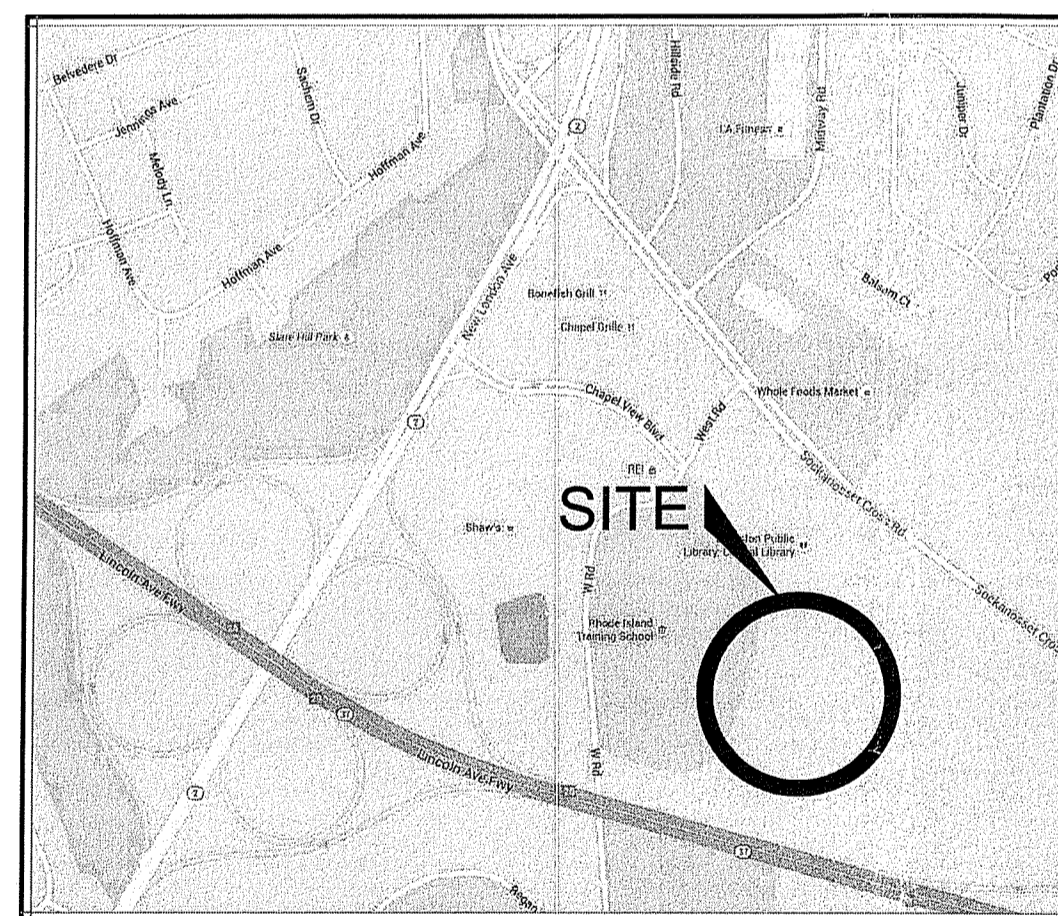


RIDEM SUBMISSION

# MIXED USE DEVELOPMENT AT 100 SOCKANOSSET

# 2019 REDEVELOPMENT SITE PLANS

A.P. 14, LOT 2 & A PORTION OF LOT 15  
100 SOCKANOSSET CROSS ROAD  
CRANSTON, R.I.

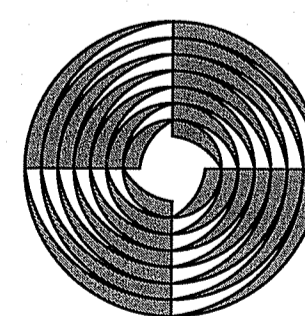


LOCUS MAP  
NOT TO SCALE

PREPARED FOR:

**100 SOCKANOSSET LLC.**  
1414 ATWOOD AVE  
JOHNSTON, R.I.

PREPARED BY:



**GAROFALO**  
GAROFALO & ASSOCIATES, INC.  
CIVIL & STRUCTURAL ENGINEERS \ SURVEYORS  
LAND PLANNERS \ ENVIRONMENTAL SCIENTISTS  
85 CORLISS STREET  
P.O. BOX 6145  
PROVIDENCE, RI 02940  
(PH) 401-273-6000 (FX) 401-273-1000

DATED:

**AUGUST, 2019**  
(REVISED 03/31/2023)

**PLAN SHEET LEGEND**

SHEET	PLAN TITLE	LATEST REVISION
-	COVER SHEET	-
C-1	GENERAL NOTES & LEGEND	-
C-2	DEMOLITION PLAN	09/15/2022
C-3	SITE PLAN	09/15/2022
C-4	GRADING AND DRAINAGE PLAN	03/31/2023
C-4.1	ENLARGED PLAN	12/10/2019
C-5	UTILITY PLAN	12/10/2019
C-6	SOIL EROSION AND SEDIMENT CONTROL PLAN	12/10/2019
C-7.1	CONSTRUCTION DETAILS	-
C-7.2	CONSTRUCTION DETAILS	-
C-7.3	CONSTRUCTION DETAILS	12/10/2019
C-7.4	CONSTRUCTION DETAILS	03/31/2023
C-7.5	CONSTRUCTION DETAILS	12/10/2019

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS AS  
SPECIFIED IN THE LETTER OF APPROVAL  
DATED: AUG 10 2019 FILE # 19-0256  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

