENTS ON COMPACTED CRUSHED STONE: 5.0 K.S.F.
PIER ON BEDROCK: 16.0 K.S.F.
STEEL BEARING PILES: 56 TON CAPACITY HP10x42

HYDRAULIC DATA

DRAINAGE AREA: 240.5 SQ. MI.
DESIGN CRITERIA: 100 YEAR FLOOD
FLOW AND VELOCITY: 4255 C.F.S., 5.2 FT./SEC.
DESIGN FLOOD ELEVATION: EL. 32.3

CONCRETE NOTES

1. CLASSES OF CONCRETE SHALL BE X(AE), XX(AE), AND A(AE) AS DESCRIBED IN THE LATEST REVISION OF TABLES (1) & (2) UNDER SECTION 601 "PORTLAND CEMENT CONCRETE" OF THE RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE SPECIAL PROVISIONS OF THE SPECIFICATIONS. SEE INDIVIDUAL BRIDGE QUANTITIES FOR CLASSES OF CONCRETE USED.
2. ALL PORTLAND CEMENT CONCRETE SHALL BE AIR-ENTRAINED PORTLAND CEMENT CONCRETE AS DESIGNATED BY THE SYMBOL (AE) FOLLOWING THE CLASS OF CONCRETE.
3. REINFORCING STEEL SHALL CONFORM TO AASHTO DESIGNATION M 31 (ASTM DESIGNATION A 615) GRADE 60. EPOXY-COATED BARS ARE DISTINGUISHED FROM NON-EPOXY-COATED BARS BY THE SUFFIX E AS INDICATED ON THE PLANS. ALL WIRE TIES AND MISCELLANEOUS HARDWARE USED FOR PLACEMENT OF EPOXY-COATED REINFORCING SHALL ALSO BE EPOXY-COATED.
4. EPOXY COATING FOR REINFORCING STEEL SHALL CONFORM TO AASHTO DESIGNATION M 284 (ASTM DESIGNATION D 3963).
5. WELDED WIRE FABRIC FOR REINFORCING SHALL CONFORM TO AASHTO DESIGNATION M 55 (ASTM DESIGNATION A 185) GRADE 60.
6. UNLESS OTHERWISE SHOWN ON THE PLANS, ALL REINFORCING SHALL BE LAPPED ACCORDING TO THE FOLLOWING CHART. LENGTHS IN PARENTHESES ARE FOR EPOXY-COATED REINFORCING.

MINIMUM REINFORCING LAPS

BAR SIZE	CLASS OF CONCRETE		
	X (AE)	XX (AE)	A (AE)
#4	12" (12")	12" (12")	12" (12")
#5	12" (14")	12" (14")	12" (14")
#6	14" (17")	14" (17")	15" (18")

NOTE:
THE LAPS LISTED ABOVE ARE FOR NON-CRITICAL SPLICES (AASHTO CLASS A SPLICE) WHERE BAR SPACING IS GREATER THAN SIX INCHES. ALL CRITICAL SPLICES SHALL BE AS SHOWN ON THE PLANS.

7. ALL REINFORCING BARS SHALL HAVE THE FOLLOWING MINIMUM COVER:

	MINIMUM COVER
CONCRETE CAST AGAINST OR PERMANENTLY EXPOSED TO EARTH (FOOTINGS, ABUTMENT AND WALL FACES, BACKWALLS)	3"
STIRRUPS AND TIES	1 1/2"
ALL OTHER BARS	2"

8. ALL ANCHOR BOLTS SHALL BE ASTM DESIGNATION A 307, EXCEPT WHERE NOTED OTHERWISE ON THE PLANS, AND SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO DESIGNATION M 232 (ASTM DESIGNATION A 153), OR METALIZED IN A MANNER APPROVED BY THE ENGINEER. SUCH APPROVAL DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO PREVENT CONCRETE STAINS OR DISCOLORATIONS. SWEDGED RODS SHALL BE AASHTO DESIGNATION M 270 (ASTM DESIGNATION A 709) GRADE 36 AND SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO DESIGNATION M 232 (ASTM DESIGNATION A 153).
9. ALL ANCHOR BOLTS SHALL BE SET PRIOR TO PLACEMENT OF CONCRETE, EXCEPT WHERE NOTED OTHERWISE ON THE PLANS, OR OTHERWISE AUTHORIZED BY THE ENGINEER.
10. HORIZONTAL CONSTRUCTION JOINTS OTHER THAN THOSE SHOWN ON THE PLANS WILL NOT BE PERMITTED WITHOUT A WRITTEN REQUEST BY THE CONTRACTOR AND PRIOR AUTHORIZATION BY THE ENGINEER.
11. UNLESS OTHERWISE NOTED ON THE PLANS, ALL EXPOSED NEW CONCRETE SURFACES VISIBLE IN ELEVATION TO ONE FOOT BELOW FINAL GROUND LINE, SHALL RECEIVE A CONCRETE SURFACE RUBBED FINISH IN ACCORDANCE WITH THE R.I. STANDARD SPECIFICATIONS.
12. THE ENTIRE SURFACES OF BEAM SEATS SHALL BE PROVIDED WITH A CONCRETE SURFACE TREATMENT - PROTECTIVE COATING IN ACCORDANCE WITH THE SPECIAL PROVISIONS.
13. ALL EXPOSED EDGES AND RE-ENTRANT CORNERS NOT OTHERWISE DETAILED ON THE PLANS SHALL HAVE A MINIMUM 3/4" CHAMFER.
14. ALL JOINT SEALANT SHALL BE POLYURETHANE-BASED UNLESS OTHERWISE DESIGNATED ON THE PLANS. THE COLOR OF THE JOINT SEALANT, WHERE EXPOSED, SHALL BE NEUTRAL (LIGHT GRAY OR TAN). THE COLOR OF THE SEALANT, WHERE NOT EXPOSED, WILL BE AT THE DISCRETION OF THE CONTRACTOR.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING CONCRETE STAINS OR DISCOLORATIONS DURING CONSTRUCTION UNTIL SUCH TIME AS THE SURFACES ARE APPROVED AND ACCEPTED. ANY CONCRETE STAINS OR DISCOLORATIONS OCCURRING PRIOR TO ACCEPTANCE OF THE SURFACES SHALL BE REMOVED BY THE CONTRACTOR AT HIS OWN EXPENSE.
16. UNLESS OTHERWISE NOTED ON THE PLANS, JOINT FILLER IS TO BE A PREFORMED, NON-EXPANSIVE, NON-EXTRUDING TYPE IN ACCORDANCE WITH SECTION M.02.11.1 OF THE RHODE ISLAND STANDARD SPECIFICATIONS.
17. EMBEDMENT LENGTHS FOR DRILLED AND GROUTED DOWELS SHALL BE IN ACCORDANCE WITH SECTION 819 OF THE R.I. STANDARD SPECIFICATIONS UNLESS OTHERWISE INDICATED ON THE PLANS.
18. IN ACCORDANCE WITH THE RHODE ISLAND STANDARD SPECIFICATIONS, ALL METAL TIES OR ANCHORAGES WHICH ARE REQUIRED FOR CONCRETE FORMWORK SHALL BE SO CONSTRUCTED THAT THEY CAN BE REMOVED TO AT LEAST TWO INCHES FROM THE EXPOSED SURFACE OF THE CONCRETE WITHOUT CAUSING DAMAGE TO THE CONCRETE SURFACE. SNAP-TIES MAY BE USED ONLY IF APPROVED BY THE ENGINEER. IF A CONTRACTOR PROPOSES TO USE THEM HE MUST SUBMIT A CATALOG-CUT AND OTHER NECESSARY INFORMATION TO THE ENGINEER TO DEMONSTRATE THAT THE TIES WILL SNAP OFF FAR ENOUGH INTO THE CONCRETE TO ALLOW FOR PROPER PATCHING. SNAP-TIES MUST PROVIDE ADEQUATE STRENGTH TO SUPPORT THE FORMS. ALL CAVITIES SHALL BE FILLED WITH AN APPROVED CEMENT MORTAR TO THE SATISFACTION OF THE ENGINEER.
19. WHEN SPUD VIBRATORS ARE BEING UTILIZED FOR CONSOLIDATION OF CONCRETE WHERE EPOXY COATED REINFORCING STEEL IS PRESENT, THE SPUDS SHALL BE RUBBER JACKETED TO PREVENT DAMAGE TO THE EPOXY COATING.
20. ALL PORTLAND CEMENT CONCRETE EXCEPT CLASS A(AE) SHALL INCLUDE A CALCIUM NITRITE CORROSION INHIBITOR IN ACCORDANCE WITH SPECIAL PROVISION CODE 601.

PRESTRESSED CONCRETE NOTES

1. THE FABRICATION OF ALL PRESTRESSED ELEMENTS SHALL BE IN ACCORDANCE WITH SECTION 809 OF THE RHODE ISLAND STANDARD SPECIFICATIONS.
2. ANY PRECAST MANUFACTURING PLANT FURNISHING PRECAST PRESTRESSED BRIDGE MEMBERS SHALL BE CERTIFIED BY THE PRECAST PRESTRESSED CONCRETE INSTITUTE PLANT CERTIFICATION PROGRAM. THE CERTIFICATION SHALL BE AS A MINIMUM IN THE B3 CATEGORY. THE MANUFACTURER SHALL SUBMIT PROOF OF CERTIFICATION PRIOR TO THE START OF PRODUCTION.
3. BEAMS ARE DETAILED WITH NOMINAL DIMENSIONS (SUCH AS 35 1/2") AND NOMINAL 1/2" JOINTS BETWEEN UNITS TO ACCOUNT FOR CONSTRUCTION TOLERANCES AND TO PROVIDE FOR AN EXACT OVERALL STRUCTURE WIDTH.
4. LIFTING DEVICES ARE THE RESPONSIBILITY OF THE PRECASTER.
5. THE CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 6000 PSI. THE MINIMUM REQUIRED COMPRESSIVE STRENGTH AT STRESS TRANSFER SHALL NOT BE LESS THAN 4000 PSI.
6. PRESTRESSING STRANDS SHALL CONSIST OF UNCOATED HIGH-STRENGTH, SEVEN-WIRE, LOW-RELAXATION, STRANDS HAVING A NOMINAL DIAMETER OF 1/2" CONFORMING TO THE REQUIREMENTS OF AASHTO STANDARD SPECIFICATION M 203 (ASTM DESIGNATION A 416) GRADE 270.
7. LATERAL TIES SHALL CONSIST OF SEVEN-WIRE, HIGH-STRENGTH, UNCOATED, LOW-RELAXATION PRESTRESSING STRANDS, HAVING A NOMINAL DIAMETER OF 1/2" CONFORMING TO AASHTO DESIGNATION M 203 (ASTM DESIGNATION A 416) GRADE 270. LATERAL TIES SHALL BE INCLUDED IN THE UNIT PRICE FOR PRESTRESSED CONCRETE MEMBERS. CORROSION PROTECTION OF THE LATERAL TIES SHALL BE AS DETAILED ON THE DRAWINGS.
8. NON-PRESTRESSED REINFORCEMENT SHALL CONFORM TO AASHTO DESIGNATION M 31 (ASTM DESIGNATION A 615) GRADE 60 AND SHALL BE EPOXY COATED.
9. ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4-INCH.
10. ANY STRUCTURAL MEMBERS DAMAGED DURING FABRICATION, SHIPPING OR ERECTION, SUCH THAT THEIR STRUCTURAL INTEGRITY IS COMPROMISED, SHALL BE REJECTED AND REPLACED AT THE CONTRACTOR'S OWN EXPENSE. THE ENGINEER SHALL BE THE SOLE JUDGE IN DETERMINING THE STRUCTURAL INTEGRITY OF DAMAGED PRESTRESSED MEMBERS.
11. DURING HANDLING, THE BEAMS MUST BE MAINTAINED IN AN UPRIGHT POSITION AT ALL TIMES AND MUST BE PICKED UP ONLY BY MEANS OF APPROVED LIFTING DEVICES AT THEIR APPROVED SUPPORT POINTS.
12. DIMENSIONAL TOLERANCES SHALL NOT EXCEED THOSE RECOMMENDED IN THE LATEST EDITION OF THE PCI MANUAL FOR QUALITY CONTROL FOR PLANTS AND OF PRECAST PRESTRESSED CONCRETE PRODUCTS.
13. THE EXTERIOR FACE OF FASCIA BEAMS SHALL RECEIVE A RUBBED FINISH (IN FIELD OR IN THE PLANT) IN ACCORDANCE WITH THE RHODE ISLAND STANDARD SPECIFICATIONS. THE COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PRESTRESSED CONCRETE MEMBERS.
14. ALL SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER IN SUFFICIENT TIME TO PERMIT CAREFUL CHECKING.
15. ALL PRESTRESSING STEEL AND EPOXY-COATED REINFORCING BARS SHALL BE SECURELY TIED TO PREVENT DISLOCATION. TIES USED FOR THE EPOXY-COATED REINFORCING STEEL SHALL ALSO BE COATED.
16. THE DETAILS OF ALL INSERTS, ANCHORS, AND ANY OTHER ITEMS REQUIRED TO BE CAST INTO THE PRECAST PRESTRESSED UNITS (WHETHER DETAILED ON THE CONTRACT DRAWINGS OR PROVIDED FOR THE CONTRACTOR'S CONVENIENCE) SHALL BE SHOWN ON THE SHOP DRAWINGS. PRECAST UNITS SHALL NOT BE FIRED OR DRILLED INTO FOR ATTACHMENT PURPOSES. ALL HARDWARE SHALL BE GALVANIZED.
17. THE NON-SHRINK GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 10,000 PSI AFTER 28 DAYS AS DETERMINED BY TESTING UNDER ASTM DESIGNATION C-109 AND SHALL NOT EXHIBIT ANY MEASURABLE DECREASE IN VOLUME AFTER CURING. THE CONTRACTOR SHALL STRICTLY FOLLOW THE MANUFACTURER'S RECOMMENDATIONS. NO TRAFFIC OR EQUIPMENT SHALL BE PERMITTED ON THE STRUCTURE UNTIL THE GROUT HAS CURED FOR AT LEAST 72 HOURS OR AS DIRECTED BY THE ENGINEER. GROUTING SHALL BE PERFORMED IN ACCORDANCE WITH THE DETAILS SHOWN.
18. THE BACKWALLS SHALL BE POURED AFTER THE BEAMS ARE IN PLACE.
19. ENDS OF BEAMS SHALL BE VERTICAL AFTER ALL DEAD LOADS HAVE BEEN PLACED.
20. ALLOWANCES FOR FABRICATION TOLERANCES SHALL BE PERMITTED IN ACCORDANCE WITH AASHTO AND PCI.

DEWATERING

1. DEWATERING BASINS, R.I. STANDARD 9.7.0, SHALL BE USED FOR ALL DEWATERING OPERATIONS. THE LOCATION AND DISCHARGE SHALL BE IN ACCORDANCE WITH ALL APPLICABLE PERMIT REQUIREMENTS FROM THE RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGENENT, OFFICE OF WATER RESOURCES\PERMITTING SECTION, OR ANY OTHER REGULATORY AGENCY HAVING JURISDICTION.
2. IT MAY BE POSSIBLE TO LOWER THE WATER SURFACE OF THE PAWCATUCK RIVER DURING THE PERIOD BETWEEN JULY 15 AND OCTOBER 31. THE CONTRACTOR SHALL MAKE HIS OWN INVESTIGATIONS AS TO THE EXTENT BY WHICH LOWERING THE WATER LEVEL MAY BE OF BENEFIT. SEE PARAGRAPH 10, PAGE GS-9 OF THE CONTRACT DOCUMENTS FOR DETAILS.

PROTECTION OF PAWCATUCK RIVER

1. NO HEAVY CONSTRUCTION EQUIPMENT WILL BE ALLOWED TO OCCUPY THE RIVER OR RIVER BED AT ANY TIME.
2. IT WILL BE THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT NO DEBRIS FALLS INTO ANY WATERCOURSE DURING WORK ON THE BRIDGE. THE USE OF SUSPENDED NETS, TARPS OR OTHER SUITABLE SHIELDS TO CATCH FALLING DEBRIS WILL BE EMPLOYED. ANY MATERIAL WHICH DOES ENTER ANY WATERCOURSE WILL BE REMOVED BY THE CONTRACTOR, USING HAND METHODS OR ROPES AND/OR CHAINS ATTACHED TO EQUIPMENT WHICH CAN BE OPERATED FROM OUTSIDE THE WATERWAY OR WETLAND AREA. PAYMENT FOR THIS WORK WILL BE MADE UNDER ITEM CODE 900.9902, "PROTECTION OF THE PAWCATUCK RIVER".

RIPRAP NOTES

1. STONES FOR DUMPED RIPRAP SHALL BE PLACED ON THE PREPARED SLOPE OR AREA IN A MANNER WHICH WILL PRODUCE AN EVENLY GRADED MASS OF STONE WITH THE MINIMUM PRACTICAL PERCENTAGE OF VOIDS. THE ENTIRE MASS SHALL BE PLACED SO AS TO CONFORM TO THE LINES, GRADES AND THICKNESSES SHOWN HEREIN.
2. STONE FOR DUMPED RIPRAP AND BEDDING FOR RIPRAP SHALL MEET THE QUALITY REQUIREMENTS OF SUBSECTION M10.03 OF THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, AND SHALL CONFORM TO THE GRADATION REQUIRMENTS OF THE NATIONAL STONE ASSOCIATION MODIFIED NSA NO. R-5 FOR DUMPED RIPRAP AND NO. FS-2 FOR FILTER (BEDDING) STONE.

OFFICE OF ENVIRONMENTAL PROGRAMS - RIDOT

1. THIS PROJECT IS BEING CONSTRUCTED IN A SENSITIVE HISTORICAL AND ARCHAEOLOGICAL AREA. THE CONTRACTOR'S ATTENTION IS DIRECTED TO PARAGRAPH 7, PAGE GS-9 CONCERNING ANY PROJECT LIMIT CHANGES AND COORDINATION OFFICE OF ENVIRONMENTAL PROGRAMS, RIDOT FOR ABUTMENT EXCAVATION.

REVISIONS		
NO.	DATE	BY
1	8/29/00	WJM

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON RHODE ISLAND

GENERAL NOTES

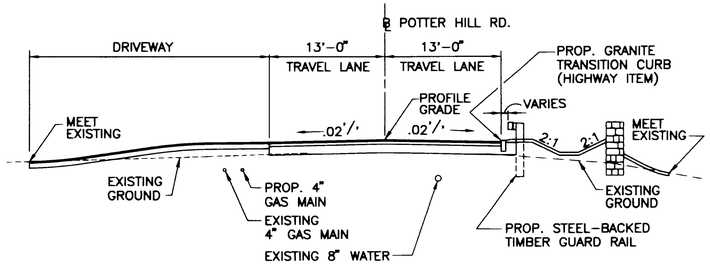
CHECKED BY CHK DATE 8/00 SCALE NONE

TUTELA ENGINEERING ASSOC., INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE RHODE ISLAND

5012-01

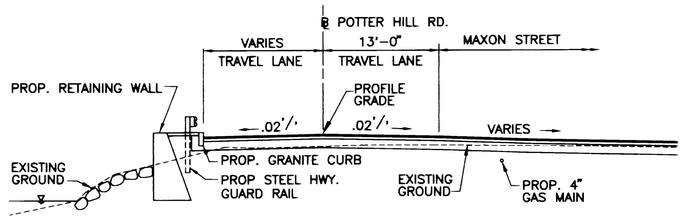
A:\5012-01 Wed Aug 30 08:37:39 2000 TUTELA ENGINEERING ASSOCIATES, INC. (16-501)

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	RI	BRO-0062(002)		12	36



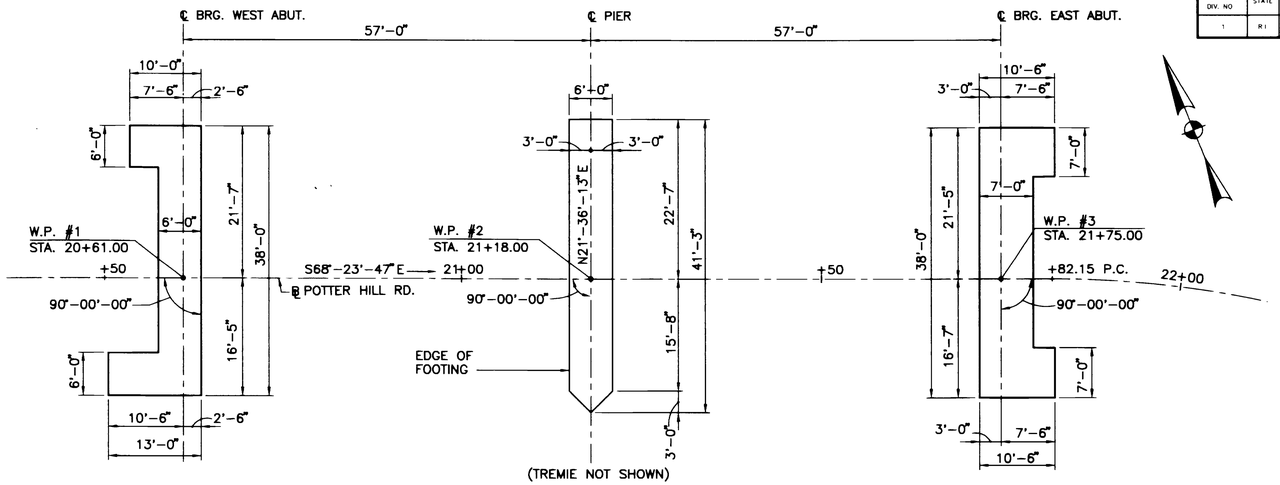
WESTERLY BRIDGE APPROACH SECTION

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



EASTERLY BRIDGE APPROACH SECTION

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

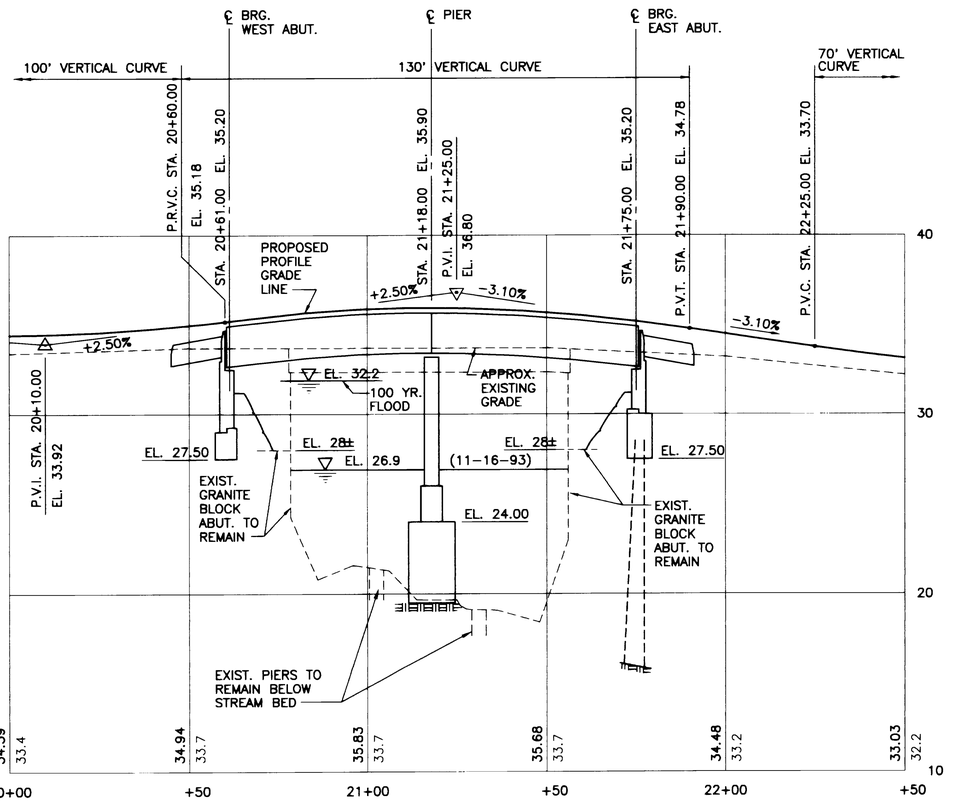


(TREMIE NOT SHOWN)

FOOTING LOCATION PLAN

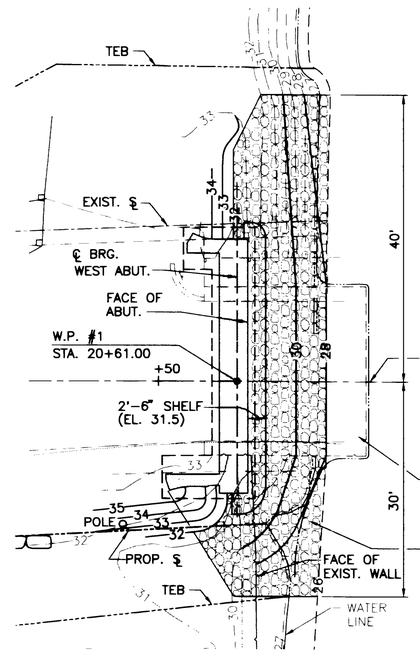
SCALE: 1"=10'

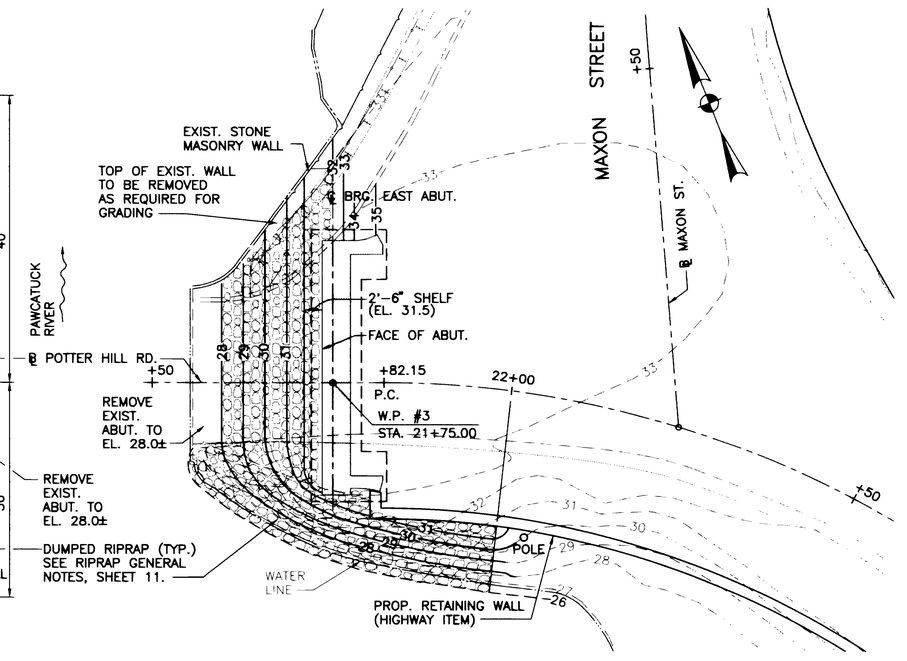
(PILES NOT SHOWN)



PROFILE - POTTER HILL RD.

SCALE: 1"=20' HOR.
1"=4' VERT.





BRIDGE GRADING PLAN (PIER NOT SHOWN)

SCALE: 1"=10'

REVISIONS		
NO.	DATE	BY

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON RHODE ISLAND

PROFILE, FOUNDATION PLAN AND BRIDGE GRADING PLAN

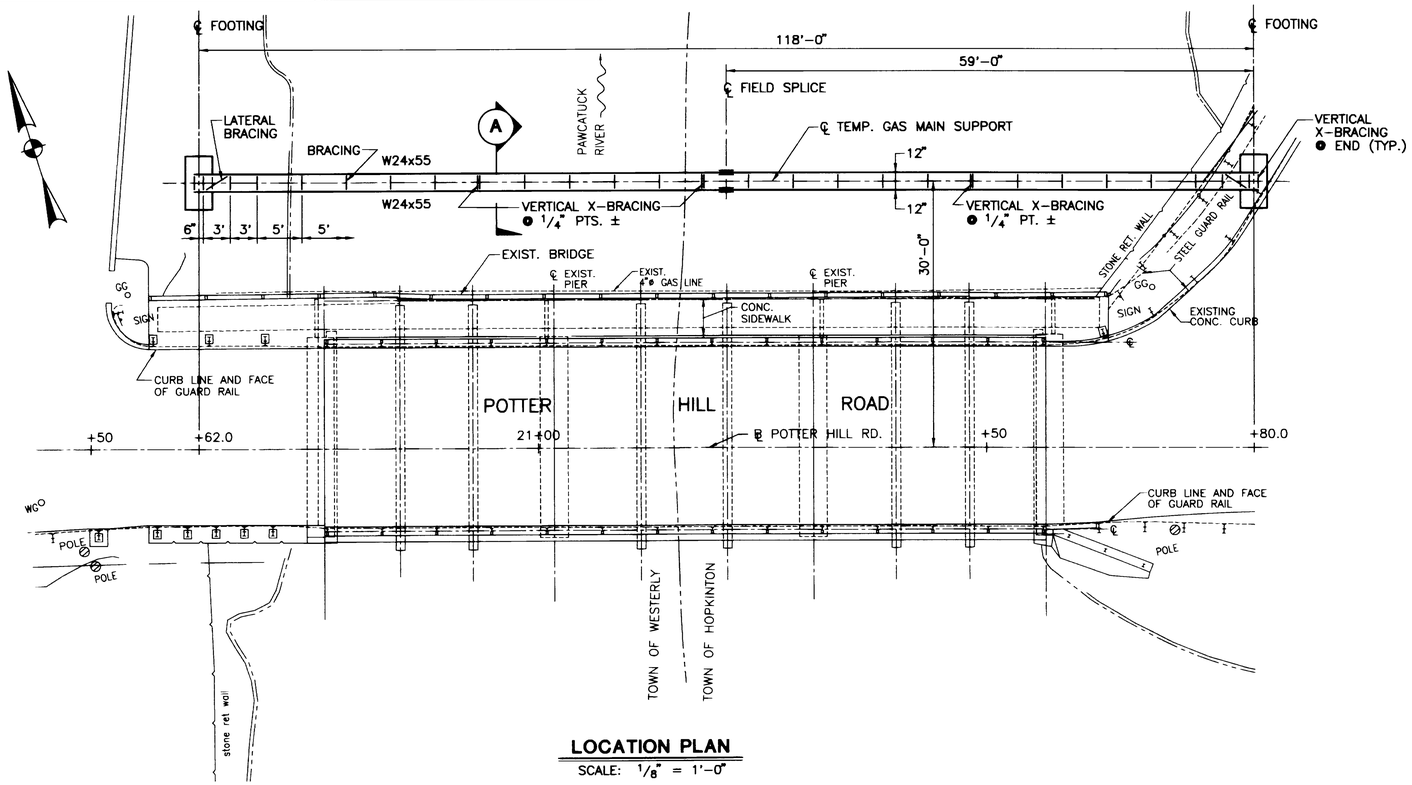
CHECKED BY CHK DATE 8/00 SCALE AS NOTED

TUTELA ENGINEERING ASSOC., INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE RHODE ISLAND

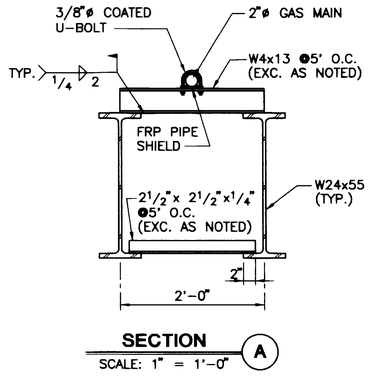
601-22

C:\DWGS\POTTER\601-22 Mon Aug 7 11:10:43 2000 TUTELA ENGINEERING ASSOCIATES, INC. (T2-50)

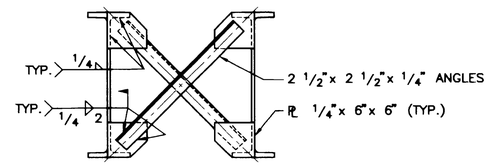
FED. ROAD DIV. NO	STATE	FEDERAL AID PROJECT NO	FISCAL YEAR	SHEET NO	TOTAL SHEET
1	RI	BRO-0052(002)		13	36



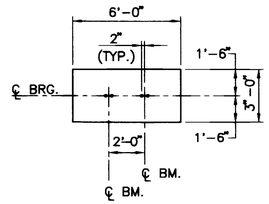
LOCATION PLAN
SCALE: 1/8" = 1'-0"



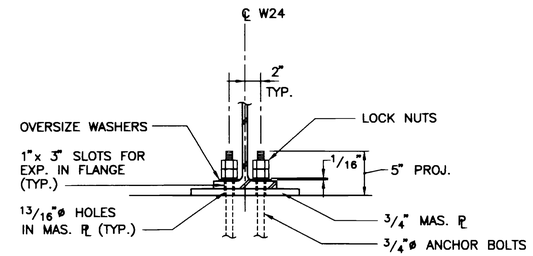
SECTION A
SCALE: 1" = 1'-0"



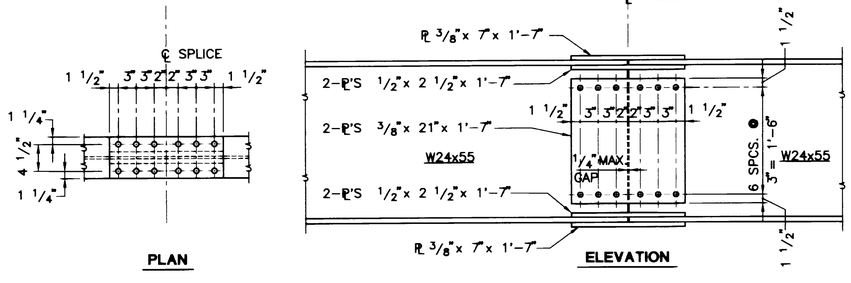
X-BRACING AT END OF BEAMS
SCALE: 1" = 1'-0"
(USE SIMILAR DETAIL ● 1/4 PT. VERTICAL BRACING)



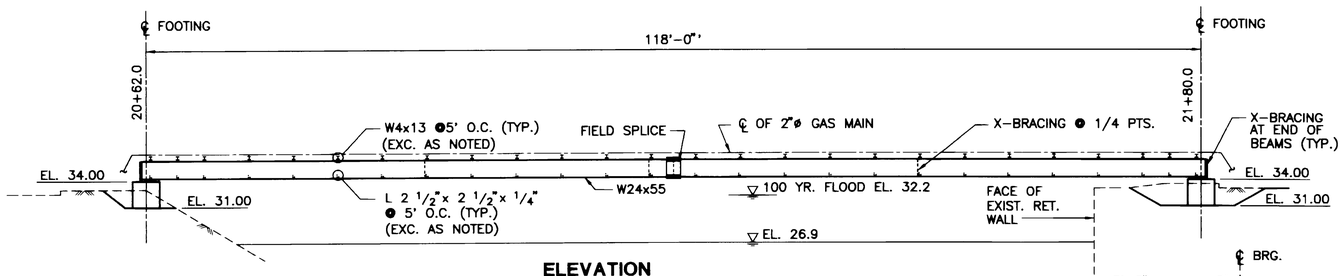
FOOTING PLAN
SCALE: 1/4" = 1'-0"



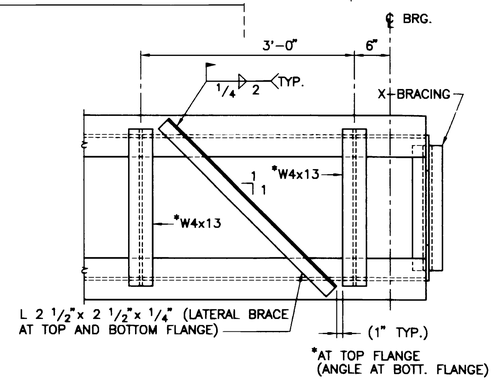
BEARING DETAILS
SCALE: 1 1/2" = 1'-0"



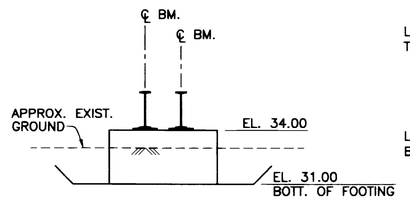
FIELD SPLICE DETAILS
SCALE: 1" = 1'-0"



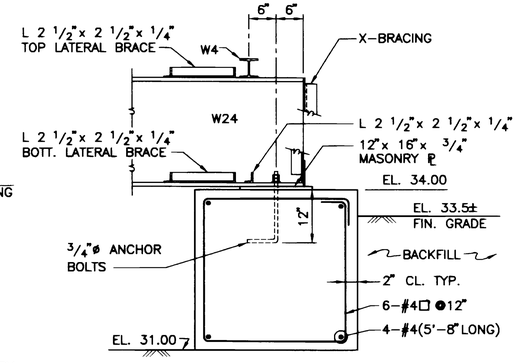
ELEVATION
SCALE: 1/8" = 1'-0"



LATERAL BRACING AT END BAYS
SCALE: 1" = 1'-0"



FOOTING ELEVATION
SCALE: 1/4" = 1'-0"



TYPICAL SECTION AT FOOTING
SCALE: 3/4" = 1'-0"

NOTES:

1. SEE SPECIAL PROVISIONS CODE 802.9901, TEMPORARY GAS MAIN SUPPORT SYSTEM.**
2. ALL CONCRETE SHALL BE CLASS XX(AE), f'c = 4,000 psi.
3. ALL STEEL SHALL BE NEW GRADE 36 STEEL (AASHTO M270)(ASTM A709).
4. ALL BOLTS SHALL BE 3/4"ø A325N (42 IN WEB, 12 EA. FLANGE).
5. BEAMS TO BE ERECTED WITH NATURAL CAMBER UP.

**(THE CONTRACTOR MAY SUBMIT AN ALTERNATE SYSTEM FOR APPROVAL)

REVISIONS		
NO.	DATE	BY

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON RHODE ISLAND

TEMPORARY GAS MAIN SUPPORT STRUCTURE

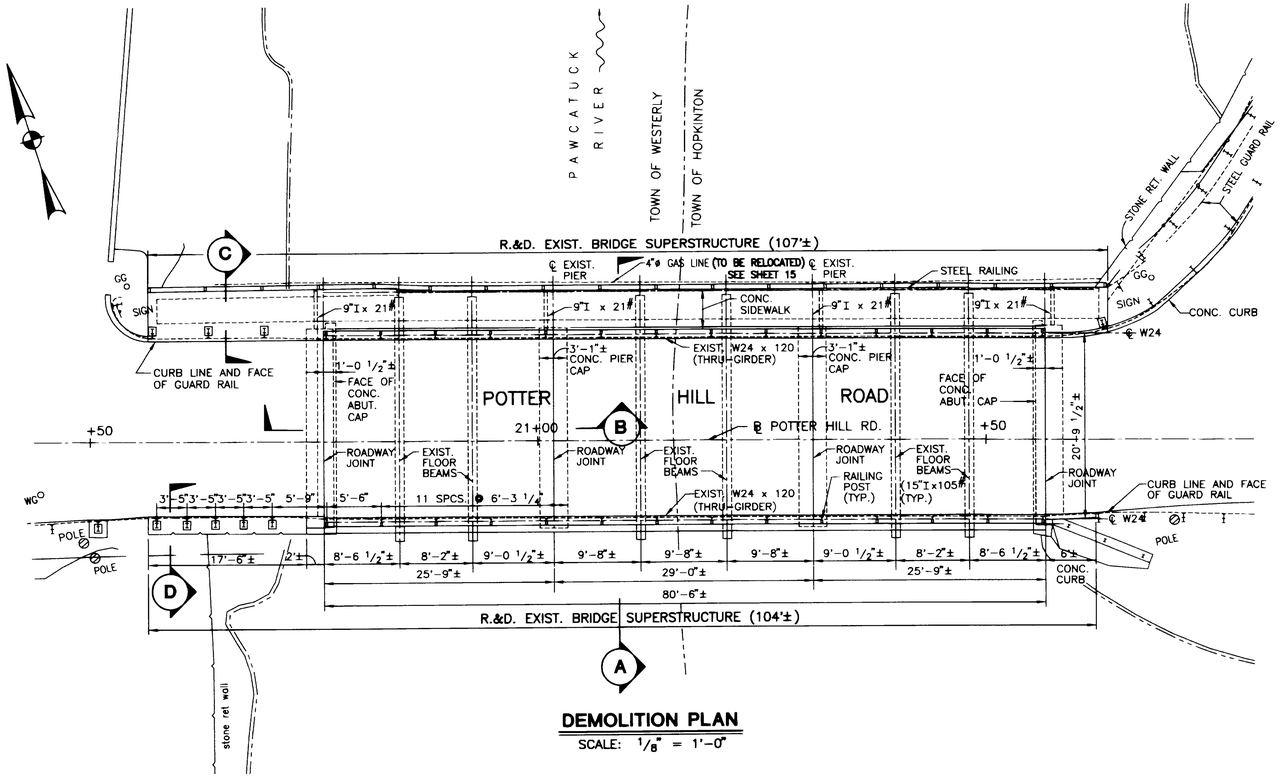
CHECKED BY CHK DATE 8/00 SCALE AS SHOWN

TUTELA ENGINEERING ASSOC., INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE RHODE ISLAND

C:\DWGS\POTTER\5061-02 Mon Aug 7 11:14:42 2000 TUTELA ENGINEERING ASSOCIATES, INC (12-50)

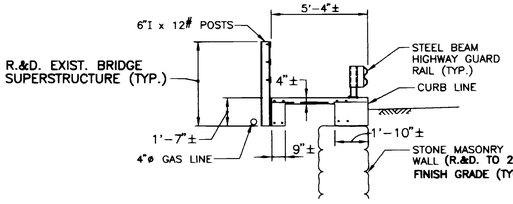
5061-02

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	RI	BRO-0062(002)		14	36



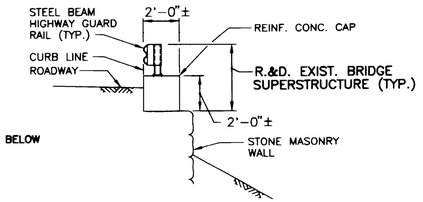
DEMOLITION PLAN

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



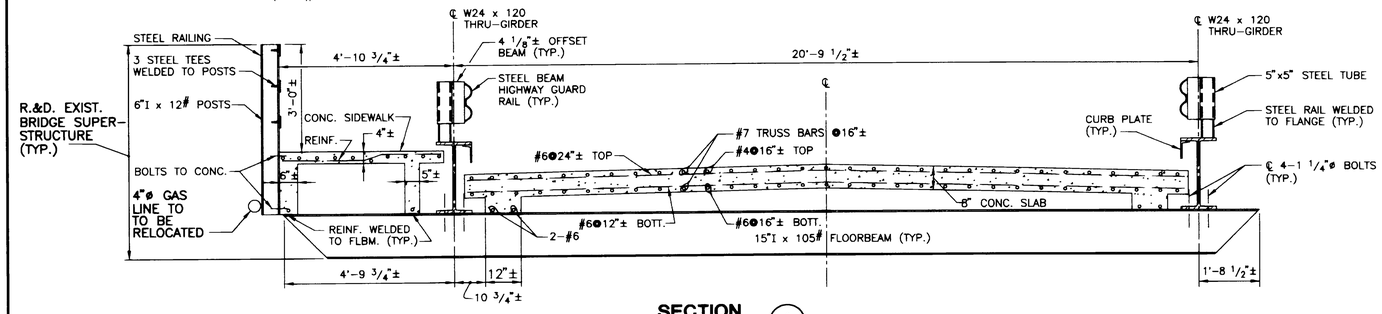
SECTION C

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



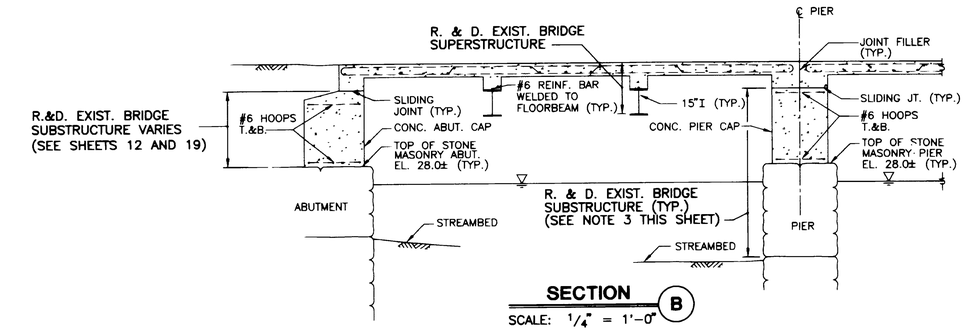
SECTION D

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



SECTION A

SCALE: 1/2" = 1'-0"



SECTION B

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

APPROXIMATE BRIDGE DEMOLITION QUANTITIES

SUPERSTRUCTURE:

STEEL BRIDGE RAILING	105 L.F.
HIGHWAY GUARDRAIL	200 L.F.
REINF. CONC. SIDEWALK SLAB AND BEAM	12 C.Y.
REINF. CONC. ROADWAY SLAB AND BEAM	54 C.Y.
STRUCTURAL STEEL	39,000 LBS

SUBSTRUCTURE:

REINF. CONC. ABUTMENT AND PIER CAPS	42 C.Y.
GRANITE STONE MASONRY	60 C.Y.

NOTES:

1. ALL DIMENSIONS SHOWN FOR THE EXISTING STRUCTURE ARE APPROXIMATE ONLY. ACTUAL DIMENSIONS MAY VARY.
2. THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS AND DIMENSIONS PRIOR TO BIDDING THE PROJECT. R.I.D.O.T. ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. THE QUANTITIES AND DIMENSIONS ARE PROVIDED FOR INFORMATIONAL PURPOSES .
3. THE EXISTING GRANITE BLOCK PIERS SHALL BE REMOVED SO THAT NO GRANITE BLOCK PROJECTS MORE THAN 6 INCHES ABOVE THE RIVER BED. DIVERS SHALL DETERMINE PROPER LIMITS OF PIER REMOVAL, PAYMENT FOR UNDERWATER INSPECTION SHALL BE MADE UNDER ITEM CODE 808.9901.

REVISIONS		
NO.	DATE	BY

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON RHODE ISLAND

DEMOLITION PLAN AND SECTIONS

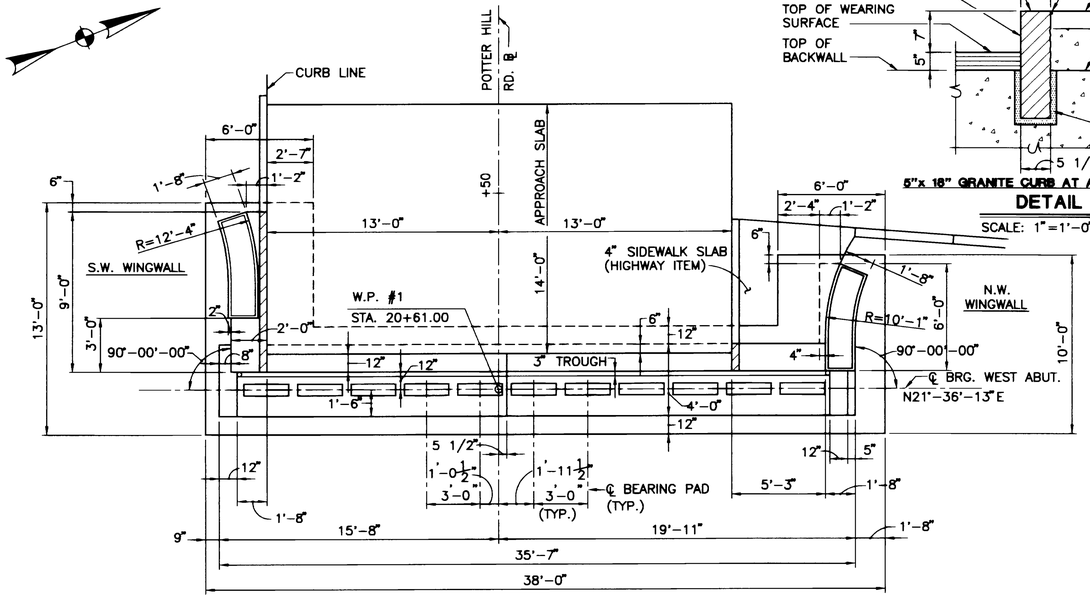
CHECKED BY CHK DATE 8/00 SCALE AS SHOWN

TUTELA ENGINEERING ASSOC., INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE RHODE ISLAND

C:\DWGS\POTTER\5034-01 Tue Aug 8 14:47:01 2000 TUTELA ENGINEERING ASSOCIATES, INC. (12-50)

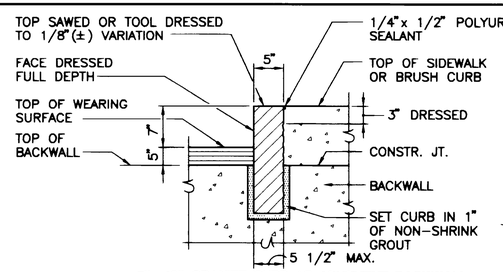
5034-01

FED ROAD DIV NO	STATE	FEDERAL AID PROJECT NO	FISCAL YEAR	SHEET NO	TOTAL SHEET
1	RI	BRO-0052(002)		15	36



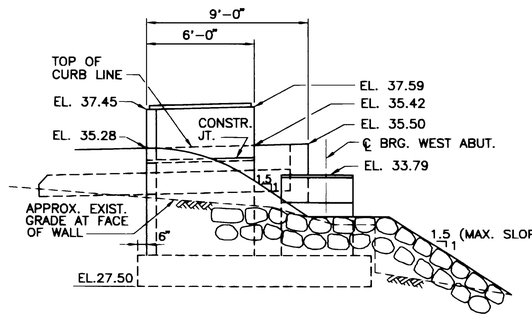
WEST ABUTMENT PLAN

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



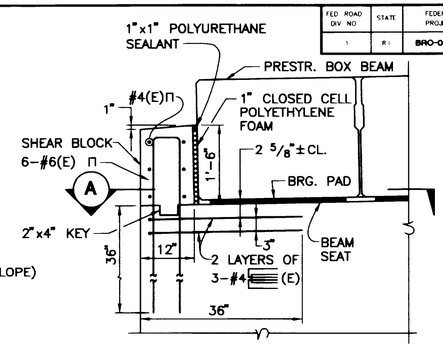
DETAIL 1 (1/18)

SCALE: 1"=1'-0"



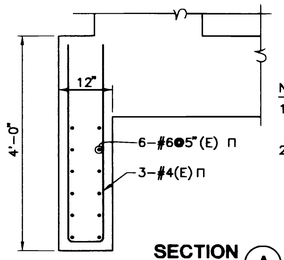
SOUTHWEST WINGWALL ELEVATION

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



ABUTMENT SHEAR BLOCK DETAIL

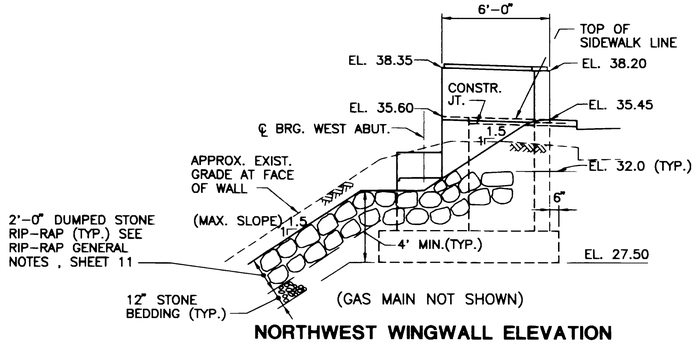
SCALE: 3/4"=1'-0"



NOTES:
1. POUR SHEAR BLOCKS AFTER BEAMS ARE IN PLACE.
2. BACKWALL REINFORCEMENT NOT SHOWN.

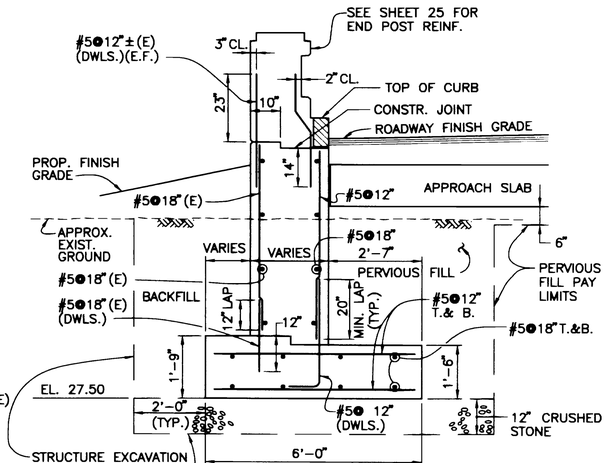
SECTION A

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



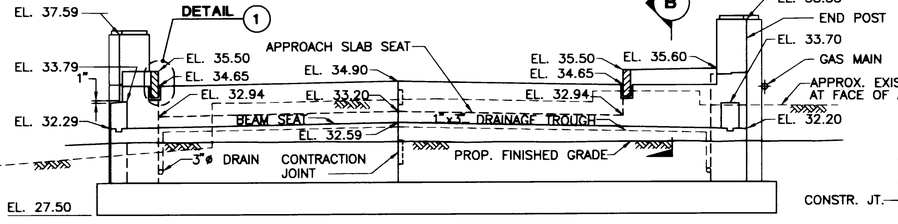
NORTHWEST WINGWALL ELEVATION

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



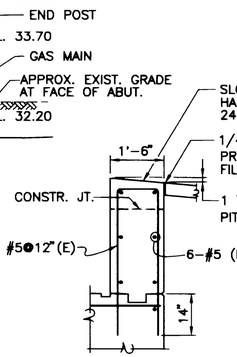
SOUTHWEST WINGWALL SECTION

SCALE: 1/2"=1'-0"



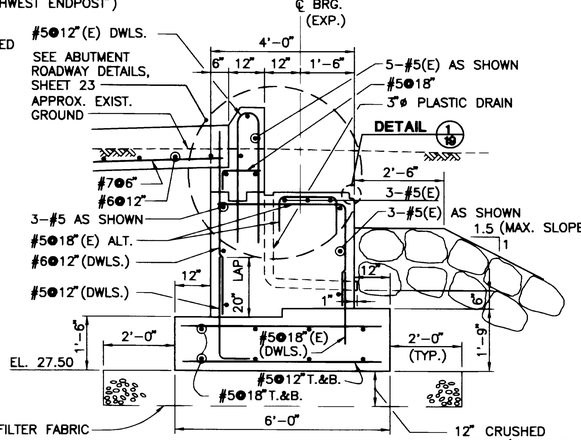
WEST ABUTMENT ELEVATION

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



SECTION B

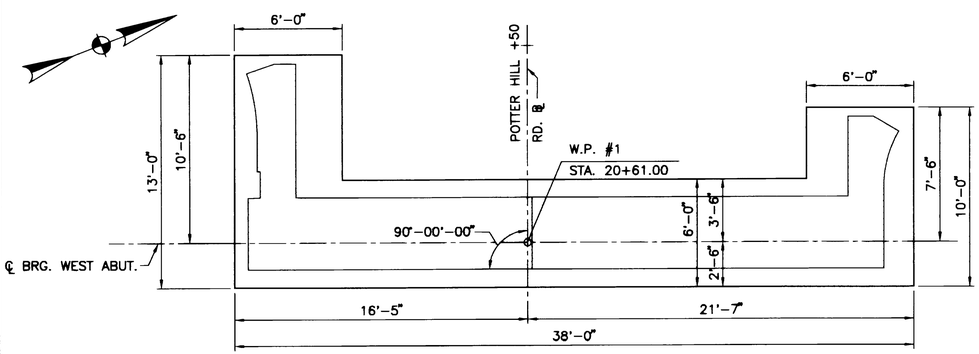
SCALE: 1/2"=1'-0"



TYPICAL ABUTMENT SECTION

SCALE: 1/2"=1'-0"

NOTES:
1. BACKWALL ELEVATIONS ARE GIVEN AT FRONT FACE OF BACKWALL AND ARE AT TOP OF CONCRETE.
2. TOP OF BACKWALL ELEVATION SHALL FOLLOW TOP OF BOX BEAM ELEVATION.
3. SEE SHEET 19 FOR ABUTMENT EXCAVATION PAY LIMITS AND MISCELLANEOUS DETAILS.
4. MAX. DESIGN SOIL PRESSURE = 4.2 K.S.F.



