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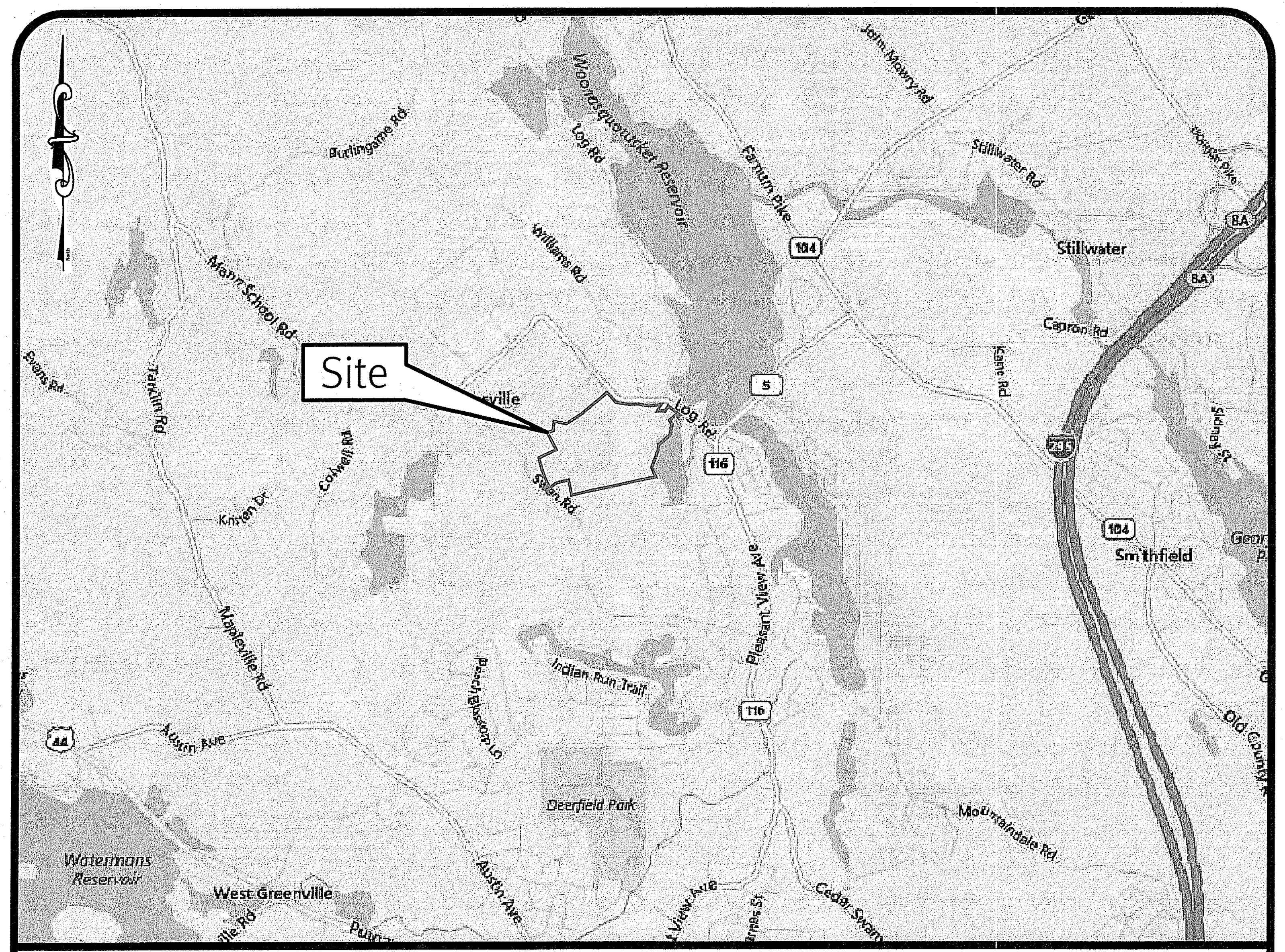
RIDEM Submission

Sand Trace

8 Mann School Road
Smithfield, Rhode Island

Assessor's Plat 46 Lot 10


Site
Stillwater
Smithfield
Mann School Rd
Log Rd
Williams Rd
Farnum Pike
Woonasquatucket Reservoir
Stillwater Rd
Capron Rd
Pleasant View Ave
Indian Run Trail
Deerfield Park
Waterman Reservoir
West Greenville
Austin Ave
Cedar Swamp
104
5
116
295
44

Location Map 1" = 2000'

OCT 1 6 2020

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2 Aerial Half Mile Radius
3 Notes and Legend
4 Existing Condition Plan
5 SESC Plan Phase 1
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9 Site Plan - 1
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12 Site Plan - 4
13 Plan & Profile - Road A Sta 00+00 - 12+00
14 Plan & Profile - Road A Sta 12+00 - 18+00
15 Plan & Profile - Road A Sta 18+00 - 28+27
16 Plan & Profile - Road B
17 Pond Complex A & D Details
18 Pond Complex B Details
19 Pond Complex C Details
20 SESC Detail Sheet
21 Detail Sheet - 1
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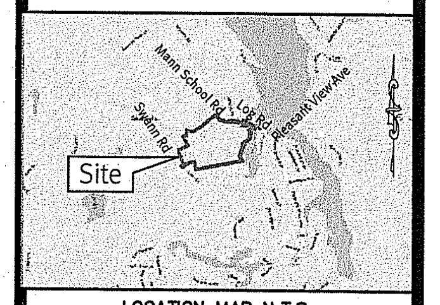
23 Detail Sheet - 3

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED DEC 1 1 2020 FILE # 20-0108
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Martin D. Wencek

SESC / O&M
The Soil Erosion and Sediment Control Plan (SESC) and Stormwater Operation and Maintenance Plan (O&M) are required documents with this plan set and must be maintained by the contractor and owner on site.

DiPrete Engineering
Two Stafford Court Cranston, RI 02920
tel 401-943-1000 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

AUDIE D. OSGOOD
REGISTERED
PROFESSIONAL ENGINEER
CIVIL
10/08/2020


Mann School Rd
Log Rd
Swann Rd
Pleasant View Ave
Site

LOCATION MAP N.T.S.

This plan set must not be used for construction purposes unless stamped 'Issued for Construction' and stamped by a registered Professional Engineer of DiPrete Engineering.

DiPrete Engineering only warrants plans on a DiPrete Engineering title block stamped by registered Professional Engineer of DiPrete Engineering. DiPrete Engineering does not warrant plans by any other party.

The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA conformance in the implementation of this plan and design.

Existing utilities shown on this plan are approximate only. DiPrete Engineering assumes no responsibility for damages incurred due to locations of existing utilities. See 'Utility Note' on sheet 3.

No.	Date	Description	By:
1	10-08-2020	RIDEM Submission Response to Comments	S.R.
0	05-01-2020	RIDEM Submission	S.R.

Drawn By: S.R.
Design By: C.D./P.A.A.

