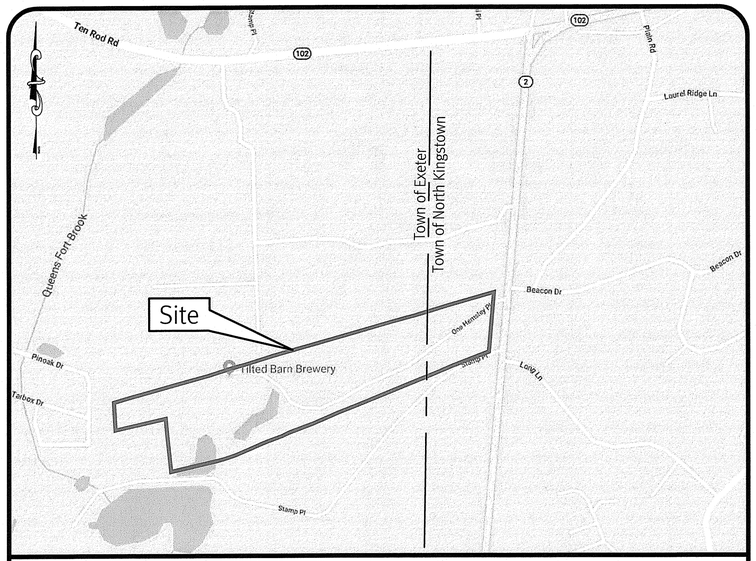
RIDEM Preliminary Determination Submission

Tilted Barn Brewery

Exeter/North Kingstown, Rhode Island

Exeter Assessor's Plat 39-1 Lot 1
North Kingstown Assessor's Plat 102 Lot 10



Location Map 1" = 500'

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9 Pond Details
10 Detail Sheet-1

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JASON P. CLOUGH
No. 9710
REGISTERED PROFESSIONAL ENGINEER CIVIL

No.	Date	Description	By:
1	4-24-2019	RIDEM Response to Comments	J.A.C.
2	4-26-2019	Public Hearing Submission	J.A.R.
3	2-8-2019	RIDEM Preliminary Determination Submission	M.T.D.

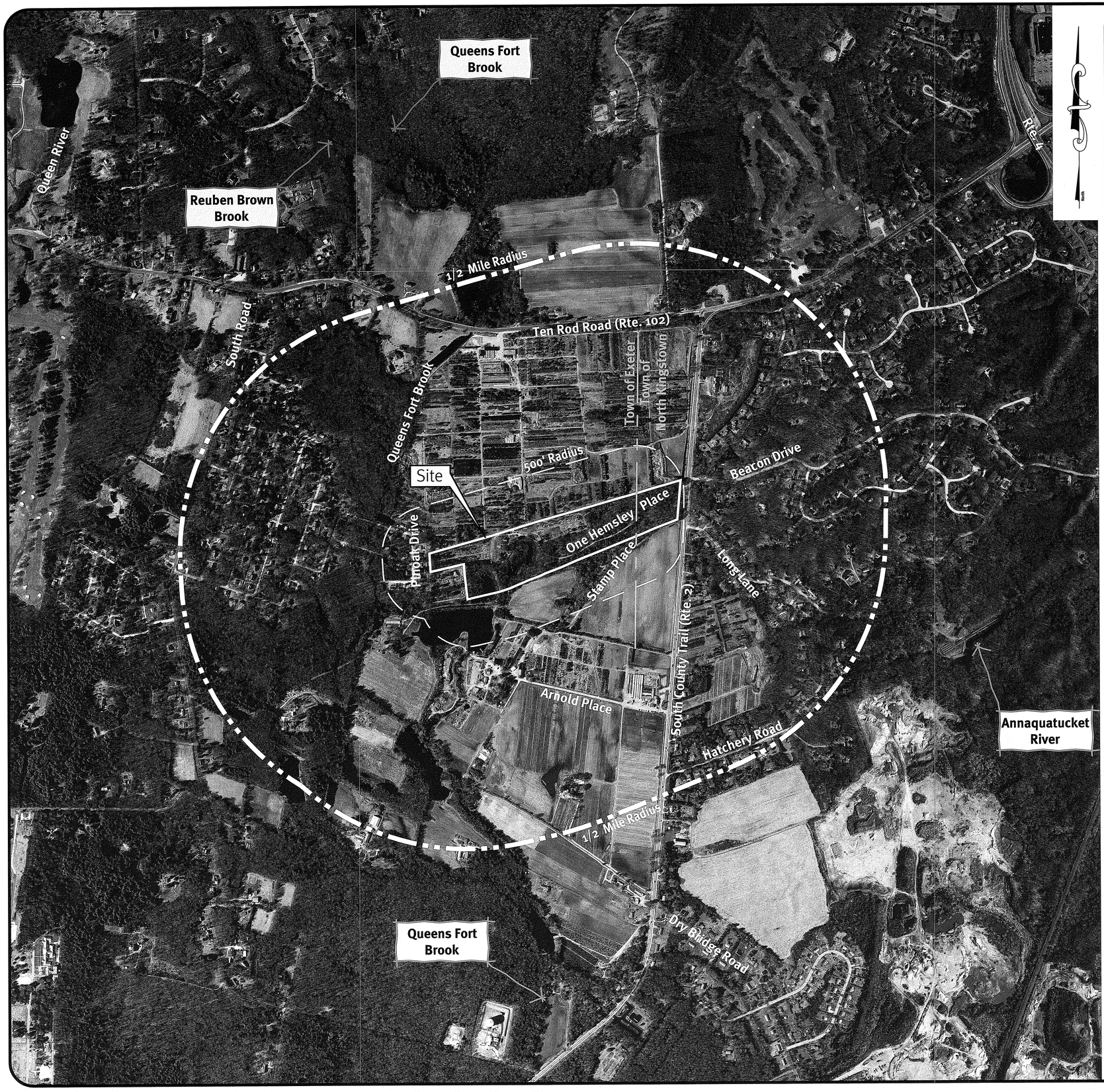
Drawn By: J.A.R. Design By: M.R.T.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAY 16 2019 FILE # 19-0042
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Cover Sheet

Tilted Barn Brewery
Assessor's Plat 39-1 Lot 1 and Assessor's Plat 102 Lot 10
Exeter/North Kingstown, Rhode Island

Client
Tilted Barn Brewery
One Hemsley Place, Exeter, Rhode Island 02822



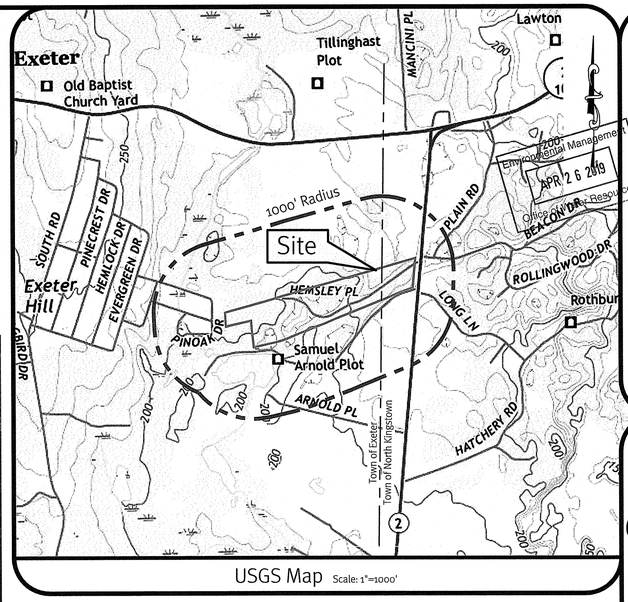


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Photo Obtained from RIGIS 2014 database

Scale: 1"=500'
0 250' 500' 1000'

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Aerial Half Mile Radius & USGS Map

Tilted Barn Brewery
Assessor's Plat 39-1 Lot 1 and Assessor's Plat 102 Lot 10
Exeter/North Kingstown, Rhode Island

Client
Tilted Barn Brewery
One Hemsley Place, Exeter, Rhode Island 02822

DE Job No: 2666-001

SHEET 2 OF 10

z:\dema\n\projects\2666-001 tilted barn brewery\autocad drawings\2666-001-cvar.dwg Plotted: 4/24/2019

General Notes:

1. THE SITE IS LOCATED ON THE TOWN OF EXETER ASSESSOR'S PLAT 39-1 LOT 1 AND IN THE TOWN OF NORTH KINGSTOWN ASSESSOR'S PLAT 102 LOT 10.
2. THE TOTAL SITE IS APPROXIMATELY 29.2± ACRES AND IS ZONED RU-3 (EXETER) AND VR (NORTH KINGSTOWN).
3. THE OWNER OF AP 39-1 LOT 1 (EXETER) AND AP 102 LOT 10 (NORTH KINGSTOWN) IS: MATTHEW J. & KARA N. RICHARDSON, 1 HEMSLEY PLACE, EXETER, RI 02822
4. THIS SITE IS LOCATED IN FEMA FLOOD ZONES X (UNSHADED) AND A. REFERENCE FEMA FLOOD INSURANCE RATE MAP 44009C0085H, MAP REVISED 10-19-2010. (FLOOD PLAIN DESCRIPTIONS SHOWN BELOW)

   ZONE A – THIS SITE IS LOCATED IN FEMA FLOOD ZONE A. ZONE A ARE AREAS OF 100-YEAR FLOOD; BASE FLOOD ELEVATIONS AND FLOOD HAZARD FACTORS NOT DETERMINED.

   ZONE X (UNSHADED) – THIS SITE IS LOCATED IN FEMA FLOOD ZONE X. ZONE X ARE AREAS WHERE THERE IS MINIMAL FLOODING.
5. THIS PLAN IS SUBSTANTIALLY CORRECT IN ACCORDANCE WITH A CLASS IV STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS. THIS COMPILATION PLAN AS BEEN PREPARED FROM SOURCES OF INFORMATION AND DATA WHOSE POSITIONAL ACCURACY AND RELIABILITY HAS NOT BEEN VERIFIED. THE PROPERTY LINES DEPICTED HEREIN DO NOT REPRESENT A BOUNDARY OPINION, AND OTHER INFORMATION DEPICTED IS SUBJECT TO SUCH CHANGES AS AN AUTHORITATIVE FIELD SURVEY MAY DISCLOSE.
6. THE SITE IS NOT WITHIN A:
   - GROUNDWATER PROTECTION AREA (RIDEM)
   - NATURAL HERITAGE AREAS (RIDEM)
   - NARROW RIVER SPECIAL AREA MANAGEMENT PLAN (CRMC)
   - SALT PONDS SPECIAL AREA MANAGEMENT PLAN (CRMC)

   THE SITE IS WITHIN A:
   - NON-COMMUNITY WELLHEAD PROTECTION AREA (RIDEM)
7. THERE WERE NO CEMETERIES, GRAVE SITES AND OR BURIAL GROUNDS OBSERVED WITHIN THE LIMITS OF THE SITE.
8. DETAILED SOIL EROSION AND SEDIMENT CONTROL MEASURES TO BE INCORPORATED AT THE PRELIMINARY DESIGN STAGE AND WILL CONFORM TO RIDEM BEST MANAGEMENT PRACTICES.
9. THE SITE IS TO BE SERVICED BY PRIVATE WELL PUBLIC WELL AND PRIVATE OWTS.
10. THE DRAINAGE SYSTEM IS DESIGNED TO MEET THE TOWN OF EXETER SUBDIVISION AND LAND DEVELOPMENT REGULATIONS WITH THE USE OF CATCH BASINS, A STONE INFILTRATION TRENCH, A SAND FILTER, AND A SEDIMENT FOREBAY. THE STORMWATER MANAGEMENT SYSTEM MEETS THE RIDEM BEST MANAGEMENT PRACTICES.
11. THE SITE IS PROPOSED TO BE BUILT IN 1 PHASE.
12. SOIL EVALUATIONS WERE COMPLETED BY KEVIN FETZER ON OCTOBER 24, 2018 & DECEMBER 13, 2018.
13. WETLAND FLAGS WERE HUNG BY KEVIN FETZER ON JANUARY 14, 2019 AND LOCATED BY DIPRETE ENGINEERING JANUARY 25, 2019
14. ANY PROPRIETARY PRODUCTS REFERENCED IN THIS PLAN SET ARE REPRESENTATIVE OF THE MINIMUM DESIGN REQUIREMENTS FOR THE PURPOSE IT PROPOSES TO SERVE. ALTERNATIVES TO ANY PROPRIETARY PRODUCT MAY BE SUBMITTED TO THE ENGINEER OF RECORD FOR CONSIDERATION, WHICH MUST BE ACCOMPANIED BY APPROPRIATE SPECIFICATION SHEETS/ DESIGN CALCULATIONS THAT DEMONSTRATE THE ALTERNATIVE(S) MEET THE MINIMUM DESIGN PARAMETERS OF THE PRODUCT SHOWN ON THE PLANS. NO ALTERNATIVES MAY BE USED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER OF RECORD.

Plan References:

1. "BOUNDARY SURVEY, TILTED BARN BREWERY, EXETER/NORTH KINGSTOWN, RHODE ISLAND ASSESSORS PLAT 103 LOT 1 NORTH KINGSTOWN, RHODE ISLAND" SCALE 1"=100', DATED NOVEMBER 9, 2018, BY DIPRETE ENGINEERING INC.

Soil Information:

(REFERENCE: USDA NATURAL RESOURCES CONSERVATION SERVICE)

SOIL NAME	DESCRIPTION
BhA	BRIDGEHAMPTON SILT LOAM, 0 TO 3 PERCENT SLOPES
BhB	BRIDGEHAMPTON SILT LOAM, 3 TO 8 PERCENT SLOPES
Dc	DEERFIELD LOAMY FINE SAND
EfB	ENFIELD SILT LOAM, 3 TO 8 PERCENT SLOPES
HkD	HINCKLEY GRAVELLY SANDY LOAM, HILLY
HnC	HINCKLEY-ENFIELD COMPLEX, ROLLING
QoC	QUONSET GRAVELLY SANDY LOAM, ROLLING
Rc	RAYPOL SILT LOAM

Permits Pending or Received:

RIDEM OWTS PERMIT – APPLICATION NO. 1811-1423
DATE SUBMITTED: 11-07-2018 – STATUS: PENDING

RIDEM WATER TABLE VERIFICATION NO. 1811-1423

Soil Erosion and Sedimentation Control Notes:

1. THE CONTRACTOR IS RESPONSIBLE FOR ALL SOIL EROSION AND SEDIMENT CONTROL ON SITE WHICH MUST BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE APPLICABLE REGULATIONS AND AUTHORITY HAVING JURISDICTION. THE CONTRACTOR IS TO NOTIFY THE DESIGN ENGINEER AND RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
2. ALL EROSION CONTROL, TEMPORARY SWALES AND TEMPORARY SEDIMENT TRAPS TO BE INSTALLED PER THE RHODE ISLAND SOIL EROSION AND SEDIMENTATION CONTROL LATEST EDITION AND THE SOIL EROSION SEDIMENTATION CONTROL PLAN (SESC).
3. TEMPORARY SWALES ARE TO BE USED TO CONTROL RUNOFF DURING CONSTRUCTION OF THE PROPOSED ROADWAY. TEMPORARY SWALES TO BE VEGETATED AFTER CONSTRUCTION. EROSION CONTROL MATS ARE TO BE INSTALLED, IF NECESSARY, TO PREVENT EROSION AND SUPPORT VEGETATION. AFTER CONSTRUCTION IS COMPLETE AND TRIBUTARY AREAS TO THE SWALES HAVE BEEN STABILIZED, THE TEMPORARY SWALES ARE TO BE CLEARED AND FINAL DESIGN, INCLUDING INSTALLATION OF THE GRASS SWALE TO BE PER THE DESIGN PLANS.
4. ONCE THE SEDIMENT TRAPS ARE NO LONGER REQUIRED AND ALL TRIBUTARY AREAS HAVE BEEN STABILIZED, THE TEMPORARY SEDIMENTATION BASIN IS TO BE CLEANED AND BROUGHT TO FINAL DESIGN GRADES.
5. INLET PROTECTION IS TO BE INSTALLED ON ALL CATCH BASINS ONCE CONSTRUCTED.
6. FOR SEQUENCE OF CONSTRUCTION, PROJECT PHASING AND CONSTRUCTION PHASING SEE SESC PLAN.
7. CONTRACTOR MAY MODIFY SEQUENCE OF CONSTRUCTION WITH APPROVAL FROM DESIGN ENGINEER AND OWNER.
8. IF CONCRETE TRUCKS ARE WASHED OUT ON SITE, ALL WASHOUT MUST BE COMPLETED IN THE DESIGNATED CONCRETE WASHOUT AREA.