WEST ABUTMENT FOOTING PLAN

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

REVISIONS		
NO.	DATE	BY

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON RHODE ISLAND

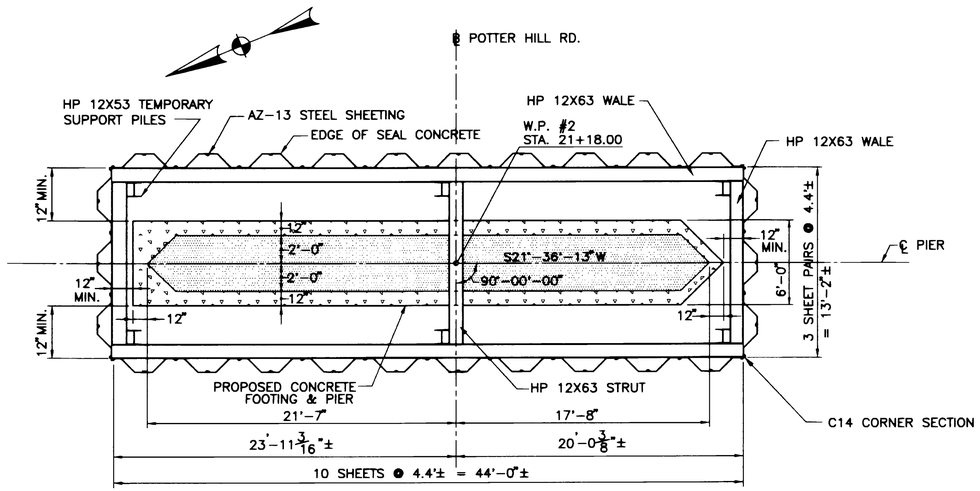
WEST ABUTMENT PLAN & ELEVATION

CHECKED BY CHK DATE 8/00 SCALE AS NOTED

TUTELA ENGINEERING ASSOC., INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE RHODE ISLAND

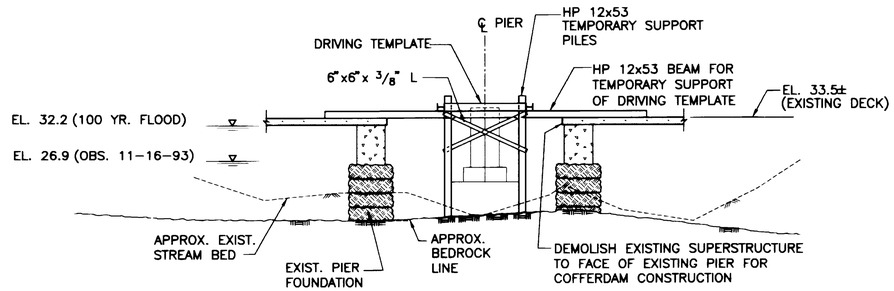
5076-01

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	RI	BRO-0062(002)		16	36



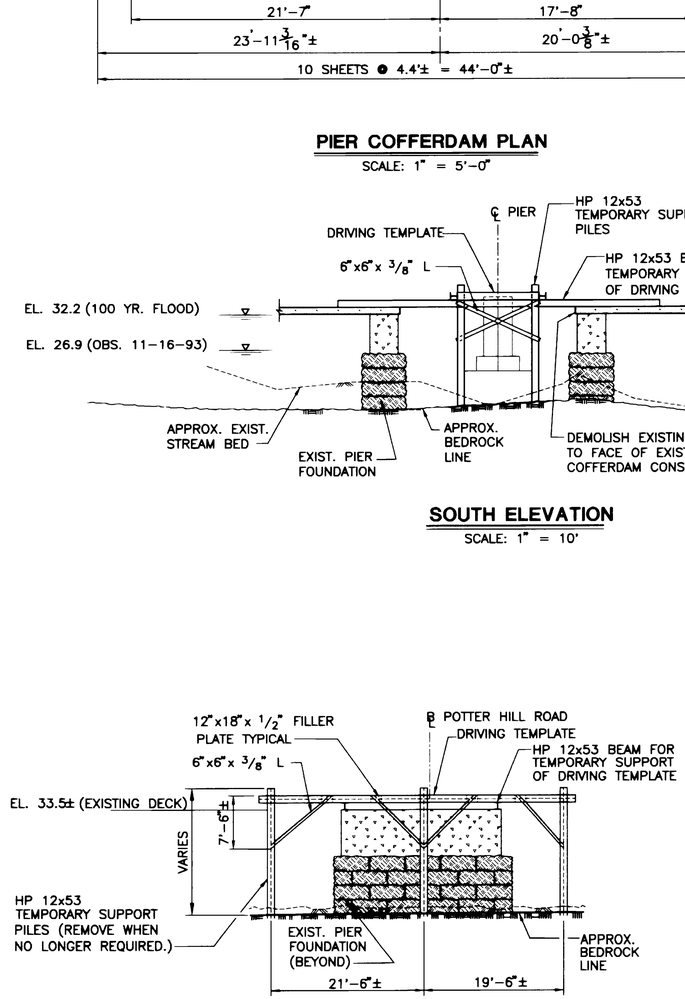
PIER COFFERDAM PLAN

SCALE: 1" = 5'-0"



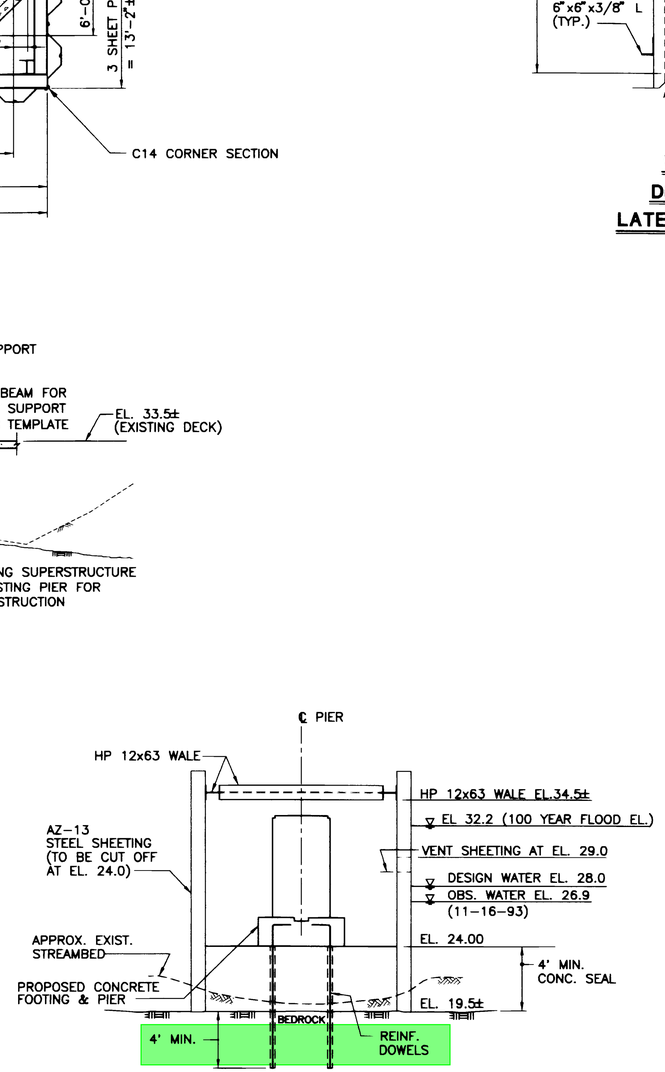
SOUTH ELEVATION

SCALE: 1" = 10'



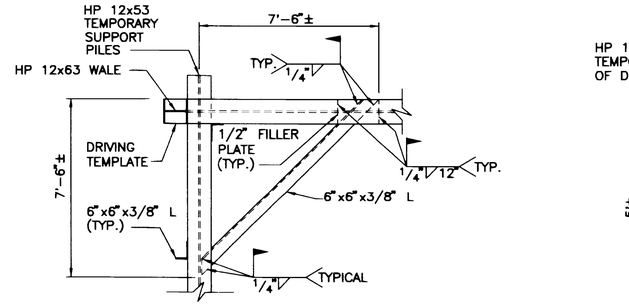
WEST ELEVATION

SCALE: 1" = 10'



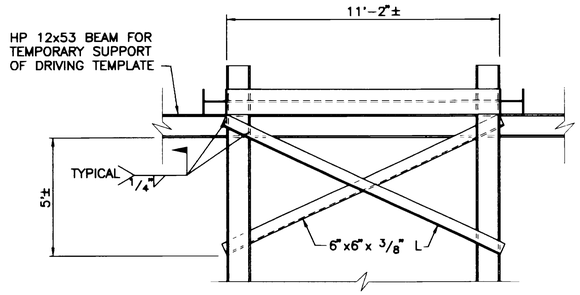
TYPICAL COFFERDAM SECTION

SCALE: 1" = 5'-0"



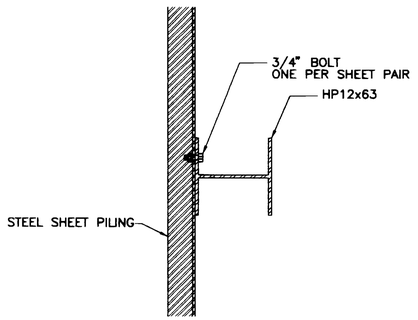
WEST ELEVATION DRIVING TEMPLATE LATERAL BRACING DETAIL

SCALE: 1"=3'



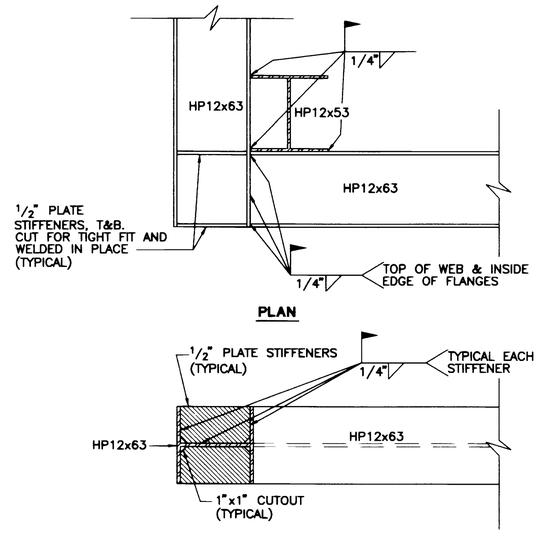
SOUTH ELEVATION DRIVING TEMPLATE LATERAL BRACING DETAIL

SCALE: 1"=3'



WALE BOLT DETAIL

SCALE: 3/32" = 1"



WALE CORNER DETAILS

SCALE: 3/32" = 1'

NOTES:

1. SEE SPECIAL PROVISIONS CODE 203.9903 FOR COFFERDAM CONSTRUCTION.
2. UNDERWATER INSPECTION SHALL BE REQUIRED AS SPECIFIED IN SPECIAL PROVISION CODE 808.9901.
3. DEWATERING THE COFFERDAM SHALL BE PAID FOR UNDER CODE 203.0530.

REVISIONS		
NO.	DATE	BY

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON RHODE ISLAND

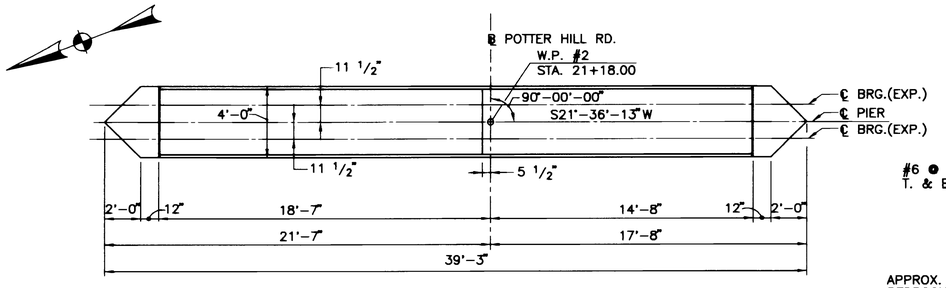
PIER COFFERDAM DETAILS

CHECKED BY CHK DATE 8/00 SCALE AS NOTED

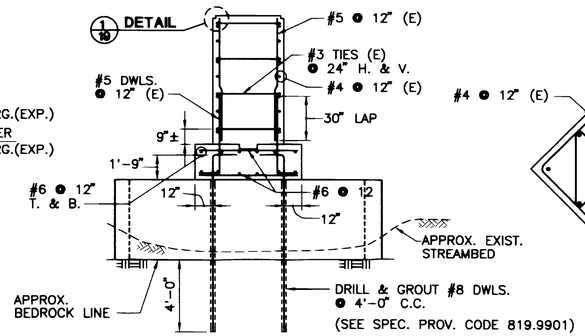
TUTELA ENGINEERING ASSOC., INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE RHODE ISLAND

5085-01

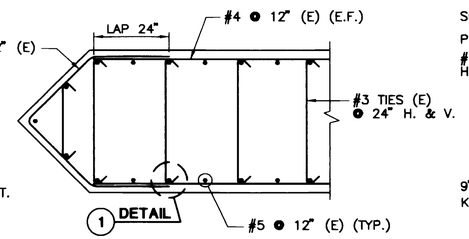
FED. ROAD DIV NO	STATE	FEDERAL AID PROJECT NO	FISCAL YEAR	SHEET NO	TOTAL SHEET
1	R.I.	BRO-0052(002)		17	36



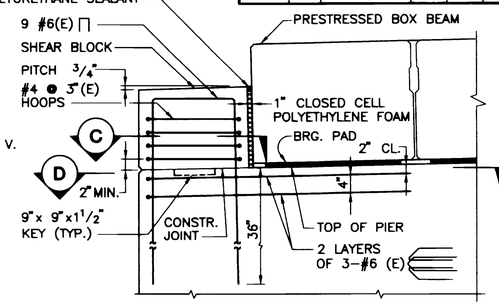
PIER CAP PLAN
SCALE: 1/4" = 1'-0"



SECTION (A)
SCALE: 1/4" = 1'-0"

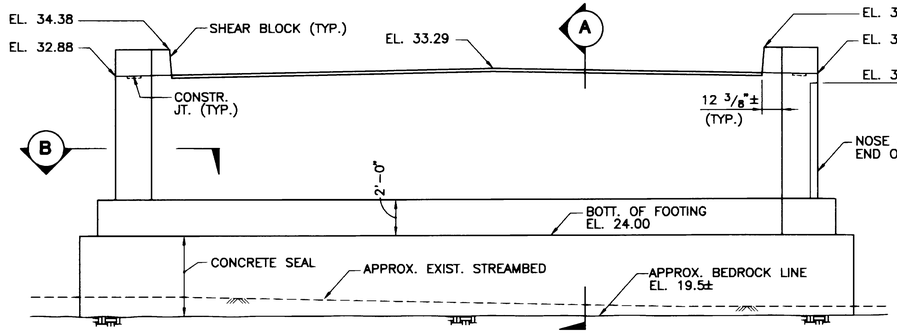


SECTION (B)
SCALE: 1/2" = 1'-0"

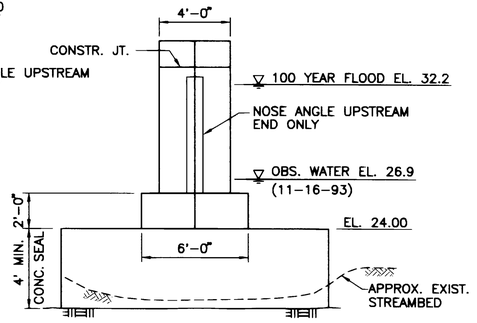


SHEAR BLOCK DETAIL AT PIER
SCALE: 3/4" = 1'-0"

NOTES:
1. POUR SHEAR BLOCKS AFTER BEAMS ARE IN PLACE.
2. ALL PIER REINFORCING NOT SHOWN.

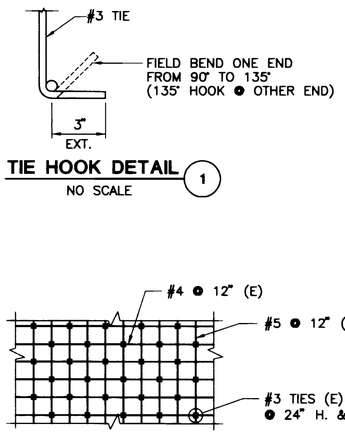


PIER ELEVATION
SCALE: 1/4" = 1'-0"

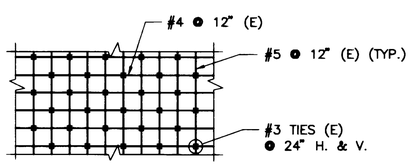


(UPSTREAM END SHOWN)

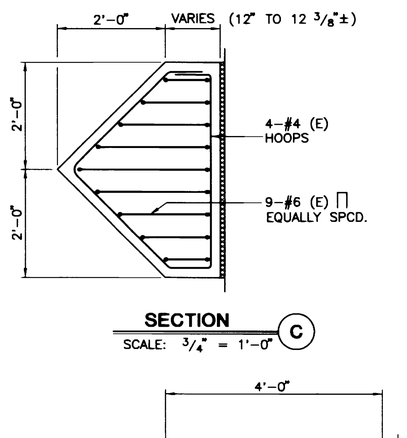
PIER END ELEVATION
SCALE: 1/4" = 1'-0"



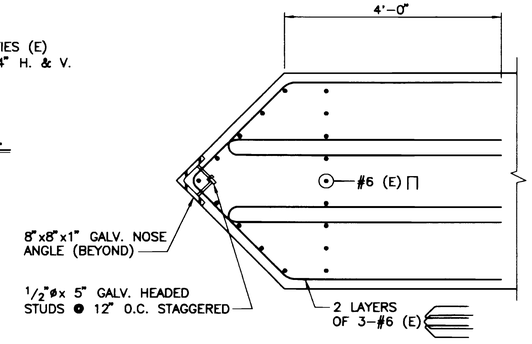
TIE HOOK DETAIL (1)
NO SCALE



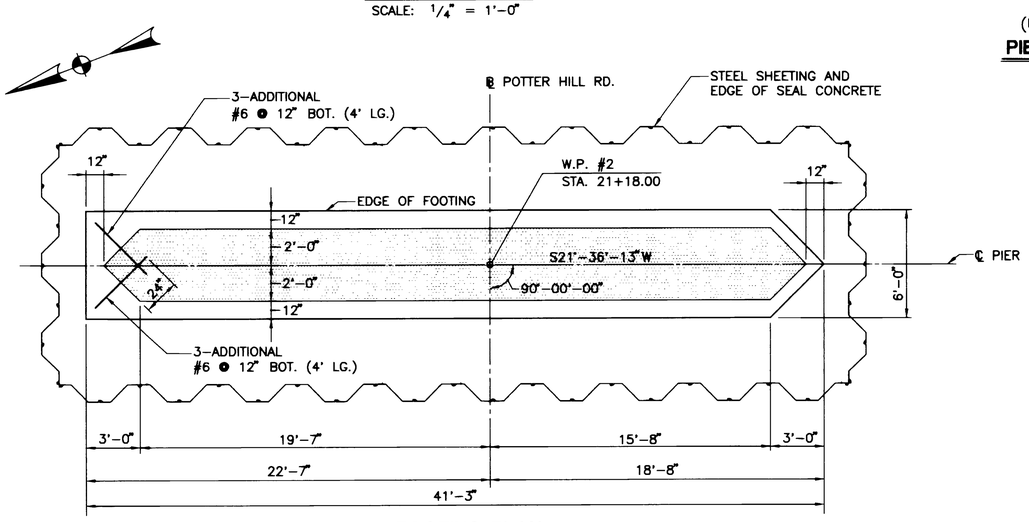
PIER SHAFT REINFORCEMENT DETAIL
SCALE: 1/4" = 1'-0"



SECTION (C)
SCALE: 3/4" = 1'-0"



SECTION (D)
SCALE: 3/4" = 1'-0"



PIER FOOTING PLAN
SCALE: 1/4" = 1'-0"

NOTES:
1. SEE SHEET 19 FOR LIMITS OF RUBBED FINISH.
2. SEE SHEET 23 FOR LIMITS OF CONCRETE PROTECTIVE COATING.
3. INCLUDE COST OF PIER NOSE ANGLE IN CODE 808.0507.

REVISIONS		
NO.	DATE	BY

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON — RHODE ISLAND

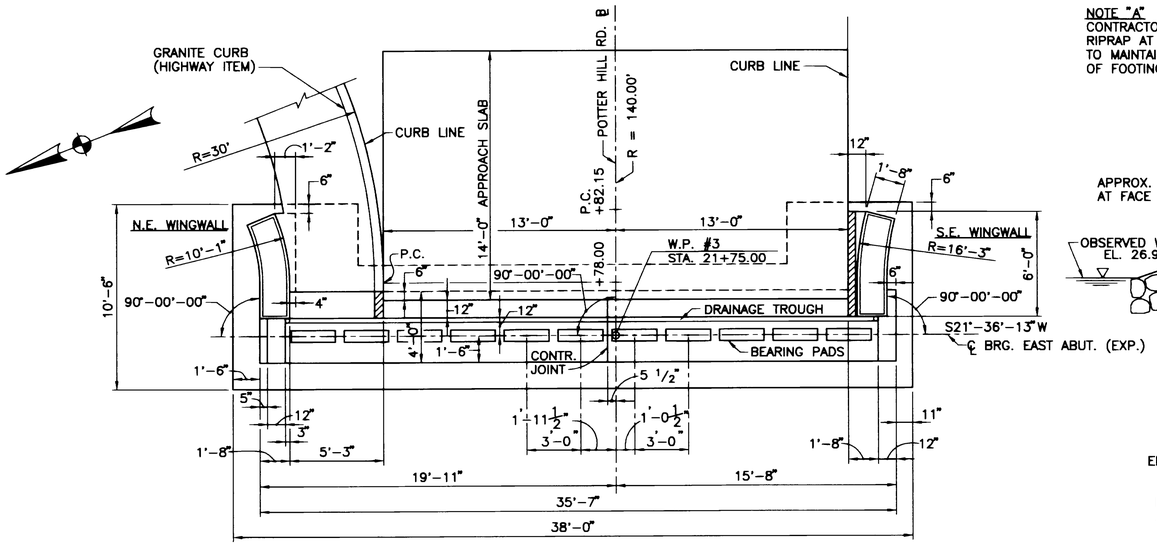
PIER PLAN AND ELEVATION

CHECKED BY CHK DATE 8/00 SCALE AS NOTED

TUTELA ENGINEERING ASSOC., INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE — RHODE ISLAND

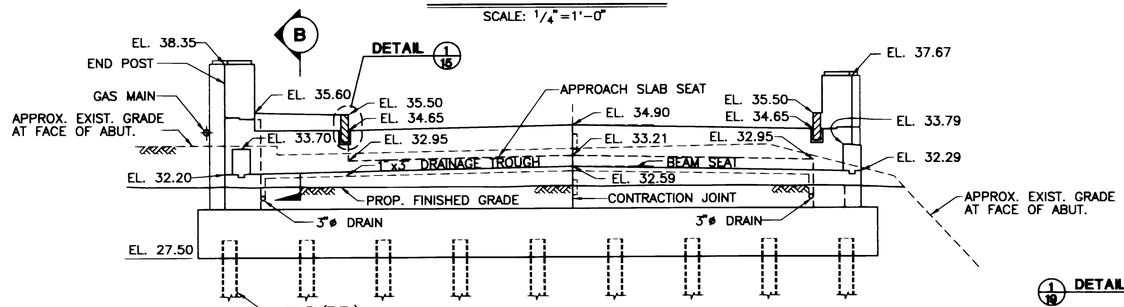
C:\DWGS\POTTER\5022-01 Mon Aug 7 14:25:56 2000 TUTELA ENGINEERING ASSOCIATES, INC. (12-50)
5022-01

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	RI	BRO-0052(002)		18	36



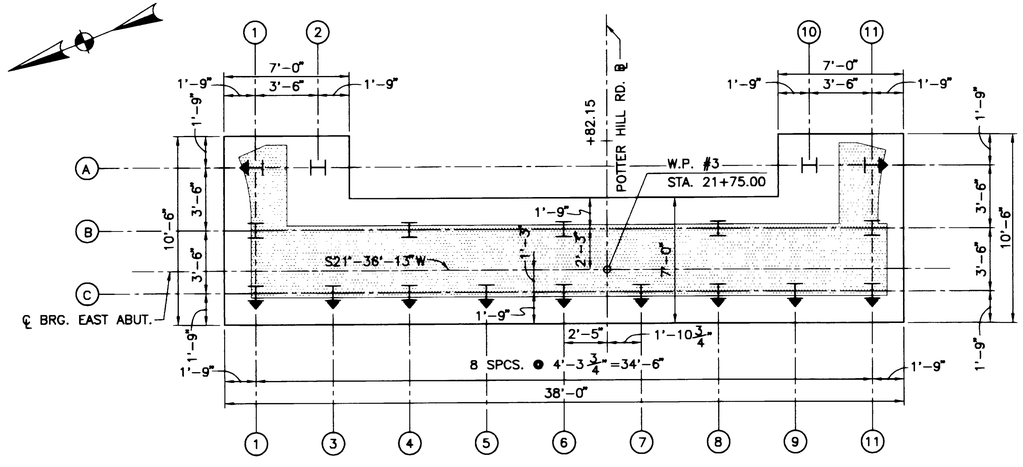
EAST ABUTMENT PLAN

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



EAST ABUTMENT ELEVATION

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

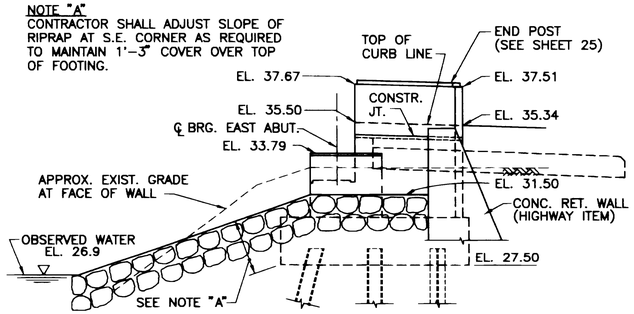


EAST ABUTMENT FOOTING PLAN

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

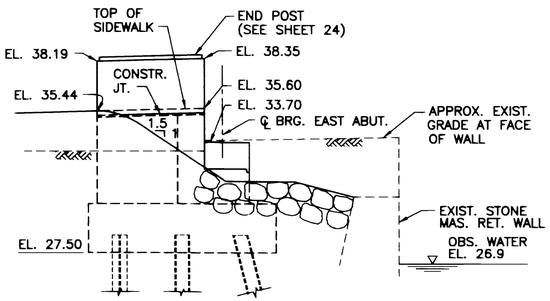
INDICATES BATTERED PILE

NOTE "A"
CONTRACTOR SHALL ADJUST SLOPE OF RIPRAP AT S.E. CORNER AS REQUIRED TO MAINTAIN 1'-3" COVER OVER TOP OF FOOTING.



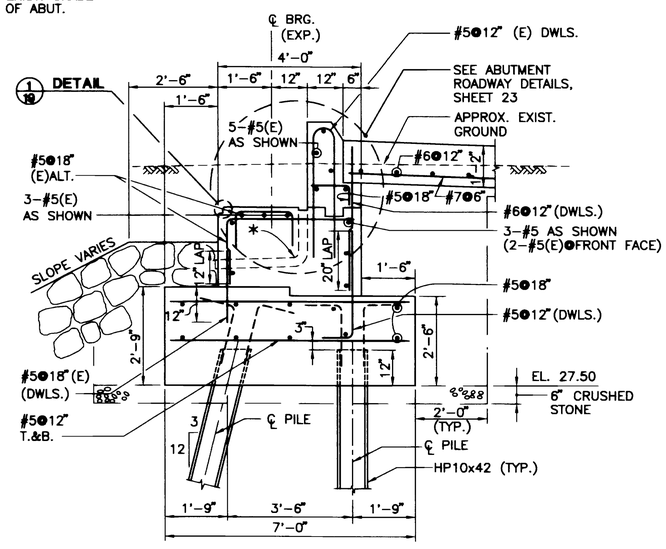
SOUTHEAST WINGWALL ELEVATION

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



NORTHEAST WINGWALL ELEVATION

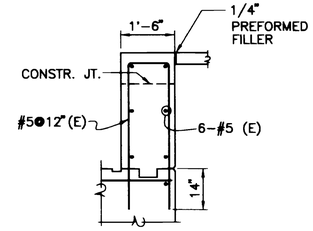
SCALE: 1/4"=1'-0"



* 3"ø PLASTIC DRAIN

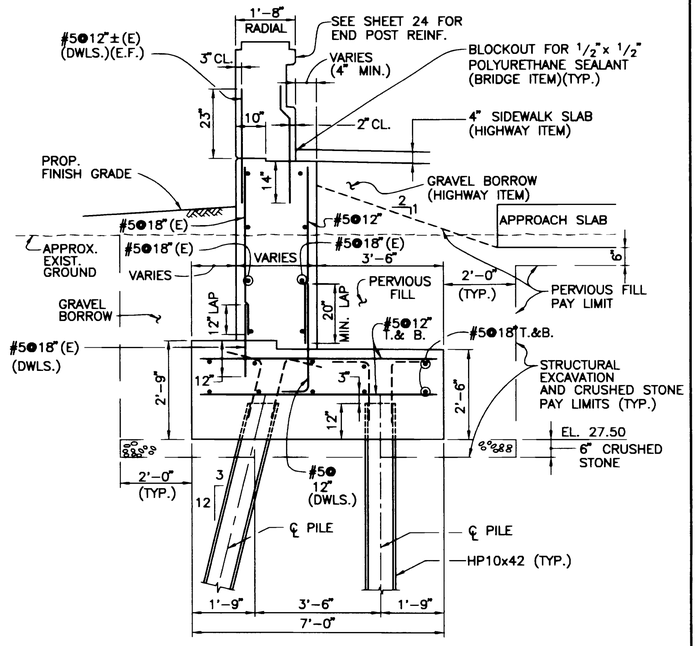
TYPICAL ABUTMENT SECTION

SCALE: 1/2"=1'-0"



SECTION B

SCALE: 1/2"=1'-0"



NORTHEAST WINGWALL SECTION

SCALE: 1/2"=1'-0"

(S.E. WINGWALL SIMILAR EXCEPT END POST)

NOTES:
1. BACKWALL ELEVATIONS ARE GIVEN AT FRONT FACE OF BACKWALL AND ARE AT TOP OF CONCRETE.
2. TOP OF BACKWALL ELEVATION SHALL FOLLOW TOP OF BOX BEAM ELEVATION.
3. SEE SHEET 19 FOR ABUTMENT EXCAVATION PAY LIMITS, PILE DETAILS, AND MISCELLANEOUS SUBSTRUCTURE DETAILS.
4. SEE SHEET 15 FOR SHEAR BLOCK DETAIL.

REVISIONS		
NO.	DATE	BY

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON RHODE ISLAND

EAST ABUTMENT PLAN & ELEVATION

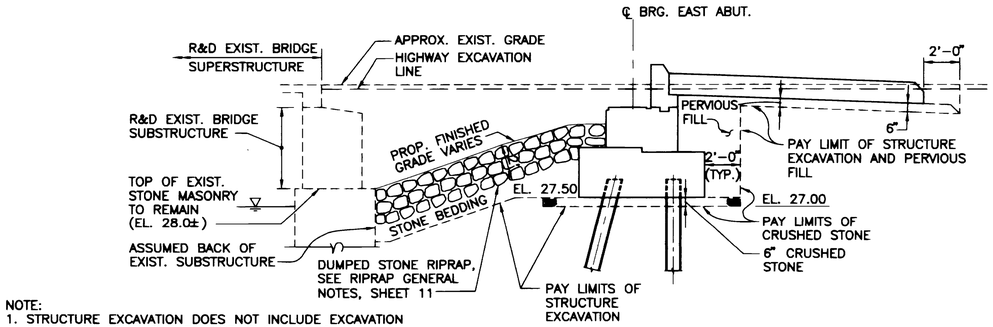
CHECKED BY CHK DATE 8/00 SCALE AS NOTED

TUTELA ENGINEERING ASSOC., INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE RHODE ISLAND

5077-01

C:\JOBS\PDT\EH5077-01 Mon Aug 7 14:35:18 2000 TUTELA ENGINEERING ASSOCIATES, INC. 1:2=1

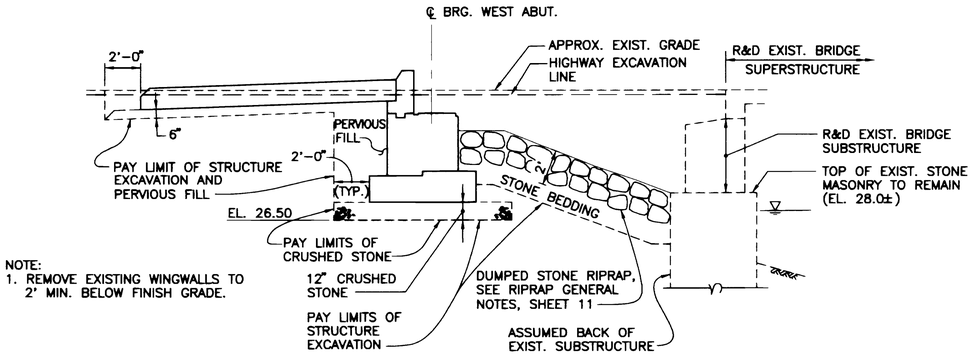
FED ROAD DIV NO	STATE	FEDERAL AID PROJECT NO	FISCAL YEAR	SHEET NO	TOTAL SHEET
1	RI	BRO-0062(002)		19	36



NOTE:
1. STRUCTURE EXCAVATION DOES NOT INCLUDE EXCAVATION NECESSARY TO R&D THE EXISTING SUBSTRUCTURE.

EAST ABUTMENT PAY LIMITS

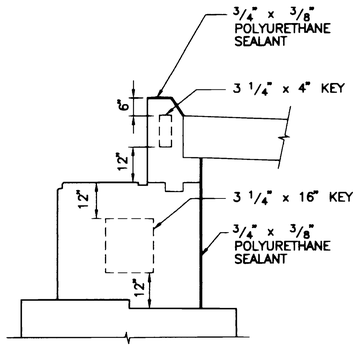
SCALE: 1/4" = 1'-0"



NOTE:
1. REMOVE EXISTING WINGWALLS TO 2' MIN. BELOW FINISH GRADE.

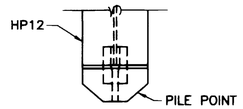
WEST ABUTMENT PAY LIMITS

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



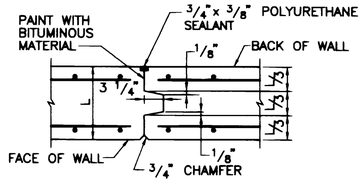
TYPICAL SECTION THRU ABUTMENT CONTRACTION JOINT

SCALE: 1/2" = 1'-0"



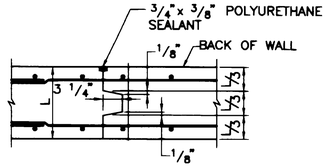
ELEVATION B

N.T.S.



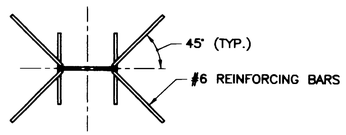
WALL CONTRACTION JOINT DETAIL

N.T.S.

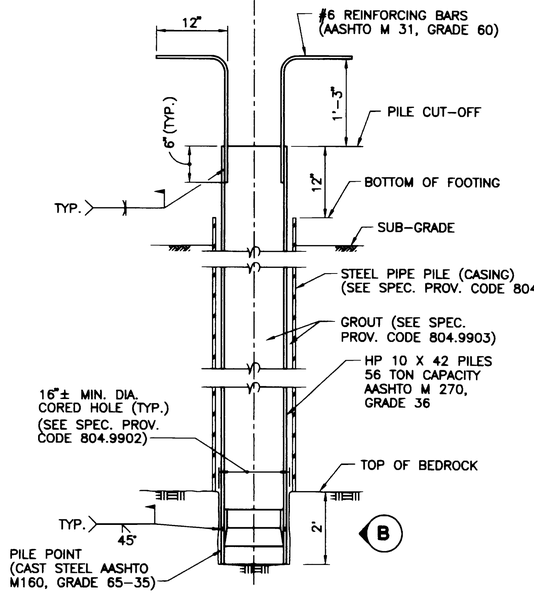


WALL CONSTRUCTION JOINT DETAIL

N.T.S.



PLAN

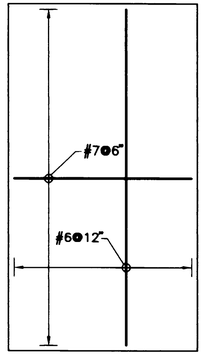


ELEVATION

STEEL H-PILE DETAILS

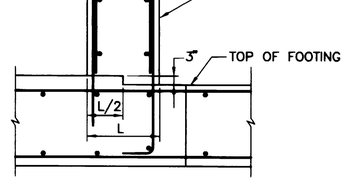
(18 REQUIRED AT THE EAST ABUTMENT)

N.T.S.



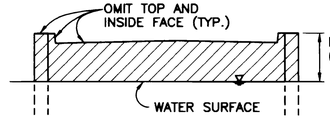
APPROACH SLAB REINFORCING PLAN

SCALE: 3/16" = 1'-0"

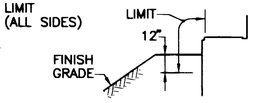


WALL SHEAR KEY DETAIL

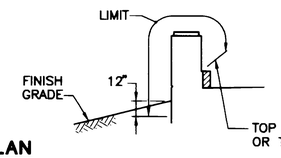
N.T.S.



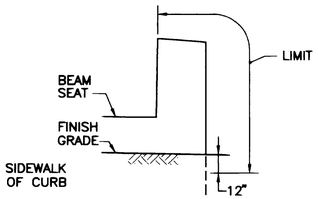
PIER



ABUTMENTS



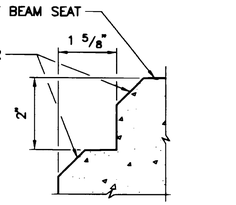
END POST
(INCLUDE TOP AND ENDS)



AT SHEAR BLOCKS
(INCLUDE FRONT FACE)

LIMITS OF CONCRETE SURFACE FINISHING RUBBED REGULAR

N.T.S.



DETAIL 1/15 1/17 1/18

N.T.S.

PILE NOTES:

1. ESTIMATED PILE LENGTHS VARY FROM 12'± MIN. TO 18'± MAX.
2. FOR THE REQUIREMENTS PERTAINING TO THE FURNISHING AND DRIVING OF FOUNDATION PILES, REFER TO THE R.I. STANDARD SPECIFICATIONS AND SPEC. PROV. CODE 804.9903.
3. FOUNDATION PILES SHALL BE DRIVEN TO A SUFFICIENT DEPTH AND RESISTANCE TO ADEQUATELY DEVELOP THEIR SPECIFIED LOAD SUPPORTING CAPACITY. THE ENGINEER SHALL BE THE SOLE JUDGE, BASED ON SOIL DATA AND THE RESULTS OF THE WAVE EQUATION ANALYSIS, OF THE REQUIRED DEPTH AND DRIVING RESISTANCE TO DEVELOP THE LOAD CAPACITY.
4. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER, INFORMATION ON THE TYPE OF EQUIPMENT PROPOSED TO BE USED, PROPOSED METHODS OF OPERATION, PROPOSED SEQUENCE OF DRIVING, AND DETAILS OF ALL PILE DRIVING EQUIPMENT AND ACCESSORIES FOR EACH PILE TYPE SPECIFIED, ALL IN ACCORDANCE WITH THE SPECIAL PROVISIONS.
5. ALL WELDING SHALL BE IN ACCORDANCE WITH THE LATEST ANSI/AASHTO/AWS D1.5-88 BRIDGE WELDING CODE.
6. COST OF REINFORCING BARS, WELDING AND GROUT SHALL BE INCLUDED IN CODE 804.9903.
7. THE MAXIMUM DESIGN PILE LOAD = 33.5 TONS.

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON RHODE ISLAND

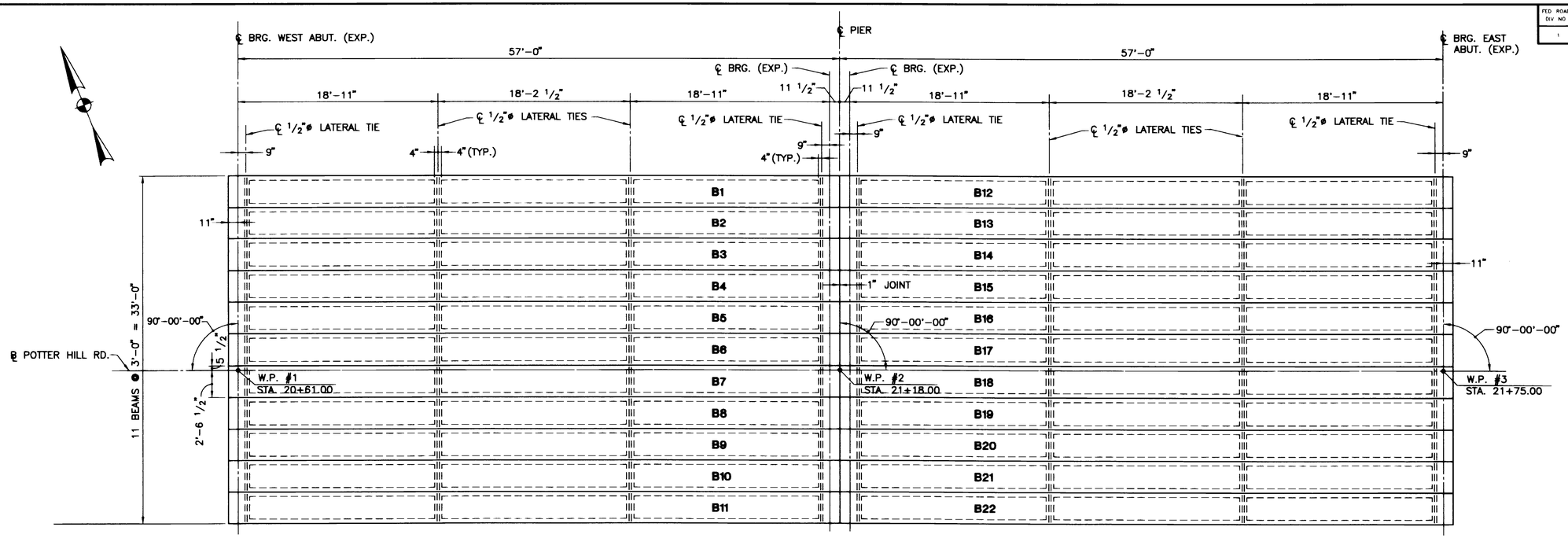
MISCELLANEOUS SUBSTRUCTURE DETAILS

CHECKED BY CHK DATE 8/00 SCALE AS NOTED

TUTELA ENGINEERING ASSOC., INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE RHODE ISLAND

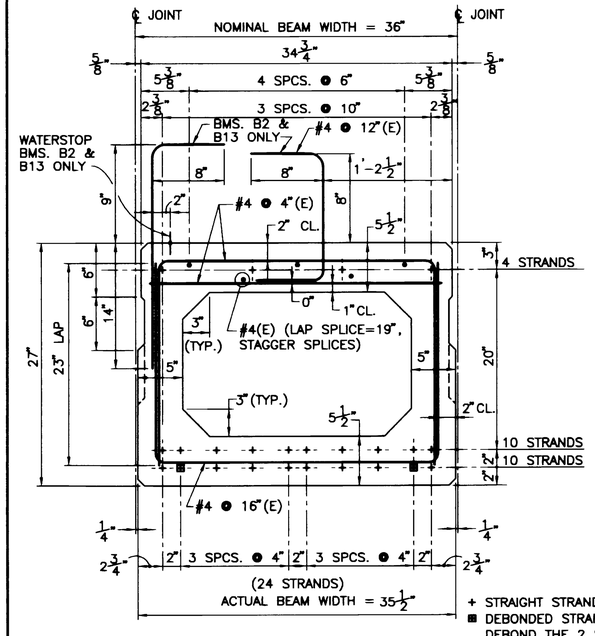
5019-01

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	RI	BRO-0052(002)		20	36



FRAMING PLAN

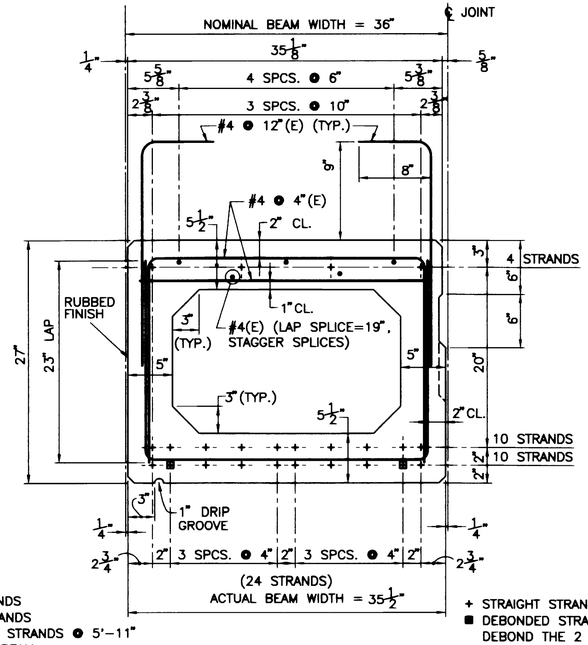
SCALE: $^3/_{16}$"=1'-0"



+ STRAIGHT STRANDS
■ DEBONDED STRANDS
DEBOND THE 2 STRANDS @ 5'-11" FROM END OF BEAM.

BEAMS B2 THRU B10 AND B13 THRU B21

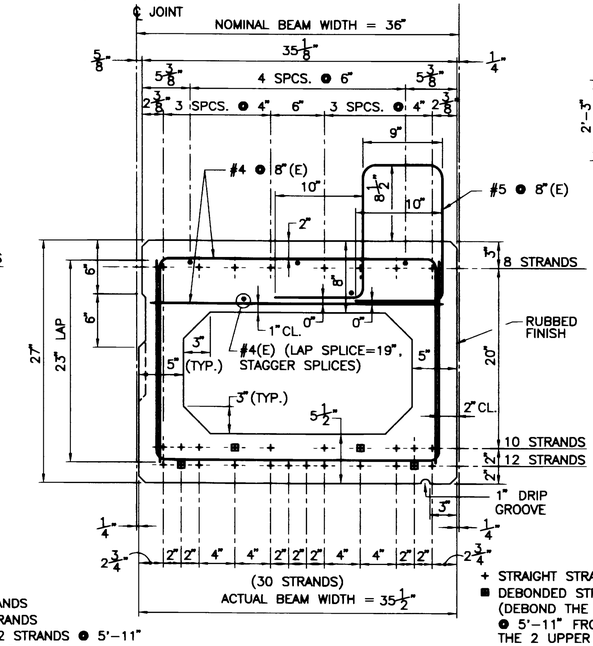
SCALE: 1 1/2"=1'-0"



+ STRAIGHT STRANDS
■ DEBONDED STRANDS
DEBOND THE 2 STRANDS @ 5'-11" FROM END OF BEAM.

BEAMS B1 AND B12

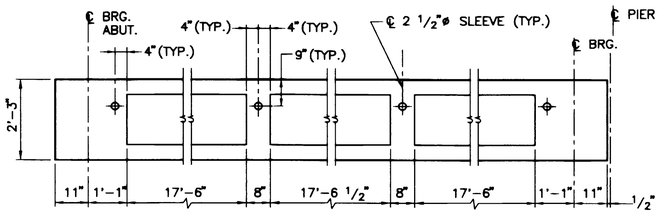
SCALE: 1 1/2"=1'-0"



+ STRAIGHT STRANDS
■ DEBONDED STRANDS
(DEBOND THE THE 2 LOWER STRANDS @ 5'-11" FROM END OF BEAM AND THE 2 UPPER STRANDS @ 10'-11" FROM END OF BEAM.)

BEAMS B11 AND B22

SCALE: 1 1/2"=1'-0"



LONGITUDINAL SECTION (REINF. NOT SHOWN)

SCALE: 1/2"=1'-0"

NOTES:

1. SEE SHEET NO. 21 FOR PRESTRESSED BOX BEAM DETAILS.

REVISIONS		
NO.	DATE	BY

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON RHODE ISLAND

FRAMING PLAN AND PRESTRESSED BOX BEAM SECTIONS

CHECKED BY CHK DATE 8/00 SCALE AS NOTED

TUTELA ENGINEERING ASSOC., INC.

ENGINEERS • ARCHITECTS • PLANNERS

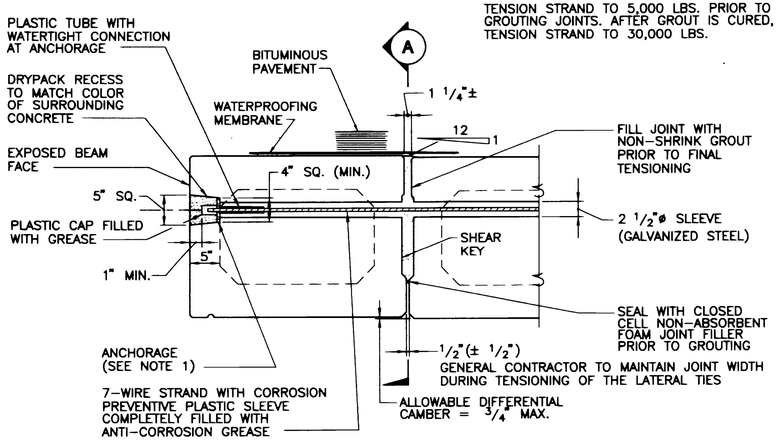
PROVIDENCE RHODE ISLAND

5080-01

C:\JOBS\PDT\EA5080-01 Mon Aug 7 14:43:37 2000 - TUTELA ENGINEERING ASSOCIATES, INC. (12-50)

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	RI	BRO-0052(002)		21	36

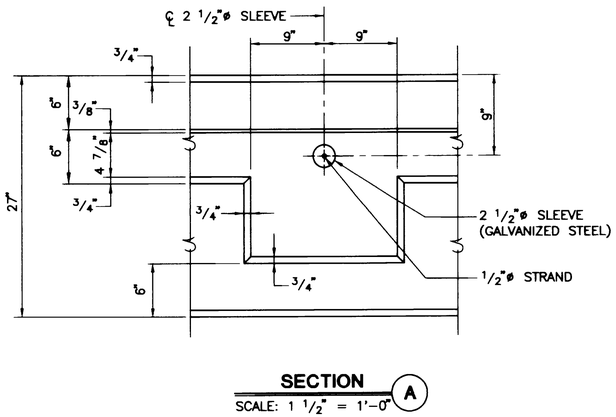
NOTE:
TENSION STRAND TO 5,000 LBS. PRIOR TO GROUTING JOINTS. AFTER GROUT IS CURED, TENSION STRAND TO 30,000 LBS.



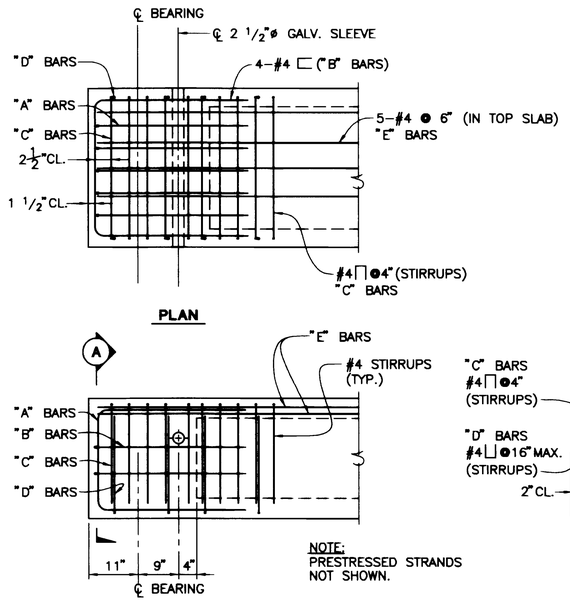
LATERAL TIE DETAILS
SCALE: 1" = 1'-0"

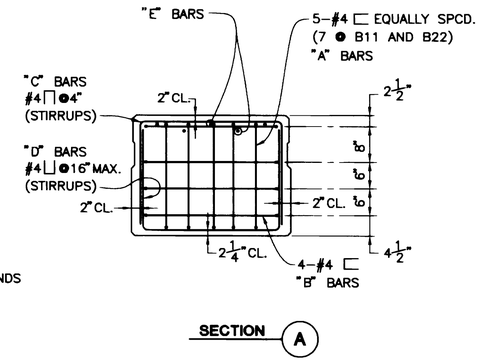
NOTES:

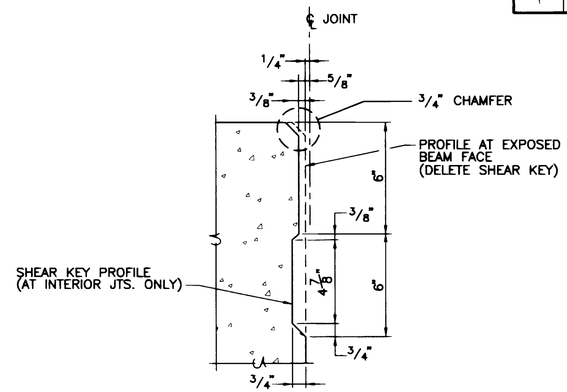
1. DETAILS OF THE ANCHORAGE ASSEMBLY TO BE SUBMITTED FOR REVIEW AND APPROVAL BY THE ENGINEER.
2. ALL PRESTRESSED BOX BEAMS SHALL BE ERECTED AS INDICATED ON THE CONTRACT DRAWINGS. THEY SHALL BE SET TO THE SPECIFIED (NOMINAL) DIMENSIONS AND WITH THE SPECIFIED (NOMINAL) 1/2 INCH SPACING BETWEEN UNITS. THE LATERAL POST-TENSIONING STRANDS SHALL BE TENSIONED INITIALLY TO 5,000 POUNDS. SAID LATERAL POST-TENSIONING IS NOT EXPECTED TO DRAW THE UNITS TOGETHER. AFTER THE UNITS ARE IN PLACE, THE FOAM JOINT FILLER SHALL BE PLACED AT THE BOTTOM OF THE SHEAR KEYS. APPROVED NON-SHRINK GROUT SHALL THEN BE PLACED INTO THE SHEAR KEYS AND ALLOWED TO CURE, AFTER WHICH THE STRANDS SHALL BE STRESSED TO THE FULL 30,000 POUNDS.
3. THE CONTRACTOR SHALL FURNISH THE STATE WITH CALCULATIONS FOR THE THEORETICAL ELONGATION OF THE LATERAL POST-TENSIONING STRANDS SO THAT THE STRAND TENSION INDICATED ON THE CALIBRATED METER CAN BE VERIFIED. THE CONTRACTOR SHALL FURNISH RECORDS TO THE STATE OF THE GAUGE READINGS VERSUS THE MEASURED ELONGATIONS.