RI Environmental Management  
APR 20 2023  
Office of Water Resources

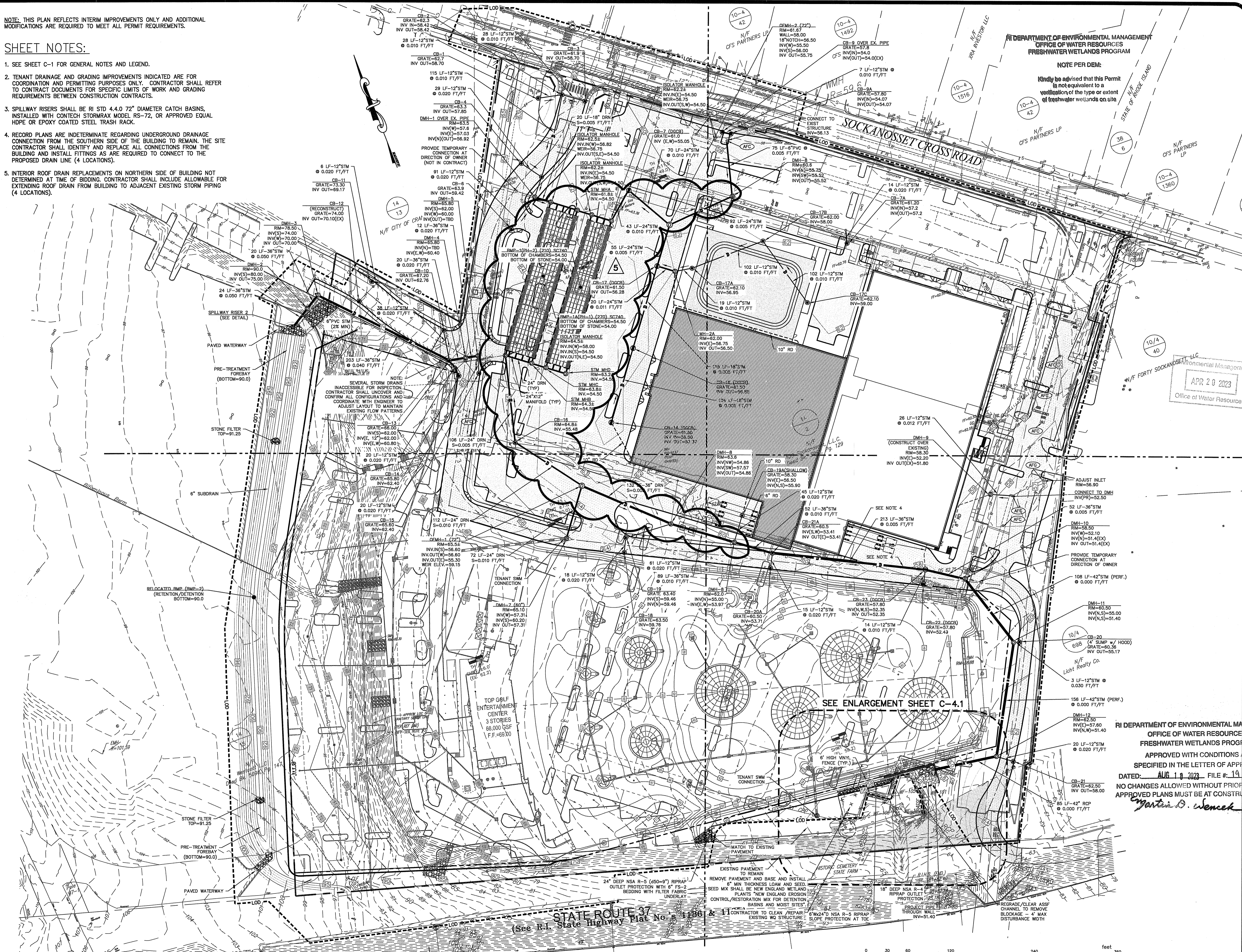
GAROFALO S. NEMENWAY  
REGISTERED PROFESSIONAL ENGINEER  
09-31-23

NOTE: THIS PLAN REFLECTS INTERIM IMPROVEMENTS ONLY AND ADDITIONAL MODIFICATIONS ARE REQUIRED TO MEET ALL PERMIT REQUIREMENTS.

**SHEET NOTES:**

- SEE SHEET C-1 FOR GENERAL NOTES AND LEGEND.
- TENANT DRAINAGE AND GRADING IMPROVEMENTS INDICATED ARE FOR COORDINATION AND PERMITTING PURPOSES ONLY. CONTRACTOR SHALL REFER TO CONTRACT DOCUMENTS FOR SPECIFIC LIMITS OF WORK AND GRADING REQUIREMENTS BETWEEN CONSTRUCTION CONTRACTS.
- SPILLWAY RISERS SHALL BE RI STD 4.4.0 72" DIAMETER CATCH BASINS, INSTALLED WITH CONTECH STORMTRAK MODEL RS-72, OR APPROVED EQUAL HDPE OR EPOXY COATED STEEL TRASH RACK.
- RECORD PLANS ARE INDETERMINATE REGARDING UNDERGROUND DRAINAGE CONNECTION FROM THE SOUTHERN SIDE OF THE BUILDING TO REMAIN. THE SITE CONTRACTOR SHALL IDENTIFY AND REPLACE ALL CONNECTIONS FROM THE BUILDING AND INSTALL FITTINGS AS ARE REQUIRED TO CONNECT TO THE PROPOSED DRAIN LINE (4 LOCATIONS).
- INTERIOR ROOF DRAIN REPLACEMENTS ON NORTHERN SIDE OF BUILDING NOT DETERMINED AT TIME OF BIDDING. CONTRACTOR SHALL INCLUDE ALLOWABLE FOR EXTENDING ROOF DRAIN FROM BUILDING TO ADJACENT EXISTING STORM PIPING (4 LOCATIONS).

LV:5471-05 Revised Office and Top Golf - 100 Sockanosset Crossroad (Cranston), RI 02904 - 05-grading and drainage-55.dwg 04/03/2023 retrevs 11:28



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.