ADA Notes:

1. ALL IMPROVEMENTS MUST COMPLY WITH THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG)" BY THE DEPARTMENT OF JUSTICE (CURRENT EDITION).
2. MAXIMUM RUNNING SLOPE ALONG ALL ACCESSIBLE PATHS OF TRAVEL MUST BE 4.5% (0.045 FT/FT), AND MAXIMUM CROSS SLOPE ACROSS ALL ACCESSIBLE PATHS OF TRAVEL MUST BE 1.5% (0.015 FT/FT).
3. ADA PARKING SPACES AND LOADING AREAS: THE STEEPEST SLOPE OF THE SPACE, MEASURED IN ANY DIRECTION (INCLUDING DIAGONAL), MUST BE LESS THAN OR EQUAL TO 2% (0.02 FT/FT). DIPRETE ENGINEERING GENERALLY RECOMMENDS A MAXIMUM OF 1.4% (0.014 FT/FT) BE USED FOR BOTH RUNNING AND CROSS SLOPES IN ORDER TO COMPLY.
4. A MINIMUM 5'x5' LANDING MUST BE PROVIDED IN FRONT OF ALL PUBLICLY ACCESSIBLE BUILDING ENTRANCES/ EGRESSES. THE STEEPEST SLOPE OF THE LANDING, MEASURED IN ANY DIRECTION (INCLUDING DIAGONAL), MUST BE LESS THAN OR EQUAL TO 2% (0.02 FT/FT). DIPRETE ENGINEERING GENERALLY RECOMMENDS A MAXIMUM OF 1.4% (0.014 FT/FT) BE USED FOR BOTH RUNNING AND CROSS SLOPES IN ORDER TO COMPLY.
5. FOR EVERY 6 (OR FRACTION OF 6) ADA PARKING SPACES, AT LEAST ONE MUST BE A VAN PARKING SPACE. FOR EXAMPLE, IF 7 ADA PARKING SPACES ARE REQUIRED, A MINIMUM OF 2 MUST BE VAN SPACES.
6. NOTWITHSTANDING THE NOTES LISTED ABOVE, TOWN OR STATE-SPECIFIC STANDARDS MAY BE MORE STRINGENT AND OVERRULE. IT IS THE RESPONSIBILITY OF THE USER OF THIS PLAN SET TO MAINTAIN COMPLIANCE WITH THE CONTROLLING STANDARD.
7. NOTE THAT THE GRADING/ PLAN VIEWS AND DETAILS CONTAINED WITHIN THIS PLAN SET MAY NOT SHOW THE DETAIL NECESSARY TO CONSTRUCT WALKWAYS, RAMPS AND SPACES TO COMPLY WITH THE ABOVE REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE LEVEL OF CARE NECESSARY TO BE CERTAIN THAT THE CONSTRUCTED PRODUCT MEETS ADA/ CONTROLLING STANDARDS. IN THE EVENT OF ANY NON COMPLIANCE THE CONTRACTOR MUST NOTIFY THE DESIGNER BEFORE CONSTRUCTION FOR ADVICE IN FINDING A RESOLUTION.

Grading and Utility Notes:

1. CONSTRUCTION TO COMMENCE SUMMER 2019 OR UPON RECEIPT OF ALL NECESSARY APPROVALS.
2. THE CONTRACTOR MUST COORDINATE WITH ALL OF THE APPROPRIATE UTILITY COMPANIES FOR AGREEMENTS TO SERVICE THE PROPOSED BUILDING. THIS MUST BE DONE PRIOR TO CONSTRUCTION. NO REPRESENTATIONS ARE MADE BY DIPRETE ENGINEERING THAT UTILITY SERVICE IS AVAILABLE.
3. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING FINISH GRADING AND DRAINAGE AROUND THE BUILDING TO ENSURE SURFACE WATER AND/OR GROUNDWATER ARE DIRECTED AWAY FROM THE STRUCTURE.
4. PRIOR TO START OF CONSTRUCTION, CONTRACTOR MUST VERIFY EXISTING PAVEMENT ELEVATIONS AT INTERFACE WITH PROPOSED PAVEMENTS, AND EXISTING GROUND ELEVATIONS ADJACENT TO DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES. CONTRACTOR MUST NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
5. ALL PROPOSED UNDERGROUND UTILITIES SERVING THE SITE AND BUILDINGS TO BE COORDINATED WITH OWNER, ARCHITECT, AND ENGINEER PRIOR TO INSTALLATION.
6. ALL RETAINING WALLS AND STEEP SLOPES ARE SUBJECT TO FINAL STRUCTURAL DESIGN. DIPRETE ENGINEERING IS NOT PROVIDING THE STRUCTURAL DESIGN OF THESE ITEMS. ALL WALLS AND STEEP SLOPES ARE TO BE DESIGNED AND BUILT UNDER THE DIRECTION OF A PROFESSIONAL GEOTECHNICAL ENGINEER AND CERTIFIED TO THE OWNER PRIOR TO THE COMPLETION OF THE PROJECT. SHOP DRAWINGS TO BE SUBMITTED PRIOR TO CONSTRUCTION. FINAL STRUCTURAL DESIGN MUST INCORPORATE THE INTENT OF THE GRADING SHOWN ON THESE PLANS AND ALL WORK MUST BE WITHIN THE LIMIT OF DISTURBANCE SHOWN ON THE PLANS.
7. ALL CUT AND FILL AREAS ARE TO BE DONE UNDER THE DIRECTION OF A PROFESSIONAL GEOTECHNICAL ENGINEER WITH TESTING AND CERTIFICATION TO BE PROVIDED TO THE APPLICANT AT THE COMPLETION OF THE PROJECT. DIPRETE ENGINEERING IS NOT PROVIDING THE FILL SPECIFICATION, GEOTECHNICAL ENGINEERING, STRUCTURAL ENGINEERING SERVICES, OR SUPERVISION AS PART OF THESE DRAWINGS.
8. NO STOCKPILING OF MATERIAL TO BE LOCATED IN THE RIGHT OF WAY AND NO OPEN TRENCHES ARE TO BE LEFT OVERNIGHT.
9. ALL LOAM IN DISTURBED AREAS TO BE STOCKPILED FOR FUTURE USE.
10. ALL EXCESS SOIL, TREES, ROCKS, BOULDERS, AND OTHER REFUSE, MUST BE DISCARDED OFF SITE IN AN ACCEPTABLE MANNER AT AN APPROVED LOCATION. STUMPS MUST BE GROUND ON SITE OR REMOVED.
11. NO STUMP DUMPS ARE PROPOSED ON SITE.

DRAINAGE

ALL DRAINAGE PIPING TO BE HIGH-DENSITY POLYETHYLENE (HDPE) WITH WATERTIGHT JOINTS WHERE INSTALLED WITHIN THE SEASONAL HIGH GROUNDWATER, UNLESS NOTED OTHERWISE ON THE PLANS OR IN THE SPECIFICATIONS. ALL STORMWATER PIPE WITHIN THE STATE'S RIGHT OF WAY TO BE REINFORCED CONCRETE PIPE (RCP) PIPE.

DRAINAGE STRUCTURES TO BE AS FOLLOWS (UNLESS OTHERWISE NOTED ON PLANS):
- CATCH BASINS ALONG CURBING TO BE RIDOT STD. 4.4.0, TYPE F FRAME, 4' DIAMETER WITH APRON STONE.
- CATCH BASINS NOT ALONG CURBING TO BE RIDOT STD 4.4.0, 4' DIAMETER
- SINGLE FRAME CATCHBASIN GRATES TO BE RIDOT STD. 6.3.2
- MANHOLES TO BE RIDOT STD. 4.2.0, 4.2.1 OR 4.2.2 AS REQUIRED
- DRAINAGE MANHOLE COVERS TO BE RIDOT STD 6.2.1
- DROP INLETS TO BE RIDOT STD. 4.5.0, 4.5.1 OR 4.5.2.
- APRON STONE, WHERE REQUIRED, TO BE RIDOT STD 7.1.7 OR 7.1.8.
- HEADWALLS TO BE RIDOT STD 2.1.0.

ALL DRAINAGE STRUCTURES MUST BE WATERTIGHT.

DRAINAGE CONNECTIONS FROM ALL YARD DRAINS (YD), AREA DRAINS (AD), TRENCH DRAINS (TD), FRENCH DRAINS (FD), WALL DRAINS (WD), AND DOWNSPOUTS (DS) ARE SHOWN FOR SCHEMATIC PURPOSES ONLY. THE LEVEL OF DETAIL SHOWN DOES NOT INCLUDE ALL JOINTS THAT MAY BE REQUIRED FOR CONSTRUCTION. ALL FITTINGS & PIPE SLOPES TO TIE INTO MAIN TRUNK LINE TO BE FIELD FIT BY CONTRACTOR.

ELECTRIC/TELECOM/GAS

PROPOSED GAS, ELECTRIC, CABLE AND DATA UTILITIES ARE SHOWN SCHEMATICALLY AND ARE PROPOSED TO BE UNDERGROUND. OWNER & CONTRACTOR TO COORDINATE FINAL DESIGN WITH APPROPRIATE UTILITY COMPANIES. ALL WORK TO BE IN ACCORDANCE WITH EACH UTILITY COMPANY'S STANDARDS AND DETAILS AS WELL AS LOCAL AND FEDERAL REGULATIONS. THIS INCLUDES BUT IS NOT LIMITED TO, POLES, TRANSFORMERS, PULL BOXES, CONCRETE PADS, CONCRETE ENCASEMENTS AND CONDUITS. CONNECTION POINTS FOR ELECTRIC AND TELECOM UTILITIES, AT THE EXISTING INFRASTRUCTURE, ARE CURRENTLY SHOWN AS UNDERGROUND UTILITIES. THESE UTILITIES MAY BE UNDERGROUND OR OVERHEAD AND WILL BE COORDINATED WITH NATIONAL GRID PRIOR TO CONSTRUCTION.

Abbreviations Legend

ADA	AMERICANS WITH DISABILITY ACT	OHW	OVERHEAD WIRE
AHJ	AUTHORITY HAVING JURISDICTION	PE	POLYETHYLENE
AP	ASSESSOR'S PLAT	℄	PROPERTY LINE
BC	BOTTOM OF CURB	PR	PROPOSED
BT	BOTTOM OF TESTHOLE	PVC	POLYVINYL CHLORIDE
BIT	BITUMINOUS (BERM)	R	RADIUS
BIO	BIORETENTION	R&D	REMOVE AND DISPOSE
BS	BASEMENT SLAB ELEVATION	RCP	REINFORCED CONCRETE PIPE
BW	FINISHED GRADE AT BOTTOM OF WALL	RIHB	RHODE ISLAND HIGHWAY BOUND
CB	CATCH BASIN	RL	ROOF LEADER
(C)	CALCULATED	ROW	RIGHT OF WAY
℄	CENTERLINE	S	SLOPE
(CA)	CHORD ANGLE	SD	SUBDRAIN
CLDIP	CONCRETE LINED DUCTILE IRON PIPE	SED	SEDIMENT FOREBAY
CO	CLEAN OUT	SF	SQUARE FOOT
CONC	CONCRETE	SFL	STATE FREEWAY LINE
(D)	DEED	SFM	SEWER FORCE MAIN
DCB	DOUBLE CATCH BASIN	SG	SLAB ON GRADE ELEVATION
DI	DROP INLET	SHL	STATE HIGHWAY LINE
DMH	DRAINAGE MANHOLE	SMH	SEWER MANHOLE
DP	DETENTION POND	SNDF	SAND FILTER
ELEV	ELEVATION	SS	SIDE SLOPE
EOP	EDGE OF PAVEMENT	STA	STATION
ESC	EROSION AND SEDIMENT CONTROL	TC	TOP OF CURB
EX	EXISTING	TD	TRENCH DRAIN
FES	FLARED END SECTION	TF	TOP OF FOUNDATION
FFE	FINISH FLOOR ELEVATION	TRANS	TRANSITION
GS	GARAGE SLAB ELEVATION	TW	TOP OF WALL (FINISHED GRADE AT TOP OF WALL)
GWT	GROUND WATER TABLE	TYP	TYPICAL
HW	HEADWALL	UDS	UNDERGROUND DETENTION SYSTEM
HC	HIGH CAPACITY CATCH BASIN GRATE	UIS	UNDERGROUND INFILTRATION SYSTEM
HDPE	HIGH DENSITY POLYETHYLENE	UP	UTILITY POLE
ID	INLINE DRAIN	WO	WALKOUT ELEVATION
INV	INVERT	WQ	WATER QUALITY
IP	INFILTRATION POND		
LF	LINEAR FEET		
LOD	LIMIT OF DISTURBANCE		
LP	LIGHT POLE		
(M)	MEASURED		
N/F	NOW OR FORMERLY		

Existing Legend
(AS SHOWN ON PROPOSED PLANS)

NOT ALL ITEMS SHOWN WILL APPEAR ON PLANS

PROPERTY LINE; ASSESSORS LINE; BUILDING; BRUSHLINE; TREELINE; GUARDRAIL; FENCE; RETAINING WALL; STONE WALL; MINOR CONTOUR LINE; MAJOR CONTOUR LINE; WATER LINE; SEWER LINE; SEWER FORCE MAIN; GAS LINE; ELECTRIC LINE; OVERHEAD WIRES; DRAINAGE LINE; SOILS LINES; 50' PERIMETER WETLAND; 100' RIVERBANK WETLAND; 200' RIVERBANK WETLAND; FEMA BOUNDARY (ZONE X / ZONE X); STREAM; WETLAND LINE & FLAG; STATE HIGHWAY LINE; STATE FREEWAY LINE

