

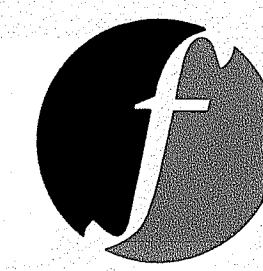
# BRAYTON STREET DRAINAGE IMPROVEMENTS

BRAYTON STREET · WEST WARWICK · RHODE ISLAND

## PERMITTING PLANS

AUGUST 31, 2023

PREPARED FOR  
**TOWN OF WEST WARWICK**  
 1170 MAIN STREET  
 WEST WARWICK, RI 02893



PREPARED BY

**FUSS & O'NEILL**

317 IRON HORSE WAY, SUITE 204  
 PROVIDENCE, RI 02908  
 401.861.3070  
 www.fando.com

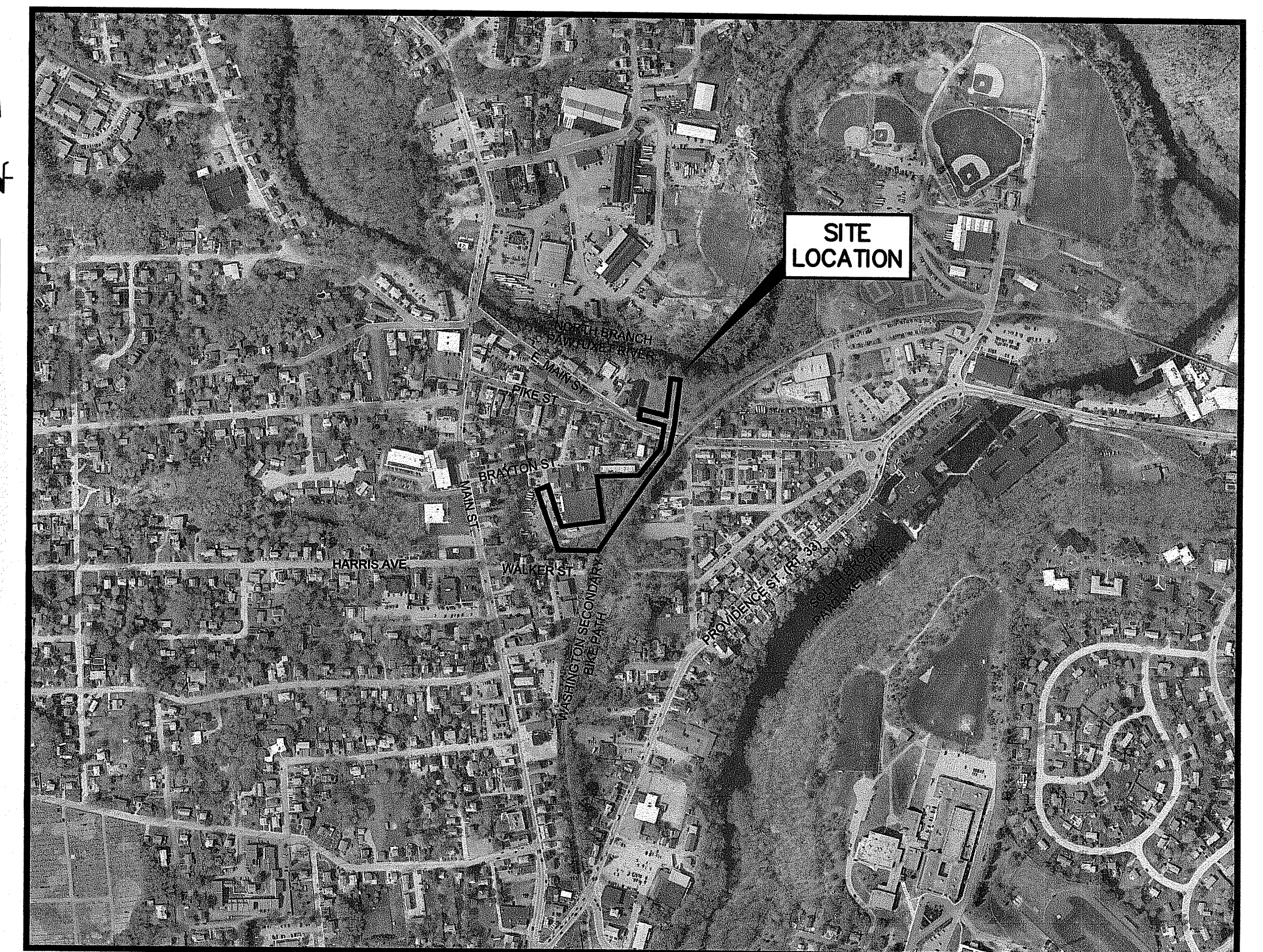
### SHEET INDEX

SHEET No.	SHEET TITLE
GI-001	COVER SHEET
CN-001	GENERAL NOTES AND LEGEND
CP-101 - CP-102	SITE PREPARATION AND EROSION AND SEDIMENTATION CONTROL PLAN NO. 1-2
CG-101 - CG-102	DRAINAGE AND GRADING PLAN NO. 1-2
CR-101	DRAINAGE & UTILITY PLAN & PROFILE
LP-101	TEMPORARY AND PERMANENT IMPACT AREAS (FOR ARMY CORPS OF ENGINEERS PURPOSES)
CD-500 - CD-505	DETAILS
SHT. 1-2	BOUNDARY SURVEY & EXISTING CONDITIONS PLAN (BY OTHERS)

### PROJECT TEAM

**SURVEYOR**  
 NATIONAL LAND SURVEYORS  
 42 HAMLET AVE.  
 WOONSOCKET, RI 02895  
 401.769.7779

**WETLANDS**  
 NATIONAL RESOURCES SERVICES, INC.  
 180 TINKHAM LN.  
 HARRISVILLE, RI 02830  
 401.568.7390

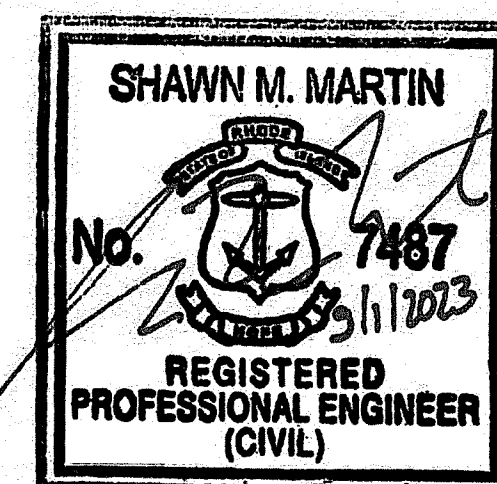


**LOCATION MAP**  
 SCALE: 1" = 500'

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM

NOTE PER DEM:  
 Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED: NOV 27 2023 FILE # 23-0913  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE  
*Yvonne D. Wemck*



PROJ. No.: 20111098.D11  
 DATE: AUGUST 31, 2023

**GI-001**

FRONT VIEW

LEGEND

Table with columns for EXIST and PROP, listing various symbols and their corresponding descriptions for features like PROPERTY LINE, CENTERLINE, DRAINAGE LINE, SEWER LINE, etc.

GENERAL NOTES

- 1. REFERENCES: THE STATE OF RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2018 EDITION, REVISIONS AND ALL CURRENT ADDENDA, ARE MADE A PART HEREOF...

ABBREVIATIONS

Table mapping abbreviations (e.g., CB, CMP, CPP) to their full names (e.g., CATCH BASIN, CORRUGATED METAL PIPE, CORRUGATED POLYETHYLENE PIPE).

LEGEND NOTE

SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SHOWN ON THE DRAWINGS TO SCALE OR TO THEIR ACTUAL DIMENSION OR LOCATION...

GENERAL CONSTRUCTION REQUIREMENTS

- 1. AN ENVIRONMENTAL LAND USE RESTRICTION (ELUR) AND ASSOCIATED SOIL MANAGEMENT PLAN (SMP) WAS RECORDED ON OCTOBER 19, 2020 ON A PORTION OF PLAT 18, LOT 33...

SOIL EROSION AND SEDIMENT CONTROL INSPECTION

- 1. A SITE-SPECIFIC SOIL EROSION AND SEDIMENT CONTROL PLAN (SESC PLAN) HAS BEEN PREPARED. THE SESC PLAN MUST BE REVIEWED AND SIGNED BY THE OWNER, OPERATOR (I.E. CONTRACTOR), AND CONTRACTOR'S DESIGNATED SESC INSPECTOR...

SPILL PREVENTION AND RESPONSE PROCEDURE

- 1. ANY INADVERTENT OR DELIBERATE DISCHARGE OF WASTE OIL OR ANY OTHER POLLUTANT TO THE STORMWATER DISPOSAL SYSTEM (I.E. INFILTRATION BEST MANAGEMENT PRACTICES, OR CLOSED-CONDUIT DRAINAGE SYSTEM THAT DISCHARGES TO MUNICIPAL SEWER SYSTEM OR WATER BODY) REQUIRES IMMEDIATE NOTIFICATION TO THE RIDEM OIL POLLUTION CONTROL PROGRAM AT (401) 277-2264...

STORMWATER MAINTENANCE PROGRAM

- 1. OPERATION AND MAINTENANCE OF STORMWATER MANAGEMENT SYSTEM SHALL BE CONDUCTED IN ACCORDANCE WITH LONG-TERM OPERATION & MAINTENANCE PLAN.

Revision table with columns for No., DATE, DESCRIPTION, DESIGNER, REVIEWER.

Professional Engineer seal for Shawn M. Martin, No. 7487, State of Rhode Island.

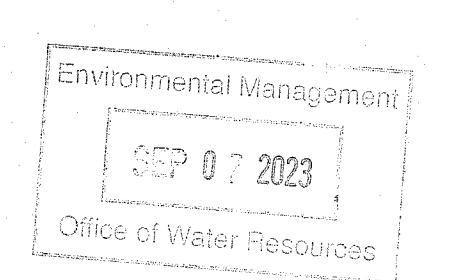
Scale information: SCALE: HORIZ.: NOT TO SCALE, VERT.: [blank], DATUM: HORIZ.: [blank], VERT.: [blank], GRAPHIC SCALE: 1" = 0' [blank]'

FUSS & O'NEILL logo and contact information: 317 IRON HORSE WAY, SUITE 204, PROVIDENCE, RI 02908, 401.861.3070, www.fando.com

TOWN OF WEST WARWICK GENERAL NOTES AND LEGEND BRAYTON STREET DRAINAGE IMPROVEMENTS WEST WARWICK RHODE ISLAND

PROJ. No.: 20111098.D11 DATE: AUGUST 2023 CN-001

File Path: J:\DWG\20111098\0111098D11\_DET01.dwg Layout: CN-001 Plotted: Fri, September 01, 2023 - 10:55 AM User: cboyden Plotter: AUTOCAD PDF GENERAL DOCUMENTATION.PCS CFB File: FO STB

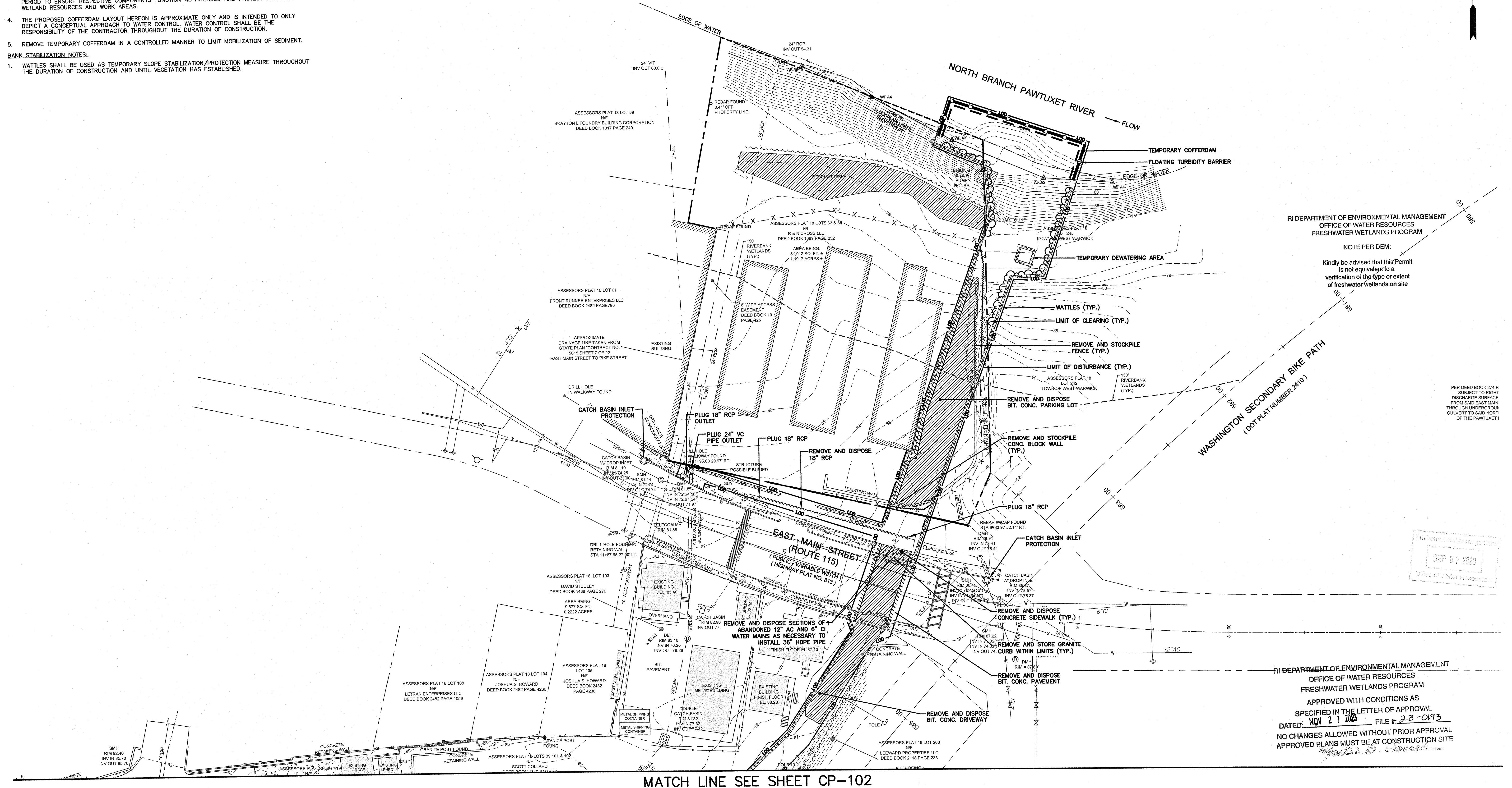


RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF WATER RESOURCES FRESHWATER WETLANDS PROGRAM APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL DATED: NOV 27 2023 FILE # 23-0193 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL APPROVED PLANS MUST BE AT CONSTRUCTION SITE

**SOIL EROSION AND SEDIMENT CONTROL NOTES:**

**GENERAL WATER CONTROL SYSTEM NOTES:**

- SOIL DISTURBANCE WITHIN THE WATER COURSE MUST TEMPORARILY CEASE IN THE EVENT OF ANY ABNORMALLY HIGH STORMWATER RUNOFF IF A DEWATERED WORKING CONDITION CANNOT BE MAINTAINED.
  - AQUATIC AND WETLAND RESOURCES MUST BE PROTECTED DURING THE INSTALLATION OF THE COFFERDAM AND THROUGHOUT DEWATERING WITHIN THE COFFERDAM LIMITS. PROVIDE SWAMP MATS AS NECESSARY TO PROTECT WETLAND RESOURCES AND FACILITATE WORK ALONG THE BANKS OF THE WATER COURSE.
  - THE COFFERDAMS AND BYPASS PROVISIONS SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD TO ENSURE RESPECTIVE COMPONENTS FUNCTION AS INTENDED AND PROTECT DOWNSTREAM WETLAND RESOURCES AND WORK AREAS.
  - THE PROPOSED COFFERDAM LAYOUT HEREON IS APPROXIMATE ONLY AND IS INTENDED TO ONLY DEPICT A CONCEPTUAL APPROACH TO WATER CONTROL. WATER CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR THROUGHOUT THE DURATION OF CONSTRUCTION.
  - REMOVE TEMPORARY COFFERDAM IN A CONTROLLED MANNER TO LIMIT MOBILIZATION OF SEDIMENT.
- BANK STABILIZATION NOTES:**
- WATTLES SHALL BE USED AS TEMPORARY SLOPE STABILIZATION/PROTECTION MEASURE THROUGHOUT THE DURATION OF CONSTRUCTION AND UNTIL VEGETATION HAS ESTABLISHED.



RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM

NOTE PER DEM:  
Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site

SEP 07 2023  
Office of Water Resources

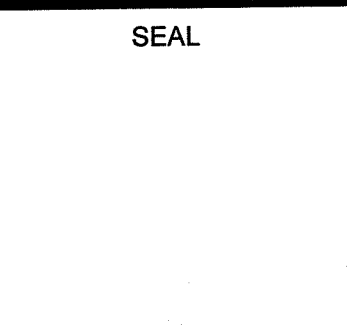
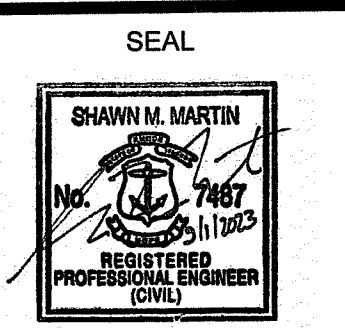
RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM

APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED: **NOV 21 2023** FILE # **23-0193**  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

MATCH LINE SEE SHEET CP-102

File Path: J:\DWG\2011\1098\011\CP-101.dwg User: cboyden  
Plotted: Fri, September 01, 2023 - 10:55 AM  
Printer: AUTOCAD PDF (GENERAL DOCUMENTATION).PC3 CTB File: FO STB  
LAYER STATE:

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER



SCALE:  
HORIZ.: 1" = 30'  
VERT.:  
DATUM:  
HORIZ.: NAD83  
VERT.: NAVD88

GRAPHIC SCALE

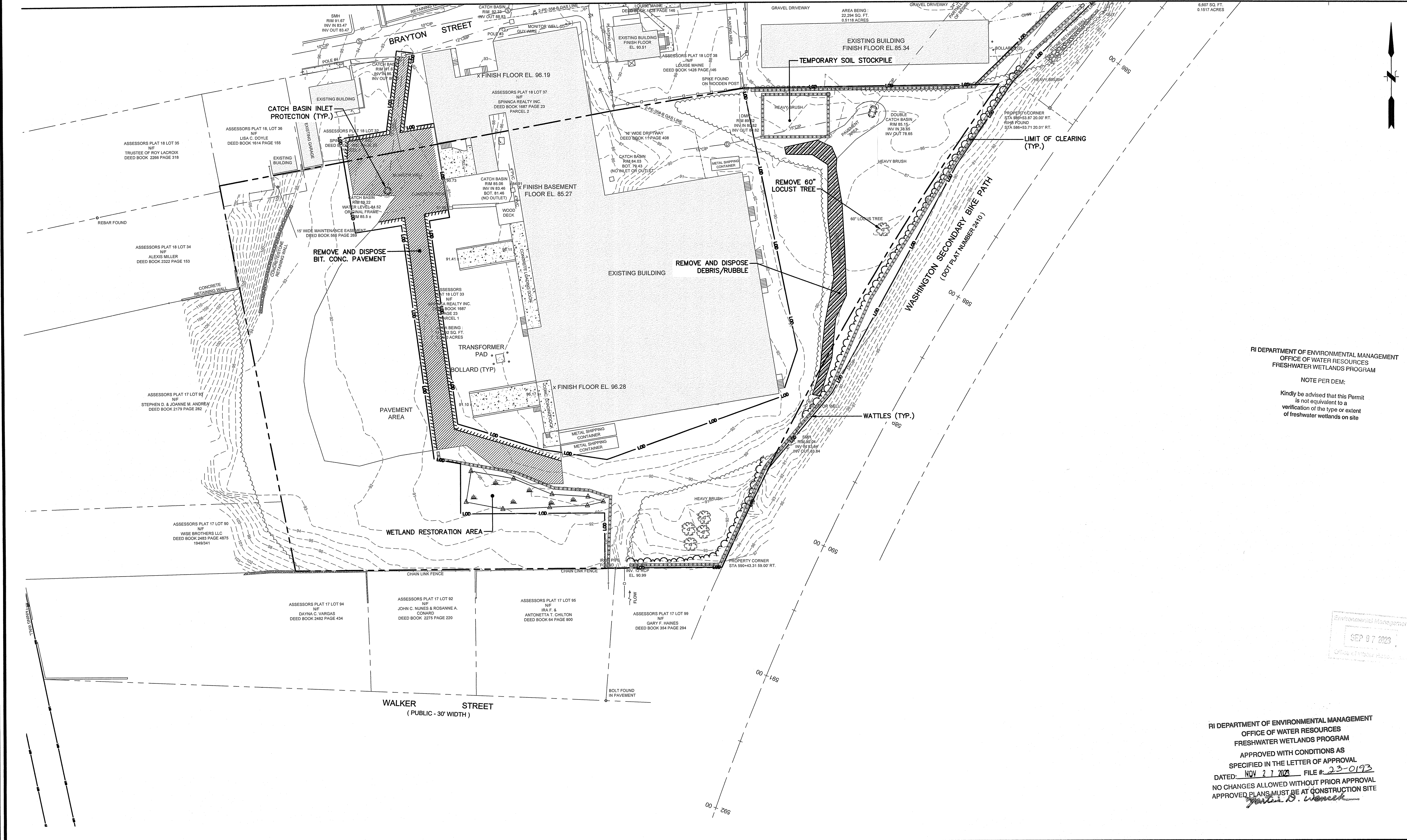
**FUSS & O'NEILL**  
317 IRON HORSE WAY, SUITE 204  
PROVIDENCE, RI 02908  
401.861.3070  
www.fando.com

TOWN OF WEST WARWICK  
SITE PREPARATION AND EROSION AND  
SEDIMENTATION CONTROL PLAN NO. 1  
BRAYTON STREET DRAINAGE IMPROVEMENTS

WEST WARWICK RHODE ISLAND

PROJ. No: 20111098.D11  
DATE: AUGUST 2023

**CP-101**



RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM

NOTE PER DEM:  
 Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site

Environmental Management  
 SEP 07 2023  
 Office of Water Resources

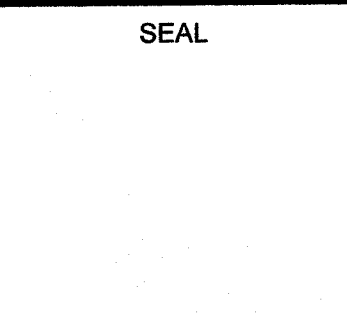
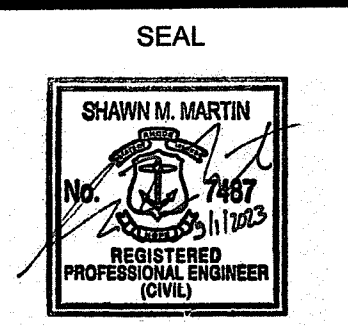
RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM

APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED: NOV 27 2023 FILE # 23-0193  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

*Martin R. Wozniak*

File Path: J:\DWG\20111098D1\Civil\Plan\20111098D1\_1.ERD01.dwg Layout: CP-102 Plotter: Fti September 01, 2023 - 10:55 AM User: cboyden  
 LAYER STATE:

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER
1.				