APR 20 2023  
Office of Water Resources

**DRAINAGE PLAN**  
FOR  
**100 SOCKANOSSET**  
**2019 REDEVELOPMENT**  
SITUATED AT  
**100 SOCKANOSSET CROSS ROAD**  
**CRANSTON, RI**  
PREPARED FOR  
**100 SOCKANOSSET LLC**

NO.	REVISION	BY	DATE
1.	PER FINAL SPR	KYY	02/28/20
2.	PER CLIENT	KYY	02/07/22
3A	DRAFT/EARLY WORK DWGS.	KYY	05/11/2022
5B	BMP REVISIONS	RAS	03/31/2023

**ISSUED FOR CONSTRUCTION**  
05-20-2022

**GAROFALO**  
GAROFALO & ASSOCIATES, INC.  
CIVIL & STRUCTURAL ENGINEERS/SURVEYORS  
LAND PLANNERS/ENVIRONMENTAL SCIENTISTS

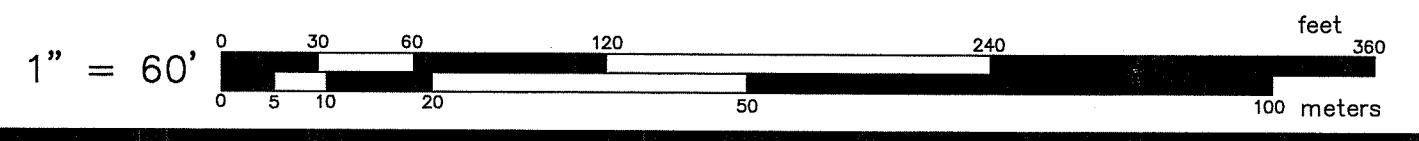
85 CORLISS STREET  
P.O. BOX 6145  
PROVIDENCE, R.I. 02940  
TEL: 401-273-6000