NAIL FOUND/SET; DRILL HOLE FOUND/SET; BOUND FOUND/SET; SIGN; BOLLARD; SOIL EVALUATION; CB CATCH BASIN; DCB DOUBLE CATCH BASIN; DMH DRAINAGE MANHOLE; FES FLARED END SECTION; GUY POLE; EMH ELECTRIC MANHOLE; UP UTILITY/POWER POLE; LIGHTPOST; SMH SEWER/SEPTIC MANHOLE; SV SEWER VALVE; CLEANOUT; HYDRANT; IRRIGATION VALVE; WV WATER VALVE; WELL; MONITORING WELL; UNKNOWN MANHOLE; GV GAS VALVE; BENCH MARK; STREAM FLOW DIRECTION

Proposed Legend

NOT ALL ITEMS SHOWN WILL APPEAR ON PLANS

PROPERTY LINE; BUILDING SETBACKS; CHAINLINK FENCE; GUARDRAIL; RETAINING WALL; MINOR CONTOUR LINE (308); MAJOR CONTOUR LINE (310); SPOT ELEVATION (312); EDGE OF PAVEMENT; BITUMINOUS BERM (RIDOT STD 7.5.1); CONCRETE CURB (RIDOT STD 7.1.0); BUILDING FOOTPRINT; BUILDING OVERHANG; ASPHALT PAVEMENT; HEAVY DUTY ASPHALT PAVEMENT; HEAVY DUTY CONCRETE; CONCRETE SIDEWALK; ASPHALT SIDEWALK; SAWCUT LINE; SIGN (RIDOT STD 24.6.2 AS APPLICABLE); SINGLE LIGHT; DOUBLE LIGHT; OVERHANGING LIGHT; ACCESSIBLE PARKING SPACE SYMBOLS; BUILDING INGRESS/EGRESS; UTILITY POLE

DRAINAGE LINE; PERFORATED SUBDRAIN; SWALE; SEWER FORCE MAIN; GAS LINE; WATER LINE; HYDRANT ASSEMBLY; WATER SHUT OFF; WATER VALVE; THRUST BLOCK; SEWER LINE; OVERHEAD WIRE; ELECTRIC, TELEPHONE, CABLE LINE; LIMIT OF DISTURBANCE/ LIMIT OF CLEARING; SEDIMENTATION BARRIER, SILT FENCE (RIDOT STD 9.2.0), COMPOST SOCK OR APPROVED EQUAL; 2:1 OR 1:1 SLOPES; UNDERGROUND INFILTRATION OUTLINE; POND ACCESS; RIP RAP; SAND FILTER; BIO RETENTION; CATCH BASIN; DOUBLE CATCH BASIN; MANHOLE; FLARED END SECTION; HEAD WALL

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Environmental Management
APR 26 2019
Office of Water Resources

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Client:
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One Hemsley Place, Exeter, Rhode Island 02822

General Notes

1. THE PARCELS ARE FOUND ON ASSESSOR'S PLAT 39-1, LOT 1 IN THE TOWN OF EXETER, AND ASSESSOR'S PLAT 102, LOT 10 IN THE TOWN OF NORTH KINGSTOWN, WASHINGTON COUNTY, RHODE ISLAND.
2. THE OWNER PER DEED BOOK 408, PAGE 288 IS MATTHEW J. & KARA N. RICHARDSON (EXETER). PER DEED BOOK 2608, PAGE 247 (NORTH KINGSTOWN).
3. BASED ON GRAPHICAL PLOTTING ONLY, THE PARCEL IS LOCATED IN X & A PER FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP 44009C0080SH, DATED OCTOBER 19, 2010. THIS DESIGNATION MAY CHANGE BASED UPON REVIEW BY A FLOOD ZONE SPECIALIST OR BY THE RESULTS OF A COMPREHENSIVE FLOOD STUDY.
4. THE PARCEL IS ZONED VR BASED ON NORTH KINGSTOWN GIS AND RU-3 PER EXETER GIS. ANY OVERLAY DISTRICTS, SPECIAL PERMITS OR VARIANCES SPECIFIC TO THIS SITE ARE NOT TAKEN INTO CONSIDERATION. PLEASE CONTACT THE ZONING DEPARTMENT FOR ANY ADDITIONAL INFORMATION OR FOR A CERTIFICATE OF ZONING.
5. THERE WERE NO CEMETERIES, GRAVE SITES AND OR BURIAL GROUNDS OBSERVED WITHIN THE LIMITS OF THE SURVEY.
6. FIELD SURVEY PERFORMED BY DIPRETE ENGINEERING ON OCTOBER 24, 2018. THIS PLAN REFLECTS ON THE GROUND CONDITIONS AS OF THAT DATE.
7. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT. DIPRETE ENGINEERING IS NOT RESPONSIBLE FOR ANY UNKNOWN OR UNRECORDED EASEMENTS, DEEDS OR CLAIMS THAT A TITLE REPORT WOULD DISCLOSE.

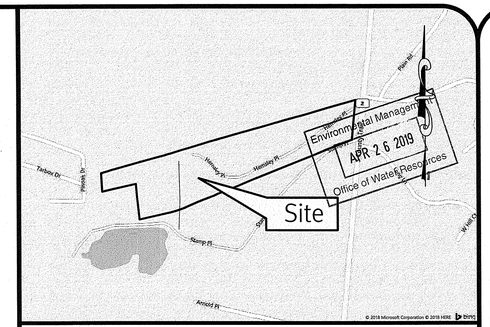
Plan References:

1. RHODE ISLAND HIGHWAY PLAT 344.
2. "SITE PLAN "SCHARTNER'S CORNER NURSERY" TEN ROD ROAD EXETER, RHODE ISLAND FOR RICHARD SCHARTNER MAP 39-BLOCK 1-LOTS 2 & 3" SCALE 1"=150', REVISED APRIL 24, 2008, BY DAVID D. GARDNER & ASSOCIATES, INC. RECORDED IN TOWN OF EXETER LAND EVIDENCE RECORDS PLAT MAP 447.
3. "PLAT OR DRAUGHT OF A TRACT OF LAND LYING IN EXETER IT BEING PART OF THE ESTATE OF JOSEPH REYNOLDS, LATE OF SAID EXETER DECEASED WITH THE DIVIDING LINE THEREON DESCRIBED AMONGST HIS HEIRS THE NAMES AND NUMBERS OF THEIR RESPECTIVE RIGHTS THEREON INSCRIBED, SENECA SURVEY" AND IN THE RECORDS OF LAND EVIDENCE IN SAID TOWN OF NORTH KINGSTOWN IN BOOK 15 AT PAGE 274, AND IN THE LAND EVIDENCE RECORDS OF SAID TOWN OF EXETER IN BOOK 4 AT PAGE 483.
4. "BOUNDARY SURVEY PLAN, CAROL STAMP REVOCABLE TRUST 2004 SOUTH COUNTY TRAIL ASSESSORS PLAT 52 BLOCK 1 LOT 8 EXETER, RHODE ISLAND ASSESSORS PLAT 103 LOT 1 NORTH KINGSTOWN, RHODE ISLAND" SCALE 1"=150', DATED NOVEMBER 2018, BY NATIONAL SURVEYORS-DEVELOPERS INC.

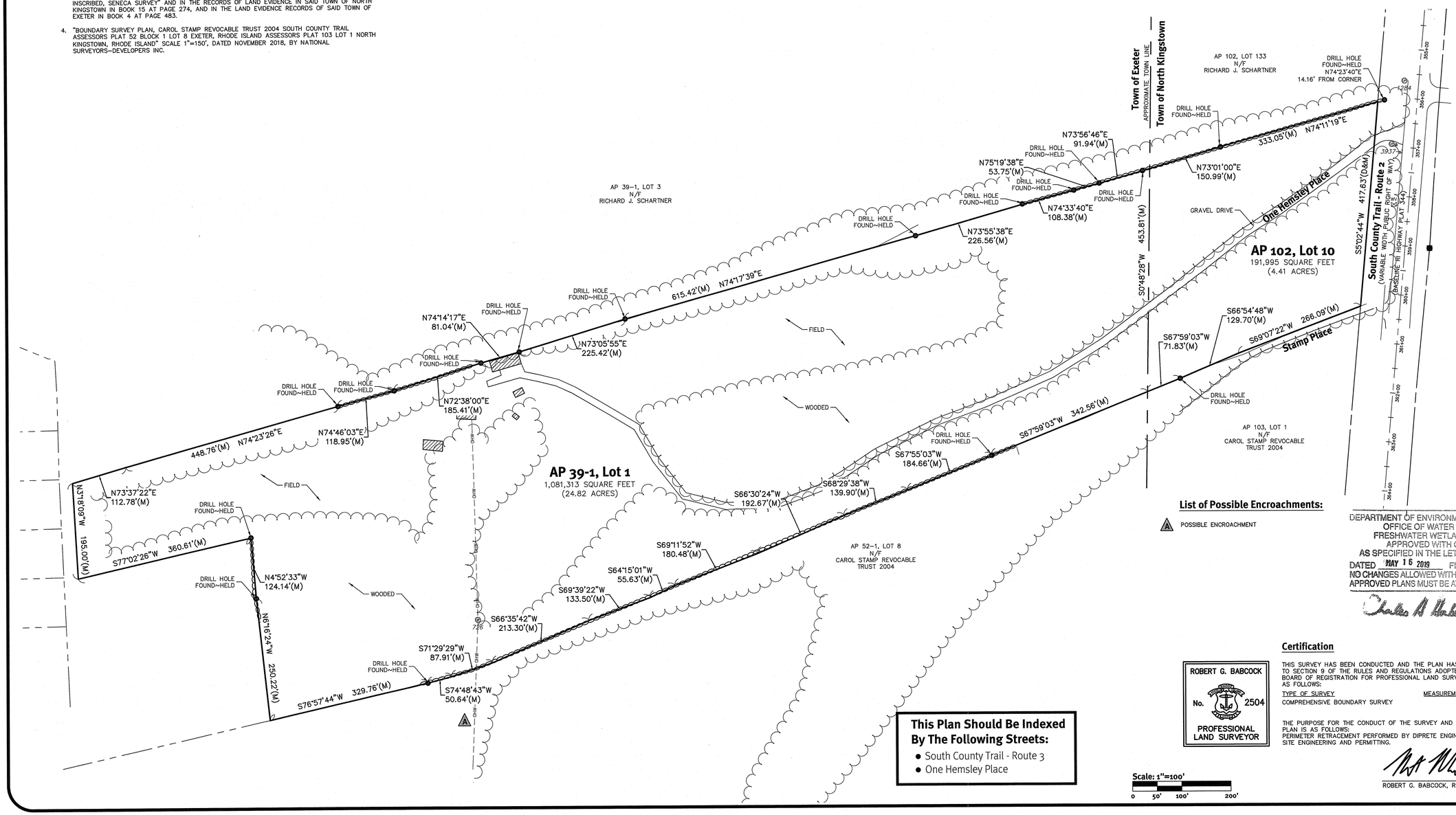
Legend

NOT ALL ITEMS SHOWN WILL APPEAR ON THE SURVEY

BUILDING		▲/△	NAIL FOUND/SET
AP	ASSESSOR'S PLAT	●/◉	DRILL HOLE FOUND/SET
N/F	NOW OR FORMERLY	◉/◎	IRON ROD/PIPE FOUND/SET
(D)	DEED	■/□	BOUND FOUND/SET
(M)	MEASURED		SIGN
(CA)	CHORD ANGLE		BOLLARD
HC	HANDICAPPED		SOIL EVALUATION
	PROPERTY LINE	CB	CATCH BASIN
	ASSESSORS LINE	DCB	DOUBLE CATCH BASIN
	TREELINE	DMH	DRAINAGE MANHOLE
	GUARDRAIL	FES	FLARED END SECTION
-X-	FENCE		GUY POLE
	RETAINING WALL	EMH	ELECTRIC MANHOLE/HANDHOLE
	STONE WALL	UP	UTILITY/POWER POLE
-2-	MINOR CONTOUR LINE		LIGHTPOST
-10-	MAJOR CONTOUR LINE	SMH	SEWER/SEPTIC MANHOLE
W	WATER LINE		SEWER VALVE
S	SEWER LINE		CLEANOUT
SFM	SEWER FORCE MAIN		HYDRANT
G	GAS LINE		IRRIGATION VALVE
E	ELECTRIC LINE		WATER VALVE
OHW	OVERHEAD WIRES		WELL
D	DRAINAGE LINE		MONITORING WELL
			UNKNOWN MANHOLE
		GV	GAS VALVE
		B-1	WETLAND FLAG
			BENCH MARK
			SHRUB
			TREE



Locus Map Not To Scale



This Plan Should Be Indexed By The Following Streets:

- South County Trail - Route 3
- One Hemsley Place

Scale: 1"=100'

0 50' 100' 200'

List of Possible Encroachments:

A POSSIBLE ENCROACHMENT

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAY 16 2019 FILE # 19-0062
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Certification

ROBERT G. BABCOCK No. 2504 PROFESSIONAL LAND SURVEYOR

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 REGISTRATION FOR PROFESSIONAL LAND SURVEYORS ON JANUARY 1, 2016, AS FOLLOWS:

TYPE OF SURVEY	MEASUREMENT SPECIFICATION
COMPREHENSIVE BOUNDARY SURVEY	CLASS I

THE PURPOSE FOR THE CONDUCT OF THE SURVEY AND FOR THE PREPARATION OF THE PLAN IS AS FOLLOWS:
PERIMETER RETRACEMENT PERFORMED BY DIPRETE ENGINEERING FOR THE PURPOSE OF SITE ENGINEERING AND PERMITTING.

11/9/2018

ROBERT G. BABCOCK, RIPLS #2504, COA #LS.000A160

DiPrete Engineering
Two Stafford Court Cranston, RI 02920
tel 401-943-1000 fax 401-464-6006 www.diprete-eng.com
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No.	Date	Description	By:
0	10/24/2018	Boundary Survey	E.L.T.
		Drawn By: E.L.T.	