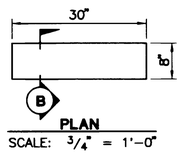
SECTION A
SCALE: 1 1/2" = 1'-0"



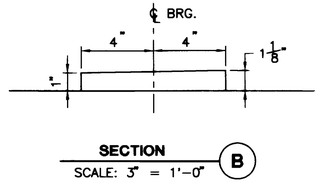




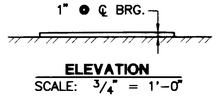
SHEAR KEY DETAIL
SCALE: 3" = 1'-0"



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



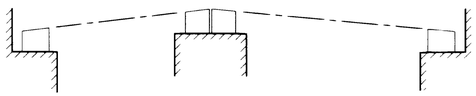
SCALE: 3" = 1'-0"



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

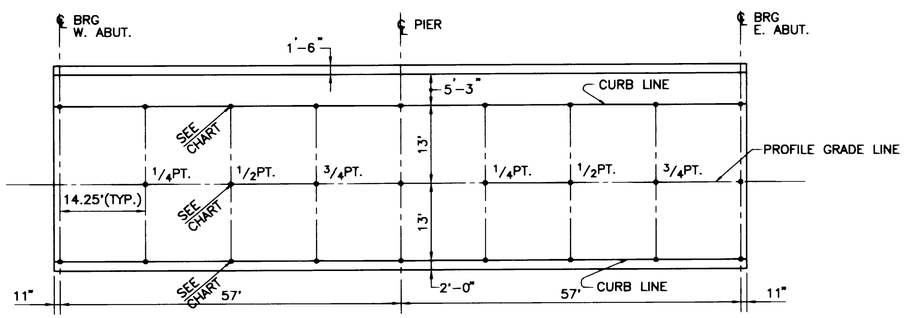
BEARING PAD DESIGN DATA
GRADE 3, 60 DUROMETER, PLAIN ELASTOMER

DESIGN METHOD A:
D.L. = 27.9 K
L.L. = 19.1 K



BEARING PAD ORIENTATION DETAIL
NO SCALE

ELASTOMERIC BEARING PAD DETAILS



BRIDGE ROADWAY GRADING PLAN
NO SCALE

END BLOCK REINFORCING DETAILS
SCALE: 3/4" = 1'-0"

	*CURB LINE	*P.G. LINE	Δ
℄ BRG. W. ABUT.	34.94	35.20	0
1/4 PT.	35.25	35.51	-.06
1/2 PT.	35.46	35.72	-.03
3/4 PT.	35.60	35.86	-.06
℄ PIER	35.64	35.90	0
1/4 PT.	35.60	35.86	-.06
1/2 PT.	35.47	35.73	-.08
3/4 PT.	35.26	35.52	-.06
℄ BRG. E. ABUT.	34.94	35.20	0

* FINISH ROADWAY ELEVATIONS
Δ EXPECTED SUPERIMPOSED DEAD LOAD DEFLECTION

REVISIONS		
NO.	DATE	BY

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON RHODE ISLAND

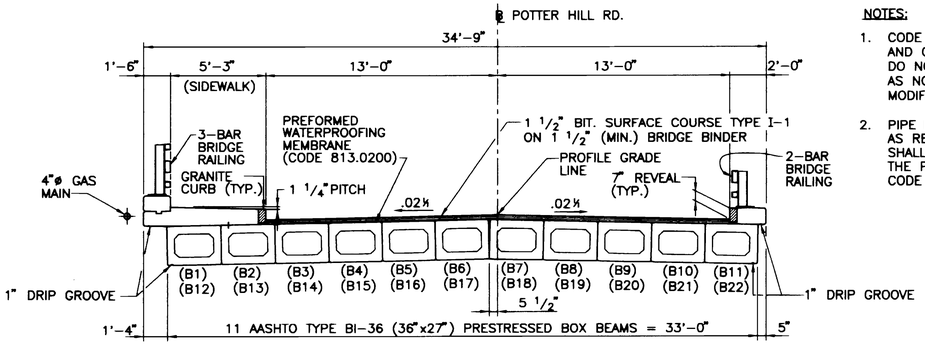
PRESTRESSED BOX BEAM DETAILS

CHECKED BY CHK DATE 8/00 SCALE AS NOTED

TUTELA ENGINEERING ASSOC., INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE RHODE ISLAND

5028-01

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	R.I.	BRO-0052(002)		22	36

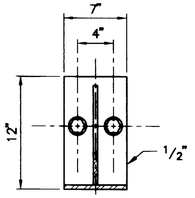


TYPICAL TRANSVERSE SECTION

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

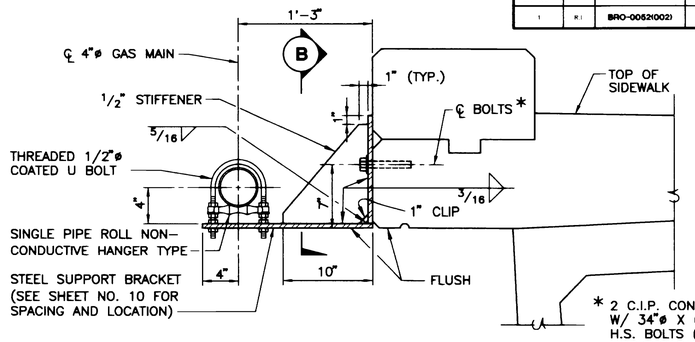
NOTES:

1. CODE 830.9901 STEEL BRIDGE RAIL 2-BAR (MODIFIED) AND CODE 830.9902 STEEL BRIDGE RAIL 3-BAR (MODIFIED) DO NOT HAVE SPECIAL PROVISIONS, BUT ARE NOTED HERE AS NOT MEETING CRASH-TESTED CRITERIA DUE TO MODIFICATION OF THEIR ANCHORAGE.
2. PIPE ROLLS, COATED U BOLTS AND ASSOCIATED HARDWARE AS REQUIRED TO SUPPORT THE NEW 4 INCH STEEL GAS MAIN SHALL BE NON-CONDUCTIVE AND SHALL BE ACCEPTABLE TO THE PROVIDENCE GAS COMPANY. SEE SPECIAL PROVISION CODE 900.9901.



SECTION B

SCALE: 1 1/2"=1'-0"

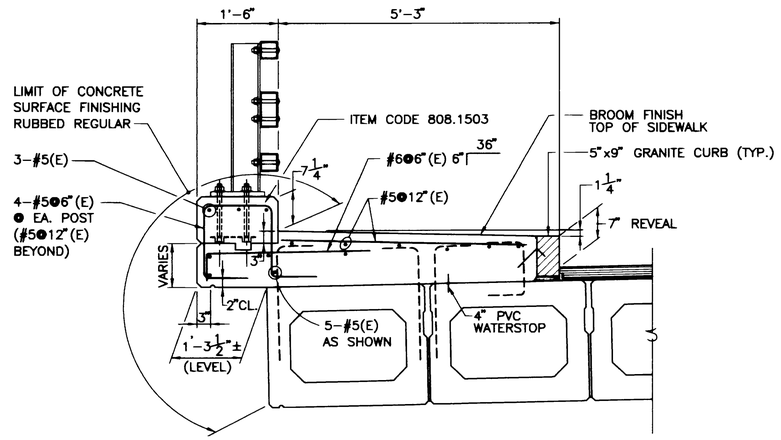


SUPPORT BRACKET NOTES:

1. SEE SPECIAL PROVISIONS CODE 900.9901, GAS MAIN SUPPORTS.
2. CONCRETE INSERTS TO BE INCLUDED IN CODE 808.1502.
3. STRUCTURAL STEEL PLATES SHALL CONFORM TO AASHTO M270 (ASTM A709) GRADE 36.
4. ALL STRUCTURAL STEEL AND FASTENERS SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M111 AND M232.

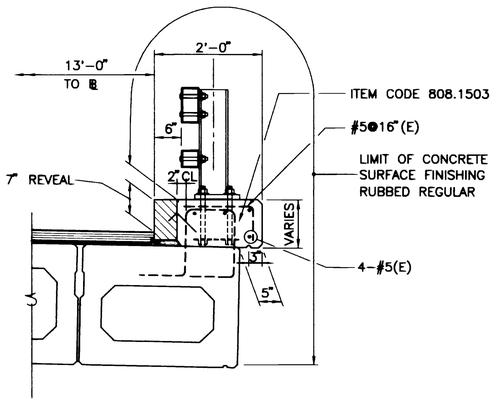
GAS MAIN SUPPORT BRACKET

SCALE: 1 1/2" = 1'-0"



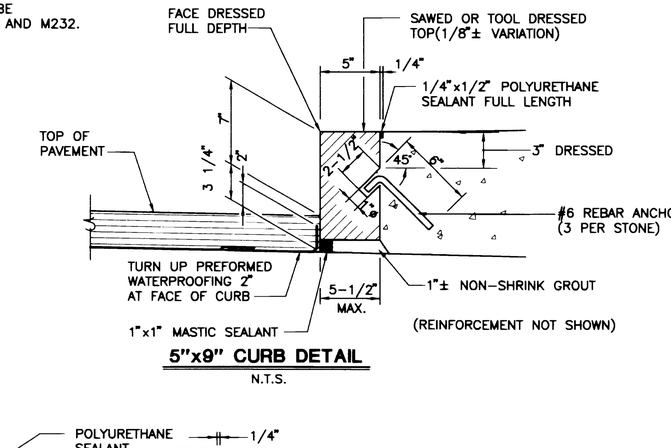
SIDEWALK SECTION

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



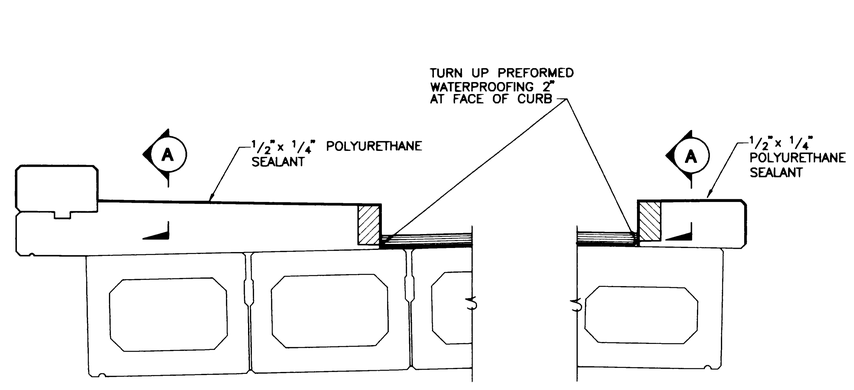
BRUSH CURB SECTION

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



5"x9" CURB DETAIL

N.T.S.

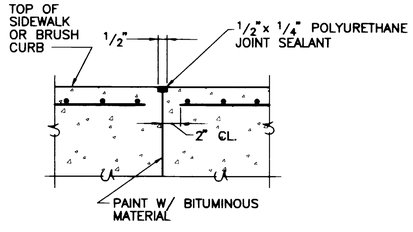


AT SIDEWALK

AT BRUSH CURB

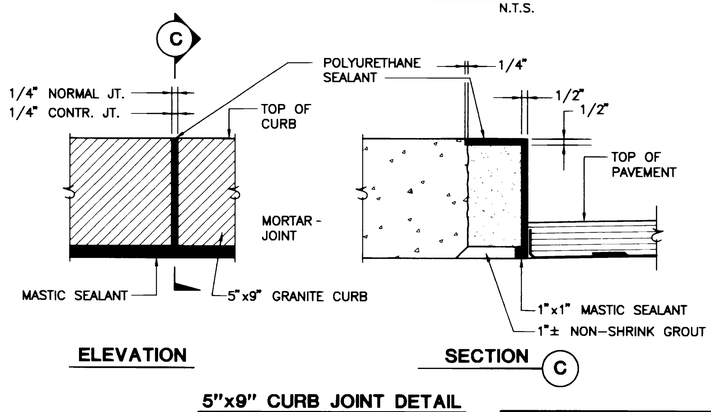
CONTRACTION JOINT SEALANT LIMITS

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



SECTION A

N.T.S.



ELEVATION

SECTION C

5"x9" CURB JOINT DETAIL

N.T.S.

CURB NOTES

1. FOR CUTTING TOLERANCES ON GRANITE CURB, SEE R.I. STANDARD SPECIFICATION M-09.05, EXCEPT AS NOTED ABOVE.
2. STRAIGHT CURB SHALL BE FURNISHED IN LENGTHS OF NOT LESS THAN 6 FEET OR GREATER THAN 10 FEET. (5 FOOT LENGTHS MAY BE ALLOWED UNDER UNUSUAL CIRCUMSTANCES, BUT ONLY WITH THE APPROVAL OF THE BRIDGE ENGINEER).

REVISIONS		
NO.	DATE	BY

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON RHODE ISLAND

TRANSVERSE SECTION AND SUPERSTRUCTURE DETAILS

CHECKED BY CHK DATE 8/00 SCALE AS NOTED

TUTELA ENGINEERING ASSOC., INC.

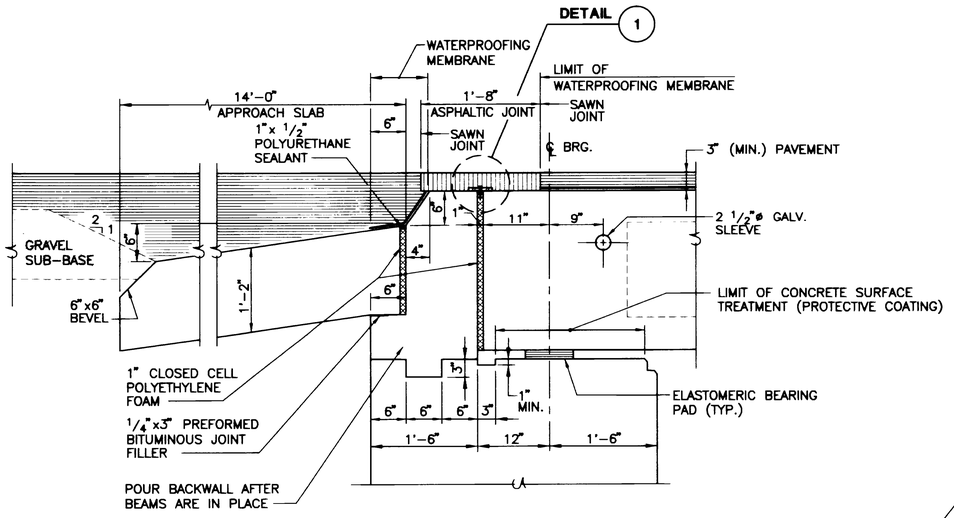
ENGINEERS • ARCHITECTS • PLANNERS

PROVIDENCE RHODE ISLAND

5078-01

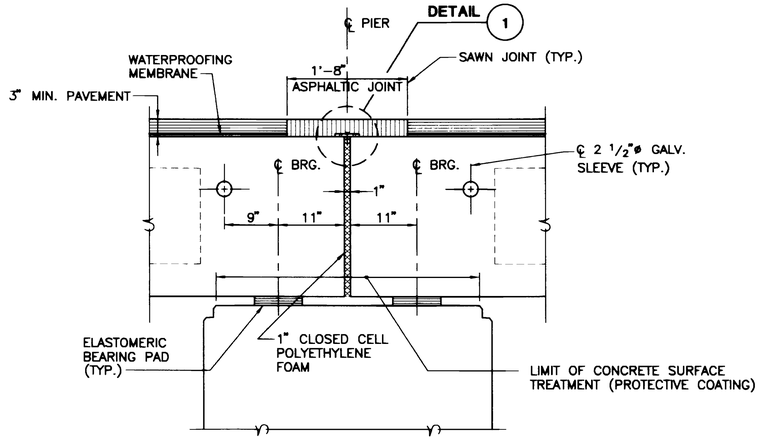
C:\DWGS\POTTER\5078-01 Mon Aug 7 16:33:59 2000 TUTELA ENGINEERING ASSOCIATES, INC. (12-50)

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	RI	BRO-0052(002)		23	36



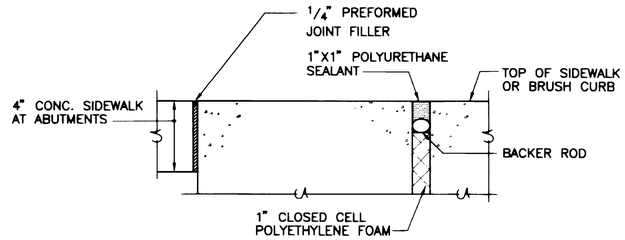
ABUTMENT ROADWAY DETAILS

SCALE: 1" = 1'-0"



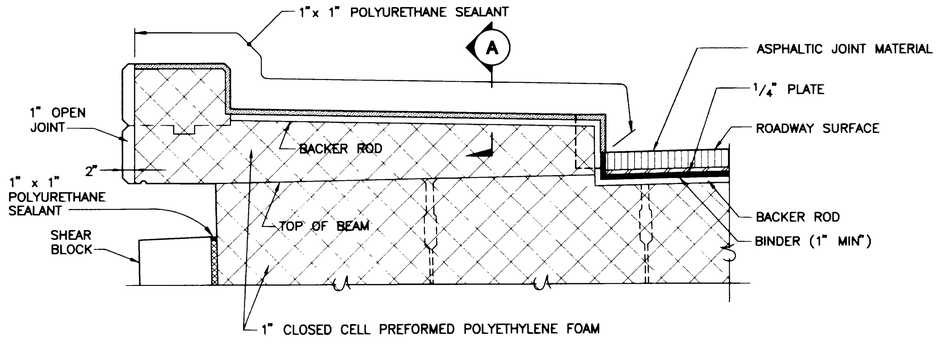
PIER ROADWAY DETAILS

SCALE: 1" = 1'-0"



SECTION (A)

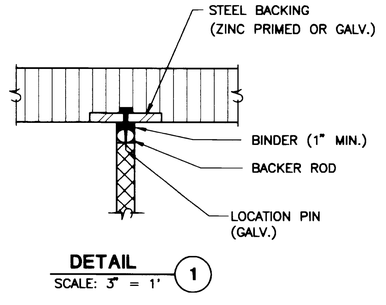
SCALE: 3"=1'-0"



(BRUSH CURB SIDE SIMILAR)

ASPHALTIC EXPANSION JOINT DETAIL (AT ABUTMENTS AND PIER)

SCALE: 1"=1'-0"



DETAIL (1)

SCALE: 3" = 1'

NOTES:
1. CODE 823.1750, ASPHALTIC EXPANSION JOINT SYSTEM SHALL INCLUDE THE SIDEWALK AND BRUSH CURB JOINT (EXCEPT SEALANT).

REVISIONS		
NO.	DATE	BY

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON RHODE ISLAND

ABUTMENT AND PIER ROADWAY DETAILS

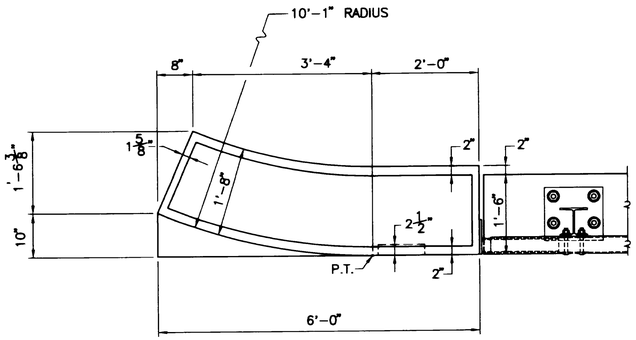
CHECKED BY CHK DATE 8/00 SCALE AS NOTED

TUTELA ENGINEERING ASSOC., INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE RHODE ISLAND

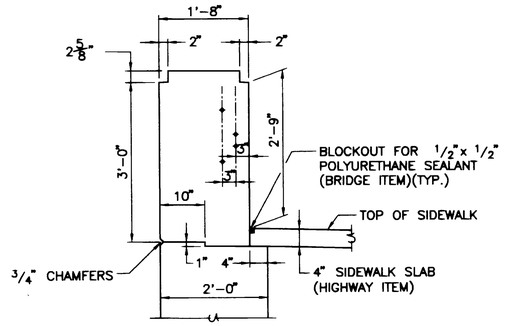
5079-01

C:\DWGS\POTTER\5079-01 Tue Aug 8 08:35:06 2000 TUTELA ENGINEERING ASSOCIATES, INC. (12-50)

FED ROAD DIV NO	STATE	FEDERAL AID PROJECT NO	FISCAL YEAR	SHEET NO	TOTAL SHEET
1	RI	BRO-0052(002)		24	36

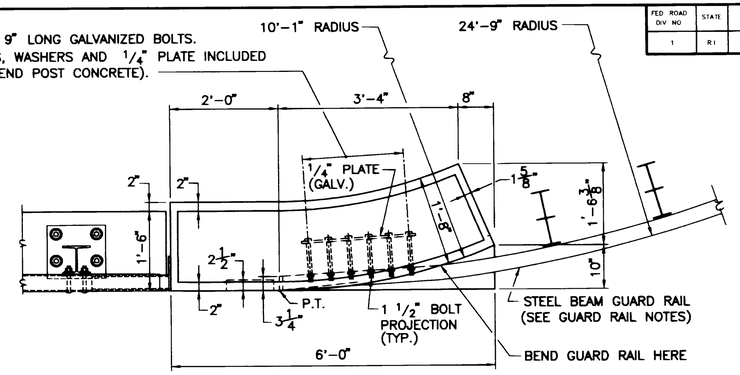


PLAN

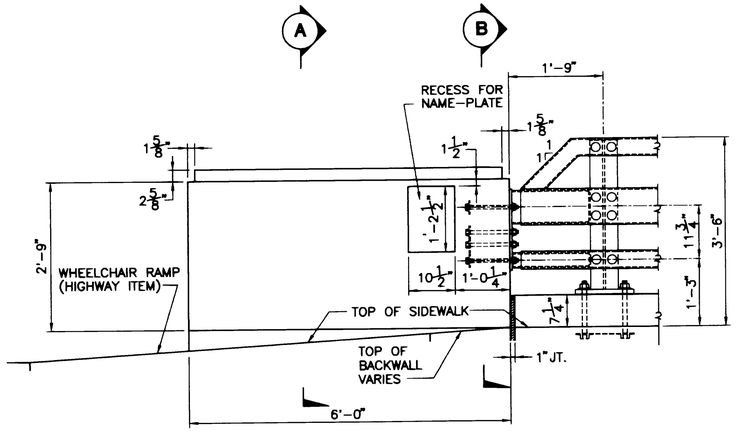


SECTION (B)
SCALE: 3/4" = 1'-0"

(6) 7/8" ø x 9" LONG GALVANIZED BOLTS. (BOLTS, NUTS, WASHERS AND 1/4" PLATE INCLUDED IN COST OF END POST CONCRETE).



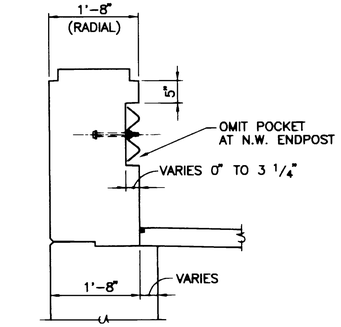
PLAN



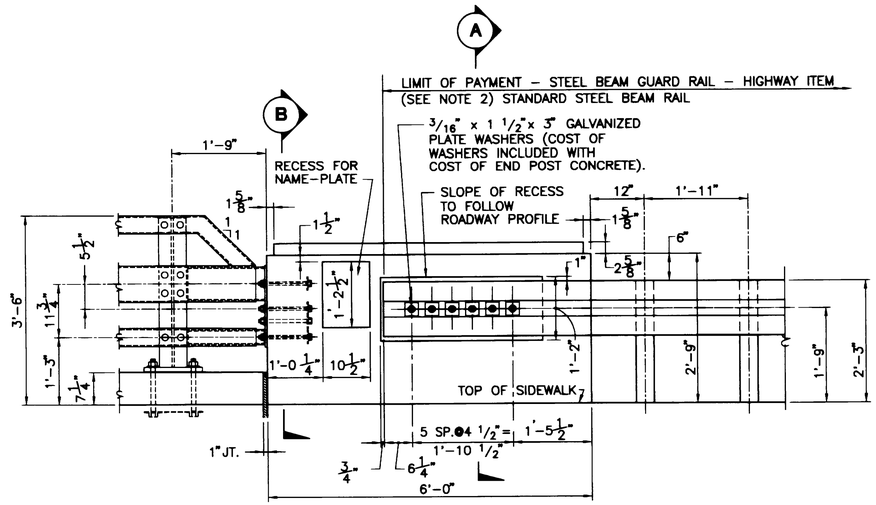
ELEVATION

NORTHWEST END POST

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



SECTION (A)
SCALE: 3/4" = 1'-0"

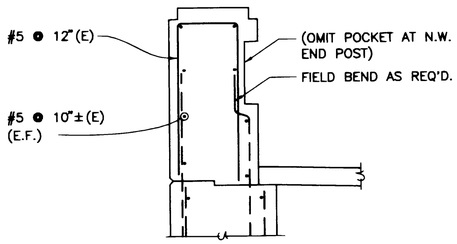


ELEVATION

NORTHEAST END POST

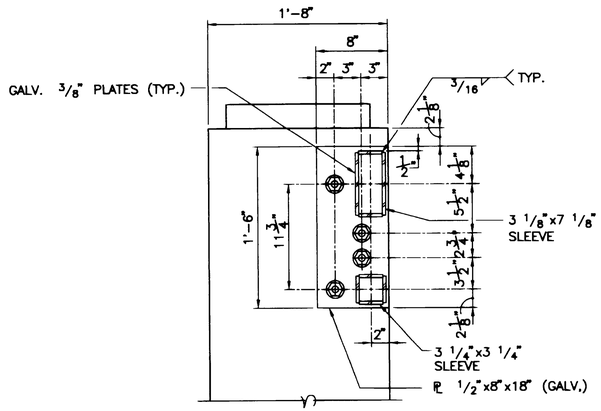
SCALE: 3/4" = 1'-0"

NOTES:
1. TO INSURE PROPER GUARD RAIL ANCHORAGE, THE GUARD RAIL INSTALLATION SHALL BEGIN AT EACH END OF THE BRIDGE AND WORK INTO THE APPROACHES.
2. THE COST OF THE GUARD RAIL TRANSITION TO BRIDGE END POSTS ARE HIGHWAY ITEMS. APPROACH SECTIONS ARE SEPARATE ITEMS IN THE PROPOSAL.
3. THE COST OF BRIDGE RAIL ANCHORAGE (PLATE, ANCHOR BOLTS, NUTS, WASHERS AND TUBE SLEEVE) IS INCLUDED IN COST OF END POST CONCRETE.

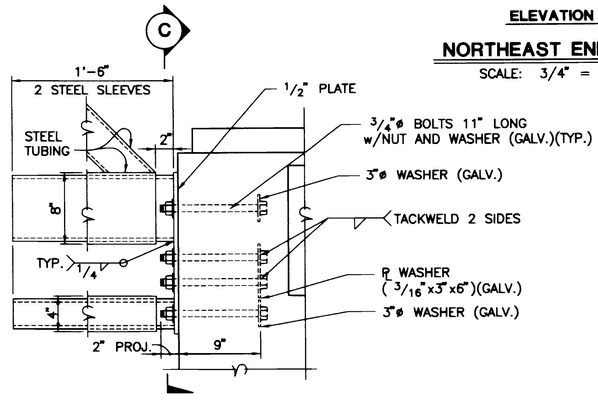


END POST REINFORCEMENT DETAILS

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



SECTION (C)
SCALE: 1-1/2" = 1'-0"



PARTIAL ELEVATION AT ENDPOST

SCALE: 1 1/2" = 1'-0"

REVISIONS		
NO.	DATE	BY

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON RHODE ISLAND

NORTHERLY END POSTS

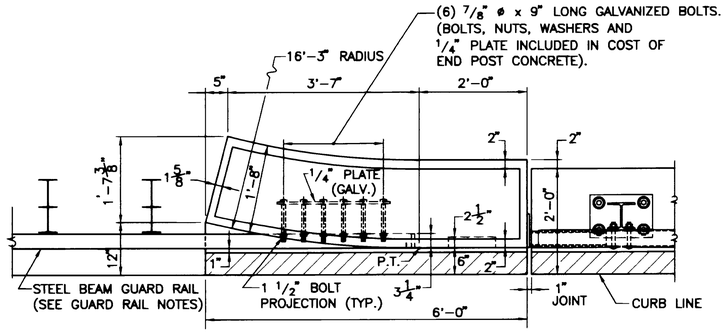
CHECKED BY CHK DATE 8/00 SCALE AS NOTED

TUTELA ENGINEERING ASSOC., INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE RHODE ISLAND

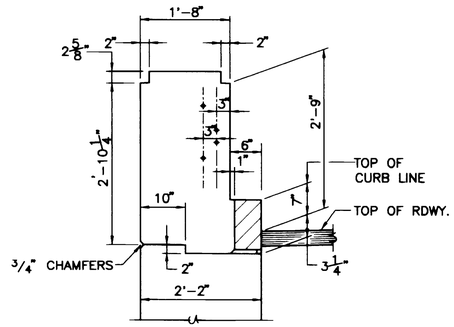
5068-01

C:\DWGS\POTTER\5068-01 Tue Aug 8 09:35:33 2000 TUTELA ENGINEERING ASSOCIATES, INC (T2-50)

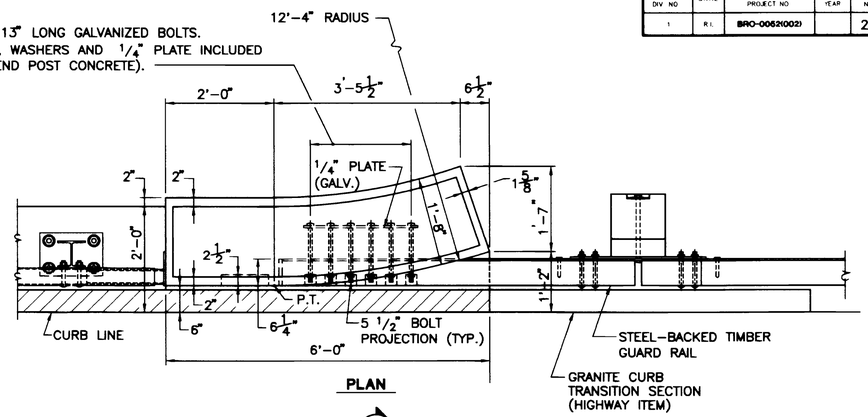
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	R.I.	BRO-0052(002)		25	36



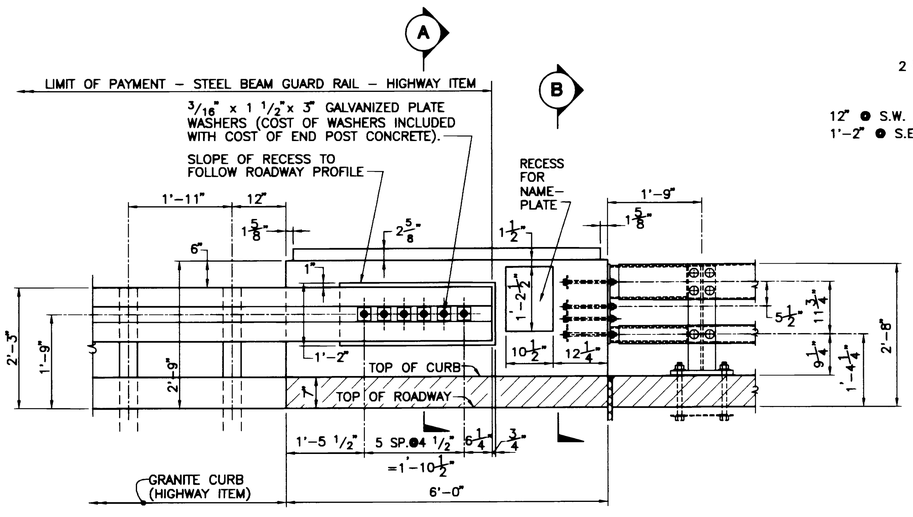
PLAN



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

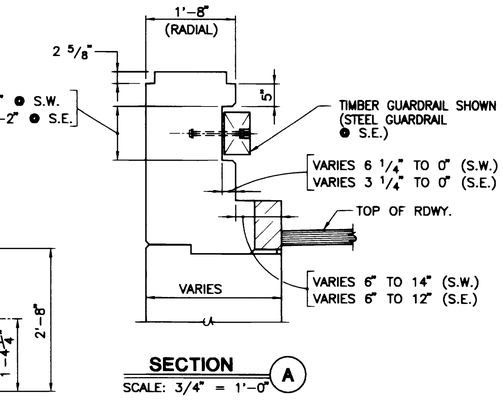


PLAN

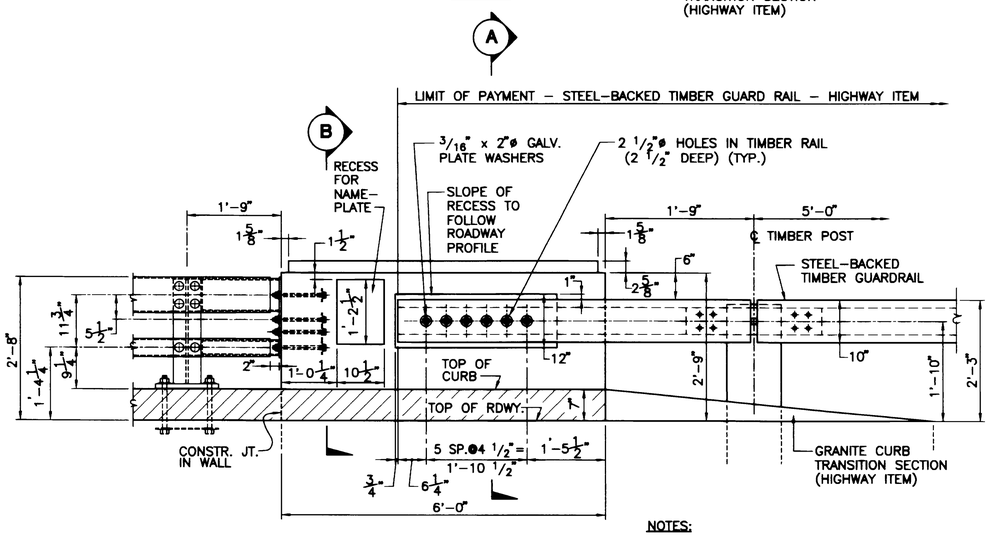


ELEVATION

SOUTHEAST END POST
SCALE: 3/4" = 1'-0"



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

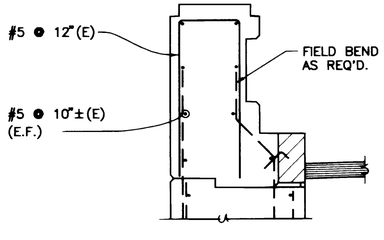


ELEVATION

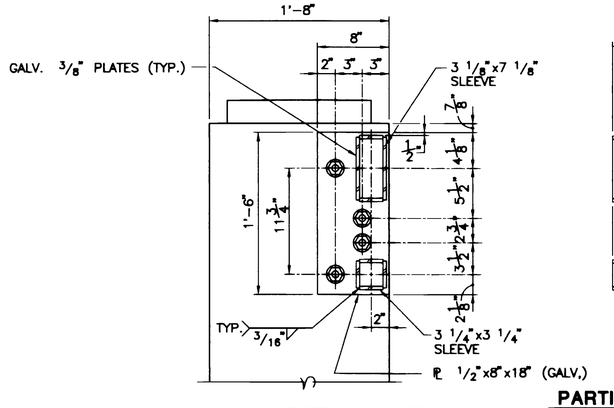
SOUTHWEST END POST
SCALE: 3/4" = 1'-0"

NOTES:

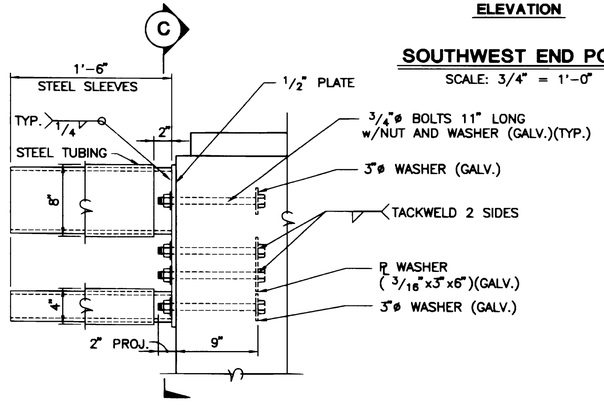
1. TO INSURE PROPER GUARD RAIL ANCHORAGE, THE GUARD RAIL INSTALLATION SHALL BEGIN AT EACH END OF THE BRIDGE AND WORK INTO THE APPROACHES.
2. THE COST OF THE GUARD RAIL TRANSITION TO BRIDGE END POSTS ARE HIGHWAY ITEMS. APPROACH SECTIONS ARE SEPARATE ITEMS IN THE PROPOSAL.
3. THE COST OF BRIDGE RAIL ANCHORAGE (PLATE, ANCHOR BOLTS, NUTS, WASHERS AND TUBE SLEEVE) IS INCLUDED IN THE COST OF END POST CONCRETE.



END POST REINFORCEMENT DETAIL
SCALE: 3/4" = 1'-0"



SECTION C
SCALE: 1-1/2" = 1'-0"



PARTIAL ELEVATION AT END POST
SCALE: 1-1/2" = 1'-0"

REVISIONS		
NO.	DATE	BY

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON — RHODE ISLAND

SOUTHERLY END POSTS

TUTELA ENGINEERING ASSOC., INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE — RHODE ISLAND

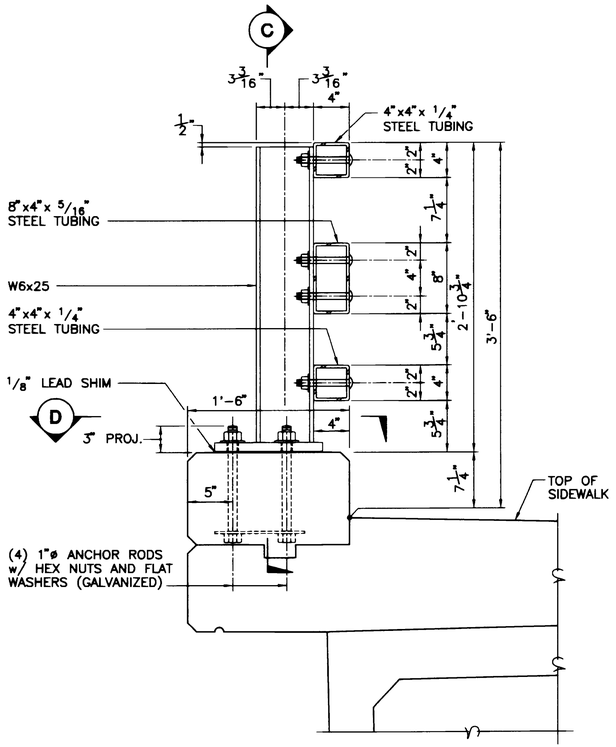
CHECKED BY CHK DATE 8/00 SCALE AS NOTED

5075-01

C:\DMGS\POTTER\5075-01 Tue Aug 8 12:02:38 2000 TUTELA ENGINEERING ASSOCIATES, INC. (T2-501)

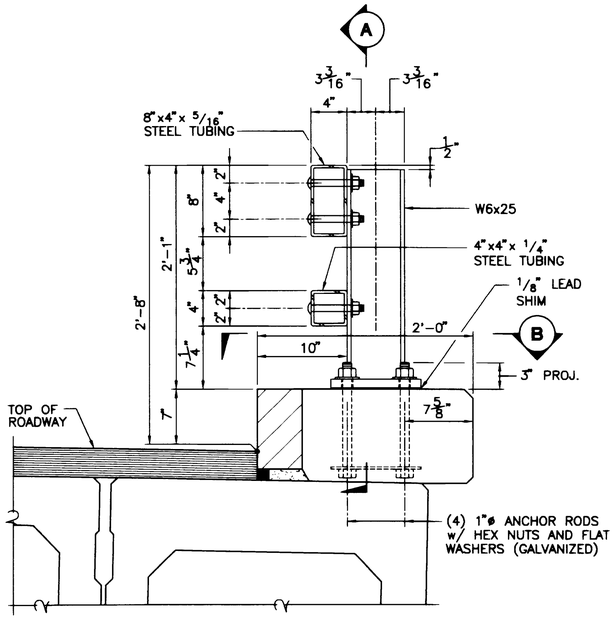
FED ROAD DIV NO	STATE	FEDERAL AID PROJECT NO	FISCAL YEAR	SHEET NO	TOTAL SHEET
1	RI	BRO-0052(002)		26	36

(R-1)



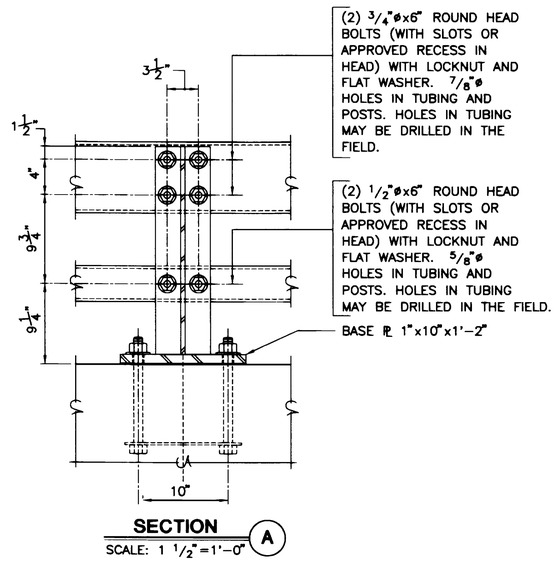
SIDEWALK RAILING

SCALE: 1 1/2"=1'-0"



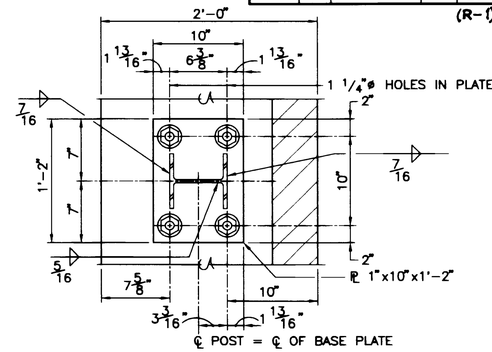
BRUSH CURB RAILING

SCALE: 1 1/2"=1'-0"



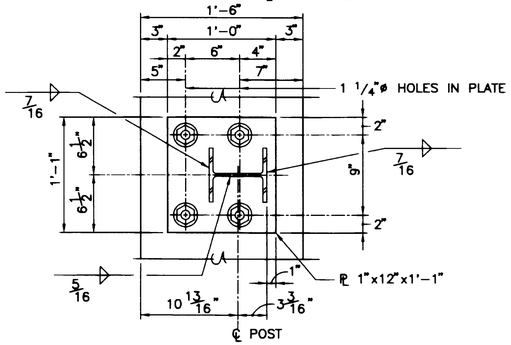
SECTION A

SCALE: 1 1/2"=1'-0"



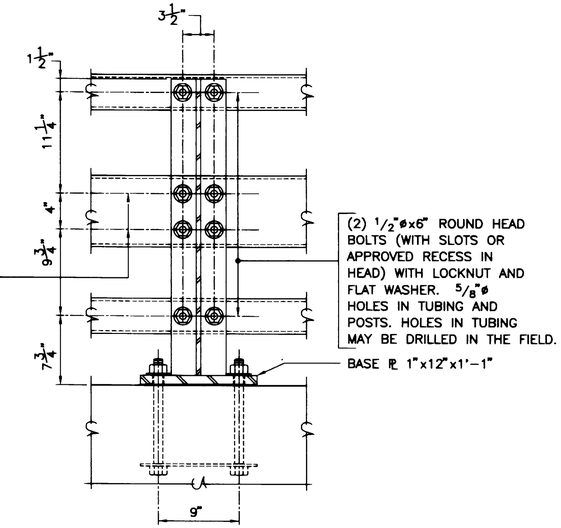
SECTION B

SCALE: 1 1/2"=1'-0"



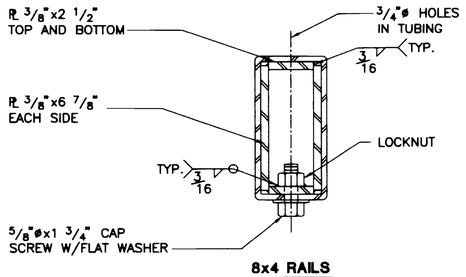
SECTION D

SCALE: 1 1/2"=1'-0"

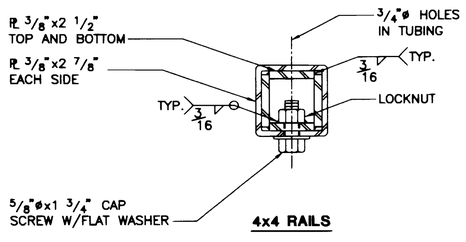


SECTION C

SCALE: 1 1/2"=1'-0"



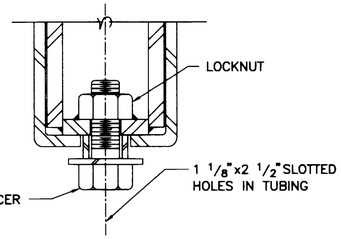
8x4 RAILS



4x4 RAILS

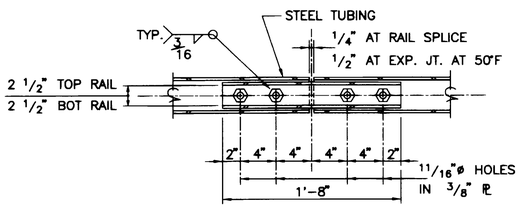
SECTIONS AT RAIL SPLICE

N.T.S.



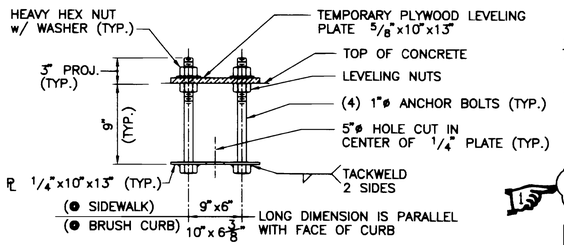
RAIL SPLICE CONNECTION AT EXPANSION JOINT

N.T.S.



PLAN-BOTTOM SPLICE PLATE (TYPICAL)

N.T.S.



ANCHOR BOLT DETAIL

SCALE: 1 1/2"=1'-0"

NOTES:

1. HOLLOW STRUCTURAL STEEL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION A 500, GRADE B, STRUCTURAL STEEL TUBING.
2. ALL OTHER STEEL SHAPES SHALL CONFORM TO THE REQUIREMENTS OF AASHTO DESIGNATION M 183 EXCEPT POSTS AND BASE PLATES WHICH SHALL CONFORM TO AASHTO DESIGNATION M 223, GRADE 50.
3. BOLTS, CAP SCREWS AND NUTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION A 307 EXCEPT THAT ANCHOR BOLTS, NUTS AND WASHERS SHALL CONFORM TO AASHTO DESIGNATION M 164.
4. ALL BOLTS, NUTS, CAP SCREWS, WASHERS AND LOCK WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO DESIGNATION M 232, AND PAINTED BLACK.
5. ALL POSTS, RAILING, RAIL SPLICES AND BASE PLATES SHALL BE METALIZED AFTER SHOP FABRICATION IN ACCORDANCE WITH SECTION M.05.07 OF THE RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND SHALL BE PAINTED BLACK.
6. ALL FIELD-DRILLED HOLES SHALL BE COATED WITH AN APPROVED ZINC-RICH PAINT BEFORE ERECTION.
7. MAXIMUM RAIL POST SPACING SHALL BE 6'-3".
8. AN EXPANSION JOINT SHALL BE PROVIDED BETWEEN ANY TWO (2) POSTS WHICH SPAN A BRIDGE EXPANSION JOINT. CAP SCREWS LOCATED AT EXPANSION JOINTS SHALL BE PROVIDED WITH LOCKNUTS AND SHALL BE TIGHTENED ONLY TO A POINT THAT WILL ALLOW RAILING MOVEMENT.
9. PROVIDE 1/8" LEAD SHIMS UNDER RAIL POST BASE PLATE.

NOTES: (cont.:)

10. SEE SHEETS 24 AND 25 FOR RAILING DETAILS AT END POSTS.
11. TUBING SHALL MEET THE LONGITUDINAL CVN REQUIREMENTS OF 15 FT-LBS AT 0 DEG. F. FOR A500, GRADE B. THE TEST SAMPLES SHALL BE TAKEN AFTER FORMING THE TUBE.
12. THE EXPOSED PORTIONS OF STEEL SLEEVES, PLATES, BOLTS, AND NUTS AT THE END POSTS SHALL BE PAINTED BLACK.

REVISIONS		
NO.	DATE	BY
1	8/29/00	WAM

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON RHODE ISLAND

BRIDGE RAILING DETAILS

CHECKED BY CHK DATE 8/00 SCALE AS SHOWN

TUTELA ENGINEERING ASSOC., INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE RHODE ISLAND

C:\POTTER\5067-01 Thu Aug 31 10:25:10 2000 (TUTELA ENGINEERING ASSOCIATES, INC. 116-50)
5067-01

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI	BRO-0052(002)		27	36

GZA GEOENVIRONMENTAL, INC.
140 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECHNICAL/GEOHYDROLOGICAL CONSULTANTS

PROJECT: BRIDGE # 52-POTTER HILL RD ASHAWAY/WESTERLY, RI

REPORT OF BORING No. B-1 | SHEET 1 OF 1 | FILE No. 31334.0 | CHKD. BY TEB

BORING Co. GZA DRILLING | FOREMAN CHARLIE TERLING | GZA ENGINEER K.M. BELLISLE

BORING LOCATION SEE EXPLORATION LOCATION PLAN | GROUND SURFACE ELEVATION 32.7 DATUM NGVD | DATE START 12-2-93 DATE END 12-3-93

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 in.

CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 in.

CASING SIZE: 3" CASING OTHER: 2" Single Tube Core Barrell

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME

DEPTH	CASING BLOWS	SAMPLE No.	SAMPLE PEN./REC	SAMPLE DEPTH (Ft.)	SAMPLE BLOWS/6"	SAMPLE DESCRIPTION Burmister CLASSIFICATION	REMARKS	STRATUM DESCRIPTION
		R-1	15/13	1.7-2.9	CORED	Coarse, aggregate CONCRETE		ASPHALT & BASE COURSE 1.5
		R-2	61/46	2.9-8.0	CORED	Coarse, aggregate CONCRETE		CONCRETE ABUTMENT
5								6.9
		R-3	12/4	8-9	CORED	Very hard, moderately weathered, moderately fractured, coarse grained, pink GRANITE		GRANITE BLOCK ABUTMENT 9.5
		S-1	20/7	9.5-11.2	64-21	Dense, fine to coarse SAND and fine to coarse Gravel, trace- Silt		SAND 11.1
10					16-86/2"			Pink GRANITE bedrock
		R-4	60/33	11.2-16.2	CORED	Very hard, moderately weathered, moderately, fractured, coarse grained, pink GRANITE with distinct grey, granite veins, changing at 15.3' to very hard, moderately weathered, moderately fractured, coarse grained, grey GRANITE		15.3 Grey GRANITE bedrock 16.1
15					RQD=46.7%			
						End of Exploration at 16.1		
20								
25								
30								

GRANULAR SOILS Blows/Ft Density		COHESIVE SOILS Blows/Ft Density	
0- 4	V. LOOSE	< 2	V. SOFT
4-10	LOOSE	2- 4	SOFT
10-30	M. DENSE	4- 8	M. STIFF
30-50	DENSE	8-15	STIFF
> 50	V. DENSE	15-30	V. STIFF
		> 30	HARD

REMARKS:
1. Augered through asphalt pavement and noted a 6"± thick layer of dark brown, fine to coarse SAND before encountering concrete abutment.
2. Augered 18" to top of concrete, 2" into concrete for total of 20"±.

NOTES:
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

GZA — BORING No. B-1

BOTTOM OF WEST ABUT. FTNG. (BEYOND) EL. 27.50

GZA GEOENVIRONMENTAL, INC.
140 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECHNICAL/GEOHYDROLOGICAL CONSULTANTS

PROJECT: BRIDGE # 52-POTTER HILL RD ASHAWAY/WESTERLY, RI

REPORT OF BORING No. B-5 | SHEET 1 OF 1 | FILE No. 31334.0 | CHKD. BY TEB

BORING Co. GZA DRILLING | FOREMAN CHARLIE TERLING | GZA ENGINEER K.M. BELLISLE

BORING LOCATION SEE EXPLORATION LOCATION PLAN | GROUND SURFACE ELEVATION 32.7 DATUM NGVD | DATE START 12-7-93 DATE END 12-8-93

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 in.

CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 in.

CASING SIZE: 3" CASING OTHER: 2" Single Tube Core Barrell

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME

DEPTH	CASING BLOWS	SAMPLE No.	SAMPLE PEN./REC	SAMPLE DEPTH (Ft.)	SAMPLE BLOWS/6"	SAMPLE DESCRIPTION Burmister CLASSIFICATION	REMARKS	STRATUM DESCRIPTION
		R-1	60/54	0-5	CORED	Dark grey, coarse aggregate CONCRETE changing at 1.5' to light grey, coarse aggregate CONCRETE		CONCRETE DECK 1.5'
								CONCRETE ABUTMENT
5								5.9'
		R-2	36/24	5-8	CORED	Light grey, coarse, aggregate CONCRETE above very hard, moderately weathered, slightly fractured, fine to medium grained, pink GRANITE		GRANITE BLOCK ABUTMENT
		R-3	24/10	8-10	CORED	Hard, moderately weathered, slightly fractured, grey GRANITE changing at 8'2" to hard, moderately fractured, slightly weathered, pink GRANITE		
10		S-1	24/8	10-12	19-8	Small pieces of GRANITE changing at 10.5' to tan/grey, fine to coarse SAND, trace Silt (completely weathered rock)		10.5' Decomposed ROCK
					7-21/5"			15.0' Bedrock
15		S-2	6/5	15-15.5	60/5"	Very dense, tan/grey, fine to coarse SAND (completely weathered rock)		
		R-4	60/50	15.5-20.5	CORED	Hard, slightly weathered, moderately fractured, medium to coarse grained, pink GRANITE with multiple shear and crack zones. Distinct veins of Quartz and Feldspar		
				RQD=38.3%				
20						End of Exploration at 20.5'		20.5'
25								
30								

GRANULAR SOILS Blows/Ft Density		COHESIVE SOILS Blows/Ft Density	
0- 4	V. LOOSE	< 2	V. SOFT
4-10	LOOSE	2- 4	SOFT
10-30	M. DENSE	4- 8	M. STIFF
30-50	DENSE	8-15	STIFF
> 50	V. DENSE	15-30	V. STIFF
		> 30	HARD

REMARKS:
1. Core barrell dropped 1'2" at 8' split spoon sample attempted, 25 blows/0". Resumed coring.
2. Casing spun to 15'; split spoon sample taken at that point; refusal on sound rock.

NOTES:
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

GZA — BORING No. B-5

GZA GEOENVIRONMENTAL INC.
140 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECH/GEOHYDROLOGICAL CONSULTANTS

PROJECT: Potter Hill Road Bridge No. 52, Westerly/Hopkinton, RI

REPORT OF BORING NO B-10 | SHEET 1 OF 2 | FILE NO 31334.4 | CHKD BY DLD

BORING CO GZA Drilling, Inc. | FOREMAN John Richardson | GZA ENG Doug Le Do

BORING LOCATION STA 20+53 S, O/S 2.5' R | GROUND SURFACE ELEV 33.6' DATUM NGVD | DATE START 12-30-98 DATE END 12-30-98

SAMPLER UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2' SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 IN

CASING UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 IN

CASING SIZE NW OTHER 3 3/4" HSA

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME
12-30-98		8'±		0 hrs

DEPTH	CASING BLOWS	SAMPLE NO	SAMPLE PEN./REC	SAMPLE DEPTH (FT)	SAMPLE BLOWS/6"	SAMPLE DESCRIPTION Burmister CLASSIFICATION	R K	STRATUM DESCRIPTION
							3"	ASPHALT PAVEMENT
							2'	BASE COARSE
		S-1	24/10	0.5-2.5	8	Medium dense, brown, fine(+) to coarse SAND, some (+)		
					11	Coarse Gravel, trace Silt		
					11			
					16			FILL
5		S-2	24/17	2.5-4.5	23	Top 15" Medium dense, brown fine(+) to coarse SAND, little(+)	1	
					9	fine to coarse Gravel, trace Silt		
					12	Bottom 2" Medium dense, dark brown/black, fine to coarse		
					14	SAND and fine to coarse Gravel little Silt		
		S-3	24/2	4.5-6.5	28	Medium dense brown, fine to coarse SAND, trace fine Gravel,	+4.5'	
					26	trace Silt		
					13			
					17			FINE TO COARSE SAND
		S-4	24/9	8.5-8.5	12	Top 9" Wet, medium dense dark brown, fine to coarse SAND		
		S-4A	/3		13	trace(+) fine Gravel, trace Cobbles (one), trace(+) Silt,		
					11	Bottom 3" Wet, medium dense, orange brown, fine to coarse(+)	+7.5'	
					11	SAND, and fine to coarse(+) Gravel, trace(+) Silt		SAND & GRAVEL
		S-5	1/1	8.5-8.6	100/1"	Wet, very dense medium to coarse SAND and ROCK FRAGMENTS, trace Silt	2	
		S-6	0/0	9	40/0"	REFUSAL NO RECOVERY	+8.5'	
10							3	
								GLACIAL TILL
							4	
		S-7	9/6	12'-13.8'	80/9"	Wet, very dense tan medium to coarse SAND and fine Gravel, trace(+) Silt		
		C-1	60/51	13.8-18.8	2 min./ft	Hard, moderately weathered, moderately fractured, gray,	+13.8'	
						medium grained GRANITE GNEISS, medium bedding, with		
15					4 min./ft	horizontal to low angle stained joints/fractures		GRANITE GNEISS BEDROCK
						RQD=0%		
					5 min./ft			

GRANULAR SOILS BLOWS/FT DENSITY		COHESIVE SOILS BLOWS/FT DENSITY	
0-4	VERY LOOSE	<2	VERY SOFT
4-10	LOOSE	2-4	SOFT
10-30	MEDIUM DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
>50	VERY DENSE	15-30	V. STIFF
		>30	HARD

REMARKS
1. Auger from 0 to 8.5'
2. Refusal encountered at approximately 8.6' on possible boulder or bedrock.
3. Spun NW casing from 0 to 9'; no boulder or bedrock encountered; sample @ 9'
4. Spun NW casing from 9 to 13'

NOTES
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

GZA — BORING NO B-10

BOTTOM OF WEST ABUT. FTNG. (BEYOND)

GZA GEOENVIRONMENTAL INC.
140 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECH/GEOHYDROLOGICAL CONSULTANTS

PROJECT: Potter Hill Road Bridge No. 52, Westerly/Hopkinton, RI

REPORT OF BORING NO B-10 | SHEET 2 OF 2 | FILE NO 31334.4 | CHKD BY DLD

DEPTH	CASING BLOWS	SAMPLE NO	SAMPLE PEN./REC	SAMPLE DEPTH (FT)	SAMPLE BLOWS/6"	SAMPLE DESCRIPTION Burmister CLASSIFICATION	R K	STRATUM DESCRIPTION
					3 min./ft			GRANITE GNEISS BEDROCK
					5 min./ft			
						END OF EXPLORATION @ 18.8'±		
20								

GRANULAR SOILS BLOWS/FT DENSITY		COHESIVE SOILS BLOWS/FT DENSITY	
0-4	VERY LOOSE	<2	VERY SOFT
4-10	LOOSE	2-4	SOFT
10-30	MEDIUM DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
>50	VERY DENSE	15-30	V. STIFF
		>30	HARD

REMARKS

NOTES
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

GZA — BORING NO. B-10

GZA GEOENVIRONMENTAL INC.
140 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECH/GEOHYDROLOGICAL CONSULTANTS

PROJECT: Potter Hill Road Bridge No. 52, Westerly/Hopkinton, RI

REPORT OF BORING NO B-9 | SHEET 1 OF 1 | FILE NO 31334.4 | CHKD BY DLD

BORING CO GZA Drilling, Inc. | FOREMAN Chris Lanking | GZA ENG M. McKenna

BORING LOCATION STA 20+48, O/S 23.6' L | GROUND SURFACE ELEV 33.0' DATUM NGVD | DATE START 12-16-98 DATE END 12-16-98

SAMPLER UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2-2 1/2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 IN

CASING UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 IN

CASING SIZE NW/HSA OTHER NV2 Core Barrel

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME
12-16-98		8'±		0 hrs

DEPTH	CASING BLOWS	SAMPLE NO	SAMPLE PEN./REC	SAMPLE DEPTH (FT)	SAMPLE BLOWS/6"	FIELD TEST DATA	SAMPLE DESCRIPTION Burmister CLASSIFICATION	R K	STRATUM DESCRIPTION
							ASPHALT NO RECOVERY	1 3"	ASPHALT
							STONE BASE, NO RECOVERY	1 6"	STONE
		S-1	24/18	0.5'-2.5'	10-17		Medium dense dark brown fine SAND some Silt,		
					11-14		little fine Gravel	2	
5		S-2	24/9	4'-6'	14-9		Medium dense, light brown fine to medium	2.5'+	FILL
					7-7		SAND some Silt little fine Gravel		
		S-3	24/11	6'-8'	2-2		Wet, medium dense, dark brown fine to medium		
					20-23		SAND little fine Silt, fine to coarse Gravel	3	FINE TO MEDIUM SAND
		S-4	18/11	8'-10'	9-8		Wet, medium dense to dense orange, fine to		NO EQUIPMENT INSTALLED
10					100/5"		medium SAND little Silt, trace fine Gravel	9.3'+	
		C-1	36/32	13.5'-16.5'	4 min.	RQD 89%	C-1: Hard very slightly weathered, slightly fractured,	4	GRANITE GNEISS BEDROCK
15					7 min.		grey, medium grained GRANITE GNEISS, very thin,		
					7 min.		moderately dipping bedding, with horizontal stained		
		C-2	24/24	16.5'-18.5'	7 min.	RQD 79%	joints/fractures, C-2 similar to C-1 except with		
					7 min.		horizontal to moderately dipping stained		
							joints/fractures	6 18.5'+	
							END OF EXPLORATION @ 18.5'+		
20									
25									
30									

GRANULAR SOILS BLOWS/FT DENSITY		COHESIVE SOILS BLOWS/FT DENSITY	
0-4	VERY LOOSE	<2	VERY SOFT
4-10	LOOSE	2-4	SOFT
10-30	MEDIUM DENSE	4-8	M. STIFF
30-50	DENSE	8-15	STIFF
>50	VERY DENSE	15-30	V. STIFF
		>30	HARD

REMARKS
1 Hollow stem augers used from 2' to 10.5' (refusal)
2 Continuous sampling from 4'± to 10.5'±
3 Spun NW casing and rollerbit to 11'±
4 For core sampling, numbers indicated in the (blows/ft") column are rate of coring in (min/ft.) using approximately 400 PSI of downward pressure in 3rd gear RQDS (Rock Quality Designations) are presented in the Field Test Data column

NOTES
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

GZA — BORING NO. B-9

BOTTOM OF WEST ABUT. FTNG. (BEYOND) EL. 27.50

REVISIONS		
NO.	DATE	BY

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON — RHODE ISLAND

BORING LOGS - 1

TUTELA ENGINEERING ASSOC., INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE — RHODE ISLAND

CHECKED BY CHK DATE 8/00 SCALE NONE

601-10

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	RI	BRO-0052(002)		28	36

GZA GEOENVIRONMENTAL, INC.
140 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECHNICAL/GEOHYDROLOGICAL CONSULTANTS

PROJECT: BRIDGE # 52-POTTER HILL RD, HOPKINTON/WESTERLY, RI

REPORT OF BORING No. B-2
SHEET 1 OF 1
FILE No. 31334.0
CHKD. BY TEB

Boring Co. GZA DRILLING
FOREMAN CHARLIE LEBLANC
GZA ENGINEER J.M. BELLISLE

BORING LOCATION SEE EXPLORATION LOCATION PLAN
GROUND SURFACE ELEVATION 32.4' DATUM NGVD
DATE START 12-2-93 DATE END 12-3-93

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 in.

CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 in.

CASING SIZE: 3" CASING OTHER: 2" Single Tube Core Barrell

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME

DEPTHS	CASING BLOWS	SAMPLE No.	SAMPLE PEN./REC	SAMPLE DEPTH (Ft.)	SAMPLE BLOWS/6"	SAMPLE DESCRIPTION (Burmister CLASSIFICATION)	REMARKS	STRATUM DESCRIPTION
0		R-1	60/45	0-5	CORED	Dark grey, coarse aggregate CONCRETE, changing to light grey, coarse, aggregate CONCRETE		1.5' CONCRETE DECK
								CONCRETE PIER
5		R-2	60/39	5-10	CORED	Light grey, coarse, aggregate CONCRETE		5.5'
						Very hard, slightly weathered, slightly fractured, medium/coarse grained, pink GRANITE	1	GRANITE BLOCK PIER
								10.0'
10		S-1	24/8	10-12	WOT/12"	Medium dense, dark brown, fine to coarse SAND, some fine to coarse Gravel, little Peat		
		S-2	22/7	12.0-13.8	7-9	Very dense, dark brown, fine to coarse SAND, some fine to coarse Gravel, little Peat	2	SAND, some Gravel, little Peat
					9-10			14.0'
					13-100/10"			Weathered GRANITE
15		R-3	72/30	14-20	CORED	Moderately hard, moderately severe weathering, extremely fractured, coarse grained GRANITE		15.5'
				RQD=33.3%		Very hard, slightly weathered, moderately fractured, medium grained, grey GRANITE with distinct veins of pink GRANITE and QUARTZ	3	Grey GRANITE Bedrock
20		R-4	24/8	20-22	CORED	Very hard, slightly weathered, moderately fractured, medium grained, grey GRANITE		
		R-5	36/34	22-25	CORED	Very hard, slightly weathered, moderately fractured, medium grained, grey GRANITE with distinct veins of QUARTZ		
25						End of Exploration at 25.0'		
30								

BOTTOM OF PIER TREMIE (BEYOND)

GRANULAR SOILS Blows/Ft Density		COHESIVE SOILS Blows/Ft Density	
0- 4	V. LOOSE	< 2	V. SOFT
4-10	LOOSE	2- 4	SOFT
10-30	M. DENSE	4- 8	M. STIFF
30-50	DENSE	8-15	STIFF
> 50	V. DENSE	15-30	V. STIFF
		> 30	HARD

REMARKS:
1. Periodic voids starting at 8.5'.
2. Split spoon dropped approximately 12" when placed in open hole.
3. First 1.5' of rock core was inconsistent in drilling, hard then soft, indicating highly fractured or weathered rock.

NOTES:
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

GZA BORING No. B-2

GZA GEOENVIRONMENTAL, INC.
140 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECHNICAL/GEOHYDROLOGICAL CONSULTANTS

PROJECT: BRIDGE # 52-POTTER HILL RD, HOPKINTON/WESTERLY, RI

REPORT OF BORING No. B-6
SHEET 1 OF 1
FILE No. 31334.0
CHKD. BY TEB

Boring Co. GZA DRILLING
FOREMAN CHARLIE LEBLANC
GZA ENGINEER J.M. BELLISLE

BORING LOCATION SEE EXPLORATION LOCATION PLAN
GROUND SURFACE ELEVATION 33.8' DATUM NGVD
DATE START 12-14-93 DATE END 12-14-93

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 in.

CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 in.

CASING SIZE: 3" CASING OTHER: 2" Single Tube Core Barrell

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME

DEPTHS	CASING BLOWS	SAMPLE No.	SAMPLE PEN./REC	SAMPLE DEPTH (Ft.)	SAMPLE BLOWS/6"	SAMPLE DESCRIPTION (Burmister CLASSIFICATION)	REMARKS	STRATUM DESCRIPTION
0		R-1	10/5	0-.6	CORED	Dark grey, coarse, aggregate CONCRETE	1	0.6' CONCRETE DECK
								(Open Air)
5		R-2	60/33	5.5-10.5	CORED	Hard, slightly weathered, sound, medium to coarse grained, pink GRANITE (individual blocks)		5.5'
								6.0' CONCRETE Spoilage
								GRANITE BLOCK PIER
10		S-1	24/12	10.5-12.5	4-6	Medium dense, grey/brown, fine to coarse SAND, trace- Peat at top. Granite fragments in tip of sampler.		10.5
					6-16		2	Stratified SANDS
					WOH/FT		3	15.0'
15		R-3	60/18	15-20	1.75 min	Moderately hard, moderately weathered, moderately to extremely fractured, medium grained, grey GRANITE	4	BEDROCK
				RQD=30.0%	2.5 min			
					3.5 min			
					4.5 min			
20					4.5 min	End of Exploration at 20.0		
25								
30								

GRANULAR SOILS Blows/Ft Density		COHESIVE SOILS Blows/Ft Density	
0- 4	V. LOOSE	< 2	V. SOFT
4-10	LOOSE	2- 4	SOFT
10-30	M. DENSE	4- 8	M. STIFF
30-50	DENSE	8-15	STIFF
> 50	V. DENSE	15-30	V. STIFF
		> 30	HARD

REMARKS:
1. Boring performed through bridge deck, beside face of concrete pier, to top of granite blocks under concrete.
2. Split spoon over-driven 6".
3. Casing driven to 15'±; during wash roller bit advanced to 15'.
4. Core barrel advanced at rotary speed of 2500 rpm.

NOTES:
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

GZA BORING No. B-6

GZA GEOENVIRONMENTAL, INC.
140 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECHNICAL/GEOHYDROLOGICAL CONSULTANTS

PROJECT: BRIDGE # 52-POTTER HILL RD, HOPKINTON/WESTERLY, RI

REPORT OF BORING No. B-3
SHEET 1 OF 1
FILE No. 31334.0
CHKD. BY TEB

Boring Co. GZA DRILLING
FOREMAN CHARLIE LEBLANC
GZA ENGINEER J.M. BELLISLE

BORING LOCATION SEE EXPLORATION LOCATION LOG
GROUND SURFACE ELEVATION 33.1' DATUM NGVD
DATE START 12-6-93 DATE END 12-7-93

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 in.

CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 in.

CASING SIZE: 3" CASING OTHER: 2" Single Tube Core Barrell

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME

DEPTH	CASING BLOWS	SAMPLE No.	SAMPLE PEN./REC	SAMPLE DEPTH (Ft.)	SAMPLE BLOWS/6"	SAMPLE DESCRIPTION (Burmister CLASSIFICATION)	REMARKS	STRATUM DESCRIPTION
0		R-1	60/50	0-5	CORED	Dark grey, coarse aggregate CONCRETE with numerous voids on light grey, coarse, aggregate Concrete. Change between materials appears at approximately 1'6"		CONCRETE DECK 1.7'
								CONCRETE PIER 6.1'
5		R-2	58/35	5.0-9.8	CORED	Grey, coarse aggregate CONCRETE changing at 6'2" to very hard, moderately weathered, slightly fractured, fine to medium grained GRANITE		
								GRANITE BLOCK PIER 13.5'
10		R-3	44/19	9.8-13.5	CORED	Very hard, slightly weathered, slightly fractured, fine to medium grained GRANITE, fine horizontal and vertical cracking at 13.3'		SAND, trace Peat 15.0'
		S-1	18/4	13.5-15.0	WOR/16"	Very loose, tan, fine to medium SAND, trace-Peat grading to very severly weathered, grey GRANITE at 14.8'		Grey GRANITE 19'
15		R-4	66/49	15.6-21.0	76/2"	Hard, slightly weathered, slightly fractured, fine to medium grained, grey GRANITE changing at 19' to very hard, very slightly weathered, amorphous pink GRANITE with distinct veins of white QUARTZ		Pink GRANITE 21'
				RQD=63.6%	CORED			
20						End of Exploration at 21'		
25								
30								

BOTTOM OF PIER TREMIE (BEYOND)

GRANULAR SOILS Blows/Ft Density		COHESIVE SOILS Blows/Ft Density	
0- 4	V. LOOSE	< 2	V. SOFT
4-10	LOOSE	2- 4	SOFT
10-30	M. DENSE	4- 8	M. STIFF
30-50	DENSE	8-15	STIFF
> 50	V. DENSE	15-30	V. STIFF
		> 30	HARD

REMARKS:
1. Spoon fell from 13'6" - 14'10" under weight of rods. Sampled from 14'10" - refusal at 76 blows/2".

NOTES:
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

GZA BORING No. B-3

GZA GEOENVIRONMENTAL, INC.
140 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECHNICAL/GEOHYDROLOGICAL CONSULTANTS

PROJECT: BRIDGE # 52-POTTER HILL RD, HOPKINTON/WESTERLY, RI

REPORT OF BORING No. B-7
SHEET 1 OF 1
FILE No. 31334.0
CHKD. BY TEB

Boring Co. GZA DRILLING
FOREMAN CHARLIE LEBLANC
GZA ENGINEER J.M. BELLISLE

BORING LOCATION SEE EXPLORATION LOCATION PLAN
GROUND SURFACE ELEVATION 33.8 DATUM NGVD
DATE START 12-10-93 DATE END 12-13-93

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 in.

CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 in.

CASING SIZE: 3" CASING OTHER: 2" Single Tube Core Barrell

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME

DEPTH	CASING BLOWS	SAMPLE No.	SAMPLE PEN./REC	SAMPLE DEPTH (Ft.)	SAMPLE BLOWS/6"	SAMPLE DESCRIPTION (Burmister CLASSIFICATION)	REMARKS	STRATUM DESCRIPTION
0		R-1	7/7	0-0.6	CORED	Dark grey, coarse aggregate CONCRETE	1	0.6' CONCRETE DECK
								(Open Air)
5		R-2	20/15	6.0-7.7	CORED	Hard, moderately weathered, moderately fractured, medium to coarse grained, pink GRANITE		6.0
		R-3	36/35	8-11	CORED	Hard, moderately weathered, sound, fine to medium grained, pink/grey GRANITE		GRANITE BLOCK PIER
10								11.0
		S-1	9/1	11-11.7	32-92/3"	Less than 1" dark brown, fine to coarse SAND, trace Peat, changing to decomposed GRANITE		SAND 13.1 (WEATHERED ROCK)
		S-2	14/10	12-13.1	92-65	Very dense, brown, fine to coarse SAND, some fine to coarse GRAVEL/ROCK CHIPS		
					36/2"			
15		R-4	60/17	13.5/18.5	4.5 min	Hard, moderately weathered, moderately fractured, medium to coarse grained, pink to grey GRANITE with excessive cracking at 13.5' to approximately 14' and distinct vein of Quartz and feldspar with black mica at approximately 18'		BEDROCK
				RQD=35.0%	5 min			
					3 min			
					4 min			
20					6 min	End of Exploration at 18.5'		
25								
30								

GRANULAR SOILS Blows/Ft Density		COHESIVE SOILS Blows/Ft Density	
0- 4	V. LOOSE	< 2	V. SOFT
4-10	LOOSE	2- 4	SOFT
10-30	M. DENSE	4- 8	M. STIFF
30-50	DENSE	8-15	STIFF
> 50	V. DENSE	15-30	V. STIFF
		> 30	HARD

REMARKS:
1. Rock cored, then core barrell lowered to top of granite block pier below concrete, and coring continued.
2. One piece of core fell into hollow during removal of barrell. Rock pieces in tip of split spoon.

NOTES:
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

GZA BORING No. B-7

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON RHODE ISLAND

BORING LOGS - 2

CHECKED BY CHK DATE 8/00 SCALE NONE

TUTELA ENGINEERING ASSOC., INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE RHODE ISLAND

601-11

: \DWGS\HILLTEP\601-11 Wed May 27 15:28:14 1998 Tutela Engineering Associates, Inc

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	RI	BRO-0053(002)		29	36

GZA GEOENVIRONMENTAL, INC.
140 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECHNICAL/GEOHYDROLOGICAL CONSULTANTS

PROJECT: BRIDGE # 52-POTTER HILL RD ASHAWAY/WESTERLY, RI

REPORT OF BORING No. B-6
SHEET 1 OF 1
FILE No. 31334.0
CHKD. BY TEB

BORING Co. GZA DRILLING
FOREMAN CRAIG LEHRING
GZA ENGINEER J.M. BELLISLE

BORING LOCATION SEE EXPLORATION LOCATION PLAN
GROUND SURFACE ELEVATION 33.6 DATUM NGVD
DATE START 12-6-92 DATE END 12-10-92

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 in.

CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 in.

CASING SIZE: 3" CASING OTHER: 2" Single Tube Core Barrell

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME

DEPTH	BLOWS/6"	SAMPLE No.	SAMPLE PEN./REC	SAMPLE DEPTH (Ft.)	SAMPLE BLOWS/6"	SAMPLE DESCRIPTION Burmister CLASSIFICATION	REMARKS	STRATUM DESCRIPTION
		R-1	60/48	0-5	CORED	Dark grey, coarse aggregate CONCRETE (3 layers of rebar encountered) changing at 1.4' to light grey, coarse aggregate CONCRETE		CONCRETE DECK 1.4'
								CONCRETE ABUTMENT 5.1'
5		R-2	60/50	5-10	CORED	Coarse aggregate CONCRETE changing at 5.1' to very hard, moderately weathered, slightly fractured, medium to coarse grained, pink and grey GRANITE blocks switching at 7.5' to very hard, slightly weathered, slightly fractured, fine to medium grained, grey GRANITE		GRANITE BLOCK ABUTMENT
		S-1	24/0	10-12	53-12	No recovery	1	10.0'
10					14-14			11.0' (SOIL) ?
		R-3	60/7	11-16	CORED	Hard, moderately weathered, slightly fractured, medium to coarse grained GRANITE		ROCK
				RQD=11.6%				
15		S-2	17/19	16-17.5	15-33	Very dense, brown, fine to coarse SAND changing to completely weathered rock. Granite fragments in tip.		16.0' SAND 17.0'
					90/5"			Bedrock
		R-4	48/41	17-21	CORED	Hard, moderately weathered, moderately fractured, coarse grained, pink GRANITE changing to hard, moderately weathered, moderately fractured, medium grained, grey GRANITE		
				RQD=43.1%				
20						End of Exploration at 21'	2	
25								
30								

GRANULAR SOILS Blows/Ft Density		COHESIVE SOILS Blows/Ft Density	
0- 4	V. LOOSE	< 2	V. SOFT
4-10	LOOSE	2- 4	SOFT
10-30	M. DENSE	4- 8	M. STIFF
30-50	DENSE	8-15	STIFF
> 50	V. DENSE	15-30	V. STIFF
		> 30	HARD

REMARKS:
1. Bent spoon therefore zero recovery; Casing spun to 10.5'; roller bit to 11.0'; cored from 11.0'-16.0'; spoon sampled 16-17.5'.
2. Four foot rock core taken due to steel fragments in bottom of hole. Fell in from above, destroying bits.

NOTES:
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES. TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED. FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

GZA BORING No. B-6

BOTTOM OF EAST ABUT. FTNG. (BEYOND) EL. 27.50

GZA GEOENVIRONMENTAL, INC.
140 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECHNICAL/GEOHYDROLOGICAL CONSULTANTS

PROJECT: BRIDGE # 52-POTTER HILL RD ASHAWAY/WESTERLY, RI

REPORT OF BORING No. B-8
SHEET 1 OF 1
FILE No. 31334.0
CHKD. BY TEB

BORING Co. GZA DRILLING
FOREMAN CRAIG LEHRING
GZA ENGINEER J.M. BELLISLE

BORING LOCATION SEE EXPLORATION LOCATION PLAN
GROUND SURFACE ELEVATION 33.7 DATUM NGVD
DATE START 12-8-93 DATE END 12-13-93

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 in.

CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 in.

CASING SIZE: HOME OTHER: 2" Single Tube Core Barrell

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME

DEPTH	BLOWS/6"	SAMPLE No.	SAMPLE PEN./REC	SAMPLE DEPTH (Ft.)	SAMPLE BLOWS/6"	SAMPLE DESCRIPTION Burmister CLASSIFICATION	REMARKS	STRATUM DESCRIPTION
		R-1	60/58	0-5	CORED	Dark grey, coarse aggregate CONCRETE, rebar at approximately 6" and 12", changing at 1.3' to light grey, coarse aggregate CONCRETE		1.3 CONCRETE DECK
								CONCRETE ABUTMENT 6.0'
5		R-2	60/54	5-10	CORED	Light grey, coarse aggregate CONCRETE changing to hard, moderately weathered, slightly fractured, fine to medium grained, pink to grey GRANITE		GRANITE BLOCK ABUTMENT 10.5'
10		R-3	60/24	10-15	CORED	Hard, moderately weathered, slightly fractured, medium grained, grey GRANITE (Abutment) changing at 10.5' to hard, moderately severely weathered, moderately fractured, medium/coarse grained, grey GRANITE (Bedrock)	1	Bedrock
		R-4	12/10	15-16	MIN/FT	Hard, moderately weathered, slightly fractured, medium grained, grey GRANITE		
15		R-5	48/31	16-20	8 min	Hard, moderately weathered, slightly fractured, medium grained, grey GRANITE with distinct veins of coarse grained, quartz and feldspar.		
				RQD=39.6%	11 min			
					11 min			
					5 min			
20					6 min	End of Exploration at 20.0'		
25								
30								

GRANULAR SOILS Blows/Ft Density		COHESIVE SOILS Blows/Ft Density	
0- 4	V. LOOSE	< 2	V. SOFT
4-10	LOOSE	2- 4	SOFT
10-30	M. DENSE	4- 8	M. STIFF
30-50	DENSE	8-15	STIFF
> 50	V. DENSE	15-30	V. STIFF
		> 30	HARD

REMARKS:
1. Bedrock appeared to be highly fractured due to the small recoveries. There is no apparent soils between the granite blocks and the bedrock in this location.

NOTES:
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES. TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED. FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

GZA BORING No. B-8

GZA GEOENVIRONMENTAL INC.
140 BROADWAY
PROVIDENCE, RHODE ISLAND
GEOTECH/GEOHYDROLOGICAL CONSULTANTS

PROJECT: Potter Hill Road Bridge No. 52, Westerly/Hopkinton, RI

REPORT OF BORING NO. B-11
SHEET 1 OF 1
FILE NO. 31334.4
CHKD BY DLD

BORING CO GZA Drilling, Inc
FOREMAN Chris Lenking
GZA ENG M. McKenna

BORING LOCATION STA 21+98, 0/S 21' L
GROUND SURFACE ELEV 33.3' DATUM NGVD
DATE START 12-21-98 DATE END 12-23-98

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2-2 1/2" SPLIT SPOON DRIVEN USING A 140 lb HAMMER FALLING 30 IN
CASING: UNLESS OTHERWISE NOTED CASING DRIVEN USING A 300 lb HAMMER FALLING 24 IN
CASING SIZE: NW OTHER: NV2 Core Barrel

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME
12-23-98		6'±		0 hrs

DEPTH	CASING BLOWS	SAMPLE NO	SAMPLE PEN./REC	SAMPLE DEPTH (FT)	SAMPLE BLOWS/6"	FIELD TEST DATA	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	RK	STRATUM DESCRIPTION	EQUIPMENT INSTALLED
		S-1	24/24	3'-23"	96-42		ASPHALT NO RECOVERY	1	0.3'± ASPHALT	
					40-36		Very dense brown, fine to medium SAND, little fine to coarse Gravel			
							trace Silt		FILL	
5		S-2	24/8	4'-6'	12-30		Dense brown, fine to medium SAND, trace (-) fine Gravel, trace Silt		6'±	
					9-9					
		S-3	24/9	6'-8'	19-21		Medium dense to loose light brown fine to medium SAND little Gravel		FINE TO MEDIUM SAND	NO EQUIPMENT INSTALLED
					4-3		trace Silt		11.5'	
		S-4	24/13	8'-10'	2-3		Wet, loose, brown, fine to medium SAND,trace Gravel, trace Silt		SILT	
10					6-10				13'	
		S-5	24/12	10'-12'	27-12		Wet, med dense brown, fine-med SAND, little Gravel, trace Silt at approx. 11 1/2 ft. changes to wet loose, brown, SILT little fine sand			
					4-4		Top 12" Wet loose, brown SILT, little fine SAND to 13'+			
		S-6	24/24	12'-14'	4-6		Bottom 12" Wet, medium dense, light brown, fine to medium SAND,		FINE TO MEDIUM SAND	
					21-98		trace coarse Gravel, trace Silt			
15										
20										
		S-7	24/7	20'-22'	24-47		Wet very dense, brown fine to medium SAND, trace Gravel, trace Silt	2	23'±	
					40-48					
		C-1	60/18	23'-28'	8 min	RQD=0%	C-1 Hard, moderately weathered, severely fractured, gray, medium grained GRANITE GNEISS, medium, moderately dipping bedding with horizontal stained joints/fractures		GRANITE GNEISS	
25					8 min					
					8 min				BEDROCK	
					11 min					
					6 min					
					3min					
30							END OF EXPLORATION @ 28'+	3		

GRANULAR SOILS BLOWS/FT DENSITY		COHESIVE SOILS BLOWS/FT DENSITY	
0-4		<2	VERY SOFT
4-10		2-4	SOFT
10-30		4-8	M. STIFF
30-50		8-15	STIFF
>50		15-30	V. STIFF
		>30	HARD

REMARKS
1. Auger from 0 to 20'
2. Spun NW casing and rollerbit to 11'+
3. NV2 barrel jammed @ approximately 27'6"

NOTES
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES. TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED. FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

GZA BORING NO. B-11

BOTTOM OF EAST ABUT. FTNG. (BEYOND) EL. 27.50

GZA GEOENVIRONMENTAL INC.
140 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECH/GEOHYDROLOGICAL CONSULTANTS

PROJECT: Potter Hill Road Bridge No. 52, Westerly/Hopkinton, RI

REPORT OF BORING NO. B-12
SHEET 1 OF 1
FILE NO. 31334.4
CHKD BY DLD

BORING CO GZA Drilling, Inc
FOREMAN Chris Lenking
GZA ENG M. McKenna

BORING LOCATION STA 21+88, 0/S 3' R
GROUND SURFACE ELEV 33.4' DATUM NGVD
DATE START 12-18-98 DATE END 12-18-98

SAMPLER: UNLESS OTHERWISE NOTED SAMPLER CONSISTS OF A 2-2 1/2" SPLIT SPOON DRIVEN USING A 140 lb HAMMER FALLING 30 IN
CASING: UNLESS OTHERWISE NOTED CASING DRIVEN USING A 300 lb HAMMER FALLING 24 IN
CASING SIZE NW OTHER: NV2 Core Barrel

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME
12-18-98		8'±		0 hr

DEPTH	CASING BLOWS	SAMPLE NO	SAMPLE PEN./REC	SAMPLE DEPTH (FT)	SAMPLE BLOWS/6"	FIELD TEST DATA	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	RK	STRATUM DESCRIPTION	EQUIPMENT INSTALLED
		S-1	24/16	3'-23"	9-15		ASPHALT NO RECOVERY		0.3'± ASPHALT	
					12-38		Medium, dense, gray brown, fine to medium SAND, trace Silt	1	FINE TO MEDIUM SAND POSSIBLE FILL	
		S-2	24/8	4'-6'	10-17		Dense to very dense, gray brown, fine to medium SAND	2	6'±	
					34-54		trace coarse Sand, trace Gravel, some Silt	3		
		S-3	24/7	6'-8'	28-21		Wet, very dense brown fine to coarse SAND and		8'± SAND AND GRAVEL	NO EQUIPMENT INSTALLED
					37-32		GRAVEL trace Silt			
		S-4	24/13	8'-10'	11-2		Wet, very loose, green black, fine SAND, trace Gravel		FINE SAND	
10					1/12"		little Silt			
		S-5	24/13	10'-12'	1/12"		Wet, very loose olive, fine SAND, trace (-) Silt			
					2-13				14'±	
		S-6	24/21	12'-14'	15-14		Wet, medium dense light gray green fine SAND trace		GLACIAL TILL	
					11-22		Silt, trace(-) medium sand, 1 piece coarse Gravel			
		S-7	24/12	14'-16'	18-34		Wet, very dense, fine to medium SAND, some Silt, some			
15					21-38		fine to coarse Gravel		18'±	
		S-8	24/20	18'-18'	21-33		Wet, very dense, light gray, fine to medium SAND some		GRANITE GNEISS BEDROCK	
					37-46		fine to coarse Gravel, little Silt	4		
		C-1	80/60	18.5'-23.5	8 min	RQD=73%	C-1 Hard, very slightly weathered slightly fractured			
					9 min		gray, medium grained GRANITE GNEISS very thin			
20					10min		moderately dipping bedding, with moderately dipping			
					10min		stained joints/fractures			
					10min			5		
25							END OF EXPLORATION @ 18.5'+			
30										

GRANULAR SOILS BLOWS/FT DENSITY		COHESIVE SOILS BLOWS/FT DENSITY	
0-4	VERY LOOSE	<2	VERY SOFT
4-10	LOOSE	2-4	SOFT
10-30	MEDIUM DENSE	4-8	M STIFF
30-50	DENSE	8-15	STIFF
>50	VERY DENSE	15-30	V. STIFF
		>30	HARD

REMARKS
1 Hollow stem augers used from 3' to 18'±
2 Continuous sampling from 4'+ to 18'+
3 Spun NW casing to 18.5'±
4 For core sampling, numbers indicated in the ((Blows/ft") column are rate of wiring in(min/ft.) using approximately 400 PSI of downward pressure in 3rd gear. RQDS (Rock Quality Designations) are presented in the Field Test Data column
5 Hole was backfilled upon completion

NOTES
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES. TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED. FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

GZA BORING NO. B-12

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT

POTTER HILL BRIDGE NO. 52

WESTERLY/HOPKINTON RHODE ISLAND

BORING LOGS - 3

CHECKED BY CHK DATE 8/00 SCALE NONE

TUTELA ENGINEERING ASSOC., INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE RHODE ISLAND

601-10

C:\DWGS\PUTTER\601-10 Thu Feb 10 09:32:11 1999 Tutela Engineering Assoc Inc (TI

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	RI	BRO-0052(083)		30	36

GZA GEOENVIRONMENTAL INC.
140 BROADWAY, PROVIDENCE, RHODE ISLAND
GEOTECH/GEOHYDROLOGICAL CONSULTANTS

PROJECT
Potter Hill Road Bridge No. 52
Westerly/Hopkinton, RI

REPORT OF BORING NO. B-13
SHEET 1 OF 1
FILE NO. 31334.4
CHKD BY DLO

BORING CO. GZA Drilling, Inc.
FOREMAN Chris Lenling
GZA ENG. M. McKenna

BORING LOCATION STA 22+40 O/S 2' R
GROUND SURFACE ELEV. 32.3' DATUM NGVD
DATE START 12-17-98 DATE END 12-17-98

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2-2 1/2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 IN.
CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING A 300 lb. HAMMER FALLING 24 IN.
CASING SIZE: NW OTHER: NVZ Core Barrel

GROUNDWATER READINGS

DATE	TIME	WATER	CASING	STABILIZATION TIME
12-17-98		6'±		0 hrs

DEPTH	CASING	SAMPLE BLOWS	SAMPLE NO.	SAMPLE PEN./REC.	SAMPLE DEPTH (FT.)	BLOWS/6"	FIELD TEST DATA	SAMPLE DESCRIPTION BURMISTER CLASSIFICATION	R K.	STRATUM DESCRIPTION	EQUIPMENT INSTALLED
			S-1	24/12	2'-2.5'	11-8		ASPHALT. NO RECOVERY		0.3'± ASPHALT	
						12-7		Medium dense, dark brown, fine(+) to coarse SAND, some Silt, little fine to coarse Gravel	1		
										2.5'± FILL	
5			S-2	24/19	4'-6'	8-2		Wet, very loose, brown, fine(+) to medium SAND, little Silt		SILTY FINE TO MEDIUM SAND	
						1/12"					
			S-3	24/15	6'-8'	3-4		Wet, medium dense, dark brown, fine SAND, some Silt			NO EQUIPMENT INSTALLED
						7-13					
			S-4	24/24	8'-10'	1-1		Wet, very loose, orange brown/gray fine SAND, some Silt			
10						1-1				10'±	
			S-5	6/6	10'-12'	12/6"		Wet, orange brown/gray fine SAND, some Silt	2	10.5'± GLACIAL TILL	
			C-1	60/60	11'-16'	9 min	RQD = 100%	C-1: Hard, very slightly weathered, slightly fractured, gray, medium Grained GRANITE GNEISS, very thin, moderately dipping bedding, with moderately dipping joints	3		
						6min			4		
						5 min			5	BEDROCK	
15						6 min					
						8 min			6		
								END OF EXPLORATION @ 16'±			
20											
25											
30											

GRANULAR SOILS BLOWS/FT	DENSITY
0-4	VERY LOOSE
4-10	LOOSE
10-30	MEDIUM DENSE
30-50	DENSE
>50	VERY DENSE

COHESIVE SOILS BLOWS/FT	DENSITY
<2	VERY SOFT
2-4	SOFT
4-8	M. STIFF
8-15	STIFF
15-30	V. STIFF
>30	HARD

REMARKS
1. Hollow stem augers used from 2' to 10.5' (refusal).
2. Continuous sampling from 4'± to 10.5'±.
3. Rock fragment encountered at tip of spoon.
4. Spun NW casing and rollerbit to 11'±.
5. For core sampling, numbers indicated in the (blows/ft") column are rate of coring in (min/ft.) using approximately 400 PSI of downward pressure in 3rd gear. RQDS (Rock Quality Designations) are presented in the Field Test Data column.
6. Hole backfilled upon completion.

NOTES
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES. TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED. FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

GZA BORING NO. B-13

REVISIONS NO.	DATE	BY

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

BRIDGE REPLACEMENT
POTTER HILL BRIDGE NO. 52
WESTERLY/HOPKINTON RHODE ISLAND

BORING LOGS - 4

CHECKED BY CHK DATE 8/00 SCALE NONE

TUTELA ENGINEERING ASSOC., INC.
ENGINEERS • ARCHITECTS • PLANNERS
PROVIDENCE RHODE ISLAND

601-10

C:\DWGS\POTTER.601-10 Thu Feb 18 09:34:40 1999 Tutela Engineering Assoc. INC

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI	BHO-0051(001)	2019	1	22

INDEX

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	STANDARD PLAN SYMBOLS & STANDARD LEGEND
3	STANDARD NOTES - 1
4	STANDARD NOTES - 2
5	LIST OF ABBREVIATIONS
6	JOB SPECIFIC GENERAL NOTES - 1
7	JOB SPECIFIC GENERAL NOTES - 2
	POTTER HILL CULVERT NO. 51
8	GENERAL PLAN
9	BRIDGE PLAN
10	REPAIR DETAIL NO. 1, ELEVATIONS
11	REPAIR DETAIL NO. 2, ABUTMENT REPAIRS
	WICKFORD BRIDGE NO. 10
12	GENERAL PLAN
13	BRIDGE PLAN
14	DECK REPAIRS
15	WINGWALL REPAIRS
16	REPAIR DETAIL NO. 1, WINGWALL REPAIRS
17	REPAIR DETAIL NO. 2, DECK REPAIRS
	THORNTON BRIDGE NO. 81
18	GENERAL PLAN
19	REPAIR DETAIL NO. 1, ELEVATIONS
20	REPAIR DETAIL NO. 2, RAILING REPAIRS
21	REPAIR DETAIL NO. 3, SPANDREL WALL REPAIRS
22	MAINTENANCE AND PROTECTION OF TRAFFIC NOTES

R.I. STANDARD SPECIFICATIONS AND STANDARD DETAILS

SPECIFICATIONS TO GOVERN THIS PROJECT ARE THE R.I. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2004 EDITION (AMENDED MARCH 2018), AND THE STATE AND FEDERAL SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS. STANDARD DETAILS FOR THIS PROJECT ARE R.I. STANDARD DETAILS, 1998 EDITION, WITH ALL REVISIONS.

STATE OF RHODE ISLAND

DEPARTMENT OF TRANSPORTATION

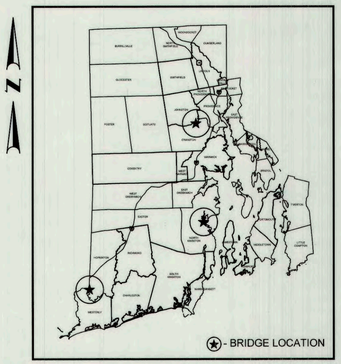
PLANS, SECTIONS, & DETAILS OF PROPOSED

REPAIRS TO POTTER HILL CULVERT NO. 51 WICKFORD BRIDGE NO. 10 THORNTON BRIDGE NO. 81

CITY/TOWN OF HOPKINTON, NORTH KINGSTOWN & CRANSTON

COUNTIES OF WASHINGTON & PROVIDENCE

R.I. CONTRACT NO. 2019-CB-065 F.A. PROJECT NO. BHO-0051(001)



LOCATION MAP

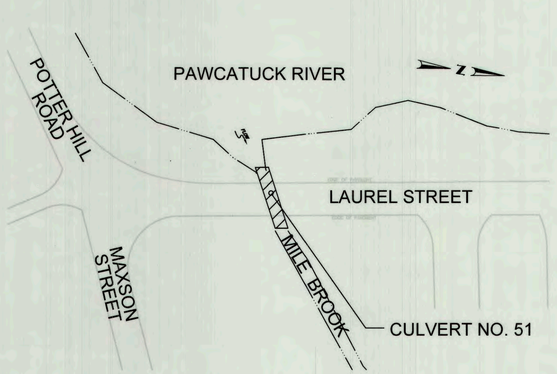
SCALE : 1" = 5000'

DESIGN DESIGNATION

POTTER HILL CULVERT NO. 51
2008 ADT = 600 V.P.D.
DESIGN SPEED = 25 M.P.H.

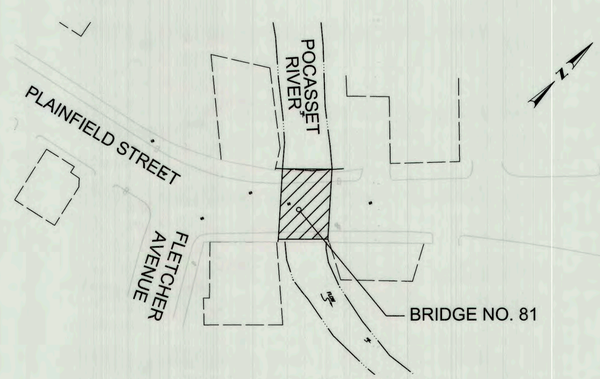
WICKFORD BRIDGE NO. 10
2008 ADT = 9,100 V.P.D.
DESIGN SPEED = 35 M.P.H.

THORNTON BRIDGE NO. 81
2015 ADT = 14,340 V.P.D.
DESIGN SPEED = 35 M.P.H.



LAYOUT PLAN - CULVERT NO. 51
SCALE: 1" = 50'

LAYOUT PLAN - BRIDGE NO. 10
SCALE: 1" = 50'



LAYOUT PLAN - BRIDGE NO. 81
SCALE: 1" = 50'

HURRICANE EVACUATION ROUTE

THIS PROJECT INCLUDES WORK ON A DESIGNATED HURRICANE EVACUATION AND DIVERSIONARY ROUTE. REFER TO GENERAL NOTE 18 ON SHEET 3.

ISSUED FOR CONSTRUCTION

R.I. DEPARTMENT OF TRANSPORTATION

APPROVED
David W. Fish 5-15-19
ADMINISTRATOR, PROJECT MANAGEMENT DATE

APPROVED
Robert Rocchio 5-18-19
CHIEF ENGINEER OF INFRASTRUCTURE DATE

APPROVED
5/15/19
DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED
N/A
DIVISION ADMINISTRATOR DATE

MICHAEL J. ADAMS
No. 11075
REGISTERED PROFESSIONAL ENGINEER
CIVIL 5-15-19

SCALE OF DRAWINGS
PLANS: AS NOTED

BASE OF LEVELS
NAVD 1988 VERTICAL
NAD 1983 HORIZONTAL

Steere ENGINEERING INC
2350 POST ROAD, SUITE 100, WARWICK, RI 02886

Contract Number 2019-CB-065
Number of Sheet 1
Total Sheets 22

0140G_V1_001_COVER

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI	BHO-0051(001)	2019	02	22

EXISTING

	EDGE OF PAVEMENT
	BERM
	CURB
	GUARDRAIL
MB	MAILBOX
NO.	UTILITY POLE
	POLE GUY
	LUMINARE
SIGN	SIGN
(SIZE)SD	SUBDRAIN
(SIZE)D	STORMDRAIN
(SIZE)S	SANITARY SEWER
(SIZE)W	WATER MAIN
(SIZE)G	GAS MAIN
(SIZE)T	TELEPHONE DUCT
(SIZE)E	ELECTRIC DUCT
	PLUG AND CAP PIPE
	ABANDONED UTILITY
	FLARED END SECTION
	HEADWALL
WG OR GG	WATER OR GAS GATE
CB	CATCH BASIN
MH	MANHOLE
HYD	HYDRANT
1+00	BASELINE OR CENTERLINE
EXIST. S.H.L. PLAT NO. XX	STATE HIGHWAY LINE
EXIST. S.F.L. PLAT NO. XX	STATE FREEWAY LINE
EXIST. P.E.B.	PERMANENT EASEMENT LINE
EXIST. T.E.B.	TEMPORARY EASEMENT LINE
	PROPERTY LINE
CITY NAME / TOWN NAME	CITY OR TOWN LINE
PWW	PAVED WATERWAY
ELEV.	CONTOUR LINE
	OPEN DITCH
R.I.H.B.	R.I. HIGHWAY BOUND
S.B.	STONE BOUND
	RETAINING WALL
	FIELD STONE WALL
NO.	BORINGS
TYPE	FENCE
	WOOD OR BRUSH LINE
(NAME)	TREES
	RIVER OR STREAM
	WETLAND AREA
NO. TYPE MATERIAL	BUILDING
	FOUNDATION
	BUILDING TO BE REMOVED
	RAILROAD TRACKS
	CUT AND MATCH
	RIP-RAP
	CUT SLOPE
	FILL SLOPE
	ROCK CUT
00.00	SPOT GRADE
	AREA GRADED TO DRAIN
	BALED HAY RI STD 9.1.0
	BALED HAY & SILT FENCE RI STD. 9.3.0
123 124 125	EDGE OF WETLAND
	WETLAND PERIMETER
ASSF	AREA SUBJECT TO STORM FLOW
100 YR. FLOOD BOUNDARY	100-YEAR FLOOD PLAIN
	LIMIT OF DISTURBANCE
	LIMIT OF CLEARING

NEW

	EDGE OF PAVEMENT
	BERM
	CURB
	GUARDRAIL
	MAILBOX
NO.	UTILITY POLE
GUY	POLE GUY
	LUMINARE
	SIGN
N(SIZE)SD	SUBDRAIN
(Length → Size)	STORMDRAIN
(Length → Size)	SANITARY SEWER
N(SIZE)W	WATER MAIN
N(SIZE)G	GAS MAIN
N-#(SIZE)T	TELEPHONE DUCT
N-#(SIZE)E	ELECTRIC DUCT
	PLUG AND CAP PIPE
	ABANDONED UTILITY
	FLARED END SECTION
	HEADWALL
	WATER OR GAS GATE
	CATCH BASIN
	MANHOLE
	HYDRANT
1+00	BASELINE OR CENTERLINE
NEW S.H.L. PLAT NO. XX	STATE HIGHWAY LINE
NEW S.F.L. PLAT NO. XX	STATE FREEWAY LINE
NEW P.E.B.	PERMANENT EASEMENT LINE
NEW T.E.B.	TEMPORARY EASEMENT LINE
	PROPERTY LINE
	CITY OR TOWN LINE
	PAVED WATERWAY
ELEV.	CONTOUR LINE
	OPEN DITCH
	R.I. HIGHWAY BOUND
	STONE BOUND
	RETAINING WALL
	FIELD STONE WALL
NO.	BORINGS
	FENCE
	WOOD OR BRUSH LINE
	TREES
	RIVER OR STREAM
	WETLAND AREA
	BUILDING
	FOUNDATION
	BUILDING TO BE REMOVED
	RAILROAD TRACKS
	CUT AND MATCH
	RIP-RAP
ROADWAY / TOP OF SLOPE	CUT SLOPE
ROADWAY / TOE OF SLOPE	FILL SLOPE
ROCK SHELF / ROCK / CUT	ROCK CUT
00.00	SPOT GRADE
ELEV.	AREA GRADED TO DRAIN
	BALED HAY RI STD 9.1.0
	BALED HAY & SILT FENCE RI STD. 9.3.0
	EDGE OF WETLAND
	WETLAND PERIMETER
	AREA SUBJECT TO STORM FLOW
	100-YEAR FLOOD PLAIN
LIMIT OF DISTURBANCE	LIMIT OF DISTURBANCE
LIMIT OF CLEARING	LIMIT OF CLEARING

1.1.0	UNDERDRAIN
1.3.0	CONCRETE CONNECTING COLLAR
2.1.0	CONCRETE HEADWALLS FOR PIPE CULVERTS
2.2.0	STANDARD HEADWALLS FOR MULTIPLE 3'-6" TO 7'-0" PIPE CULVERTS
2.3.0 (DIA.)	PRECAST CONCRETE FLARED END SECTION
3.2.0	BRICK/SOLID BLOCK 4'-0" ROUND MANHOLE
3.2.1 (DIA.)	BRICK/SOLID BLOCK 5'-0" OR 6'-0" ROUND MANHOLE
3.3.0	BRICK/SOLID BLOCK TYPE "D" SQUARE CATCH BASIN
3.3.2	BRICK/SOLID BLOCK TYPE "F" SQUARE CATCH BASIN
3.3.3	SOLID BLOCK FLUSH SQUARE CATCH BASIN
3.4.0	BRICK/SOLID BLOCK TYPE "D" ROUND CATCH BASIN
3.4.1	BRICK/SOLID BLOCK ROUND CATCH BASIN WITH GUTTER INLET
3.4.2	BRICK/SOLID BLOCK TYPE "F" ROUND CATCH BASIN
3.4.3	BRICK/SOLID BLOCK TYPE "R" CATCH BASIN
3.4.4	SOLID BLOCK FLUSH ROUND CATCH BASIN
3.4.5 (DIA.)	BRICK/SOLID BLOCK 5'-0" OR 6'-0" ROUND CATCH BASIN
3.5.0	SOLID BLOCK SHALLOW TYPE "F" SQUARE CATCH BASIN
3.5.1 (SIZE)	SOLID BLOCK SHALLOW 5'-0" OR 6'-0" SQUARE CATCH BASIN
3.6.0	BRICK/SOLID BLOCK DROP INLET
3.7.0 (DIA.)	BRICK/SOLID BLOCK ROUND MANHOLE OR CATCH BASIN GREATER THAN 12'-0"
4.2.0	PRECAST 4'-0" ROUND MANHOLE
4.2.1	PRECAST 5'-0" ROUND MANHOLE
4.2.2	PRECAST 6'-0" ROUND MANHOLE
4.3.0 (SIZE)	PRECAST 4'-0" OR 6'-0" SQUARE MANHOLE OR CATCH BASIN
4.4.0 (DIA.)	PRECAST 4'-0", 5'-0", OR 6'-0" ROUND CATCH BASIN
4.5.0	PRECAST CONCRETE DROP INLET
4.5.1	PRECAST CONCRETE DROP INLET LATERAL OUTLET
4.5.2	PRECAST CONCRETE DROP INLET LONGITUDINAL OUTLET
5.3.0	CATCH BASIN AND MANHOLE STEP
5.4.0	CONCRETE COLLARS
6.1.0	LIGHT-DUTY SQUARE FRAME AND ROUND COVER
6.1.1	HEAVY DUTY SQUARE FRAME AND ROUND COVER
6.2.0	LIGHT-DUTY ROUND FRAME AND COVER
6.2.1	HEAVY-DUTY ROUND FRAME AND COVER
6.3.0	SQUARE FRAME AND GRATE
6.3.1	SQUARE FRAME AND GRATE
6.3.2	SQUARE FRAME AND GRATE (BICYCLE SAFE)
6.3.3	HIGH CAPACITY FRAME AND GRATE
6.3.4	HIGH CAPACITY FRAME AND GRATE (BICYCLE SAFE)
6.4.0	ROUND FRAME AND GRATE
7.1.0S	PRECAST CONCRETE CURB (STRAIGHT)
7.1.0C	PRECAST CONCRETE CURB (CIRCULAR)
7.1.1	3'-0" PRECAST CONCRETE TRANSITION CURB
7.1.2	6'-0" PRECAST CONCRETE TRANSITION CURB
7.1.4	PRECAST 2'-0" RADIUS CORNER
7.1.5	PRECAST CONCRETE INLET STONE (FOR SQUARE CATCH BASIN)
7.1.6	PRECAST CONCRETE INLET STONE (FOR ROUND CATCH BASIN)
7.1.7	PRECAST CONCRETE APRON STONE (FOR SQUARE CATCH BASIN)
7.1.8	PRECAST CONCRETE APRON STONE (FOR ROUND CATCH BASIN)
7.2.0S	PRECAST CONCRETE SLOPED FACE CURB (STRAIGHT)
7.2.0C	PRECAST CONCRETE SLOPED FACE CURB (CIRCULAR)
7.2.1	PRECAST CONCRETE SLOPED FACE TRANSITION CURB
7.2.2	PRECAST CONCRETE TRANSITION CURB (VERTICAL FACE TO SPLOPED FACE)
7.3.0S	GRANITE CURB (STRAIGHT)
7.3.0C	GRANITE CURB (CIRCULAR)
7.3.1	3'-0" GRANITE TRANSITION CURB
7.3.2	6'-0" GRANITE TRANSITION CURB
7.3.3	GRANITE WHEELCHAIR RAMP TRANSITION CURB
7.3.4	GRANITE 2'-0" RADIUS CORNER
7.3.5	GRANITE INLET STONE (FOR SQUARE CATCH BASIN)
7.3.6	GRANITE INLET STONE (FOR ROUND CATCH BASIN)
7.3.7	GRANITE APRON STONE (FOR SQUARE CATCH BASIN)
7.3.8	GRANITE APRON STONE (FOR ROUND CATCH BASIN)
7.4.0	GRANITE SLOPED FACE CURB
7.4.1	GRANITE SLOPED FACE TRANSITION CURB
7.4.2	GRANITE TRANSITION CURB (VERTICAL FACE TO SLOPE FACE)
7.5.0	BITUMINOUS CONCRETE LIP CURB
7.5.1A	BITUMINOUS BERM (CONSTRUCTION METHOD A)
7.5.1B	BITUMINOUS BERM (CONSTRUCTION METHOD B)
7.6.0	CURB SETTING DETAIL
8.2.0	BITUMINOUS CONCRETE DITCH
8.3.0	RIP-RAP DITCH
8.4.0	PAVED WATERWAY
9.1.0	BALED HAY EROSION CHECK
9.2.0	SILT FENCE DETAIL
9.3.0	BALED HAY DITCH EROSION CHECK AND SILT FENCE COMBINED
9.4.0	BALED HAY DITCH AND SWALE EROSION CHECK
9.5.0	LOG AND HAY CHECK DAM
9.7.0	DEWATERING BASIN
9.8.0	BALED HAY CATCH BASIN INLET PROTECTION
9.9.0	CONSTRUCTION ACCESS
10.1.0	WET STONE MASONRY RETAINING WALL
10.2.0	RUBBLE MASONRY WALL
10.3.0	CONCRETE RETAINING WALL
10.4.0	STONE MASONRY STEPS
14.1.0	CONCRETE HIGHWAY BOUND
15.1.0	POST AND MOUNTINGS FOR RURAL MAILBOX
15.2.0 (NO.)	POST AND MULTIPLE MOUNTINGS FOR RURAL MAILBOXES
18.2.0	PRECAST TYPE "A" HANDHOLE
18.2.2	HEAVY DUTY TYPE "H" HANDHOLE
18.3.0	ALUMINUM LIGHTING STANDARDS
20.2.0	BI-DIRECTIONAL CONTROL DEVICE
24.6.1	STREET SIGN MOUNTING DETAIL
26.2.0	POLYETHYLENE DRUM WITH MARKINGS
26.3.0	PVC PLASTIC PIPE TYPE III BARRICADE
31.1.0	CHAIN LINK FENCE 3'-0" TO 4'-0"
31.2.0	CHAIN LINK FENCE 5'-0" TO 6'-0"
31.2.1	CHAIN LINK FENCE 5'-0" TO 6'-0" INTERMEDIATE POST
31.3.0	WOVEN WIRE RIGHT-OF-WAY FENCE (STEEL POST)
34.1.0	TYPICAL GUARDRAIL INSTALLATION
34.2.0	STEEL BEAM GUARDRAIL
34.2.1	STEEL BEAM GUARDRAIL DETAILS
34.2.2	STEEL BEAM GUARDRAIL DOUBLE FACED ASSEMBLY
34.2.3	STEEL BEAM GUARDRAIL FIXTURES
34.2.5	STEEL BEAM GUARDRAIL REFLECTORIZED TRIANGULAR DELINEATOR
34.3.1	GUARDRAIL END SECTION
34.3.2	TERMINAL END SECTION (SINGLE FACE)
34.3.3	ANCHORAGE DETAILS APPROACH END SECTION
34.3.4	ANCHORAGE DETAILS TRAILING END SECTION
34.4.0	STEEL BACKED TIMBER GUARDRAIL
34.4.1	STEEL BACKED TIMBER GUARDRAIL TERMINAL SECTION-TYPE 1
40.1.0	DOUBLE-FACED PRECAST MEDIAN BARRIER
40.2.0	SINGLE-FACED PRECAST MEDIAN BARRIER
40.2.1	SINGLE-FACED PRECAST MEDIAN BARRIER
40.3.0	PRECAST MEDIAN BARRIER TRANSITION UNIT
40.5.0	PRECAST MEDIAN BARRIER FOR TEMPORARY TRAFFIC CONTROL
43.1.0	CEMENT CONCRETE SIDEWALK
43.2.0	BITUMINOUS CONCRETE SIDEWALK
43.3.0	WHEELCHAIR RAMP
43.3.1	WHEELCHAIR RAMP FOR LIMITED RIGHT-OF-WAY AREAS
43.4.0	DRIVEWAY DEVELOPMENT FOR 3'-0" TRANSITION CURB
43.4.1	DRIVEWAY DEVELOPMENT FOR 6'-0" TRANSITION CURB
43.5.0	CEMENT CONCRETE DRIVEWAYS
48.1.0	DETECTABLE WARNING SYSTEM
51.1.0	TREE PROTECTION DEVICE
51.1.1	DRIP LINE TREE PROTECTION DEVICE FOR EXISTING TREES
51.2.0	SHRUB PROTECTION DEVICE
51.3.0	TREE WELL
51.4.0	TREE WALL

AB	ADJUST CATCH BASIN TO GRADE
ABM	ADJUST CATCH BASIN TO MANHOLE
AC	ADJUST CURB STOP TO GRADE
AD	ADJUST DRAINAGE MANHOLE TO GRADE
AE	ADJUST ELECTRIC MANHOLE TO GRADE
AFC	ADJUST FRAME AND COVER TO GRADE
AFG	ADJUST FRAME AND GRATE TO GRADE
AG	ADJUST GAS GATE BOX TO GRADE
AHH	ADJUST HANDHOLE TO GRADE
AS	ADJUST SANITARY SEWER MANHOLE TO GRADE
AT	ADJUST TELEPHONE MANHOLE TO GRADE
AW	ADJUST WATER GATE BOX TO GRADE
BCD	BITUMINOUS CONCRETE DRIVEWAY 3" BITUMINOUS CONCRETE TYPE I-2 8" GRAVEL BORROW SUBBASE COURSE
BPS	BUILD NEW STRUCTURE OVER EXISTING PIPE
CCB	CLEAN CATCH BASIN
CCP	CUT AND CAP PIPE WITH RESTRAINT (ALL SIZES)
CFP	CLEAN AND FLUSH PIPE
CG	CLEARING AND GRUBBING
CMH	CLEAN MANHOLE
CP (DEPTH)	COLD PLANE
CPP	CUT AND PLUG PIPE (ALL TYPES, ALL SIZES)
DB	REMOVE AND DISPOSE BITUMINOUS CURB
DC	REMOVE AND DISPOSE CONCRETE CURB
DCB	REMOVE AND DISPOSE CATCH BASIN
DDI	REMOVE AND DISPOSE DROP INLET
DF	REMOVE AND DISPOSE FENCE
DFC	REMOVE AND DISPOSE FRAME AND COVER
DFE	REMOVE AND DISPOSE FLARED END SECTION
DFG	REMOVE AND DISPOSE FRAME AND GRATE
DFH	REMOVE AND DISPOSE FIRE HYDRANT
DFP	REMOVE AND DISPOSE FLEXIBLE PAVEMENT
DG	REMOVE AND DISPOSE GUARDRAIL
DH	REMOVE AND DISPOSE HEADWALL
DHB	REMOVE AND DISPOSE HIGHWAY BOUND
DHH	REMOVE AND DISPOSE HANDHOLE
DL	REMOVE AND DISPOSE LIGHT AND FOUNDATION
DMB	REMOVE AND DISPOSE MEDIAN BARRIER
DMH	REMOVE AND DISPOSE MANHOLE
DMM	REMOVE AND DISPOSE MEDIAN MARKER
DOW	REMOVE AND DISPOSE OBSERVATION WELL
DP	REMOVE AND DISPOSE PIPE
DPB	REMOVE AND DISPOSE PAVEMENT AND RIGID BASE
DRB	REMOVE AND DISPOSE RIGID BASE
DS	REMOVE AND DISPOSE SIGN
DSS	REMOVE AND DISPOSE TRAFFIC SIGNAL SYSTEM
DSW	REMOVE AND DISPOSE SIDEWALK
DTD	REMOVE AND DISPOSE TELEPHONE DUCT BANKS
DUP	REMOVE AND DISPOSE UTILITY POLE
DWW	REMOVE AND DISPOSE PAVED WATERWAY
FF	FILTER FABRIC RIPRAP FLARED END UNDERLAYMENT
GET	FLARED GUARDRAIL END TREATMENT
IA	IMPACT ATTENUATOR
IDL	IMPERVIOUS DITCH LINER
LOD	LIMIT OF DISTURBANCE
LOR	LIMIT OF REGRADING
LS	4" LOAM AND SEED

NFH	NEW FIRE HYDRANT WITH GATE VALVE
NIC	NOT IN THIS CONSTRUCTION CONTRACT
NWB	FURNISH AND INSTALL NEW WATER GATE VALVE BOX
NWVB	FURNISH AND INSTALL NEW WATER GATE VALVE AND BOX
NWCB	FURNISH AND INSTALL NEW WATER CURB STOP BOX
NWSB	FURNISH AND INSTALL NEW WATER CURB STOP AND BOX
PCD	PERMANENT CHECK DAM
PS	4" PLANTABLE SOIL AND SEED
RCB	RECONSTRUCT TYPE "D" CATCH BASIN, TO CATCH BASIN WITH GUTTER INLET
RCM	R.I.D.O.T. COMMUNICATIONS MANHOLE
RHH	REMOVE, HANDLE, HAUL, TRIM, RESET CURB EDGING, STRAIGHT, CIRCULAR (ALL TYPES)
RLP	RELOCATE LAMP POST
RMB	RELOCATE MAILBOX (BY OTHERS)
RPM	REMOVE PAVEMENT MARKINGS
RRP	RIP-RAP PAD (SEE DETAIL)
RRS	REMOVE AND RELOCATE SIGN
RUP	RELOCATE UTILITY POLE (BY OTHERS)
SB	STONE BAFFLE
SBAE	STEEL BEAM BRIDGE CONNECTION APPROACH END (W/O NESTED RAIL)
SBTE	STEEL BEAM BRIDGE CONNECTION TRAILING END (W/NESTED RAIL)
SD-	STRUCTURAL DISPOSITION - SEE CS PAGES OF SPECIFICATION
SF	REMOVE AND STOCKPILE FENCE
SGA	SPECIAL GRADED AGGREGATE
SGC	REMOVE AND STOCKPILE GRANITE CURB
SGR	REMOVE AND STOCKPILE GUARDRAIL
SH	REMOVE AND STOCKPILE HYDRANT
SS	REMOVE AND STOCKPILE SIGN
STS	REMOVE AND STOCKPILE TRAFFIC SIGNAL SYSTEM
TB	CONCRETE THRUST BLOCK
TEP	TIE EXISTING PIPE INTO NEW STRUCTURE
TNP	TIE NEW PIPE INTO EXISTING STRUCTURE
TBT	THRIE BEAM TRANSITION
TBBC	THRIE BEAM BRIDGE CONNECTION
TT	TREE TRIMMING
WCM	4" WOOD CHIP MULCH
4DY	4" EPOXY RESIN PAVEMENT MARKINGS - DOUBLE YELLOW
6W	6" EPOXY RESIN PAVEMENT MARKINGS - WHITE
12W	12" EPOXY RESIN PAVEMENT MARKINGS - WHITE
6WT	6" PREFORMED PATTERNED MARKING (HIGH PERFORMANCE TAPE)
4Y	4" EPOXY RESIN PAVEMENT MARKINGS - YELLOW
6Y	6" EPOXY RESIN PAVEMENT MARKINGS - YELLOW
P.G.L.	PROFILE GRADE LINE

ISSUED FOR CONSTRUCTION

THIS PLAN SHALL NOT BE ALTERED

REVISIONS		
NO.	DATE	BY
1	6/07	TRB

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

REPAIRS TO
POTTER HILL CULVERT NO. 51
WICKFORD BRIDGE NO. 10
THORNTON BRIDGE NO. 81
HOPKINTON, NORTH KINGSTOWN, & CRANSTON

STANDARD PLAN SYMBOLS & STANDARD LEGEND

CHECKED BY MJA DATE MAY, 2019 SCALE NO SCALE

Steere ENGINEERING INC

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI	BHO-0051(001)	2019	03	22

GENERAL NOTES:

1. ANY DAMAGE TO EXISTING PAVEMENT, BRIDGES, CONDUIT, SIDEWALK, FENCES, ETC., CAUSED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE.