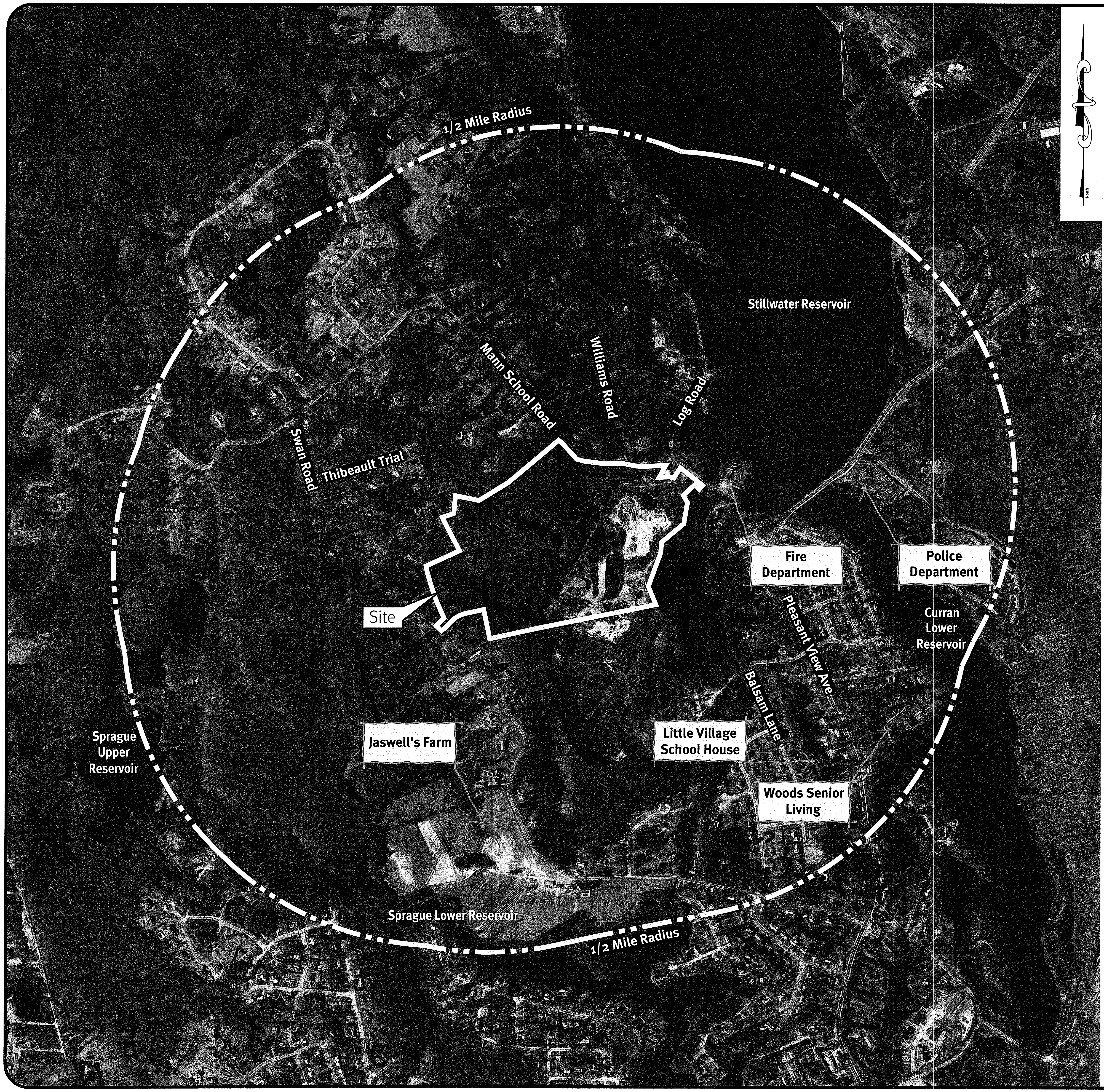
Cover Sheet

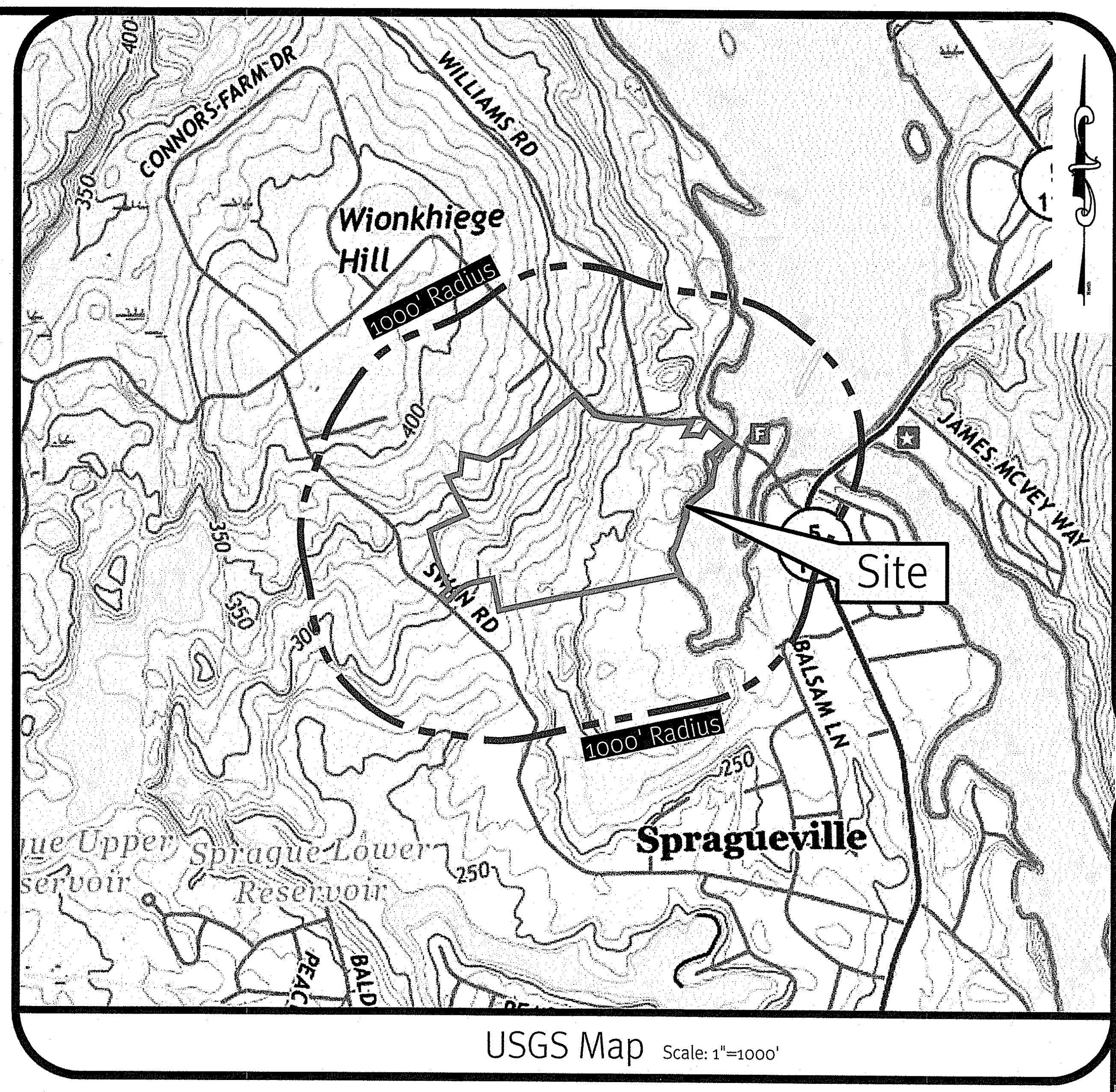
Sand Trace
Assessor's Plat 46 Lot 10, Zone R-20M, Area: 54.95 ±Acres
Smithfield, Rhode Island

Applicant
Sand Trace LLC
10B Appian Way, Smithfield, Rhode Island 02917
tel 401-231-4700 fax 401-232-3203

SHEET 1 OF 23

DE Job No: 0214-017


1/2 Mile Radius
Stillwater Reservoir
Swan Road
Thibeault Trial
Mann School Road
Williams Road
Log Road
Site
Fire Department
Police Department
Pleasant View Ave
Curran Lower Reservoir
Balsam Lane
Jaswell's Farm
Little Village School House
Woods Senior Living
Sprague Upper Reservoir
Sprague Lower Reservoir
1/2 Mile Radius
North


CONNORS FARM DR
WILLIAMS RD
Wionkhiege Hill
1000' Radius
JAMES MCVEY WAY
Site
SWAN RD
BALSAM LN
1000' Radius
Sprague Upper Reservoir
Sprague Lower Reservoir
Spragueville
350
400
300
250

USGS Map Scale: 1"=1000'

Legend:

PROPERTY LINE ━━━━━

HALF MILE RADIUS LINE ━━ ▪ ▪ ━━

1000' RADIUS LINE ━━ ‑ ‑ ━━

OCT 1 6 2020

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

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED DEC 1 1 2020 FILE # 20-0108
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Martin D. Wencek

Photo Obtained from RIGIS 2014 database.

Scale: 1"=400'
0 200' 400' 800'

DiPrete Engineering

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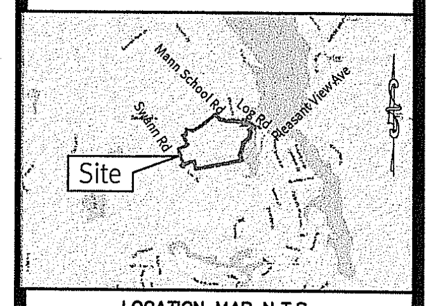
10/08/2020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Drawn By: S.R.
Design By: C.D./P.A.A.

Aerial Half Mile Radius

Sand Trace

Assessor's Plat 46 Lot 10, Zone R-20M, Area: 54.95 ±Acres
Smithfield, Rhode Island

Applicant
Sand Trace LLC
10B Appian Way, Smithfield, Rhode Island 02917
tel 401-231-4700 fax 401-232-3203

DE Job No: 0214-017

SHEET 2 OF 23

z:\demain\projects\0214-017 the village on stillwater\autocad drawings\0214-017-cvar.dwg Plotted: 10/16/2020

General Notes:

1. THE SITE IS LOCATED ON THE TOWN OF SMITHFIELD ASSESSOR'S PLAT 46 LOT 10.
2. THE SITE IS APPROXIMATELY 54.95± ACRES AND IS ZONED R-20M.
3. THE OWNER OF AP 46 LOT 10 IS:

   SAND TRACE, LLC
   10B APPIAN WAY
   SMITHFIELD, RI 02917

4. THIS SITE IS LOCATED IN FEMA FLOOD ZONES AE AND X. REFERENCE FEMA FLOOD INSURANCE RATE MAP 44007C0168H, MAP REVISED OCTOBER 02, 2015 (FLOOD PLAIN DESCRIPTIONS SHOWN BELOW).

   ZONE AE – THIS SITE IS LOCATED IN FEMA FLOOD ZONE AE. ZONE AE ARE SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD. BASE FLOOD ELEVATIONS HAVE BEEN DETERMINED.

   ZONE X (SHADED) – THIS SITE IS LOCATED IN FEMA FLOOD ZONE X. ZONE X ARE AREAS OF 0.2% ANNUAL CHANCE OF FLOOD; AREAS OF 1% ANNUAL CHANCE OF FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.

5. THE BOUNDARY LINE AS SHOWN ON THIS PLAN DEPICTS THE RESULTS OF A CLASS I BOUNDARY RETRACEMENT SURVEY AS PERFORMED BY DIPRETE ENGINEERING ASSOCIATES, INC. THIS PLAN IS NOT TO BE CONSTRUED AS A CLASS I BOUNDARY RETRACEMENT SURVEY PLAN AND IS NOT SUITABLE FOR RECORDING AS A CLASS I STANDARD SURVEY PLAN.
6. PLANIMETRIC FEATURES, CONTOUR LINES, AND SPOT ELEVATIONS WITHIN THE DESIGN AREA WERE STEREO COMPILED AT A SCALE OF 1"=40' BY BLUESKY GEOSPATIAL LIMITED, NORTH ADAMS, MA. SUB-CONSULTANTS TO THE OWNER/DEVELOPER, FROM COLOR PHOTOGRAPHY TAKEN ON APRIL 24, 2019 AND FIT TO GROUND CONTROL POINTS SURVEYED BY DIPRETE ENGINEERING. GROUND CONTROL WAS PERFORMED ON THE GROUND BY DIPRETE ENGINEERING USING REAL TIME KINEMATIC G.P.S. OBSERVATIONS. THE CONTOUR INTERVAL IS 1 FOOT. NINETY PERCENT OF THE TOPOGRAPHY AS DEPICTED IS ACCURATE TO WITHIN HALF THE CONTOUR INTERVAL, AND THE REMAINING TEN PERCENT IS ACCURATE TO WITHIN ONE FULL CONTOUR INTERVAL. CONTOUR DATA BEYOND THAT OBTAINED FROM BLUESKY GEOSPATIAL LIMITED, SHOWN ON THIS PLAN CONFORMS TO A T-4 TOPOGRAPHICAL SURVEY STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS; SAID DATA IS BASED ON ELEVATION INFORMATION THAT WAS COLLECTED WITH AIRBORNE LIDAR TECHNOLOGY FOR THE ENTIRE AREA OF RHODE ISLAND BETWEEN APRIL 22 AND MAY 6, 2011 AS PART OF THE NORTHEAST LIDAR PROJECT. THIS DATA'S POSITIONAL ACCURACY AND RELIABILITY HAS NOT BEEN VERIFIED BY DIPRETE ENGINEERING AND IS SUBJECT TO CHANGES AN AUTHORITATIVE FIELD SURVEY MAY DISCLOSE.
7. ALL WORK PERFORMED HEREIN IS TO BE GOVERNED BY CURRENT EDITIONS OF THE RHODE ISLAND STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, TOWN OF SMITHFIELD STANDARD SPECIFICATIONS AND DETAILS AND SPECIFICATIONS INCLUDED AS PART OF THE DRAWINGS. IN AREAS OF CONFLICT BETWEEN THE DIFFERENT SPECIFICATIONS, THE DESIGN PLANS AND PROJECT SPECIFICATIONS WILL TAKE PRECEDENCE OVER THE GENERAL SPECIFICATIONS AND THE DESIGN ENGINEER WILL INTERPRET THE CONSTRUCTION REQUIREMENT. THE CONTRACTOR IS ADVISED TO SUBMIT A REQUEST FOR INFORMATION (RFI) FOR ANY AREAS OF CONFLICT BEFORE COMMITTING TO CONSTRUCTION.
8. THE SITE IS NOT WITHIN A:
   - GROUNDWATER PROTECTION AREA (RIDEM)
   - NARROW RIVER SPECIAL AREA MANAGEMENT PLAN (CRMC)
   - SALT PONDS SPECIAL AREA MANAGEMENT PLAN (CRMC)
   - GROUNDWATER PROTECTION OVERLAY DISTRICT (TOWN)
   - AGRICULTURAL USE AREA
9. THIS SITE IS WITHIN A:
   - NATURAL HERITAGE AREAS (RIDEM)
10. THE FOLLOWING DOCUMENTS ARE CONSIDERED PART OF THE PROJECT PLANS AND THE CONTRACTOR/ OWNER MUST MAINTAIN THESE DOCUMENTS AS PART OF A FULL PLAN SET:
    - SOIL EROSION AND SEDIMENT CONTROL PLAN (SESC). THE SESC CONTAINS THE FOLLOWING:
      - EROSION CONTROL MEASURES
      - SHORT TERM MAINTENANCE
      - ESTABLISHMENT OF VEGETATIVE COVER
      - CONSTRUCTION POLLUTION PREVENTION
      - SEQUENCE OF CONSTRUCTION
    - STORMWATER OPERATION AND MAINTENANCE PLAN (O&M). THE O&M CONTAINS:
      - LONG TERM MAINTENANCE
      - LONG TERM POLLUTION PREVENTION
11. THIS PLAN SET REFERENCES RIDOT STANDARD DETAILS (DESIGNATED AS RIDOT STD X.X.X.). RIDOT STANDARD DETAILS ARE AVAILABLE FROM RIDOT AND ONLINE AT: HTTP: //WWW.DOT.RI.GOV/BUSINESS/CONTRACTORSANDCONSULTANTS.PHP.
12. THE SITE IS TO BE SERVICED BY PUBLIC WATER, PUBLIC SEWER AND UNDERGROUND ELECTRIC/TELECOM.
13. THE SITE IS PROPOSED TO BE BUILT WITH PRIVATE ROADWAYS WITH 12' WIDE TRAVEL LANES AND 1' CAPE COD BERMS (TOTAL PAVEMENT WIDTH = 26'). NO SIDEWALKS ARE PROPOSED.
14. THE DRAINAGE SYSTEM IS DESIGNED TO MEET THE TOWN OF SMITHFIELD SUBDIVISION AND LAND DEVELOPMENT REGULATIONS WITH THE USE OF CATCH BASINS, CULVERTS, SEDIMENT FOREBAYS AND DRAINAGE BASINS. THE STORMWATER MANAGEMENT SYSTEM MEETS THE RIDEM BEST MANAGEMENT PRACTICES.
15. THE SITE IS PROPOSED TO BE BUILT IN 3 PHASES AND CREATE A 160 UNIT RESIDENTIAL CONDOMINIUM DEVELOPMENT IN ACCORDANCE WITH THE REQUIREMENTS FOR A COMPREHENSIVE PERMIT, 25% OF THE PROPOSED UNITS WILL BE DESIGNATED AS AFFORDABLE.
16. SOIL EVALUATIONS WERE COMPLETED BY DIPRETE ENGINEERING ON NOVEMBER 5, 2019.
17. WETLANDS DELINEATED BY NATURAL RESOURCE SERVICES, INC. (86 HARRISVILLE MAIN STREET P.O. BOX 311 HARRISVILLE, RI 02830 PHONE: 401-568-7390 FAX: 401-568-7490) AND SURVEYED BY DIPRETE ENGINEERING USING GPS SUBMETER TECHNOLOGY.
18. 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.
19. THIS PLAN SET MAY REFERENCE AND/ OR INCLUDE REPRODUCTIONS OF PROPRIETARY PRODUCTS/ DETAILS BY OTHERS, AND/ OR THEIR ASSOCIATED SPECIFICATIONS. ANY REFERENCED OR REPRODUCED PROPRIETARY PRODUCT OR DETAIL BY OTHERS THAT IS SHOWN ON DIPRETE PLANS IS STRICTLY FOR INFORMATION/ SPECIFICATION PURPOSES ONLY. DIPRETE ENGINEERING DOES NOT WARRANT ANY PROPRIETARY PRODUCTS, DETAILS BY OTHERS OR THEIR RESPECTIVE DESIGNS. IF A DIPRETE ENGINEERING PLAN INCLUDES A PROPRIETARY PRODUCT/ DETAIL BY OTHERS (EITHER EXPLICITLY OR IMPLIED) AND IS STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND/OR REGISTERED LANDSCAPE ARCHITECT OF DIPRETE ENGINEERING, SAID STAMP DOES NOT EXTEND TO ANY PORTION OF THE PROPRIETARY PRODUCT/ DETAIL BY OTHERS OR ITS DESIGN.