Boundary Survey

Tilted Barn Brewery

Exeter/North Kingstown, Rhode Island

Client
Tilted Barn Brewery
One Hemsley Place, Exeter, Rhode Island 02822

SHEET 4 OF 10

DE Job No: 2666-001 Copyright 2018 by DiPrete Engineering Associates, Inc.

z:\demain\project\2666-001 tilted barn brewery\autocad drawing\2666-001-exco.dwg Plotted: 11/9/2018

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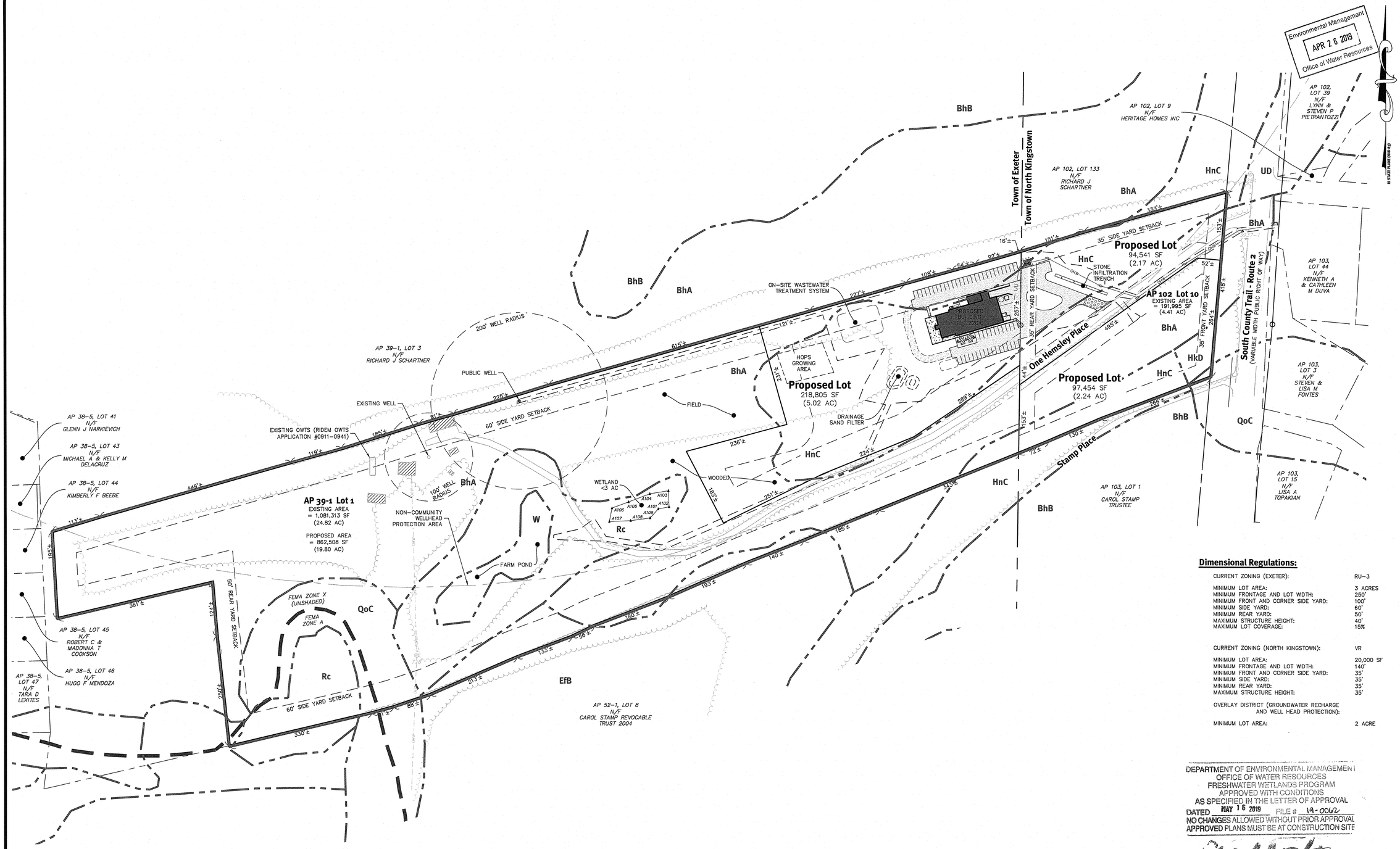
APR 26 2019
Office of Water Resources



Dimensional Regulations:

CURRENT ZONING (EXETER):	RU-3
MINIMUM LOT AREA:	3 ACRES
MINIMUM FRONTAGE AND LOT WIDTH:	250'
MINIMUM FRONT AND CORNER SIDE YARD:	100'
MINIMUM SIDE YARD:	60'
MINIMUM REAR YARD:	50'
MAXIMUM STRUCTURE HEIGHT:	40'
MAXIMUM LOT COVERAGE:	15%
CURRENT ZONING (NORTH KINGSTOWN):	VR
MINIMUM LOT AREA:	20,000 SF
MINIMUM FRONTAGE AND LOT WIDTH:	140'
MINIMUM FRONT AND CORNER SIDE YARD:	35'
MINIMUM SIDE YARD:	35'
MINIMUM REAR YARD:	35'
MAXIMUM STRUCTURE HEIGHT:	35'
OVERLAY DISTRICT (GROUNDWATER RECHARGE AND WELL HEAD PROTECTION):	
MINIMUM LOT AREA:	2 ACRE

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Charles A. Horbert

Scale: 1"=100'
0 50' 100' 200'

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JASON P. CLOUGH
No. 9710
REGISTERED PROFESSIONAL ENGINEER
CIVIL

No.	Date	Description	By
2	4-26-2019	RIDEM Response to Comments	J.A.C.
1	4-22-2019	Preliminary Submission	J.A.S.
0	2-28-2019	Wetland Boundary Determination Submission	J.A.S.

Drawn By: J.A.S. Design By: M.R.T.

Overall Site Plan

Tilted Barn Brewery

Assessor's Plat 39-1 Lot 1 and Assessor's Plat 102 Lot 10
Exeter/North Kingstown, Rhode Island

Client
Tilted Barn Brewery
One Hemsley Place, Exeter, Rhode Island 02822

SHEET 5 OF 10

DE Job No: 2666-001 Copyright 2019 by DiPrete Engineering Associates, Inc.

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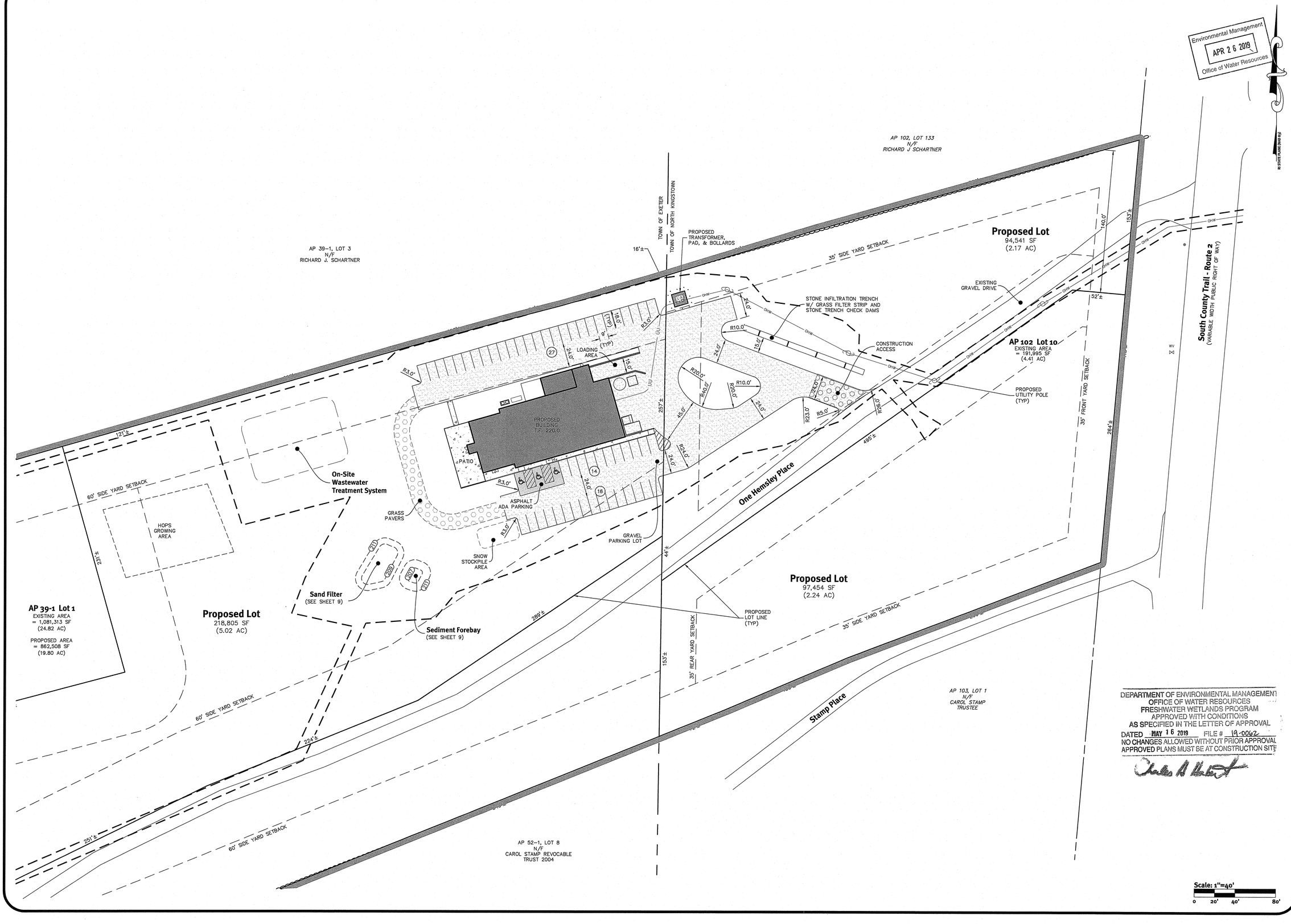

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JASON P. CLOUGH
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4/24/19
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No.	Description	Date	Drawn By: J.A.R.	Design By: M.R.T.
1	RIDEM Preliminary Determination Submission	2-8-2019		
2	Preliminary Submission	4-22-2019		
3	RIDEM Response to Comments	4-24-2019		

Site Plan

Tilted Barn Brewery
Assessor's Plat 39-1 Lot 1 and Assessor's Plat 102 Lot 10
Exeter/North Kingstown, Rhode Island

Client
Tilted Barn Brewery
One Hemsley Place, Exeter, Rhode Island 02822

SHEET 6 OF 10

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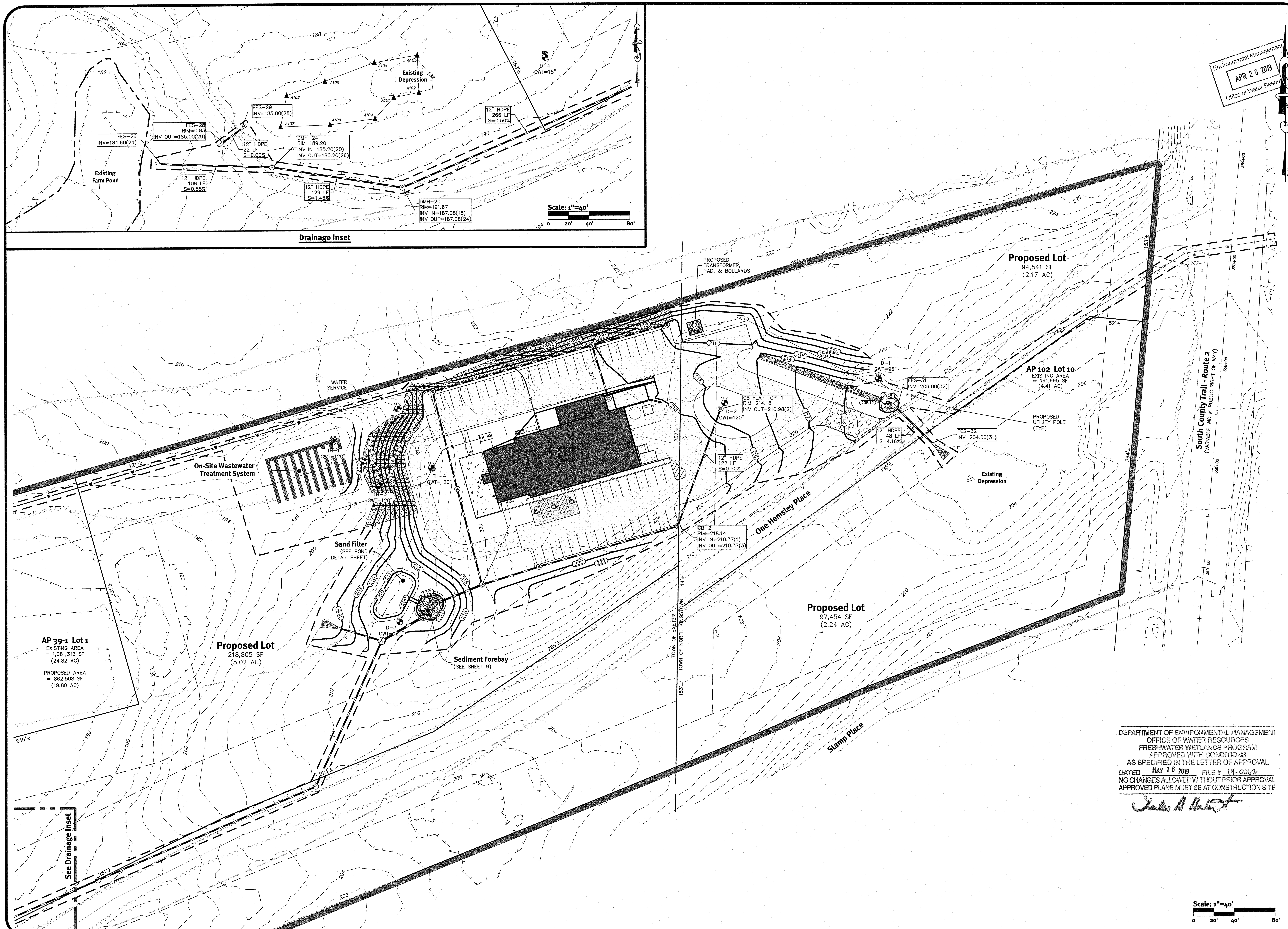

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JASON P. CLOUGH
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No.	Date	Description	By:
3	4-26-2019	RIDEM Response to Comments	J.A.R.
2	4-22-2019	Preliminary Submission	J.A.R.
1	2-8-2019	RIDEM Preliminary Determination Submission	J.A.R.

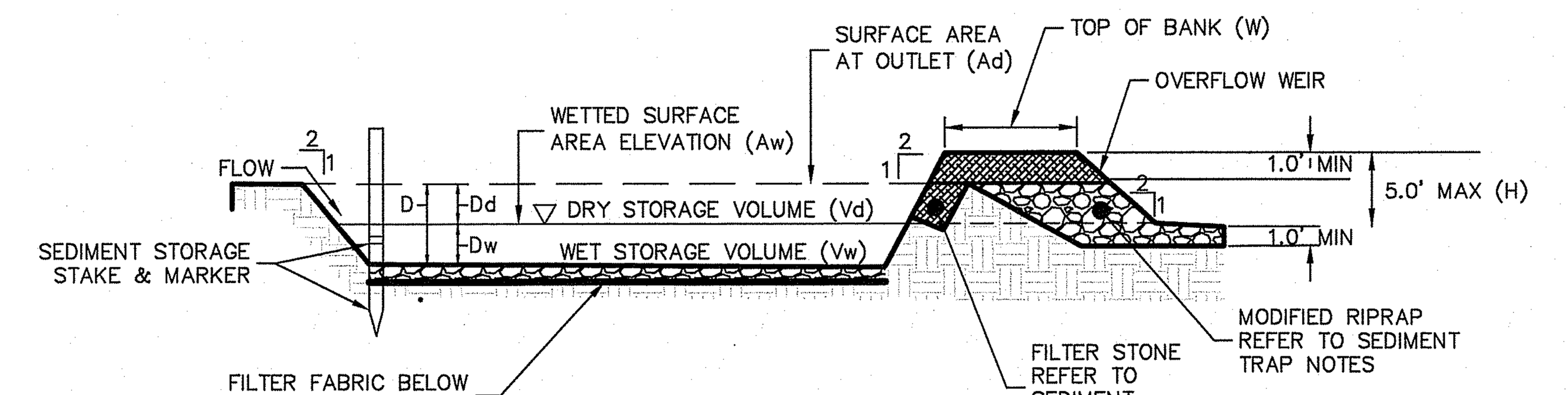
Drawn By: J.A.R. Design By: M.R.T.