2. THE CONTRACTOR SHALL PLACE ALL EQUIPMENT AND MATERIAL AS FAR AWAY AS POSSIBLE FROM THE EDGE OF THE TRAVEL LANE SO AS NOT TO CAUSE A SAFETY HAZARD, IN ACCORDANCE WITH SECTION 106.06 OF THE R.I.D.O.T. STANDARD SPECIFICATION, LATEST EDITION.

3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE EXISTING CONDITIONS ARE NOT OBLITERATED BEFORE CONTROL POINTS ARE LOCATED AND CONSTRUCTION LAYOUT IS ESTABLISHED. THE CONSTRUCTION LAYOUT SHALL BE PROVIDED IN SUFFICIENT DETAIL, THEREBY ENABLING HIM TO CONSTRUCT THE PROJECT IN CONFORMITY WITH THE PLANS AND SPECIFICATIONS. SURVEY WILL BE PROVIDED BY THE CONTRACTOR. THE RESIDENT ENGINEER WILL NOT AUTHORIZE CONSTRUCTION ACTIVITIES TO BEGIN UNTIL HE IS SATISFIED THAT ALL GROUND CONTROL HAS BEEN ESTABLISHED, TIED DOWN, AND DULY RECORDED IN STANDARD FIELD BOOKS.

4. ALL R.I. STD. 9.9.0 CONSTRUCTION ACCESS ROADS SHALL BE CONSTRUCTED PRIOR TO ANY ROADWAY ACCEPTING CONSTRUCTION TRAFFIC.

5. THE FREQUENCY AND APPLICATION RATES FOR THE DUST CONTROL ITEMS WILL BE AS DIRECTED BY THE ENGINEER.

6. ALL SIDEWALK AND DRIVEWAYS DESIGNATED FOR REPLACEMENT SHALL BE CUT AND MATCHED AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

7. ASPHALT EMULSION TACK COAT SHALL BE PLACED PRIOR TO PAVEMENT PLACEMENT ON THE CONCRETE BASE OR COLD PLANED PAVEMENT, AND ON ANY NEW COURSE WHICH HAS BEEN OPEN TO TRAFFIC, OR ANY NEW COURSE WHICH HAS BEEN EXPOSED FOR MORE THAN 3 DAYS, AND/OR AS DIRECTED BY THE ENGINEER. IT SHALL ALSO BE APPLIED TO VERTICAL PAVEMENT FACES BETWEEN ADJOINING PAVEMENT SECTIONS. ALL APPLICATIONS ON BOTH HORIZONTAL AND VERTICAL SURFACES SHALL BE PAID FOR UNDER THE CONTRACT UNIT BID PRICE FOR CODE 403.0300 "ASPHALT EMULSION TACK COAT."

8. THE LIMITS OF CLEARING AND SURFACE DISTURBANCE MUST BE STRICTLY ADHERED TO IN ALL AREAS. IN ADDITION TO THOSE AREAS SPECIFICALLY DESIGNATED ON THE PLANS, THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND PLACING, AT HIS OWN EXPENSE, PLANTABLE SOIL AND SEED IN AREAS WHICH ARE OUTSIDE OF THE PROJECT'S AREAS OF DISTURBANCE AND WHICH ARE IMPACTED BY CONSTRUCTION OPERATIONS INCLUDING THOSE AREAS WHERE VEHICLES, EQUIPMENT AND MATERIALS ARE STORED WITH THE PERMISSION OF THE ENGINEER.

9. UNDER NO CIRCUMSTANCE WILL THE CONTRACTOR BE ALLOWED TO STOCKPILE REMOVED PAVEMENT MATERIALS WITHIN THE PROJECT LIMITS.

10. CLEANING AND SWEEPING OF PAVEMENT WILL INCLUDE REMOVAL OF ALL PAVEMENT DEBRIS PRIOR TO THE PLACEMENT OF EACH BITUMINOUS PAVEMENT LIFT. ALL CLEANING AND SWEEPING SHALL BE DONE TO THE SATISFACTION OF THE ENGINEER.

11. PRIOR TO INSTALLATION, ALL SIGNS, MOUNTINGS AND LOCATIONS SHALL BE APPROVED OR MODIFIED BY THE ENGINEER.

12. THE COORDINATE SYSTEM IS THE R.I. STANDARD GRID SYSTEM, NAD 83. THE VERTICAL CONTROL IS NGVD 29.

13. PAVEMENT OPERATIONS FOR CURBED SECTIONS: IN AREAS WHERE CURBING IS SET TO FINISH LINE AND GRADE, THE CONTRACTOR WILL NOT BE REQUIRED TO UTILIZE THE SENSOR AND SKY-TYPE DEVICE FOR AUTOMATIC GRADE CONTROL, BUT WILL BE ALLOWED TO MANUALLY ADJUST THE BITUMINOUS PAVER FOR CONTROLLING GRADE.

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL ROADWAYS FREE OF DEBRIS RESULTING FROM THEIR CONSTRUCTION OPERATIONS. ALL DEBRIS SHALL BE REMOVED TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.

15. NO FUEL STORAGE, VEHICLE REFUELING, OR EQUIPMENT STORAGE SHALL TAKE PLACE IN DESIGNATED WETLANDS, NOR WITHIN 100' OF ANY WATER BODY. THIS REQUIREMENT SHALL NOT SUPERSEDE ANY FEDERAL, STATE OR LOCAL LAW, ORDINANCE, RULE OR REGULATION THAT APPLIES TO THE SAME, UNLESS THIS REQUIREMENT IS MORE STRINGENT THAN SAID LAW, ORDINANCE, RULE OR REGULATION.

16. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT AT THE END OF FINAL PAVING OPERATIONS, FLOW TO EXISTING DRAINAGE STRUCTURES HAS BEEN REESTABLISHED AND THAT NO ISOLATED DEPRESSIONS REMAIN. THERE SHALL BE NO SEPARATE PAYMENT FOR THIS PROVISION; IT SHALL BE CONSIDERED INCIDENTAL TO PAVING AND COLD PLANING OPERATIONS.

17. ALL EMBANKMENTS SHALL BE PLACED IN HORIZONTAL LAYERS NOT EXCEEDING 12" (AFTER COMPACTION) AND SHALL BE COMPACTED AS SPECIFIED BEFORE THE NEXT LAYER IS PLACED. ALSO, EMBANKMENT CONSTRUCTION SHALL CONFORM TO SECTION 202.03.2 OF THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.

18. IF THIS PROJECT IS ON A HURRICANE EVACUATION AND DIVERSIONARY ROUTE, AS DESIGNATED ON THE COVERSHEET, THE CONTRACTOR IS ADVISED THAT UPON 12 (TWELVE) HOURS NOTICE THE ROADWAY SHALL BE OPEN TO EVACUEES AND EMERGENCY PERSONNEL. ANY EXTRA WORK NECESSARY TO COMPLY WITH THIS REQUIREMENT WILL BE REIMBURSED UNDER FORCE ACCOUNT PROCEDURES.

19. THE CONTRACTOR SHALL READ, BECOME FAMILIAR WITH, AND ADHERE TO ALL OF THE PROVISIONS, CONDITIONS, AND STIPULATIONS STATED IN THE ENVIRONMENTAL APPROVALS ISSUED FOR THE PROJECT FROM THE DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (RIDEM), AND/OR THE ARMY CORPS OF ENGINEERS (ACOE), AND/OR THE COASTAL RESOURCES MANAGEMENT COUNCIL (CRMC). COPIES OF EACH OF THESE PERMITS ARE INCLUDED IN THE CS PAGES OF THE CONTRACT DOCUMENTS. ALL COSTS ASSOCIATED WITH THESE CONDITIONS SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION AND INCLUDED WITH THE COST FOR THE ASSOCIATED BID ITEM(S).

20. FOR ALL PROJECTS INVOLVING KNOWN SITE REMEDIATION ISSUES, THE CONTRACTOR SHALL READ, BECOME FAMILIAR WITH, AND ADHERE TO ALL OF THE CONSTRUCTION RELATED PROVISIONS, CONDITIONS, AND STIPULATIONS OF ANY REMEDIAL PLANS DEVELOPED FOR THE PROJECT. COPIES OF THESE DOCUMENTS ARE INCLUDED IN THE CS PAGES OF THE CONTRACT DOCUMENTS. ALL COSTS ASSOCIATED WITH COMPLIANCE WITH THESE DOCUMENTS SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION AND INCLUDED WITH THE COST FOR THE ASSOCIATED BID ITEM(S).

21. NO UNPROTECTED CONSTRUCTED FEATURE MAY PROJECT MORE THAN 4 INCHES ABOVE THE FINISHED GRADE OF A TRAVERSABLE SLOPE IN A CLEAR ZONE, e.g. HEADWALL, DRAINAGE INLET, ETC.

22. THE REMAINING SECTION OR STUB OF A BREAKAWAY BASE MAY NOT PROJECT MORE THAN 4 INCHES ABOVE THE FINISHED GRADE OF A TRAVERSABLE SLOPE IN A CLEAR ZONE, e.g. SIGN POSTS, LIGHT POLES, FIRE HYDRANTS, ETC.

DRAINAGE AND EROSION CONTROL NOTES:

1. FOR ALL PROJECTS WITH AT LEAST ONE(1) ACRE OF SOIL DISTURBANCE. R.I.D.O.T. IS REQUIRED TO DEVELOP AND ENFORCE A SITE SPECIFIC STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ORDER TO REMAIN IN COMPLIANCE WITH THE RIPDES GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL READ, BECOME FAMILIAR WITH, AND ADHERE TO ALL OF THE PROVISIONS, CONDITIONS, AND STIPULATIONS OF THE GENERAL PERMIT AND THE SITE SPECIFIC SWPPP FOR THIS PROJECT. COPIES OF THESE DOCUMENTS ARE INCLUDED IN THE CS PAGES OF THE CONTRACT DOCUMENTS. ALL COSTS ASSOCIATED WITH ADHERENCE TO THE SWPPP SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION AND INCLUDED WITH THE COST FOR THE ASSOCIATED BID ITEM(S).

2. NO UNDISTURBED AREAS SHALL BE CLEARED OF EXISTING VEGETATION AFTER OCTOBER 15 OF ANY CALENDAR YEAR OR DURING ANY PERIOD OF FULL OR LIMITED WINTER SHUTDOWN. ALL DISTURBED SOILS EXPOSED PRIOR TO OCTOBER 15 OF ANY CALENDAR YEAR SHALL BE SEEDED OR PROTECTED BY THAT DATE. ANY SUCH AREAS THAT DO NOT HAVE ADEQUATE VEGETATIVE STABILIZATION, AS DETERMINED BY THE RESIDENT ENGINEER OR ENVIRONMENTAL INSPECTOR, BY NOVEMBER 15 OF ANY CALENDAR YEAR, MUST BE STABILIZED THROUGH THE USE OF EROSION CONTROL MATTING OR HAY MULCH, IN ACCORDANCE WITH SPECIFICATIONS CONTAINED WITHIN THE R.I. SOIL EROSION AND SEDIMENT CONTROL HANDBOOK. IF WORK CONTINUES WITHIN ANY OF THESE AREAS DURING THE PERIOD FROM OCTOBER 15 THROUGH APRIL 15, CARE MUST BE TAKEN TO ENSURE THAT ONLY THE AREA REQUIRED FOR THAT DAY'S WORK IS EXPOSED, AND ALL ERODIBLE SOIL MUST BE RESTABILIZED WITHIN 5 WORKING DAYS. ANY WORK TO CORRECT PROBLEMS RESULTING FROM FAILURE TO COMPLY WITH THIS PROVISION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THERE WILL BE NO SEPARATE PAYMENT FOR THIS PROVISION, IT SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION OPERATIONS. STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN 2 WEEKS OF FINAL GRADING.

3. STOCKPILES OF MATERIAL SHALL NOT BE LOCATED WITHIN REGULATED WETLANDS OR BUFFER ZONE AREAS. THEY SHALL HAVE SIDE SLOPES NO GREATER THAN 30% AND STOCKPILES OF ERODABLE MATERIAL SHALL ALSO BE SEEDED AND RINGED WITH R.I. STD. 9.1.0 TO STABILIZE.

4. IF THE PLANS INCLUDE SPECIFIC AREAS FOR PLACEMENT OF CONSTRUCTION DEWATERING BASINS AND/OR EQUIPMENT AND MATERIALS STORAGE AND STOCKPILING, AND IF THE CONTRACTOR ELECTS TO UTILIZE ANY OTHER AREAS FOR THESE PURPOSES, THIS SHALL BE APPROVED BY THE ENGINEER ONLY AFTER OBTAINING ANY NECESSARY PERMITS AND/OR PERMIT MODIFICATIONS FROM THE APPROPRIATE REGULATORY AUTHORITY(IES). ANY PERMITTING REQUIREMENTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE ACCOMPLISHED AT NO COST TO THE STATE. THE ENGINEER WILL COORDINATE SUBMISSION OF ANY REQUIRED PERMIT APPLICATION MATERIALS WITH THE R.I.D.O.T. OFFICE OF ENVIRONMENTAL PROGRAMS.

5. JUTE MESH SHALL BE USED TO STABILIZE PLANTABLE SOIL AND/OR LOAM IN ALL DITCHES, ON ALL SLOPES ADJACENT TO WETLANDS AND WETLAND PERIMETERS, AND ON ALL SLOPES WITHIN WATER QUALITY BASINS. JUTE MESH IN DITCHES SHALL EXTEND TO AN ELEVATION 2 FEET ABOVE THE BOTTOM OF THE DITCH.

6. SEEDING ON ALL SLOPES 3 TO 1 OR STEEPER SHALL CONSIST OF THE FOLLOWING APPLICATIONS UNLESS CHANGED IN THE CONTRACT.

   a. SEEDING TYPE I.

   b. ADHESIVE MULCH STABILIZER

7. UNVEGETATED SLOPES SHALL NOT BE UNATTENDED OR EXPOSED FOR PERIODS IN EXCESS OF 2 WEEKS OR THROUGH THE INACTIVE WINTER SEASON.

8. PRIOR TO DRAINAGE AND UTILITY CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION (HORIZONTAL AND VERTICAL) OF ALL EXISTING PIPES AND/OR STRUCTURES WHICH ARE TO BE CONNECTED. ANY VARIATION FOUND FROM THE PLANS MUST BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO DRAINAGE AND UTILITY CONSTRUCTION. WORK CAN COMMENCE ONLY UPON THE ENGINEER'S AUTHORIZATION.

9. ALL DRAINAGE AND UTILITY STRUCTURES WITHIN THE PAVED ROADWAY SHALL BE ADJUSTED TO GRADE WITH THE SURROUNDING PAVEMENT PRIOR TO THE WINTER SHUTDOWN.

10. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL THROUGHOUT THE WORK AREA.

11. CATCH BASIN RIM GRADES NOTED ON PLANS ARE DEPRESSED 0.1' LOWER THAN THE GUTTER GRADE. RIM ELEVATIONS SHOWN ARE FINAL GRADES. THE CONTRACTOR SHALL PLACE FRAMES AND GRATES 0.1' BELOW THE GRADE CONSTRUCTED IN THIS CONTRACT OR AS DIRECTED BY THE ENGINEER.

12. PROVISIONS FOR CLEARING TO ACCESS OUTFALLS DURING THE CLEANING AND FLUSHING OF THE CLOSED DRAINAGE SYSTEM SHALL BE KEPT TO A MINIMUM.

   a. ANY VEGETATIVE CLEARING SHALL BE LIMITED TO BRUSH AND TREES LESS THAN 3" DIAMETER.

   b. NO HEAVY EQUIPMENT MAY ENCROACH UPON VEGETATED PERIMETER OR RIVERBANK WETLANDS AS WELL AS BIOLOGICAL WETLANDS.

13. THE CONTRACTOR SHALL INSTALL ALL EROSION CONTROL DEVICES FOR OUTLET PROTECTION PRIOR TO CLEANING AND FLUSHING STORM WATER DRAINAGE. EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL ALL FLUSHED SEDIMENTS ARE REMOVED. AT ALL OUTFALL LOCATIONS WHERE PIPES ARE TO BE CLEANED AND FLUSHED, OUTLET PROTECTION (R.I. STD. 9.1.0 OR 9.3.0) SHALL BE INSTALLED TO TRAP SEDIMENTS. THESE SEDIMENTS SHALL THEN BE REMOVED AND DISPOSED OF LEGALLY BEFORE THE OUTLET PROTECTION DEVICES ARE REMOVED. IF OUTLET PROTECTION AT THE OUTFALL IS NOT FEASIBLE, THEN THE OUTLET PIPE OF THE LAST DRAINAGE STRUCTURE TO BE CLEANED SHALL BE PLUGGED TO CAPTURE ALL MATERIALS FLUSHED FROM PIPES. AFTER THE MATERIALS ARE REMOVED FROM THE DRAINAGE STRUCTURE, THE OUTLET SHALL BE UNPLUGGED TO RESUME NORMAL FUNCTIONING.

14. R.I. STD. 9.8.0 BALED HAY INLET PROTECTION SHALL BE INSTALLED AT ALL CATCH BASINS AND INLETS WHENEVER SUBBASE IS EXPOSED, AND SHALL REMAIN IN PLACE UNTIL THE ABUTTING GROUND SURFACES ARE STABILIZED.

15. WHERE BALED HAY INLET PROTECTION AND SILT FENCES ARE USED AT CATCH BASINS, THEY SHALL BE REMOVED AT THE END OF THE PROJECT OR AS DIRECTED BY THE ENGINEER IN ORDER TO PREVENT CLOGGING OF THE INLET.

DRAINAGE AND EROSION CONTROL NOTES (CONTINUED):

16. DETENTION AND RETENTION BASINS MAY BE ROUGH GRADED AND STABILIZED WITH VEGETATION AND/OR OTHER EROSION CONTROL MEASURES AS REQUIRED BY THE ENGINEER PRIOR TO USE AS TEMPORARY SEDIMENTATION BASINS DURING PROJECT CONSTRUCTION. FINAL BASIN CONSTRUCTION SHALL NOT COMMENCE UNTIL ALL SOURCES OF SEDIMENT HAVE BEEN ELIMINATED, FINAL ROADSIDE VEGETATION IS ESTABLISHED AND USE OF TEMPORARY BASINS IS NO LONGER REQUIRED AS DIRECTED BY THE ENGINEER. ANY ISSUES RELATING TO EROSION AND/OR SEDIMENT TRANSPORT INTO WETLAND AREAS RESULTING FROM SUCH USE OF SEDIMENTATION BASINS DURING CONSTRUCTION SHALL BE THE RESPONSIBILTY OF THE CONTRACTOR. ANY CORRECTIVE ACTION REQUIRED TO RESOLVE SUCH ISSUES SHALL BE COMPLETED BY THE CONTRACTOR.

17. THE TOE OF ANY FILL SLOPE IS TO REMAIN AT LEAST 1' INSIDE OF ALL EROSION CONTROLS. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR COVER ANY PORTION OF THE EROSION CONTROL MEASURES WITH MATERIAL. ANY MATERIAL THAT IS PLACED ON ANY EROSION CONTROLS BY THE CONTRACTOR, OR ANY AGENT OF THE CONTRACTOR, SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR, AND ANY NECESSARY REPAIRS TO THE EROSION CONTROLS ACCOMPLISHED.

18. PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES, EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED AT THOSE AREAS INDICATED ON THE PLANS. CLEARING MAY OCCUR PRIOR TO INSTALLATION OF SUCH CONTROLS, HOWEVER NO GRUBBING, GRADING, FILLING, OR OTHER SOIL DISTURBANCE SHALL OCCUR PRIOR TO INSTALLATION. THE LIMITS OF CLEARING AND SURFACE DISTURBANCE MUST BE STRICTLY ADHERED TO IN ALL AREAS.

19. ALL HAY BALES, SILT FENCE OR TEMPORARY PROTECTION SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS IS ESTABLISHED. IF NEEDED, TEMPORARY SEEDING CAN HELP TO MINIMIZE EROSION. TEMPORARY SEED WILL CONFORM TO R.I.D.O.T. STANDARD TEMPORARY SEED MIX.

20. THE CONTRACTOR MUST REPAIR AND/OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN THE PERIOD OF ONE YEAR AND HE SHALL DO SO AT NO ADDITIONAL EXPENSE TO THE STATE.

21. THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE SPECIFIED IN SUBSECTION L.02.03 OF THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.

22. ADDITIONAL EROSION CONTROLS, SHALL BE INSTALLED AS DIRECTED BY THE RESIDENT ENGINEER. THESE ADDITIONAL ITEMS WILL BE PAID AT THE UNIT PRICE FOR THAT BID ITEM.

UTILITY NOTES:

1. EXISTING UTILITIES HAVE BEEN SHOWN ON THE PLANS USING THE BEST AVAILABLE INFORMATION AND ARE APPROXIMATE. BUILDING SERVICE CONNECTIONS (ELECTRIC, GAS, TELEPHONE, WATER AND SANITARY) ARE NOT SHOWN. CONTRACTOR IS TO ASSUME SERVICES ARE PRESENT TO ALL BUILDINGS.

2. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING DRAINAGE AND UTILITIES BOTH UNDERGROUND AND OVERHEAD BEFORE EXCAVATION BEGINS IN ACCORDANCE WITH CHAPTER 39-1.2 OF THE R.I. GENERAL LAWS ENTITLED "EXCAVATION NEAR UNDERGROUND UTILITY FACILITIES", WITH AMENDMENTS EFFECTIVE AS OF NOVEMBER 1, 2009 AND, WHEN NECESSARY, BY CONTACTING THE INDIVIDUAL UTILITY COMPANIES. EXCAVATION SHALL BE IN ACCORDANCE WITH ALL STATUTES, ORDINANCES, RULES AND REGULATIONS OF ANY APPLICABLE CITY, TOWN, STATE OR FEDERAL AGENCY. THE CONTRACTOR SHOULD UNDERSTAND THAT NOT ALL UTILITIES SUBSCRIBE TO THE DIG SAFE PROGRAM. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES AND ENSURE THAT ALL UTILITIES HAVE BEEN MARKED PRIOR TO COMMENCING THEIR WORK. ANY DAMAGE TO EXISTING UTILITIES MARKED IN THE FIELD, OR AS A RESULT OF FAILING TO CONTACT THE APPROPRIATE UTILITY COMPANY, SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE STATE.

3. ALL EXISTING UTILITIES TO BE ABANDONED SHALL BE CAPPED.

4. EXISTING WATER SERVICES SHALL BE RECONNECTED TO THE NEW WATER MAINS.

5. UTILITY SERVICE CONNECTIONS SHALL BE MAINTAINED TO ALL EXISTING FACILITIES TO REMAIN.

6. FIRE HYDRANTS SHALL NOT BE REMOVED FROM SERVICE WITHOUT WRITTEN AUTHORIZATION FROM THE FIRE DEPARTMENT OR THE WATER AUTHORITY.

7. ALL NEW WATER LINES SHALL BE DISINFECTED TO THE SATISFACTION OF THE WATER AUTHORITY IN ACCORDANCE WITH THE SPECIFICATIONS.

8. ALL UTILITY POLE RELATED WORK SHALL BE BY OTHERS.

ISSUED FOR CONSTRUCTION

THIS PLAN SHALL NOT BE ALTERED

REVISIONS		
NO.	DATE	BY
1	4/07	TRB
2	3/10	RBH

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

REPAIRS TO
POTTER HILL CULVERT NO. 51
WICKFORD BRIDGE NO. 10
THORNTON BRIDGE NO. 81
HOPKINTON, NORTH KINGSTOWN, & CRANSTON

STANDARD NOTES - 1

CHECKED BY MJA DATE MAY, 2019 SCALE NO SCALE

Steere ENGINEERING INC

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI	BHO-0051(001)	2019	04	22

LANDSCAPE NOTES:

1. ALL PLANT MATERIAL MUST BE TAGGED AT THE NURSERY (A RECOGNIZED GROWER OF PLANT MATERIAL) IN ACCORDANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION. ALL PLANT MATERIAL MUST BE NURSERY GROWN; NO PLANTATION GROWN PLANT MATERIAL WILL BE ACCEPTED.
2. ALL PLANT SUBSTITUTIONS AND/OR CHANGES IN PLANT LOCATION MUST BE APPROVED IN ACCORDANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
3. ALL PLANT MATERIAL IS TO BE FIELD LOCATED BY A REPRESENTATIVE FROM THE R.I.D.O.T. LANDSCAPE ARCHITECTURE UNIT.
4. A R.I.D.O.T. LANDSCAPE REPRESENTATIVE MUST BE ON SITE TO APPROVE ALL TRIMMING AND CLEARING NECESSARY TO COMPLETE THE WORK AS SHOWN ON THE PLANS.
5. ANY TOPSOIL USED AS PLANTABLE SOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS, AND SHALL CONFORM TO SECTION M.18 OF THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
6. ALL TREES AND SHRUBS SHALL BE MULCHED WITH PINE BARK MULCH IN ACCORDANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
7. ALL TREES AND/OR SHRUBS THAT ARE PLANTED AS A BED SHALL BE MULCHED AS A BED.
8. PROVIDE A MINIMUM 6'-8" BRANCHING STANDARD ON ALL TREES INSTALLED ADJACENT TO SIDEWALKS AND/OR PEDESTRIAN ACCESS AREAS.

STRUCTURAL NOTES FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS:

GENERAL

1. ALL SUPPORT DESIGNS AND ASSOCIATED SHOP DRAWING REVIEWS SHALL BE IN CONFORMANCE WITH THE LATEST EDITION, OF THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS (THE "SPECIFICATIONS"), INCLUDING THE LATEST INTERIM SPECIFICATIONS, EXCEPT AS MODIFIED HEREIN.

CONSTRUCTION DRAWINGS AND DETAILS

1. THE FOLLOWING NOTES SHALL BE INCLUDED ON ALL PLANS AND/OR SHOP DRAWINGS IN REFERENCE TO ANCHOR BOLTS:
   - "PRETENSIONING OF ALL ANCHOR NUTS IS REQUIRED, AND SHALL BE ACCOMPLISHED BY TIGHTENING TO 1/6TH TURN BEYOND THE SNUG-TIGHT POSITION."
   - "THE MAXIMUM CLEARANCE BETWEEN THE BOTTOM OF THE LEVELING NUTS AND THE TOP OF THE CONCRETE IS CRITICAL AND SHALL NOT EXCEED THE AMOUNT SPECIFIED ON THIS DRAWING."
2. THE USE OF GROUT UNDER BASE PLATES SHALL GENERALLY NOT BE PERMITTED. IF SPECIFIC CONDITIONS WARRANT ITS USE, THE GROUT SHALL NOT BE CONSIDERED LOAD CARRYING; LOADS SHALL BE DIRECTLY SUPPORTED BY THE ANCHOR BOLTS. ADEQUATE DRAINAGE SHALL BE PROVIDED.
3. THE DAMPENING EFFECTS OF VIBRATION MITIGATION DEVICES SHALL NOT BE CONSIDERED IN THE DESIGN OF STRUCTURAL SUPPORTS FOR SIGNS AND TRAFFIC SIGNALS. IF THE CONTRACTOR CHOOSES TO USE THESE DEVICES FOR WARRANTY PURPOSES, THE TYPE OF DEVICES PROPOSED SHALL BE APPROVED BY THE DEPARTMENT PRIOR TO FABRICATION OF SUPPORTS.

TRAFFIC SIGNAL NOTES:

1. ALL SALVAGED TRAFFIC SIGNAL EQUIPMENT SHALL BE DELIVERED TO THE R.I.D.O.T. MAINTENANCE HEADQUARTERS, 360 LINCOLN AVENUE, WARWICK, RHODE ISLAND, 02888.
2. BACK PLATES SHALL BE INSTALLED ON ALL TRAFFIC SIGNAL HEADS.
3. THE CONTRACTOR SHALL SUPPLY AND INSTALL ON THE UPPER LEFT HAND CORNER OF THE BACK OF THE CONTROLLER CABINET DOOR A LAMINATED INTERSECTION GRAPHIC AND TABLE DEPICTING THE TRAFFIC DETECTOR RELAY CHANNEL ASSIGNMENTS. THE DIAGRAM SHALL BE A GRAPHIC OF THE INDIVIDUAL INTERSECTION ORIENTED SIMILAR TO THE PLANS SHOWING THE LOCATIONS OF EACH OF THE LOOP DETECTORS. THE DIAGRAM SHALL, AT A MINIMUM, INCLUDE DETECTOR NUMBERS, STREET NAME LABELS, NORTH ARROW, AND CONTROLLER CABINET LOCATION. THE ASSIGNMENT INFORMATION SHALL BE INCLUDED IN A TABLE WHICH SHALL INCLUDE, AT A MINIMUM, THE APPROACH NAME, DETECTOR NUMBER, TERMINAL NUMBER, DETECTOR RACK SLOT NUMBER, RELAY NUMBER, RELAY CHANNEL NUMBER, AND PHASE ASSOCIATED WITH EACH DETECTOR.
4. TRAFFIC CONTROLLER CABINETS, UNLESS OTHERWISE NOTED, SHALL BE NEMA TS2 TYPE 1 CABINET SIZE 6 ("P" TYPE) WITH NOMINAL DIMENSIONS OF 52"Hx44"Wx24"D.
5. ALL DELAY AND EXTENSION TIMES, AS CALLED FOR ON THE PLANS, FOR PROPOSED LOOP DETECTORS SHALL BE PROGRAMMED IN THE TRAFFIC SIGNAL CONTROLLER AND NOT THE DETECTOR RELAY.
6. A BARE GROUND WIRE SHALL BE PLACED IN ALL PVC CONDUITS AND SHALL BE BONDED TO GROUND RODS IN ACCORDANCE WITH SECTION T.03 OF THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
7. THE FINAL POSITION OF SIGNAL HEADS, PEDESTRIAN PUSHBUTTONS, DETECTORS, AND STOP LINE AND CROSSWALK PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER IN THE FIELD ACCORDING TO ACTUAL INTERSECTION CHARACTERISTICS.
8. A 2' MINIMUM BUFFER SHALL BE PROVIDED BETWEEN THE CURB AND ALL LATERAL OBSTRUCTIONS (INCLUDING ALL SIGNAL POLES AND TRAFFIC/PEDESTRIAN SIGNAL HEADS) TO PROVIDE ADEQUATE CLEARANCE FOR TURNING VEHICLES.
9. ALL FOUNDATIONS MUST HAVE CONES OR BARRELS BOLTED TO FOUNDATION BASES UNTIL ACTUAL POLE IS INSTALLED.
10. WHEN PLACING TRAFFIC SIGNAL HANDHOLES OR CONDUIT IN EXISTING PORTLAND CEMENT CONCRETE SIDEWALKS, THE ENTIRE SIDEWALK SQUARE OF CONCRETE SHALL BE REPLACED IN ACCORDANCE WITH R.I. STD. 43.1.0. NO PATCHES WILL BE ALLOWED.
11. ALL PEDESTRIAN PUSHBUTTONS SHALL BE COMPLIANT WITH "THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES" (ADAAG) AND SHALL INCLUDE A PRESSURE-ACTIVATED (NON-MOVING) BUTTON. SIGNS APPLICABLE TO PUSHBUTTON ACTUATION SHALL BE INSTALLED SUCH THAT THE CROSSING ASSIGNED TO EACH BUTTON IS CLEARLY INDICATED. IF SITE CONDITIONS DO NOT ALLOW PEDESTRIAN PUSHBUTTONS TO BE INSTALLED WHERE CALLED FOR ON THE PLANS, THE R.I.D.O.T. TRAFFIC ENGINEERING UNIT SHALL BE CONSULTED WITH THROUGH AN R.F.I. PRIOR TO INSTALLING THE PUSHBUTTONS. THE FINAL PLACEMENT OF ALL PEDESTRIAN PUSHBUTTONS SHALL BE IN ACCORDANCE WITH ADAAG AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
12. ALL LOOP DETECTORS SHALL BE CENTERED WITHIN EACH LANE AS DELINEATED, UNLESS OTHERWISE DIMENSIONED ON PLANS.
13. ALL LOOP DETECTORS SHALL BE CUT INTO THE FINAL PAVEMENT SURFACE COURSE.
14. TRAFFIC SIGNAL CONTROLLERS SHALL BE WIRED SO THAT ANY FIRE PRE-EMPTION SHALL OVERRIDE MANUAL (PUSH BUTTON) OPERATION.
15. THE CONTRACTOR SHALL WORK CONTINUOUSLY TO RESTORE TRAFFIC SIGNAL OPERATION TO ITS INTENDED PURPOSE WHEN REPLACING THE TRAFFIC SIGNAL EQUIPMENT. A POLICE DETAIL IS REQUIRED TO DIRECT TRAFFIC AT THE INTERSECTION AT ALL TIMES WHEN THE TRAFFIC SIGNAL IS INOPERATIVE. AT NO TIME SHALL THE CONTRACTOR LEAVE THE SITE BEFORE RESTORING FULL TRAFFIC OPERATIONS.

MAINTENANCE AND PROTECTION OF TRAFFIC NOTES:

1. ALL MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL SETUPS, SIGNS, CHANNELIZING DEVICES, ETC., SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
2. ALL SIGN MOUNTINGS FOR TEMPORARY AND CONSTRUCTION SIGNS SHALL BE IN ACCORDANCE WITH THE R.I.D.O.T. STANDARD SPECIFICATIONS, LATEST EDITION.
3. THE CONTRACTOR SHALL COVER ALL EXISTING AND/OR TEMPORARY SIGNS THAT ARE NOT RELEVANT TO THE TRAFFIC CONTROL REQUIRED DURING ANY PARTICULAR STAGE OF THE CONTRACT.
4. ADVANCE FLAGPERSON SIGNS (W20-7A) SHALL BE USED IN ADVANCE OF ANY POINT AT WHICH A FLAGPERSON OR A POLICE OFFICER HAS BEEN STATIONED TO CONTROL TRAFFIC. WHEN NEEDED, AN APPROPRIATE DISTANCE MESSAGE MAY BE DISPLAYED ON A SUPPLEMENTAL PLATE (24"x18") BELOW THE FLAGPERSON SYMBOL SIGN. THE SIGN SHALL BE PROMPTLY REMOVED OR COVERED WHENEVER THE FLAGPERSON IS NOT AT THE STATION.
5. POLICE OFFICERS (AND NOT FLAGPERSONS) SHALL BE UTILIZED WHEN WORK WILL IMPACT SIGNALIZED INTERSECTIONS AND LIMITED ACCESS HIGHWAYS.
6. POLYETHYLENE DRUMS SHALL BE UTILIZED AS A CHANNELIZING DEVICE WHEN A TRAFFIC CONTROL SET-UP IS TO REMAIN BEYOND WORKING HOURS WHEN NO WORKERS ARE PRESENT. CONES SHALL BE UTILIZED WHEN A TRAFFIC CONTROL SET-UP IS TO REMAIN ONLY DURING WORKING HOURS AND IS SUBSEQUENTLY BROKEN DOWN AT THE END OF THE WORKDAY.
7. ARROW PANELS SHALL BE SET IN THE FLASHING FOUR CORNERS CAUTION MODE UNLESS UTILIZED FOR A MERGING TAPER. ARROW PANELS SET IN THE FLASHING ARROW MODE SHALL NOT BE UTILIZED FOR LANE SHIFTS.
8. TEMPORARY CONSTRUCTION SIGNS AND OTHER WORKZONE TRAFFIC CONTROL DEVICES THAT ARE DAMAGED OR REQUIRE RELOCATION SHALL BE REPLACED AND / OR RELOCATED UNDER THE PAY ITEM FOR "MAINTENANCE AND MOVEMENT TRAFFIC PROTECTION."
9. THE PRIVATE VEHICLES OF CONSTRUCTION WORKERS SHALL NOT BE PARKED ON THE TRAVEL LANES OR SHOULDERS. THEY MAY BE PARKED WITHIN THE STATE RIGHT-OF-WAY ONLY IN AREAS 30' BEYOND THE OUTSIDE EDGE OF THE TRAVEL LANES AND/OR IN AREAS APPROVED BY THE ENGINEER.
10. TEMPORARY CONSTRUCTION SIGNS AND OTHER TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE INSTALLED PRIOR TO THE START OF WORK IN ANY AREA OPEN TO TRAFFIC, AND SHALL BE REMOVED AS SOON AS PRACTICAL WHEN THEY ARE NO LONGER APPROPRIATE.
11. THE INTENDED VEHICLE PATHS THROUGH EACH WORK ZONE SHALL BE CLEARLY MARKED AT ALL TIMES. WATERBORNE PAVEMENT MARKINGS SHALL BE INSTALLED BEFORE THE END OF THE WORK SHIFT ON ALL COLD-PLANED AND NEW ROADWAY SURFACES THAT WILL BE OPENED TO TRAFFIC AT THE END OF THE SHIFT.

ISSUED FOR CONSTRUCTION

THIS PLAN SHALL NOT BE ALTERED

REVISIONS		
NO.	DATE	BY
1	4/07	TRB
2	11/07	TRB
3	3/10	RBH

Steere ENGINEERING INC

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

REPAIRS TO
POTTER HILL CULVERT NO. 51
WICKFORD BRIDGE NO. 10
THORNTON BRIDGE NO. 81
HOPKINTON, NORTH KINGSTOWN, & CRANSTON

STANDARD NOTES - 2

CHECKED BY MJA DATE MAY, 2019 SCALE NO SCALE

Z:\Steere jobs\RIDOT\Task 005 – High Priority Repairs to Bleachery & Potter Hill_RIC No. 2019-CB-065 Potter Wickford Thornton\Plans\0140G_V1_004_STDNOTES002

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI	BHO-0051(001)	2019	05	22

LIST OF ABBREVIATIONS

A

ABUTMENT	= ABUT.
ALTERNATE	= ALT.
ANCHOR BOLT	= A.B.
APPROVED	= APPD.
APPROXIMATE	= APPROX.
AVERAGE	= AVG.

B

BEAM	= BM.
BACK TO BACK	= B TO B
BETWEEN	= BTWN
BEARING	= BRG.
BITUMINOUS	= BIT.
BOLT CIRCLE	= B.C.
BOTTOM	= BOT.
BUILDING	= BLDG.
BUILDING LINE	= B.L.

C

CAST IN-PLACE	= C.I.P.
CAST IRON	= C.I.
CENTER TO CENTER	= C TO C
CENTERLINE	= ℄
CIRCLE	= CIR.
CLASS I AND II CONTROLLED LOW STRENGTH MATERIAL	= CLSM
CLEARANCE	= CL.
COLUMN	= COL.
CONCRETE	= CONC.
CONDUIT	= COND.
CONNECTION	= CONN.
CONSTRUCTION	= CONST.
CONTRACTION	= CONTR.
COUNTERSINK	= CSK.
COUPLING	= CPLG.

D

DEEP	= D
DETAIL	= DET.
DIAGONAL	= DIAG.
DIAPHRAGM	= DIAPHM.
DIAMETER	= DIA.
DIMENSION	= DIM.
DRAWING	= DWG.
DRAIN	= DR.
DRIVEWAY	= DR.

E

EACH	= EA.
EACH FACE	= E.F.
ELEVATION	= EL.
ESTIMATED	= EST.
EXISTING	= EXIST.
EXPOSED	= EXP.

F

FABRICATE	= FAB.
FAR FACE	= F.F.
FAR SIDE	= F.S.
FACE TO FACE	= F TO F
FLANGE	= FLG.
FLAT HEAD	= F.H.
FOOTING	= FTG.
FOUNDATION	= FDN.
FULL LENGTH	= FL
FURNISH, FABRICATE & ERECT	= F.F. & E.

G

GAGE	= GA.
GALVANIZE	= GALV.
GRADE	= GR.
GRATING	= GRTG.
GROUND	= GND.

H

HIGH DENSITY POLYETHYNLENE	= HDPE
HEIGHT	= HGT.
HEXAGON	= HEX.
HIGH	= H
HOLLOW AREA	= HA
HOT MIX ASPHALT	= HMA.
HORIZONTAL	= HORIZ.

I

INCH	= IN.
INFORMATION	= INFO.
INSIDE DIAMETER	= I.D.
INVERT	= INV.

J

JOINT	= JT.

L

LENGTH	= LGTH.
LIGHTING	= LTG.
LIMIT OF DISTURBANCE	= LOD
LOAD & RESISTANCE FACTOR DESIGN	= LRFD
LONG	= L.

M

MATERIAL	= MATL.
MAXIMUM	= MAX.
MEAN HIGH WATER	= M.H.W.
MEAN SEA LEVEL	= M.S.L.
MILES PER HOUR	= M.P.H.
MINIMUM	= MIN.
MISCELLANEOUS	= MISC.

N

NEAR FACE	= N.F.
NEAR SIDE	= N.S.
NOT TO SCALE	= N.T.S.
NUMBER	= NO.

O

ON CENTER	= O.C.
OPENING	= OPNG.
OPTIONAL	= OPT.
OUTSIDE DIAMETER	= O.D.

P

PERMANENT	= PERM.
PLATE	= ℙ
POINT OF VERTICAL CURVATURE	= P.V.C.
POINT OF VERTICAL TANGENCY	= P.V.T.
POLYVINYL CHLORIDE	= PVC
POINT OF TANGENCY	= P.T.
POUNDS PER SQUARE INCH	= P.S.I.
POUNDS PER SQUARE FOOT	= P.S.F.
PRECAST PRESTRESSED	= PC. PS.
PROPOSED GRADE LINE	= PGL.

R

RADIUS	= R.
RAILROAD	= R.R.
REINFORCING	= REINF.
REHABILITATION	= REHAB.
REMOVE & DISPOSE	= R & D
REQUIRED	= REQD.

S

SECTION	= SECT.
SCHEDULE	= SCH.
SCHEMATIC	= SCHEM.
SHEET	= SH.
SIDEWALK	= SDWK.
SPACES	= SP.
STATE HIGHWAY LINE	= S.H.L.
SQUARE	= SQ.
STATION	= STA.
STAY IN PLACE	= S.I.P.
SUPPORT OF EXCAVATION/ TEMPORARY EARTH RETAINING SYSTEM	= SOE.
SYMMETRICAL	= SYM.

T

TEMPORARY	= TEMP.
TEMPORARY USE AGREEMENT	= TUA
TOP	= T.
TYPICAL	= TYP.

V

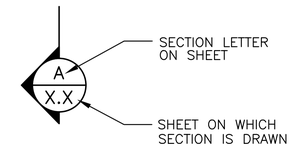
VARIES	= VAR.
VEHICLES PER DAY	= V.P.D.
VERTICAL	= VERT.
VERTICAL CURVE	= V.C.

W

WELDED WIRE FABRIC	= W.W.F.
WIDE	= W.
WITH	= W/
WORKING POINT	= W.P.

Y

YEAR	= YR.



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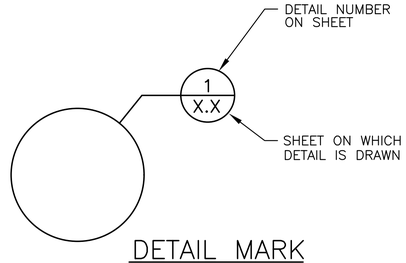

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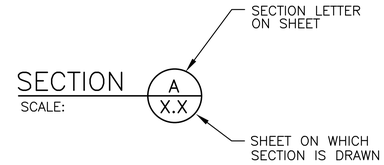

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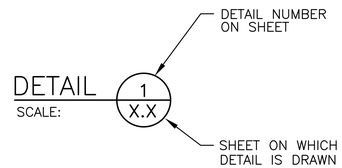


DETAIL TITLE

SECTION & DETAIL DESIGNATIONS

ISSUED FOR CONSTRUCTION

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

REPAIRS TO
POTTER HILL CULVERT NO. 51
WICKFORD BRIDGE NO. 10
THORNTON BRIDGE NO. 81
HOPKINTON, NORTH KINGSTOWN, & CRANSTON

LIST OF ABBREVIATIONS

CHECKED BY MJA DATE MAY, 2019 SCALE NO SCALE

Steere ENGINEERING INC

Z:\Steere jobs\RIDOT\Task 005 – High Priority Repairs to Bleachery & Potter Hill_RIC No. 2019-CB-065 Potter Wickford Thornton\Plans\0140G_V1_005_LISTOFABBREVIATIONS

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI	BHO-0051(001)	2019	06	22

R-1

GENERAL NOTES

1. ALL CONSTRUCTION INDICATED ON THESE PLANS SHALL BE IN ACCORDANCE WITH:
   - STATE OF RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AMENDED 2018, INCLUDING ALL REVISIONS AND SUPPLEMENTS UP TO THE DATE OF THE CONTRACT ADVERTISEMENT.
   - STATE OF RHODE ISLAND DEPARTMENT OF TRANSPORTATION LRFD BRIDGE DESIGN MANUAL, 2007 EDITION, INCLUDING ALL REVISIONS OR SUPPLEMENTS UP TO THE DATE OF THE CONTRACT ADVERTISEMENT.
   - AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS, 4TH EDITION, INCLUDING INTERIMS UP TO THE DATE OF THE CONTRACT ADVERTISEMENT.
   - THE SPECIFICATIONS ACCOMPANYING THESE PLANS.

   IN CASE OF CONFLICT BETWEEN THE PLANS, SPECIFICATIONS, OR MANUALS LISTED ABOVE, THE SPECIAL PROVISIONS OF THE SPECIFICATIONS ACCOMPANYING THESE PLANS SHALL GOVERN.
2. TOPOGRAPHIC CONDITIONS ARE PRESENTED AS 2-FOOT CONTOURS OBTAINED FROM THE RHODE ISLAND GEOGRAPHIC INFORMATION SYSTEM (RIGIS). ACCURACY OF VERTICAL TOPOGRAPHY IS INTENDED FOR PLANNING PURPOSES ONLY AND IS NOT GUARANTEED.
3. ALL ABUTMENTS AND WALLS ARE DRAWN LOOKING AT THE EXPOSED FACES.
4. ALL ITEMS NOT REFERENCED FOR MODIFICATION WILL BE "EXISTING TO REMAIN" UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
5. ANY STRUCTURAL MEMBERS THAT ARE TO REMAIN AND ARE DAMAGED DURING THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE ENGINEER'S SATISFACTION.
6. ANY DAMAGE TO EXISTING STATE, TOWN, OR PRIVATE PROPERTY CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE.
7. THE CONTRACTOR SHALL PLACE ALL EQUIPMENT AND MATERIALS IN HIS FIELD YARD OR AT A SITE APPROVED BY THE ENGINEER. THE EQUIPMENT AND MATERIAL SHALL BE PLACED IN A STORAGE AREA SO AS NOT TO CAUSE A SAFETY HAZARD.
8. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL ELEVATIONS, DIMENSIONS, DETAILS, ANGLES, STRUCTURAL MEMBER SIZES, AND LAYOUTS AS SHOWN ON THESE PLANS.
9. TEMPORARY PROTECTIVE SHIELDING SHALL BE PROVIDED AND INSTALLED TO PREVENT ANY CONSTRUCTION DEBRIS FROM FALLING IN THE WATERWAY.
10. EXISTING DETAILS, DIMENSIONS, AND ELEVATIONS PROVIDED IN THIS PLAN SET HAVE BEEN OBTAINED FROM THE ORIGINAL DRAWINGS, WHERE APPLICABLE, AND FIELD INSPECTIONS AND ARE NOT GUARANTEED.
11. FIELD CONDITIONS MAY EXIST THAT DEVIATE FROM THE DIMENSIONS SHOWN ON THE PLANS. THE CONTRACTOR SHALL TAKE ALL FIELD MEASUREMENTS NECESSARY TO ASSURE PROPER FIT-UP OF THE FINISHED WORK AND SHALL ASSUME FULL RESPONSIBILITY FOR THEIR ACCURACY.
12. THE CONTRACTOR SHALL TAKE THE PROPER PRECAUTIONS TO ENSURE THE STABILITY OF ALL STRUCTURAL ELEMENTS DURING CONSTRUCTION.
13. EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND MAY BE INCOMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL UTILITIES THAT SHOULD AFFECT ANY CONSTRUCTION OPERATIONS. IF ANY UTILITIES ARE DAMAGED AS A RESULT OF CONSTRUCTION OPERATIONS, THE UTILITY COMPANIES AND ENGINEER SHALL BE NOTIFIED IMMEDIATELY AND REPAIR COSTS SHALL BE BORNE BY THE CONTRACTOR.
14. THE CONTRACTOR SHALL SECURE ALL WORK AREAS AT ALL TIMES TO PREVENT UNAUTHORIZED ACCESS.
15. ALL REMOVAL AND DISPOSAL OF DEBRIS (LAND AND RIVER), TREE LIMBS, VEGETATION AND SHRUBS, AS SHOWN ON THE PLANS SHALL BE PAID UNDER THE RESPECTIVE LUMP SUM BRIDGE/CULVERT REPAIR ITEMS.
16. ALL DISTURBED AREAS FROM CONSTRUCTION ACTIVITIES SHALL BE CLEANED AND RESTORED TO THE ORIGINAL GROUND CONDITION. ANY AREA DISTURBED BY THE CONTRACTOR AND BEYOND THE LIMIT OF DISTURBANCE SHOWN, SHALL BE RESTORED TO THE ORIGINAL CONDITION, AT NO ADDITIONAL COST TO THE STATE.
17. REFER TO CS PAGES FOR A SUGGESTED SEQUENCE OF CONSTRUCTION FOR EACH LOCATION: POTTER HILL CULVERT NO. 51, WICKFORD BRIDGE NO. 10, AND THORNTON BRIDGE NO. 81.
18. LOCATIONS AND DIMENSIONS OF DEFICIENCIES NOTED FOR REPAIR ARE APPROXIMATE AND BASED ON FIELD OBSERVATIONS. CONTRACTOR SHALL ESTABLISH LIMITS OF VARIOUS REPAIRS BASED ON THE PLANS AND AS DIRECTED BY THE ENGINEER. THE EXTENT AND LOCATION OF CONCRETE AND MASONRY REPAIRS ARE TO BE FIELD VERIFIED AND APPROVED BY THE ENGINEER AFTER THE CONTRACTOR HAS SOUNDED AND MARKED OUT THE REPAIR AREAS. 1

DESIGN DATA

DESIGN SPECIFICATIONS:

- AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION, INCLUDING INTERIMS UP TO THE DATE OF THE CONTRACT ADVERTISEMENT.
- RHODE ISLAND LRFD BRIDGE DESIGN MANUAL, 2007 EDITION, INCLUDING ALL REVISIONS UP TO THE DATE OF THE CONTRACT ADVERTISEMENT.
- STATE OF RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AMENDED 2018, INCLUDING ALL REVISIONS AND SUPPLEMENTS UP TO THE DATE OF THE CONTRACT ADVERTISEMENT.

  IN CASE OF CONFLICT, THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL SHALL GOVERN.

MATERIALS

STONE MASONRY:

- STONE – GRANITE TO MATCH EXISTING, ASTM C615
- MORTAR – TYPE M
- DOWELS – GRADE 60, ASTM A615 OR ASTM A706, GALVANIZED PER ASTM A767, CLASS 1
- GROUT – HIGH STRENGTH NON-SHRINK, 8000 PSI AFTER 28 DAYS

DECK:

- CONCRETE – CLASS HP 5,000 PSI
- REBAR – GRADE 60, ASTM A615 OR ASTM A706, GALVANIZED PER ASTM A767, CLASS 1

STEEL RAILING:

- PIPE RAILS – ASTM A53, GRADE B, GALVANIZED PER ASTM A123
- WELD METAL – CURRENT REQUIREMENTS OF ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE.
- STRUCTURAL STEEL PLATES AND SHAPES – ASHTO M270 GRADE 36.