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, THE DIRECTOR OF PUBLIC WORKS, THE TOWN ENGINEER, AND RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
2. ALL EROSION CONTROL INCLUDING (BUT NOT LIMITED TO) TEMPORARY SWALES, TEMPORARY SEDIMENT TRAPS, ETC. TO BE INSTALLED PER THE LATEST EDITION OF THE RHODE ISLAND SOIL EROSION AND SEDIMENTATION CONTROL (RISESC) HANDBOOK AND THE SOIL EROSION & SEDIMENTATION CONTROL PLAN(S). NOTE THE SOIL EROSION AND SEDIMENT CONTROL SHOWN ON THESE PLANS ARE THE MINIMUM QUANTITY/ TYPE OF EROSION CONTROL DEVICES AND MATERIALS DEEMED REQUIRED BY DIPRETE ENGINEERING TO MEET THE OBJECTIVES OF THE RISESC HANDBOOK, BUT IS CONSIDERED A GUIDE ONLY. ADDITIONAL MEASURES/ ALTERNATE CONFIGURATIONS MAY BE REQUIRED IN ORDER TO MEET THE RISESC HANDBOOK BASED ON FACTORS INCLUDING (BUT NOT LIMITED TO) SITE PARAMETERS, WEATHER, INSPECTIONS AND UNIQUE FEATURES. THE SESC WILL CONTINUE TO EVOLVE THROUGHOUT CONSTRUCTION/PHASES. PURSUANT TO NOTE 1 ABOVE, SESC REMAINS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL THE SITE IS FULLY STABILIZED AND/ OR SESC RESPONSIBILITIES ARE ASSUMED BY THE OWNER IN WRITING.
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 TO BE CLEANED AND BROUGHT TO FINAL DESIGN GRADES.
5. INLET PROTECTION IS TO BE INSTALLED ON ALL CATCH BASINS ONCE CONSTRUCTED. INLET PROTECTION MUST BE INSTALLED ON EACH TRIBUTARY CATCH BASINS PRIOR TO CONSTRUCTION OF NEXT PHASE OF PROJECT.
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.

Demolition Notes:

1. CONTRACTOR TO OBTAIN ALL FEDERAL, STATE, AND MUNICIPAL APPROVALS PRIOR TO THE START OF CONSTRUCTION.
2. CONTRACTOR TO PERFORM DAILY SWEEPING AT CONSTRUCTION ENTRANCE DURING DEMOLITION AND CONSTRUCTION TO MINIMIZE SEDIMENTS ON EXTERNAL STREETS.
3. ANY EXISTING BUILDING(S) AND PROPERTY PROPOSED TO REMAIN WHICH ARE DAMAGED BY THE CONTRACTOR MUST BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
4. CONTRACTOR IS RESPONSIBLE FOR REMOVING AND LEGALLY DISPOSING (R&D) ALL MATERIALS INDICATED ON THE PLANS UNLESS SPECIFIED OTHERWISE HERE IN. R&D MATERIALS MUST INCLUDE BUT ARE NOT LIMITED TO PAVEMENT, GRAVEL, CATCH BASINS, MANHOLES, GRATES/FRAMES/COVERS, AND ANY EXCESS SOIL THAT IS NOT INCORPORATED INTO THE WORK.
5. IN ADDITION TO THOSE AREAS SPECIFICALLY DESIGNATED ON THE PLANS, ALL DISTURBED AREAS INCLUDING THE CONTRACTOR'S STOCKPILE AND STAGING AREAS WITHIN THE LIMIT OF WORK MUST BE RESTORED TO MATCH THE DESIGN PLANS.
6. CONTRACTOR MUST DOCUMENT LOCATION OF ALL SUBSURFACE UTILITIES REMAINING IN PLACE AFTER DEMOLITION (ACTIVE AND INACTIVE/ABANDONED). LOCATION MUST BE DOCUMENTED BY FIELD SURVEY OR SWING TIES. COPIES OF LOCATION DOCUMENTATION MUST BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF DEMOLITION AND PRIOR TO START OF NEW CONSTRUCTION. A MARKER MUST BE INSTALLED TO FINISH GROUND AT ALL INSTALLED CAPS/PLUGS. THE MARKER CAN BE A POST IN CONSTRUCTION AREAS OR PAINTED ON A PERMANENT SURFACE.

Layout and Materials:

1. PROPOSED DEVELOPMENT TO BE BUILT IN 3 PHASES (1 TO 3)
2. DIMENSIONS ARE FROM THE FACE OF CURB, FACE OF BUILDING, FACE OF WALL, AND CENTER LINE OF PAVEMENT MARKINGS, UNLESS OTHERWISE NOTED.
3. CURBING TO BE CAPE COD BERMS OR AS LABELED ON THE PLANS.
4. SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR MUST REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.
5. SEE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND DETAILS CONTIGUOUS TO THE BUILDING, INCLUDING SIDEWALKS, RAMPS, BUILDING ENTRANCES, STAIRWAYS, UTILITY PENETRATIONS, CONCRETE DOOR PADS, COMPACTOR PAD, LOADING DOCKS, BOLLARDS, ETC.
6. PROPOSED BOUNDS AND ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION MUST BE SET OR RESET BY A PROFESSIONAL LICENSED SURVEYOR.
7. CONTRACTOR MUST NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS. CONTRACTOR MUST VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE STAMPED PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.
8. ALL GUARDRAIL ONSITE MUST BE STEEL BACKED TIMBER GUARDRAIL WITH STEEL POSTS, IN CONFORMANCE WITH SECTION 5.4.1.10 OF THE AASHTO ROADSIDE DESIGN GUIDE. ALTERNATIVE GUARDRAILS WILL BE CONSIDERED BY THE DESIGN ENGINEER IF THEY ARE DOT APPROVED EQUAL AND ACCEPTABLE TO THE OWNER. ALTERNATIVES MUST BE APPROVED IN WRITING BY THE OWNER AND DESIGN ENGINEER PRIOR TO CONSTRUCTION.

Soil Information:

(REFERENCE: SOIL MAPPING OBTAINED FROM RIGIS. SOIL GEOGRAPHIC DATA DEVELOPED BY THE RHODE ISLAND SOIL SURVEY PROGRAM IN PARTNERSHIP WITH THE NATIONAL COOPERATIVE SOIL SURVEY)

SOIL NAME	DESCRIPTION
CdB	CANTON AND CHARLTON FINE SANDY LOAMS, 3 TO 8 PERCENT SLOPES
CeC	CANTON AND CHARLTON FINE SANDY LOAMS, VERY ROCKY, 3 TO 15 PERCENT SLOPES
ChC	CANTON AND CHARLTON VERY STONY FINE SANDY LOAMS, 8 TO 15 PERCENT SLOPES
ChD	CANTON AND CHARLTON VERY STONY FINE SANDY LOAMS, 15 TO 25 PERCENT SLOPES
HkC	HINCKLEY GRAVELLY SANDY LOAM, ROLLING
Pg	PITS, GRAVEL
Rf	RIDGEBURY, WHITMAN, AND LEICESTER EXTREMELY STONY FINE SANDY LOAMS

Grading and Utility Notes:

1. CONSTRUCTION TO COMMENCE SUMMER 2020 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 PROJECT. 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 BUILDINGS TO ENSURE SURFACE WATER AND/OR GROUNDWATER ARE DIRECTED AWAY FROM THE STRUCTURE.
4. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING FOUNDATION WALL CONFIGURATION.
5. 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.
6. ALL PROPOSED UNDERGROUND UTILITIES SERVING THE SITE AND BUILDINGS TO BE COORDINATED WITH OWNER, ARCHITECT, AND ENGINEER PRIOR TO INSTALLATION.
7. ALL SIGNIFICANT CUTS / FILLS, RETAINING WALLS, AND STEEP SLOPES ARE SUBJECT TO GRADING REVISIONS AND FINAL STRUCTURAL DESIGN. DIPRETE ENGINEERING IS PROVIDING PRELIMINARY GRADING ONLY AND NOT PROVIDING THE STRUCTURAL DESIGN OF THESE ITEMS. ALL SIGNIFICANT CUTS / FILLS, RETAINING 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 OF REVISED GRADING, RETAINING WALLS, AND STEEP SLOPES ARE TO BE SUBMITTED TO DIPRETE ENGINEERING FOR APPROVAL 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.
8. FINAL SLOPES LOCATED ABOVE ALL PROPOSED WALLS TO BE DESIGNED BY GEOTECHNICAL ENGINEER.
9. NO STOCKPILING OF MATERIAL TO BE LOCATED IN THE RIGHT OF WAY AND NO OPEN TRENCHES ARE TO BE LEFT OVERNIGHT.
10. ALL LOAM IN DISTURBED AREAS TO BE STOCKPILED FOR FUTURE USE.
11. 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.
12. 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
- CATCH BASINS TO HAVE 3' SUMPS WITHOUT WEEPHOLES.
- SINGLE FRAME CATCHBASIN GRATES TO BE RIDOT STD. 6.3.2
- DOUBLE FRAME CATCHBASIN GRATES TO BE RIDOT STD. 6.3.2
- HIGH CAPACITY CATCHBASIN GRATES TO BE RIDOT STD 6.3.4 AND INSTALLED ANYWHERE GRADES ARE 6% AND STEEPER
- 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.

SUBDRAIN DESIGN, IF NECESSARY, TO BE PROVIDED BY GEOTECHNICAL ENGINEER. IF NEEDED, SUBDRAIN PIPES MUST CONNECT INTO STRUCTURES #48, 62, AND 73 ON THE DOWNSTREAM SIDE OF WEIR TO PREVENT GROUNDWATER FROM ENTERING BEST MANAGEMENT PRACTICE SYSTEMS.

ROOF DRAINAGE TO BE PIPED INTO DRAINAGE NETWORK UNLESS SHOWN OTHERWISE ON PLANS AND UNITS 6,7, 31-37 WHICH MUST DISCHARGE TO THE SWALE AT THE REAR OF THE UNITS.

FINAL DRAINAGE DESIGN ABOVE ALL PROPOSED WALLS TO BE PROVIDED BY GEOTECHNICAL ENGINEER.

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.

SANITARY SEWER

ALL SANITARY SEWER PIPING TO BE SDR 35 UNLESS NOTED OTHERWISE ON THE PLANS OR IN THE SPECIFICATIONS. ALL SEWER IMPROVEMENTS MUST COMPLY WITH THE SMITHFIELD SEWER AUTHORITY RULES AND REGULATIONS AND ANY APPLICABLE AUTHORITY HAVING JURISDICTION, INCLUDING (BUT NOT LIMITED TO) MATERIALS, DIMENSIONS AND ACCESS COVERS. CONTRACTOR MUST SUBMIT SHOP DRAWINGS FOR APPROVAL BY ENGINEER OF RECORD PRIOR TO CONSTRUCTION.

WATER

ALL WATER MAINS TO BE CONCRETE LINED DUCTILE IRON PIPE (CLDIP). ALL WATER MAIN IMPROVEMENTS MUST COMPLY WITH THE GREENVILLE WATER DISTRICT AND ANY APPLICABLE AUTHORITY HAVING JURISDICTION, INCLUDING (BUT NOT LIMITED TO) MATERIALS, DIMENSIONS AND ACCESS COVERS. CONTRACTOR TO PROVIDE SHOP DRAWINGS AND SUBMITTALS TO THE ENGINEER OF RECORD FOR APPROVAL FOR ALL WATER IMPROVEMENTS AND APPURTENANCES INCLUDING BUT NOT LIMITED TO PIPES, VALVES, FITTINGS, HEAT ENCLOSURES, AND BACKFLOWS. ALL COMPONENTS OF THE WATER SYSTEM TO BE ASBUILT PER GREENVILLE WATER DISTRICT REQUIREMENTS. ALL COMPONENTS OF THE WATER SYSTEM TO BE INSPECTED BY GREENVILLE WATER DISTRICT. CONTRACTOR TO COORDINATE ALL IMPROVEMENTS WITH GREENVILLE WATER DISTRICT TO ENSURE INSPECTOR IS ON SITE.