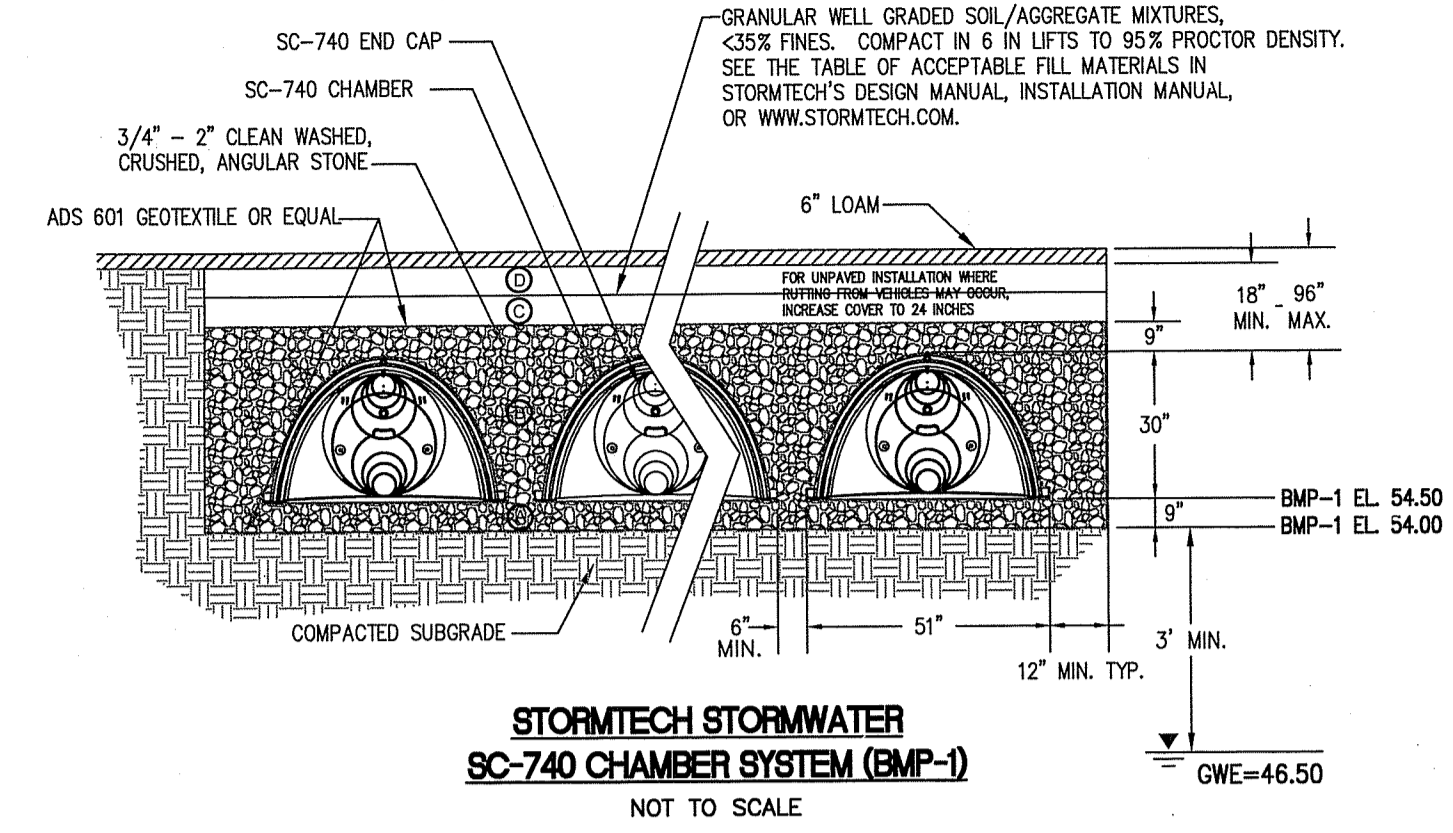
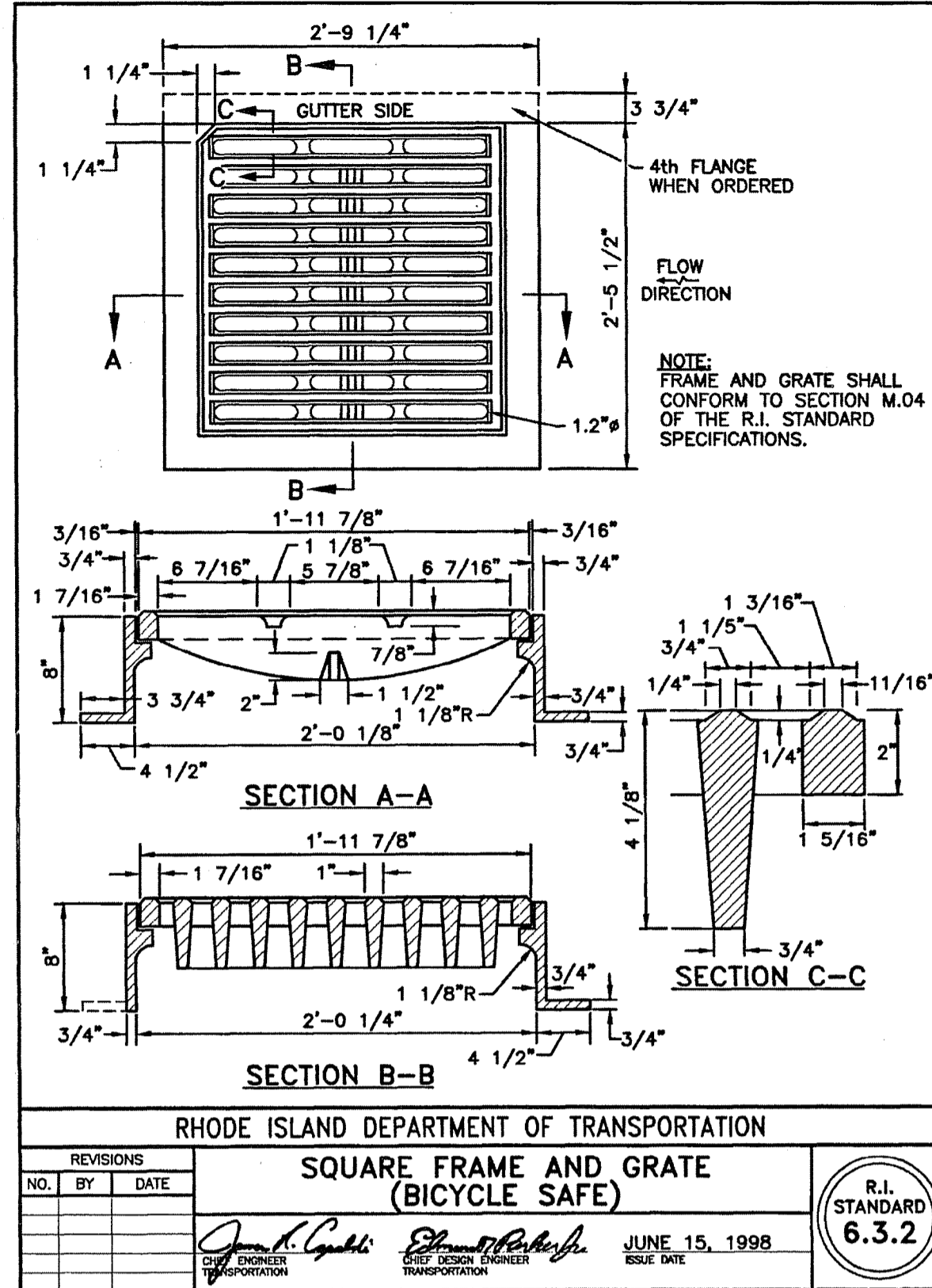
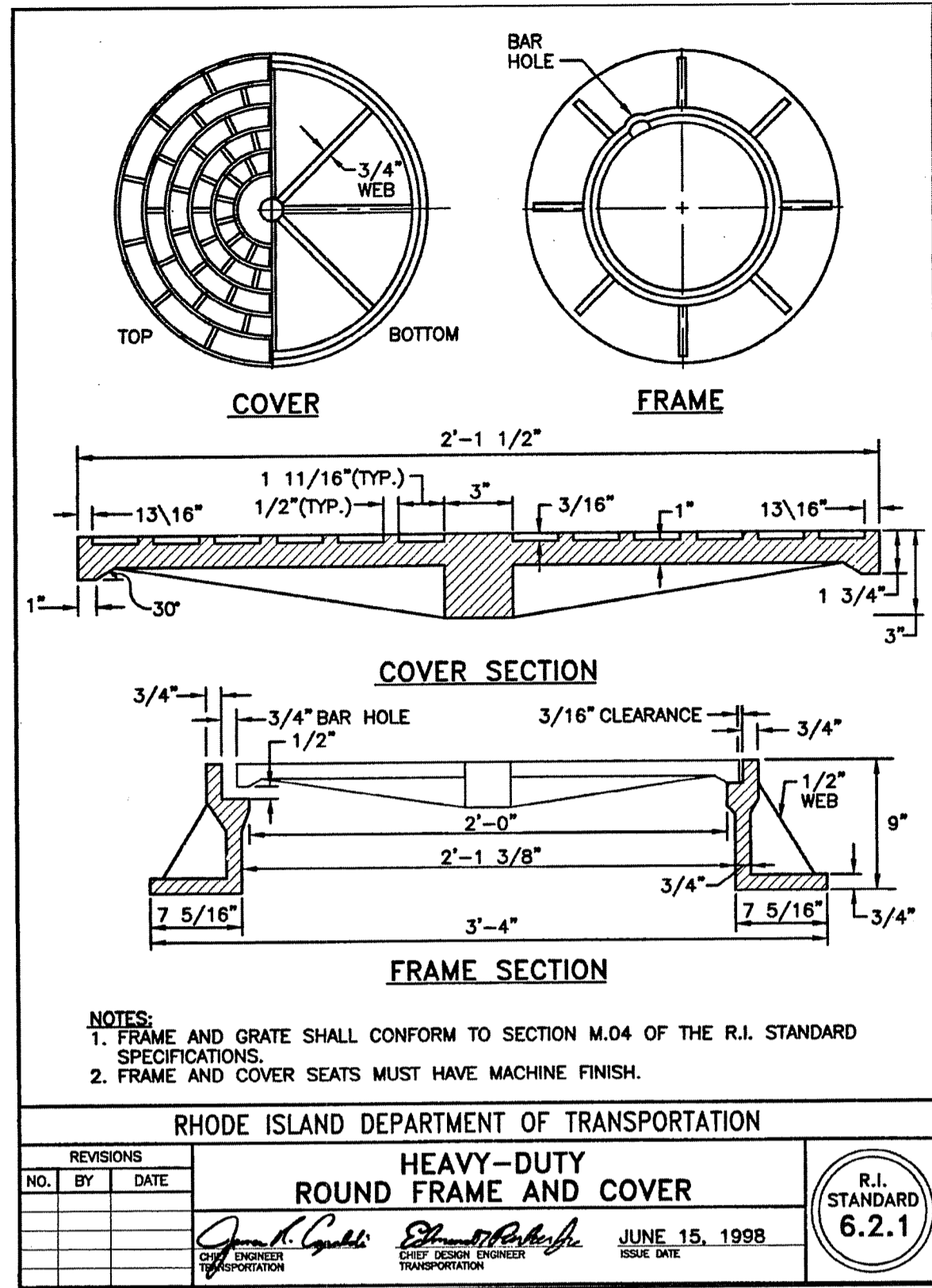
RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED: **AUG 19 2023** FILE # **19-02358**  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