SCALE:  
 HORZ.: 1" = 30'  
 VERT.:  
 DATUM:  
 HORZ.: NAD83  
 VERT.: NAVD88

GRAPHIC SCALE

**FUSS & O'NEILL**  
 317 IRON HORSE WAY, SUITE 204  
 PROVIDENCE, RI 02908  
 401.861.3070  
 www.fando.com

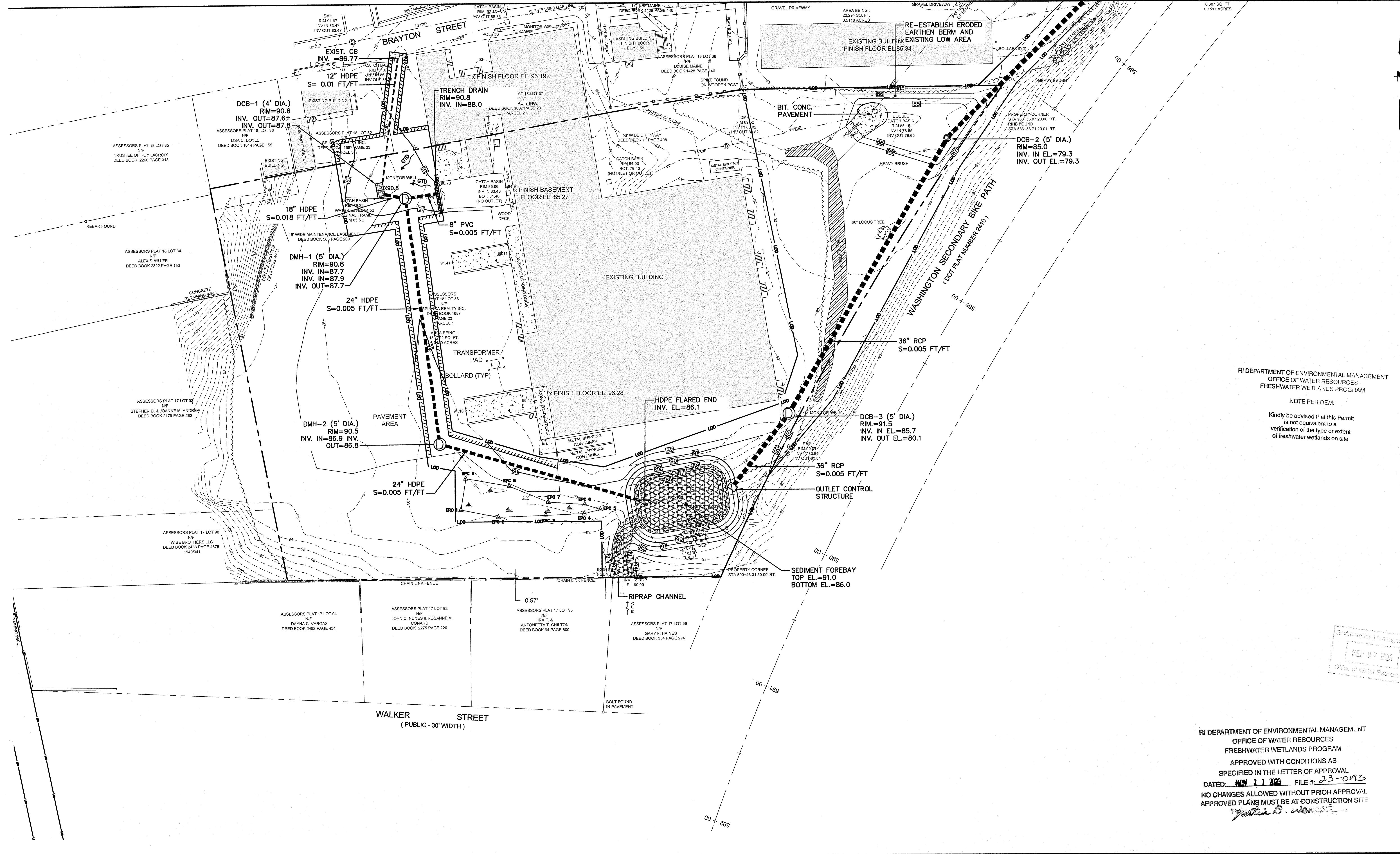
TOWN OF WEST WARWICK  
 SITE PREPARATION AND EROSION AND  
 SEDIMENTATION CONTROL PLAN NO. 2  
 BRAYTON STREET DRAINAGE IMPROVEMENTS

WEST WARWICK RHODE ISLAND

PROJ. No.: 20111098.D11  
 DATE: AUGUST 2023

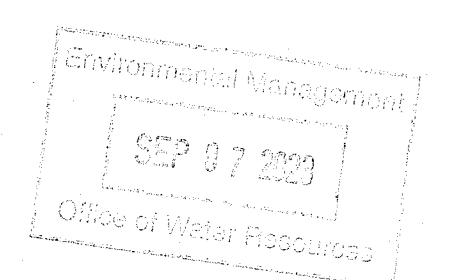
**CP-102**





RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM

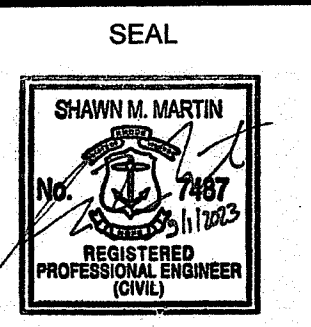
NOTE PER DEM:  
Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site



RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED: NOV 27 2023 FILE # 23-0193  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

File Path: J:\DWG\20111098D11\1098D11\_DRA01.dwg Layout: CG-102 Plotted: Fri, September 01, 2023 - 10:55 AM User: cboyden  
LAYER STATE: CTB File: FO.STB

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER



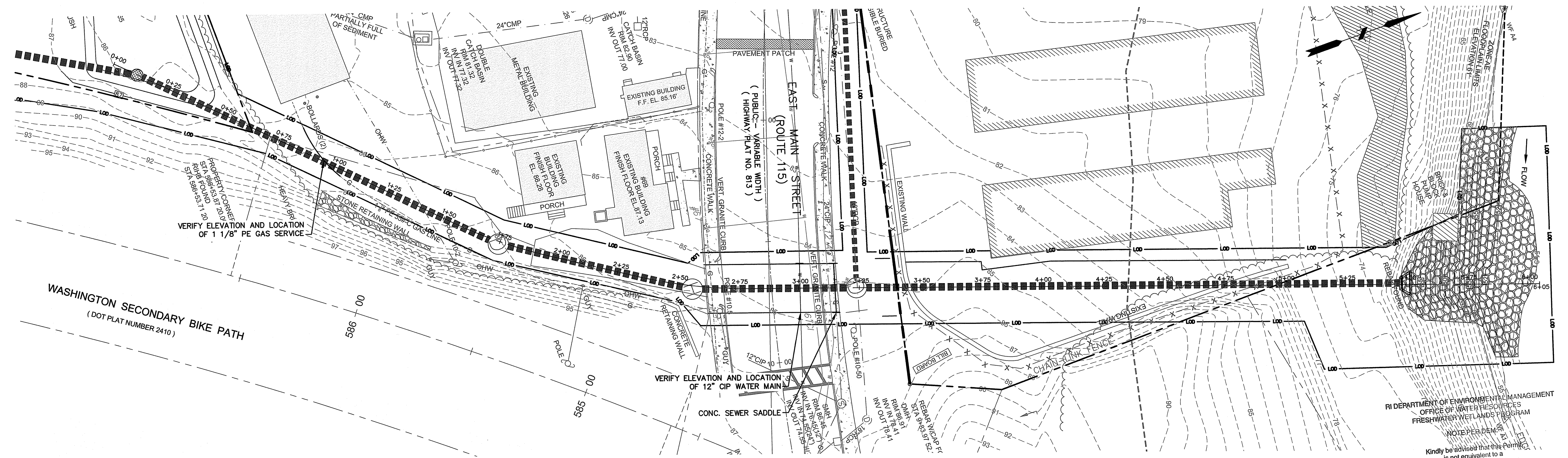
SCALE:  
HORIZ.: 1" = 30'  
VERT.:  
DATUM:  
HORIZ.: NAD83  
VERT.: NAVD88

**FUSS & O'NEILL**  
317 IRON HORSE WAY, SUITE 204  
PROVIDENCE, RI 02908  
401.861.3070  
www.fando.com

TOWN OF WEST WARWICK  
DRAINAGE AND GRADING PLAN NO. 2  
BRAYTON STREET DRAINAGE IMPROVEMENTS  
WEST WARWICK RHODE ISLAND

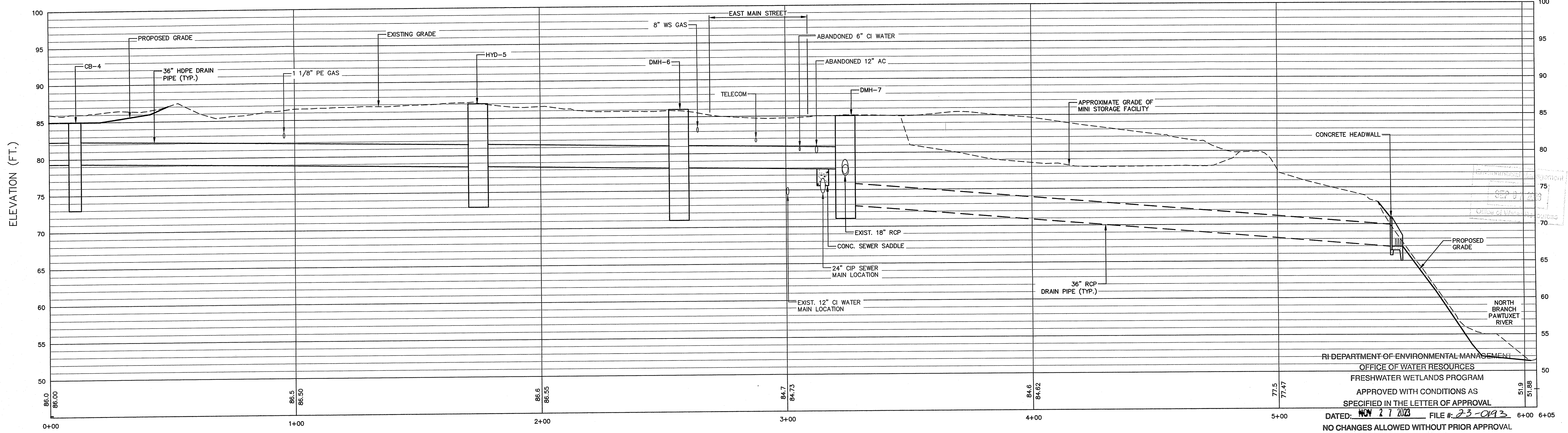
PROJ. No.: 20111098.D11  
DATE: AUGUST 2023  
**CG-102**

NORTH BRANCH PAWTUXET RIVER



**PLAN**  
SCALE: 1" = 20'

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
NOTE PER DEM. 11  
Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site

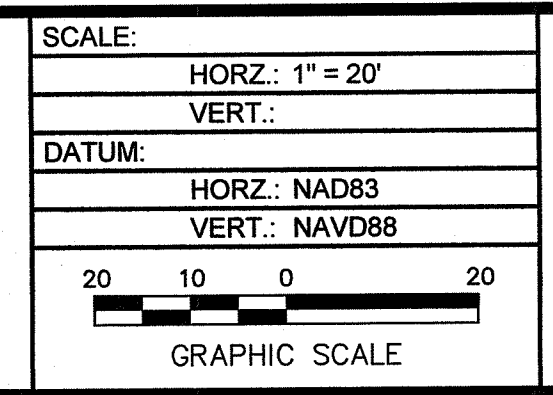
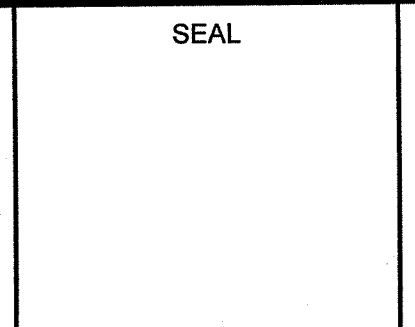
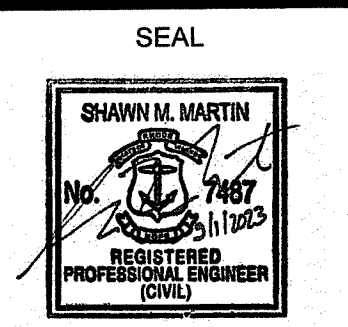


**PROFILE STA. 0+00 - 5+80**  
SCALE: H: 1" = 20' ; V: 1" = 7'

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED: NOV 27 2023 FILE # 23-093  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

File Path: J:\DWG\2011\098\01\CR-101.dwg Plotted: Fri, September 01, 2023 - 10:55 AM User: cboyden  
 Plotter: AUTOCAD PDF (GENERAL DOCUMENTATION) PC3 CTB File: FO.STB  
 LAYER STATE:

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER



**FUSS & O'NEILL**  
 317 IRON HORSE WAY, SUITE 204  
 PROVIDENCE, RI 02908  
 401.861.3070  
 www.fando.com

TOWN OF WEST WARWICK  
 DRAINAGE & UTILITY  
 PLAN & PROFILE  
 BRAYTON STREET DRAINAGE IMPROVEMENTS  
 WEST WARWICK RHODE ISLAND

PROJ. No.: 20111098.D11  
 DATE: AUGUST 2023  
**CR-101**

**WETLAND IMPACT AREA NOTES:**

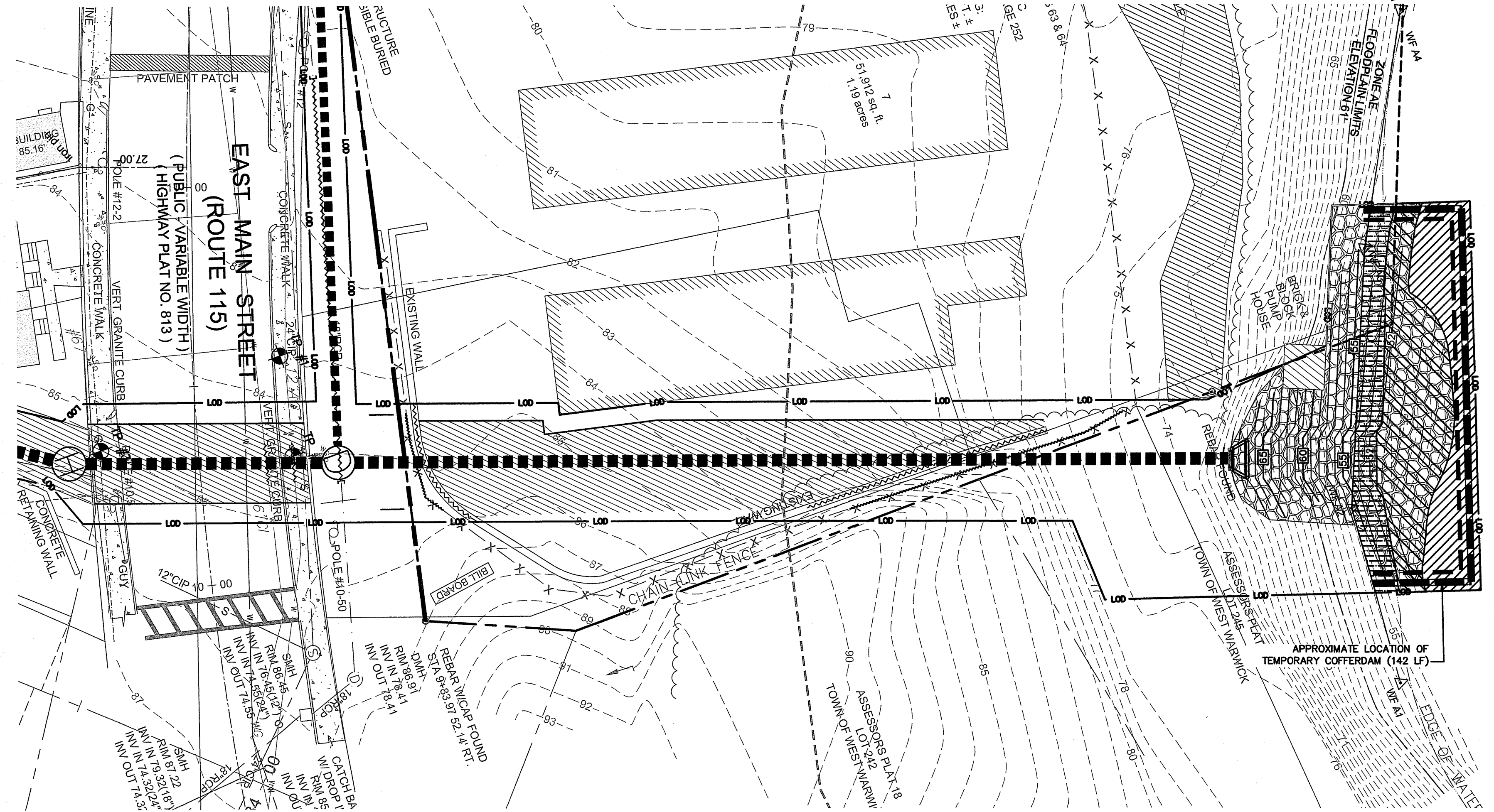
1. THE ORDINARY HIGH WATER MARK (OHWM) IS APPROXIMATELY EL. 53.3± AND WAS DETERMINED BASED ON TOPOGRAPHIC SURVEY INFORMATION, THE LOCATION OF TERRESTRIAL VEGETATION, AND THE DISTRIBUTION OF LITTER AND DEBRIS ALONG THE WATERCOURSE BANKS.
2. PERMANENT AND TEMPORARY WETLAND IMPACT AREAS SHALL BE RESTORED WITH WETLAND SEED MIX. PERIPHERAL AQUATIC RESOURCE AREAS DISTURBED BY CONSTRUCTION SHALL BE RESTORED WITH WETLAND SEED MIX AND/OR LIVES STEAKS. RESTORATION APPROACH WILL BE DETERMINED BY THE ENGINEER BASED ON THE ELEVATION OF THE DISTURBED AREA AND THE SURROUNDING WETLAND CHARACTERISTICS. ENGINEER WILL DETERMINE SUITABILITY OF RESTORATION TYPE, DURING CONSTRUCTION AND REPORT SQUARE FOOTAGE OF ADDITIONALLY DISTURBED AREAS TO THE ARMY CORPS OF ENGINEERS.