As-Built Notes:

ALL COMPONENTS OF THE DRAINAGE, SEWER, WATER SYSTEMS, ROADWAY, BUILDING LOCATIONS, GRADING, AND UTILITIES STRUCTURES MUST BE AS-BUILT PRIOR TO COVERING. ENGINEER TO BE NOTIFIED PRIOR TO COVERING TO SURVEY AS-BUILT LOCATIONS. ENGINEER WILL NOT ACCEPT FIELD MEASUREMENTS FROM THE SITE CONTRACTOR.

Abbreviations Legend

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

OCT 1 6 2020

Americans with Disabilities Act 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.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED DEC 1 1 2020 FILE # 20-0108
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Martin D. Wencek

Note: This Plan Must Be Reproduced In Color

Existing Legend
(AS SHOWN ON PROPOSED PLANS)

NOT ALL ITEMS SHOWN WILL APPEAR ON PLANS

PROPERTY LINE	△/△	NAIL FOUND/SET
ASSESSORS LINE	●/◎	DRILL HOLE FOUND/SET
BUILDING	○/◎	
BRUSHLINE	■/□	BOUND FOUND/SET
TREELINE		SIGN
GUARDRAIL		BOLLARD
FENCE	SEV	SOIL EVALUATION
RETAINING WALL	CB	CATCH BASIN
STONE WALL	DCB	DOUBLE CATCH BASIN
MINOR CONTOUR LINE	DMH	DRAINAGE MANHOLE
MAJOR CONTOUR LINE	FES	FLARED END SECTION
WATER LINE		GUY POLE
SEWER LINE	EMH	ELECTRIC MANHOLE
SEWER FORCE MAIN	UP	UTILITY/POWER POLE
GAS LINE		LIGHTPOST
ELECTRIC LINE	SMH	SEWER/SEPTIC MANHOLE
OVERHEAD WIRES	SV	SEWER VALVE
OVERHEAD WIRES TO BE REMOVED		CLEANOUT
		HYDRANT
DRAINAGE LINE		IRRIGATION VALVE
SOILS LINES	WV	WATER VALVE
50' PERIMETER WETLAND		WELL
100' RIVERBANK WETLAND		MONITORING WELL
WATERBODY		UNKNOWN MANHOLE
FEMA BOUNDARY	GV	GAS VALVE
STREAM		BENCH MARK
STATE FREEWAY LINE		STREAM FLOW DIRECTION
DRAINAGE LINE	B1 B2	WETLAND LINE & FLAG
WETLAND HATCH		STATE HIGHWAY LINE

Proposed Legend

NOT ALL ITEMS SHOWN WILL APPEAR ON PLANS

PROPERTY LINE	OVERHANGING LIGHT
BUILDING SETBACKS	BUILDING INGRESS/EGRESS
CHAINLINK FENCE	DRAINAGE LINE
GUARDRAIL SEE LAYOUT AND MATERIALS NOTE 8.	PERFORATED SUBDRAIN
RETAINING WALL	SWALE
1:1 BOULDER RETAINING WALL	SEWER FORCE MAIN
MINOR CONTOUR LINE	GAS LINE
MAJOR CONTOUR LINE	WATER LINE
SPOT ELEVATION	HYDRANT ASSEMBLY
EDGE OF PAVEMENT	WATER SHUT OFF
BITUMINOUS BERM	WATER VALVE
CONCRETE CURB (RIDOT STD 7.1.0)	THRUST BLOCK
BUILDING FOOTPRINT	SEWER LINE
BUILDING OVERHANG	ELECTRIC, TELEPHONE, CABLE LINE
ASPHALT PAVEMENT	LIMIT OF DISTURBANCE/ LIMIT OF CLEARING
HEAVY DUTY ASPHALT PAVEMENT	SEDIMENTATION BARRIER, SILT FENCE (RIDOT STD 9.2.0), COMPOST SOCK OR APPROVED EQUAL
HEAVY DUTY CONCRETE	2:1 SLOPES
CONCRETE	UNDERGROUND INFILTRATION OUTLINE
ASPHALT SIDEWALK	POND ACCESS
PREDOMINATELY HYDRIC SOILS	RIPRAP
PRIME FARMLAND SOILS	SAND FILTER
EMERGENCY ACCESS/FUTURE EXTENSION	BIO RETENTION
EMERGENCY GATED GRAVEL ROAD	EASEMENT
SNOW STORAGE AREA	CATCH BASIN
SAWCUT LINE	DOUBLE CATCH BASIN
SIGN (RIDOT STD 24.6.2 AS APPLICABLE)	MANHOLE
SINGLE LIGHT	FLARED END SECTION
DOUBLE LIGHT	HEADWALL
	ACCESSIBLE PARKING SPACE SYMBOLS
	SEWER MANHOLE

Utility Note:

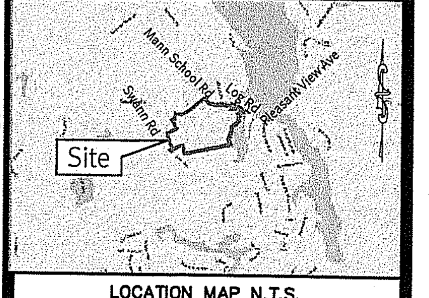
ALL UNDERGROUND UTILITIES SHOWN ON THIS PLAN WERE PROVIDED BY OTHERS AND ARE APPROXIMATE ONLY. LOCATIONS MUST BE DETERMINED IN THE FIELD BEFORE EXCAVATION, BLASTING, UTILITY INSTALLATION, BACKFILLING, GRADING, PAVEMENT RESTORATION, AND ALL OTHER SITE WORK. ALL UTILITY COMPANIES, PUBLIC AND PRIVATE, MUST BE CONTACTED INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THESE DOCUMENTS. CONTACT DIG SAFE A MINIMUM OF 72 WORKING HOURS PRIOR TO ANY CONSTRUCTION AT 811. DIG SAFE IS RESPONSIBLE FOR CONTRACTING MEMBER UTILITY COMPANIES. DIG SAFE MEMBER UTILITY COMPANIES ARE RESPONSIBLE TO MARK ONLY THE FACILITIES THAT THEY OWN OR MAINTAIN. NON DIG SAFE MEMBER COMPANIES ARE NOT NOTIFIED BY DIG SAFE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INVESTIGATE AND NOTIFY IF ANY PRIVATELY OWNED OR NON DIG SAFE MEMBER UTILITIES ARE IN THE AREA.

PER THE CODE OF FEDERAL REGULATIONS – TITLE 29, PART 1926 IT IS THE SITE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ACCURATE UNDERGROUND UTILITY LINE LOCATIONS FROM THE UTILITY COMPANIES, UTILITY OWNERS AND, OR VIA UNDERGROUND UTILITY LOCATION EQUIPMENT AS NEEDED TO ESTABLISH ACCURATE LOCATIONS PRIOR TO ANY EXCAVATION. THE USE OF PROFESSIONAL UTILITY LOCATING COMPANIES PRIOR TO ANY EXCAVATION IS RECOMMENDED.

DIPRETE ENGINEERING IS NOT A PROFESSIONAL UTILITY LOCATION COMPANY, AND IS NOT RESPONSIBLE FOR UNDERGROUND UTILITIES, DEPICTED OR NOT, EITHER IN SERVICE OR ABANDONED. ANY SIZES, LOCATIONS, EXISTENCE, OR LACK OF EXISTENCE OF UTILITIES SHOWN ON THESE PLANS SHOULD BE CONSIDERED APPROXIMATE UNTIL VERIFIED BY A PROFESSIONAL UTILITY LOCATION COMPANY. DIPRETE ENGINEERING ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED.

DiPrete Engineering
Two Stafford Court Cranston, RI 02920
tel 401-943-1000 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

AUDIE D. OSGOOD
REGISTERED PROFESSIONAL ENGINEER CIVIL



LOCATION MAP N.T.S.

This plan set must not be used for construction purposes unless stamped 'Issued for Construction' and stamped by a registered Professional Engineer of DiPrete Engineering.

DiPrete Engineering only warrants plans on a DiPrete Engineering title block stamped by registered Professional Engineer of DiPrete Engineering. DiPrete Engineering does not warrant plans by any other party.

The contractor is responsible for all of the means, methods, safety procedures and requirements, and OSHA conformance in the construction of this plan and design.

Existing utilities shown on this plan are approximate only. DiPrete Engineering assumes no responsibility for damages incurred as a result of utilities. See 'Utility Note' on sheet 3.

No.	Date	Description	By:
2	10-16-2020	RIDEM Submission Response to Comments	S.R.
1	10-08-2020	RIDEM Submission	S.R.

Drawn By: S.R. Design By: C.D./P.A.A.

Notes And Legend
Sand Trace

Assessor's Plat 46 Lot 10, Zone R-20M, Area 54.95 ±Acres
Smithfield, Rhode Island

Applicant
Sand Trace LLC
10B Appian Way, Smithfield, Rhode Island 02917
tel 401-231-4700 fax 401-232-3203

DE Job No: 0214-017 Copyright 2019 by DiPrete Engineering Associates, Inc.

SHEET 3 OF 23

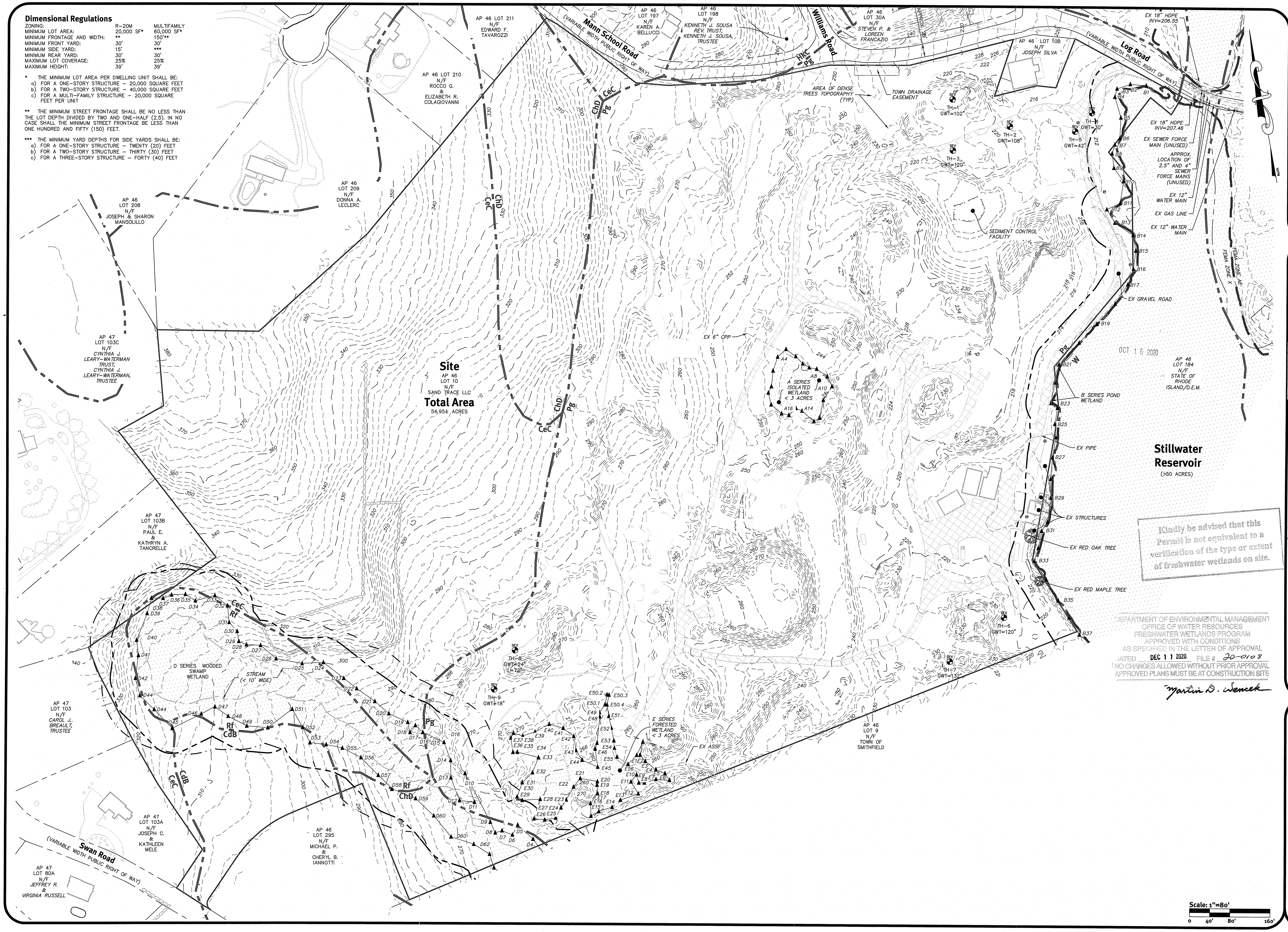
Dimensional Regulations

ZONING:	R–20M	MULTIFAMILY
MINIMUM LOT AREA:	20,000 SF*	60,000 SF*
MINIMUM FRONTAGE AND WIDTH:	**	150'**
MINIMUM FRONT YARD:	30'	30'
MINIMUM SIDE YARD:	15'	***
MINIMUM REAR YARD:	30'	30'
MAXIMUM LOT COVERAGE:	25%	25%
MAXIMUM HEIGHT:	39'	39'

* THE MINIMUM LOT AREA PER DWELLING UNIT SHALL BE:
- a) FOR A ONE–STORY STRUCTURE – 20,000 SQUARE FEET
- b) FOR A TWO–STORY STRUCTURE – 40,000 SQUARE FEET
- c) FOR A MULTI–FAMILY STRUCTURE – 20,000 SQUARE FEET PER UNIT

** THE MINIMUM STREET FRONTAGE SHALL BE NO LESS THAN THE LOT DEPTH DIVIDED BY TWO AND ONE–HALF (2.5). IN NO CASE SHALL THE MINIMUM STREET FRONTAGE BE LESS THAN ONE HUNDRED AND FIFTY (150) FEET.