MASONRY NOTES

1. ALL MASONRY CONSTRUCTION SHALL COMPLY WITH SECTION 911 "STONE MASONRY WALLS" OF THE RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. STONE SIZE AND SHAPE SHALL BE SIMILAR TO THOSE OF ADJACENT EXISTING STONES TO THE EXTENT PRACTICABLE.
3. CHINKING STONES SHALL BE USED AT THE TOP OF EACH STONE MASONRY VOID REPAIR BETWEEN NEW AND EXISTING STONE COURSES WHERE DOWELS ARE NOT USED.
4. THE FINISHED FACE OF STONE MASONRY SHALL MATCH THAT OF THE EXISTING.

GENERAL NOTES REGARDING TEMPORARY CONSTRUCTION CONDITIONS

1. DESIGN WIND PRESSURES FOR CONSTRUCTION:

   MINIMUM WIND PRESSURES TO BE USED BY THE CONTRACTOR FOR DESIGN DURING THE CONSTRUCTION CONTRACT (WITH THE EXCEPTION OF SIGNS) SHALL BE FROM THE FOLLOWING TABLE:

HEIGHT ABOVE GROUND (FT)	WIND PRESSURE (PSF)
UP TO 17'	23
OVER 17' AND UP TO 33'	27
OVER 33' AND UP TO 50'	30
OVER 50' AND UP TO 75'	34
OVER 75' AND UP TO 100'	37

TABLE NOTES

A. APPLICATION OF THE TABULAR PRESSURE:
   - BRIDGE COMPONENTS DURING CONSTRUCTION, PRIOR TO THE INSTALLATION OF THE PERMANENT BRACING SYSTEMS, NOT INCLUDING CRANE LIFTING.
   - FALSE WORK, SHORING, AND SCAFFOLDING AS DEFINED IN FHWA GUIDE DESIGN SPECIFICATION FOR BRIDGE TEMPORARY WORKS, EXCLUDING 3-DIMENSIONAL LATTICED OR TRUSSED FRAMES OR TOWERS;
   - TEMPORARY SHIELDING.

   WIND PRESSURES FOR ALL OTHER STRUCTURES SHALL BE CALCULATED BASED ON ASCE DESIGN LOADS ON STRUCTURES DURING CONSTRUCTION, SEI/ASCE 37-02 (ALL REFERENCES TO THE ASCE 7 IN THE SEI/ASCE 37-02 PUBLICATION, SHALL BE THE LATEST REVISION OF ASCE 7). THE EXPOSURE CATEGORY SHALL BE B.

ISSUED FOR CONSTRUCTION

ADDENDUM NO. 2

REVISIONS		
NO.	DATE	BY
1	6/6/19	JC III

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

REPAIRS TO
POTTER HILL CULVERT NO. 51
WICKFORD BRIDGE NO. 10
THORNTON BRIDGE NO. 81
HOPKINTON, NORTH KINGSTOWN, & CRANSTON

JOB SPECIFIC
GENERAL NOTES - 1

Steere ENGINEERING INC

CHECKED BY MJA DATE MAY, 2019 SCALE NO SCALE

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI	BHO-0051(001)	2019	07	22

UTILITY NOTES

1. EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND WERE LOCATED USING THE BEST AVAILABLE INFORMATION.
2. BOTH FEDERAL AND STATE LAW (RI GENERAL LAW 39-1.2) REQUIRE NOTIFICATION OF APPROPRIATE UTILITY COMPANIES BEFORE DIGGING, TRENCHING, BLASTING, DEMOLISHING, BORING, BACKFILLING, GRADING, LANDSCAPING, OR OTHER EARTH MOVING OPERATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES (INCLUDING THROUGH THE "DIG SAFE" PROGRAM) TO ENSURE THAT ALL UTILITIES, BOTH UNDERGROUND AND OVERHEAD, HAVE BEEN MARKED BEFORE COMMENCEMENT OF SUCH WORK. THE CONTRACTOR SHOULD UNDERSTAND THAT NOT ALL UTILITIES SUBSCRIBE TO THE "DIG SAFE" PROGRAM. ANY DAMAGE TO EXISTING UTILITIES MARKED IN THE FIELD, OR AS A RESULT OF FAILING TO CONTACT THE APPROPRIATE UTILITY COMPANIES, SHALL BE REPAIRED OR REPLACED (AS DEEMED APPROPRIATE BY THE STATE AND/OR THE IMPACTED UTILITY COMPANY) AT NO ADDITIONAL COST TO THE STATE.
3. CONSTRUCTION EQUIPMENT AND PERSONNEL SHALL FOLLOW OSHA REGULATIONS INCLUDING MINIMUM CLEARANCE TO ENERGIZED OVERHEAD LINES.
4. OVERHEAD OR UNDERGROUND UTILITY LINES MAY BE IN CONFLICT WITH REQUIRED TEMPORARY OR PERMANENT CONSTRUCTION, OR THE EQUIPMENT NECESSARY TO PERFORM THIS REQUIRED CONSTRUCTION. DEPENDING UPON THE CONTRACTOR'S METHODS OF CONSTRUCTION, THESE UTILITIES MAY NEED TO BE RELOCATED FOR PORTIONS OF THE CONSTRUCTION PERIOD AND THEN MOVED BACK TO PERMANENT LOCATIONS WHICH MAY BE OTHER THAN CURRENT LOCATIONS. THE ACTUAL RELOCATIONS (TEMPORARY OR PERMANENT) ARE THE RESPONSIBILITY OF THE INDIVIDUAL UTILITY OWNER. HOWEVER, THE CONTRACTOR WILL BE REQUIRED TO COORDINATE THE EXACT LOCATION AND TIMING OF ALL UTILITY RELOCATIONS WITH THE INDIVIDUAL UTILITY OWNER, AND TO PHASE HIS CONSTRUCTION OPERATIONS AS REQUIRED TO ACCOMMODATE ALL (TEMPORARY AND PERMANENT) UTILITY RELOCATIONS. IN ADDITION TO FIELD MEETINGS AND CORRESPONDENCE, THIS COORDINATION MAY INCLUDE STAKINGS AND LOCATIONS, EXCAVATION AND TEMPORARY GRADING, PROVIDING ACCESS TO EXISTING AND FUTURE UTILITY POLE AND CONDUIT LOCATIONS, OR OTHER PHYSICAL WORK AS REQUIRED TO ALLOW FOR UTILITY RELOCATION WORK. THE CONTRACTOR SHALL ENGAGE IN THE NECESSARY COORDINATION OF UTILITY RELOCATIONS AND ASSOCIATED WORK AT NO ADDITIONAL COST TO THE PROJECT OR THE STATE, AND SHALL HAVE NO RIGHT TO ADDITIONAL COMPENSATION FOR DELAYS OR STAGING AND PHASING OF HIS WORK AS A RESULT OF UTILITY RELOCATION WORK.

EROSION CONTROL AND ENVIRONMENTAL NOTES

1. IF RIPRAP IS PRESENT IN AREAS OF PROPOSED COMPOST FILTER SOCK OR COMPOST FILTER SOCK CANNOT BE PLACED DUE TO OPEN FLOWS, COMPOST FILTER SOCK MAY BE OMITTED.
2. ALL EROSION CONTROLS, INCLUDING WATER CONTROL DEVICES SHALL BE IN PLACE AND ACCEPTED BY THE ENGINEER PRIOR TO ANY CONSTRUCTION.
3. ALL TEMPORARY WATER CONTROLS SHALL BE REMOVED IN THEIR ENTIRETY UPON COMPLETION OF THE WORK.
4. ALL WORK SHALL RESULT IN NO NET CHANGE OF THE CHANNEL CROSS-SECTION.
5. THERE WILL BE NO ADVERSE IMPACTS TO THE STREAM OR AQUATIC SPECIES AS A RESULT OF THIS PROJECT.
6. ALL DISTURBED SOILS TO BE RESTORED WITH PLANTABLE SOIL AND SEED.
7. POTTER HILL CULVERT NO. 51 WORK TO BE COMPLETED DURING PERIODS OF LOW FLOW.

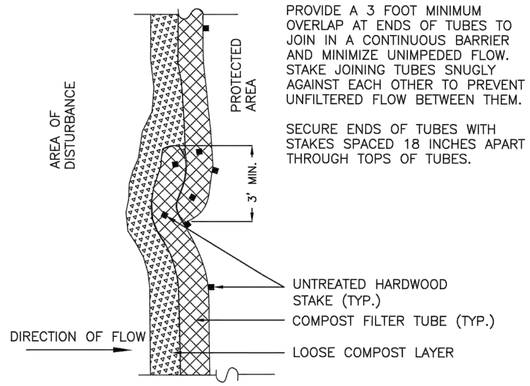
JOB SPECIFIC LEGEND

(CFS) COMPOST FILTER SOCK

(IP) INLET PROTECTION

JOB SPECIFIC SYMBOLS

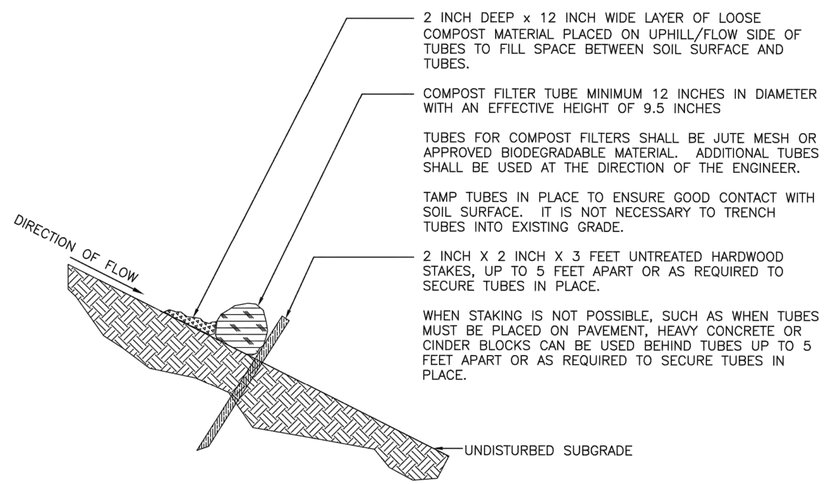
12" COMPOST FILTER SOCK



PROVIDE A 3 FOOT MINIMUM OVERLAP AT ENDS OF TUBES TO JOIN IN A CONTINUOUS BARRIER AND MINIMIZE UNIMPEDED FLOW. STAKE JOINING TUBES SNUGLY AGAINST EACH OTHER TO PREVENT UNFILTERED FLOW BETWEEN THEM.

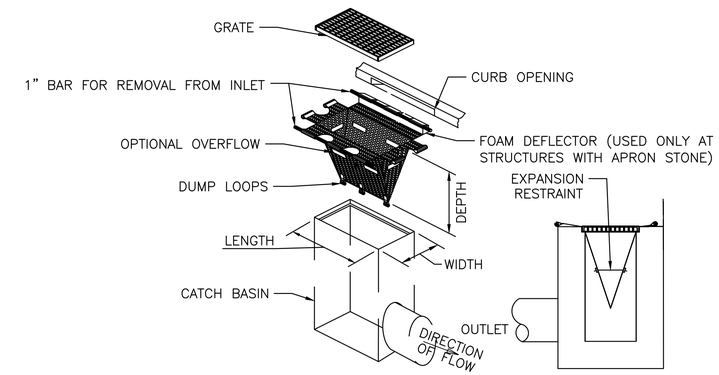
SECURE ENDS OF TUBES WITH STAKES SPACED 18 INCHES APART THROUGH TOPS OF TUBES.

PLAN VIEW – JOIN DETAIL



1. PROVIDE A MINIMUM TUBE DIAMETER OF 12 INCHES FOR SLOPES UP TO 50 FEET IN LENGTH WITH A SLOPE RATIO OF 3H:1V OR STEEPER. LONGER SLOPES OF 3H:1V MAY REQUIRE LARGER TUBE DIAMETER OR ADDITIONAL COURSING OF FILTER TUBES TO CREATE A FILTER BERM. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR SITUATIONS WITH LONGER OR STEEPER SLOPES.
2. INSTALL TUBES ALONG CONTOURS AND PERPENDICULAR TO SHEET OR CONCENTRATED FLOW.
3. DO NOT INSTALL IN PERENNIAL, EPHEMERAL OR INTERMITTENT STREAMS.
4. CONFIGURE TUBES AROUND EXISTING SITE FEATURES TO MINIMIZE SITE DISTURBANCE AND MAXIMIZE CAPTURE AREA OF STORM WATER RUN-OFF.

SINGLE COMPOST FILTER SOCK DETAIL
NOT TO SCALE



SIDE VIEW INSTALLATION DETAIL
NOT TO SCALE

(IP) INLET SEDIMENT CONTROL DEVICE
NOT TO SCALE

ISSUED FOR CONSTRUCTION

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

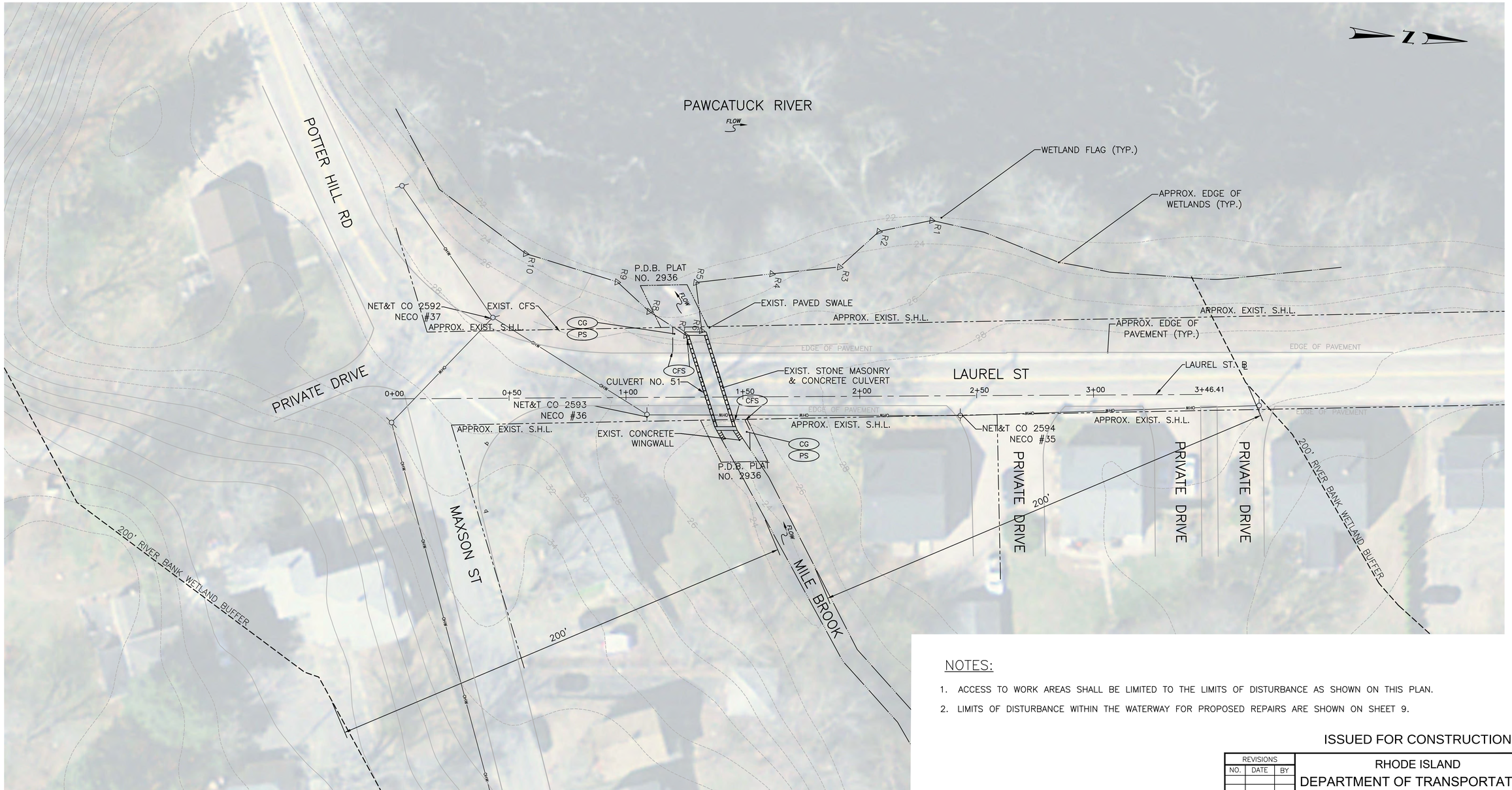
REPAIRS TO
POTTER HILL CULVERT NO. 51
WICKFORD BRIDGE NO. 10
THORNTON BRIDGE NO. 81
HOPKINTON, NORTH KINGSTOWN, & CRANSTON

JOB SPECIFIC
GENERAL NOTES - 2

Steere ENGINEERING INC

CHECKED BY MJA DATE MAY, 2019 SCALE NO SCALE

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI	BHO-0051(001)	2019	08	22



NOTES:

1. ACCESS TO WORK AREAS SHALL BE LIMITED TO THE LIMITS OF DISTURBANCE AS SHOWN ON THIS PLAN.
2. LIMITS OF DISTURBANCE WITHIN THE WATERWAY FOR PROPOSED REPAIRS ARE SHOWN ON SHEET 9.

ISSUED FOR CONSTRUCTION

GENERAL PLAN
SCALE: 1" = 20'-0"

0 10' 20' 40'

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

REPAIRS TO
POTTER HILL CULVERT NO. 51
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THORNTON BRIDGE NO. 81
HOPKINTON, NORTH KINGSTOWN, & CRANSTON

GENERAL PLAN
POTTER HILL CULVERT NO. 51

Steere ENGINEERING INC

CHECKED BY MJA DATE MAY, 2019 SCALE 1"=20'

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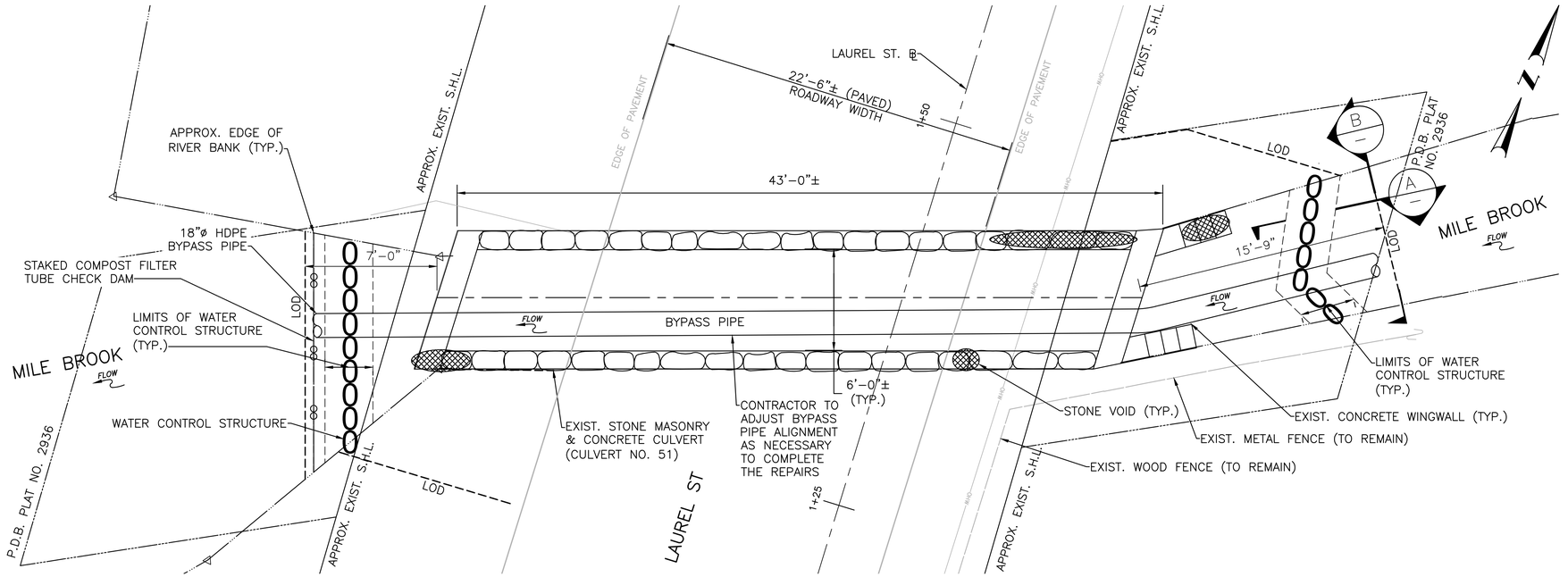
0140G_V1_008_GENERAL001

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI	BHO-0051(001)	2019	09	22



REPAIR AREA PLAN

SCALE: 1" = 4'

0 2' 4' 8'

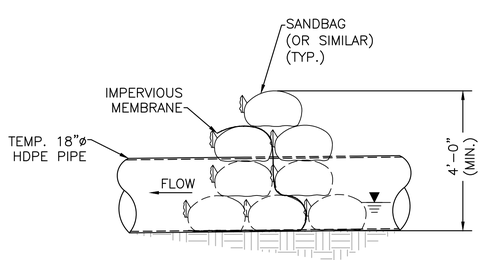
GENERAL NOTES:

1. PROPOSED REPAIRS WILL BE DONE IN THE DRY. SANDBAGS (OR SIMILAR) AND TEMPORARY BYPASS PIPE SHALL BE INSTALLED AS SHOWN PRIOR TO AND DURING ALL REPAIRS.
2. NO HEAVY EQUIPMENT SHALL BE ALLOWED WITHIN THE LIMITS OF THE WATERWAY.
3. ALL WATER CONTROL MEASURES TO BE REMOVED UPON COMPLETION OF THE WORK.
4. THERE SHALL BE NO ADVERSE EFFECTS TO FISH OR OTHER WILDLIFE.
5. WORK SHALL BE COMPLETED BETWEEN JULY 1ST AND OCTOBER 31ST.
6. REPAIRS SHALL RESULT IN NO CHANGE IN CROSS-SECTIONAL AREA OF THE CULVERT OR FLOOD PLAIN.
7. ACCESS TO THE REPAIR AREAS SHALL BE FROM THE NORTHEAST AND SOUTHWEST CORNER ONLY.
8. ALL WORK SHALL BE RESTRICTED TO THE AREAS SHOWN.

* PERIMETER WETLAND ASSOCIATED WITH MILE BROOK. ALL DISTURBED AREAS TO BE RESTORED WITH PLANTABLE SOIL & SEED.

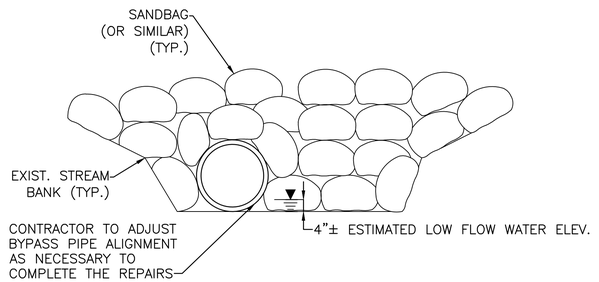
LEGEND:

STONE VOID TO BE REPAIRED



WATER CONTROL SECTION A

SCALE: 1" = 2'



WATER CONTROL SECTION B

SCALE: 1" = 2'

ISSUED FOR CONSTRUCTION

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

REPAIRS TO
POTTER HILL CULVERT NO. 51
WICKFORD BRIDGE NO. 10
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HOPKINTON, NORTH KINGSTOWN, & CRANSTON

BRIDGE PLAN
POTTER HILL CULVERT NO. 51

CHECKED BY MJA DATE MAY, 2019 SCALE AS SHOWN

Steere ENGINEERING INC

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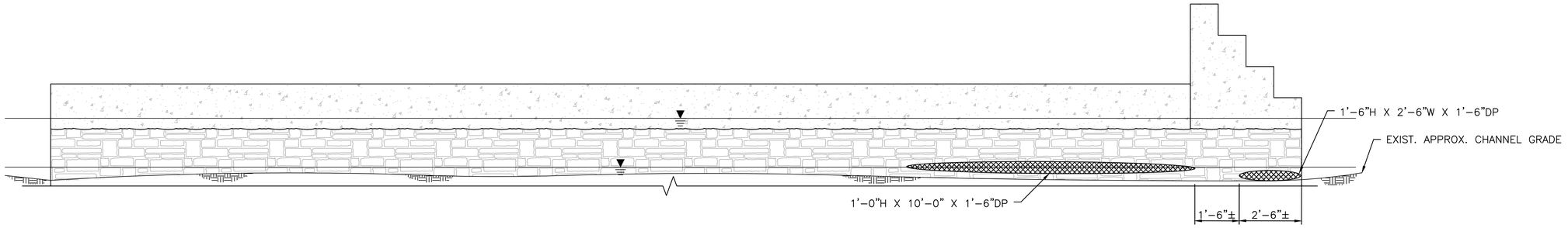
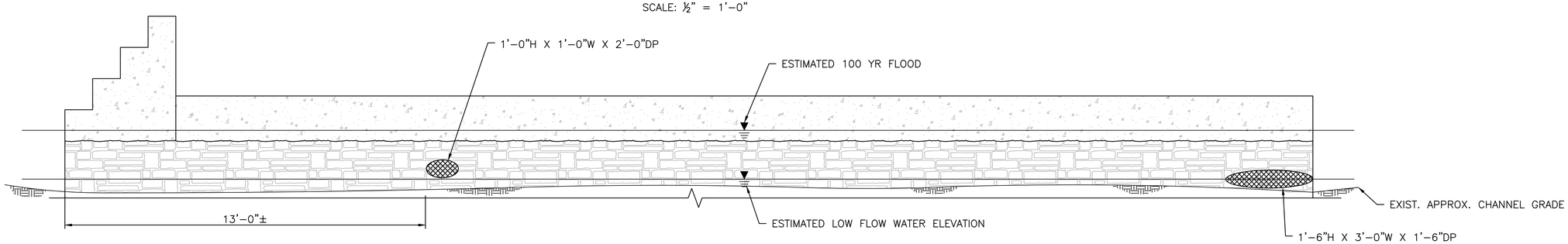
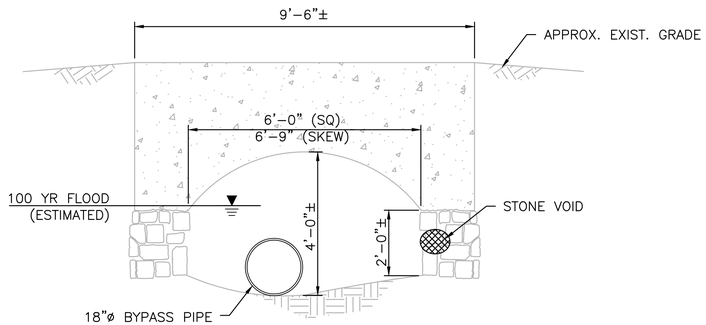
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI	BHO-0051(001)	2019	10	22



NORTH ABUTMENT ELEVATION
SCALE: ½" = 1'-0"

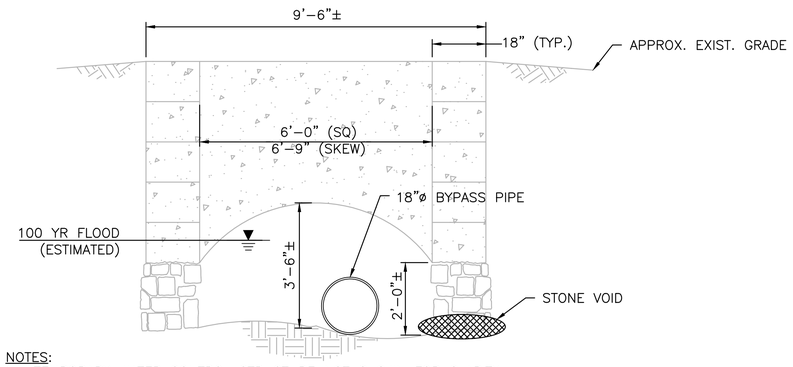


SOUTH ABUTMENT ELEVATION
SCALE: ½" = 1'-0"



NOTES:
1. TEMPORARY WATER CONTROL STRUCTURE NOT SHOWN FOR CLARITY.
2. CONTRACTOR TO ADJUST BYPASS PIPE ALIGNMENT AS NECESSARY TO COMPLETE THE REPAIRS.

WEST ELEVATION
SCALE: ½" = 1'-0"



NOTES:
1. TEMPORARY WATER CONTROL STRUCTURE NOT SHOWN FOR CLARITY.
2. CONTRACTOR TO ADJUST BYPASS PIPE ALIGNMENT AS NECESSARY TO COMPLETE THE REPAIRS.

EAST ELEVATION
SCALE: ½" = 1'-0"

LEGEND:

STONE VOID TO BE REPAIRED

EXISTING GROUND (APPROX.)

0 1/4' 1/2' 1'
SCALE: 1/2"=1'-0"

Steere ENGINEERING INC

ISSUED FOR CONSTRUCTION

REVISIONS		
NO.	DATE	BY

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DEPARTMENT OF TRANSPORTATION

REPAIRS TO
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WICKFORD BRIDGE NO. 10
THORNTON BRIDGE NO. 81
HOPKINTON, NORTH KINGSTOWN, & CRANSTON

REPAIR DETAIL NO.1 ELEVATIONS
POTTER HILL CULVERT NO. 51

CHECKED BY MJA DATE MAY, 2019 SCALE 1/2"=1'-0"

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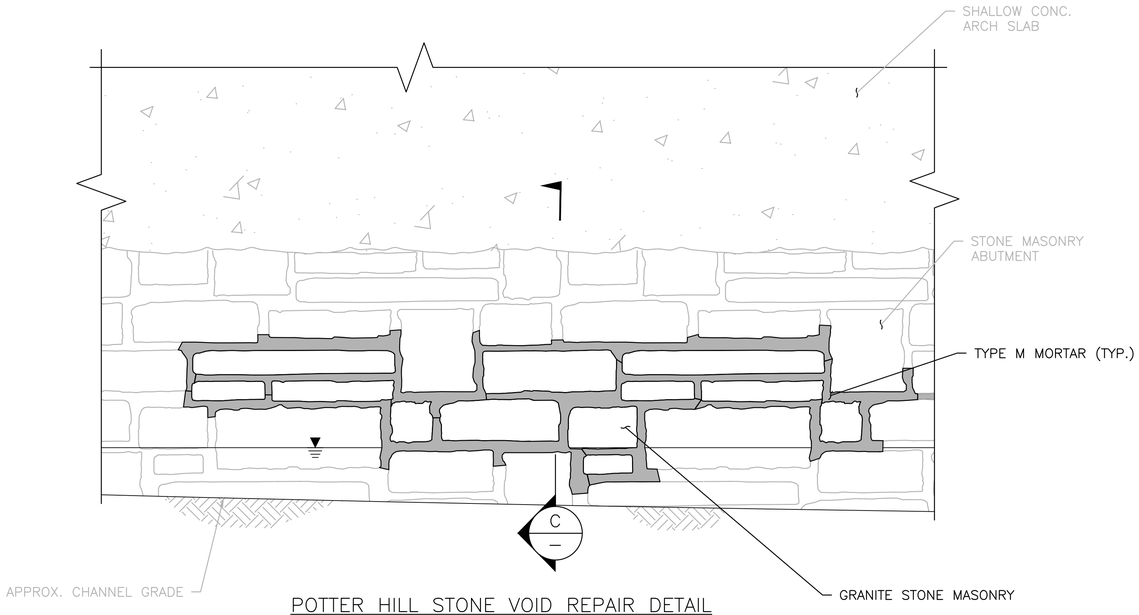
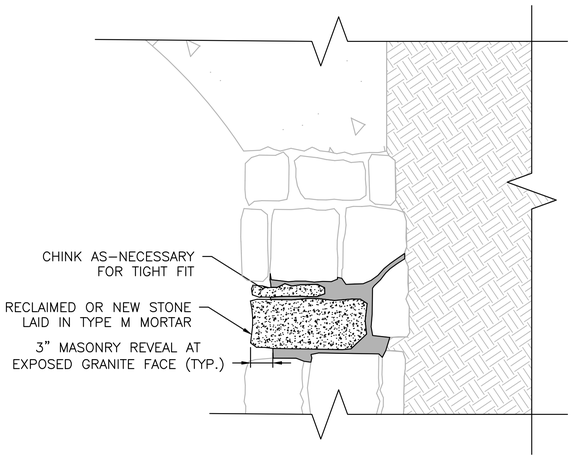
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI	BHO-0051(001)	2019	11	22



POTTER HILL STONE VOID REPAIR DETAIL
NOT TO SCALE



POTTER HILL STONE VOID REPAIR SECTION C/—
NOT TO SCALE

POTTER HILL STONE VOID REPAIR NOTES:

1. EXISTING STONES SHALL BE REMOVED FROM WATERWAY BY HAND. STONES SHALL BE CLEANED, DRIED, AND BEST-FIT INTO VOIDS.
2. RECLAIMED STONES SHALL BE SUPPLEMENTED AS NECESSARY WITH NEW GRANITE STONES OF SIMILAR SIZE AND SHAPE TO FILL THE REMAINING VOID SPACE.
3. TYPE M MORTAR SHALL BE RAKED BACK TO A DEPTH OF 3" ON THE EXPOSED FACE OF EACH STONE.

ISSUED FOR CONSTRUCTION

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

REPAIRS TO
POTTER HILL CULVERT NO. 51
WICKFORD BRIDGE NO. 10
THORNTON BRIDGE NO. 81
HOPKINTON, NORTH KINGSTOWN, & CRANSTON

REPAIR DETAIL NO. 2
ABUTMENT REPAIRS
POTTER HILL CULVERT NO. 51

Steere ENGINEERING INC

CHECKED BY MJA DATE MAY, 2019 SCALE N.T.S.

Z:\Steere jobs\RIDOT\Task 005 – High Priority Repairs to Bleachery & Potter Hill_RIC No. 2019-CB-065 Potter Wickford Thornton\Plans\0140G_V1_011_REPDET002

0140G_V1_011_REPDET002

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	R. I.	SRS-0230(002)	77	1	30

STATE OF RHODE ISLAND

DEPARTMENT OF TRANSPORTATION
DIVISION OF PUBLIC WORKS

PLAN, PROFILE AND SECTIONS OF PROPOSED

STATE HIGHWAY

ASHAWAY RIVER BRIDGE Nº 50
SUPERSTRUCTURE REPLACEMENT

HOPKINTON RHODE ISLAND

WASHINGTON COUNTY

R.I. CONTRACT Nº 7710

R.I.E.A. Project Nº SRS-0230(002)

INDEX OF SHEETS

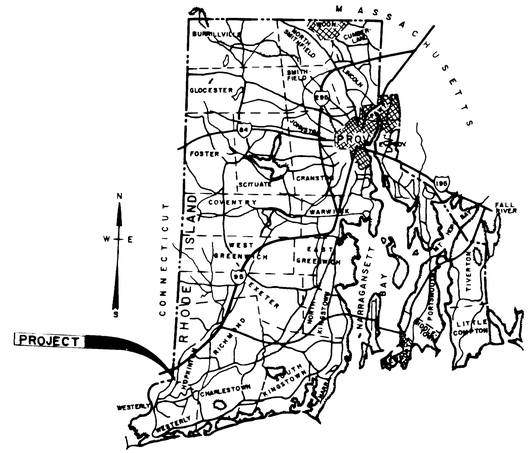
1. TITLE SHEET
2. PLAN & PROFILE - 1
3. PLAN & PROFILE - 2
4. PLAN & PROFILE - 3 (INCLUDES TYP. APPROACH SECTION)
5. DEMOLITION OF PORTIONS OF EXISTING BRIDGE
6. GENERAL PLAN & ELEVATION
7. NORTH ABUTMENT
8. SOUTH ABUTMENT
9. NORTHWEST RETAINING WALL
10. DECK SHEET - 1
11. DECK SHEET - 2
12. DETAIL SHEET - 1
13. DETAIL SHEET - 2
14. REINFORCING SCHEDULE
15. TRAFFIC DETOUR SIGNING
16-25. APPROACH CROSS SECTIONS
26-30. R.I. STANDARDS

RHODE ISLAND STANDARD STRUCTURES

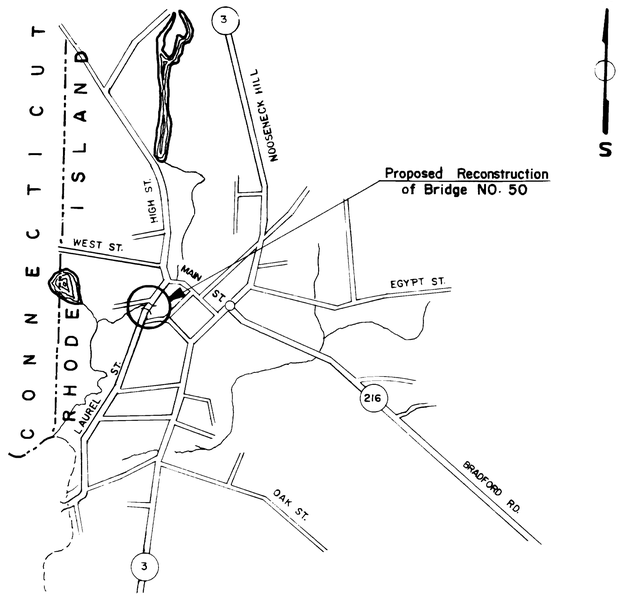
SPECIFICATIONS TO GOVERN THIS PROJECT ARE RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION REVISION OF 1971 WITH LATEST REVISIONS THROUGH JUNE 1, 1974 AND STATE AND FEDERAL SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS STANDARD DETAIL FOR THIS PROJECT ARE RHODE ISLAND STANDARD DETAILS, DATED 1974, WITH LATEST REVISIONS THROUGH JULY 1, 1974.

R.I. STD. DETAILS INCLUDED IN THIS CONTRACT ARE:

4.3	CATCH BASIN TYPE "F" (ROUND)
5.12	SQUARE FRAME AND GRATE
5.31	CAST IRON STEP
7.15	P/C CONC. APRON STONE
34.1	TYPICAL GUARD RAIL INSTALLATION
34.5	ANCHORAGE APPROACH SECTION
34.6	ANCHORAGE DETAIL TRAILING END
34.31	STEEL BEAM GUARD RAIL
34.32	" " " "
34.33	" " " "
34.34	" " " "
43.1	CEMENT CONCRETE SIDEWALK
43.2	BITUMINOUS CONCRETE SIDEWALK
7.11	P/C CEMENT CONCRETE CURB
7.16	P/C CEMENT CONCRETE CURB - 2' CORNER
7.17	P/C CEMENT CONCRETE CURB TRANSITION
14.1	CONCRETE HIGHWAY BOUND
26.1	4' BARRICADE
29.0	GUIDE SIGNS AND CONSTRUCTION SIGNS



LOCATION MAP



VICINITY MAP
(SCALE: 4" = 1 MILE)

BASE OF LEVELS
MEAN SEA LEVEL

DESIGN DATA

TRAFFIC DATA
ADT 1971 ——— 2000.
ADT 1999 ——— 6000.
DESIGN SPEED ——— 30 MPH

LOADING — IN ACCORDANCE WITH SPECIFICATIONS OF THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1973 EDITION, WITH INTERIM SPECIFICATIONS 1974, 1975 AND 1976 FOR HS20-44 LOADING AND THE RHODE ISLAND LEGAL LOAD.

NOTE:

MARKING SHOWN THUS ..... ☐ DENOTES AS BUILT, PER RESIDENTS' ENGINEER DRAWING IN FIELD. ONLY MATERIAL SHOWN ON THOSE PLANS IS INCLUDED HERE.

JOSHUA N. CHOPY
NO. 2413
REGISTERED PROFESSIONAL ENGINEER

R.I. DEPARTMENT OF TRANSPORTATION
DIVISION OF PUBLIC WORKS

APPROVED
Joshua N. Chopy — CHIEF ENGINEER — 9/13/77 DATE

APPROVED
Virginia A. Casto — ASSISTANT DIRECTOR FOR ADMINISTRATION — 9/13/77 DATE

APPROVED
Wendall G. Sanders — DIRECTOR — 9/13/77 DATE

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED

DIVISION ADMINISTRATOR — DATE

Contract Number 7710
Number of Sheet 1
Total Sheets 30

50,001

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	R.I.	SRS-0230(002)	77	2	30

℄ CURVE DATA
178°-11'-35"
TAN = 50.00
ARC = 99.99
RAD 3170.62

R.I. FED. AID PROJECT NO. SRS - 0230(002)
AND CONTRACT NO. 7710
BEGINS AT STA. 12 + 62 ±

INSTALL 2000' # 10 Cross Linked Wire From Pole 2607 to Pole 606

INSTALL F.A.
1-Rock & Spool
1-5/8" x 14" Galv. Bolt + Wash.
1-5/8" x 6" Galv. Lag + Wash.

INSTALL F.A.
1-Rock & Spool
1-5/8" x 14" Galv. Bolt + Wash
1-5/8" x 6" Galv. Lag + Wash

25' L.F-12" REFLECTORIZED PIGMENT PAVEMENT MARKING WHITE (STOP BAR)

ASHAWAY LINE & TWINE M.F.G. CO.

INSTALL # 2606
CONST. 5' BIT. WALK R.I. STD. 43.2

RELOCATED # 2605

RELOCATED # 2604

R & D ISOLATED TREE

BIT. PARKING LOT

CUT & MATCH EXIST.

PROPOSED S.H.L.

PROPOSED GUTTER LINE

EXIST. STREET LINE

EXIST. GUTTER

EXISTING GUTTER

EXISTING S.H.L.

EXIST. GRANITE CURB

R & R CURB & CORS

CONSTRUCTION ℄

PLAT 1816

PLAT # 1148

LAUREL STREET

MAIN ST

PROPOSED 4" PLASTIC GAS (BY OTHERS)

F & S CONC. CURB R.I. STD. 7.11

WET MASONRY RET. WALLS

BRIDAL WREATH BUSH

4" BUSH

SOUR WOOD

50" BEECH

QUINCE

MOCK ORANGE

CESSPOOL

BOUND

EXISTING STREET LINE

CUT & MATCH

R & D CURB

BIT. DRIVE

CONC. WALK

CONST. CEM. CONC. WALK R.I. STD. 43.1

CONST. BIT. CONC. S/W R.I. STD. 43.2

PROPOSED S.H.L.

R.I.H.B.

AETNA ENG. CO.

CEM. BLOCK CURB

BIT. DRIVE

GRASS

WALK

REPLACE EXIST. PIPE WITH RIHB

MH

HO # 72

HO # 70

P #2607

2606

2605

1736

2604

STA. 11 + 69.60
STA. 11 + 78.48
STA. 11 + 92.88
STA. 12 + 00
STA. 12 + 50
STA. 12 + 55 (RT 13')
STA. 12 + 72 (LT. 12')
STA. 12 + 75 ±
STA. 13 + 13 ±
STA. 13 + 88 (LT 13')
STA. 14 + 00 ±
STA. 14 + 50 (PC)
STA. 14 + 52 ± (RT. 16')
STA. 14 + 76 ± (RT. 15.5)
STA. 15 + 50.09 (PT)
STA. 16 + 00
STA. 16 + 20 (RT. 15')
STA. 16 + 68 (RT. 15')
STA. 12 + 50 TO 14 + 80 ±
PC. 16 + 35.85

139°-29'-30"
118°-43'-10"
178°-01'-00"
178°-11'-35"

115.5'
2.0' C.R.
2.0' C.R.
2.0' C.R.
2.0' C.R.
222.0'

NOTE:
FOR ROADWAY GUTTER GRADES, SEE CROSS SECTIONS

N

00.00 INDICATES PROPOSED GRADES
(00.00) INDICATES EXISTING GRADES

ROLL GRADE

- 1.00 % ±

- 2.00 % ±

PVI STA. 15+37.50 EL. 41.19

50
40
30

12 + 50	13 + 00	13 + 50	14 + 00	14 + 50	15 + 00	15 + 50
42.12 (42.12)	42.93 (42.93)	42.67 (42.67)	42.46 (42.46)	41.96 (41.96)	41.56 (41.56)	40.95 (40.95)

16 + 00: 39.92 (39.93)
16 + 50: 38.92 (38.88)

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION
DIVISION OF PUBLIC WORKS

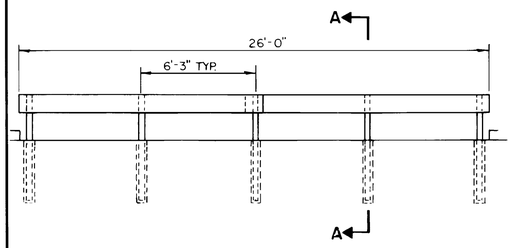
ASHAWAY RIVER BRIDGE Nº 50
SUPERSTRUCTURE REPLACEMENT
HOPKINTON RHODE ISLAND

PLAN & PROFILE-1

CHECKED BY _____ DATE _____ SCALE HOR. _____ VERT. _____

50,002

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	R.I.	SRS-0230 (002)	77	3	30



POSITIVE PROTECTION BARRIER

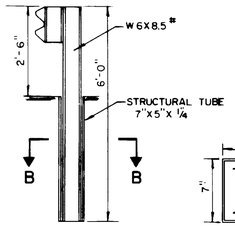
SCALE: 1/4" = 1'-0"

NOTE:

SECTION A-A SHOWS A SUGGESTED DETAIL TO REMOVE POST TO GAIN ACCESS TO THE CONSTRUCTION SITE. AN ALTERNATE PLAN MAY BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

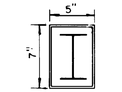
POSITIVE PROTECTION BARRIER TO BE PLACED IN POSITION DURING NON-WORKING PERIODS.

PAYMENT FOR POSITIVE PROTECTION BARRIER SHALL INCLUDE ITS FINAL REMOVAL.



SECTION A-A

SCALE: 1/2" = 1'-0"



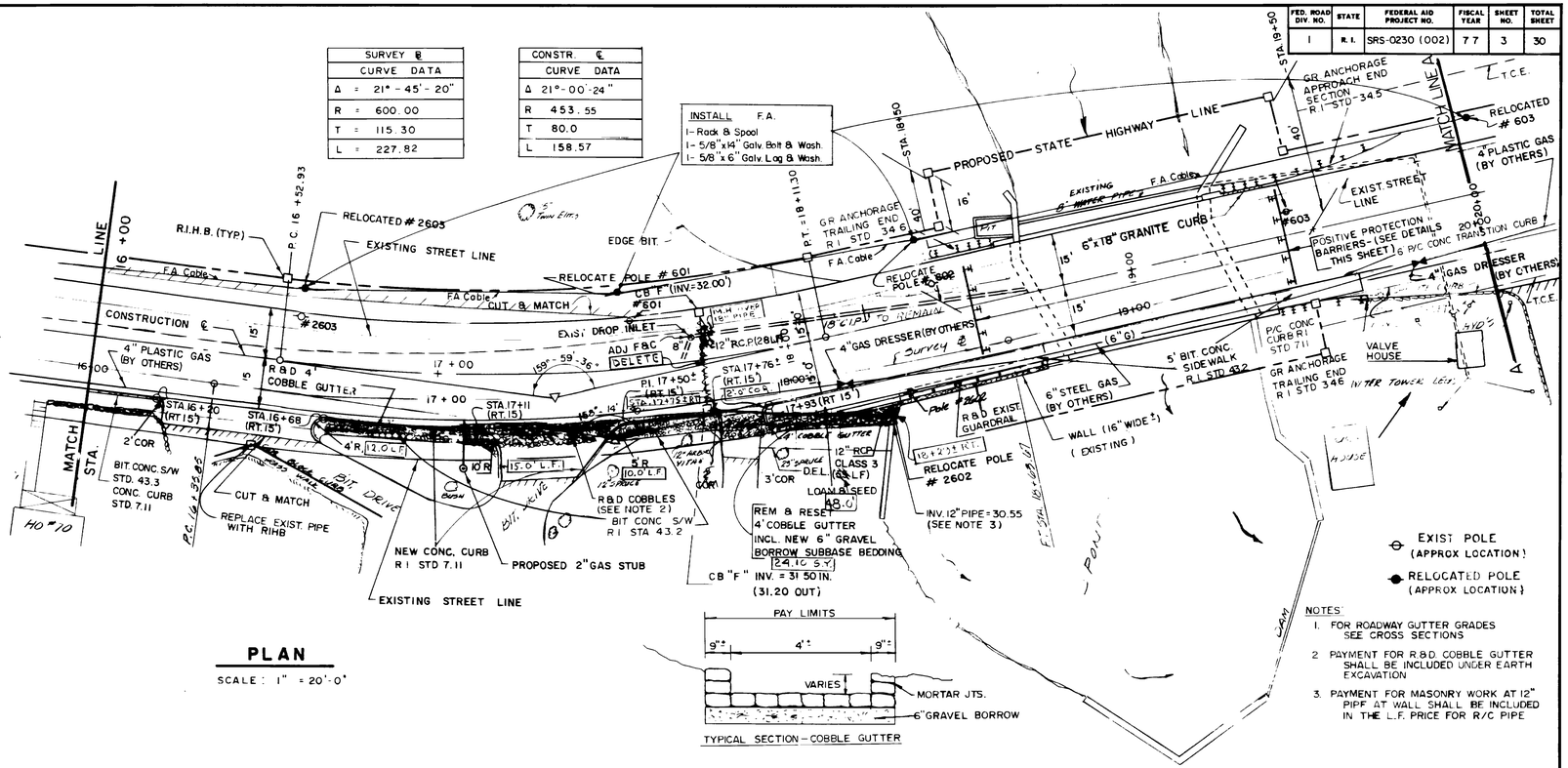
SECTION B-B

SCALE: 1"=1'-0"

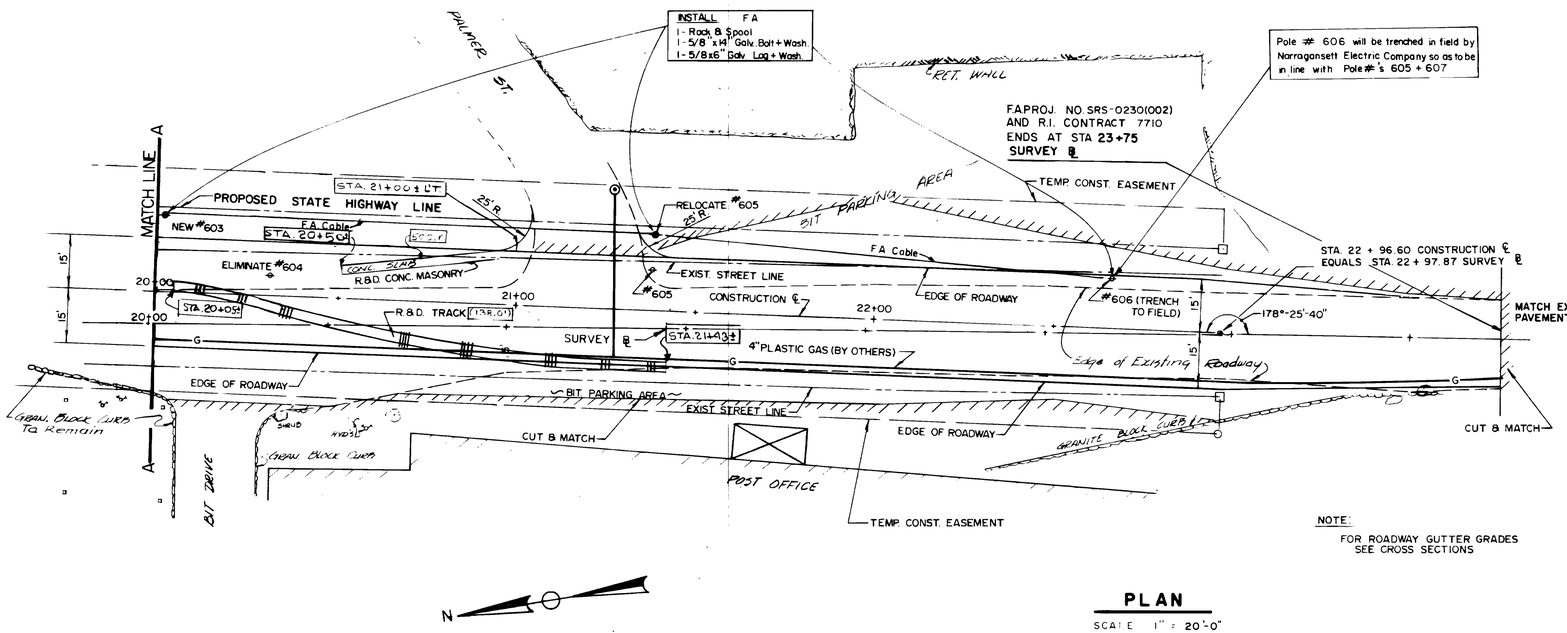
SURVEY ℄ CURVE DATA	
Δ	21° - 45' - 20"
R	600.00
T	115.30
L	227.82

CONSTR. ℄ CURVE DATA	
Δ	21°-00'-24"
R	453.55
T	80.0
L	158.57

INSTALL F.A.
1- Rack & Spool
1- 5/8"x14" Galv. Bolt & Wash.
1- 5/8"x 6" Galv. Lag & Wash.