*Martin D. Wenczek*

JOB NO. 5471-05	DRAWN BY R.A.S.
DWG. NO. 5471-05-G&D	CHECK BY S.S.H.
SCALE: AS SHOWN	APPROVED S.B.G.
	DATE: FEBRUARY 28, 2020

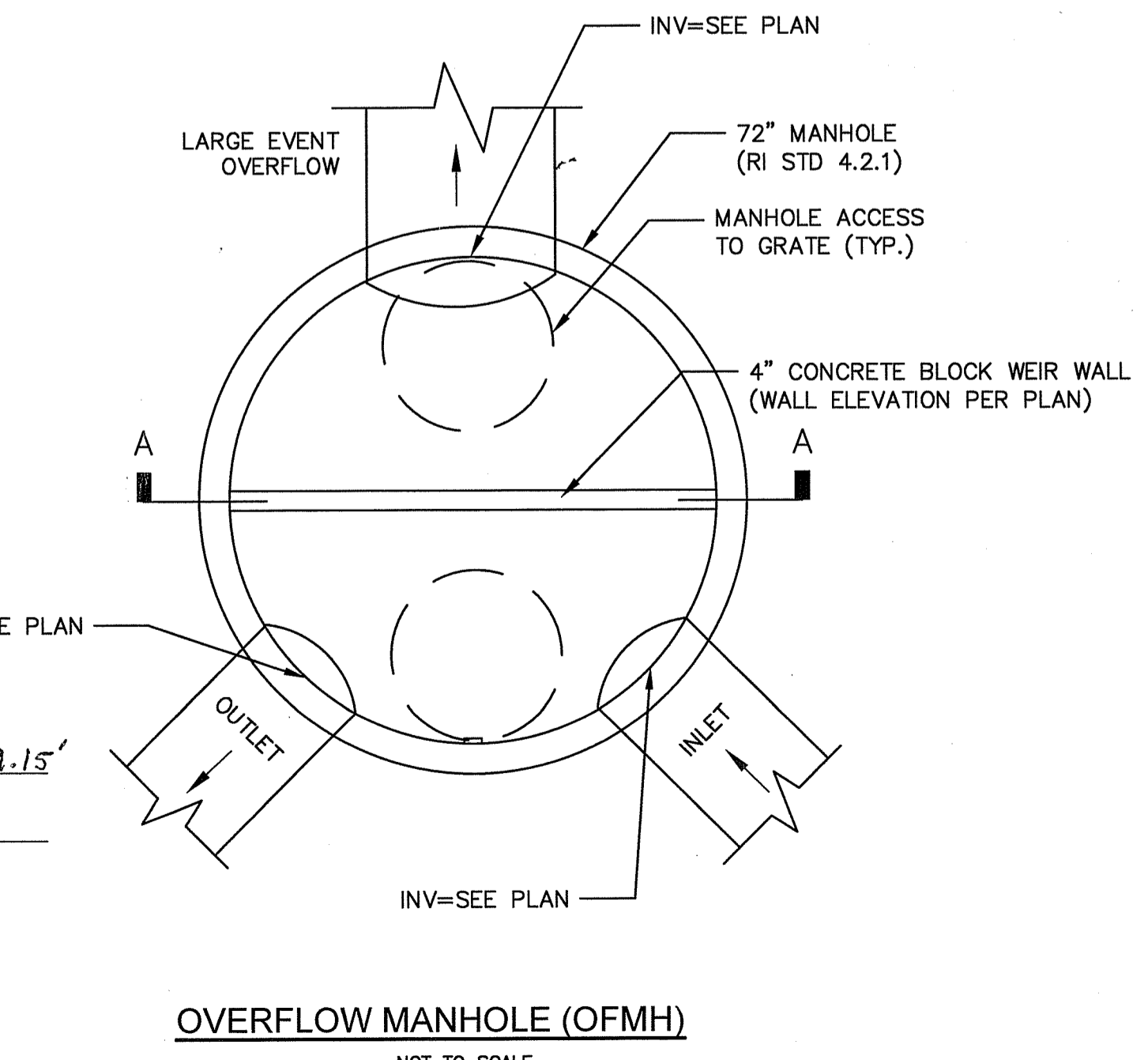
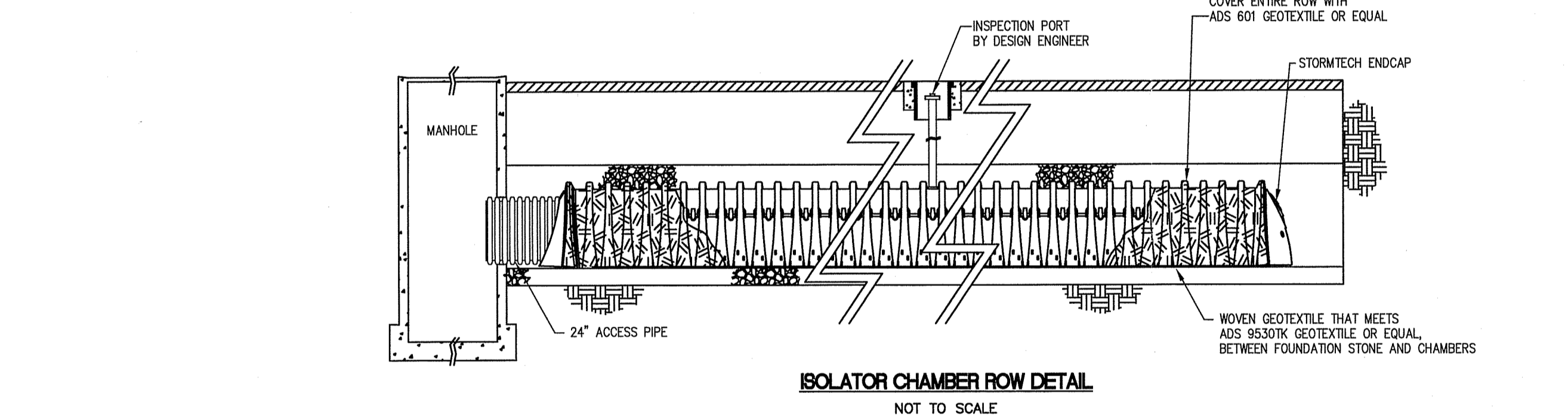