*** THE MINIMUM YARD DEPTHS FOR SIDE YARDS SHALL BE:
- a) FOR A ONE–STORY STRUCTURE – TWENTY (20) FEET
- b) FOR A TWO–STORY STRUCTURE – THIRTY (30) FEET
- c) FOR A THREE–STORY STRUCTURE – FORTY (40) FEET


Site
AP 46
LOT 10
N/F
SAND TRACE LLC
Total Area
54.95± ACRES
Stillwater
Reservoir
(>50 ACRES)
AP 46 LOT 211 N/F EDWARD F. TAVAROZZI
AP 46 LOT 210 N/F ROCCO G. & ELIZABETH R. COLAGIOVANNI
AP 46 LOT 209 N/F DONNA A. LECLERC
AP 46 LOT 208 N/F JOSEPH & SHARON MANSOLILLO
AP 47 LOT 103C N/F CYNTHIA J. LEARY–WATERMAN TRUST, CYNTHIA J. LEARY–WATERMAN, TRUSTEE
AP 47 LOT 103B N/F PAUL E. & KATHRYN A. TANCRELLE
AP 47 LOT 103 N/F CAROL J. BREAULT, TRUSTEE
AP 47 LOT 103A N/F JOSEPH C. & KATHLEEN MELE
AP 47 LOT 80A N/F JEFFREY R. & VIRGINIA RUSSELL
AP 46 LOT 295 N/F MICHAEL P. & CHERYL B. IANNOTTI
AP 46 LOT 9 N/F TOWN OF SMITHFIELD
AP 46 LOT 184 N/F STATE OF RHODE ISLAND/D.E.M.
AP 46 LOT 197 N/F KAREN A. BELLUCCI
AP 46 LOT 198 N/F KENNETH J. SOUSA REV. TRUST, KENNETH J. SOUSA, TRUSTEE
AP 46 LOT 30A N/F STEVEN P. & LOREEN FRANCAZIO
AP 46 LOT 10B N/F JOSEPH SILVA
Mann School Road (VARIABLE WIDTH PUBLIC RIGHT OF WAY)
Williams Road
Log Road (VARIABLE WIDTH PUBLIC RIGHT OF WAY)
Swan Road (VARIABLE WIDTH PUBLIC RIGHT OF WAY)
AREA OF DENSE TREES TOPOGRAPHY (TYP)
TOWN DRAINAGE EASEMENT
SEDIMENT CONTROL FACILITY
EX 18" HDPE INV=206.55
EX 18" HDPE INV=207.46
EX SEWER FORCE MAIN (UNUSED)
APPROX. LOCATION OF 2.5" AND 4" SEWER FORCE MAINS (UNUSED)
EX 12" WATER MAIN
EX GAS LINE
EX 12" WATER MAIN
FEMA ZONE AE
FEMA ZONE X
EX GRAVEL ROAD
EX 6" CPP
EX PIPE
EX STRUCTURES
EX RED OAK TREE
EX RED MAPLE TREE
EX ASSF
B SERIES POND WETLAND
A SERIES ISOLATED WETLAND < 3 ACRES
D SERIES WOODED SWAMP WETLAND
STREAM (< 10' WIDE)
E SERIES FORESTED WETLAND < 3 ACRES
TH–1 GWT=102"
TH–2 GWT=108"
TH–3 GWT=120"
TH–4 GWT=30"
TH–5 GWT=42"
TH–6 GWT=120"
TH–7 GWT=132"
TH–8 GWT=24" L=72"
TH–9 GWT=18"
ChD
CeC
Pg
Rf
CdB
HkC
W
North
OCT 1 6 2020
Scale: 1"=80'
0
40'
80'
160'

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

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED DEC 1 1 2020 FILE # 20-0108
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Martin D. Wencek

DiPrete Engineering

Two Stafford Court Cranston, RI 02920
tel 401-943-1000 fax 401-464-6006 www.diprete-eng.com

Boston • Providence • Newport

AUDIE D. OSGOOD
No.
REGISTERED
PROFESSIONAL ENGINEER
CIVIL
10/08/2020

Site
Swan Rd
Mann School Rd
Log Rd
Pleasant View Ave

LOCATION MAP N.T.S.

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DiPrete Engineering only warrants plans on a DiPrete Engineering title block stamped by registered Professional Engineer of DiPrete Engineering. DiPrete Engineering does not warrant plans by any other party.

The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA conformance in the implementation of this plan and design.

Existing utilities shown on this plan are approximate only. DiPrete Engineering assumes no responsibility for damages incurred due to locations of existing utilities. See 'Utility Note' on sheet 3.

No.	Date	Description	By:
1	10-08-2020	RIDEM Submission Response to Comments	S.R.
0	05-01-2020	RIDEM Submission	S.R.

Drawn By: S.R.
Design By: C.D./P.A.A.

Existing Condition Plan

Sand Trace

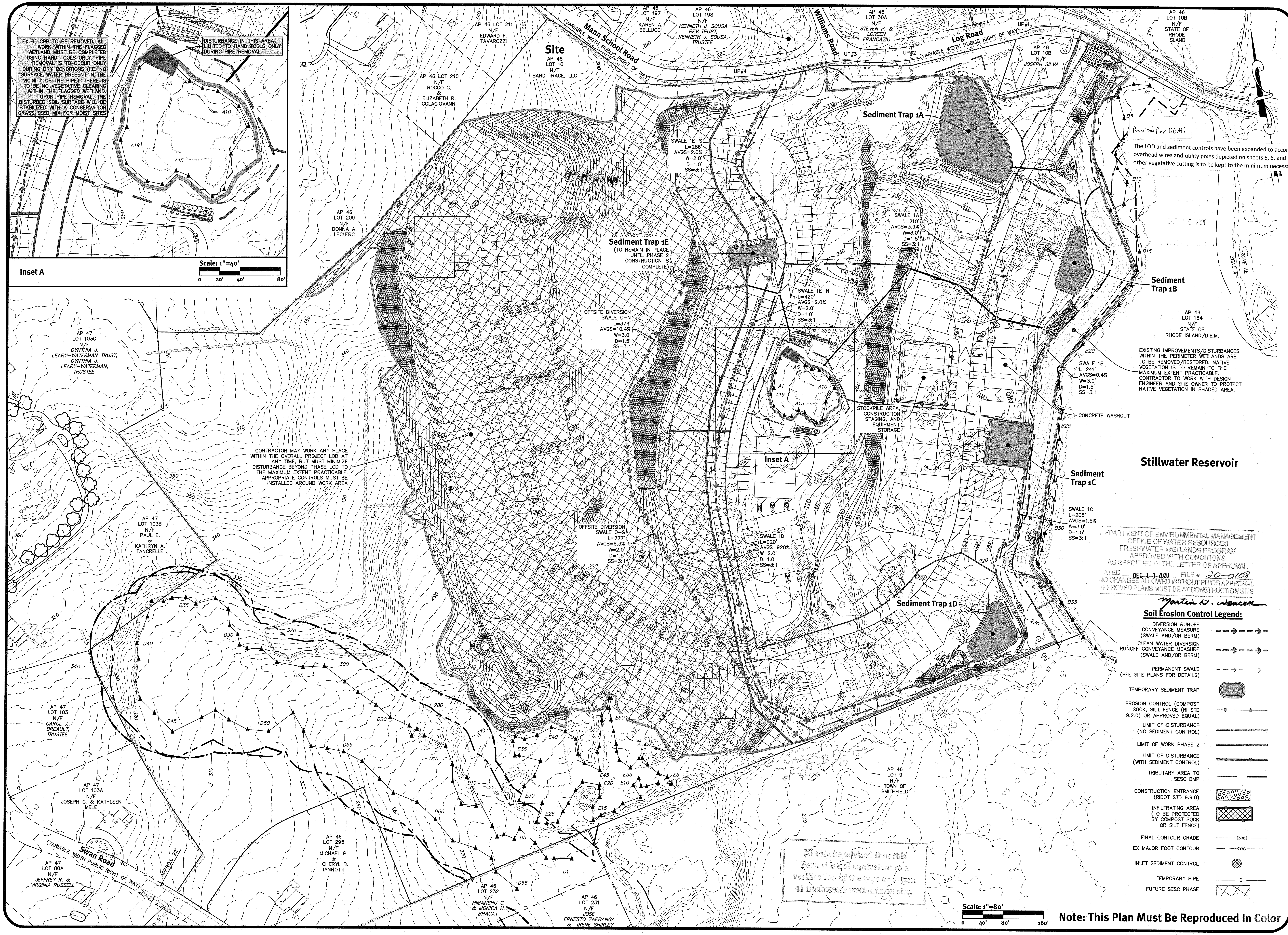
Assessor's Plat 46 Lot 10, Zone R-20M, Area: 54.95 ±Acres
Smithfield, Rhode Island

Applicant
Sand Trace LLC
10B Appian Way, Smithfield, Rhode Island 02917
tel 401-231-4700 fax 401-232-3203

SHEET 4 OF 23

DE Job No: 0214-017

z:\demain\projects\0214-017 the village on stillwater\autocad drawings\0214-017-expn.dwg Plotted: 10/16/2020


Inset A
Scale: 1"=40'
0 20' 40' 80'
A1
A5
A10
A15
A19
240
244
248
250
Site
AP 46
LOT 10
N/F
SAND TRACE, LLC
Mann School Road
(VARIABLE WIDTH PUBLIC RIGHT OF WAY)
Williams Road
Log Road
(VARIABLE WIDTH PUBLIC RIGHT OF WAY)
AP 46 LOT 211 N/F EDWARD F. TAVAROZZI
AP 46 LOT 197 N/F KAREN A. BELLUCCI
AP 46 LOT 198 N/F KENNETH J. SOUSA REV. TRUST, KENNETH J. SOUSA, TRUSTEE
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AP 47 LOT 103B N/F PAUL E. & KATHRYN A. TANCRELLE
AP 47 LOT 103 N/F CAROL J. BREAULT, TRUSTEE
AP 47 LOT 103A N/F JOSEPH C. & KATHLEEN MELE
AP 47 LOT 80A N/F JEFFREY R. & VIRGINIA RUSSELL
AP 46 LOT 295 N/F MICHAEL P. & CHERYL B. IANNOTTI
AP 46 LOT 232 N/F HIMANSHU C. & MONICA H. BHAGAT
AP 46 LOT 231 N/F JOSE ERNESTO ZARRANGA & IRENE SHIRLEY
AP 46 LOT 9 N/F TOWN OF SMITHFIELD
AP 46 LOT 184 N/F STATE OF RHODE ISLAND/D.E.M.
Swan Road
(VARIABLE WIDTH PUBLIC RIGHT OF WAY)
APPROX. 22'
UP#1
UP#2
UP#3
UP#4
Sediment Trap 1A
Sediment Trap 1B
Sediment Trap 1C
Sediment Trap 1D
Sediment Trap 1E
(TO REMAIN IN PLACE UNTIL PHASE 2 CONSTRUCTION IS COMPLETE)
SWALE 1E–S L=286' AVGS=2.0% W=2.0' D=1.0' SS=3:1
SWALE 1E–N L=420' AVGS=2.0% W=2.0' D=1.0' SS=3:1
SWALE 1A L=210' AVGS=3.9% W=3.0' D=1.5' SS=3:1
SWALE 1B L=241' AVGS=0.4% W=3.0' D=1.5' SS=3:1
SWALE 1C L=205' AVGS=1.5% W=3.0' D=1.5' SS=3:1
SWALE 1D L=920' AVGS=920% W=2.0' D=1.0' SS=3:1
OFFSITE DIVERSION SWALE O–N L=374' AVGS=10.4% W=3.0' D=1.5' SS=3:1
OFFSITE DIVERSION SWALE O–S L=777' AVGS=6.3% W=2.0' D=1.5' SS=3:1
STOCKPILE AREA, CONSTRUCTION STAGING, AND EQUIPMENT STORAGE
Inset A
CONCRETE WASHOUT
Stillwater Reservoir
ZONE AE
ZONE X
OHW
B1
B5
B10
B15
B20
B25
B30
B35
D1
D5
D10
D15
D20
D25
D30
D35
D40
D45
D50
D55
D60
D65
E5
E10
E15
E20
E25
E30
E35
E40
E45
E50
E55
220
230
240
250
270
280
290
300
310
320
330
340
350
360
370
380
Scale: 1"=80'
0 40' 80' 160'