Grading And Utilities Plan

Tilted Barn Brewery

Assessor's Plat 39-1 Lot 1 and Assessor's Plat 102 Lot 10
Exeter/North Kingstown, Rhode Island

Client
Tilted Barn Brewery
One Hemsley Place, Exeter, Rhode Island 02822



SECTION VIEW

Temporary Sediment Trap Details

NOT TO SCALE

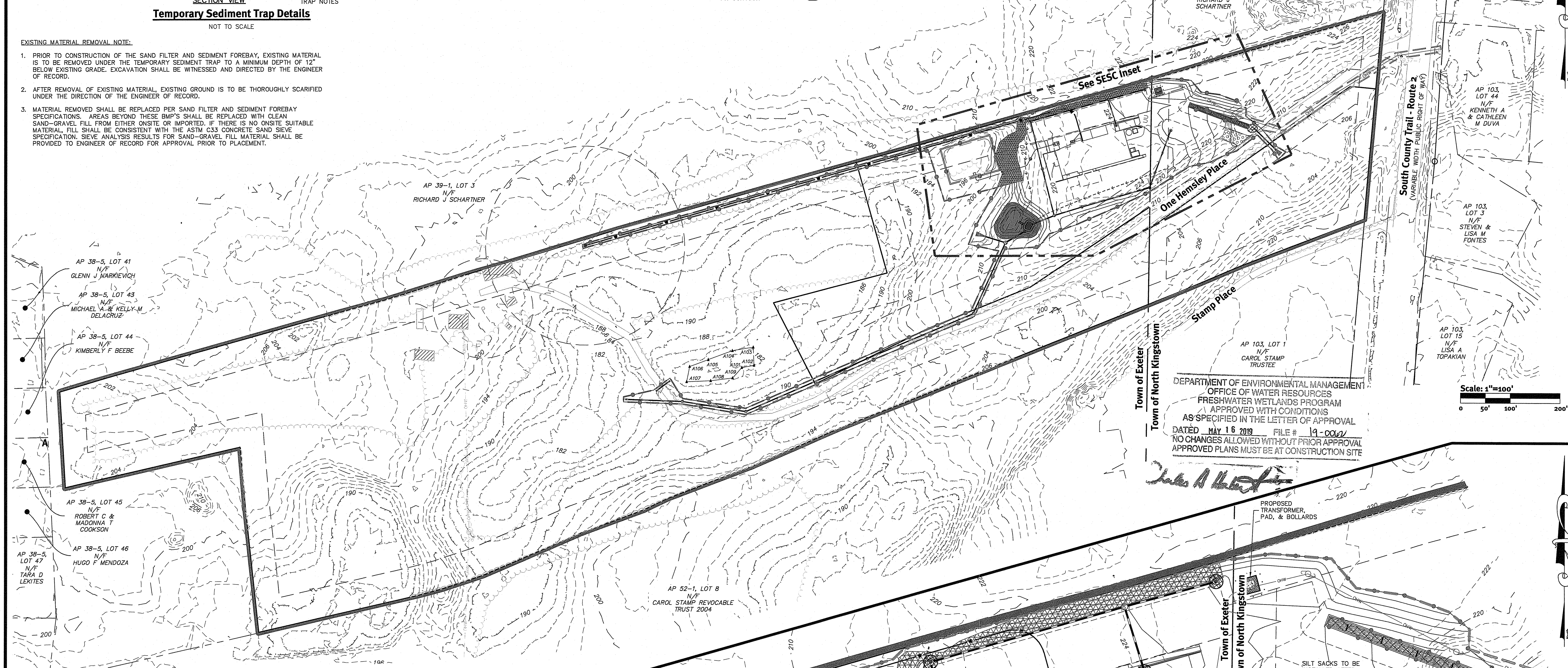
SEDIMENT TRAP DIMENSIONS	TRAP A
TRIBUTARY DRAINAGE AREA (AC)	2.11
WET STORAGE DEPTH (Dw) (FT)	2.00
DRY STORAGE DEPTH (Dd) (FT)	1.00
TOTAL DEPTH (D) (FT)	3.00
BOTTOM OF TRAP AREA (Ab) (SF)	2,300
WETTED SURFACE AREA (Aw) (SF)	3,540
SURFACE AREA AT OUTLET (Ad) (SF)	4,240

Soil Erosion Control Legend:

- DIVERSION RUNOFF CONVEYANCE MEASURE (SWALE AND/OR BERM)
- TEMPORARY SEDIMENT TRAP
- EROSION CONTROL (COMPOST SOCK, SILT FENCE (RI STD 9.2.0) OR APPROVED EQUAL)
- LIMIT OF DISTURBANCE (W/ EROSION CONTROL)
- PR CONTOUR (308)
- CONSTRUCTION ENTRANCE (RIDOT STD 9.9.0)
- INFILTRATING AREA (TO BE PROTECTED BY COMPOST SOCK OR SILT FENCE)
- SILT SACK OR APPROVED EQUIVALENT

EXISTING MATERIAL REMOVAL NOTE:

1. PRIOR TO CONSTRUCTION OF THE SAND FILTER AND SEDIMENT FOREBAY, EXISTING MATERIAL IS TO BE REMOVED UNDER THE TEMPORARY SEDIMENT TRAP TO A MINIMUM DEPTH OF 12" BELOW EXISTING GRADE. EXCAVATION SHALL BE WITNESSED AND DIRECTED BY THE ENGINEER OF RECORD.
2. AFTER REMOVAL OF EXISTING MATERIAL, EXISTING GROUND IS TO BE THOROUGHLY SCARIFIED UNDER THE DIRECTION OF THE ENGINEER OF RECORD.
3. MATERIAL REMOVED SHALL BE REPLACED PER SAND FILTER AND SEDIMENT FOREBAY SPECIFICATIONS. AREAS BEYOND THESE BMP'S SHALL BE REPLACED WITH CLEAN SAND-GRAVEL FILL FROM EITHER ONSITE OR IMPORTED. IF THERE IS NO ONSITE SUITABLE MATERIAL, FILL SHALL BE CONSISTENT WITH THE ASTM C33 CONCRETE SAND SIEVE SPECIFICATION. SIEVE ANALYSIS RESULTS FOR SAND-GRAVEL FILL MATERIAL SHALL BE PROVIDED TO ENGINEER OF RECORD FOR APPROVAL PRIOR TO PLACEMENT.



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Sediment Trap Notes:

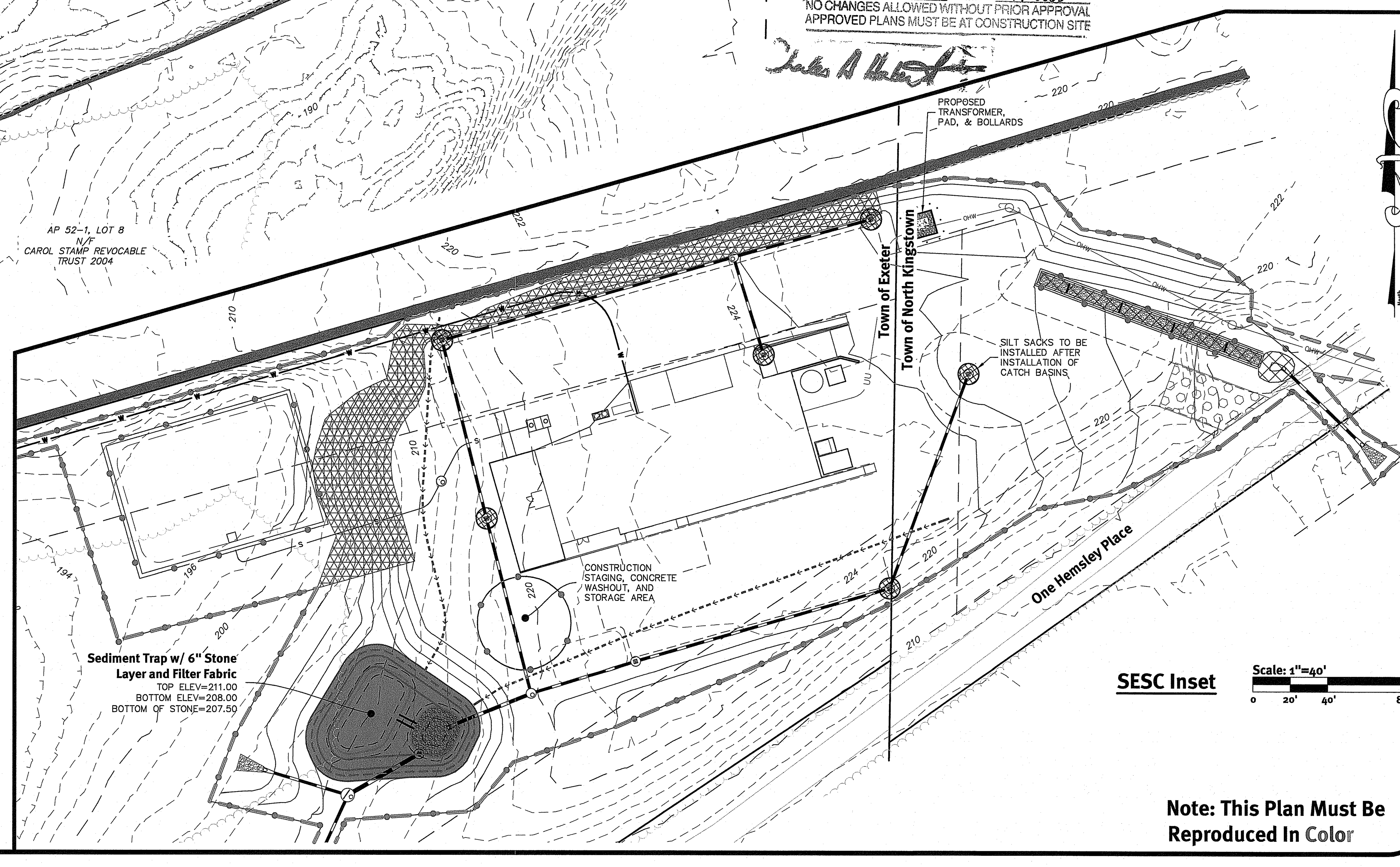
1. THE TEMPORARY SEDIMENT TRAPS SHALL MEET ALL REQUIREMENTS FOR TEMPORARY SEDIMENT TRAPS OUTLINED IN THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK (LATEST REVISION) SECTION SIX: SEDIMENT CONTROL MEASURES
2. THE TEMPORARY SEDIMENT TRAP SHALL HAVE AN INITIAL STORAGE VOLUME OF 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA.
3. ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER EXCEPT FOR THE EXCAVATED WET STORAGE AREA WHERE SLOPES SHALL NOT EXCEED 1.5:1.
4. THE OUTLET SHALL BE LOCATED AT THE MOST DISTANT HYDRAULIC POINT FROM THE INLET.
5. THE OUTLET CONSISTS OF A PERVIOUS STONE DIKE WITH A CORE OF MODIFIED RIPRAP AND FACED ON THE UPSTREAM SIDE WITH STONE.
6. TEMPORARY SEDIMENT TRAPS MUST OUTLET ONTO STABILIZED GROUND.
7. MAXIMUM HEIGHT OF A TEMPORARY SEDIMENT TRAP EMBANKMENT IS LIMITED TO 5 FEET.
8. SIDE SLOPES OF THE EMBANKMENT SHALL BE 2:1 OR FLATTER.
9. MODIFIED RIPRAP: SHALL MEET THE REQUIREMENTS OF RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SUBSECTION M.10.03.2.
10. FILTER STONE: SHALL MEET THE REQUIREMENTS OF RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SUBSECTION M.01.03 TABLE I, COLUMN V FILTER STONE.

Inspection, Maintenance, and Removal Requirements:

1. INSTALL "SEDIMENT STORAGE" STAKE WITH A MARKER AT ONE HALF OF THE WET STORAGE VOLUME.
2. INSPECT THE TEMPORARY SEDIMENT TRAP AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.25 INCH OR GREATER.
3. CHECK THE OUTLET TO ENSURE THAT IT IS STRUCTURALLY SOUND AND HAS NOT BEEN DAMAGED BY EROSION OR CONSTRUCTION EQUIPMENT.
4. CHECK FOR SEDIMENT ACCUMULATION AND FILTRATION PERFORMANCE.
5. WHEN SEDIMENTS HAVE ACCUMULATED TO ONE HALF THE MINIMUM REQUIRED VOLUME OF THE WET STORAGE, DEWATER THE TRAP AS NEEDED, REMOVE SEDIMENTS AND RESTORE THE TRAP TO ITS ORIGINAL DIMENSIONS.
6. DISPOSE OF THE SEDIMENT REMOVED FROM THE BASIN IN A SUITABLE AREA.
7. THE TEMPORARY SEDIMENT TRAP MAY BE REMOVED AFTER THE CONTRIBUTING DRAINAGE AREA IS STABILIZED.

Installation Notes:

1. CLEAR, GRUB AND STRIP ANY VEGETATION AND ROOT MAT FROM ANY PROPOSED EMBANKMENT AND OUTLET AREA.
2. REMOVE STONES AND ROCKS WHOSE DIAMETER IS GREATER THAN THREE (3) INCHES AND OTHER DEBRIS.
3. EXCAVATE WET STORAGE AND CONSTRUCT THE EMBANKMENT AND/OR OUTLET AS NEEDED TO ATTAIN THE NECESSARY STORAGE REQUIREMENTS.
4. USE ONLY FILL MATERIAL FOR THE EMBANKMENT THAT IS FREE FROM EXCESSIVE ORGANICS, DEBRIS, LARGE ROCKS (OVER SIX (6) INCHES) OR OTHER UNSUITABLE MATERIALS. COMPACT THE EMBANKMENT IN 9-INCH LAYERS BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED
5. STABILIZE THE EARTHEN EMBANKMENT USING ANY OF THE FOLLOWING MEASURES, SEEDING FOR TEMPORARY VEGETATION COVER; SEEDING FOR PERMANENT VEGETATIVE COVER; OR SLOPE PROTECTION, IMMEDIATELY AFTER INSTALLATION



SESC Inset

Scale: 1"=40'
0 20' 40' 80'

Note: This Plan Must Be Reproduced In Color

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JASON P. CLOUGH
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4/24/2019

No.	Date	Description	By:
2	4-24-2019	RIDEM Response to Comments	J.A.C.
1	4-22-2019	Preliminary Submission	J.A.R.
0	2-8-2019	RIDEM Preliminary Determination Submission	M.I.D.