**IMPACT AREA SUMMARY**

	WATERCOURSE (OHWM)	WETLAND FLAGS (RIDEM)
TEMPORARY IMPACT AREA (SF)	1,031	1,031
PERMANENT IMPACT AREA (SF)	675	1,771
TOTAL (SF)	1,706	2,802

**LEGEND**

- TEMPORARY WATERCOURSE IMPACT AREA (OHWM)
- PERMANENT WATERCOURSE IMPACT AREA (OHWM)
- WETLAND IMPACT AREA (RIDEM)

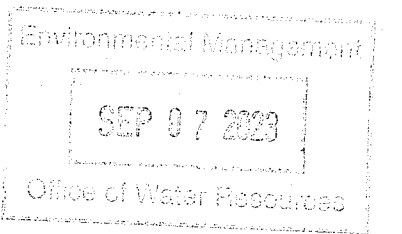


**PLAN**  
SCALE: 1" = 20'

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM

**NOTE PER DEM:**

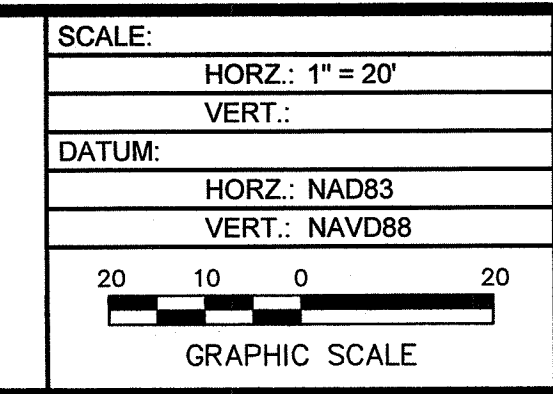
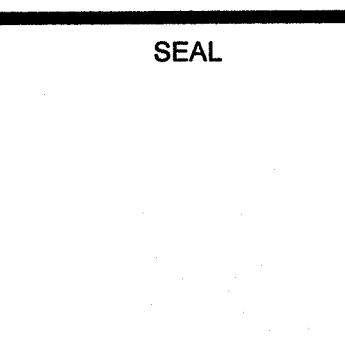
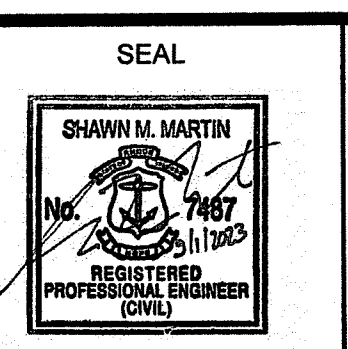
Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site



RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED: NOV 27 2023 FILE # 23-0193  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE  
*Martin D. Wenzel*

File Path: J:\DWG\2023\11\098D11\DWG\Plan2011098D11\_LND01.dwg Layout: LP-101 Plotted: Fri, September 01, 2023 - 10:55 AM User: cboyden  
MIS VIEW: PLOTTER: AUTOCAD PDF (GENERAL DOCUMENTATION) PC3 CTB File: FO.81B

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

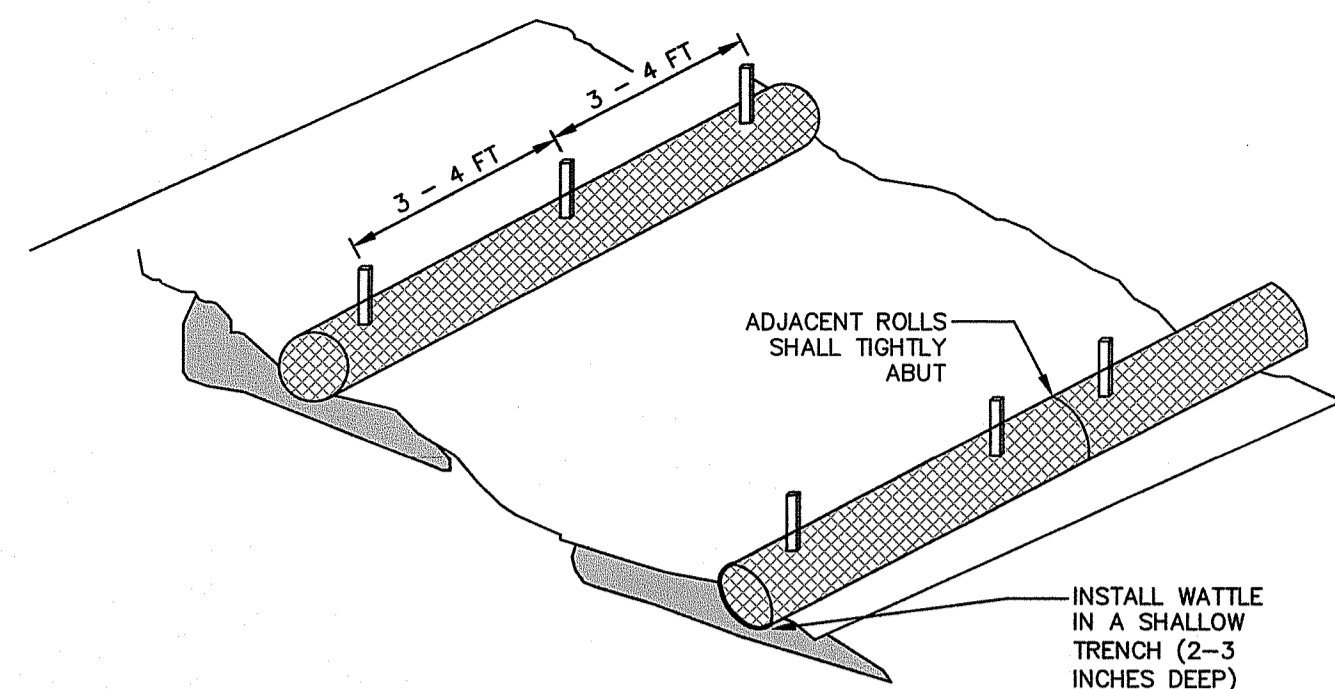


**FUSS & O'NEILL**  
317 IRON HORSE WAY, SUITE 204  
PROVIDENCE, RI 02908  
401.861.3070  
www.fando.com

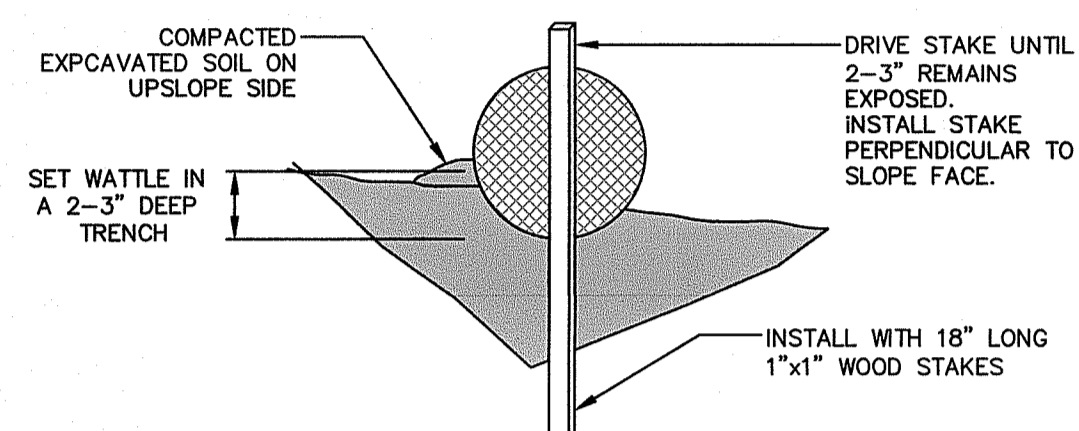
TOWN OF WEST WARWICK  
TEMPORARY AND PERMANENT IMPACT AREAS  
(FOR ARMY CORPS OF ENGINEERS PURPOSES)  
BRAYTON STREET DRAINAGE IMPROVEMENTS  
WEST WARWICK RHODE ISLAND

PROJ. No: 20111098D11  
DATE: AUGUST 2023  
**LP-101**

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS AS  
 SPECIFIED IN THE LETTER OF APPROVAL  
 DATED: ~~10/21/2023~~ FILE # ~~23-0193~~  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE  
*Martin D. Wenczek*



TYPICAL WATTLE INSTALLATION GUIDE



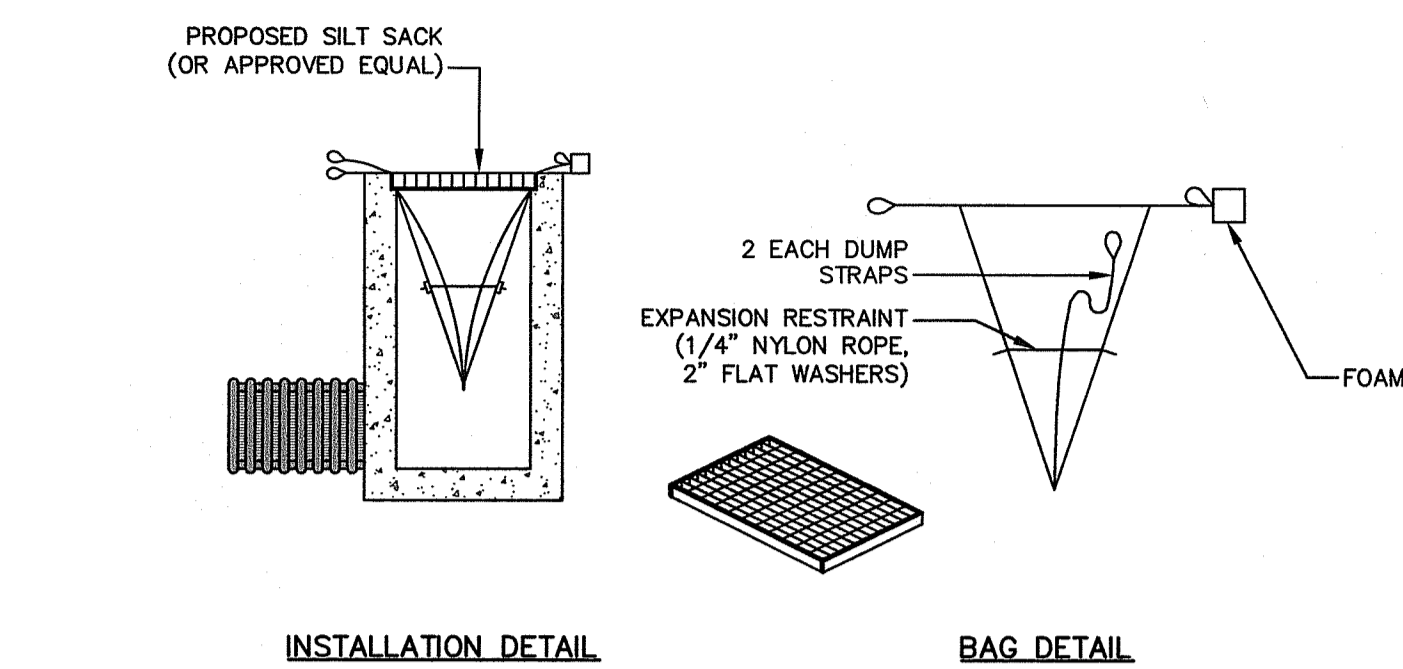
ENTRENCHMENT

NOTES:

1. WATTLES SHALL BE TRENCHED APPROXIMATE 2-3 INCHES AND STAKED SUCH THAT WATTLES DIRECTLY CONTACT SOIL AND PRECLUDE UNDERMINING OR BLOWOUTS. THE TRENCH SHALL BE APPROXIMATELY 9 INCHES WIDE. STAKES SHALL BE DRIVEN THROUGH THE CENTER OF THE WATTLE AT A SPACING OF 3-4 FEET ON CENTER AND NO GREATER THAN 6" FROM THE EACH END OF THE WATTLE. STAKES SHALL BE 1-INCH BY 1-INCH WOODEN STAKES WITH A LENGTH OF 18 INCHES. COMPACT SOIL EXCAVATED TO CREATE TRENCH ON UPHILL SIDE SIDE.
2. ENDS OF ADJACENT WATTLES SHALL BE TIGHTLY BUTTED OR OVERLAPPED SO THAT NO OPENING EXISTS FOR WATER TO PASS THROUGH. WATTLES SHALL BE FREE OF DAMAGE OR DEFECTS WHEN DELIVERED TO THE SHIPPER. NO VEHICLES SHALL BE DRIVEN OVER WATTLES.
3. WATTLES SHALL BE 12-INCH SEDIMAX-SW12™ MANUFACTURED BY NORTH AMERICAN GREEN, OR APPROVED EQUAL.

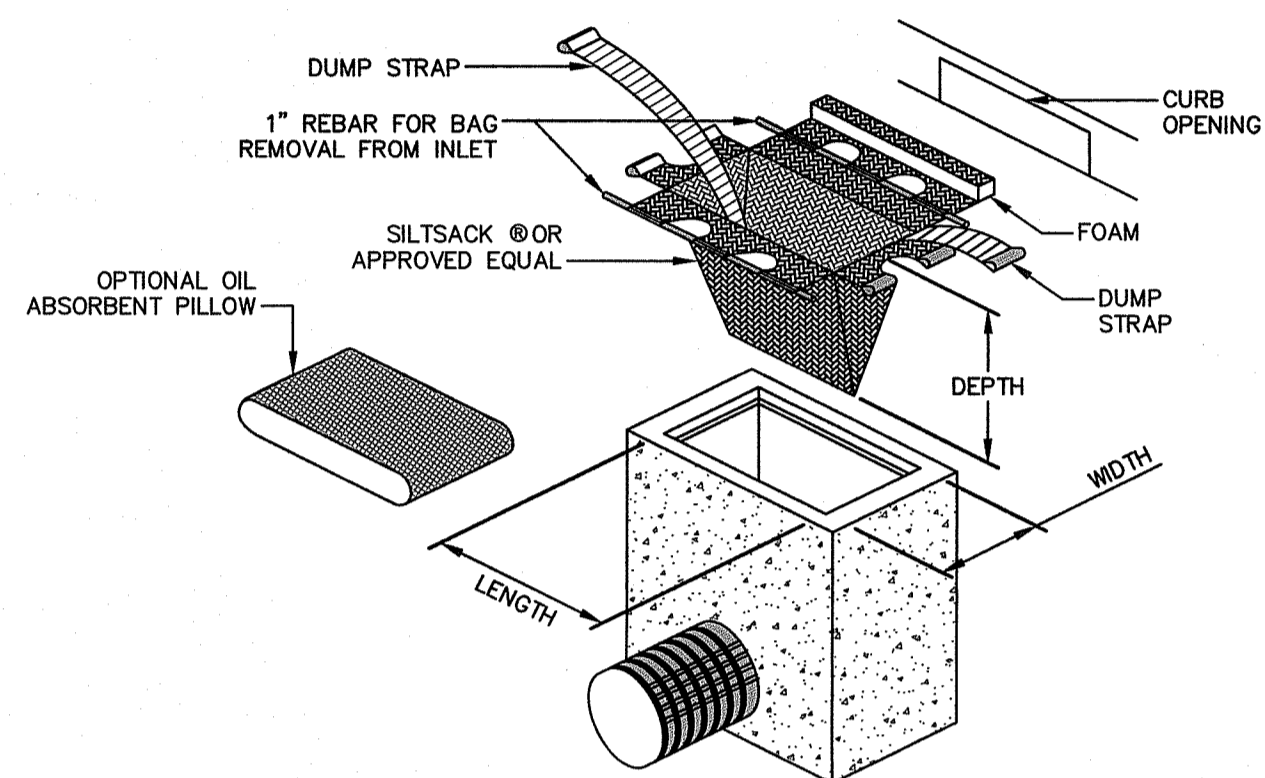
WATTLES

NOT TO SCALE



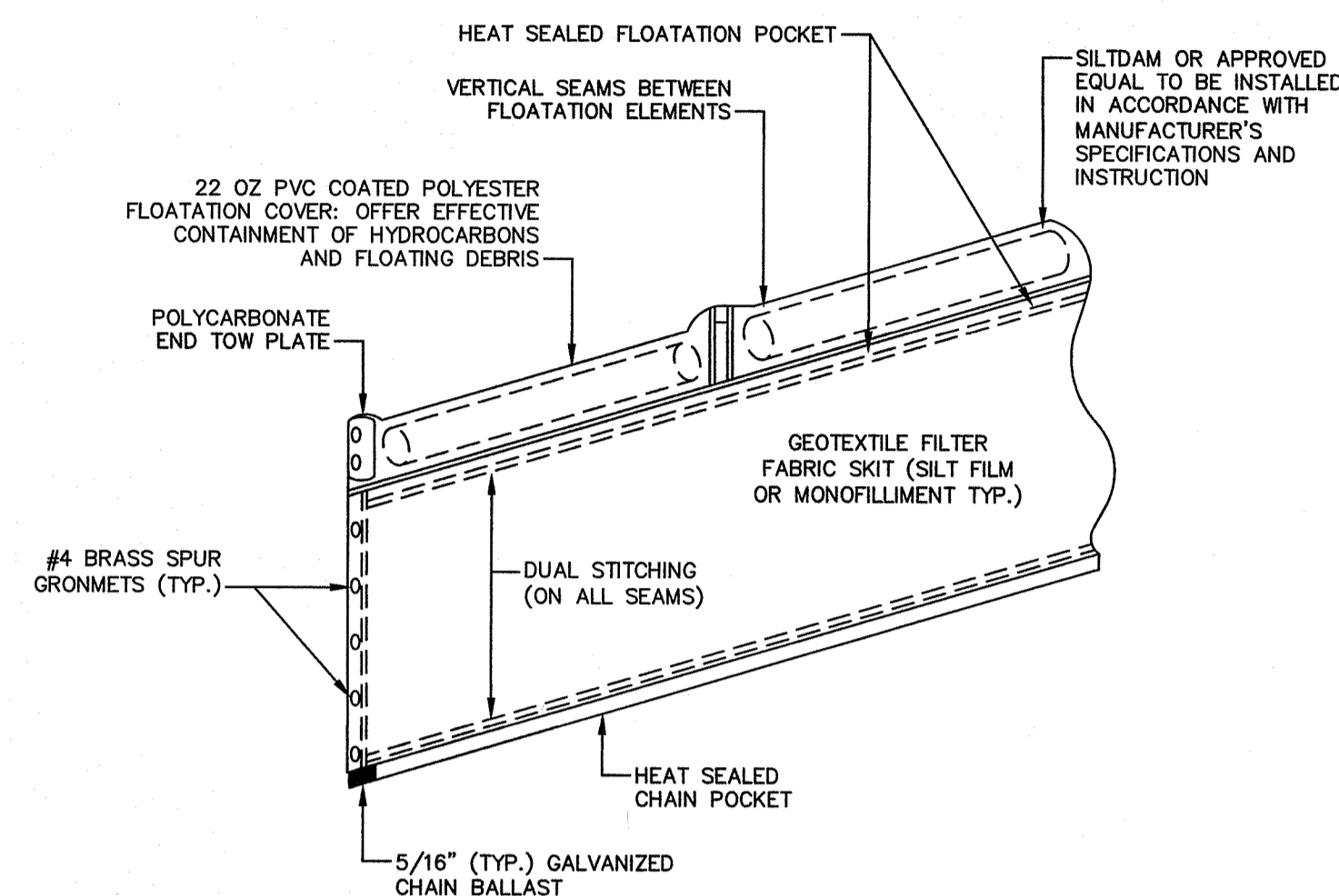
INSTALLATION DETAIL

BAG DETAIL



CATCH BASIN INLET PROTECTION

NOT TO SCALE

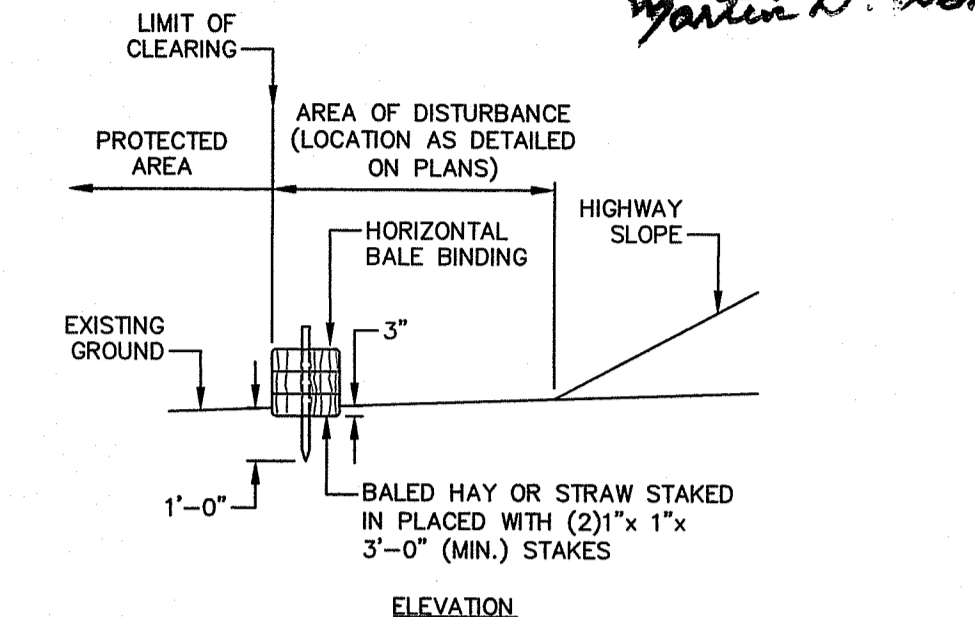


NOTES:

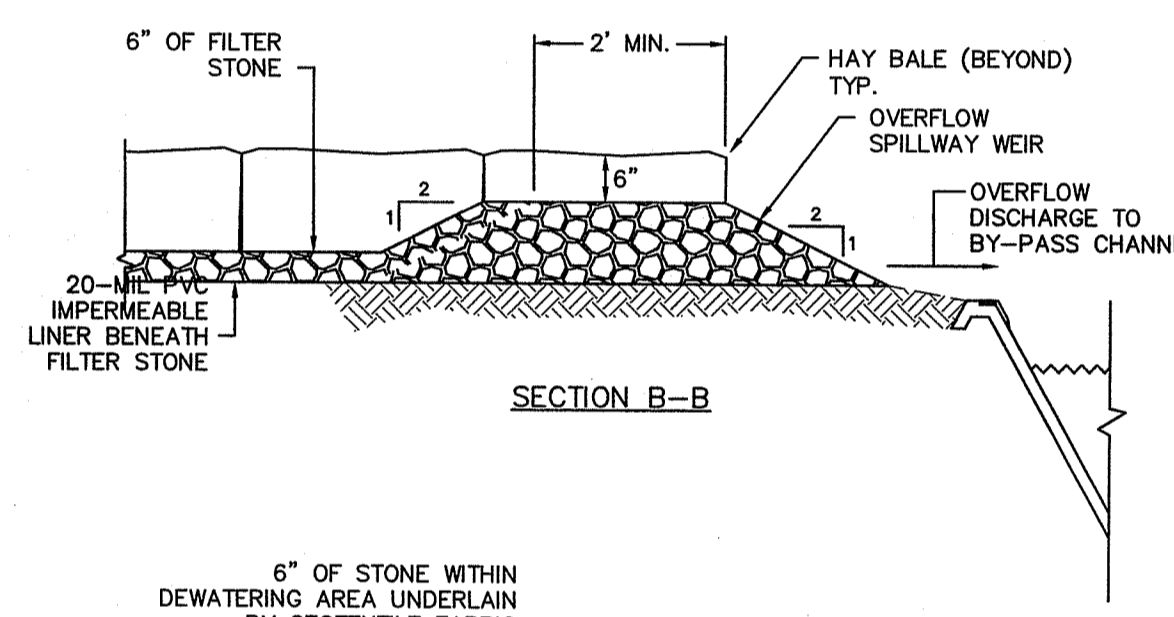
1. FLOATATION SIZE (6", 8" OR 12" DIA.) DETERMINED BY SKIRT DEPTH/SITE VARIABLES.
2. OTHER END TYPES AVAILABLE SUCH AS ALUMINUM UNIVERSAL SLIDE OR SLOTTED TUBE.
3. OPTIONAL TOP TENSION CABLE (5/16" TYP.) AVAILABLE FOR INCREASED STRENGTH.