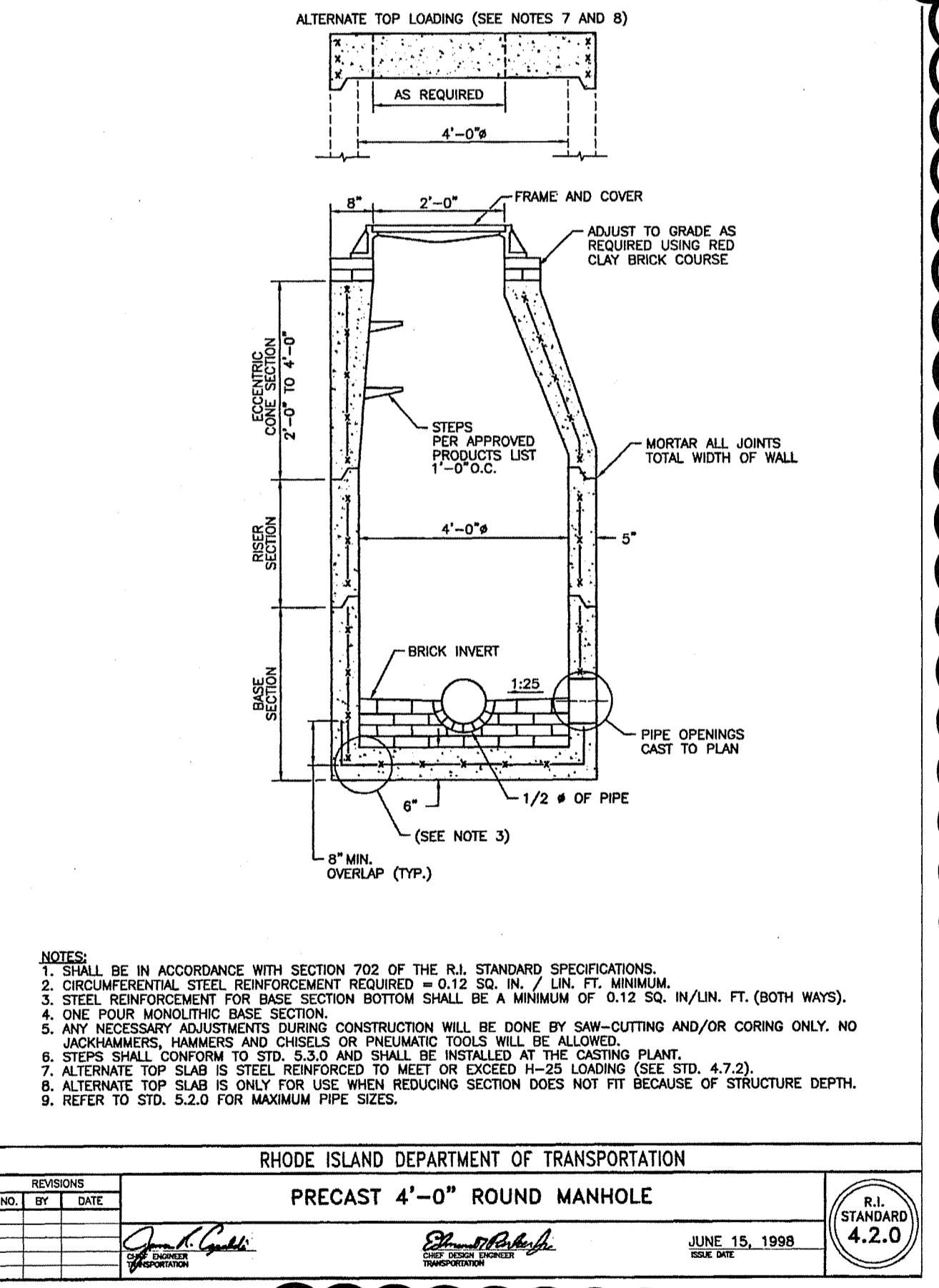
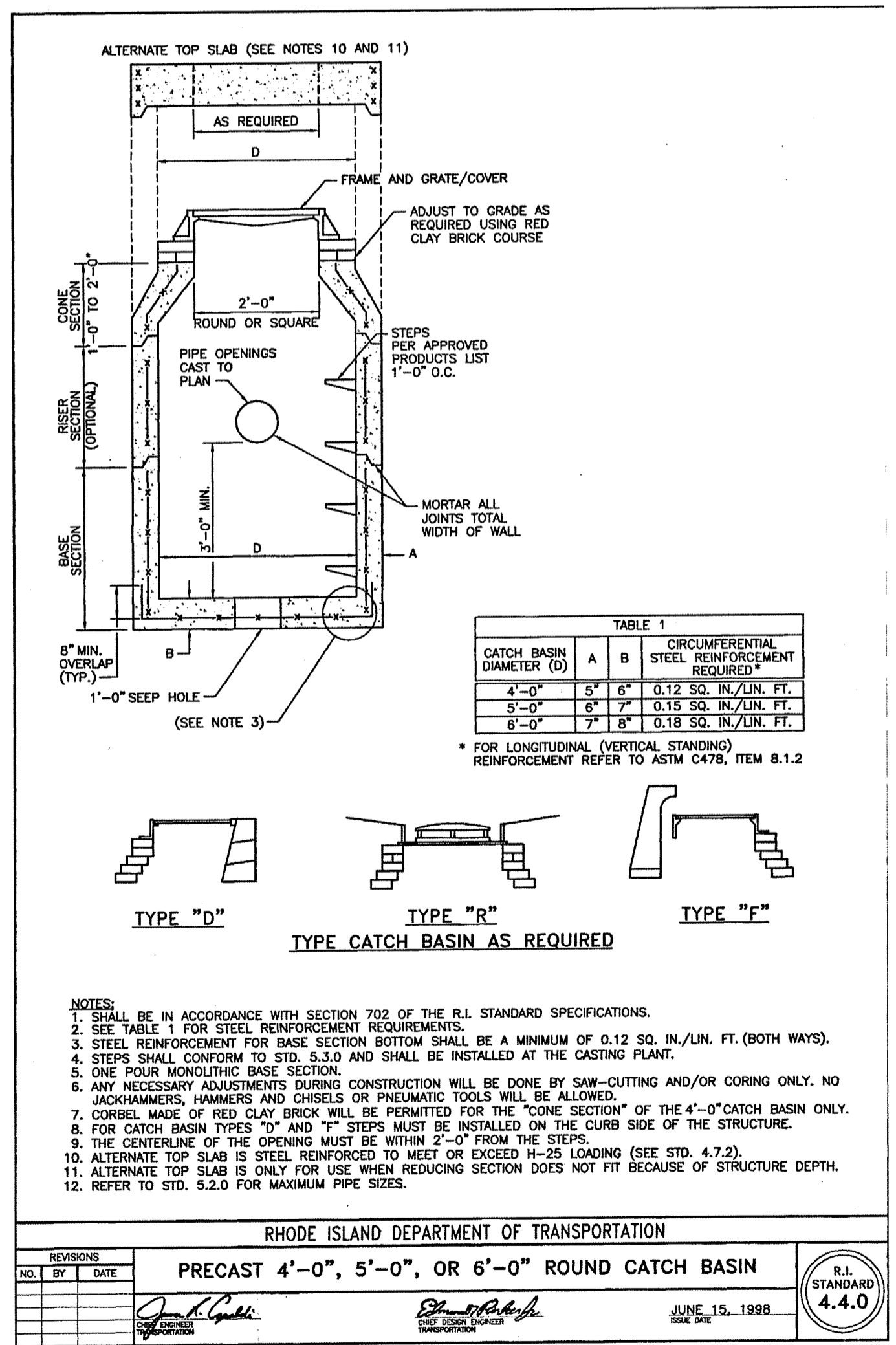
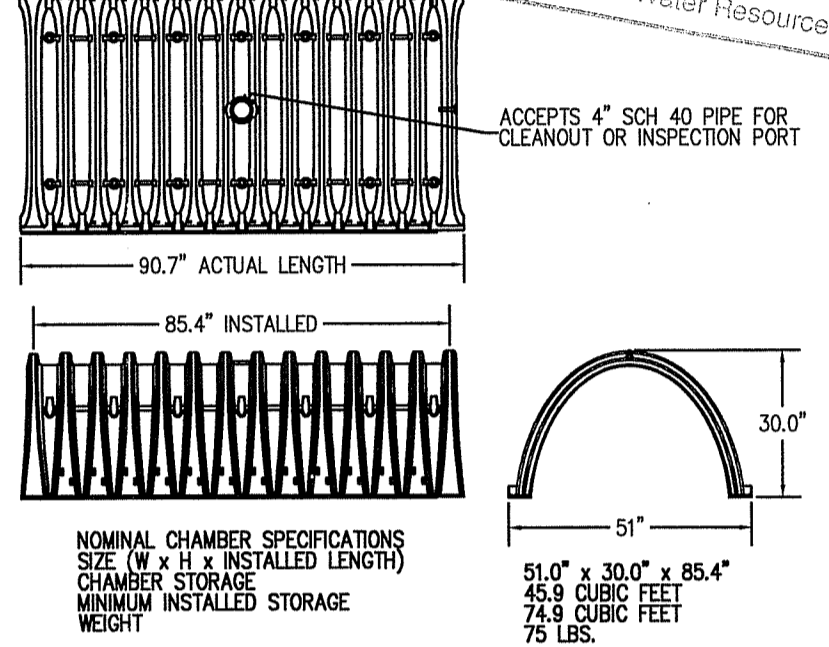
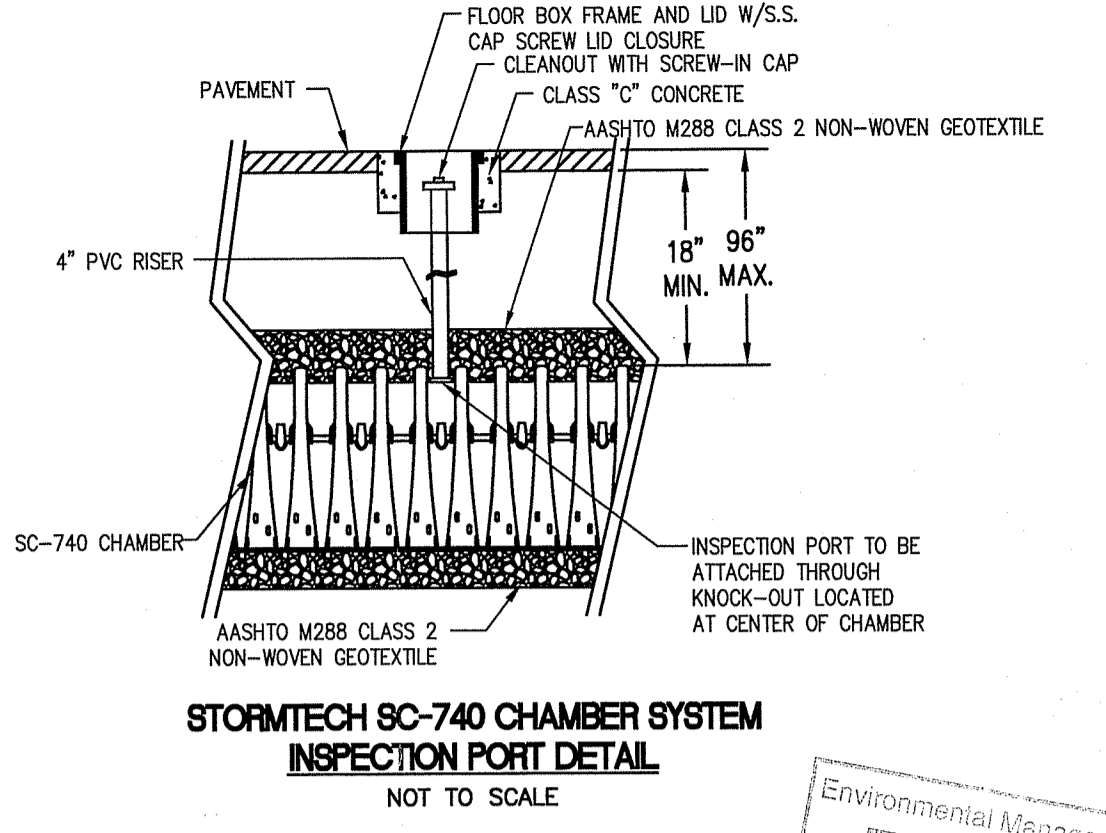
SHEET  
**C-4A**  
2 of 3  
43 OF 36 SHEETS