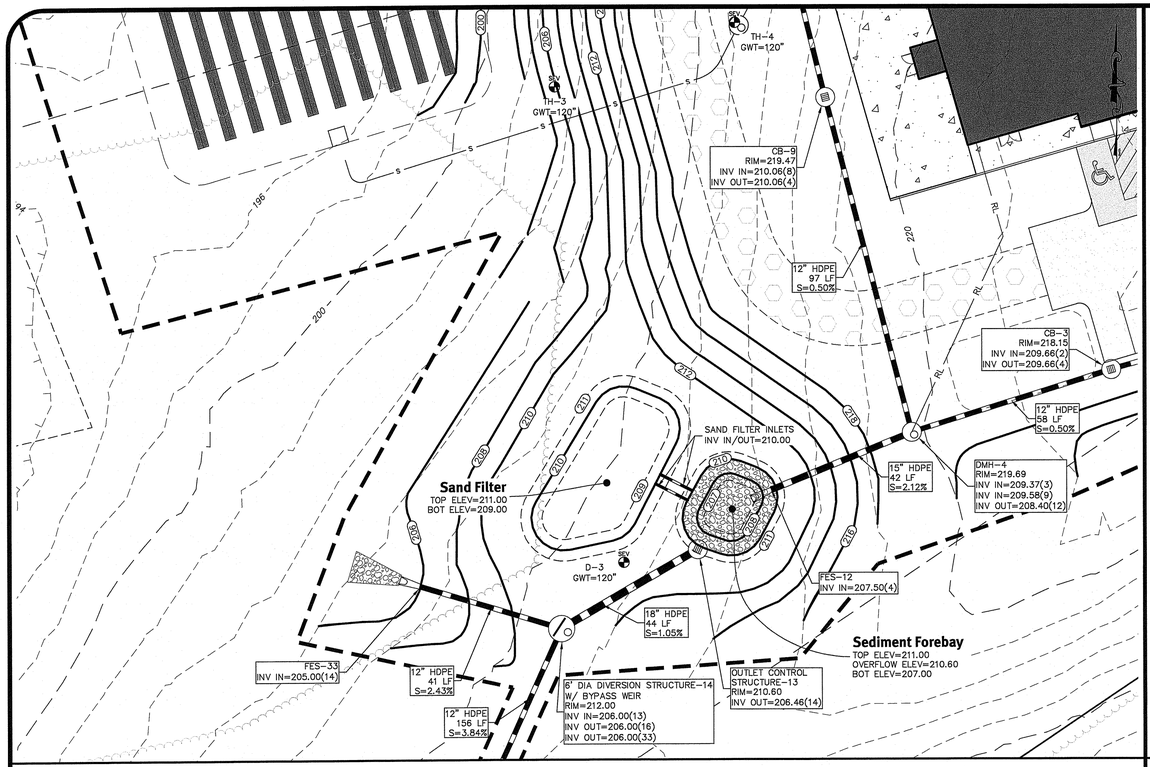
Drawn By: J.A.R. Design By: M.R.T.

Soil Erosion And Sediment Control Plan

Tilted Barn Brewery

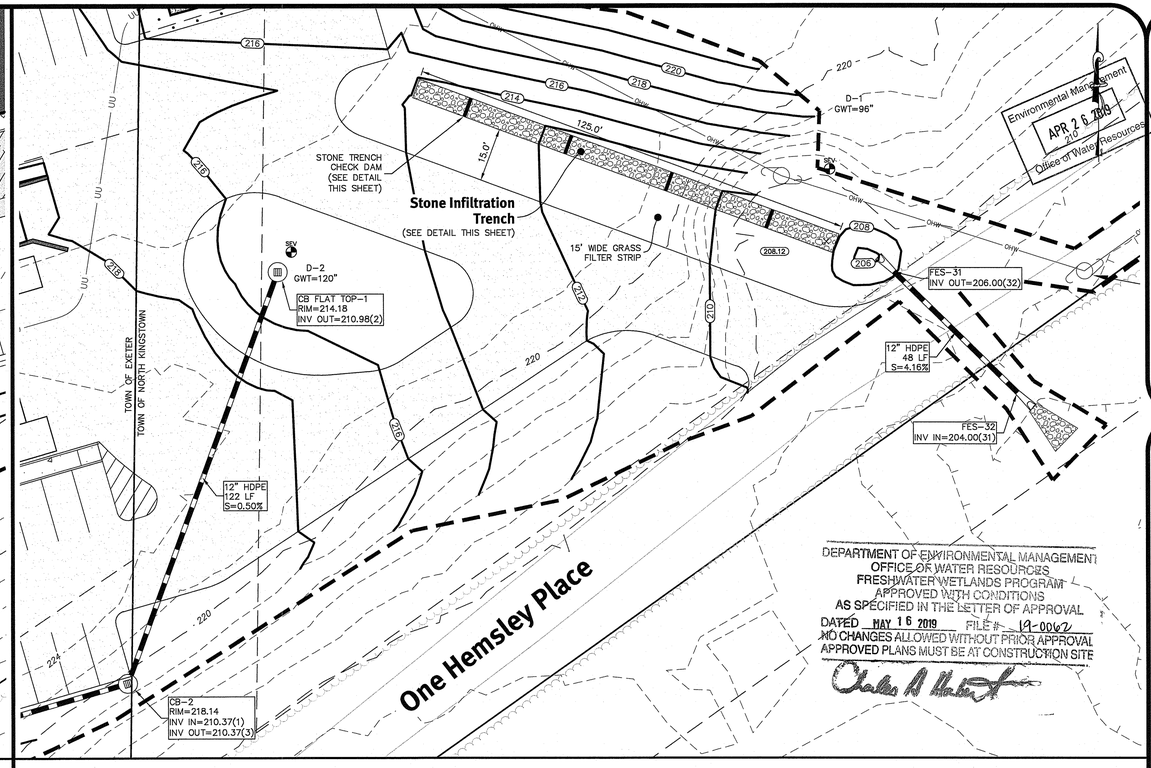
Assessor's Plat 39-1 Lot 1 and Assessor's Plat 102 Lot 10
Exeter/North Kingstown, Rhode Island

Client
Tilted Barn Brewery
One Hemsley Place, Exeter, Rhode Island 02822



Sediment Forebay & Sand Filter

Scale: 1"=20'
0 10' 20' 40'



Stone Infiltration Trench

Scale: 1"=20'
0 10' 20' 40'

Environmental Management
APR 26 2019
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4/12/19
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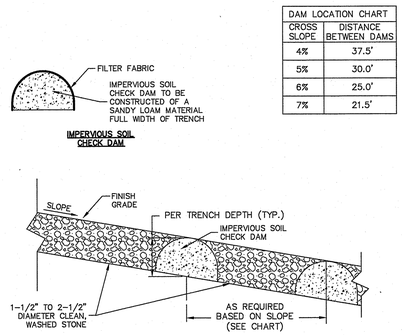
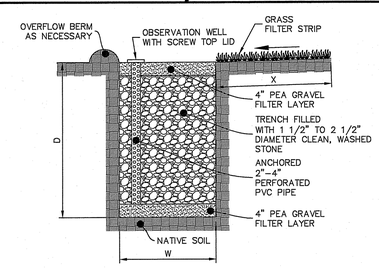
CIVIL

DAM LOCATION CHART	
CROSS SLOPE	DISTANCE BETWEEN DAMS
4%	37.5'
5%	30.0'
6%	25.0'
7%	21.5'



Stone Trench Check Dam Detail
NOT TO SCALE

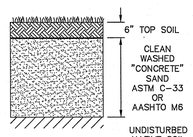


LOCATION	TRENCH DEPTH (D)	TRENCH WIDTH (W)	GRASS FILTER STRIP WIDTH (X)
INFILTRATION TRENCH	36"	66"	180"

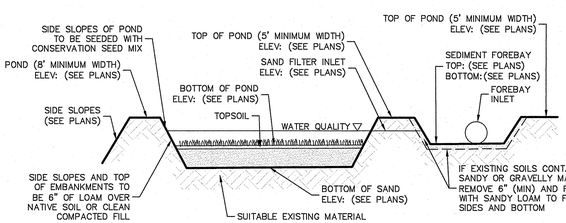
NOTE:
- BOTTOM OF TRENCH VARIES FROM ELEVATION 212 TO 205.
- GROUNDWATER TABLE IS </= TO ELEVATION 200 PER TESTHOLES D-1 AND D-4.

Stone Infiltration Trench
NOT TO SCALE

DESCRIPTION	SNDF	SDFB
TOP OF POND ELEVATION	211.00	211.00
100 YEAR STORM ELEVATION	210.95	210.98
10 YEAR STORM ELEVATION	210.66	210.79
1 YEAR STORM ELEVATION	210.44	210.61
WQ STORM ELEVATION	209.55	210.56
BOTTOM OF POND ELEVATION	209.00	207.00
TOP SOIL DEPTH	209.00	N/A
SAND DEPTH	2.50	N/A
BOTTOM OF SAND ELEVATION	206.50	N/A
SEASONAL HIGH GWT ELEVATION	199.20	202.75
SOIL EVALUATION	D-3	D-3



SAND FILTER
TYPICAL SECTION

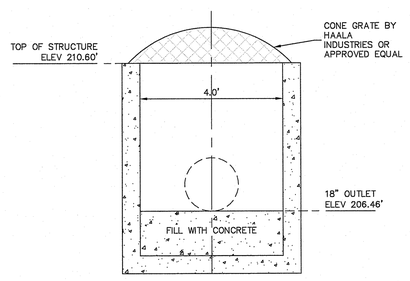


NOTE:
LIMITS OF SAND FILTER TO BE STAKED OUT AND NOT USED AS A TEMPORARY SEDIMENT BASIN DURING CONSTRUCTION (NO CONSTRUCTION TRAFFIC ALLOWED WITHIN FILTER LIMITS)

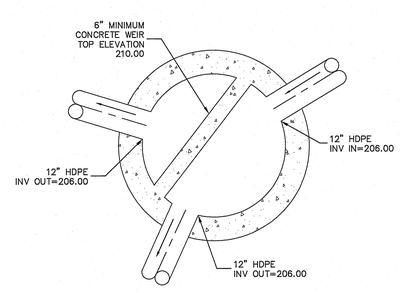
SAND FILTER
NOT TO SCALE

SEDIMENT FOREBAY
NOT TO SCALE

Sand Filter BMP System
NOT TO SCALE

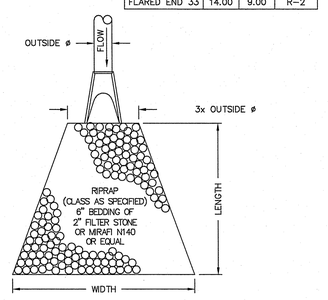


Outlet Control Structure
4' Diameter Manhole
SCALE: 1"=2'



Bypass Structure (6'Ø Manhole)
NOT TO SCALE

FLARED END	LENGTH	WIDTH	CLASS
FLARED END 32	13.00	9.00	R-2
FLARED END 33	14.00	9.00	R-2



Riprap Apron/ FE Detail
NOT TO SCALE

No.	Date	Description	By
2	4-24-2019	RIDM Response to Comments	JA.C.
1	4-22-2019	Preliminary Submission	JA.R.
0	3-8-2019	RIDEM Preliminary Determination Submission	BJ.D.

Design By: M.R.T.
Drawn By: J.A.R.

Pond Details
Tilted Barn Brewery
Assessor's Plat 39-1 Lot 1 and Assessor's Plat 102 Lot 10
Exeter/North Kingstown, Rhode Island
Client
Tilted Barn Brewery
One Hemsley Place, Exeter, Rhode Island 02822

DE Job No: 2665-001 Copyright 2019 by DiPrete Engineering Associates, Inc.

SHEET 9 OF 10

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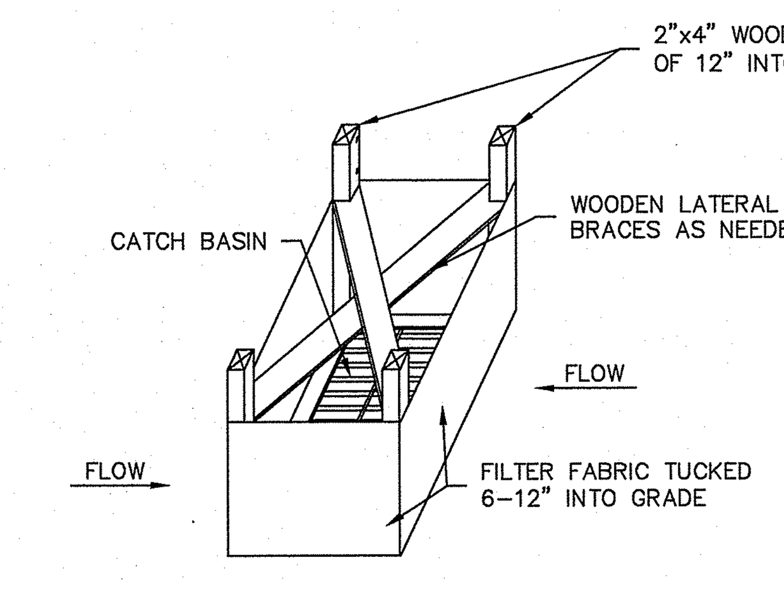
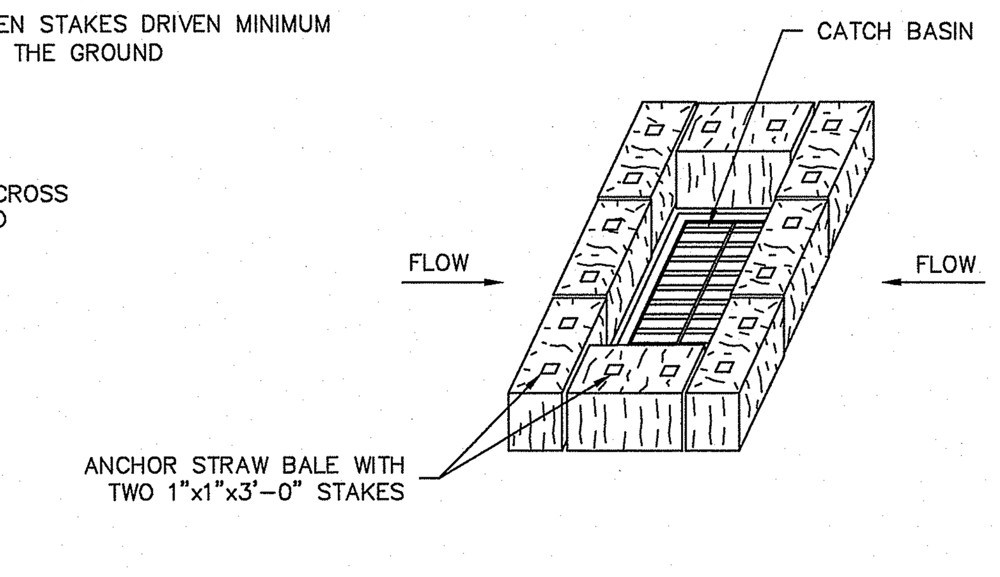
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAY 16 2019 FILE # 19-0062
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE



SILT FENCE INSTALLATION FOR CATCH BASINS AT LOW POINTS



STRAW BALE FILTER INSTALLATION FOR CATCH BASINS AT LOW POINTS

NOTES:
1. STORMWATER INLETS WHICH DO NOT DISCHARGE TO SEDIMENT TRAPS OR BASINS MUST BE PROTECTED UNTIL THE TRIBUTARY AREAS ARE STABILIZED.
2. SEDIMENT MUST BE REMOVED FROM INLET PROTECTION AFTER EACH STORM.
3. REFER TO LONG TERM/SHORT TERM MAINTENANCE NOTES FOR TIMING OF PLACEMENT AND REMOVAL OF EROSION CONTROL ELEMENTS.