SILTDAM OR FLOATING TURBIDITY BARRIER

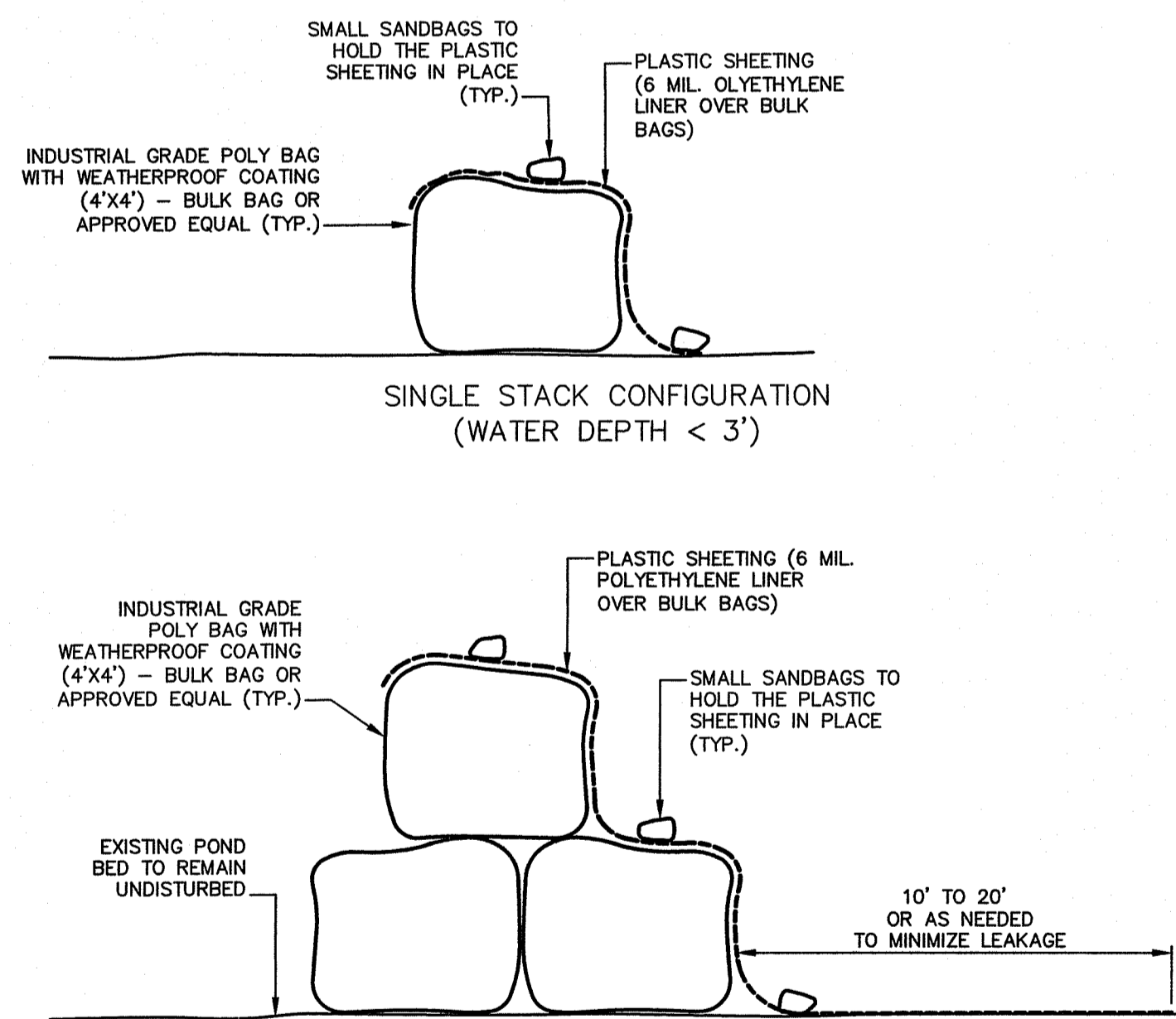
NOT TO SCALE



SECTION A-A



SECTION B-B



SINGLE STACK CONFIGURATION (WATER DEPTH < 3')

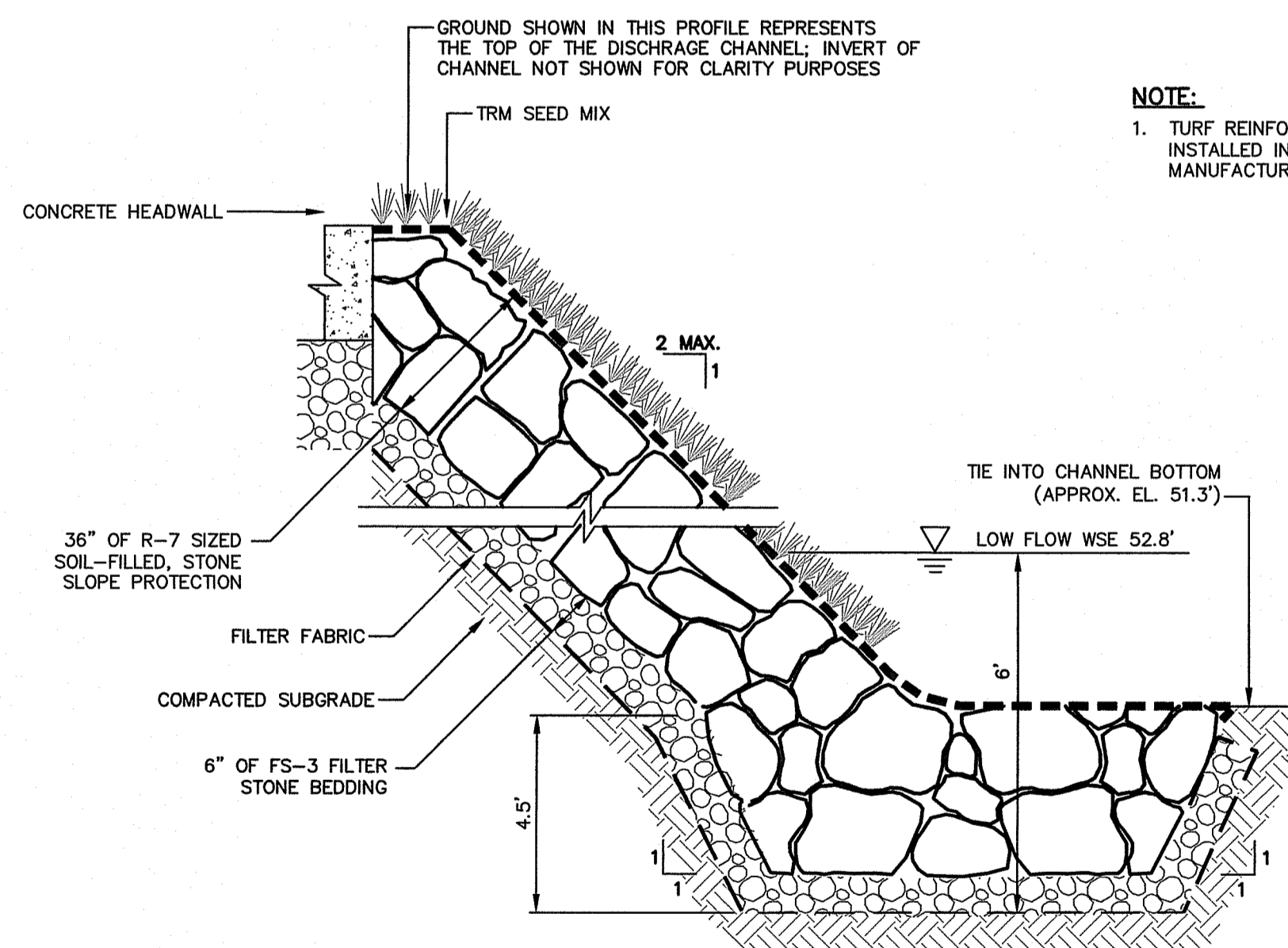
DOUBLE STACK CONFIGURATION (WATER DEPTH > 3')

NOTE:

1. REMOVE ALL SANDBAGS AND ACCUMULATED SEDIMENT AFTER CONSTRUCTION IS COMPLETE.

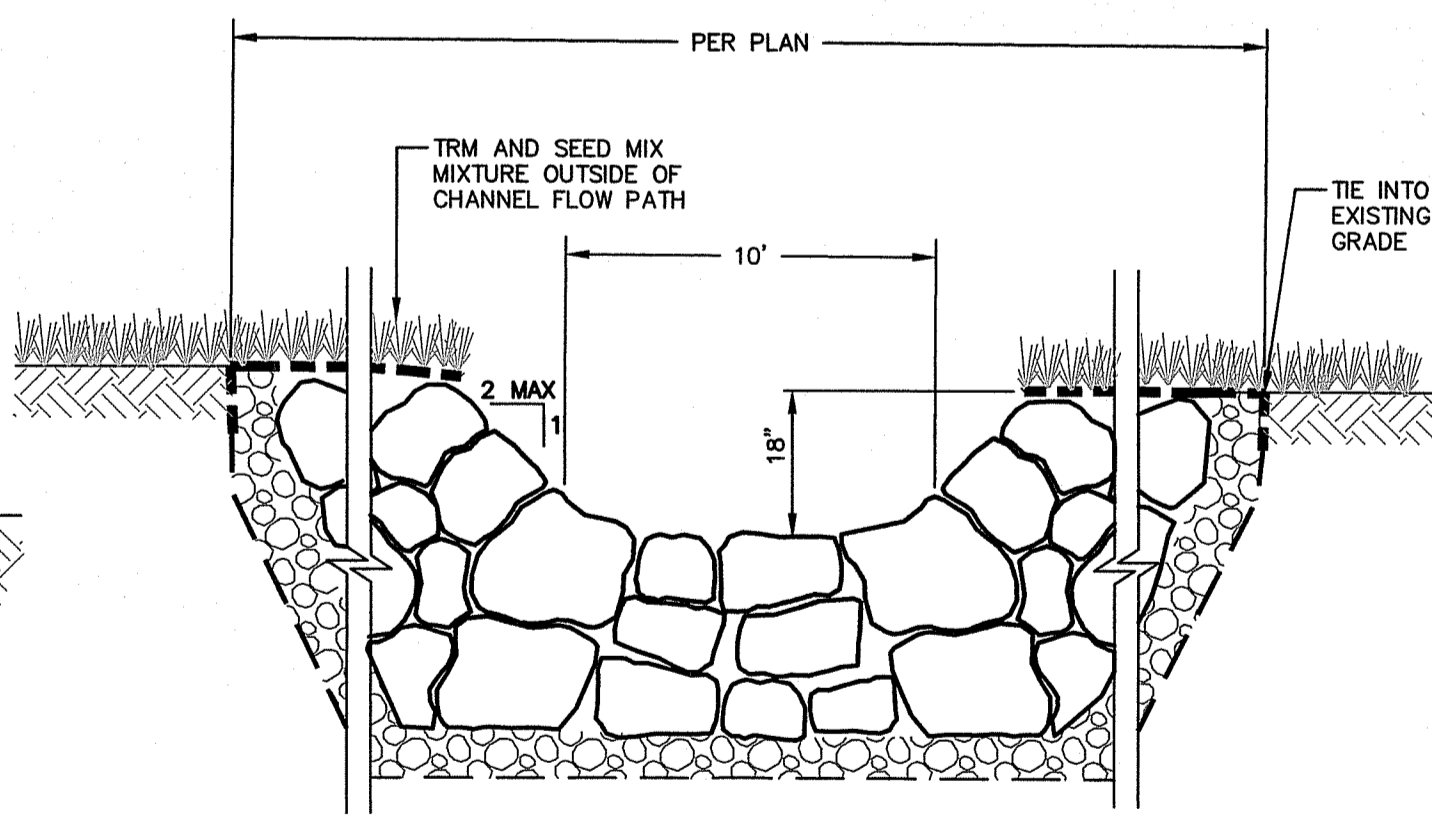
TEMPORARY COFFERDAM

NOT TO SCALE

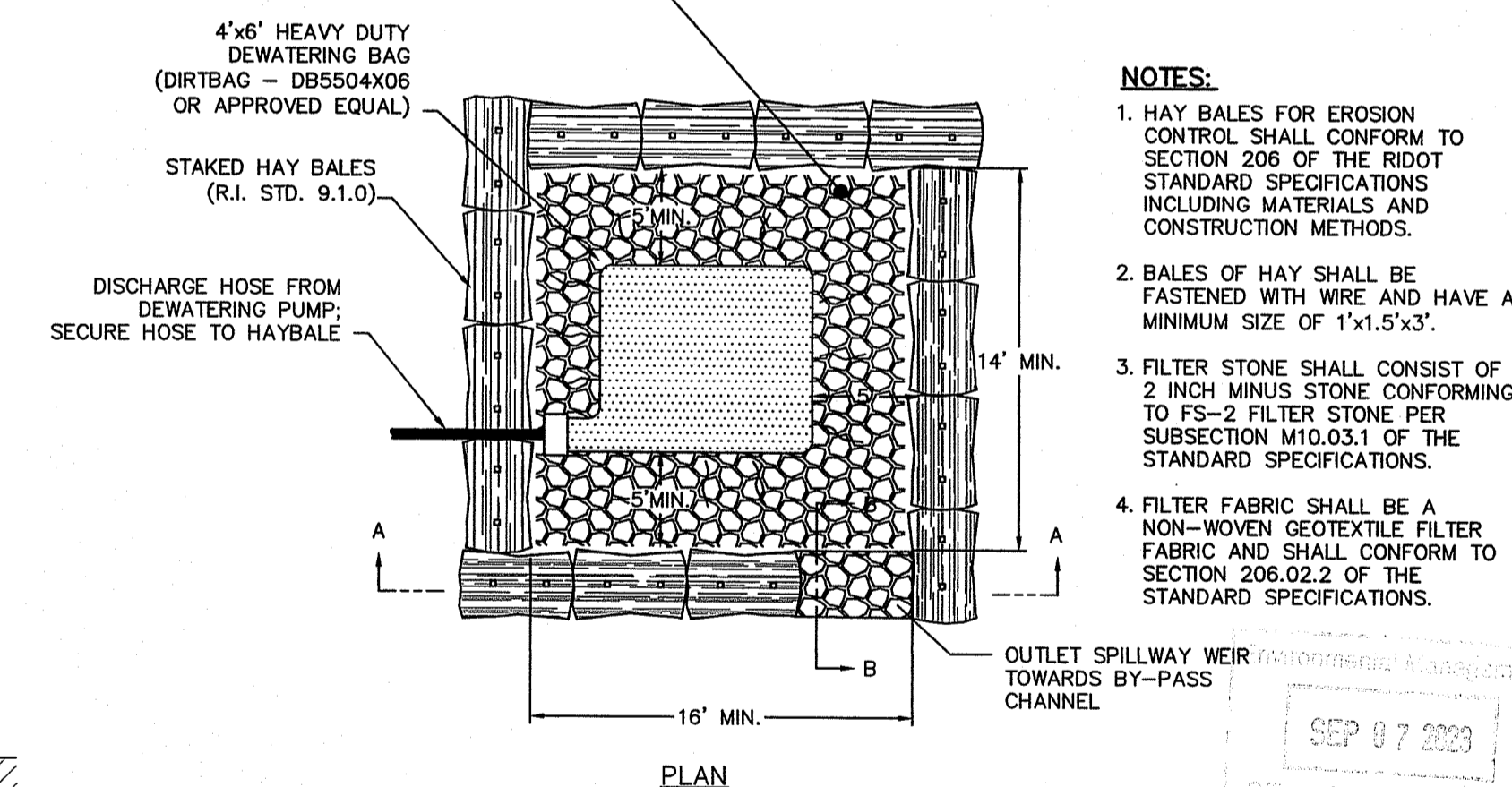


RIVERBANK SLOPE AND TOE PROTECTION

NOT TO SCALE



DISCHARGE CHANNEL TYPICAL SECTION



NOTES:

1. HAY BALES FOR EROSION CONTROL SHALL CONFORM TO SECTION 206 OF THE RIDOT STANDARD SPECIFICATIONS INCLUDING MATERIALS AND CONSTRUCTION METHODS.
2. BALES OF HAY SHALL BE FASTENED WITH WIRE AND HAVE A MINIMUM SIZE OF 1'x1.5'x3'.
3. FILTER STONE SHALL CONSIST OF 2 INCH MINUS STONE CONFORMING TO FS-2 FILTER STONE PER SUBSECTION M10.03.1 OF THE STANDARD SPECIFICATIONS.
4. FILTER FABRIC SHALL BE A NON-WOVEN GEOTEXTILE FILTER FABRIC AND SHALL CONFORM TO SECTION 206.02.2 OF THE STANDARD SPECIFICATIONS.

NOTES:

1. THE DEWATERING BAG, DIRTBAG® DB55 OR APPROVED EQUAL, SHALL BE HEAVY DUTY AND CONSIST OF A NONWOVEN BAG SEWN WITH A DOUBLE NEEDLE MATCHING USING A HIGH STRENGTH THREAD.
2. EACH DEWATERING BAG SHALL HAVE A FILL SPOUT LARGE ENOUGH TO ACCOMMODATE A 4-INCH DISCHARGE HOSE. THE BAG SHALL BE PROVIDED WITH STRAPS TO SECURE THE HOSE AND PREVENT PUMPED WATER FROM ESCAPING WITHOUT BEING FILTERED.
3. MAINTAIN DEWATERING BAG(S) AS NECESSARY TO EFFICIENTLY FILTER SEDIMENT OR PASS WATER AT A REASONABLE RATE. USE OF EXCESSIVE FLOW RATES OR OVERFILLING DIRTBAGS WITH SEDIMENT WILL CAUSE RUPTURES OF THE BAGS OR FAILURE OF THE HOSE ATTACHMENT STRAPS.
4. DISPOSE OF DEWATERING BAG AND CONTENTS AT OFF-SITE DISPOSAL FACILITY IN ACCORDANCE WITH THE APPROVED SOIL MANAGEMENT PLAN OR AS DIRECTED BY ENGINEER.
5. INSTALL DEWATERING BAG AND CRUSHED STONE BEDDING WITH A SLOPE SO INCOMING WATER FLOWS DOWNHILL THROUGH THE BAG WITHOUT CREATING MORE EROSION. STRAP THE NECK OF DEWATERING BAG TIGHTLY TO THE DISCHARGE HOSE.

TEMPORARY DEWATERING BASIN WITH FILTER BAG

NOT TO SCALE

File Path: J:\DWG\2011\1098D11\1098D11.dwg Layer: CD-501 Plotted: Fri, September 01, 2023 - 10:56 AM User: cboyden MS VIEW Plotter: AUTOCAD PDF (GENERAL DOCUMENTATION).PC3 CTB File: FO.STB

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

SEAL

SEAL

SCALE:

HORIZ.: AS NOTED

VERT.:           

DATUM:           

HORIZ.:           

VERT.:           

GRAPHIC SCALE

**FUSS & O'NEILL**

317 IRON HORSE WAY, SUITE 204  
 PROVIDENCE, RI 02908  
 401.861.3070  
 www.fandoo.com

TOWN OF WEST WARWICK

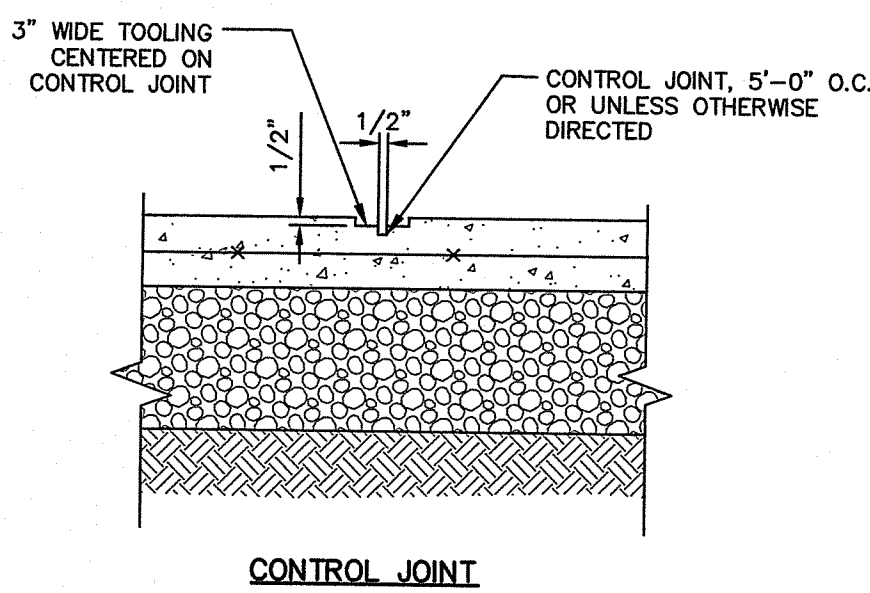
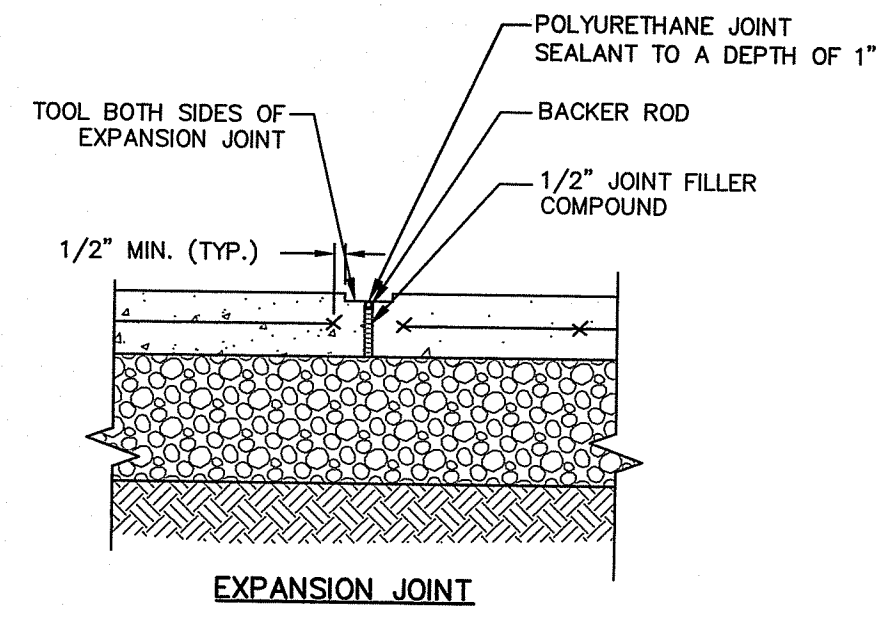
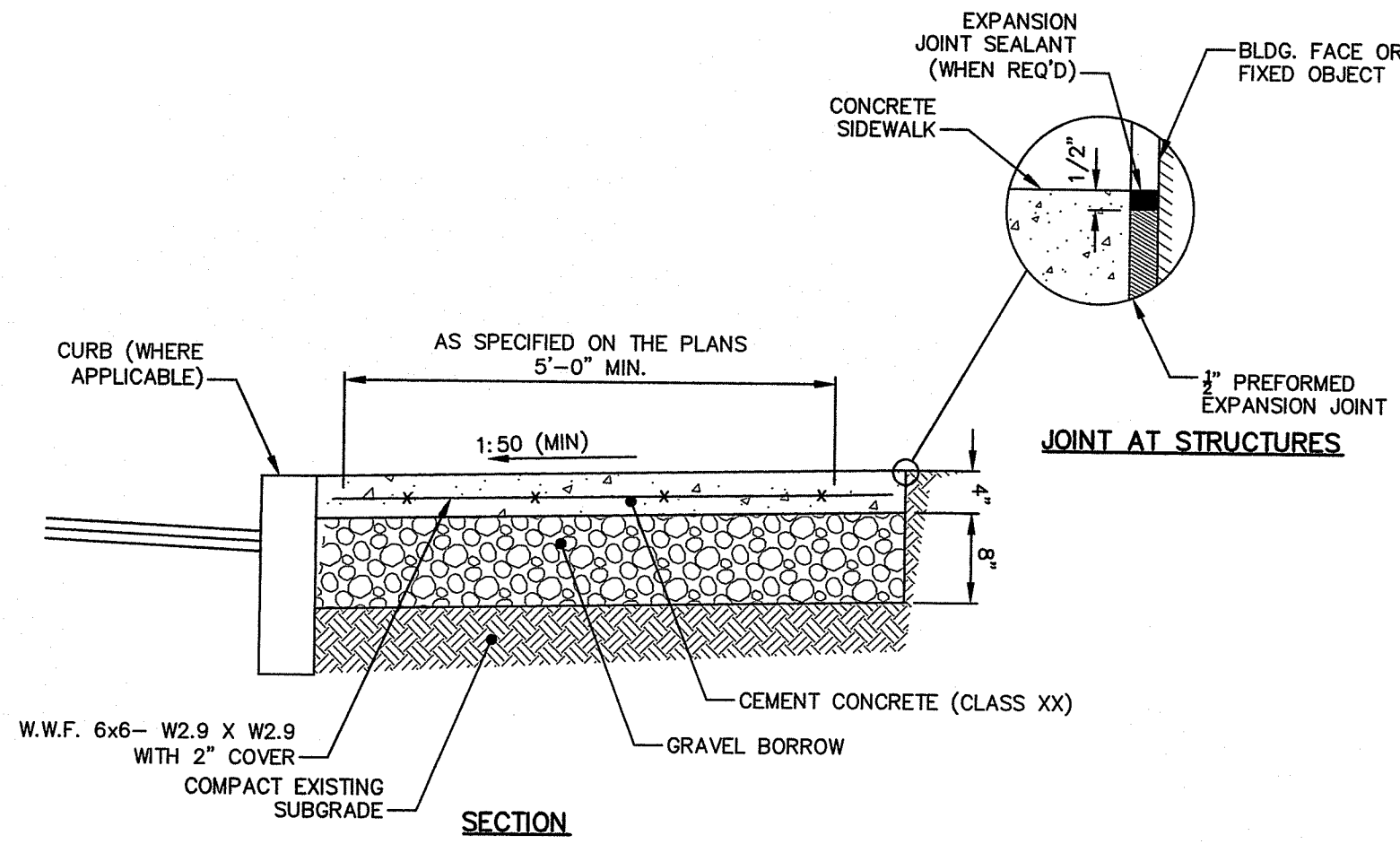
DETAILS