EX 6" CPP TO BE REMOVED. ALL WORK WITHIN THE FLAGGED WETLAND MUST BE COMPLETED USING HAND TOOLS ONLY. PIPE REMOVAL IS TO OCCUR ONLY DURING DRY CONDITIONS (I.E. NO SURFACE WATER PRESENT IN THE VICINITY OF THE PIPE). THERE IS TO BE NO VEGETATIVE CLEARING WITHIN THE FLAGGED WETLAND. UPON PIPE REMOVAL, THE DISTURBED SOIL SURFACE WILL BE STABILIZED WITH A CONSERVATION GRASS SEED MIX FOR MOIST SITES

DISTURBANCE IN THIS AREA LIMITED TO HAND TOOLS ONLY DURING PIPE REMOVAL.

CONTRACTOR MAY WORK ANY PLACE WITHIN THE OVERALL PROJECT LOD AT ANY TIME, BUT MUST MINIMIZE DISTURBANCE BEYOND PHASE LOD TO THE MAXIMUM EXTENT PRACTICABLE. APPROPRIATE CONTROLS MUST BE INSTALLED AROUND WORK AREA

EXISTING IMPROVEMENTS/DISTURBANCES WITHIN THE PERIMETER WETLANDS ARE TO BE REMOVED/RESTORED. NATIVE VEGETATION IS TO REMAIN TO THE MAXIMUM EXTENT PRACTICABLE. CONTRACTOR TO WORK WITH DESIGN ENGINEER AND SITE OWNER TO PROTECT NATIVE VEGETATION IN SHADED AREA.

Revised Per DEM:

The LOD and sediment controls have been expanded to accommodate the removal of the existing overhead wires and utility poles depicted on sheets 5, 6, and 7 of 23. No tree cutting is to occur and all other vegetative cutting is to be kept to the minimum necessary for removal.

OCT 1 6 2020

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED DEC 1 1 2020 FILE # 20-0108
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Martin D. Wencek

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

Soil Erosion Control Legend:

DIVERSION RUNOFF CONVEYANCE MEASURE (SWALE AND/OR BERM) — — → — — → —
CLEAN WATER DIVERSION RUNOFF CONVEYANCE MEASURE (SWALE AND/OR BERM) — — → — — → —
PERMANENT SWALE (SEE SITE PLANS FOR DETAILS) - - → - - → -
TEMPORARY SEDIMENT TRAP ▨
EROSION CONTROL (COMPOST SOCK, SILT FENCE (RI STD 9.2.0) OR APPROVED EQUAL) —●——●—
LIMIT OF DISTURBANCE (NO SEDIMENT CONTROL) ━━━
LIMIT OF WORK PHASE 2 ━━━
LIMIT OF DISTURBANCE (WITH SEDIMENT CONTROL) ━●━━●━
TRIBUTARY AREA TO SESC BMP —— ——
CONSTRUCTION ENTRANCE (RIDOT STD 9.9.0) ○○○
INFILTRATING AREA (TO BE PROTECTED BY COMPOST SOCK OR SILT FENCE) ▩
FINAL CONTOUR GRADE ——308——
EX MAJOR FOOT CONTOUR — —160— —
INLET SEDIMENT CONTROL ⊗
TEMPORARY PIPE —— D ——
FUTURE SESC PHASE ⊠

Note: This Plan Must Be Reproduced In Color

DiPrete Engineering
Two Stafford Court, Cranston, RI 02920
tel 401-943-1000 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

AUDIE D. OSGOOD
No.
REGISTERED
PROFESSIONAL ENGINEER
CIVIL
10/08/2020

Site
Mann School Rd
Log Rd
Stillwater Rd
Reservoir View Ave

LOCATION MAP N.T.S.

This plan set must not be used for construction purposes unless stamped 'Issued for Construction' and stamped by a registered Professional Engineer of DiPrete Engineering.

DiPrete Engineering only warrants plans on a DiPrete Engineering title block stamped by registered Professional Engineer of DiPrete Engineering. DiPrete Engineering does not warrant plans by any other party.

The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA conformance in the implementation of this plan and design.

Existing utilities shown on this plan are approximate only. DiPrete Engineering assumes no responsibility for damages incurred due to locations of existing utilities. See 'Utility Note' on sheet 3.

No.	Date	Description	By:
1	10-08-2020	RIDEM Submission Response to Comments	S.R.
0	05-01-2020	RIDEM Submission	S.R.

Drawn By: S.R.
Design By: C.D./P.A.A.

SESC Plan Phase 1

Sand Trace

Assessor's Plat 46 Lot 10, Zone R-20M, Area: 54.95 ±Acres
Smithfield, Rhode Island

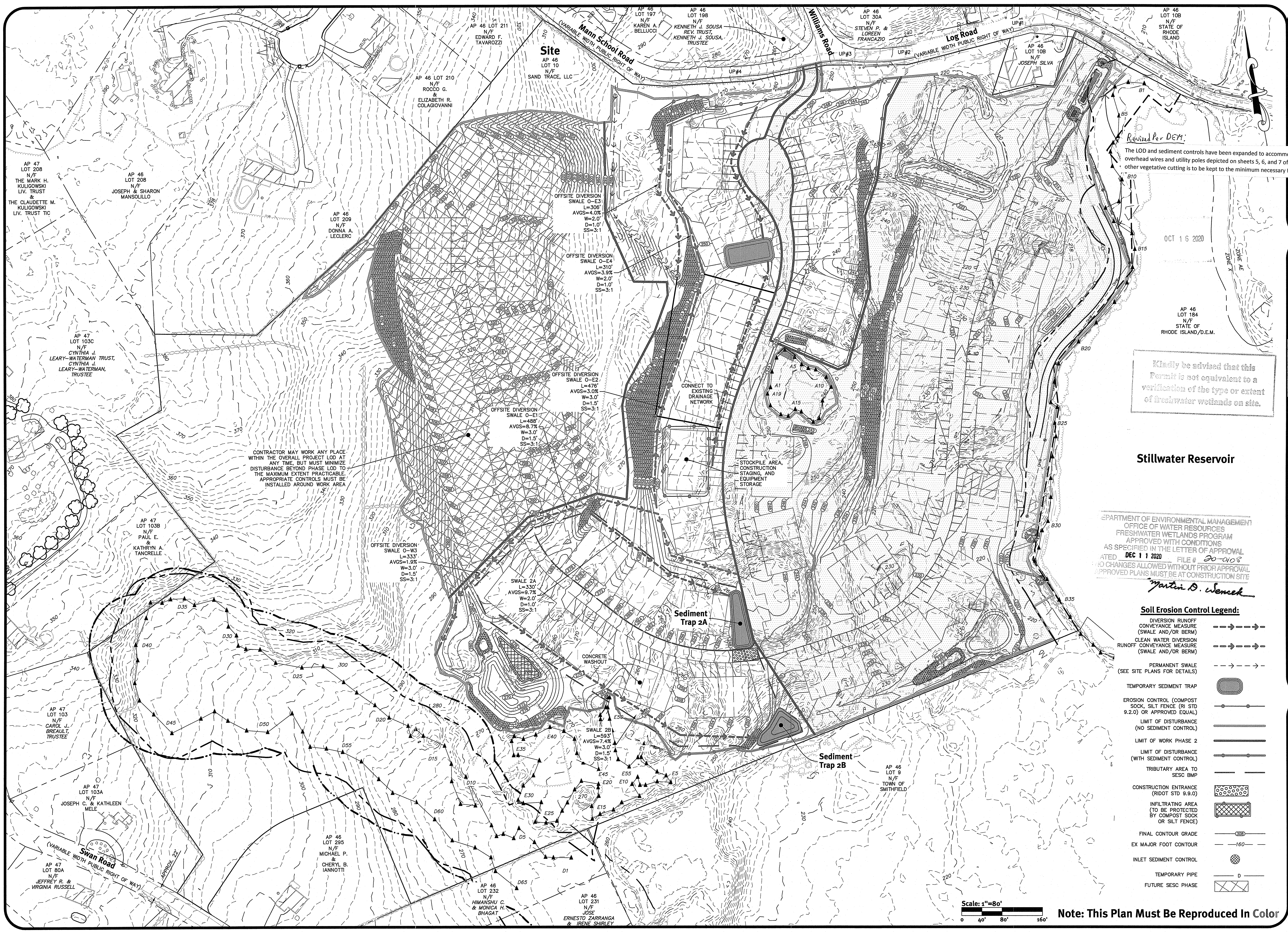
Applicant
Sand Trace LLC
10B Appian Way, Smithfield, Rhode Island 02917
tel 401-231-4700 fax 401-232-3203

DE Job No: 0214-017

SHEET 5 OF 23

z:\demain\projects\0214-017 the village on stillwater\autocad drawings\0214-017-sesc.dwg Plotted: 10/16/2020

z:\demain\projects\0214-017 the village on stillwater\autocad drawings\0214-017-sesc.dwg Plotted: 10/16/2020


Site
AP 46
LOT 10
N/F
SAND TRACE, LLC
Mann School Road
(VARIABLE WIDTH PUBLIC RIGHT OF WAY)
Williams Road
Log Road
(VARIABLE WIDTH PUBLIC RIGHT OF WAY)
Swan Road
(VARIABLE WIDTH PUBLIC RIGHT OF WAY)
APPROX. 22'
UP#1
UP#2
UP#3
UP#4
AP 46 LOT 211
N/F
EDWARD F.
TAVAROZZI
AP 46
LOT 197
N/F
KAREN A.
BELLUCCI
AP 46
LOT 198
N/F
KENNETH J. SOUSA
REV. TRUST,
KENNETH J. SOUSA,
TRUSTEE
AP 46
LOT 30A
N/F
STEVEN P. &
LOREEN
FRANCAZIO
AP 46
LOT 10B
N/F
JOSEPH SILVA
AP 46
LOT 10B
N/F
STATE OF
RHODE
ISLAND
AP 46 LOT 210
N/F
ROCCO G.
&
ELIZABETH R.
COLAGIOVANNI
AP 47
LOT 208
N/F
THE MARK H.
KULIGOWSKI
LIV. TRUST
&
THE CLAUDETTE M.
KULIGOWSKI
LIV. TRUST TIC
AP 46
LOT 208
N/F
JOSEPH & SHARON
MANSOLILLO
AP 46
LOT 209
N/F
DONNA A.
LECLERC
AP 47
LOT 103C
N/F
CYNTHIA J.
LEARY-WATERMAN TRUST,
CYNTHIA J.
LEARY-WATERMAN,
TRUSTEE
AP 47
LOT 103B
N/F
PAUL E.
&
KATHRYN A.
TANCRELLE
AP 47
LOT 103
N/F
CAROL J.
BREAULT,
TRUSTEE
AP 47
LOT 103A
N/F
JOSEPH C. & KATHLEEN
MELE
AP 47
LOT 80A
N/F
JEFFREY R. &
VIRGINIA RUSSELL
AP 46
LOT 295
N/F
MICHAEL P.
&
CHERYL B.
IANNOTTI
AP 46
LOT 232
N/F
HIMANSHU C.
& MONICA H.
BHAGAT
AP 46
LOT 231
N/F
JOSE
ERNESTO ZARRANGA
& IRENE SHIRLEY
AP 46
LOT 9
N/F
TOWN OF
SMITHFIELD
AP 46
LOT 184
N/F
STATE OF
RHODE ISLAND/D.E.M.
Stillwater Reservoir
ZONE X
ZONE AE
OFFSITE DIVERSION
SWALE O-E3
L=306'
AVGS=4.0%
W=2.0'
D=1.0'
SS=3:1
OFFSITE DIVERSION
SWALE O-E4
L=310'
AVGS=3.9%
W=2.0'
D=1.0'
SS=3:1
OFFSITE DIVERSION
SWALE O-E2
L=476'
AVGS=3.0%
W=3.0'
D=1.5'
SS=3:1
OFFSITE DIVERSION
SWALE O-E1
L=488'
AVGS=8.7%
W=3.0'
D=1.5'
SS=3:1
OFFSITE DIVERSION
SWALE O-W3
L=333'
AVGS=1.9%
W=3.0'
D=1.5'
SS=3:1
SWALE 2A
L=330'
AVGS=9.7%
W=2.0'
D=1.0'
SS=3:1
SWALE 2B
L=593'
AVGS=7.4%
W=3.0'
D=1.5'
SS=3:1
CONNECT TO
EXISTING
DRAINAGE
NETWORK
STOCKPILE AREA,
CONSTRUCTION
STAGING, AND
EQUIPMENT
STORAGE
CONCRETE
WASHOUT
Sediment
Trap 2A
Sediment
Trap 2B
A1
A5
A10
A15
A19
B1
B5
B10
B15
B20
B25
B30
B35
D1
D5
D10
D15
D20
D25
D30
D35
D40
D45
D50
D55
D60
D65
E1
E5
E10
E15
E20
E25
E30
E35
E40
E45
E50
E55