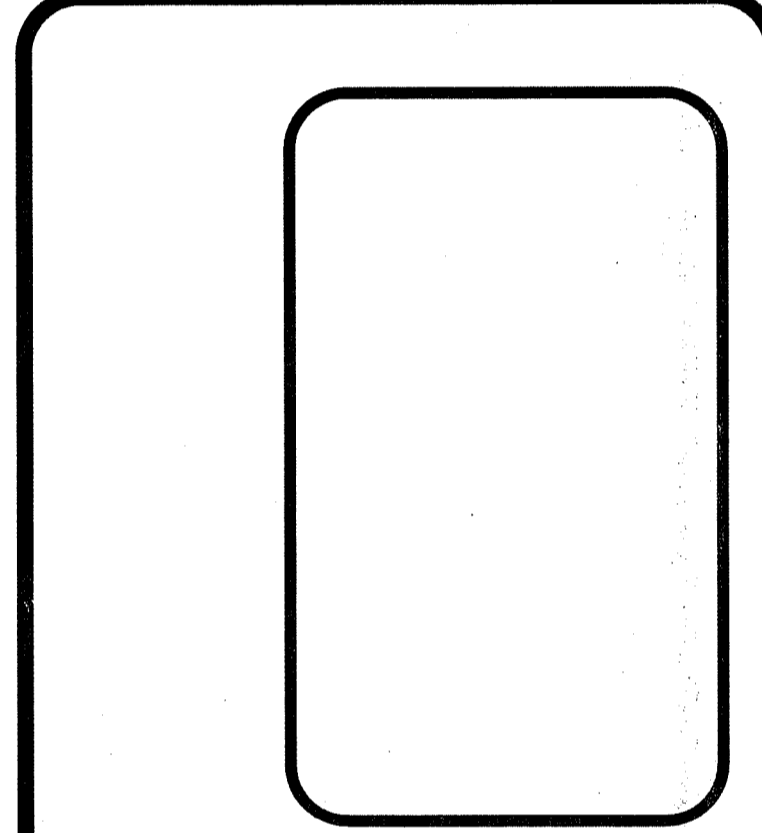
MATERIAL LOCATION	DESCRIPTION	AASHTO M43 DESIGNATION	COMPACTION/DENSITY REQUIREMENT
① FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISH GRADE ABOVE. NOT THAT PAVEMENT SUBBASE MAY BE PART OF THIS LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIALS AND PREPARATION REQUIREMENTS.
② FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (457 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THIS LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES. MOST PAVEMENT SUB-BASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	3, 357, 4, 487, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTION AFTER 12" (305 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (152 mm) LIFTS TO A MIN. 95% STANDARD PROCTOR DENSITY. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
③ EMBEDMENT STONE SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN WASHED, CRUSHED, ANGULAR STONE, NOMINAL SIZE DISTRIBUTION BETWEEN 3/4-2 INCH (19-51 mm)	3, 357, 4, 487, 5, 56, 57	NO COMPACTION REQUIRED.
④ FOUNDATION STONE BELOW CHAMBERS FORM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN WASHED, CRUSHED, ANGULAR STONE, NOMINAL SIZE DISTRIBUTION BETWEEN 3/4-2 INCH (19-51 mm)	3, 357, 4, 487, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A 95% STANDARD PROCTOR DENSITY.*