BRAYTON STREET DRAINAGE IMPROVEMENTS

WEST WARWICK RHODE ISLAND

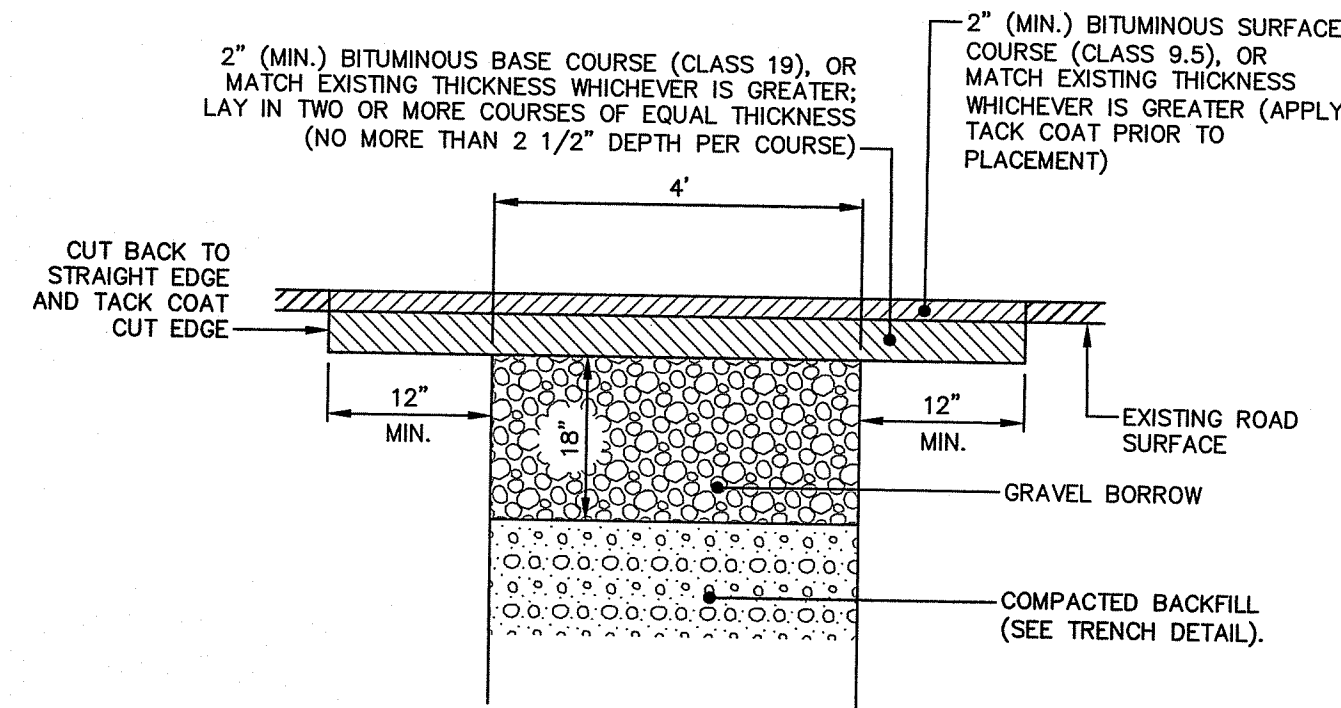
PROJ. No.: 2011098.D11  
 DATE: AUGUST 2023

**CD-501**



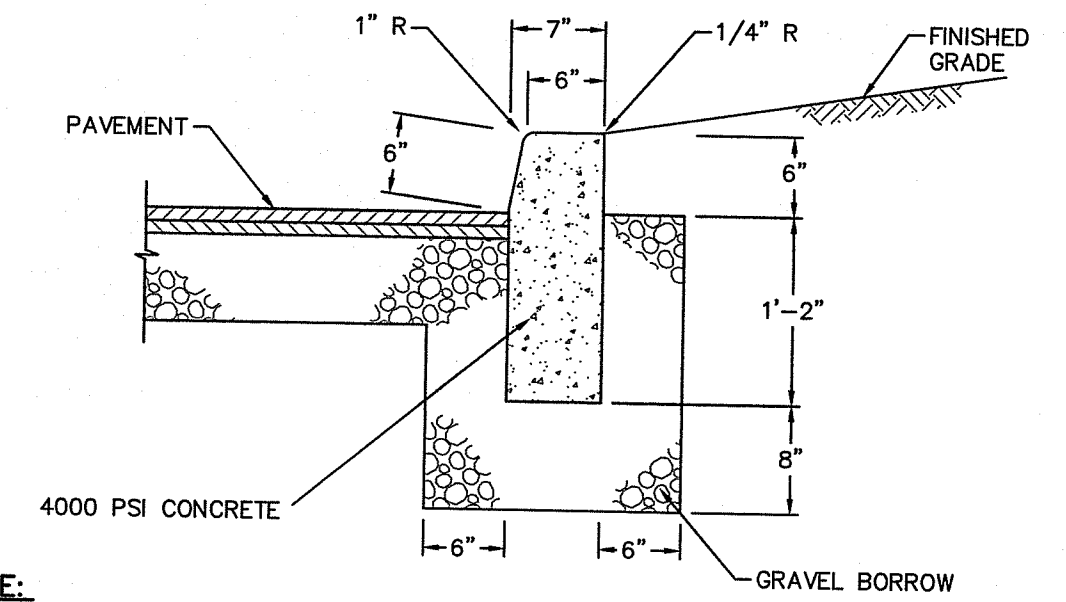
- NOTES:**
1. PROVIDE EXPANSION JOINTS WITH 1/2" PREMOLDED JOINT FILLER AT MIN. 20 FT. O.C. AND AT FACE OF BUILDINGS OR FIXED OBJECTS.
  2. PROVIDE TOOLED CONTROL JOINTS AT 5' O.C.
  3. PROVIDE BROOM FINISH IN DIRECTION PERPENDICULAR TO CURB.
  4. UNSUITABLE MATERIAL WITHIN SUBGRADE SHALL BE REMOVED AND REPLACED WITH GRAVEL BORROW.
  5. CROSS-SLOPE VARIES. SEE GRADING PLAN.

**CONCRETE SIDEWALK**  
NOT TO SCALE



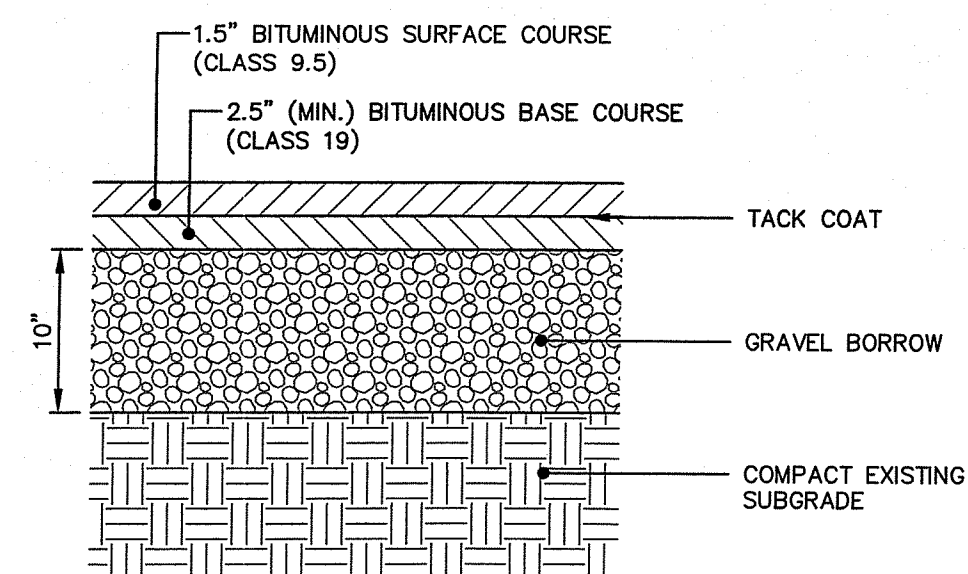
- NOTE:**  
UNUSABLE MATERIAL WITHIN SUBGRADE SHALL BE REMOVED AND REPLACED WITH GRAVEL BORROW.

**ROADWAY PAVEMENT REPAIR**  
**(EAST MAIN STREET)**  
NOT TO SCALE



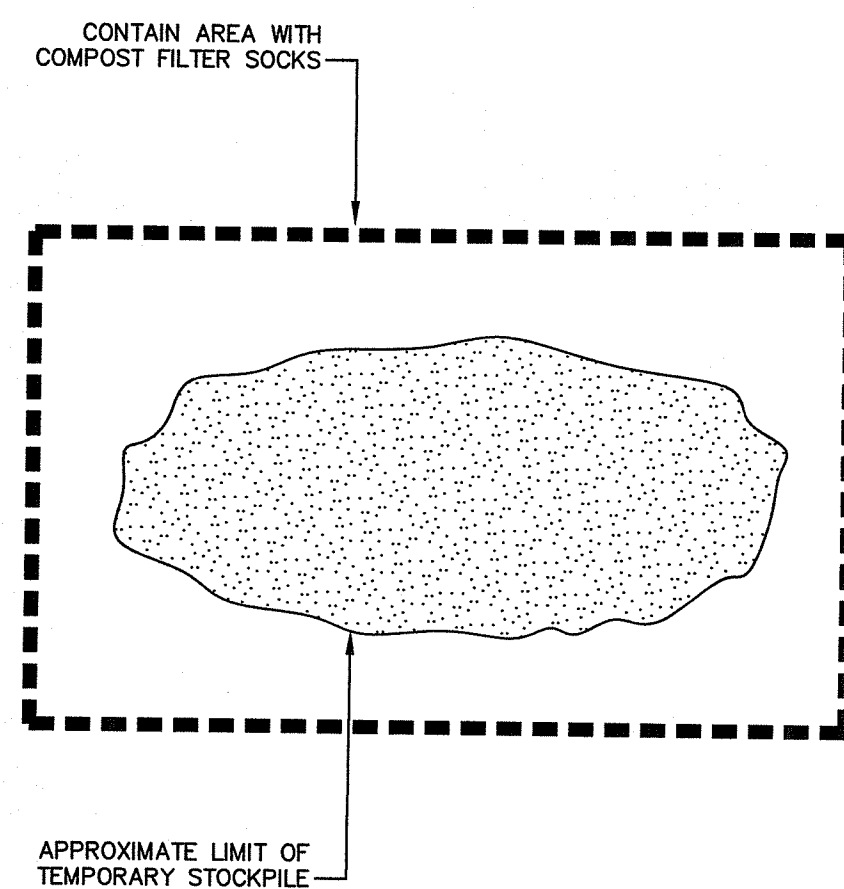
- NOTE:**
1. 1 INCH DEEP BEVELED JOINT AT TOP AND FACE OF CURB EVERY 10 FEET.
  2. 1/2 INCH EXPANSION JOINT AND FILLER EVERY 30 FEET.
  3. 1/2 INCH EXPANSION JOINT AND FILLER WHEN CURB IS ADJACENT TO CONCRETE SIDEWALK.

**CONCRETE CURB**  
NOT TO SCALE

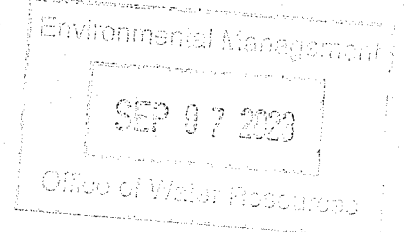


- NOTE:**  
UNUSABLE MATERIAL WITHIN SUBGRADE SHALL BE REMOVED AND REPLACED WITH GRAVEL BORROW.

**BITUMINOUS CONCRETE PAVEMENT**  
NOT TO SCALE



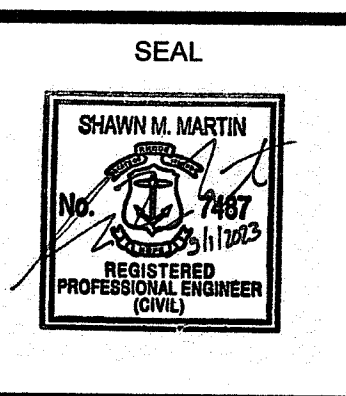
**TEMPORARY SOIL STOCKPILE**  
NOT TO SCALE



RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS AS  
SPECIFIED IN THE LETTER OF APPROVAL  
DATED: NOV 27 2023 FILE # 23-0193  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE  
*Shawn M. Martin*

File Path: J:\DWG\2011\098\011\098\011\098\011\_DET01.dwg Layout: CD-502 Plotted: Fri, September 01, 2023 - 10:56 AM User: cboyden  
MS VIEW: LAYER STATE: PLOTTER: AUTOCAD PDF (GENERAL DOCUMENTATION) PC3 CTB File: FO.STB

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER



SEAL

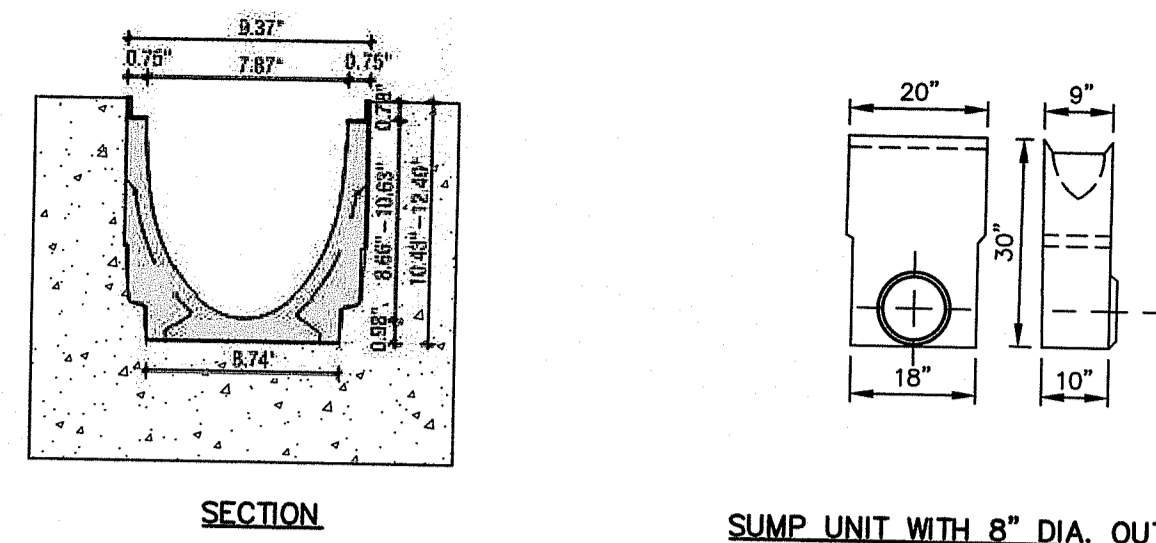
SEAL

SCALE:  
HORZ.: AS NOTED  
VERT.:  
DATUM:  
HORZ.:  
VERT.:  
GRAPHIC SCALE

**f** **FUSS & O'NEILL**  
317 IRON HORSE WAY, SUITE 204  
PROVIDENCE, RI 02908  
401.861.3070  
www.fando.com

TOWN OF WEST WARWICK  
DETAILS  
BRAYTON STREET DRAINAGE IMPROVEMENTS  
WEST WARWICK RHODE ISLAND

PROJ. No.: 20111098.D11  
DATE: AUGUST 2023  
**CD-502**



SECTION

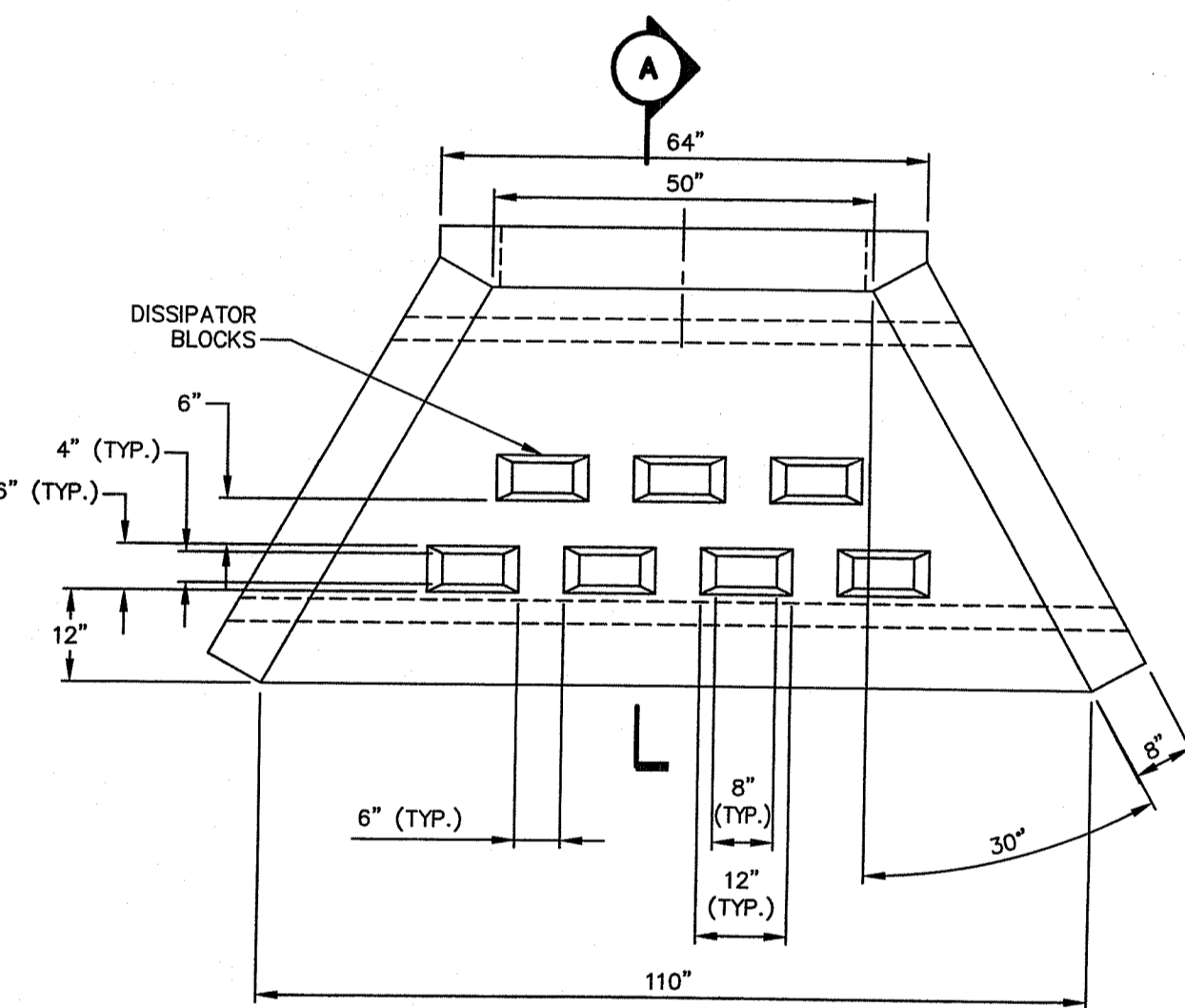
SUMP UNIT WITH 8" DIA. OUTLET

NOTES:

- TRENCH DRAIN SHALL BEFILCOTEN PRO V 200 WITH SUMP UNIT OR APPROVED EQUAL.
- MODULAR CHANNEL SECTIONS SHALL BE MADE OF FIBER REINFORCED POLYMER (FRP) OR GALVANIZED STEEL.
- SHALL HAVE A POSITIVE MECHANICAL CONNECTION BETWEEN CHANNEL SECTIONS THAT WILL NOT SEPARATE DURING THE INSTALLATION AND SHALL MECHANICALLY LOCK INTO THE CONCRETE SURROUND EVERY 10".
- CHANNELS HAVE A SMOOTH, SELF CLEANING BOTTOM WITH A 0.5% BUILT IN SLOPE.
- SHALL BE PROVIDED WITH A GALVANIZED HEEL-PROOF DUCTILE IRON (GHPD) CLASS C GRATES THAT LOCK DOWN TO FRAME.
- FRAME SHALL BE EXTRA-HEAVY-DUTY FRAM ASSEMBLY WITH ANCHOR STUDS. FRAME ASSEMBLY CONFORMS TO ASTM SPECIFICATION A36 WITH 12-4" LONG CONCRETE ANCHORS PER 120". THE FRAME IS SUPPLIED WITH A POWDER COATED FINISH.
- GRATE LOCKDOWN BARS SHALL BE INTEGRAL TO THE FRAME AND SHALL BE VANDAL-PROOF.
- ALL WELDS MUST BE PERFORMED BY A CERTIFIED WELDER PER ASTM STANDARD AWS D1.1. FRAMES SHALL BE PRODUCED IN THE U.S.A.
- CONCRETE ENCASEMENT SHALL BE CLASS A PER PART 600, SECTION 601 OF THE RIDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGE CONSTRUCTION.