CONTRACTOR MAY WORK ANY PLACE WITHIN THE OVERALL PROJECT LOD AT ANY TIME, BUT MUST MINIMIZE DISTURBANCE BEYOND PHASE LOD TO THE MAXIMUM EXTENT PRACTICABLE. APPROPRIATE CONTROLS MUST BE INSTALLED AROUND WORK AREA

Revised Per DEM:

The LOD and sediment controls have been expanded to accommodate the removal of the existing overhead wires and utility poles depicted on sheets 5, 6, and 7 of 23. No tree cutting is to occur and all other vegetative cutting is to be kept to the minimum necessary for removal.

OCT 1 6 2020

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DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
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APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Martin D. Wencek

Soil Erosion Control Legend:

DIVERSION RUNOFF CONVEYANCE MEASURE (SWALE AND/OR BERM)	- - → - - → -
CLEAN WATER DIVERSION RUNOFF CONVEYANCE MEASURE (SWALE AND/OR BERM)	- - → - - → -
PERMANENT SWALE (SEE SITE PLANS FOR DETAILS)	- - → - - → -
TEMPORARY SEDIMENT TRAP	⬬
EROSION CONTROL (COMPOST SOCK, SILT FENCE (RI STD 9.2.0) OR APPROVED EQUAL)	—●—●—
LIMIT OF DISTURBANCE (NO SEDIMENT CONTROL)	━━━
LIMIT OF WORK PHASE 2	━━━
LIMIT OF DISTURBANCE (WITH SEDIMENT CONTROL)	━●━●━
TRIBUTARY AREA TO SESC BMP	— —
CONSTRUCTION ENTRANCE (RIDOT STD 9.9.0)	○○○
INFILTRATING AREA (TO BE PROTECTED BY COMPOST SOCK OR SILT FENCE)	▩
FINAL CONTOUR GRADE	—(308)—
EX MAJOR FOOT CONTOUR	— —160— —
INLET SEDIMENT CONTROL	●
TEMPORARY PIPE	—— D ——
FUTURE SESC PHASE	☒

Scale: 1"=80'
0 40' 80' 160'

Note: This Plan Must Be Reproduced In Color

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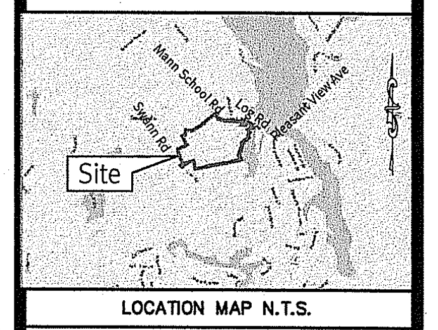
Two Stafford Court, Cranston, RI 02920
tel 401-943-1000 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

AUDIE D. OSGOOD
REGISTERED PROFESSIONAL ENGINEER CIVIL



LOCATION MAP N.T.S.

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No.	Date	Description	By:
1	10-08-2020	RIDEM Submission Response to Comments	S.R.
0	05-01-2020	RIDEM Submission	S.R.

Drawn By: S.R.
Design By: C.D./P.A.A.

SESC Plan Phase 2

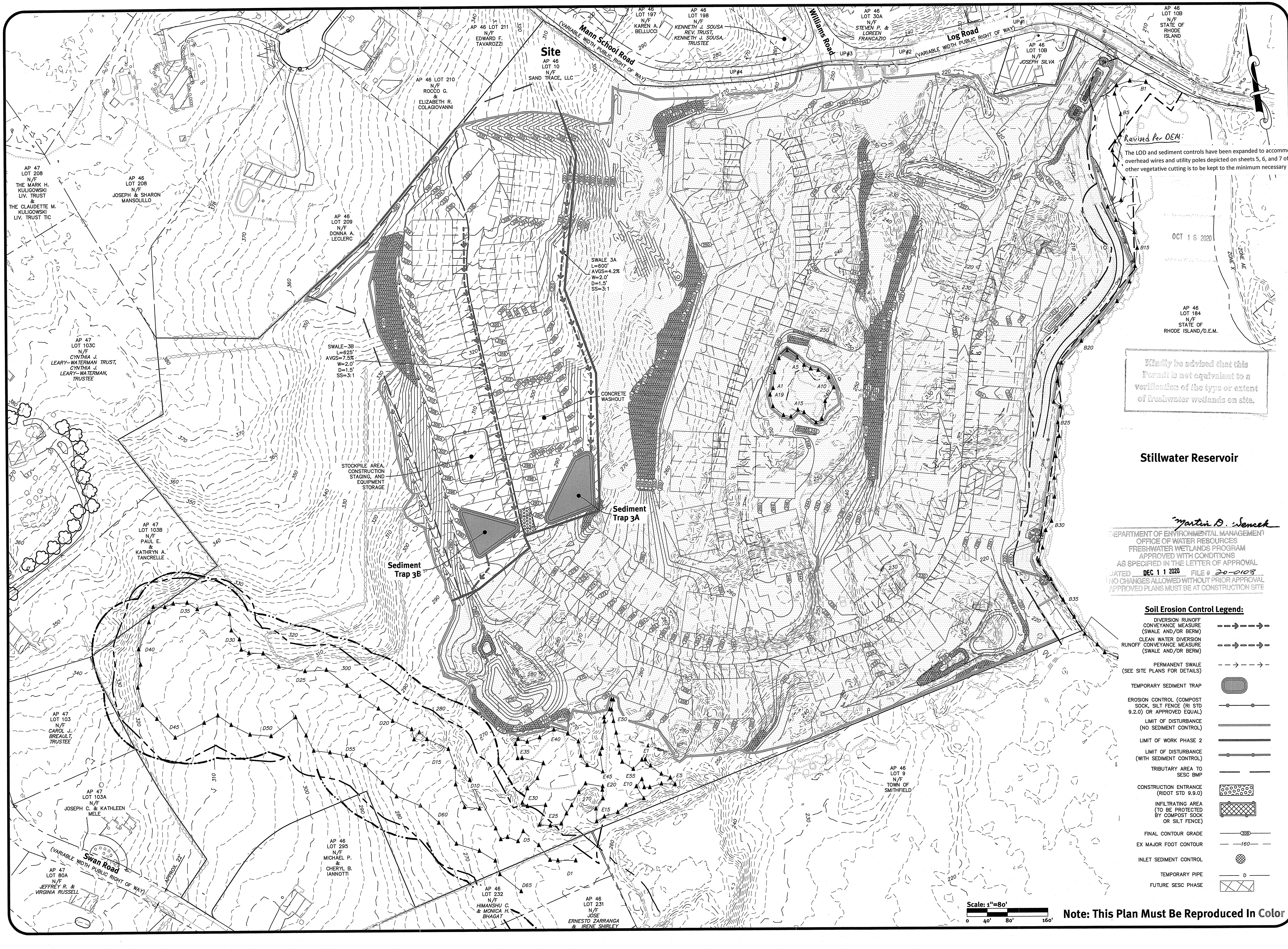
Sand Trace

Assessor's Plat 46 Lot 10, Zone R-20M, Area: 54.95 ±Acres
Smithfield, Rhode Island

Applicant
Sand Trace LLC
10B Appian Way, Smithfield, Rhode Island 02917
tel 401-231-4700 fax 401-232-3203

DE Job No: 0214-017 Copyright 2019 by DiPrete Engineering Associates, Inc.

SHEET 6 OF 23


Site
AP 46
LOT 10
N/F
SAND TRACE, LLC
Mann School Road
(VARIABLE WIDTH PUBLIC RIGHT OF WAY)
Williams Road
Log Road
(VARIABLE WIDTH PUBLIC RIGHT OF WAY)
UP#1
UP#2
UP#3
UP#4
AP 46 LOT 211
N/F
EDWARD F.
TAVAROZZI
AP 46 LOT 210
N/F
ROCCO G.
&
ELIZABETH R.
COLAGIOVANNI
AP 46
LOT 197
N/F
KAREN A.
BELLUCCI
AP 46
LOT 198
N/F
KENNETH J. SOUSA
REV. TRUST,
KENNETH J. SOUSA,
TRUSTEE
AP 46
LOT 30A
N/F
STEVEN P. &
LOREEN
FRANCAZIO
AP 46
LOT 10B
N/F
JOSEPH SILVA
AP 46
LOT 10B
N/F
STATE OF
RHODE
ISLAND
AP 47
LOT 208
N/F
THE MARK H.
KULIGOWSKI
LIV. TRUST
&
THE CLAUDETTE M.
KULIGOWSKI
LIV. TRUST TIC
AP 46
LOT 208
N/F
JOSEPH & SHARON
MANSOLILLO
AP 46
LOT 209
N/F
DONNA A.
LECLERC
AP 47
LOT 103C
N/F
CYNTHIA J.
LEARY-WATERMAN TRUST,
CYNTHIA J.
LEARY-WATERMAN,
TRUSTEE
AP 47
LOT 103B
N/F
PAUL E.
&
KATHRYN A.
TANCRELLE
SWALE 3A
L=600'
AVGS=4.2%
W=2.0'
D=1.5'
SS=3:1
SWALE-3B
L=625'
AVGS=7.5%
W=2.0'
D=1.5'
SS=3:1
CONCRETE
WASHOUT
STOCKPILE AREA,
CONSTRUCTION
STAGING, AND
EQUIPMENT
STORAGE
Sediment
Trap 3A
Sediment
Trap 3B
AP 46
LOT 184
N/F
STATE OF
RHODE ISLAND/D.E.M.
ZONE X
ZONE AE
Stillwater Reservoir
B1
B5
B15
B20
B25
B30
B35
A1
A5
A10
A15
A19
AP 47
LOT 103
N/F
CAROL J.
BREAULT,
TRUSTEE
AP 47
LOT 103A
N/F
JOSEPH C. & KATHLEEN
MELE
AP 47
LOT 80A
N/F
JEFFREY R. &
VIRGINIA RUSSELL
Swan Road
(VARIABLE WIDTH PUBLIC RIGHT OF WAY)
APPROX. 22'
AP 46
LOT 295
N/F
MICHAEL P.
&
CHERYL B.
IANNOTTI
AP 46
LOT 232
N/F
HIMANSHU C.
& MONICA H.
BHAGAT
AP 46
LOT 231
N/F
JOSE
ERNESTO ZARRANGA
& IRENE SHIRLEY
AP 46
LOT 9
N/F
TOWN OF
SMITHFIELD
D1
D5
D10
D15
D20
D25
D30
D35
D40
D45
D50
D55
D60
D65
E1
E5
E10
E15
E20
E25
E30
E35
E40
E45
E50
E55
OHW
Scale: 1"=80'
0
40'
80'
160'

Revised Per OEM:

The LOD and sediment controls have been expanded to accommodate the removal of the existing overhead wires and utility poles depicted on sheets 5, 6, and 7 of 23. No tree cutting is to occur and all other vegetative cutting is to be kept to the minimum necessary for removal.