Catch Basin Erosion Control

NOT TO SCALE

Environmental Management
APR 26 2019
Office of Water Resources

DiPrete Engineering

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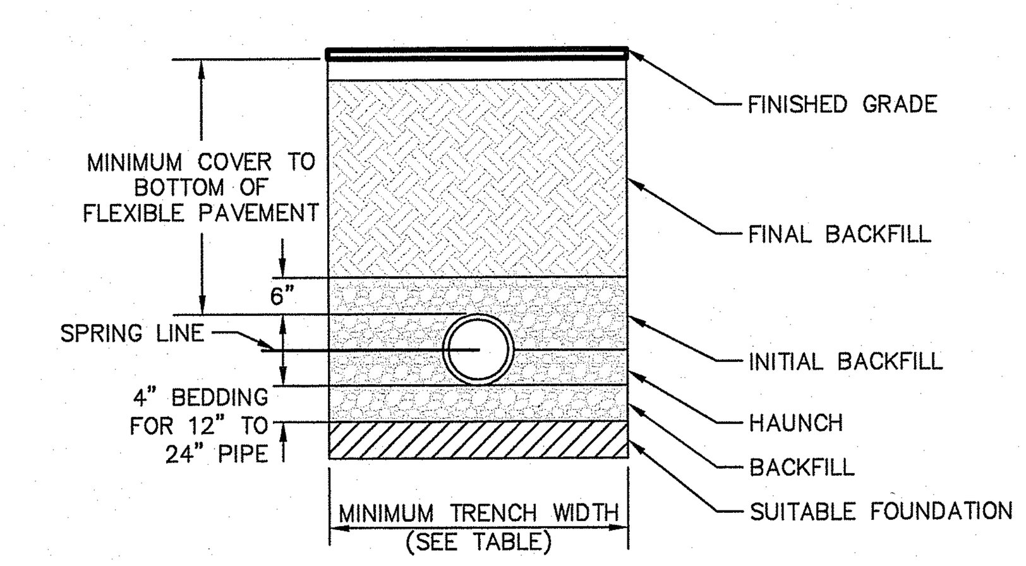
Boston • Providence • Newport

JASON P. CLOUGH
No. 9110
REGISTERED PROFESSIONAL ENGINEER CIVIL

INSTALLATION NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS, LATEST ADDITION.
2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100MM) FOR 4"–24" (100MM–600MM); 6" (150MM) FOR 30"–60" (750MM–900MM).
5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
6. MINIMUM COVER: MINIMUM COVER, H, IN NON–TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" ø PIPE AND 24" OF COVER FOR 54"–60" ø PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

PIPE ø	MINIMUM TRENCH WIDTH
6"	23"
8"	26"
12"	30"
15"	34"
24"	39"



HDPE Trench Detail

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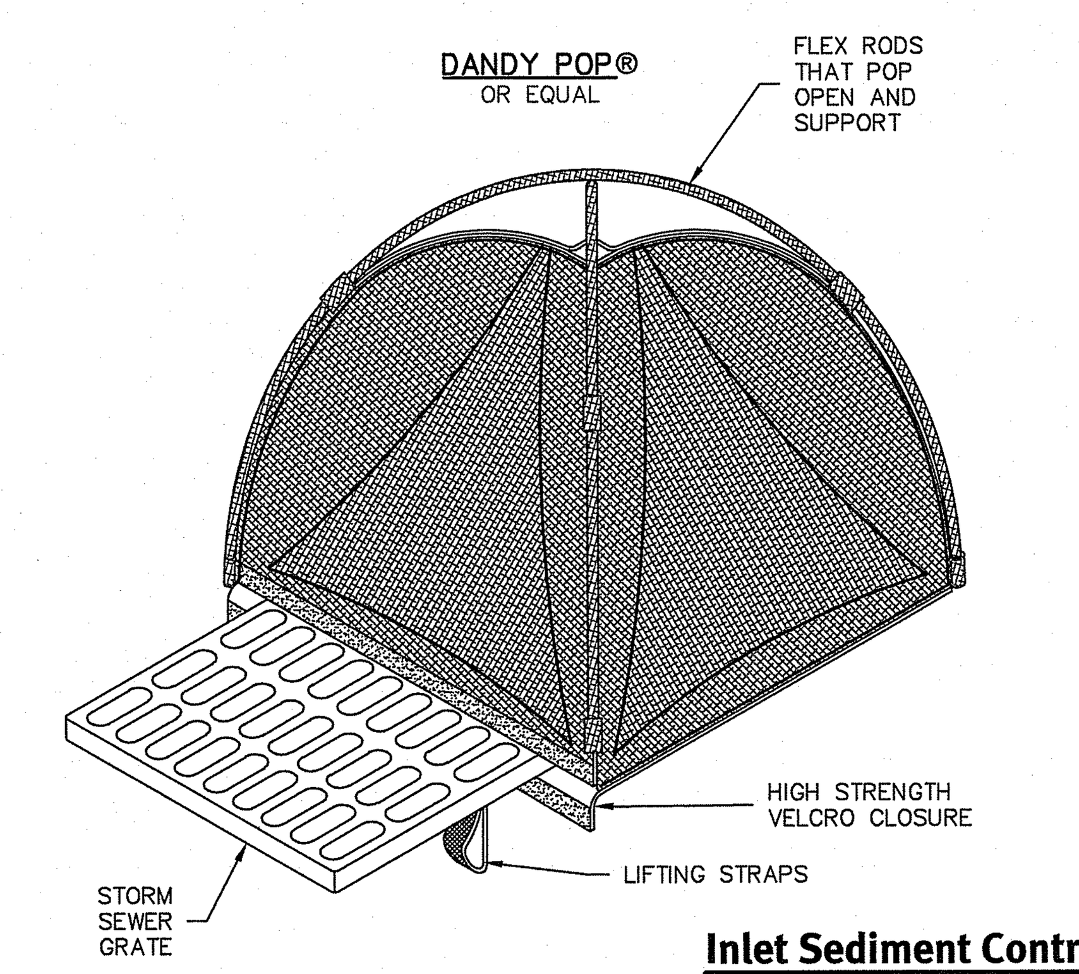

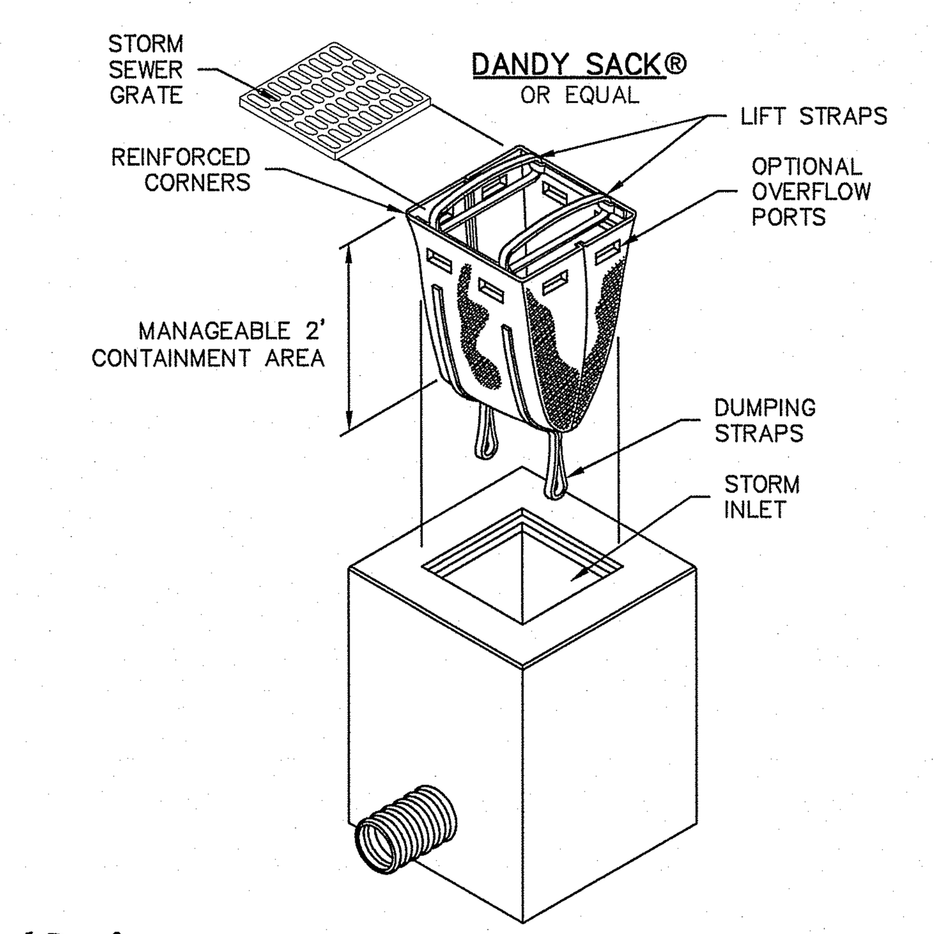

Inlet Sediment Control Devices

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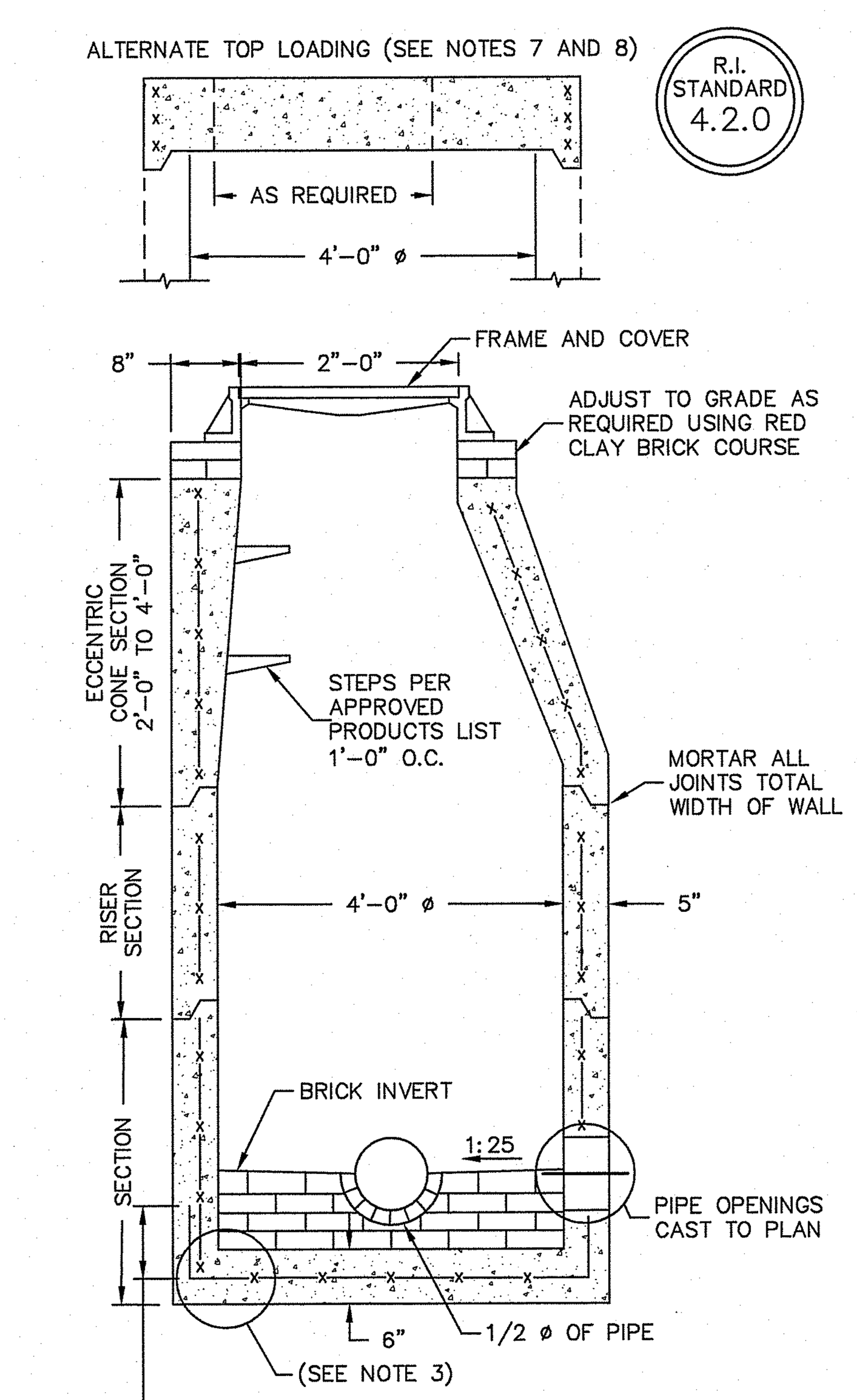
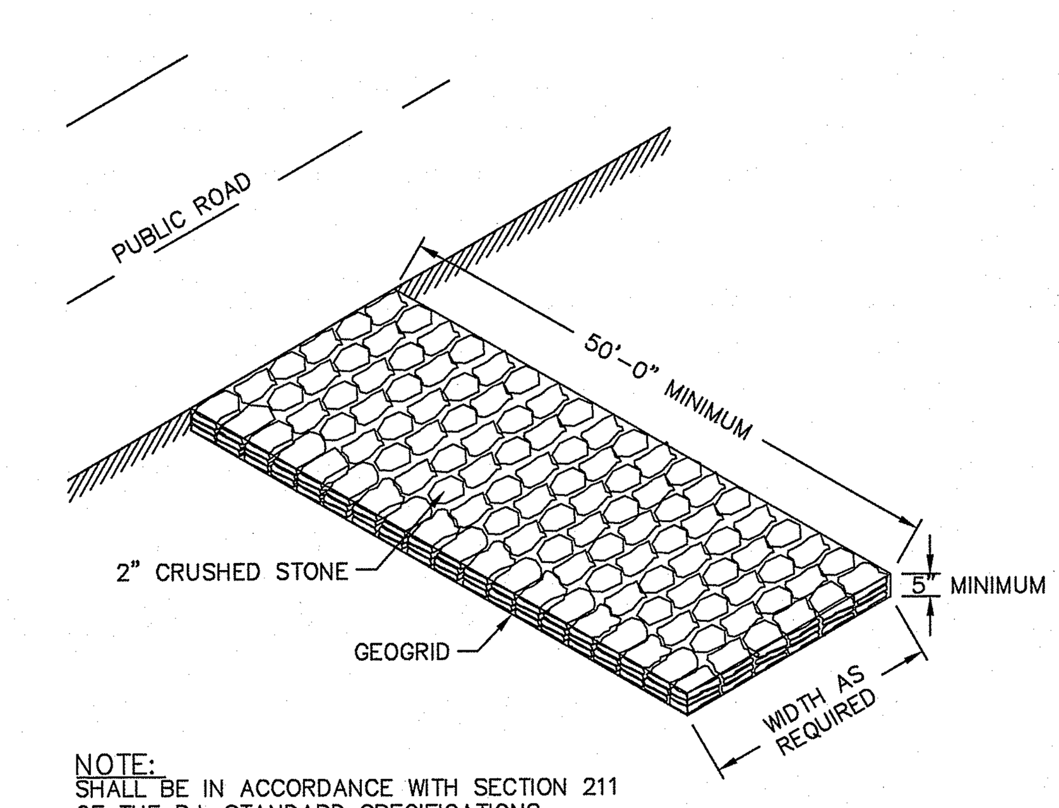


NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATIONS.
2. CIRCUMFERENTIAL STEEL REINFORCEMENT REQUIRED = 0.12 SQUARE INCH/LIN. FOOT MINIMUM.
3. STEEL REINFORCEMENT FOR BASE SECTION BOTTOM SHALL BE A MINIMUM OF 0.12 SQUARE INCH/LIN. FOOT (BOTH WAYS).
4. ONE POUR MONOLITHIC BASE SECTION.
5. ANY NECESSARY ADJUSTMENTS DURING CONSTRUCTION WILL BE DONE BY SAWCUTTING AND/OR CORING ONLY. NO JACKHAMMERS, HAMMERS AND CHISELS OR PNEUMATIC TOOLS WILL BE ALLOWED.
6. STEPS SHALL CONFORM TO STD. 5.3.0 AND SHALL BE INSTALLED AT THE CASTING PLANT.
7. ALTERNATE TOP SLAB IS STEEL REINFORCED TO MEET OR EXCEED H–25 LOADING (SEE STD. 4.7.2).
8. ALTERNATE TOP SLAB IS ONLY FOR USE WHEN REDUCING SECTION DOES NOT FIT BECAUSE OF STRUCTURE DEPTH.
9. REFER TO STD. 5.2.0 FOR MAXIMUM PIPE SIZES.