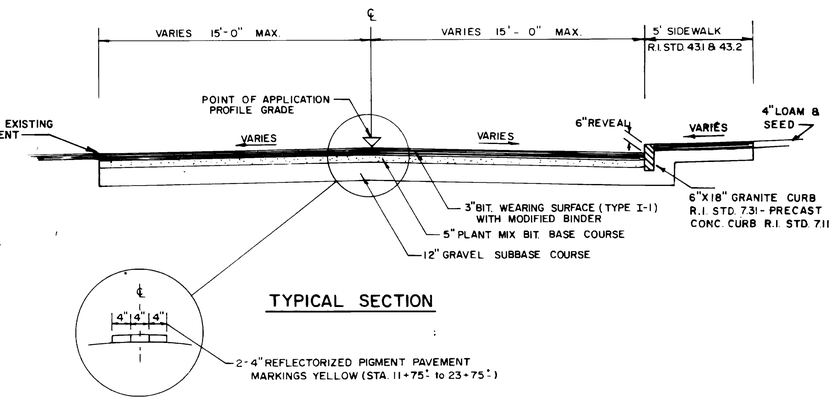

PROPOSED STATE HIGHWAY LINE
MATCH LINE
R.I.H.B. (TYP.)
P.C. 16 + 52.93
RELOCATED # 2605
EXISTING STREET LINE
EDGE BIT.
RELOCATE POLE # 601
CB "F" (INV=32.00')
#601
#2603
#603
CUT & MATCH
EXIST. DROP INLET
ADJ F&C
DELETE
12" RCP (28 L.F.)
4" PLASTIC GAS (BY OTHERS)
CONSTRUCTION ℄
R&D 4" COBBLE GUTTER
STA. 16 + 20 (RT. 15')
STA. 16 + 68 (RT. 15')
STA. 17 + 11 (RT. 15')
STA. 17 + 76± (RT. 15')
P.I. 17 + 50± (RT. 15')
2'COR
BIT. CONC. S/W STD. 43.3
CONC. CURB STD. 7.11
REPLACE EXIST. PIPE WITH RIHB
CUT & MATCH
NEW CONC. CURB R I STD 7.11
EXISTING STREET LINE
PROPOSED 2" GAS STUB
R&D COBBLES (SEE NOTE 2)
BIT. CONC. S/W R I STA 43.2
4'R 12.0 L.F.
15.0' L.F.
5'R 10.0' L.F.
3'COR
12" RCP CLASS 3 (63 L.F.)
LOAM & SEED 48.0
REM & RESET 4' COBBLE GUTTER INCL. NEW 6" GRAVEL BORROW SUBBASE BEDDING 24.16 S.Y.
CB "F" INV. = 31.50 IN. (31.20 OUT)
INV. 12" PIPE = 30.55 (SEE NOTE 3)
RELOCATE POLE # 2602
GR ANCHORAGE APPROACH END SECTION R I STD-34.5
GR ANCHORAGE TRAILING END R I STD 34.6
RELOCATE POLE # 603
EXIST STREET LINE
4" PLASTIC GAS (BY OTHERS)
POSITIVE PROTECTION BARRIERS - (SEE DETAILS THIS SHEET) 6 P/C CONC TRANSITION CURB
6"x18" GRANITE CURB
4" GAS DRESSER (BY OTHERS)
5' BIT. CONC. SIDEWALK R.I. STD 9.2
6" STEEL GAS (BY OTHERS)
WALL (16" WIDE ±) (EXISTING)
P/C CONC CURB R I STD 7.11
GR ANCHORAGE TRAILING END R I STD 34.6
VALVE HOUSE
R&D EXIST. GUARDRAIL
EXISTING 8" WATER PIPE
F.A. Cable
EXISTING STREET LINE
EXISTING STREET LINE
EXISTING STREET LINE

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	R.I.	SRS - 0230 (002)	77	4	30

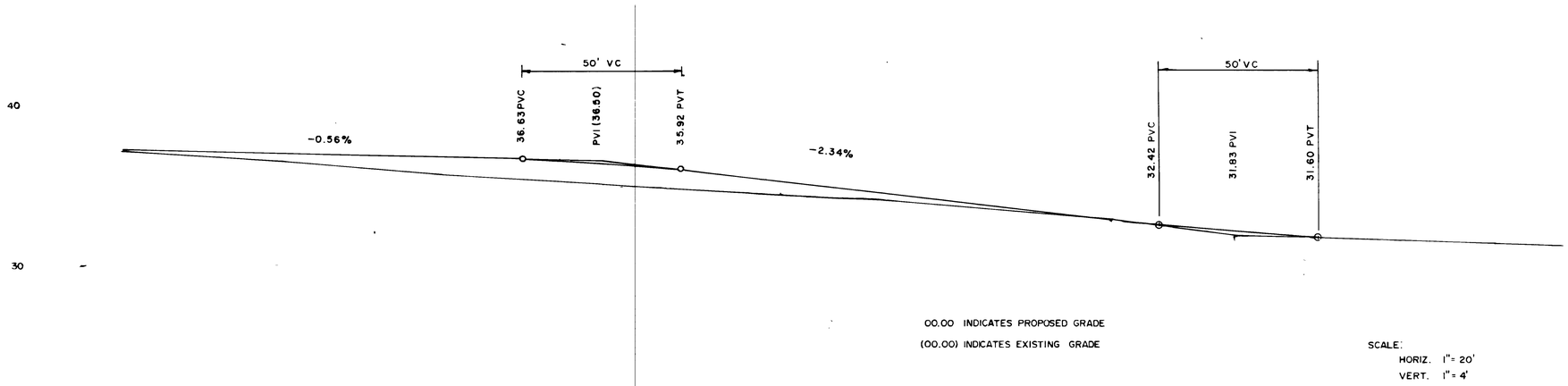


PLAN

SCALE 1" = 20'-0"



TYPICAL SECTION



00.00 INDICATES PROPOSED GRADE
(00.00) INDICATES EXISTING GRADE

SCALE:
HORIZ. 1" = 20'
VERT. 1" = 4'

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION
DIVISION OF PUBLIC WORKS

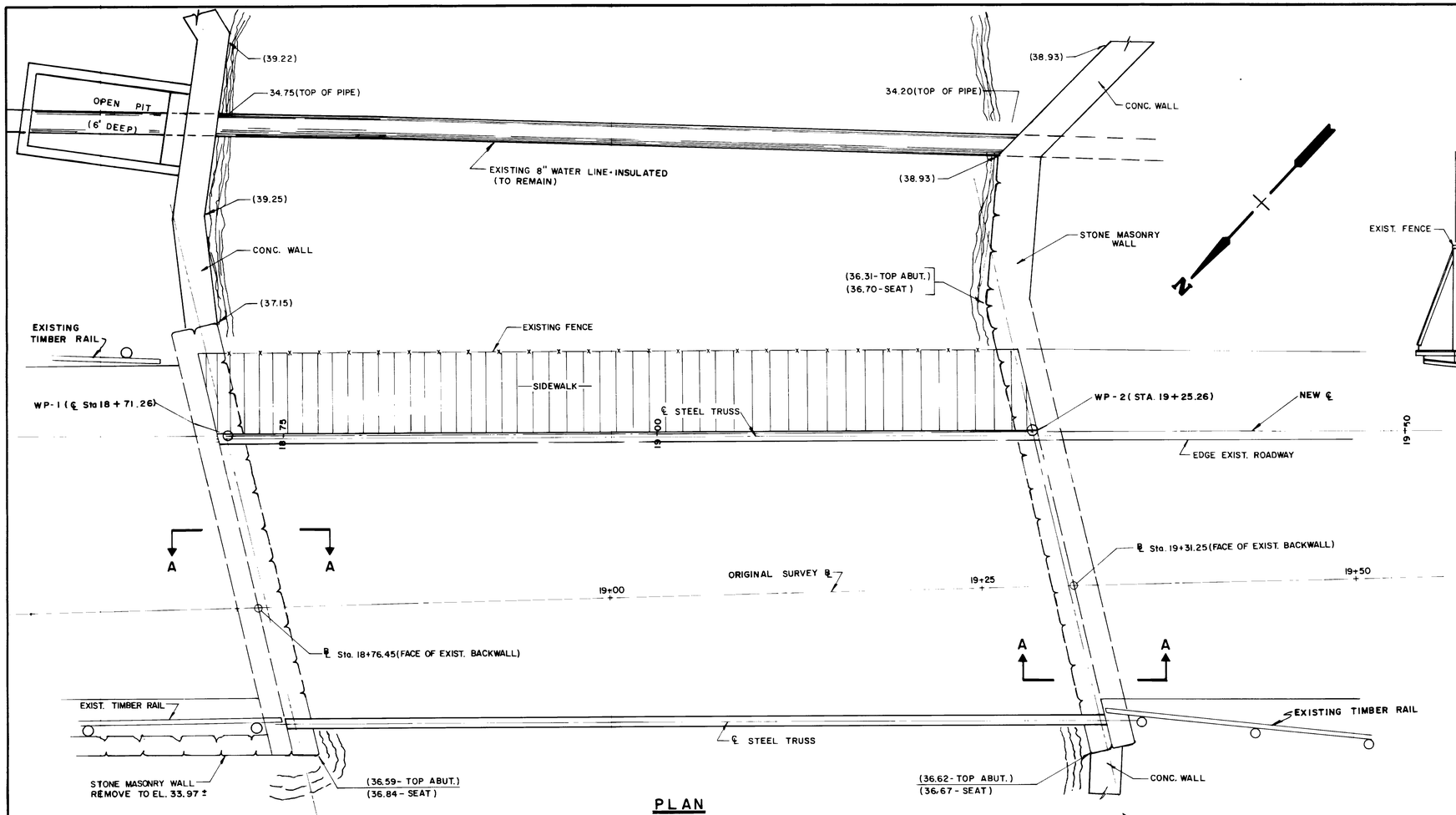
ASHAWAY RIVER BRIDGE Nº 50
SUPERSTRUCTURE REPLACEMENT
HOPKINTON, RHODE ISLAND

PLAN & PROFILE-3

CHECKED BY _____ DATE _____ SCALE HOR. _____ VERT. _____

50,004

FED.ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	R.I.	SRS-0230(002)	77	5	30

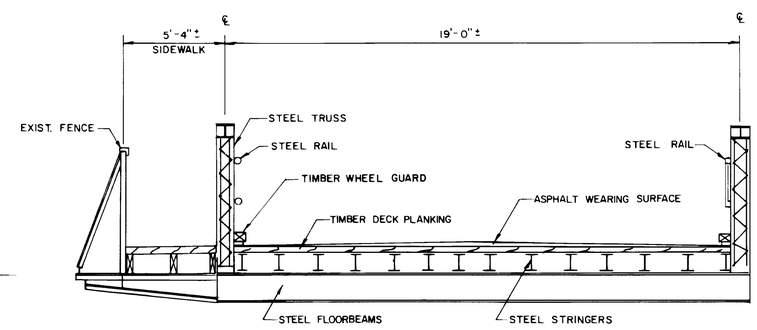


PLAN

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

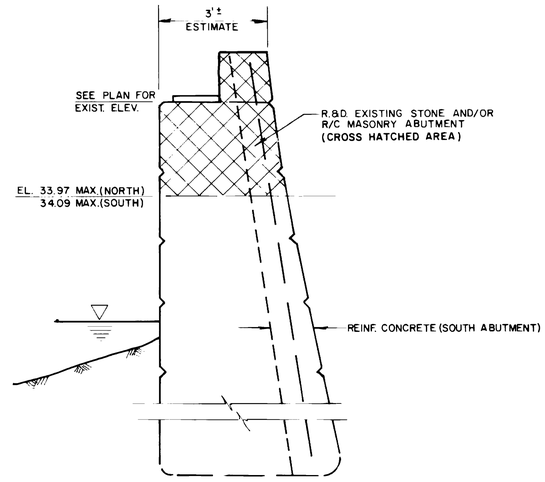
NOTE:

GRADES ABOVE SHOWN THUSLY (00.00) ARE EXISTING ABUT. & WALL GRADES.



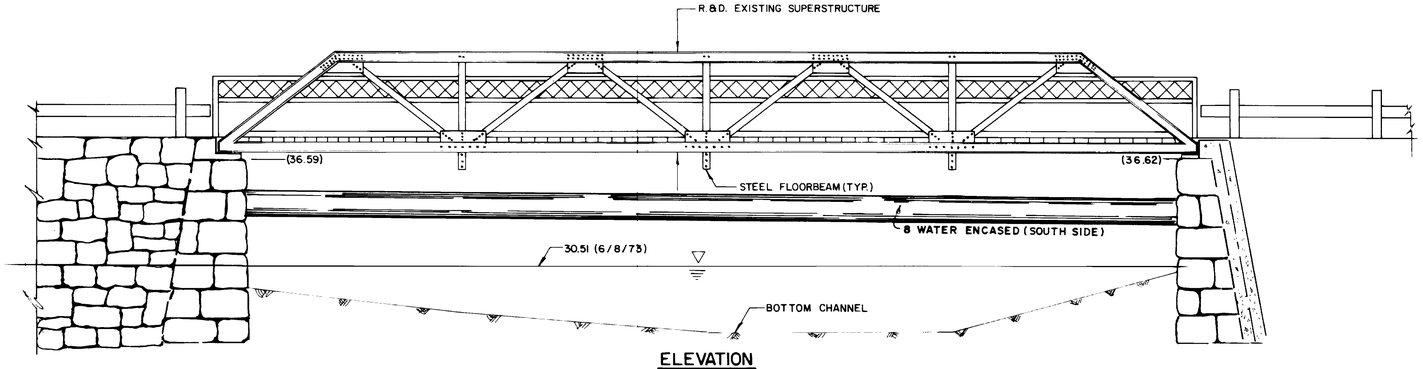
TYPICAL SECTION

(SCALE: 3/8" = 1'-0")



SECTION A-A

(SCALE: 1/2" = 1'-0")



ELEVATION

(SCALE: 1/4" = 1'-0")

REMOVE AND DISPOSE ITEMS

1.) BRIDGE SUPERSTRUCTURE (INCLUDES: STEEL TRUSS, FLOORBEAMS, STRINGERS, PLANKING, WEARING SURFACE, SIDEWALK & FENCE & EXISTING TIMBER APPROACH RAILING)
2.) PORTIONS OF MASONRY ABUTMENTS INDICATED ABOVE

NORTH ABUT.	20±CY
SOUTH ABUT.	15±CY
N.W. RETAINING WALL	LS

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION
DIVISION OF PUBLIC WORKS

ASHAWAY RIVER BRIDGE NO. 50
SUPERSTRUCTURE REPLACEMENT

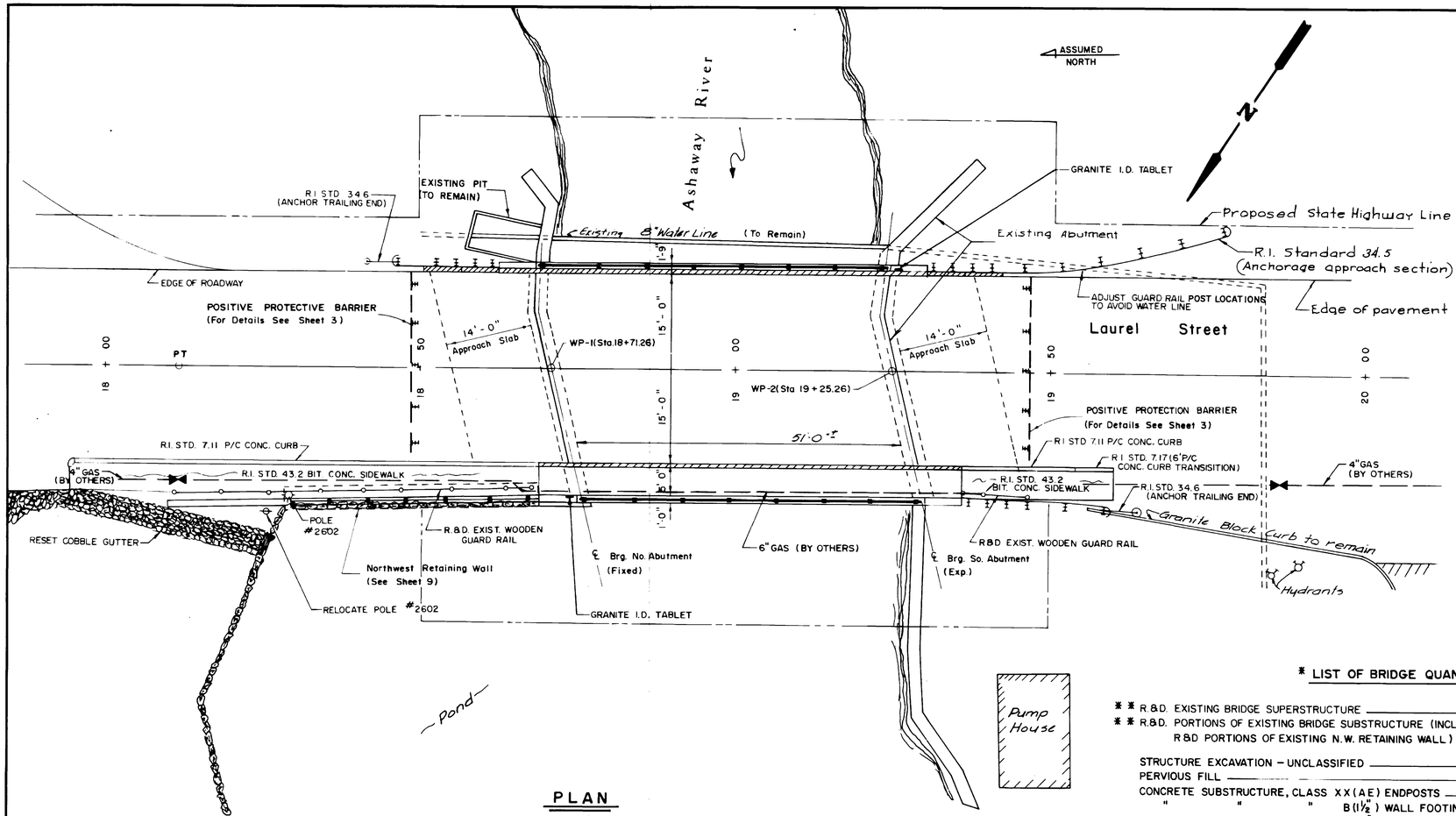
HOPKINTON RHODE ISLAND

DEMOLITION OF PORTIONS OF EXISTING BRIDGE

CHECKED BY _____ DATE _____ SCALE AS NOTED

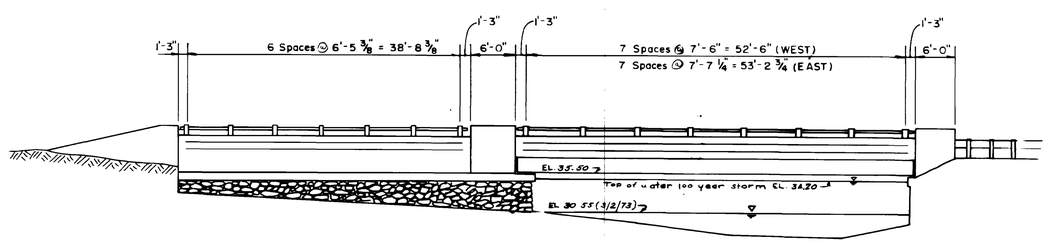
RHODE ISLAND BLUEPRINT CO.

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	R.I.	SRS-0230(002)	77	6	30



PLAN

(Scale: 1" = 10')



WEST ELEVATION

CONCRETE NOTES

1. The basic value of design allowable stress (fc) for all concrete (except P/S concrete) is .40 f'c. (fc for Class B concrete = .40 x 3000 = 1200 P.S.I.; fc for Class XX(AE) concrete is .40 x 4000 = 1600 P.S.I.)
2. The classes of concrete for the various components of the structure shall be in accordance with the standard specifications. Class B concrete will be required for all footing and abutments.
3. Reinforcing steel shall conform to the requirements of A.S.T.M. designation A-615 grade 60 "Deformed Billet Steel Bars for Concrete Reinforcement," allowable stress in tension of 24,000 P.S.I.
4. All reinforcing shall have the following minimum cover:
   Footings . . . . . 3"
   All other bars . . . 2"
   (Except P/S Conc. Beams)
5. Unless otherwise shown on the plans, the following minimum lap length for reinforcing bars shall be used;

Bar	Lap
#4	12"
#5	15"
#6	19"
#7	26"
#8	35"

6. The contractor shall take every effort to prevent discoloration of the concrete during construction.
7. Horizontal construction joints other than those shown on the plans will not be permitted unless authorized by the Engineer.
8. All exposed edges and reentrant corners shall have a minimum 3/4" inch chamfer, unless otherwise shown on the plans.
9. All exposed concrete surfaces visible in elevation shall be rubbed in accordance with the standard specifications.
10. A uniform flexible buterate polymer coating conforming to the special provisions shall be applied to the inside face and top surface of the parapet and endpost, and to the beam seats and drainage troughs of the abutments.
11. All joints sealants are to be type B (Polysulfide Base) except as noted. Color of sealant where exposed in curbing and parapets shall be neutral (light tan or grey). under pavement, back of walls, etc. color to be at the discretion of the contractor.
12. All joint fillers to be premoulded, non-expansive, non-extruding type.

* LIST OF BRIDGE QUANTITIES

** R.&D. EXISTING BRIDGE SUPERSTRUCTURE	L.S.
** R.&D. PORTIONS OF EXISTING BRIDGE SUBSTRUCTURE (INCLUDES: R&D PORTIONS OF EXISTING N.W. RETAINING WALL)	L.S.
STRUCTURE EXCAVATION – UNCLASSIFIED	119 C.Y.
PERVIOUS FILL	10 C.Y.
CONCRETE SUBSTRUCTURE, CLASS XX(AE) ENDPOSTS	5 C.Y.
" " " B(1½") WALL FOOTINGS (N.W. RET. WALL)	9 C.Y.
" " " B(1½") ABUT. STEMS	25 C.Y.
" " " B(1½") WALL STEMS (N.W. RET. WALL)	18 C.Y.
" " " B(1½") APPROACH SLABS	39 C.Y.
CONCRETE SUPERSTRUCTURE, CLASS XX (AE) BRIDGE SIDEWALKS & PARAPETS	24 C.Y.
CONCRETE SURFACE FINISHING, RUBBED REGULAR	1,740 S.F.
CONCRETE SURFACE TREATMENT, BUTERATE POLYMER	680 S.F.
STANDARD BARS GRADE 60	12,800 Lbs
P/S CONCRETE BOX BEAMS, TYPE B-I (48")	1,984 S.F.
GRANITE CURB - SLOPED FACED	69 L.F.
GRANITE CURB - VERTICAL FACED	55 L.F.
MEMBRANE WATERPROOFING (3-PLY)	200 S.Y.
MASTIC JOINT SEALER (1" x 1")	1,317 C.i
BITUMINOUS PAVEMENT - MODIFIED BINDER	31 Ton
BITUMINOUS PAVEMENT - TYPE I-1, SURFACE COURSE	15 Ton
DRILL & GROUT REINFORCING DOWELS	84 EA.
ELASTOMERIC BEARINGS	18 EA.
ALUMINUM BRIDGE RAIL - 1 BAR ORNAMENTAL	151 L.F.
SAW & SEAL JOINTS IN BITUMINOUS CONC. PAVEMENT	62 L.F.
GRANITE IDENTIFICATION TABLETS	2 EA.
JOINT SEAL - TYPE A - BITUMINOUS	184 C.I.
JOINT SEALER - TYPE B - CLASS 2	1,585 C.I.
PREFORMED JOINT FILLER - CORK - 1"	196 S.F.
" " " BITUMINOUS - ½"	100 S.F.
" " " " ¼"	15 S.F.
ANCHOR DOWELS FOR P/S BOX BEAMS	6 EA.
6" X 18" GRANITE CURB	25 L.F.
SLOPE FACE GRANITE CURB TRANSITION	12 L.F.

* PAYMENT FOR ALL QUANTITIES LISTED SHALL BE INCLUDED IN THE LUMP SUM PAYMENT FOR CODE 800.9999 "SUPERSTRUCTURE & SUBSTRUCTURE." FOR APPROACH QUANTITIES SEE PROPOSAL.

** NOT INCLUDED IN LUMP SUM ITEM ABOVE.

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION
DIVISION OF PUBLIC WORKS

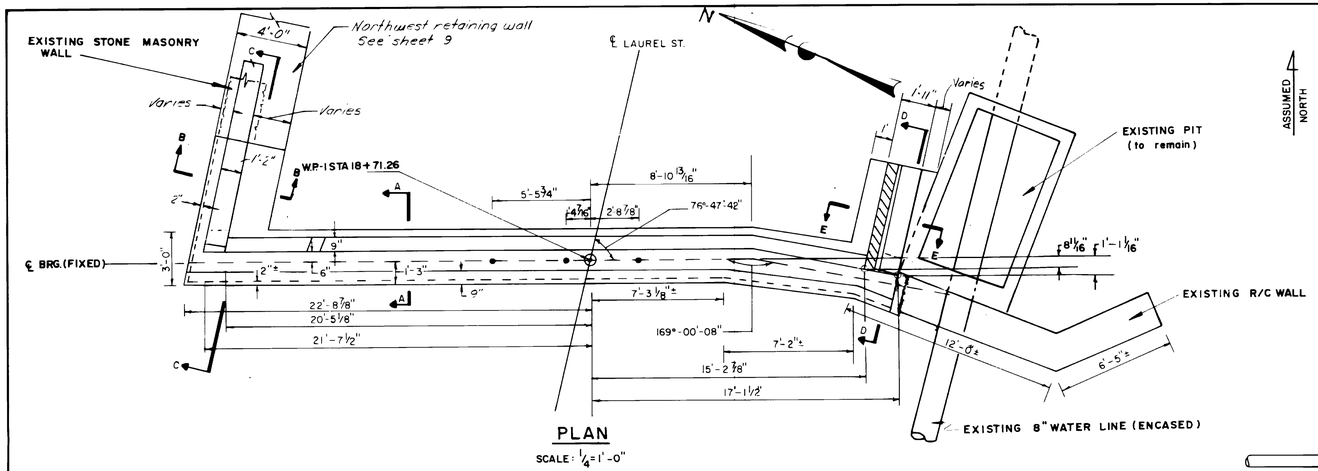
ASHAWAY RIVER BRIDGE Nº 50
SUPERSTRUCTURE REPLACEMENT
HOPKINTON RHODE ISLAND

GENERAL PLAN & ELEVATION

CHECKED BY _____ DATE _____ SCALE 1" = 10'

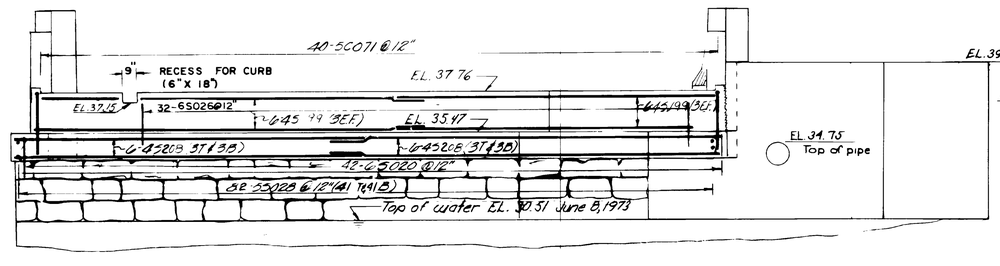
50,006

FED. ROAD NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	R.I.	STRS-0230(002)	77	7	30



PLAN

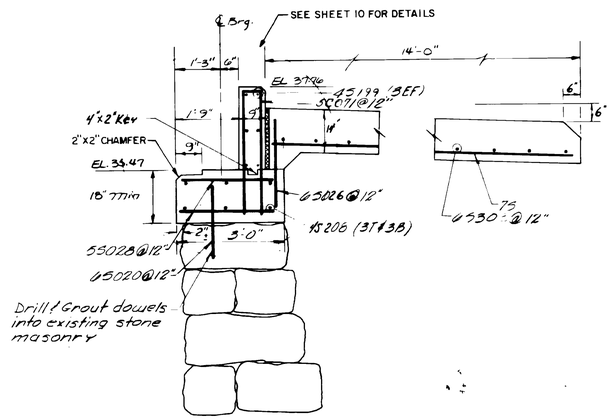
SCALE: 1/4" = 1'-0"



ELEVATION

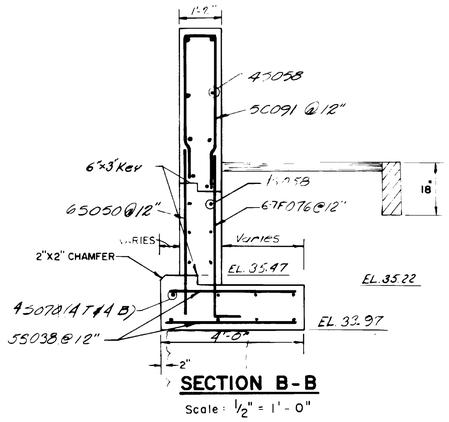
NORTH ABUTMENT

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



SECTION A-A

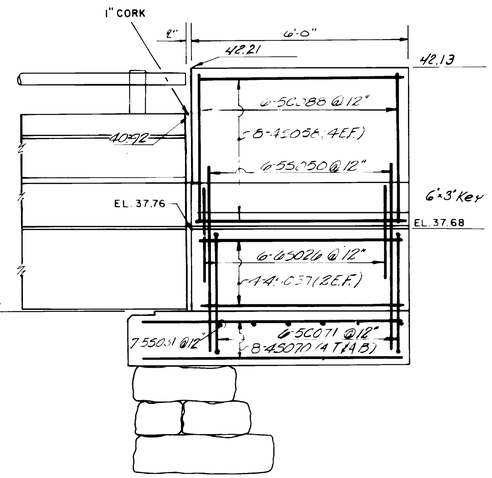
Scale: 1/2" = 1'-0"



SECTION B-B

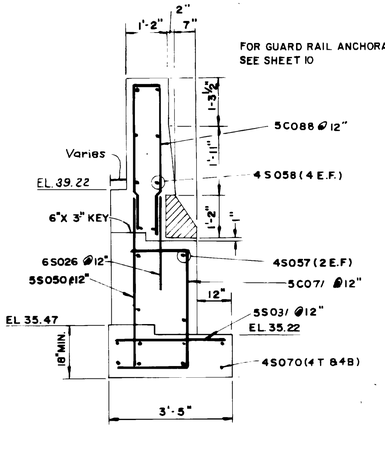
Scale: 1/2" = 1'-0"

NW.



SECTION D-D

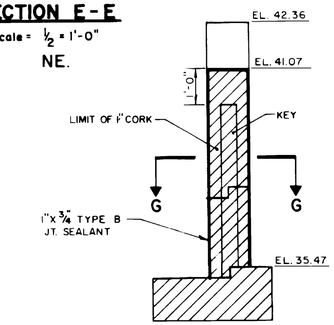
Scale: 1/2" = 1'-0"



SECTION E-E

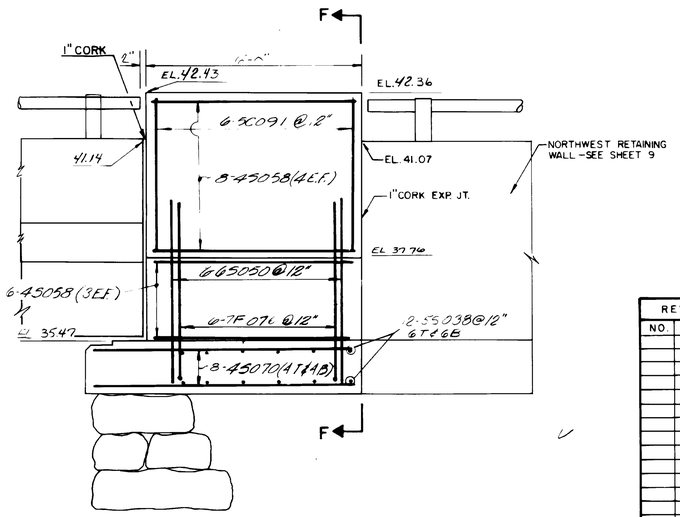
Scale = 1/2" = 1'-0"

NE.



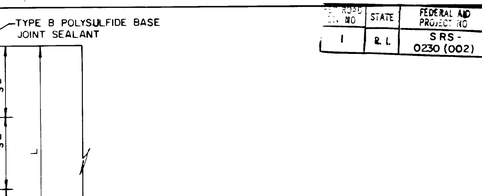
SECTION F-F

SCALE: 1/2" = 1'-0"



SECTION C-C

Scale: 1/2" = 1'-0"



EXPANSION JOINT IN WALL

SECTION G-G

NOT TO SCALE

REVISIONS NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION
DIVISION OF PUBLIC WORKS

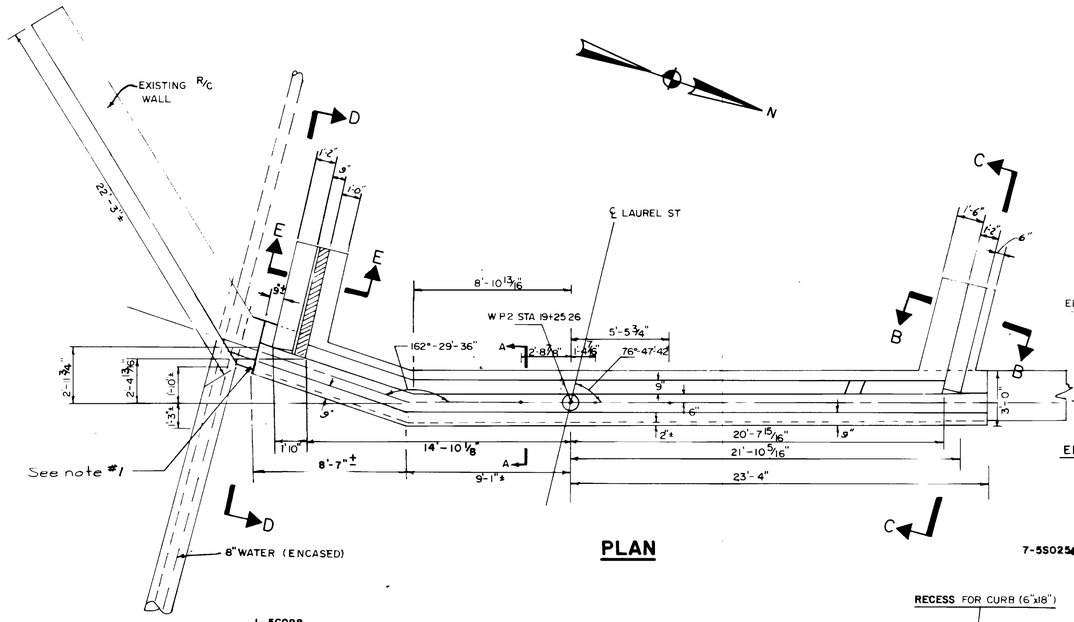
ASHAWAY RIVER BRIDGE NO. 50
SUPERSTRUCTURE REPLACEMENT
HOPKINTON RHODE ISLAND

NORTH ABUTMENT

CHECKED BY _____ DATE _____ SCALE _____

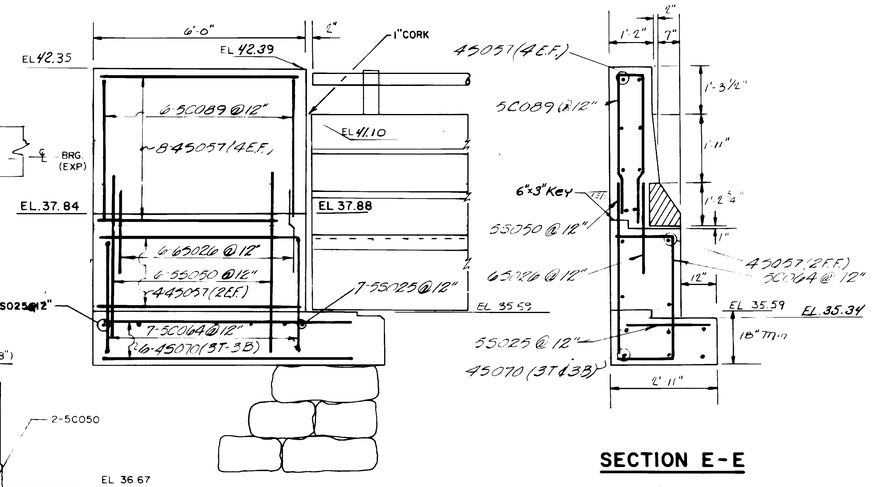
50,007

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
1	R. I.	SRS-0230(002)	77	8	30



PLAN

ASSUMED NORTH



SECTION D-D

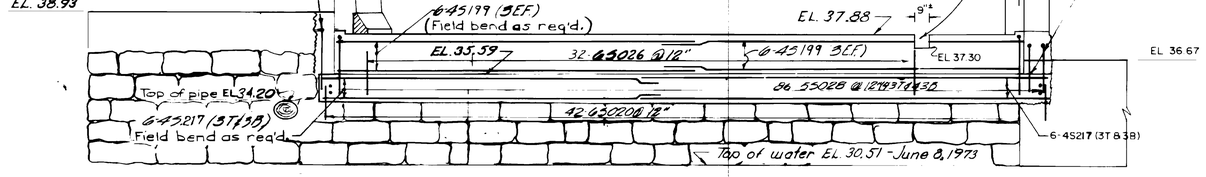
Scale: 1/2" = 1'-0"

SECTION E-E

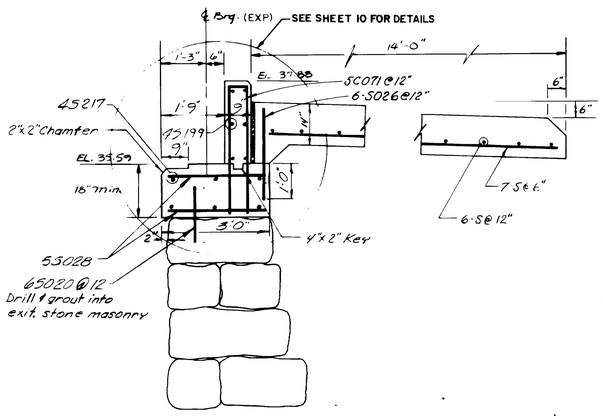
Scale: 1/2" = 1'-0"

NOTES:

1. MORTAR FRACTURED FACE OF THE EXISTING R/C SE WALL CAP WITH APPROVED EPOXY MORTAR.
2. FOR GUARD RAIL CONNECTIONS TO END POSTS, SEE SHEET NO. 13.

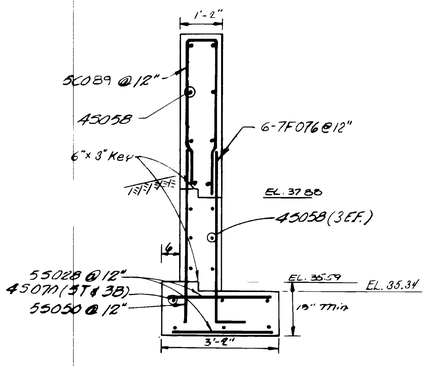


ELEVATION
SOUTH ABUTMENT
SCALE: 1/4"= 1'-0"



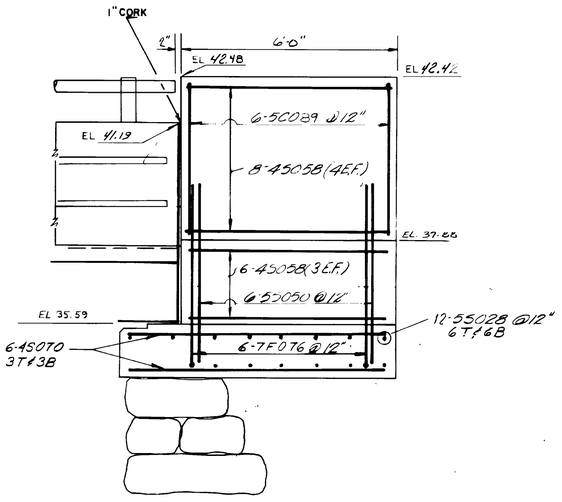
SECTION A-A

Scale: 1/2" = 1'-0"



SECTION B-B

Scale: 1/2" = 1'-0"



SECTION C-C

Scale: 1/2"= 1'-0"

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION
DIVISION OF PUBLIC WORKS

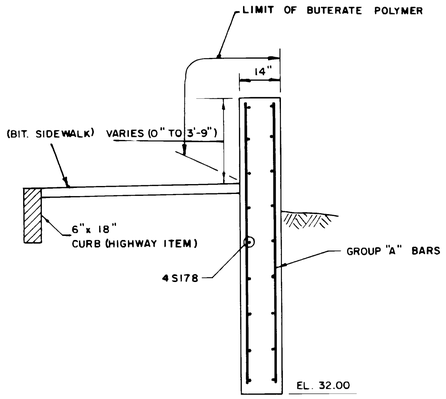
ASHAWAY RIVER BRIDGE NO. 50
SUPERSTRUCTURE REPLACEMENT
HOPKINTON RHODE ISLAND

SOUTH ABUTMENT

CHECKED BY _____ DATE _____ SCALE _____

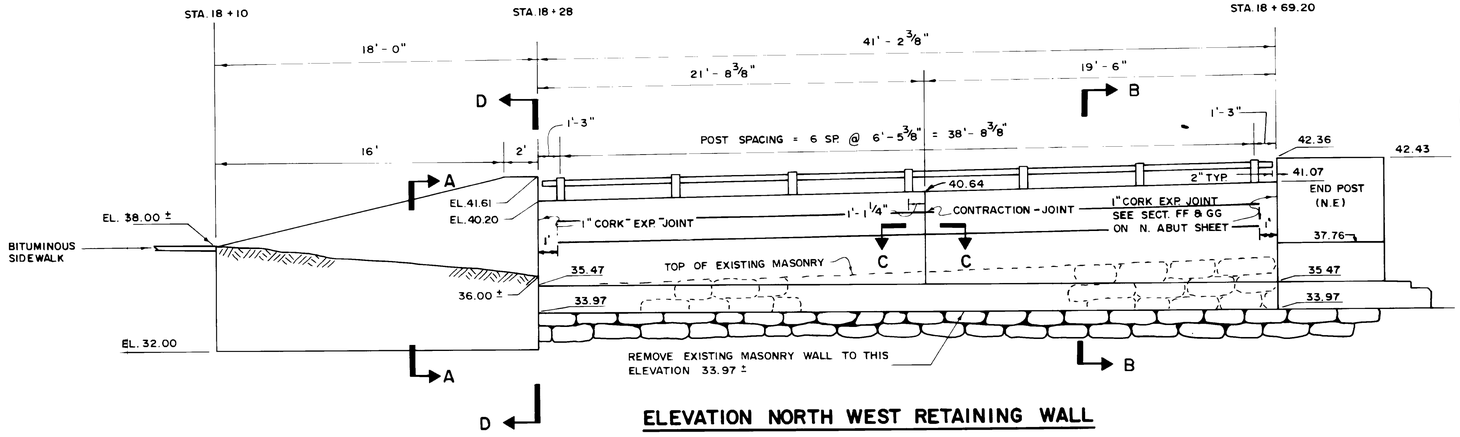
50,008

FED.ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	R.I.	SRS - 0230(002)	77	9	30



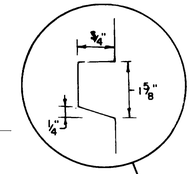
SECTION A-A

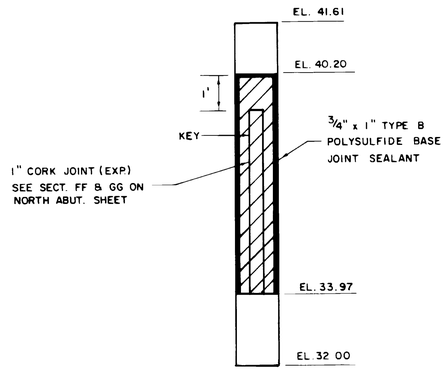
SCALE 1/2" = 1'-0"



ELEVATION NORTH WEST RETAINING WALL

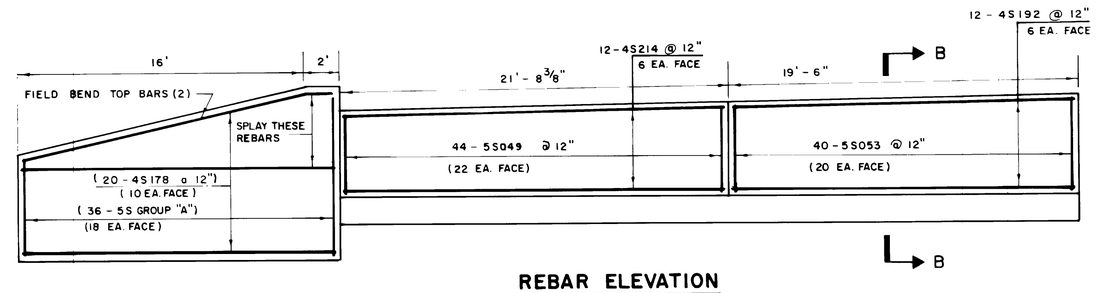
SCALE 1/4" = 1'-0"





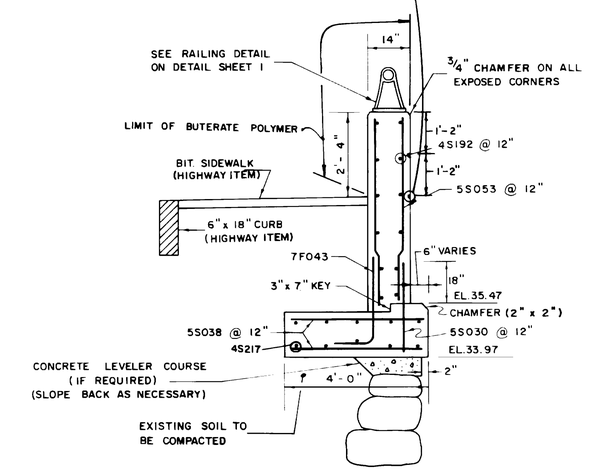
EXPANSION JOINT IN WALL
SECTION D-D

SCALE 1/2" = 1'-0"



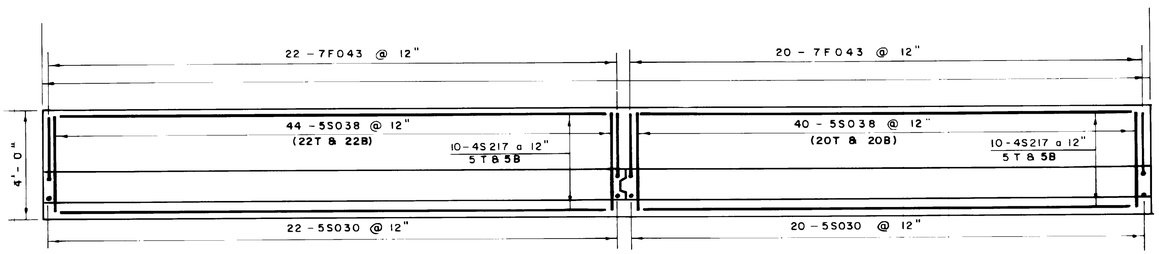
REBAR ELEVATION

SCALE 1/4" = 1'-0"



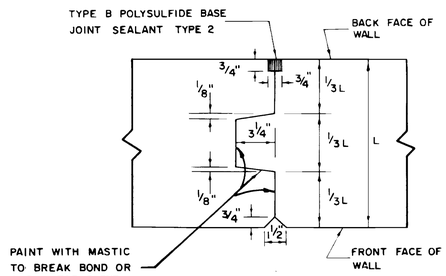
SECTION B-B

SCALE 1/2" = 1'-0"



FOOTING PLAN

SCALE 3/8" = 1'-0"



CONTRACTION JOINT IN WALL
SECTION C-C

NOT TO SCALE

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION
DIVISION OF PUBLIC WORKS

ASHAWAY RIVER BRIDGE NO. 50
SUPERSTRUCTURE REPLACEMENT

HOPKINTON RHODE ISLAND

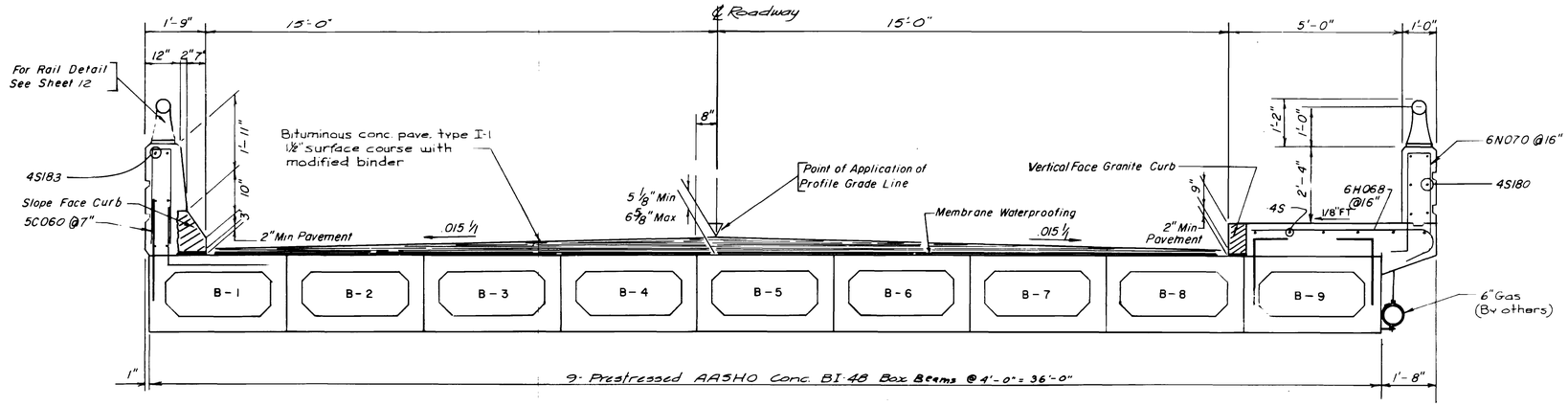
NORTHWEST RETAINING WALL

CHECKED BY_____ DATE_____ SCALE _____

RHODE ISLAND BLUEPRINT CO.

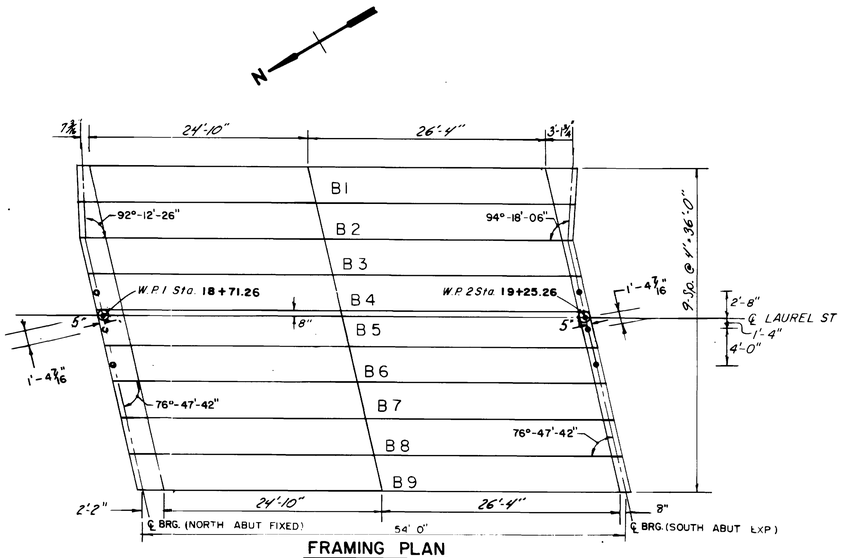
50,009

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	R.I.	SRS-0230(002)	77	10	30



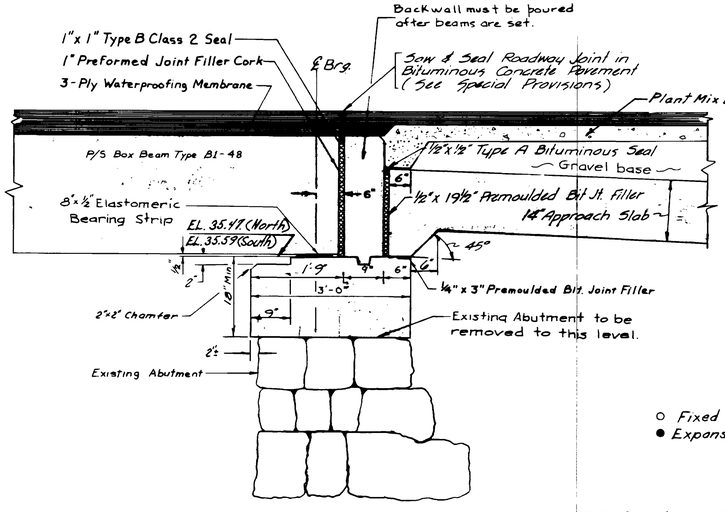
DECK SECTION

Scale: ½" = 1'-0"



FRAMING PLAN

1"/8 = 1'-0"

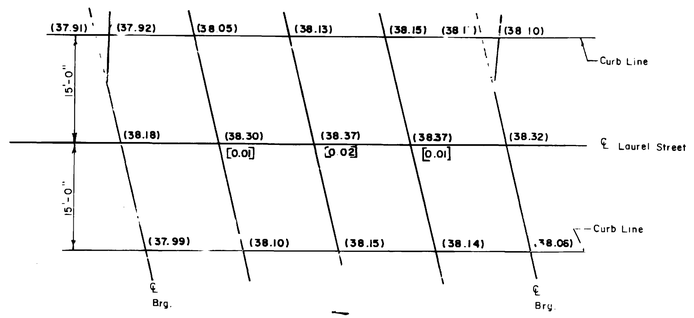


ABUTMENT DETAIL

Scale ¾" = 1'-0"

○ Fixed Bearing
● Expansion Bearing

(00.00) Indicates Finish Roadway Elevations (in feet)
[.00] Indicates Deflection Due To Superimposed Dead Load (in feet)



DECK GRADES

Scale 1" = 10'-0"

PRESTRESSED CONCRETE NOTES:

1. PRECAST PRESTRESSED CONCRETE: THE MINIMUM COMPRESSIVE STRENGTH OF PRESTRESSED CONCRETE AT THE AGE OF 28 DAYS SHALL BE 5000 P.S.I. THE MINIMUM COMPRESSIVE STRENGTH AT TRANSFER OF STRESSING FORCE SHALL BE 4000 P.S.I.
2. PRETENSIONING STEEL: INDIVIDUAL TENDONS SHALL CONSIST OF HIGH TENSILE STRENGTH 7-WIRE STRANDS HAVING A NOMINAL ½" DIAMETER AND SHALL CONFORM TO ASTM A416. THE INITIAL TENSILE FORCE APPLIED TO EACH STRAND SHALL BE 28,920 LBS. THE ULTIMATE STRENGTH OF TENDONS f'_s = 270,000 P.S.I.
3. LATERAL TIES: INDIVIDUAL TIES SHALL CONSIST OF HIGH TENSILE STRENGTH 7-WIRE STRANDS HAVING A NOMINAL ½" DIAMETER AND SHALL CONFORM TO ASTM A416 (f'_s = 270,000 P.S.I.). LATERAL TIES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PRESTRESSED CONCRETE BOX BEAMS. AN APPROVED ALTERNATE METHOD OF PROVIDING AN EQUIVALENT TENSIONING FORCE USING STRUCTURAL STEEL TIE RODS CONFORMING TO ASTM A36 MAY BE USED.
4. HANDLING PRESTRESSED BOX BEAMS: IN HANDLING, THE BEAM MUST BE MAINTAINED IN AN UPRIGHT POSITION AT ALL TIMES AND MUST BE PICKED UP ONLY BY MEANS OF APPROVED LIFTING DEVICES.
5. FINISH: EXTERIOR FACE OF FASCIA BEAM UNITS TO HAVE A SURFACE FINISH RUBBED. THE COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PRESTRESSED CONCRETE BOX BEAMS.
6. CONSTRUCTION TOLERANCES: DIMENSIONAL TOLERANCES SHALL NOT EXCEED THOSE RECOMMENDED IN THE AASHTO INTERIM MANUAL FOR INSPECTION OF PRESTRESSED CONCRETE BRIDGE MEMBERS.
7. CLASS OF CONCRETE: CONCRETE FOR PRESTRESSED BOX BEAMS SHALL BE CLASS "X" AS DESCRIBED IN TABLES (1) & (2) IN SECTION 600 "PORTLAND CEMENT CONCRETE" OF THE R.I. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. MAXIMUM SIZE OF AGGRETE SHALL BE ¾".
8. REINFORCEMENT: ALL STIRRUPS, SPACERS AND BARS SHALL CONFORM TO ASTM A615 GRADE 60 "DEFORMED BILLET STEEL BARS FOR CONCRETE REINFORCEMENT".
9. SHOP DRAWINGS: ALL SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER IN SUFFICIENT TIME TO PERMIT CAREFUL CHECKING.
10. ALL PRESTRESSING STEEL AND REINFORCING RODS SHALL BE SECURELY TIED TO PREVENT DISLOCATION.