TRENCH DRAIN

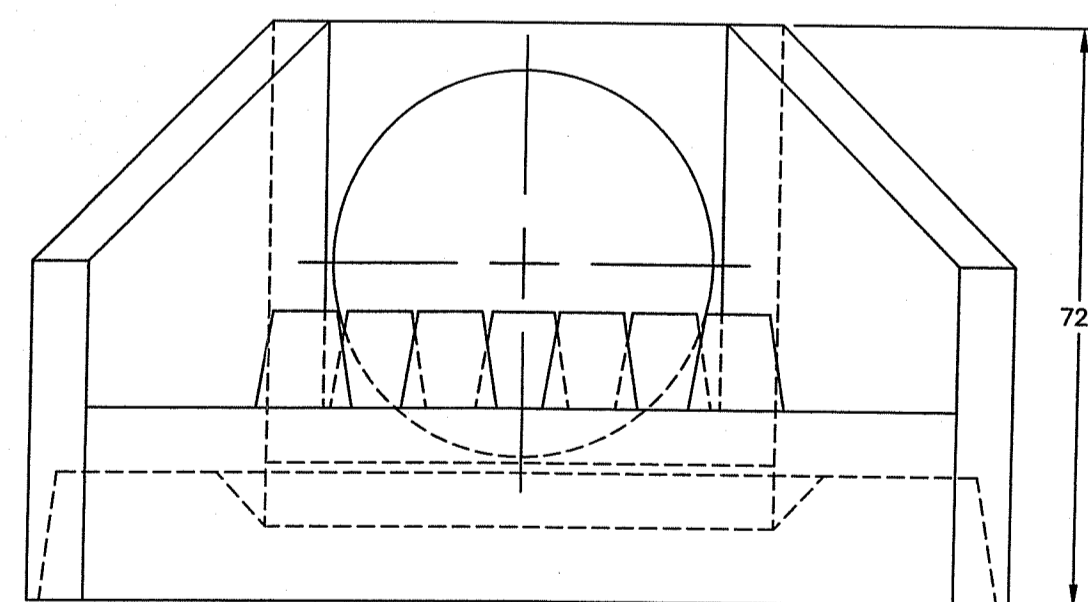
NOT TO SCALE



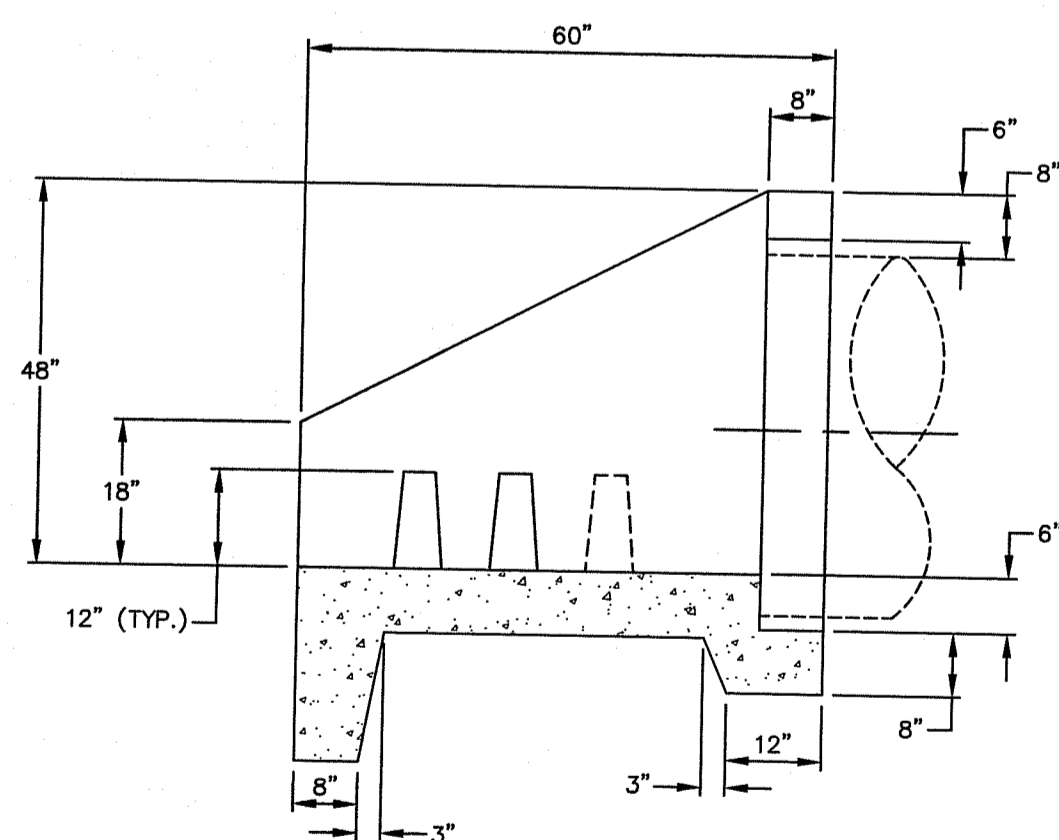
PLAN VIEW

NOTES:

- CONCRETE MINIMUM COMPRESSION STRENGTH: F'c=5,000 PSI @ 28 DAYS.
- REINFORCING STEEL: ASTM A615, FY=60,000 PSI.
- UNDERLAIN WITH 12" INCH OF STONE BEDDING.



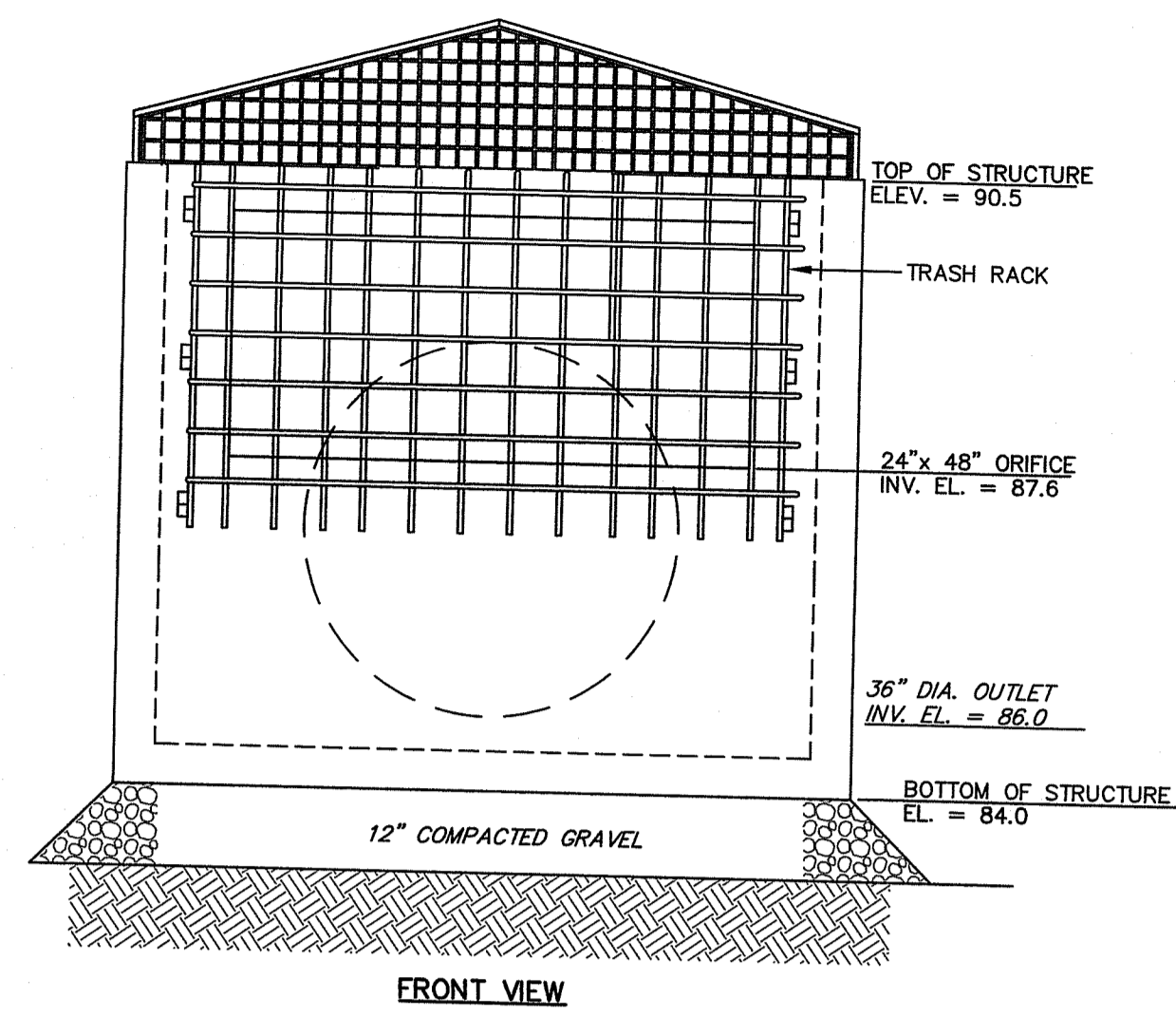
FRONT VIEW



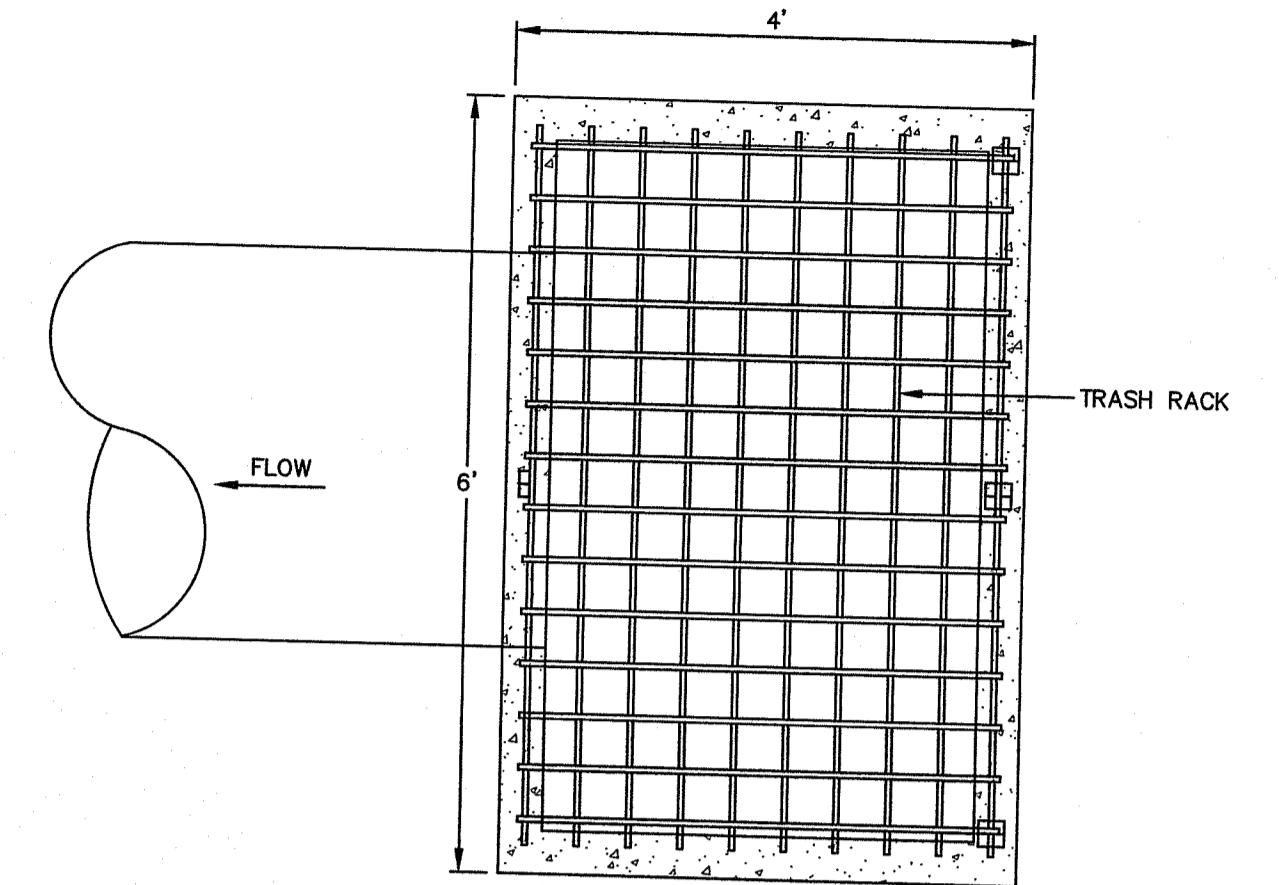
SECTION A

CONCRETE HEADWALL

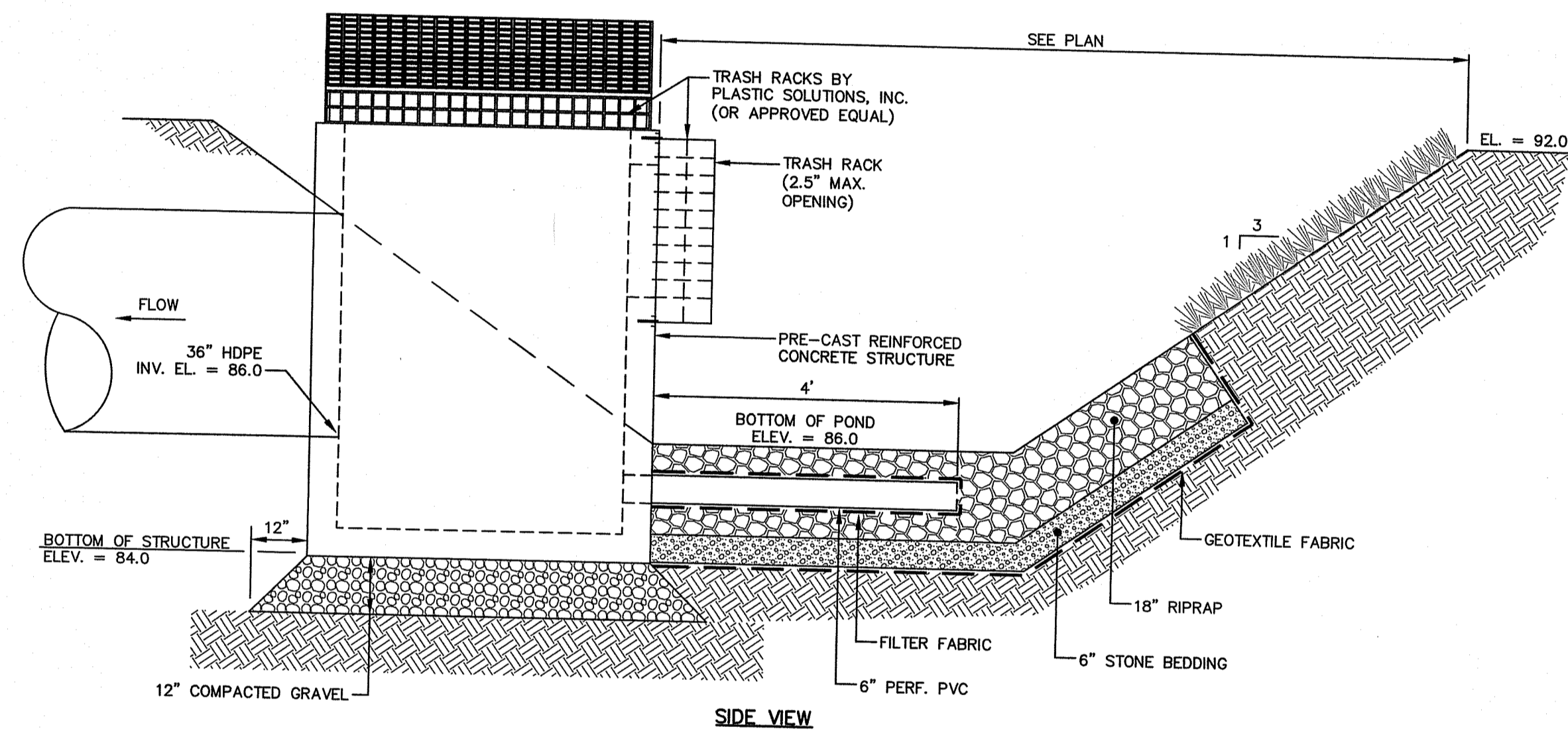
NOT TO SCALE



FRONT VIEW



TOP VIEW



SIDE VIEW

OUTLET CONTROL STRUCTURE AND SEDIMENT FOREBAY

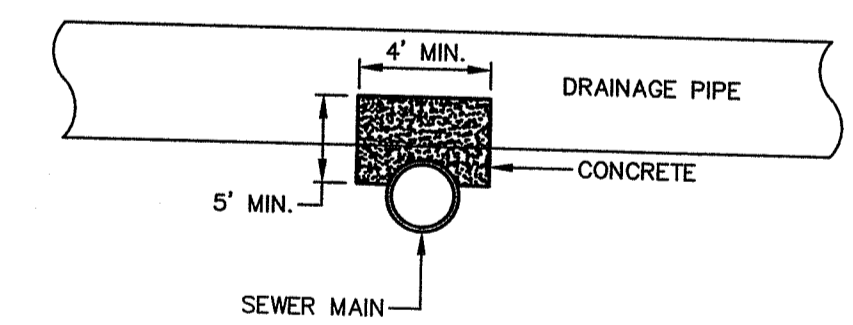
NOT TO SCALE

GENERAL NOTES:

- SHALL BE IN ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATIONS.
- SEE TABLE 1 FOR STEEL REINFORCEMENT REQUIREMENTS.
- STEEL REINFORCEMENT FOR BASE SECTION BOTTOM SHALL BE A MINIMUM OF 0.12 SQ.IN./LIN.FT. (BOTH WAYS).
- CONCRETE SHALL BE COMPRESSIVE STRENGTH 4000 PSI TYPE II CEMENT.
- OVERFLOW STRUCTURE DESIGN SHALL CONFORM TO ASTM C-478 FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS."
- PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
- ONE POUR MONOLITHIC BASE SECTION.
- SECTION JOINTS SHALL BE BUTYL RUBBER PER ASTM C-443 AND FEDERAL SPECIFICATION SS-S-210A.
- WATERTIGHT SEAL AT PIPE CONNECTIONS SHALL BE MADE WITH RUBBER MANHOLE BOOT.
- TRASH RACKS BY PLASTIC SOLUTIONS, INC. (OR APPROVED EQUAL)
- NATIONAL STONE ASSOCIATION (NSA) NO. R-4 RIPRAP AND FS-2 STONE BEDDING, AS SPECIFIED BY RIDOT M.10.03.2

OVERFLOW STRUCTURE SIZE	TABLE 1		CIRCUMFERENTIAL STEEL REINFORCEMENT REQUIRED*
	A	B	
4'-0" x 6'-0"	5"	6"	.12 SQ.IN. / LIN.FT.

\* FOR LONGITUDINAL (VERTICAL STANDING) REINFORCEMENT REFER TO ASTM C478, ITEM 8.1.2



SECTION VIEW

NOTE:

- DRAINAGE PIPE JOINTS SHALL BE INSTALLED SUCH THAT THEY ARE NOT WITHIN 3 FEET OF CONCRETE SADDLE.
- SADDLE SHALL EXTEND ALONG THE SEWER MAIN 3- FEET BEYOND THE OUTER WALLS OF THE DRAINAGE PIPES.