Precast 4'-0" Round Manhole

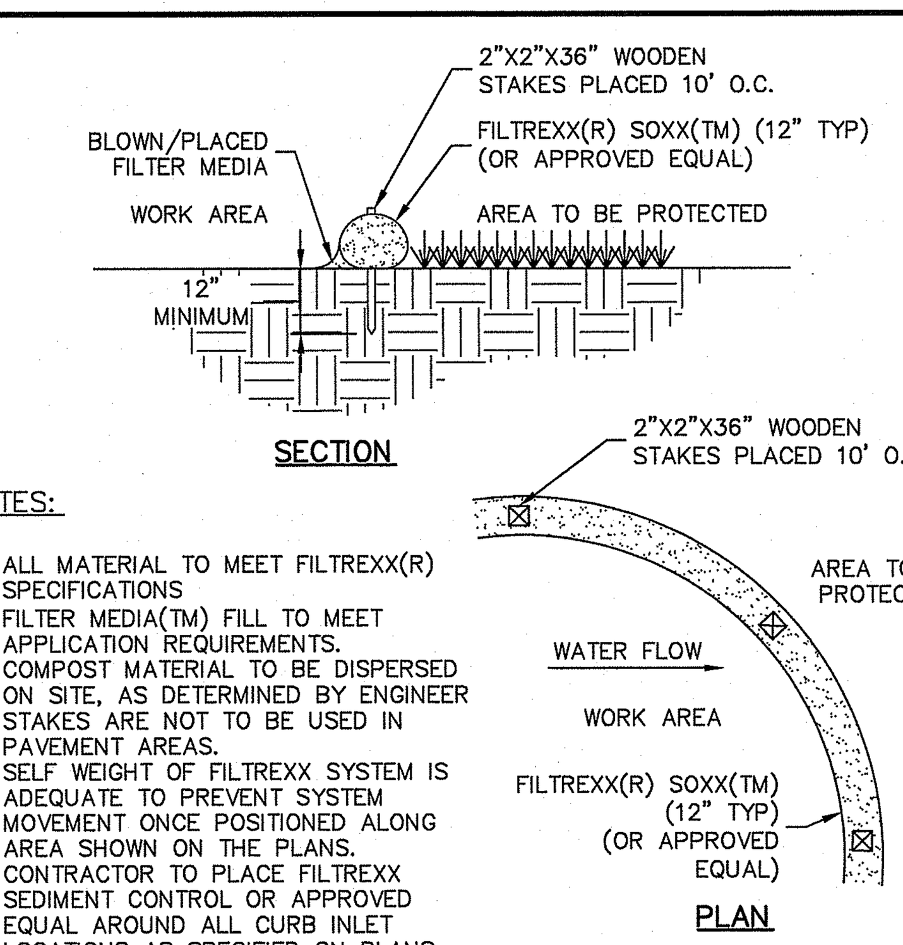
NOT TO SCALE



NOTE:
SHALL BE IN ACCORDANCE WITH SECTION 211 OF THE R.I. STANDARD SPECIFICATIONS.

Construction Access

NOT TO SCALE

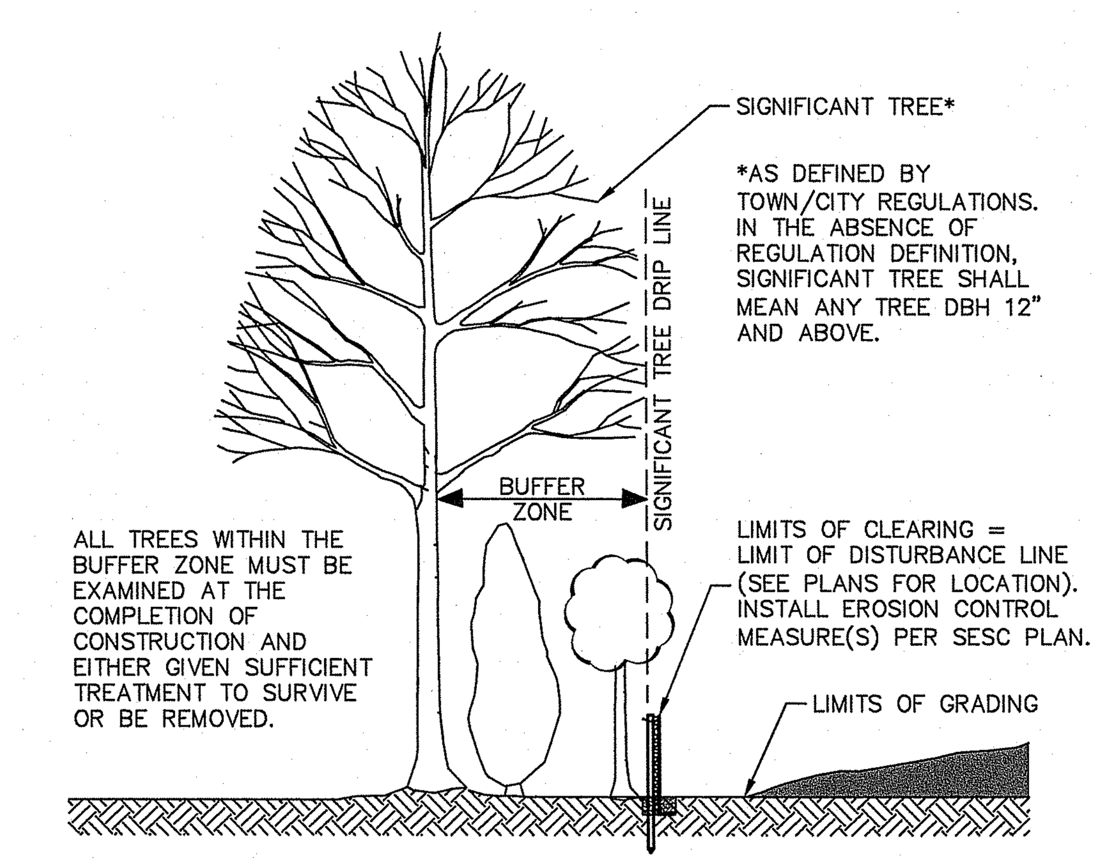


NOTES:

1. ALL MATERIAL TO MEET FILTREXX(R) SPECIFICATIONS
2. FILTER MEDIA(TM) FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER
4. STAKES ARE NOT TO BE USED IN PAVEMENT AREAS.
5. SELF WEIGHT OF FILTREXX SYSTEM IS ADEQUATE TO PREVENT SYSTEM MOVEMENT ONCE POSITIONED ALONG AREA SHOWN ON THE PLANS.
6. CONTRACTOR TO PLACE FILTREXX SEDIMENT CONTROL OR APPROVED EQUAL AROUND ALL CURB INLET LOCATIONS AS SPECIFIED ON PLANS.

Filtrexx Sediment Control (or Approved Equal)

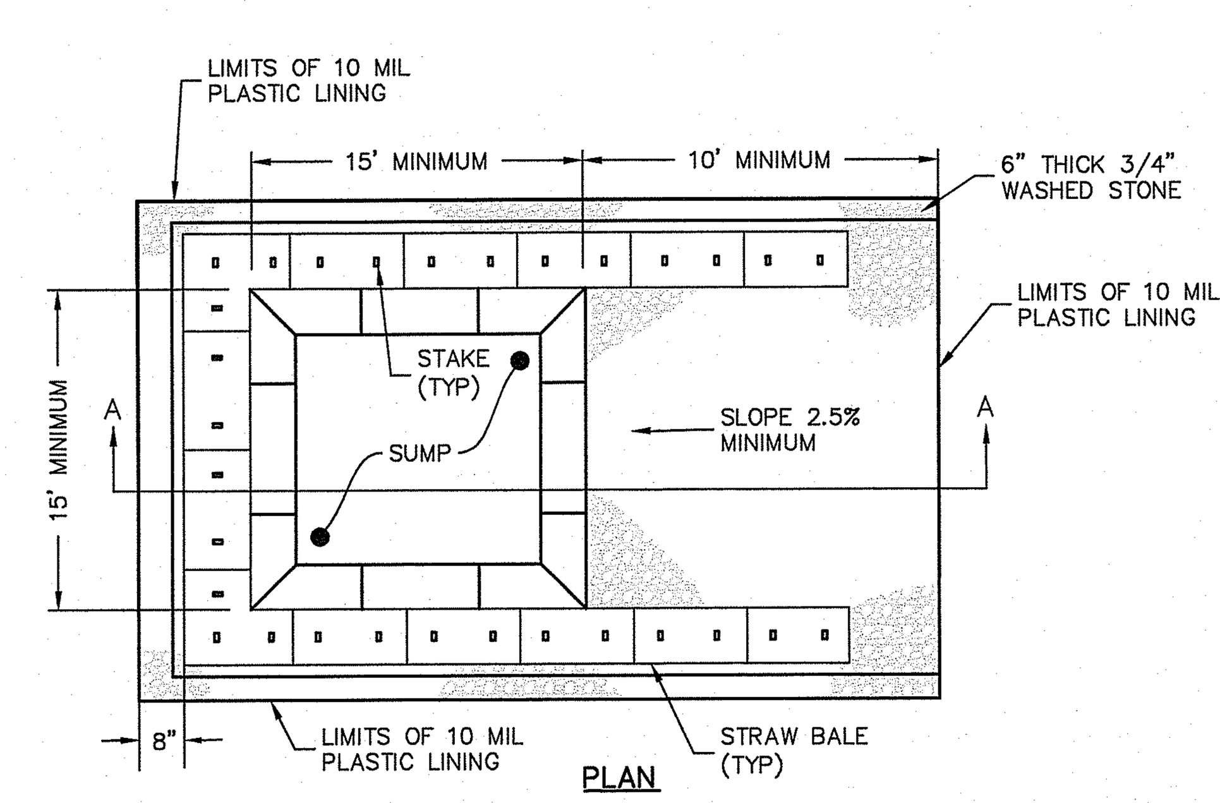
NOT TO SCALE

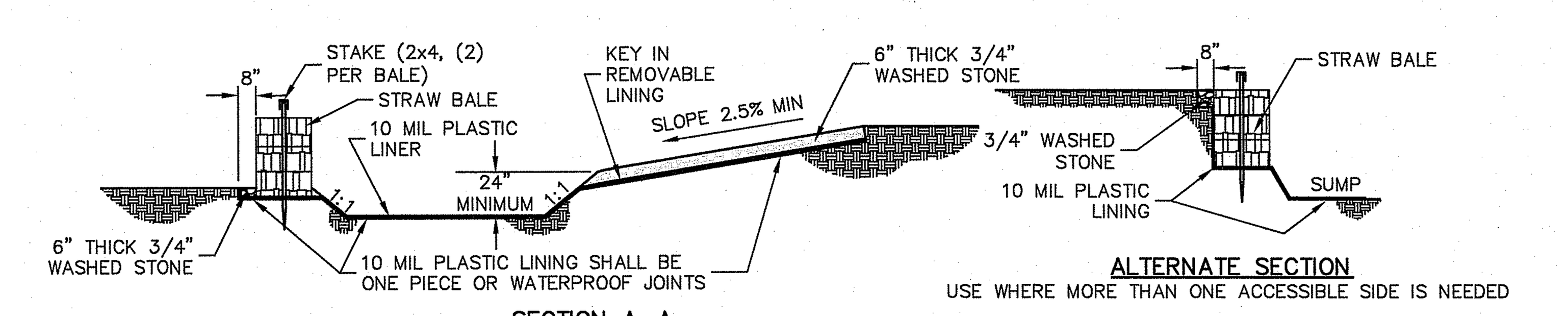


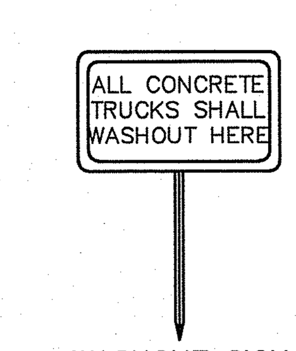
NOTE: LIMIT OF DISTURBANCE (LOD) MUST BE STAKED OUT PRIOR TO CONSTRUCTION. IF ANY SIGNIFICANT TREE DRIP LINE IS ENCROACHING PAST THE LOD, CONTRACTOR MUST CONTACT SITE ENGINEER PRIOR TO CONSTRUCTION.

Limit of Disturbance at Vegetation

NOT TO SCALE







WASHOUT SIGN

NOTES:

1. PIT IS SPECIFICALLY DESIGNATED, DIKED AND IMPERVIOUS CONTAINMENT TO PREVENT CONTACT BETWEEN CONCRETE WASH AND STORMWATER.
2. WASH WATER SHALL NOT BE ALLOWED TO FLOW TO SURFACE WATER.
3. FACILITY MUST HOLD SUFFICIENT VOLUME TO CONTAIN CONCRETE WASTE WITH A MINIMUM FREEBOARD OF 12."
4. FACILITY SHALL NOT BE FILLED BEYOND 95% CAPACITY UNLESS A NEW FACILITY IS CONSTRUCTED.
5. SAWCUT PORTLAND CEMENT CONCRETE, RESIDUE FROM SAWCUT AND GRINDING TO BE DISPOSED OF IN THE PIT.
6. CONCRETE WASHOUTS SHALL BE LOCATED A MINIMUM OF 100' FROM DRAINAGE WAYS, INLETS, AND SURFACE WATERS.
7. MANUFACTURED CONCRETE WASHOUT DEVICES MAY BE USED IF REMOVED FROM THE SITE WHEN 95% FULL CAPACITY.

Concrete Washout Area

NOT TO SCALE

No.	Date	Description	By:
2	4-24-2019	RIDEM Response to Comments	J.A.C.
1	4-22-2019	Preliminary Submission	J.A.R.
0	2-8-2019	RIDEM Preliminary Determination Submission	M.I.D.

Drawn By: J.A.R. Design By: M.R.T.

Detail Sheet-1

Tilted Barn Brewery

Assessor's Plat 39-1 Lot 1 and Assessor's Plat 102 Lot 10
Exeter/North Kingstown, Rhode Island

Client
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