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION
DIVISION OF PUBLIC WORKS

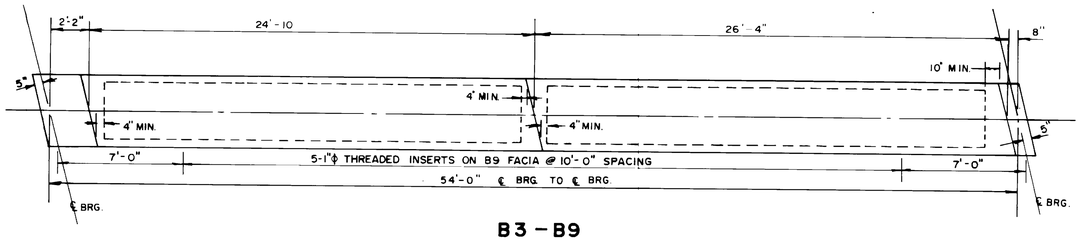
ASHAWAY RIVER BRIDGE NO. 50
SUPERSTRUCTURE REPLACEMENT
HOPKINTON RHODE ISLAND

DECK SHEET-1

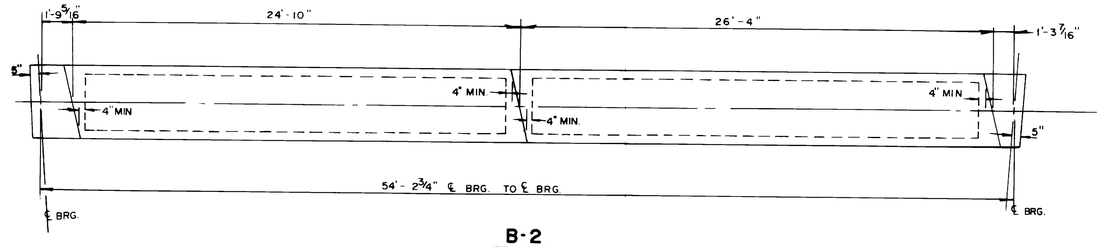
CHECKED BY _____ DATE _____ SCALE _____

50,010

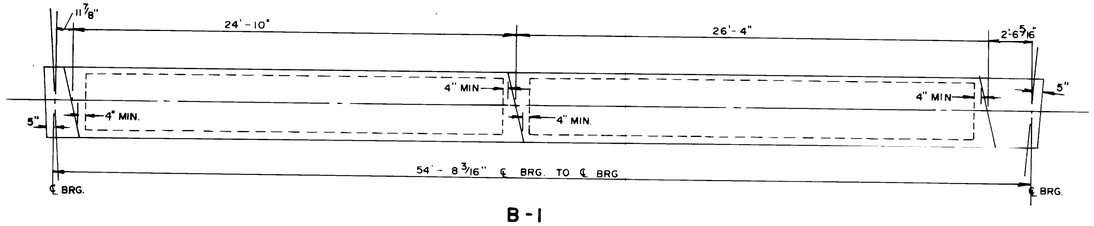
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	R.I.	SRS-0230(002)	77	11	30



B3 – B9

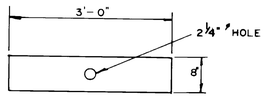


B-2

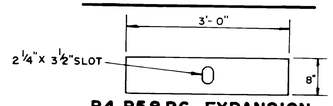


B-1

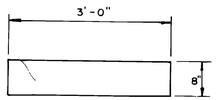
BOX BEAM PLAN
(SCALE: 1/4" = 1'-0")



B4, B5 & B6 FIXED

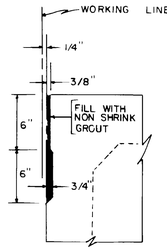


B4, B5 & B6 EXPANSION

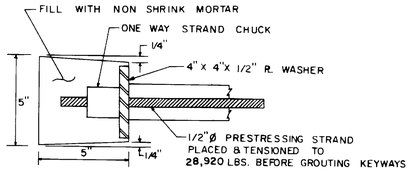


B1, B2, B3, B7, B8, & B9

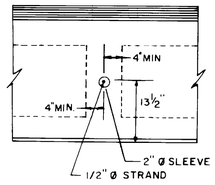
BEARING PADS
(SCALE 3/4" = 1'-0")



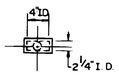
KEY DETAIL
(SCALE: 1 1/2" = 1'-0")

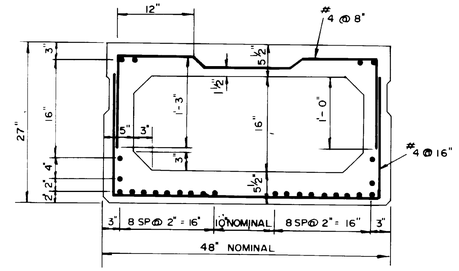


LATERAL TIE DETAIL
(SCALE: 3" = 1'-0")

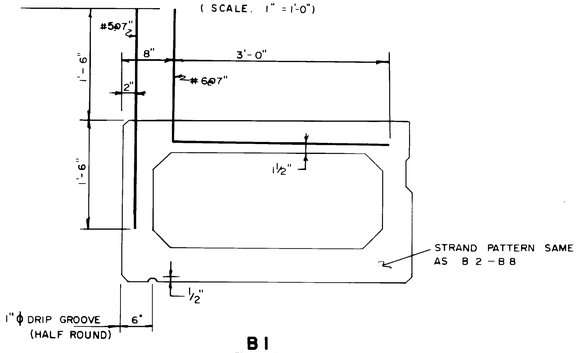


INTERMEDIATE INTERNAL DIAPHRAGMS
(SCALE: 3/4" = 1'-0")

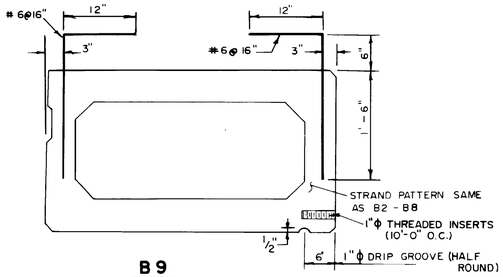




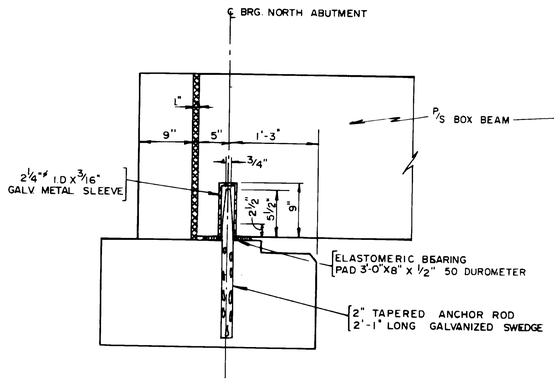
TYPE B1 - 48 BOX BEAM
B2 — B8
(SCALE. 1" = 1'-0")



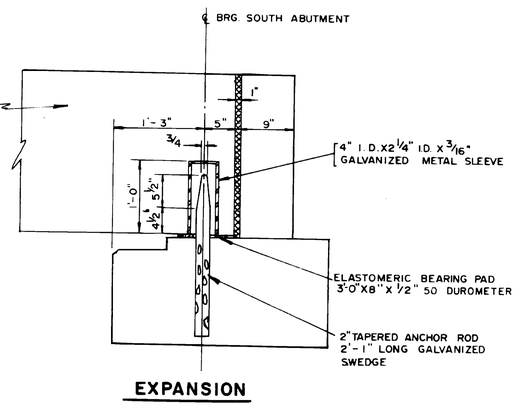
B1



B9



FIXED



EXPANSION

BEARING DETAILS
(SCALE 1" = 1'-0")

REVISIONS NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION
DIVISION OF PUBLIC WORKS

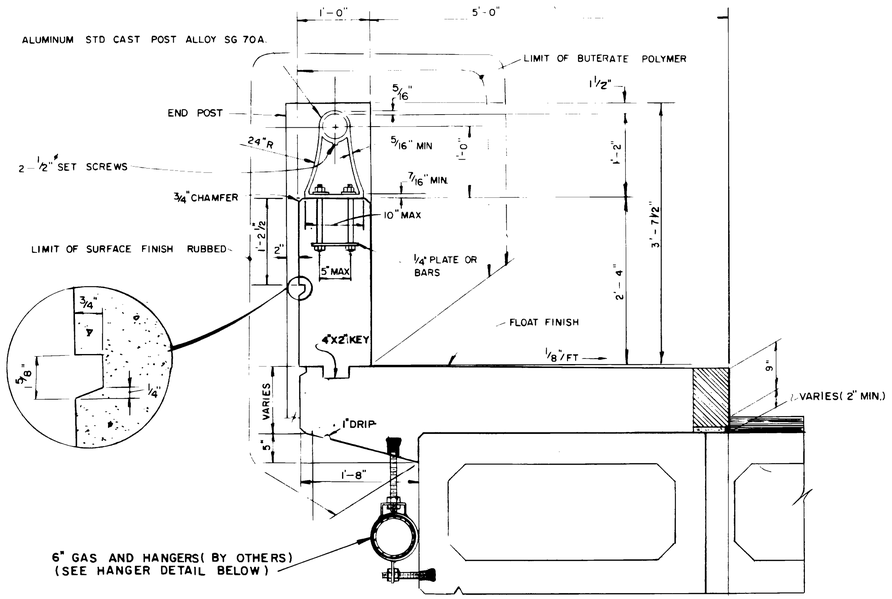
ASHAWAY RIVER BRIDGE NO. 50
SUPERSTRUCTURE REPLACEMENT
HOPKINTON RHODE ISLAND

DECK SHEET - 2

CHECKED BY _____ DATE _____ SCALE _____

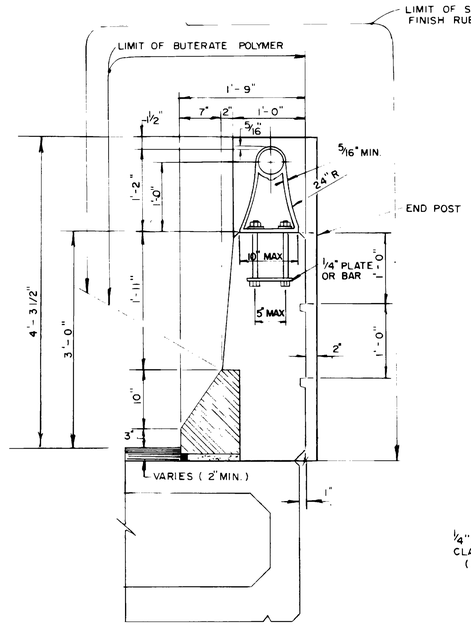
50,011

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	R.I.	SRS-0230(002)	77	12	30



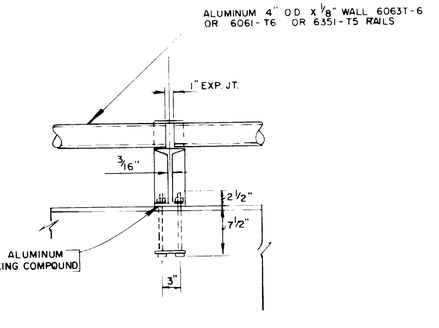
SIDEWALK SECTION

SCALE: 1" = 1'-0"



PARAPET SECTION

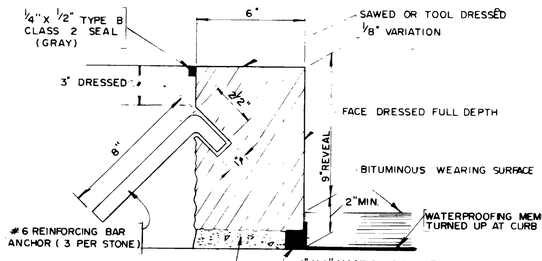
SCALE: 1" = 1'-0"



RAILING DETAILS

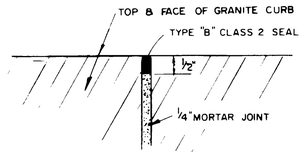
SCALE: 1" = 1'-0"

FOR CUTTING TOLERANCE ON GRANITE CURB SEE R.I. STD. SPECS. M.09.05
LENGTHS TO BE FURNISHED AS SHOWN ON SHEET 13



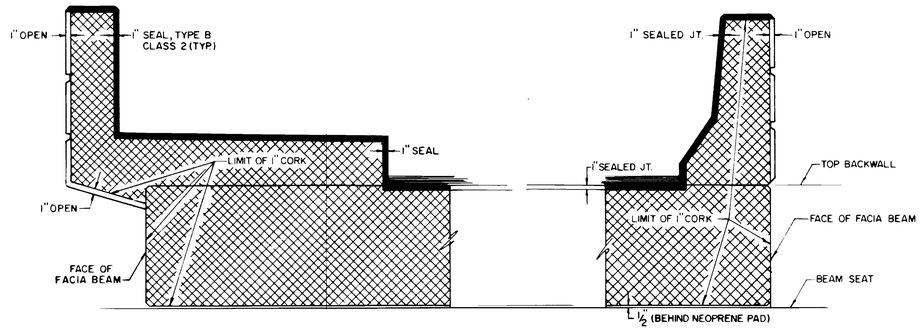
VERTICAL FACE GRANITE CURB

SCALE: 3" = 1'-0"



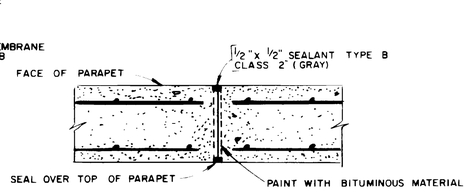
CURB JOINT DETAIL

NOT TO SCALE



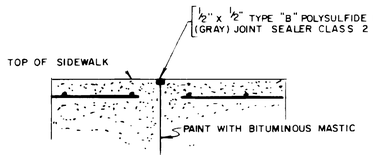
DETAIL FOR 1" CORK JOINT

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



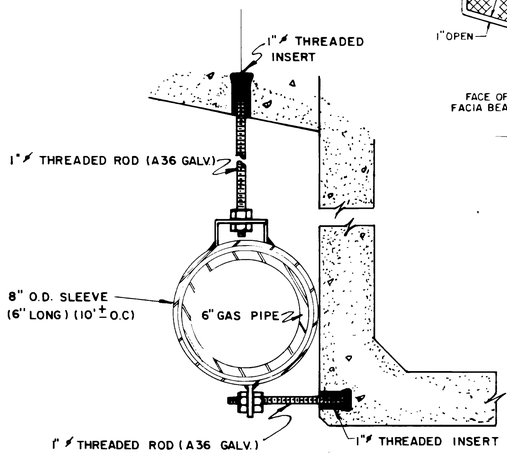
CONTRACTION JOINT IN PARAPET

NOT TO SCALE



CONTRACTION JOINT IN WALK

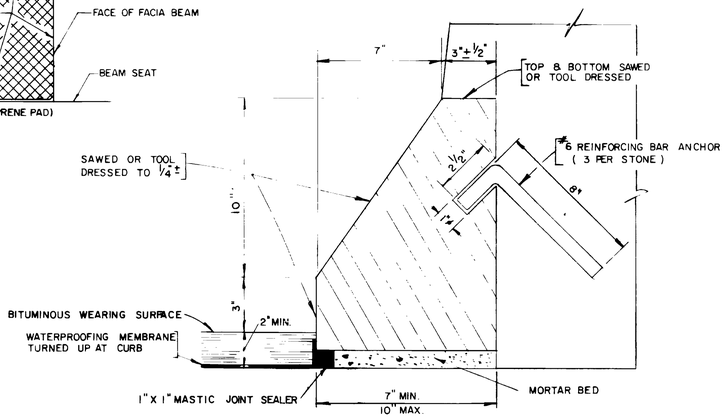
NOT TO SCALE



NOTE:
THE 6" GAS LINE AND HANGERS WILL BE FURNISHED AND INSTALLED BY THE SO. COUNTY GAS COMPANY. THE 1" ∅ THREADED INSERTS WILL BE PROVIDED UNDER THIS CONTRACT, AND THEIR COST WILL BE DISTRIBUTED AMONG THE OTHER PROPOSAL ITEMS.

GAS PIPE - HANGER DETAIL

SCALE: 3" = 1'-0"



SLOPED FACE GRANITE CURB

SCALE: 3" = 1'-0"

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION
DIVISION OF PUBLIC WORKS

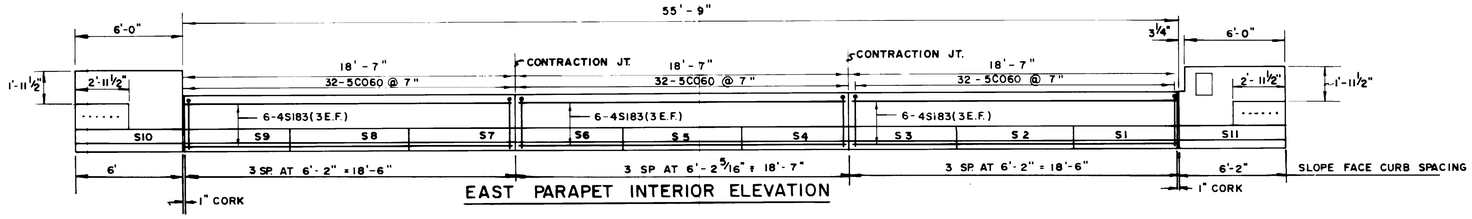
ASHAWAY RIVER BRIDGE Nº 50
SUPERSTRUCTURE REPLACEMENT
HOPKINTON RHODE ISLAND

DETAIL SHEET 1

CHECKED BY _____ DATE _____ SCALE _____

50,012

FED.ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	R.I.	SRS-0230(002)	77	13	30

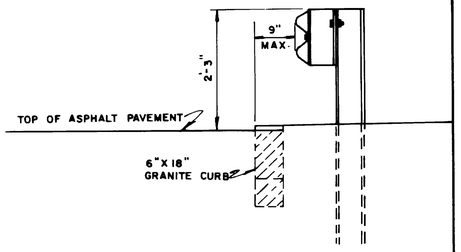


EAST PARAPET INTERIOR ELEVATION

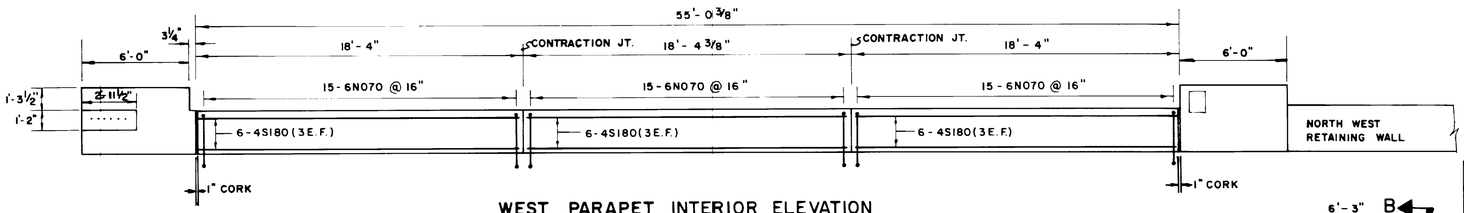
Scale: 1/4" = 1'-0"

VERTICAL FACE CURB	
MARK	HEIGHT
V1	10¼"
V2	10¾"
V3	11"
V4	11¼"
V5	11½"
V6	11½"
V7	11½"
V8	11½"
V9	11¼"

SLOPE FACE CURB	
MARK	HEIGHT
S1	15"
S2	15"
S3	15¼"
S4	15¼"
S5	15¼"
S6	15¼"
S7	15"
S8	14¾"
S9	14¼"
S10	14"
S11	14¾"

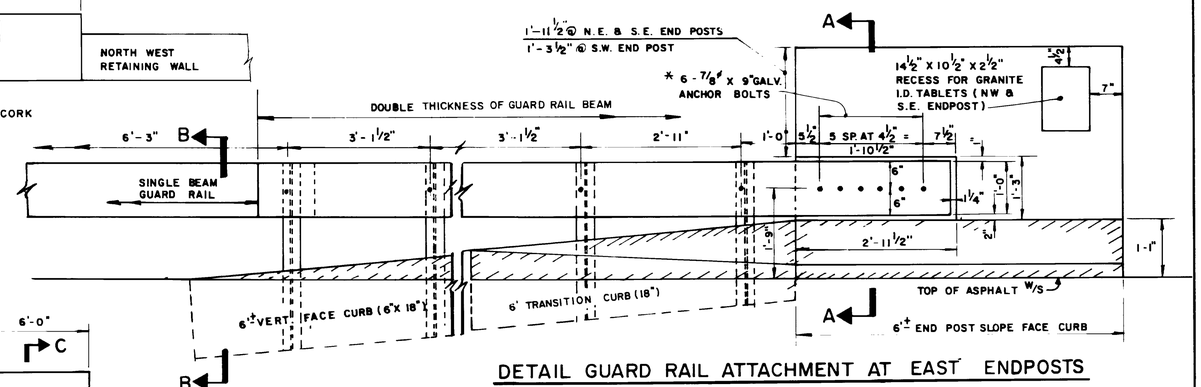


SECTION B-B



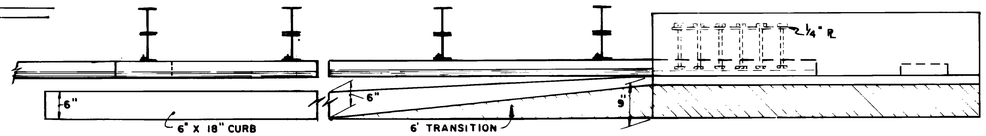
WEST PARAPET INTERIOR ELEVATION

Scale: 1/4" = 1'-0"



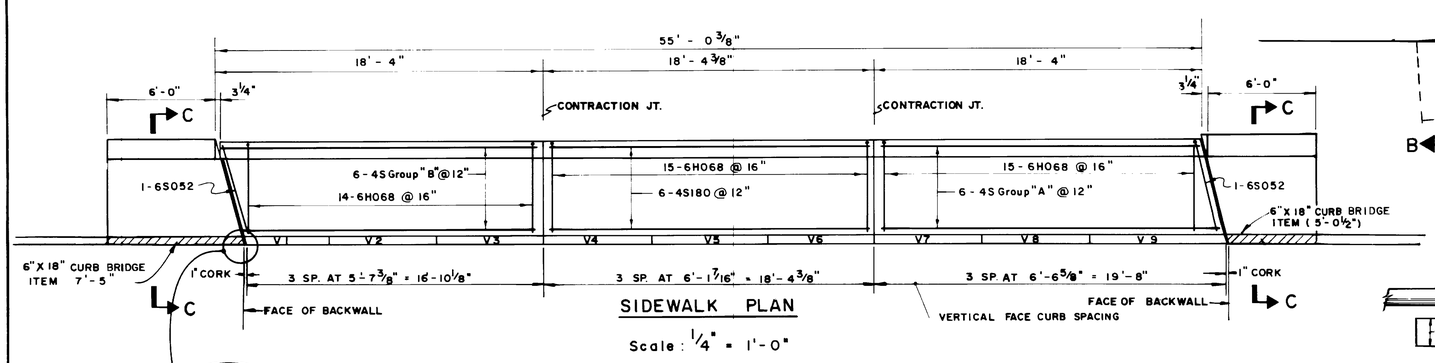
DETAIL GUARD RAIL ATTACHMENT AT EAST ENDPOSTS

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



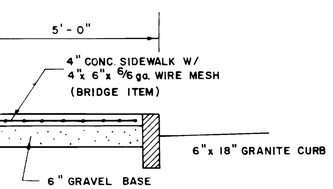
PLAN AT END OF BRIDGE

SCALE 3/4" = 1'-0"



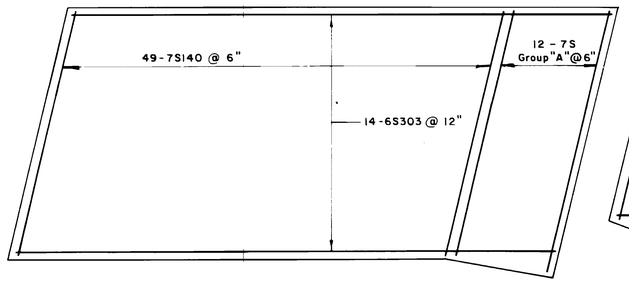
SIDEWALK PLAN

Scale: 1/4" = 1'-0"



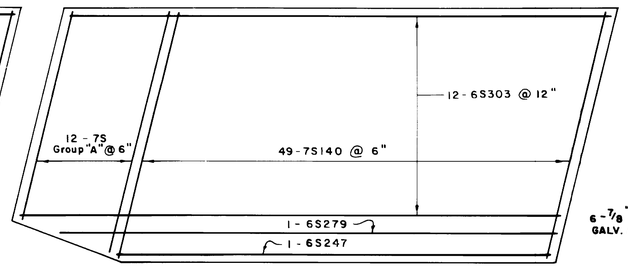
SECTION C-C

Scale: 1/2" = 1'-0"



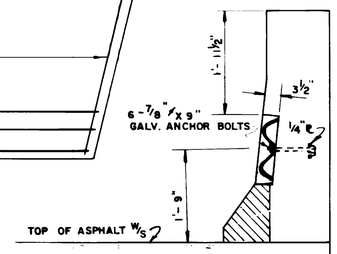
NORTH APPROACH SLAB

Scale: 1/4" = 1'-0"



SOUTH APPROACH SLAB

Scale: 1/4" = 1'-0"



SECTION A-A

* NOTE:
PAYMENT FOR ANCHORAGE OF GUARD RAIL TO ENDPOSTS AND EXTRA THICKNESS OF GUARD RAIL BEAM SHALL BE INCLUDED IN THE L.S. PRICE BID IN THE PROPOSAL FOR SUPERSTRUCTURE AND SUBSTRUCTURE.

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION
DIVISION OF PUBLIC WORKS

ASHAWAY RIVER BRIDGE NO. 50
SUPERSTRUCTURE REPLACEMENT

HOPKINTON RHODE ISLAND

DETAIL SHEET - 2

CHECKED BY_____ DATE_____ SCALE_____

50,013

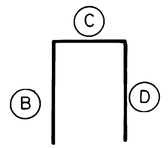
RHODE ISLAND BLUEPRINT CO.

FED. ROAD DIV. NO	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
1	R.I.	SRS - 0230(002)	77	14	30

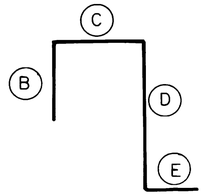
	No	SIZE	TYPE	LENGTH FT.	LENGTH IN.	A	B	C	D	E	F	G	H	K	R	O	REMARKS
			NORTH ABUTMENT														
†	7	7	F	7	6		1'-6"	0'-6"									
	42	6	5	2	0												
	38	6	5	2	6												
	6	6	5	5	0												
	7	5	5	3	1												
	12	5	5	3	8												
	6	5	C	7	1		1'-7"	3'-5"	2'-1"								
	40	5	C	7	1		3'-4"	0'-5"	3'-4"								
	82	5	5	2	8												
	6	5	5	5	0												
	6	5	C	9	1		4'-1"	0'-8"	4'-4"								
	6	5	C	8	8		3'-11"	0'-8	4'-1"								
	12	4	5	20	8												
	12	4	5	19	9												
†	16	4	5	7	0												
†	27	4	5	5	8												
			SOUTH ABUTMENT														
	6	7	F	7	6		1'-6"	0'-6"									
	42	6	5	2	0												
††	40	6	5	2	6												
	98	5	5	2	8												
	40	5	C	7	1		3'-4"	0'-5"	3'-4"								
	1	5	C	9	8		4'-5"	0'-10"	4'-5"								
	12	5	C	8	9		3'-11"	0'-8"	4'-2"								
	2	5	C	5	0		2'-1	0'-10	2'-1"								
	12	5	5	5	0												
††	7	5	C	6	4		1'-6"	3'-4"	1'-6"								
	9	5	5	2	5												
	12	4	5	19	9												
	12	4	5	21	7												
	26	4	5	5	8												
	12	4	5	7	0												
			WEST PARAPET														
	18	4	5	18	0												
	45	6	N	7	0		2'-10"	0'-7"	3'-1"	0'-6"							
			EAST PARAPET														
	18	4	5	18	3												
	96	5	C	6	0		2'-7"	0'-7"	2'-10"								
			SIDEWALK														
	44	6	H	6	8		4'-10"	1'-1"	0'-9"				0'-2¼"				
	6	4	5	18	0												"L" Varies 18'-0" thru 19'-4"
	6	4	5	Group "A"													"L" Varies 18'-0 thru 19'-4"
	6	4	5	Group "B"													
	2	6	5	3	2												
			NORTH APPROACH SLAB														
	49	7	5	14	0												
	12	7	5	Group "A"													"L" Varies 14'-0" thru 15'-0"
	14	6	5	30	3												
			SOUTH APPROACH SLAB														
	49	7	5	14	0												
	12	6	5	30	3												
	1	6	5	27	9												
	1	6	5	24	7												
	12	7	5	Group "A"													"L" Varies 12'-0 thru 13'-10"

No	SIZE	TYPE	LENGTH FT.	LENGTH IN.	A	B	C	D	E	F	G	H	K	R	O	REMARKS
			NORTH WEST RETAINING WALL													
			FOOTING													
20	4	5	21	7												
42	5	5	3	0												
84	5	5	3	8												
42	7	F	4	3		1'-0"	3'-3"									
			STEM													
12	4	5	19	2												
12	4	5	21	4												
44	5	5	4	9												
40	5	5	5	3												
20	4	5	17	8												
36	5	5	Group "A"													Seq. length varies from 5'-8" thru 9'-2⅛"

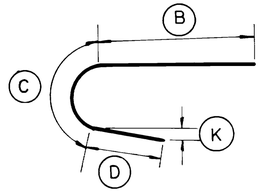
† Indicates the Inclusion of One Test Bar
†† " " " " TWO " "



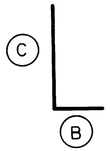
TYPE C



TYPE N



TYPE H



TYPE F

REVISIONS NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION
DIVISION OF PUBLIC WORKS

ASHAWAY RIVER BRIDGE NO. 50
SUPERSTRUCTURE REPLACEMENT
HOPKINTON RHODE ISLAND

REINFORCING SCHEDULE

DRAWN _____ CHECKED _____ SET NO.

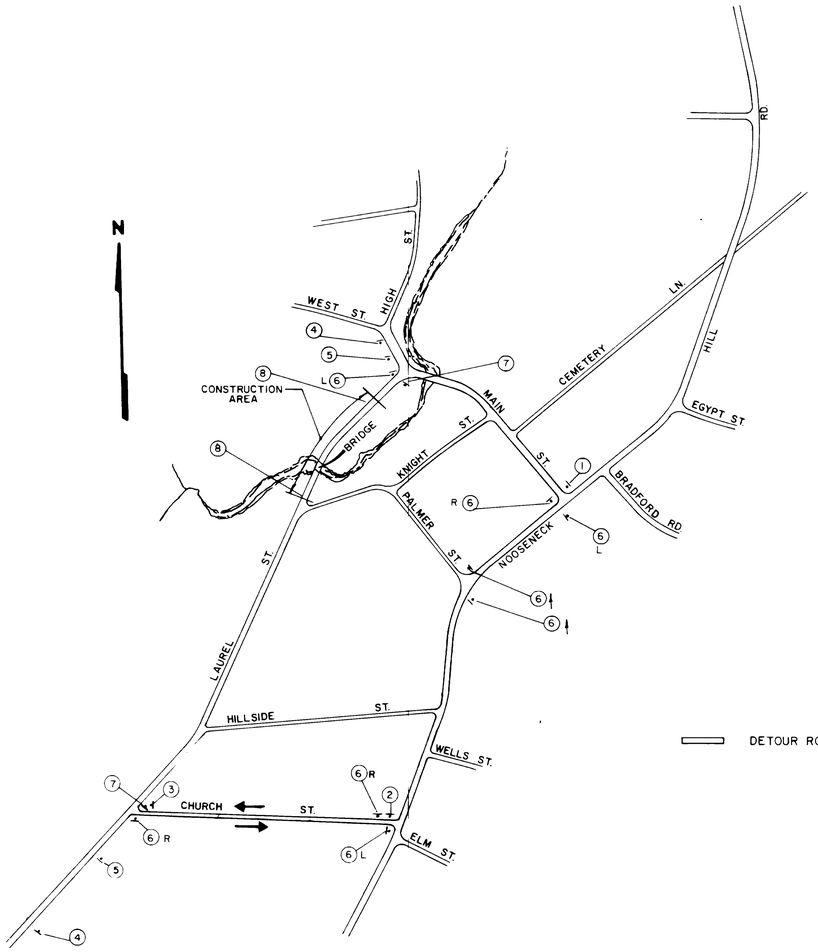
APPROVED _____ SUPERVISING CIVIL ENGINEER (BRIDGES) PRINTED

FINAL DATE

APPROVED _____ CHIEF ENGINEER ISSUED TO

50,014

	STATE	FED. NO. PROJ.	SHEET	TOTAL SHEETS
1	R.I.	SRS-0230(002)	77	15	30



PLAN OF DETOUR ROUTE

1" = 400'

LEGEND

DETOUR ROUTE

	LOCATION	QUANTITY	COLOR	MTG
6" D, 4', ASHAWAY LINE & TWINE, 2'-6", SPEC	①↑ ②→ ③→	3	BLK/OR	25.5
W20-1 SPEC, 36", BRIDGE CONSTRUCTION AHEAD	④	2	BLK/OR	25.5
W20-2d, 36", DETOUR AHEAD	⑤	2	BLK/OR	25.5
M4-9R, 30" x 24", DETOUR	⑥ 2↑ 3→ 3→	8	BLK/OR	25.5
R11-3 (SPEC), 60" x 30", BRIDGE OUT AHEAD LOCAL TRAFFIC ONLY	⑦	2	BLK/WH	ON 26.1 (4')
R11-2 (SPEC.), 48" x 30", BRIDGE OUT	⑧	2	BLK/WH	ON 26.1 (4')

REVISIONS		
NO.	DATE	BY

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION
DIVISION OF PUBLIC WORKS

ASHAWAY RIVER BRIDGE NO. 50
SUPERSTRUCTURE REPLACEMENT
HOPKINTON RHODE ISLAND

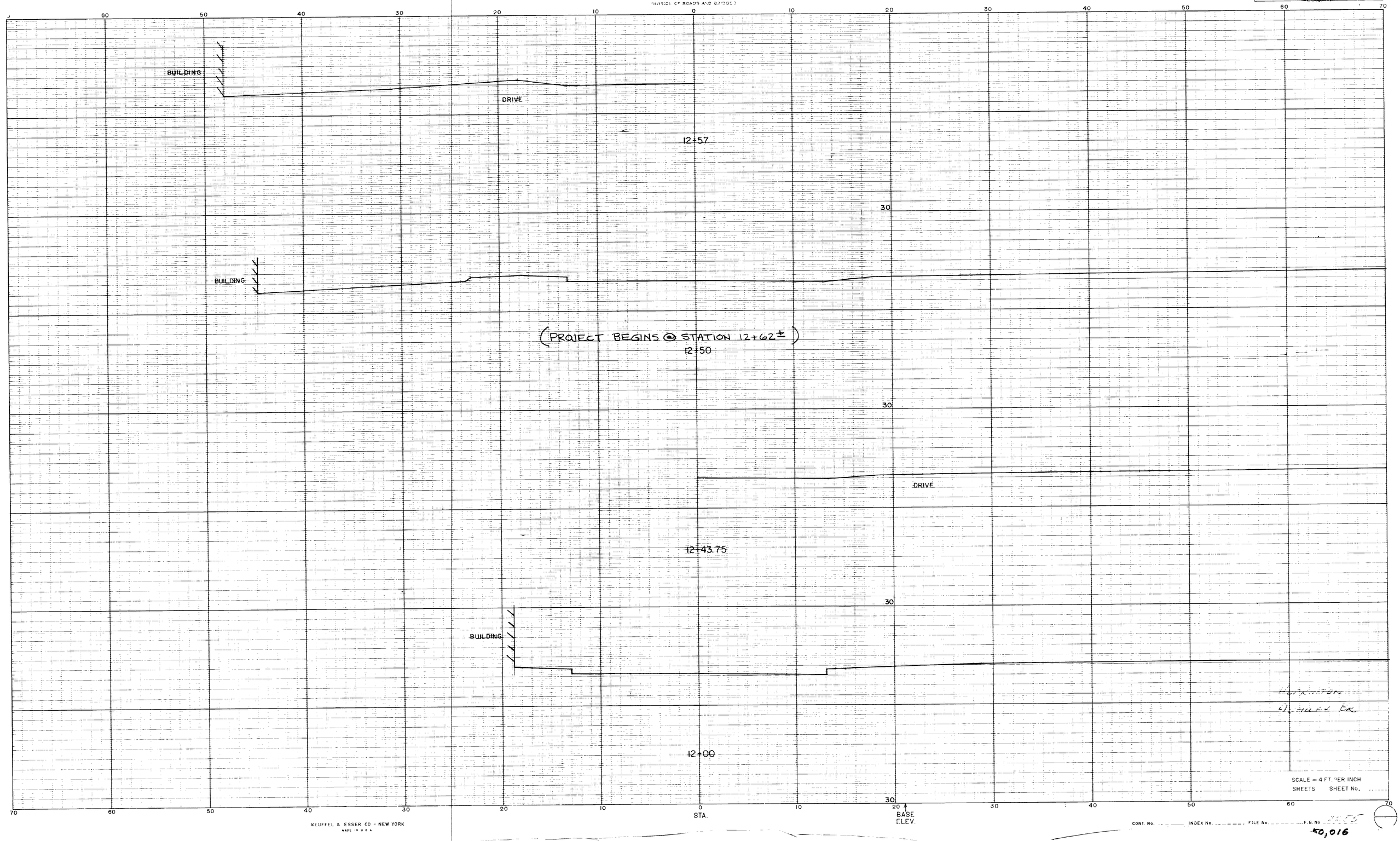
TRAFFIC DETOUR SIGNING

CHECKED BY _____ DATE _____ SCALE _____

50,015

RHODE ISLAND
DEPARTMENT OF PUBLIC WORKS
DIVISION OF ROADS AND BRIDGES

FED ROAD DIST No.	STATE	FED AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
1	R. I.	SRS-(0230(002)	77	16	30



SCALE = 4 FT. PER INCH
SHEETS SHEET No.

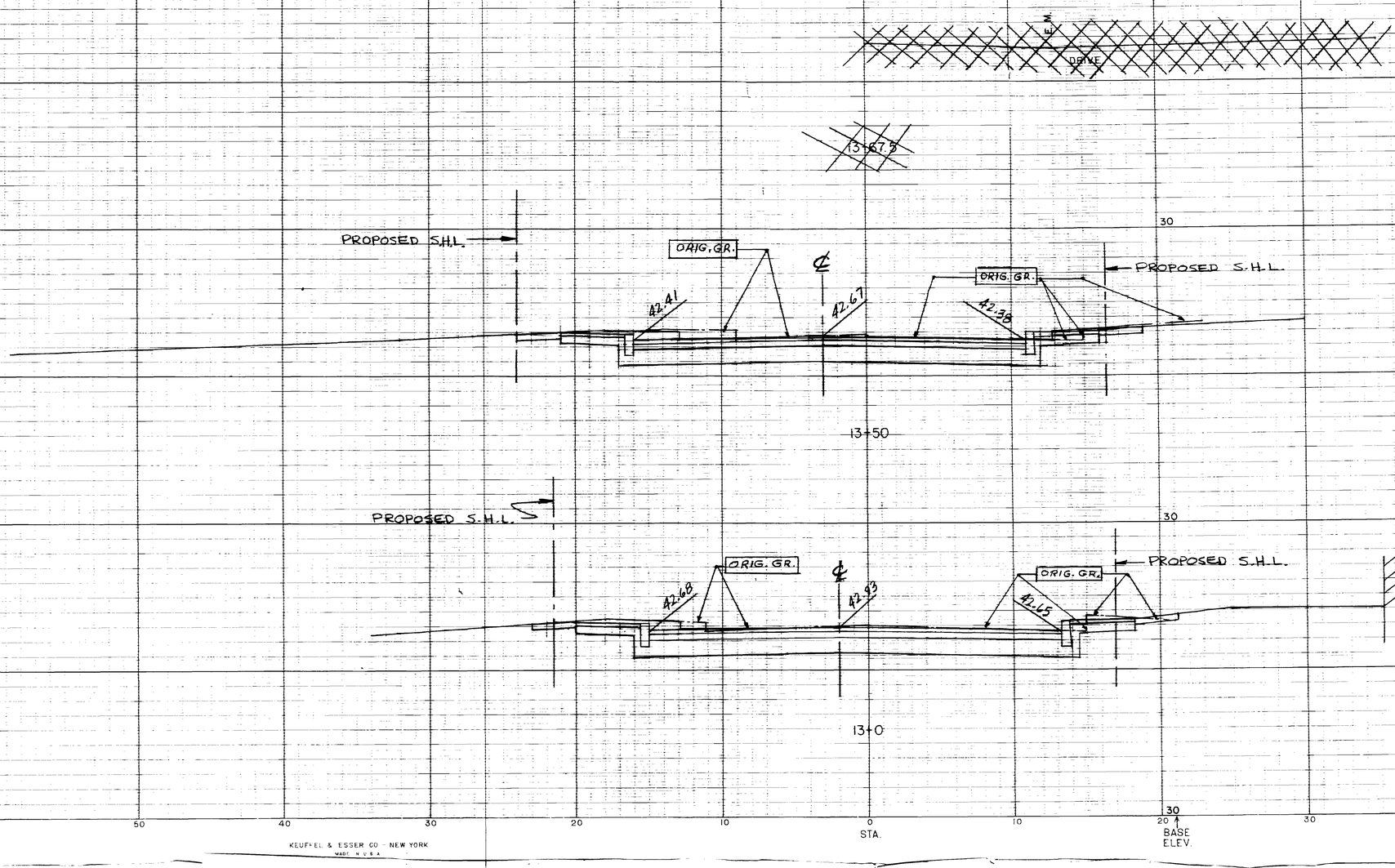
CONT. No. INDEX No. FILE No. F.B. No.

50,016

KEUFFEL & ESSER CO - NEW YORK
MADE IN U.S.A.

RHODE ISLAND
DEPARTMENT OF PUBLIC WORKS
DIVISION OF ROADS AND BRIDGES

FED ROAD DIST No	STATE	FED AID PROJ No	FISCAL YEAR	SHEET No	TOTAL SHEETS
1	R. I.	SRS-0230(002)	77	17	30



KEUFFEL & ESSER CO - NEW YORK
MADE IN U.S.A.

CONT No. _____ INDEX No _____ FILE No _____ F.B. No 2-55

50,017

RHODE ISLAND
DEPARTMENT OF PUBLIC WORKS
DIVISION OF ROADS AND BRIDGES

FED ROAD DIST No	STATE	FED AID PROJ No	FISCAL YEAR	SHEET No	TOTAL SHEETS
1	R.I.	SRS 0230(002)	77	18	30

60 50 40 30 20 10 0 10 20 30 40 50 60 70

PROPOSED S.H.L.

41.27

41.56

41.25

EFF.

EXISTING STREET LINE

RETAINING WALL

ORIG. GR.

15+00

30.0

EXISTING STREET LINE

DRIVE

14+69

ORIG. GR.

30.0

PROPOSED S.H.L.

41.68

41.96

41.64

PROPOSED S.H.L.

14+50

ORIG. GR.

30.0

PROPOSED S.H.L.

42.11

42.46

42.17

14+00

ORIG. GR. = ———·———·———

SCALE = 4 FT. PER INCH
SHEETS SHEET No.

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70
STA.
30.0
BASE ELEV.

KEUFFEL & ESSER CO - NEW YORK
MADE IN U.S.A.

CONT No. _____ INDEX No. _____ FILE No. _____ F.B. No. _____

50,018

RHODE ISLAND
DEPARTMENT OF PUBLIC WORKS
DIVISION OF ROADS AND BRIDGES

FED ROAD DIST No	STATE	FED AID PROJ No	FISCAL YEAR	SHEET No	TOTAL SHEETS
	R. I.	SRS-0200(02)	77	19	30

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

PROPOSED S.H.L.

ORIG. GR.

EXISTING STREET LINE

RETAINING WALL

38.67 ℄ 38.92 38.62

Ⓐ

16+50 30.0

EXISTING STREET LINE

℄

DRIVE

16+32 30.0

PROPOSED S.H.L.

ORIG. GR.

39.67 ℄ 39.92 39.62

EXISTING STREET LINE

RETAINING WALL

16+00 30.0

PROPOSED S.H.L.

ORIG. GR.

40.65 ℄ 40.90 40.65

EXISTING STREET LINE

RETAINING WALL

Ⓐ SCARIFY & RESHAPE

ORIG. GR. ———·———·———

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

15+50 STA. 30.0 BASE ELEV.

SCALE = 4 FT PER INCH
SHEETS SHEET No.

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CONT. No. _____ INDEX No. _____ FILE No _____ F.B. No _____

50,019

RHODE ISLAND
DEPARTMENT OF PUBLIC WORKS
DIVISION OF ROADS AND BRIDGES

FED ROAD DIST No	STATE	FED AID PROJ No	FISCAL YEAR	SHEET No	TOTAL SHEETS
	R. I.	SRS-0230(002)	77	20	30

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

PROPOSED S.H.L.

STA. 17+75
CONSTRUCT C.B. "F"
NO APRON STONE

EXISTING STREET LINE

26.85 ℄ 37.15 36.85

EXIST. 18" C.I. PIPE (APPROXIMATE)
ACTUAL LOCATION OF 18" PIPE
12" RCP III

32.00

31.50
17.75

12" RCP III → TO POND (INV. = 30.55)

31.20

30.0

STA 17+75
CONSTRUCT C.B. F
STD. = 5.3 APRON STONE = 5.15

ORIG. GR.

PROPOSED S.H.L.

EXISTING STREET LINE

36.95 ℄ 37.15 36.95

Ⓐ

17+50 30.0

PROPOSED S.H.L.

EXISTING STREET LINE

37.20 ℄ 37.50 37.20

17+25 30.0

Ⓐ SCARIFY & RESHAPE

ORIG. GR.

PROPOSED S.H.L.

EXISTING STREET LINE

37.62 ℄ 37.92 37.62

SCALE = 4 FT PER INCH
SHEETS SHEET No.

17+00 30.0
STA. BASE ELEV.

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CONT. No. INDEX No. FILE No. F.B. No.

50,0

RHODE ISLAND
DEPARTMENT OF PUBLIC WORKS
DIVISION OF ROADS AND BRIDGES

FED ROAD DIST No	STATE	PROJ No	FED AID FISCAL YEAR	No	SHEETS
1	R. I.	SRS-0230(021)	77	21	30

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

18+75 30.0

PROPOSED S.H.L.

37.43 37.85 37.43

EXISTING STREET LINE

18+50 30.0

PROPOSED S.H.L.

37.32 37.62 37.32

EXISTING STREET LINE

REBUILD COBBLE GUTTER

18+25 30.0

PROPOSED S.H.L.

ORIG. GR.

36.92 37.22 36.92

EXISTING STREET LINE

REBUILD COBBLE GUTTER

LEGEND

ORIG. GR.

18+00 STA. 30.0 BASE ELEV.

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

SCALE = 4 FT PER INCH
SHEETS SHEET No.

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CONT. No. INDEX No. FILE No. F.B. No.

50,021

RHODE ISLAND
DEPARTMENT OF PUBLIC WORKS
DIVISION OF ROADS AND BRIDGES

FED ROAD DIST No	STATE	FED AID PROJ No	FISCAL YEAR	SHEET No	TOTAL SHEETS
	R. I.	SRS-02300(021)	77	22	30

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

PROPOSED S.H.L.

EXISTING STREET LINE

37.38 37.68 37.38

(A)

19+75 30.0

PROPOSED S.H.L.

EXISTING STREET LINE

37.83 38.05 37.83

(A)

BENCH MARK

19+50 30.0

(A) SCARIFY & RESHAPE

19+31.25 30.0

18+76.45 30.0

STA. BASE ELEV.

SCALE = 4 FT PER INCH
SHEETS SHEET No.

CONT. No. INDEX No. FILE No. F. B. No.

50,C

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RHODE ISLAND
DEPARTMENT OF PUBLIC WORKS
DIVISION OF ROADS AND BRIDGES

FED ROAD DIST No.	STATE	FED AID PROJ No	FISCAL YEAR	SHEET No	TOTAL SHEETS
1	R. I.	STPE-0230(028)	77	23	30

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

PROPOSED S.H.L.

36.47 ℄ 36.77 36.47

EXISTING STREET LINE

BUILDING

Ⓐ

21+00 30.0

PROPOSED S.H.L.

36.73 ℄ 37.03 36.73

EXISTING STREET LINE

BUILDING

Ⓐ

20+50 30.0

℄

DRIVE

20+23 30.0

PROPOSED S.H.L.

37.00 ℄ 37.30 37.00

EXISTING STREET LINE

Ⓐ SCARIFY & RESHAPE

Ⓐ

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

20+00 STA. 30.0 BASE ELEV.

SCALE = 4 FT PER INCH
SHEETS SHEET No.

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CONT. No. _____ INDEX No. _____ FILE No. _____ F.B. No. _____

50,02

RHODE ISLAND
DEPARTMENT OF PUBLIC WORKS
DIVISION OF ROADS AND BRIDGES

FED ROAD DIST. No	STATE	FED. AID PROJ. No	FISCAL YEAR	SHEET No.	TOTAL SHEETS
1	R. I.	SPR-0220(021)	77	24	30

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

EXIST. STREET LINE

ORIG. GR.

EXISTING STREET LINE

32.70 33.00 32.70

23+00

ORIG. GR.

PROPOSED S.H.L.

EXISTING STREET LINE

33.86 34.16 33.86

(A) (A)

30.0

22+50

PROPOSED S.H.L.

EXISTING STREET LINE

BUILDING

35.03 35.33 35.03

(A) (A)

22+00 30.0

(A) SCARIFY & RESHAPE

PALMER STREET

PROPOSED S.H.L.

21+75

PROPOSED S.H.L.

EXISTING STREET LINE

BUILDING

36.08 36.38 36.08

(A) (A)

LEGEND

ORIG. GR. = ——— · ———

21+50 30.0

STA. BASE ELEV.

SCALE = 4 FT PER INCH
SHEETS SHEET No.

CONT. No. INDEX No. FILE No. F.B. No.

50,024

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RHODE ISLAND
DEPARTMENT OF PUBLIC WORKS
DIVISION OF ROADS AND BRIDGES

FED ROAD DIST. No.	STATE	FED AID PROJ. No	FISCAL YEAR	SHEET No	TOTAL SHEETS
1	R. I.	SRS-023(002)	77	25	30

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

PROJECT ENDS @ STA 23+75

ORIG. GR.

EXISTING STREET LINE

EXISTING STREET LINE

31.69

31.92

31.64

23+50

LEGEND

ORIG. GR. = ——·——·——

SCALE = 4 FT. PER INCH

SHEETS SHEET No.

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

STA.

BASE ELEV.

KEUFFEL & ESSER CO. - NEW YORK
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CONT. No. INDEX No. FILE No. F. B. No.

50,025

APPENDIX N

DESIGN EXCEPTIONS

ROUTING SLIP

ACTION SLIP

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

Referred to: Robert Rocchio, Chief Engineer for Infrastructure Date: 9/30/2025

From: Jon Fontana

Item:	Design Exceptions	
	Project's name	Corridor Ashaway
	PTS ID #	0013Q
	Contract Number	2023-EB-025C

***** PLEASE ROUTE AS SHOWN BELOW *****

ROUTING FOR APPROVAL

ROUTING–FOR APPROVAL				
Name	Initial	Date	Approve	Disapprove
Jon Fontana	JF	10/1/25	✓	
Michael Boyd	MGB	10/1/25	✓	
Jessica Rodas				
Assistant Manager of Project Management (Acting) Jessica Rodas		10/3/25	✓	
Director, Division of Project Management Lori Fisette	LMF	10/30/25	✓	
State Traffic Safety Engineer Steve Pristawa (n/a if Bridge or Highway)				
State Bridge Engineer John Preiss (n/a if Highway or Safety)				
Chief Engineer for Infrastructrue Robert Rocchio	RR	10/30/25	✓	
Return to PM				

Department of Transportation
Two Capitol Hill
Providence, RI 02903

Office 401-222-2450
Fax 401-222-3905

MEMO:

To: Robert Rocchio, P.E.
Chief Engineer for Infrastructure

September 30, 2025

From: Jon Fontana
Project Manager I

Subject: **CORRIDOR ASHAWAY**
PTS ID 0013Q
RI CONTRACT NO. 2023-EB-025C (DESIGN)
RI FAP No. STP3334001
DESIGN EXCEPTION

In the attached memo, VHB is requesting design exception from the RIDOT Highway Design Manual. The design exception is for the minimum eleven feet for travel lanes.

The attached report details the design elements and existing conditions that are considered controlling criteria and the resulting required design exception options. Please see attached email from Traffic Safety, they have reviewed the exception and confirms option 1 (reclaim existing roadways in kind) as the preferred choice. This option would limit potential ROW impact and permitting needs.

Should you have any questions, please feel free to contact Jon Fontana ext. 4211.

Recommended: Lori A. Fisette

Lori A. Fisette, MBA, PMP
Director, Division of Project Management

JF
Attachment
cc: Fisette, Rodas; file (w/attachments)

Department of Transportation
Two Capitol Hill
Providence, RI 02903

Office 401-222-2450
Fax 401-222-3905

MEMO:

To: Lori A. Fisette, MBA, PMP
Director, Division of Project Management

Date: September 30, 2025

From: Robert Rocchio, P.E.
Chief Engineer for Infrastructure

Subject: **CORRIDOR ASHAWAY**
DESIGN EXCEPTION
PTS ID 0013Q
RI CONTRACT NO. 2023-EB-025C (DESIGN)
RI FAP No. STP3334001

At the request of the Project Manager, I have reviewed the attached design exception for the subject project. Your request for design exceptions for lane width on the project are hereby approved. The consultant has provided appropriate supporting documentation relating to this matter; therefore, we take no exception.

Should you have any questions, please feel free to contact me at x4411.

JF
cc: Fisette, Rocchio, Rodas; file

Fontana, Jon (DOT)

From: Raymond, Sean (DOT)
Sent: Monday, September 29, 2025 4:24 PM
To: Fontana, Jon (DOT); Pristawa, Steve (DOT); Hall, Megan E. (DOT)
Cc: Soscia, Robert (DOT); Boyd, Michael (DOT)
Subject: RE: 2023-EH-007D Corridor Ashaway
Attachments: RIDOT - Travel Lane Width Exception - Corridor Ashaway REV 1.pdf

Hi Jon,

I could not find a record of our office reviewing this, however, looking at it now, I agree with Option 1. The Chief Engineer gives final approval of design exceptions so I would recommend following PMs current procedure for obtaining that (not sure what it is myself).

Sean Raymond, P.E.
Assistant Director of Administrative Services
Office of Safety
Rhode Island Department of Transportation
Two Capitol Hill
Providence, Rhode Island, 02903
O: 401-563-4204
E:Sean.Raymond@dot.ri.gov
http://www.dot.ri.gov
http://www.facebook.com/ridotnews [facebook.com]
@ridotnews [twitter.com]

From: Fontana, Jon (DOT) <Jon.Fontana@dot.ri.gov>
Sent: Monday, September 29, 2025 2:21 PM
To: Pristawa, Steve (DOT) <steve.pristawa@dot.ri.gov>; Raymond, Sean (DOT) <sean.raymond@dot.ri.gov>; Hall, Megan E. (DOT) <Megan.E.Hall@dot.ri.gov>
Cc: Soscia, Robert (DOT) <robert.soscia@dot.ri.gov>; Boyd, Michael (DOT) <Michael.Boyd@dot.ri.gov>
Subject: 2023-EH-007D Corridor Ashaway

Hi everyone

I have taken this project over from Nelia. Can you please let me know if the attached design exception has been reviewed and approved?

Jon Fontana
Project Manager 1
Rhode Island Department of Transportation

Memorandum

To: Nelia Piscopio - RIDOT
Robert Soscia - RIDOT

Date: July 26, 2024

Project #: 73420.04

From: Rick Rhodes - VHB

Re: Travel Lane Width
Laurel Street/Maxson Street
Design Exception
Corridor - Ashaway

Introduction

The "Corridor – Ashaway" improvement project (PTS ID: 0013Q; STIP ID: 3334) will include rehabilitation or replacement of four bridges and the reclamation or mill and overlay of street segments within the Ashaway corridor. Each component of the Project is necessary to bring the existing roadways and bridges up to current safety standards.

This memo has been developed to provide justification for an exception request for the travel lane widths of Laurel Street and Maxson Street.

Existing Conditions

The project contains both Laurel Street and Maxson Street which are residential roadways. Laurel Street's existing conditions consist of a two-way two-lane striped roadway moving traffic north-south/south-north. The current lane widths of the roadway vary from approximately 9.0 feet to 11.0 feet. The shoulder widths along Laurel Street vary from approximately 0.5 feet to 2.0 feet. Maxson Street is an unstriped, two-way two-lane roadway moving traffic west-east/east-west. The lane widths also vary from approximately 9.0 feet to 11.0 feet.

The existing edge of pavement for both Laurel Street and Maxson Street abuts portions of the right-of-way limits, small portions of sidewalk, and driveways.

Travel Lane Width Exception – Laurel Street and Maxson Street

This design request is being sought by VHB for the 30% Design of the "Corridor – Ashaway" project and is anticipated to be necessary for the final designer to complete the project. VHB has identified portions of the Laurel Street and Maxson Street roadways as a source of issue for meeting State Regulation regarding travel lane widths.

VHB has proposed the following alternatives for Laurel and Maxson Streets.

1. Reclaim Existing Roadways in Kind

1 Cedar Street
Suite 400
Providence, RI 02903-1023
P 401.272.8100

vhb

Memorandum

a. This alternative keeps the current roadway widths, so the roadways would not meet the RIDOT standards described in the RIDOT Highway Design Manual. The Manual states that RIDOT's policy requires a minimum of 11 feet for travel lanes. This alternative, however, would still meet the AASHTO Green Book standard of 9-to-12-foot lanes, and would allow for the crown of the road to remain as existing. This would result in minimal impacts to the landscaping of abutting properties, the sidewalks that are being replaced in kind, roadway runoff, and right-of-way.

2. Roadway Widening

a. This alternative involves the widening of Laurel Street and Maxson Street to meet the RIDOT standard of a minimum of 11-foot travel lanes from the existing crown of the roadways. Consistent shoulder widths could be constructed as well. This alternative would however have greater impacts to the abutting properties. Widening to 11-foot lanes would cause potential right-of-way and permitting needs (adjacent to the Pawcatuck River) and drainage and landscaping conflicts.

b. In terms of the right-of-way and permitting needs and drainage conflicts: For the freshwater wetland applications, it will at the very least increase impacts to jurisdictional area and buffer zone, though we don't see this as an impediment to the permitting timeline. However, the increase in impervious area would require additional area for treatment under the RIDOT linear manual and the Stormwater Management, Design, and Installation Rules which could be a complicating factor since the right-of-way is narrow in this area, and there are already limited opportunities for stormwater treatment. Any encroachment into biological wetland from roadway expansion would also require additional review from USACE. This project is already under their jurisdiction due to the bridge work, but road widening would fall under a different general permit and require additional review. We are not certain if this would trigger additional review time since the Project would hopefully be able to remain at the Self Verification (SV) or Preconstruction Notification review (PCN) category, but it's a consideration. In sum, while this widening may not increase the permitting timeline of the project, since we are already anticipating an Application to Alter from RIDEM and a SV or PCN from USACE, it would increase the area/volume of stormwater treatment needed, as well as, potential right-of-way along the abutting properties and drainage redesign.

c. As far as the landscaping conflicts due to widening the roadway, retaining walls would have to be removed and disposed and rebuilt as well as new retaining walls warranted due to regrading, and tree trimming/clearing as well. Additionally, there are utility poles that would need to be relocated requiring potential right-of-way.

1 Cedar Street
Suite 400
Providence, RI 02903-1023
P 401.272.8100

Memorandum

d. Furthermore, Maxson Street is not a State maintained roadway east of Laurel Street, according to RIDOT maps, so the Town of Hopkinton would have to be consulted to pursue efforts to widen the roadway.

e. Roadway widening would result in additional costs of a rough order of magnitude of $2 million to the construction budget and timeframe of a rough order of magnitude of 1 year for right-of-way acquisition, additional stormwater considerations, drainage relocation, and other above considerations to the project schedule.

Recommendation

Due to the low average daily traffic volumes (less than 800 ADT [2023]) on these roadways and the low speed that is maintained (25 miles per hour), VHB is requesting that Option 1 – Reclaim Existing Roadway in Kind be approved for construction. Despite not meeting RIDOT width standards, this alternative would result in minimal project impacts, and it would comply with AASHTO Green Book standards.

1 Cedar Street
Suite 400
Providence, RI 02903-1023
P 401.272.8100