CONCRETE SEWER SADDLE

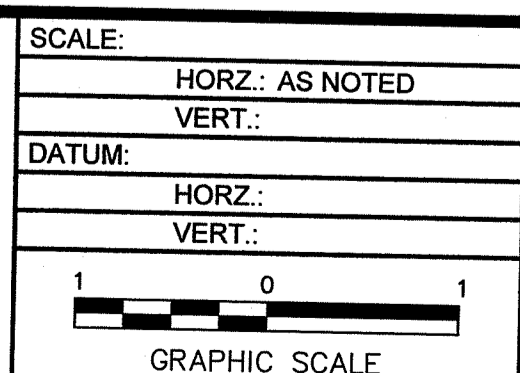
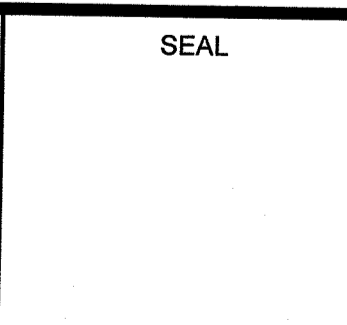
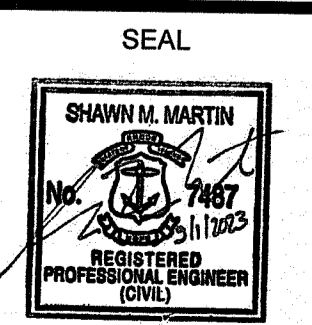
NOT TO SCALE

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM

APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED: NOV 21 2003 FILE # 23-0193  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE  
*Yvonne D. Wrensch*

File Path: J:\DWG\VP20111098D11\01\VP20111098D11.dwg Layout: CD-503 Plotter: Fri, September 01, 2003 - 10:56 AM User: cboyden  
MS VIEW: LAYER STATE: PLOTTER: AUTOCAD PDF (GENERAL DOCUMENTATION).PC3 CTB File: FO.STB

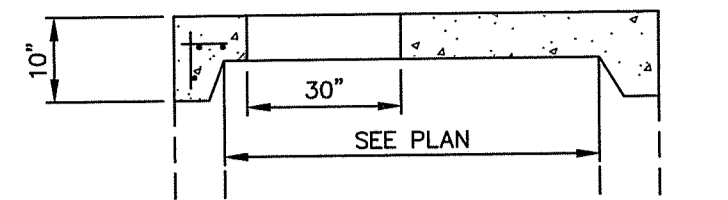
No.	DATE	DESCRIPTION	DESIGNER	REVIEWER



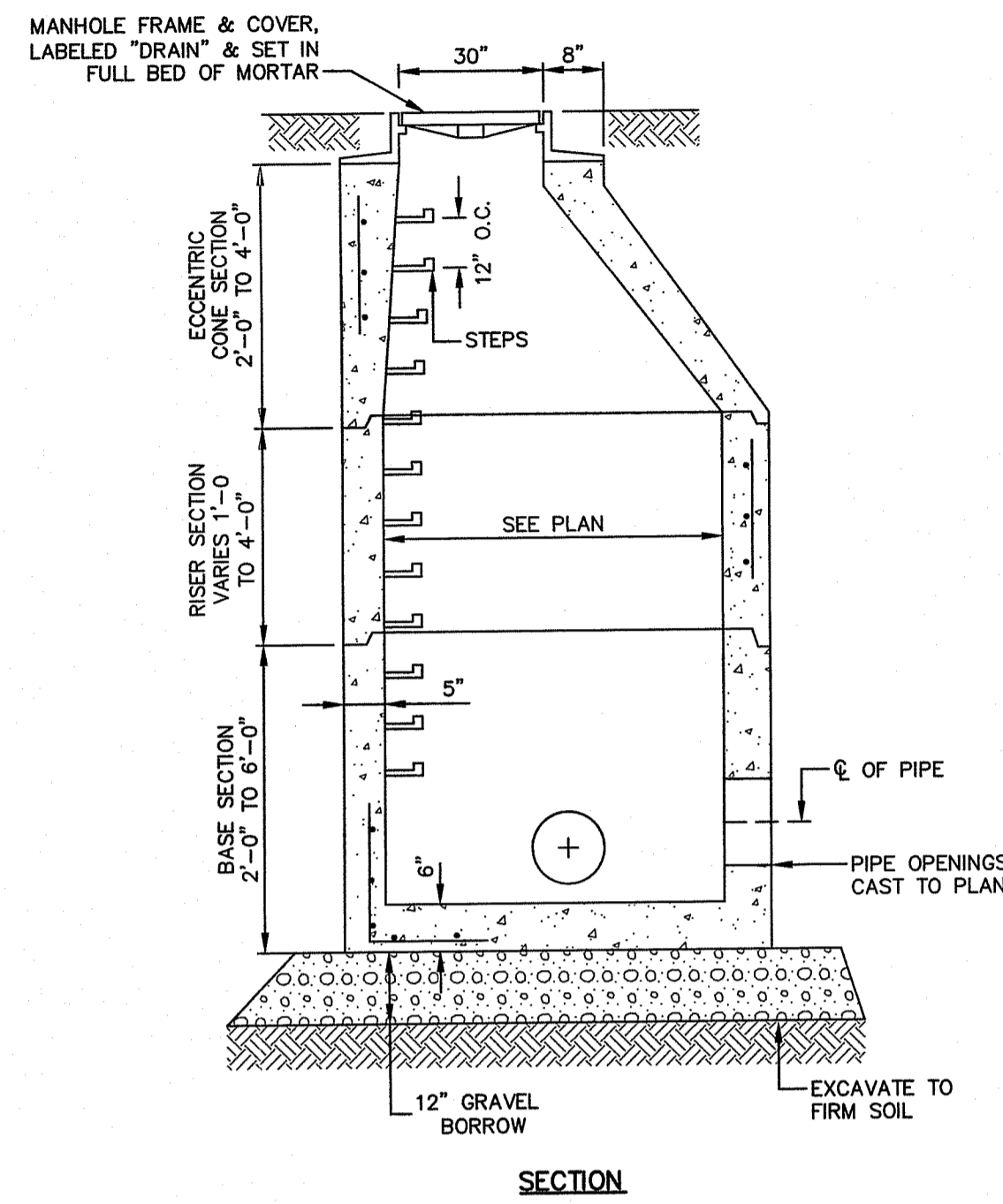
**f** **FUSS & O'NEILL**  
317 IRON HORSE WAY, SUITE 204  
PROVIDENCE, RI 02908  
401.861.3070  
www.fando.com

TOWN OF WEST WARWICK  
DETAILS  
BRAYTON STREET DRAINAGE IMPROVEMENTS  
WEST WARWICK RHODE ISLAND

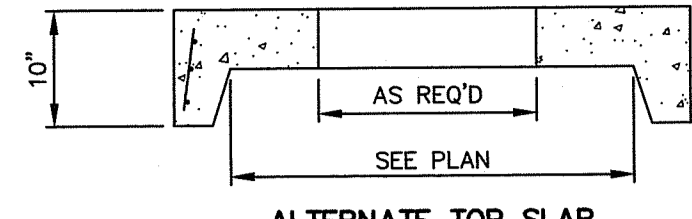
PROJ. No.: 2011098.D11  
DATE: AUGUST 2003  
**CD-503**



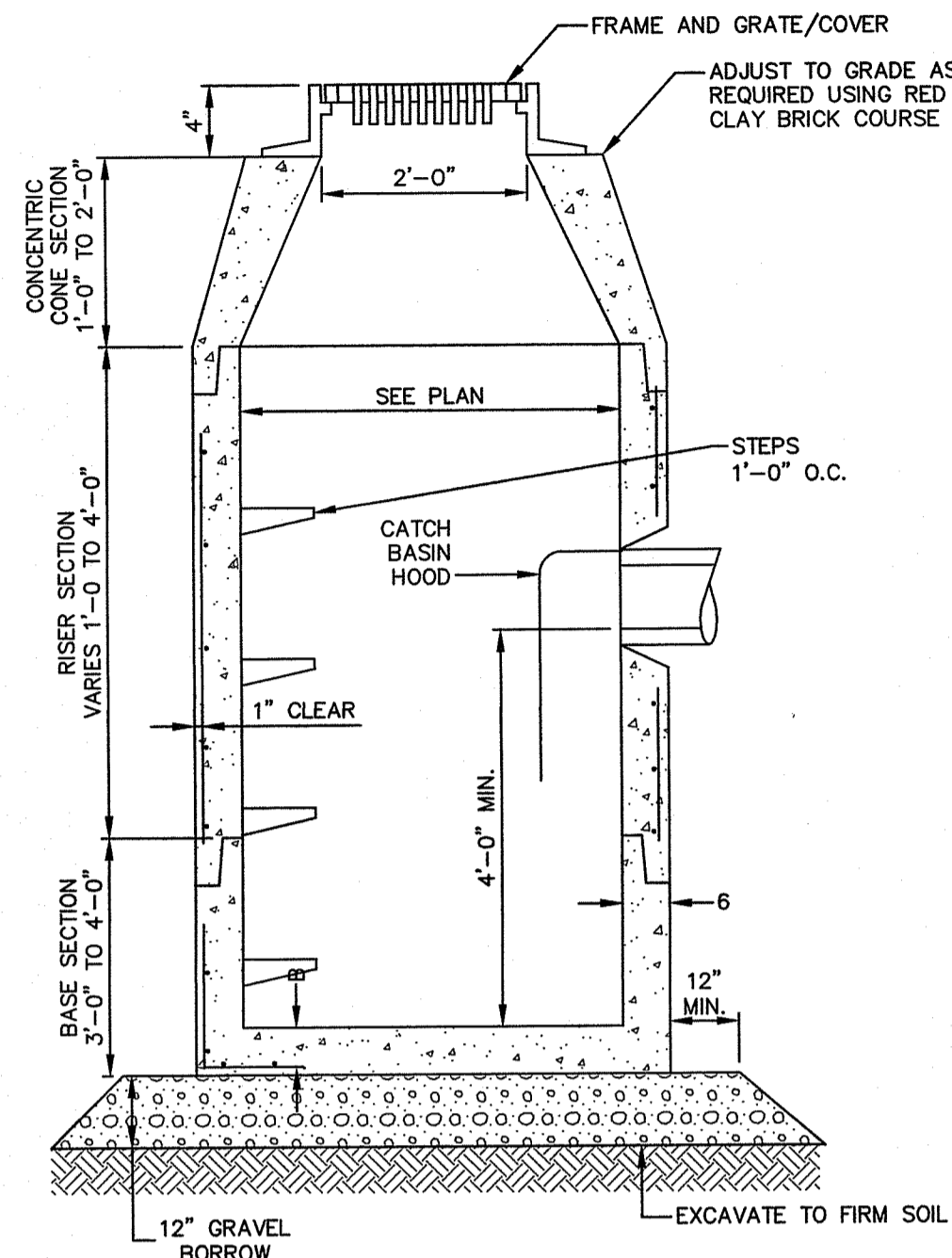
ALTERNATE TOP SLAB  
(STEEL REINFORCED FOR HS-25 LOADING)



DRAIN MANHOLE  
NOT TO SCALE



ALTERNATE TOP SLAB  
(STEEL REINFORCED FOR HS-25 LOADING)



SECTION

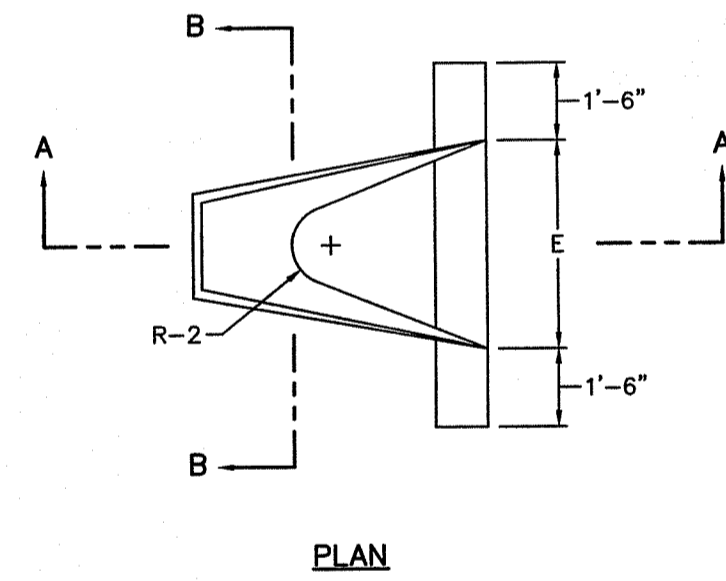
CATCH BASIN  
NOT TO SCALE

NOTES:

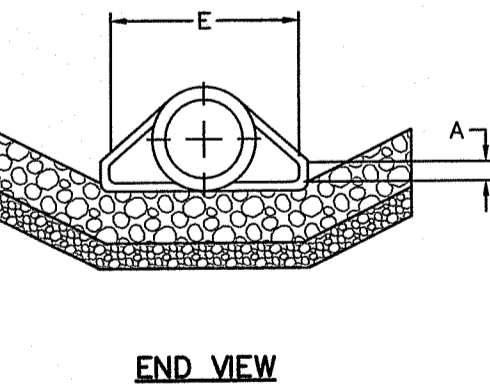
- FRAME AND GRATE SHALL BE R.I. STD. 6.3.0 OR APPROVED EQUAL.
- FRAMES SHALL BE SET IN FULL BED OF MORTAR. ADJUST TO GRADE WITH RED CLAY BRICKS AND MORTAR.
- REINFORCING STEEL SHALL CONFORM TO ASTM A-185:
  - 0.12 SQ. IN./LIN. FT. CIRCUMFERENTIAL
  - 0.18 SQ. IN./FT. (BOTH WAYS) BASE BOTTOM
- CONCRETE SHALL BE COMPRESSIVE STRENGTH 4,000 PSI TYPE II CEMENT.
- ONE POUR MONOLITHIC BASE SECTION.
- PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
- JOINT SEALANT SHALL BE PREFORMED BUTYL RUBBER MASTIC TYPE SEAL THAT COMPLIES WITH AASHTO M198 OR SYNTHETIC RUBBER GASKET THAT COMPLIES WITH ASTM C-443 OR C-361.
- CATCH BASIN DESIGN SHALL CONFORM TO ASTM C-478 FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTION."
- CATCH BASIN STEPS SHALL BE ASTM A 615/A615M, DEFORMED, 1/2-INCH STEEL REINFORCED RODS ENCASED IN ASTM D 4101, POLYPROPYLENE PLASTIC. THE CENTERLINE OF OPENING MUST BE WITHIN 2'-0" FROM STEPS.
- ANY NECESSARY ADJUSTMENTS DURING CONSTRUCTION WILL BE DONE BY SAW-CUTTING AND/OR CORING ONLY. NO JACKHAMMERS, HAMMERS AND CHISELS OR PNEUMATIC TOOLS WILL BE ALLOWED.
- INVERT CONSTRUCTED OF BRICK OR CEMENT CONCRETE, CLASS D.

NOTES:

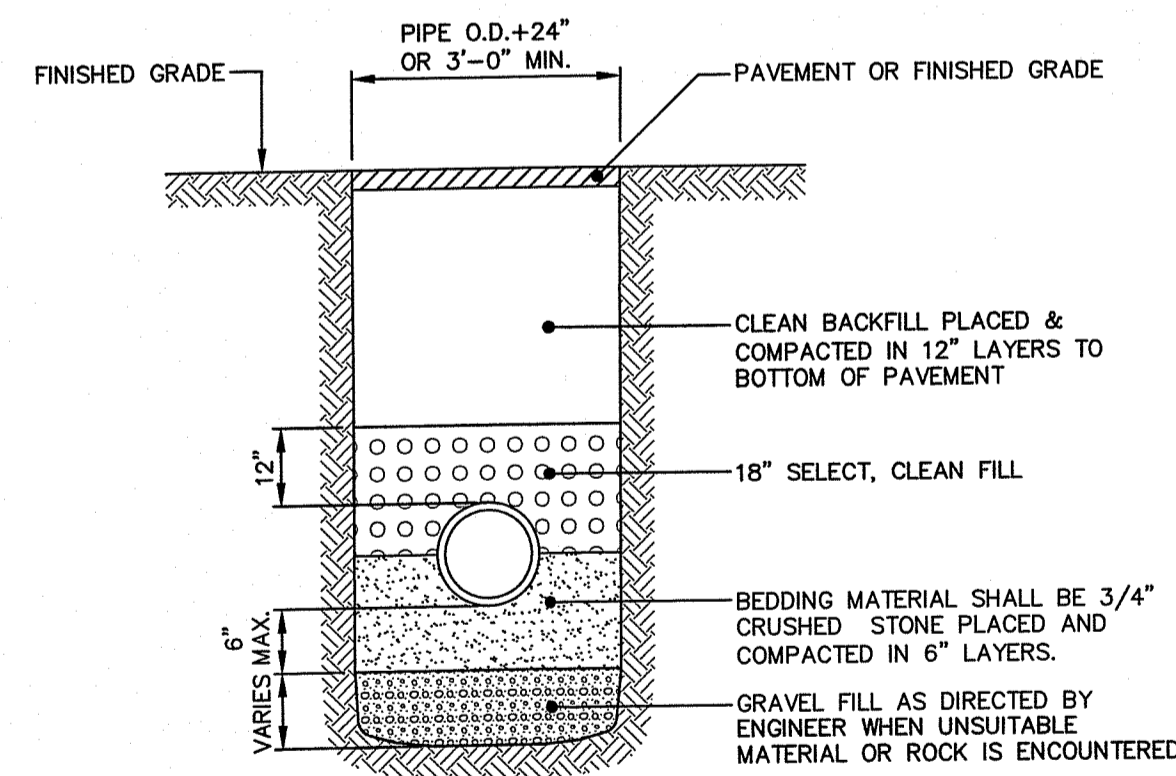
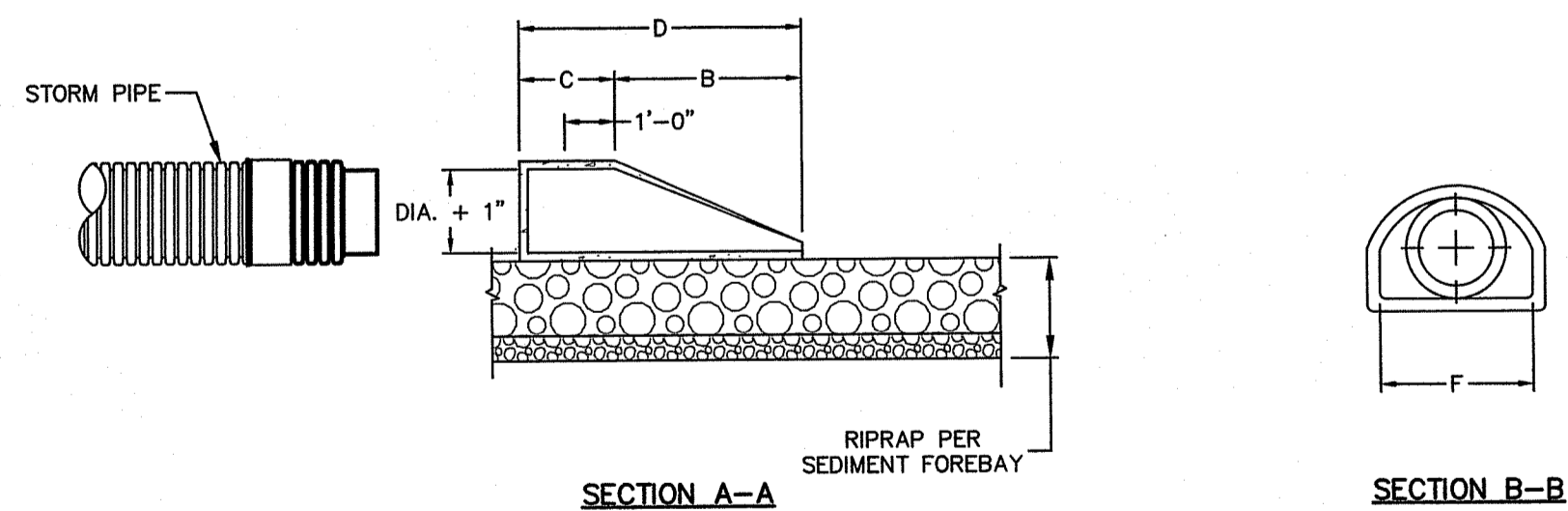
- FRAME AND COVER TO BE R.I. STD. 6.2.1 OR APPROVED EQUAL. LETTERING: "DRAIN"
- FRAMES SHALL BE SET IN FULL BED OF MORTAR. ADJUST TO GRADE WITH RED CLAY BRICKS AND MORTAR.
- REINFORCING STEEL SHALL CONFORM TO ASTM A-185:
  - 0.12 SQ. IN./LIN. FT. CIRCUMFERENTIAL
  - 0.18 SQ. IN./FT. (BOTH WAYS) BASE BOTTOM
- CONCRETE SHALL BE COMPRESSIVE STRENGTH 4,000 PSI TYPE II CEMENT.
- ONE POUR MONOLITHIC BASE SECTION.
- PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
- JOINT SEALANT SHALL BE PREFORMED BUTYL RUBBER MASTIC TYPE SEAL THAT COMPLIES WITH AASHTO M198 OR SYNTHETIC RUBBER GASKET THAT COMPLIES WITH ASTM C-443 OR C-361.
- MANHOLE DESIGN SHALL CONFORM TO ASTM C-478 FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS."
- MANHOLE STEPS SHALL BE ASTM A 615/A615M, DEFORMED, 1/2-INCH STEEL REINFORCED RODS ENCASED IN ASTM D 4101, POLYPROPYLENE PLASTIC. THE CENTERLINE OF OPENING MUST BE WITHIN 2'-0" FROM STEPS.
- ANY NECESSARY ADJUSTMENTS DURING CONSTRUCTION WILL BE DONE BY SAW-CUTTING AND/OR CORING ONLY. NO JACKHAMMERS, HAMMERS AND CHISELS OR PNEUMATIC TOOLS WILL BE ALLOWED.
- INVERT CONSTRUCTED OF BRICK OR CEMENT CONCRETE, CLASS D.



DIMENSIONS						
DIA.	A	B	C	D	E	F
24"	9 1/2"	3'-7 1/2"	2'-6"	6'-1 1/2"	4'-0"	2'-9 3/16"



HDPE FLARED END  
NOT TO SCALE



TYPICAL STORM DRAIN TRENCH DETAIL  
(FOR RCP AND HDPE PIPE)  
NOT TO SCALE

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS AS  
SPECIFIED IN THE LETTER OF APPROVAL  
DATED: 08/17/2023 FILE # 23-0193  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

*Matt A. Sencel*

File Path: I:\DWG\2011\08\01\1088D11\_DET01.dwg Layout: CD-504 User: cboyden  
Plotter: AUTOCAD PDF (GENERAL DOCUMENTATION).PC3 CTB File: FO.STB  
LAYER STATE:

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER
1.				