PLEASE NOTE:  
1) THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEANED, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN WASHED, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".  
2) AS AN ALTERNATE FOR PROCTOR TESTING AND GROUND DENSITY MEASUREMENTS ON OPEN GRADED STONE, STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (229 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH AN APPROPRIATE COMPACTOR.  
3) EXCAVATE ANY FILL MATERIALS ENCOUNTERED BELOW INFILTRATION SYSTEM AND BACKFILL WITH ASTM C-33 SAND.



CONSTRUCTION DETAILS - 4  
FOR  
100 SOCKANOSSET  
2019 REDEVELOPMENT  
SITUATED AT  
100 SOCKANOSSET CROSS ROAD  
CRANSTON, RI  
PREPARED FOR  
100 SOCKANOSSET LLC

NO.	REVISION	BY	DATE
1	PER ROEM COMMENTS	SSH	12/10/19
2	CLARIFIED BMP-1 & BMP-2 DETAIL	SSH	01/06/20
5	BMP REVISIONS	RAS	03/19/23



**GAROFALO**  
GAROFALO & ASSOCIATES, INC.  
CIVIL & STRUCTURAL ENGINEERS/SURVEYORS  
LAND PLANNERS/ENVIRONMENTAL SCIENTISTS

85 CORLISS STREET  
P.O. BOX 6145  
PROVIDENCE, R.I. 02940  
TEL. 401-273-6000

Garofalo & Associates ©  
These drawings are the property of the engineer/surveyor and have been prepared for the owner and not to be used for any other purpose, location or owner without written consent of the owner or one of its directors.

JOB NO. 5471-05	DRAWN BY R.A.S.
DWG. NO. 5471-05-Details	CHECK BY S.S.H.
SCALE: AS SHOWN	APPROVED S.B.G.
	DATE: APRIL 11, 2019

SHEET  
**C-7.4**  
3 of 3  
44 OF 48 SHEETS

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED: AUG 14 2023 FILE #: 19-0258  
NO CHANGES ALLOWED WITHOUT PRIOR WRITTEN APPROVED PLANS MUST BE AT CONSTRUCTION SITE