SEAL

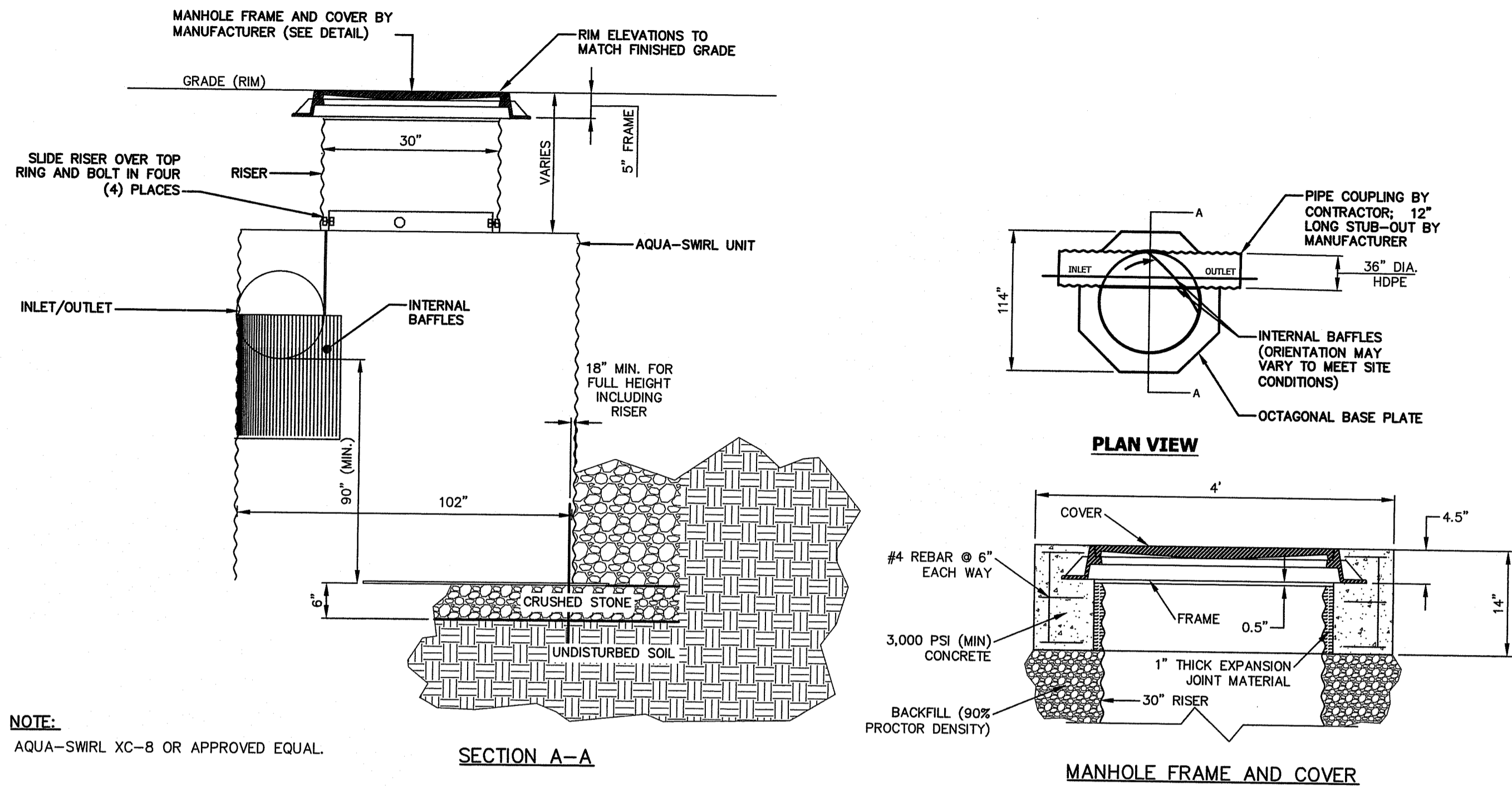
SEAL

SCALE:  
HORZ.: AS NOTED  
VERT.:  
DATUM:  
HORZ.:  
VERT.:  
GRAPHIC SCALE

**FUSS & O'NEILL**  
317 IRON HORSE WAY, SUITE 204  
PROVIDENCE, RI 02908  
401.861.3070  
www.fando.com

TOWN OF WEST WARWICK  
DETAILS  
BRAYTON STREET DRAINAGE IMPROVEMENTS  
WEST WARWICK RHODE ISLAND

PROJ. No.: 20111088.D11  
DATE: AUGUST 2023  
**CD-504**



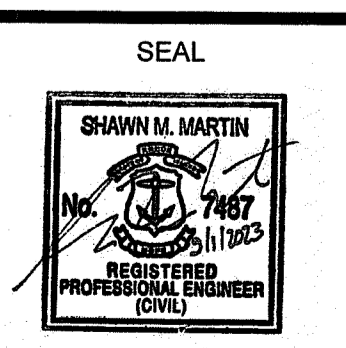
**HYDRODYNAMIC SEPARATOR**  
NOT TO SCALE

Environmental Management  
SEP 07 2023  
Office of Water Resources

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS AS  
SPECIFIED IN THE LETTER OF APPROVAL  
DATED: NOV 27 2023 FILE #: 23-0193  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

File Path: J:\DWG\2021\11098D11\11098D11.dwg Layer State: LAYER STATE: User: cboyden

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER



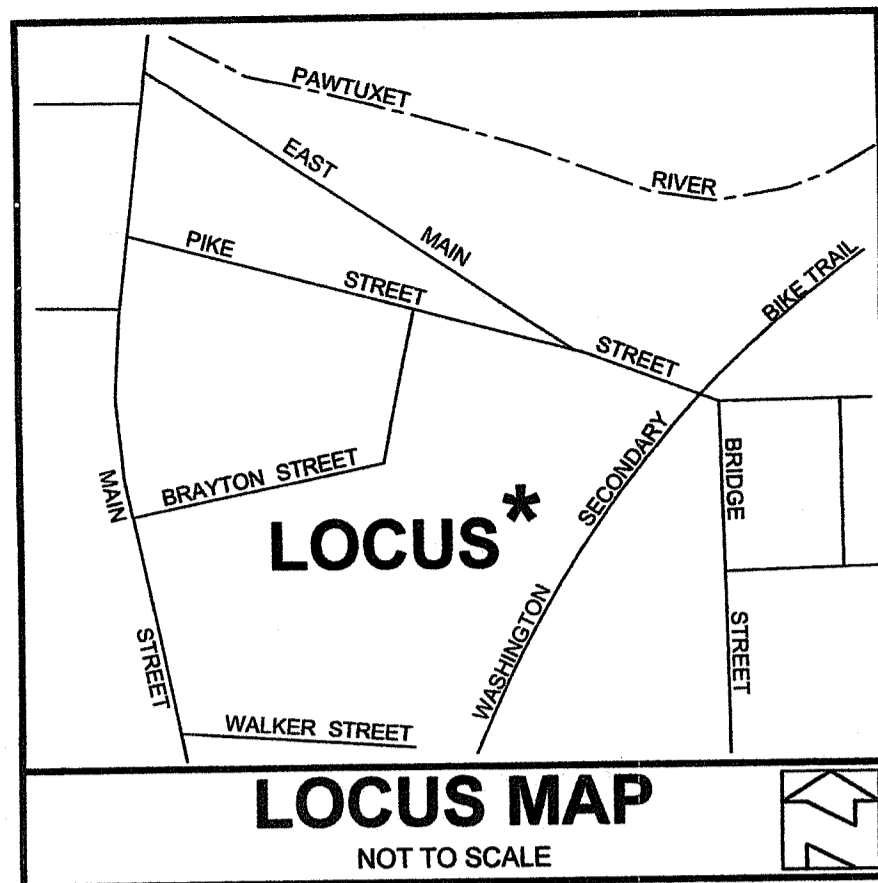
SEAL	SEAL	

SCALE:  
HORZ.: AS NOTED  
VERT.:  
DATUM:  
HORZ.:  
VERT.:  
GRAPHIC SCALE

**FUSS & O'NEILL**  
317 IRON HORSE WAY, SUITE 204  
PROVIDENCE, RI 02908  
401.861.3070  
www.fando.com

TOWN OF WEST WARWICK  
DETAILS  
BRAYTON STREET DRAINAGE IMPROVEMENTS  
WEST WARWICK RHODE ISLAND

PROJ. No.: 20111098.D11  
DATE: AUGUST 2023  
**CD-505**



**LEGEND**  
NOT TO SCALE

---	BOUNDARY
- - -	ABUTTER
○ ○ ○ ○ ○	STONEWALL
~ ~ ~	TREELINE
△	WETLANDS EDGE
---	50' PERIMETER WETLAND
---	100' RIVERBANK WETLAND
---	200' RIVERBANK WETLAND
---	BUILDING ENVELOPE
G	GAS LINE
D	DRAINAGE LINE
S	SEWER LINE
W	WATER LINE
OHW	ELECTRIC LINE
○	IRON PIN
○	BOUND
○	DRILL HOLE
○	UTILITY POLE
○	WATER VALVE
○	GAS VALVE
○	HYDRANT

**ZONING CRITERIA**

ZONING DISTRICT	C1
MINIMUM LOT AREA	40,000 SQ. FT.
MINIMUM LOT FRONTAGE	200'
MINIMUM FRONT YARD SETBACK	50'
MINIMUM SIDE YARD SETBACK	20'
MINIMUM REAR YARD SETBACK	50'
MAXIMUM BUILDING COVERAGE	30%
MAXIMUM BUILDING HEIGHT	90'

NO.	DATE	DESCRIPTION	BY

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS AS  
SPECIFIED IN THE LETTER OF APPROVAL  
DATED: NOV 27 2020 FILE #: 23-0193  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

*Martin D. Therien*



**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

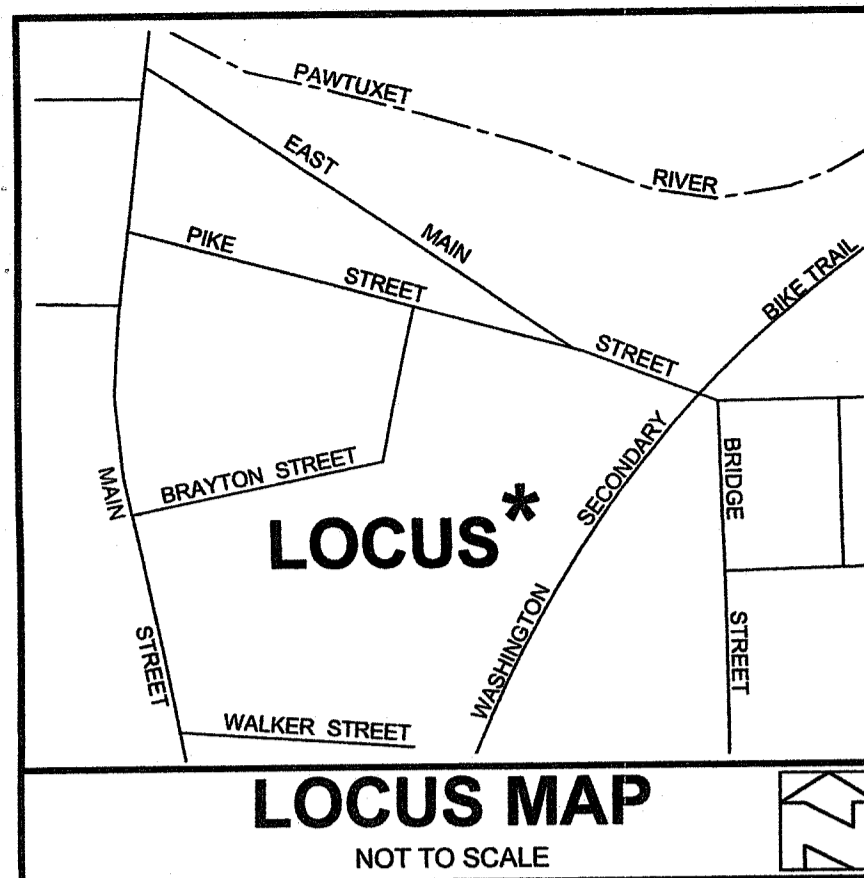
**LOCUS MAP**  
NOT TO SCALE



1-888-DIG-SAFE  
PROTECT YOURSELF, GIVE TWO  
WORKING DAYS NOTICE

**LOCUS MAP**  
NOT TO SCALE





ZONING CRITERIA	
ZONING DISTRICT	C1
MINIMUM LOT AREA	40,000 SQ. FT.
MINIMUM LOT FRONTAGE	200'
MINIMUM FRONT YARD SETBACK	50'
MINIMUM SIDE YARD SETBACK	20'
MINIMUM REAR YARD SETBACK	50'
MAXIMUM BUILDING COVERAGE	30%
MAXIMUM BUILDING HEIGHT	90'



**GENERAL NOTES:**

1. THE LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE LATEST AVAILABLE INFORMATION. THE UTILITY LOCATIONS ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. THE CONTRACTOR SHALL CHECK AND VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, BOTH OVERHEAD AND UNDERGROUND, AND "DIG-SAFE" MUST BE NOTIFIED PRIOR TO COMMENCING ANY CONSTRUCTION OPERATIONS. RESTORATION AND REPAIR OF DAMAGED TO EXISTING UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WITH NO ADDITIONAL COST TO THE OWNER. NO EXCAVATION SHALL COMMENCE UNTIL ALL INVOLVED UTILITY COMPANIES AND/OR TOWN WHOSE FACILITIES MIGHT BE AFFECTED BY ANY WORK TO BE PERFORMED BY THE CONTRACTOR ARE NOTIFIED AT LEAST 72 HOURS IN ADVANCE.

2. THIS SITE LIES WITHIN ZONE AE AND X AREAS AS SHOWN ON THE FIRM MAP FOR THE TOWN OF WEST WARWICK, RHODE ISLAND COMMUNITY PANEL NO.44003C0109H, MAP DATED OCTOBER 02, 2015.

3. WETLANDS SHOWN HEREIN WERE DELINEATED BY NATURAL RESOURCE SERVICES INC. PO BOX 311 HARRISVILLE RHODE ISLAND 02830 ON FEBRUARY 2020.

4. THERE ARE NO KNOWN EASEMENTS OR RIGHTS OF WAY WITHIN OR ADJACENT TO THIS PARCEL UNLESS OTHERWISE SHOWN.

5. HORIZONTAL DATUM IS BASED ON RHODE ISLAND STATE PLANE COORDINATES NAD 83 DATUM AND CONTOURS BASED ON NAVD 85 DATUM

6. THERE ARE NO KNOWN HISTORIC CEMETERIES WITHIN OR IMMEDIATELY ADJACENT TO THIS PARCEL UNLESS OTHERWISE SHOWN.

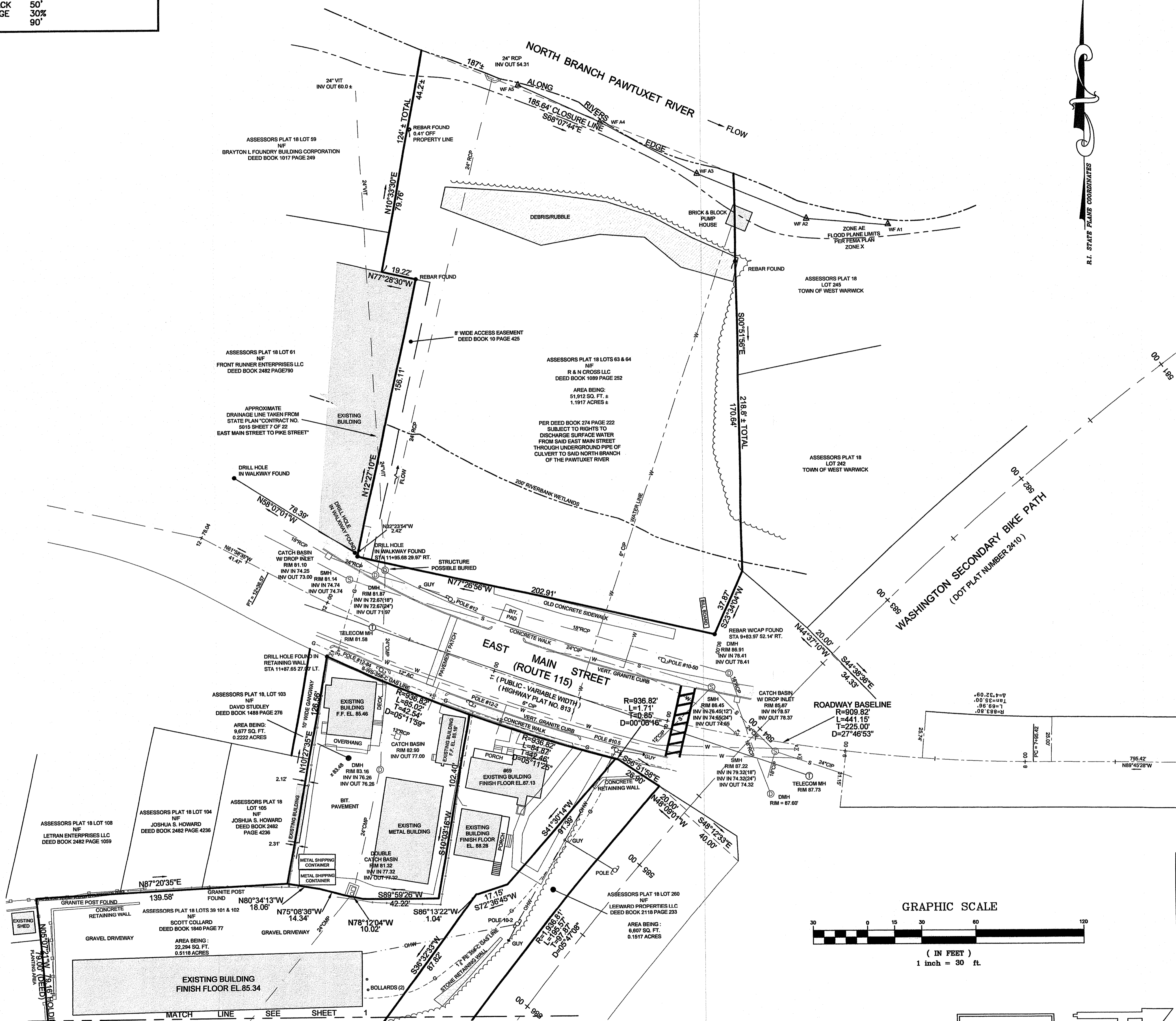
**REFERENCES:**

1. PLAN ENTITLED: "PROPOSED BUILDING PLAN PREPARED FOR PATRIOT OIL COMPANY LOCATION 63 EAST MAIN STREET WEST WARWICK RHODE ISLAND SHEET 2 OF 2 SCALE 1"=10' DATED SEPTEMBER 29, 2015 REVISED AUGUST 07, 2016" BY BOYER ASSOCIATES

2. PLAN ENTITLED: "ADMINISTRATIVE SUBDIVISION PORTUGUESE-AMERICAN CITIZENS CLUB OF WEST WARWICK SCALE 1"=20' DATED JANUARY 23, 2006" BY BOYER ASSOCIATES

3. PLAN ENTITLED: "WASHINGTON SECONDARY RAILROAD RIGHT-OF-WAY CRANSTON, WARWICK AND WEST WARWICK RHODE ISLAND CONTRACT 3 SCALE 1"=100' SHEETS 16 & 17 OF 19 DATED 2001 RHODE ISLAND DEPARTMENT OF TRANSPORTATION PLAT NO. 2410" BY PARR ENGINEERING

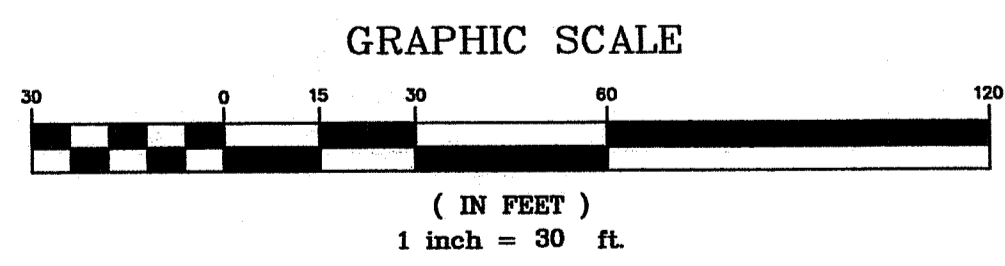
4. STATE HIGHWAY PLAT NUMBER 813. (EAST MAIN STREET)(ROUTE 115)



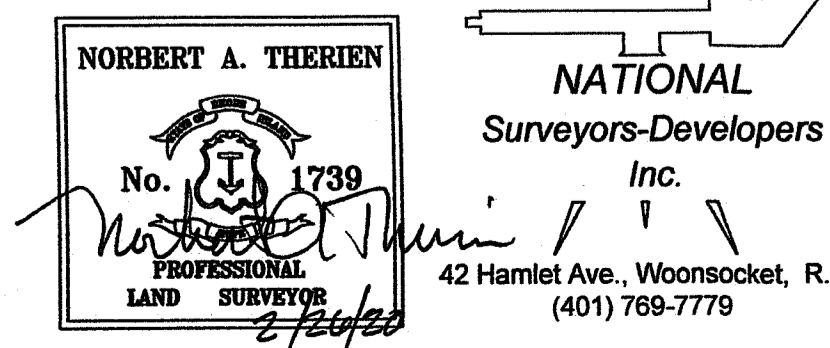
NO.	DATE	DESCRIPTION	BY

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS AS  
 SPECIFIED IN THE LETTER OF APPROVAL  
 DATED: NOV 27 2023 FILE #: 23-0193  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL!  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE  
*Martin D. Wenczek*

LEGEND	
	BOUNDARY
	ABUTTER
	STONEWALL
	TREELINE
	WETLANDS EDGE
	50' PERIMETER WETLAND
	100' RIVERBANK WETLAND
	200' RIVERBANK WETLAND
	BUILDING ENVELOPE
	GAS LINE
	DRAINAGE LINE
	SEWER LINE
	WATER LINE
	ELECTRIC LINE
	IRON PIN
	BOUND
	DRILL HOLE
	UTILITY POLE
	WATER VALVE
	GAS VALVE
	HYDRANT



THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO SECTION 9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATIONS FOR PROFESSIONAL LAND SURVEYORS NOVEMBER 25, 2015 AS FOLLOWS:  
 TYPE OF SURVEY: COMPREHENSIVE BOUNDARY SURVEY  
 MEASUREMENT SPECIFICATION: CLASS 1 STANDARD  
 PURPOSE OF SURVEY: BOUNDARY SURVEY  
 BY: *Norbert A. Therien* DATE: 2/26/20  
 NORBERT A. THERIEN, PLS NO. 1739



**R & N CROSS LLC**  
**ASSESSORS PLAT 18 LOTS 63 & 64**  
**LEEWARD PROPERTIES LLC**  
**ASSESSORS PLAT 18 LOT 260**  
**SCOTT COLLARD**  
**ASSESSORS PLAT 18 LOTS 39 101 & 102**  
**DAVID STUDLEY**  
**ASSESSORS PLAT 18, LOT 103**  
**EAST MAIN STREET**  
**WEST WARWICK, RHODE ISLAND**  
**BOUNDARY SURVEY & EXISTING CONDITIONS PLAN**

DRAWN BY: W.C.R.	CHECKED BY: N.A.T.	FIELD BY: R.W.,J.S.
FEBRUARY 2020	JOB No. 2020-1	SHEET 2 OF 2