OCT 1 6 2020

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Martin D. Wencek

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED DEC 1 1 2020 FILE # 20-0108
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Soil Erosion Control Legend:

DIVERSION RUNOFF CONVEYANCE MEASURE (SWALE AND/OR BERM)	- - → - - → -
CLEAN WATER DIVERSION RUNOFF CONVEYANCE MEASURE (SWALE AND/OR BERM)	- - → - - → -
PERMANENT SWALE (SEE SITE PLANS FOR DETAILS)	- - → - - → -
TEMPORARY SEDIMENT TRAP	▨
EROSION CONTROL (COMPOST SOCK, SILT FENCE (RI STD 9.2.0) OR APPROVED EQUAL)	—●—●—
LIMIT OF DISTURBANCE (NO SEDIMENT CONTROL)	——
LIMIT OF WORK PHASE 2	——
LIMIT OF DISTURBANCE (WITH SEDIMENT CONTROL)	—●—●—
TRIBUTARY AREA TO SESC BMP	—— ——
CONSTRUCTION ENTRANCE (RIDOT STD 9.9.0)	○○○
INFILTRATING AREA (TO BE PROTECTED BY COMPOST SOCK OR SILT FENCE)	▨
FINAL CONTOUR GRADE	—(308)—
EX MAJOR FOOT CONTOUR	— —160— —
INLET SEDIMENT CONTROL	●
TEMPORARY PIPE	—— D ——
FUTURE SESC PHASE	☒

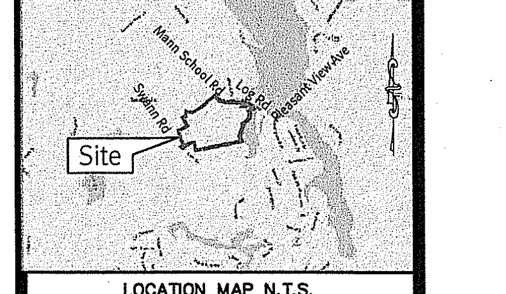
Note: This Plan Must Be Reproduced In Color

DiPrete Engineering

Two Stone Place, Cranston, RI 02920
tel 401-943-1000 fax 401-464-6006 www.diprete-eng.com

Boston • Providence • Newport

AUDIE D. OSGOOD
No. 9013 10/08/2020
REGISTERED
PROFESSIONAL ENGINEER
CIVIL


Mann School Rd
Log Rd
Pleasant View Ave
Swann Rd
Site

LOCATION MAP N.T.S.

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No.	Date	Description	By:
1	10-08-2020	RIDEM Submission Response to Comments	S.R.
0	05-01-2020	RIDEM Submission	S.R.

Drawn By: S.R.
Design By: C.D./P.A.A.

SESC Plan Phase 3

Sand Trace

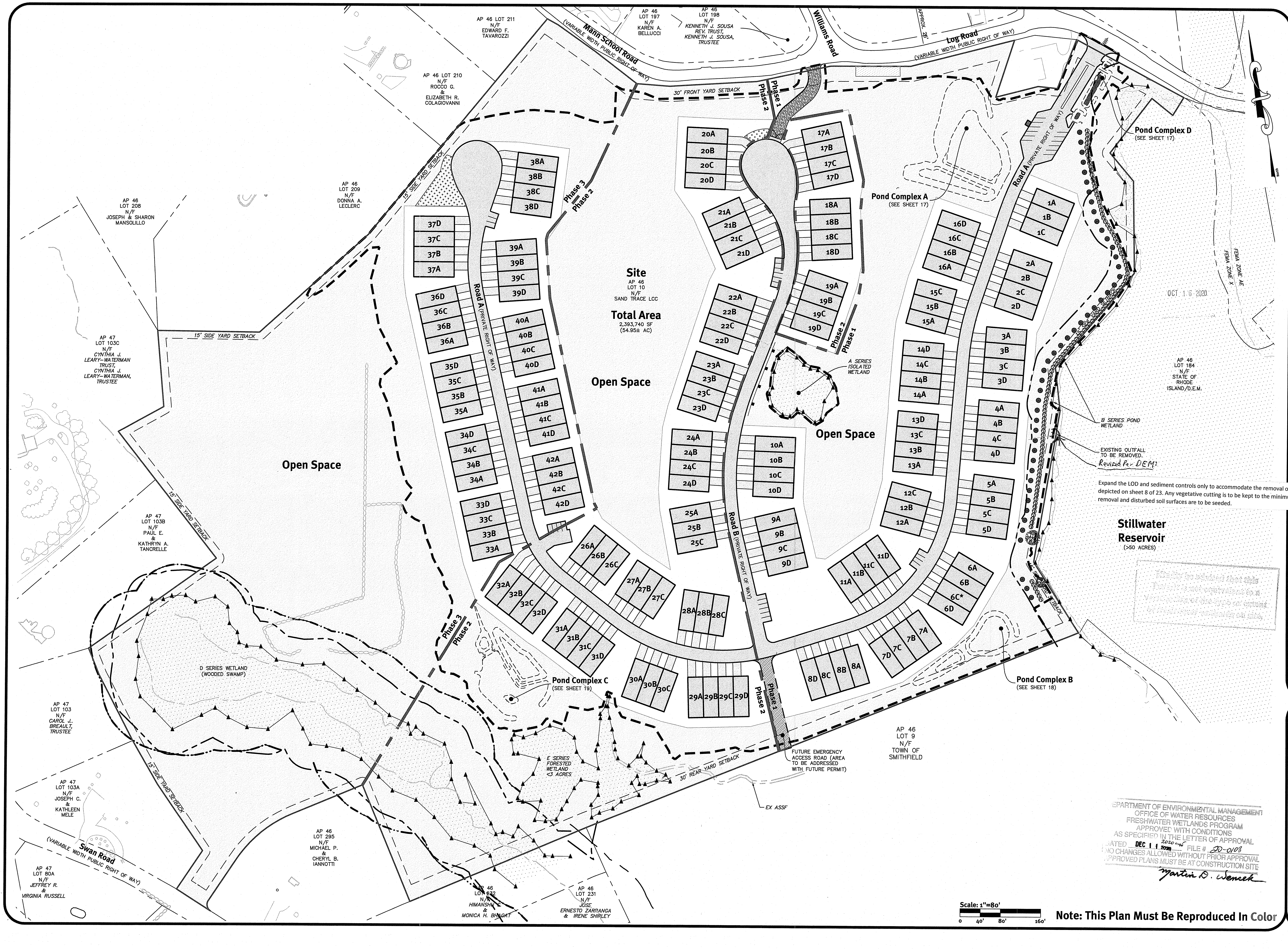
Assessor's Plat 46 Lot 10, Zone R-20M, Area: 54.95 ±Acres
Smithfield, Rhode Island

Applicant
Sand Trace LLC
10B Appian Way, Smithfield, Rhode Island 02917
tel 401-231-4700 fax 401-232-3203

DE Job No: 0214-017

SHEET 7 OF 23

z:\demain\projects\0214-017 the village on stillwater\autocad drawings\0214-017-sesc.dwg Plotted: 10/16/2020


Mann School Road
(VARIABLE WIDTH PUBLIC RIGHT OF WAY)
Williams Road
Log Road
(VARIABLE WIDTH PUBLIC RIGHT OF WAY)
APPROX. 28'
AP 46 LOT 211 N/F EDWARD F. TAVAROZZI
AP 46 LOT 197 N/F KAREN A. BELLUCCI
AP 46 LOT 198 N/F KENNETH J. SOUSA REV. TRUST, KENNETH J. SOUSA, TRUSTEE
AP 46 LOT 210 N/F ROCCO G. & ELIZABETH R. COLAGIOVANNI
AP 46 LOT 209 N/F DONNA A. LECLERC
AP 46 LOT 208 N/F JOSEPH & SHARON MANSOLILLO
AP 47 LOT 103C N/F CYNTHIA J. LEARY–WATERMAN TRUST, CYNTHIA J. LEARY–WATERMAN, TRUSTEE
AP 47 LOT 103B N/F PAUL E. & KATHRYN A. TANCRELLE
AP 47 LOT 103 N/F CAROL J. BREAULT, TRUSTEE
AP 47 LOT 103A N/F JOSEPH C. & KATHLEEN MELE
AP 47 LOT 80A N/F JEFFREY R. & VIRGINIA RUSSELL
AP 46 LOT 295 N/F MICHAEL P. & CHERYL B. IANNOTTI
AP 46 LOT 232 N/F HIMANSHU & MONICA H. BHAGAT
AP 46 LOT 231 N/F JOSE ERNESTO ZARRANGA & IRENE SHIRLEY
AP 46 LOT 9 N/F TOWN OF SMITHFIELD
AP 46 LOT 184 N/F STATE OF RHODE ISLAND/D.E.M.
Swan Road
(VARIABLE WIDTH PUBLIC RIGHT OF WAY)
30' FRONT YARD SETBACK
15' SIDE YARD SETBACK
30' REAR YARD SETBACK
Site
AP 46 LOT 10 N/F SAND TRACE LCC
Total Area
2,393,740 SF
(54.95± AC)
Open Space
Open Space
Open Space
Road A (PRIVATE RIGHT OF WAY)
Road B (PRIVATE RIGHT OF WAY)
Phase 1
Phase 2
Phase 3
Pond Complex A (SEE SHEET 17)
Pond Complex B (SEE SHEET 18)
Pond Complex C (SEE SHEET 19)
Pond Complex D (SEE SHEET 17)
A SERIES ISOLATED WETLAND
B SERIES POND WETLAND
D SERIES WETLAND (WOODED SWAMP)
E SERIES FORESTED WETLAND <3 ACRES
EXISTING OUTFALL TO BE REMOVED.
Revised Per DEM:
FEMA ZONE AE
FEMA ZONE X
EX ASSF
FUTURE EMERGENCY ACCESS ROAD (AREA TO BE ADDRESSED WITH FUTURE PERMIT)
Stillwater Reservoir
(>50 ACRES)
1A 1B 1C
2A 2B 2C 2D
3A 3B 3C 3D
4A 4B 4C 4D
5A 5B 5C 5D
6A 6B 6C* 6D
7A 7B 7C 7D
8A 8B 8C 8D
9A 9B 9C 9D
10A 10B 10C 10D
11A 11B 11C 11D
12A 12B 12C
13A 13B 13C 13D
14A 14B 14C 14D
15A 15B 15C
16A 16B 16C 16D
17A 17B 17C 17D
18A 18B 18C 18D
19A 19B 19C 19D
20A 20B 20C 20D
21A 21B 21C 21D
22A 22B 22C 22D
23A 23B 23C 23D
24A 24B 24C 24D
25A 25B 25C
26A 26B 26C
27A 27B 27C
28A 28B 28C
29A 29B 29C 29D
30A 30B 30C
31A 31B 31C 31D
32A 32B 32C 32D
33A 33B 33C 33D
34A 34B 34C 34D
35A 35B 35C 35D
36A 36B 36C 36D
37A 37B 37C 37D
38A 38B 38C 38D
39A 39B 39C 39D
40A 40B 40C 40D
41A 41B 41C 41D
42A 42B 42C 42D
North
Scale: 1"=80'
0 40' 80' 160'

Expand the LOD and sediment controls only to accommodate the removal of the existing outfall depicted on sheet 8 of 23. Any vegetative cutting is to be kept to the minimum necessary for outfall removal and disturbed soil surfaces are to be seeded.

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

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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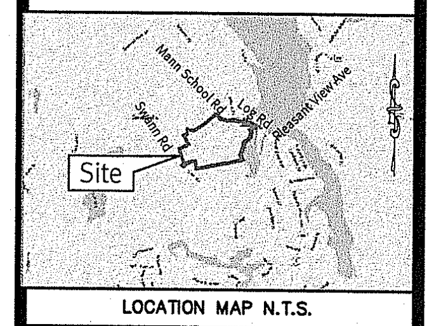
Martin D. Wencek

Note: This Plan Must Be Reproduced In Color

OCT 1 6 2020

DiPrete Engineering
Two Stafford Court Cranston, RI 02920
tel 401-943-1000 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

AUDIE D. OSGOOD
No. 9013
10/08/2020
REGISTERED
PROFESSIONAL ENGINEER
CIVIL


Mann School Rd
Log Rd
Pleasant View Ave
Swann Rd
Site

LOCATION MAP N.T.S.

This plan set n… stamped 'Issu…ction' and stamped by a registered Professional E…rete Engineering.

DiPrete Engine…rants plans on a DiPrete Engineering title block star…ered Professional Engineer of DiPrete Engineering. D…ering does not warrant plans by any other party.

The contracto…e for all of the means, methods, safety precautions a…ts, and OSHA conformance in the implementatio… and design.

Existing utilities shown on this plan are approximate only. DiPrete Engineering assumes no responsibility for damages incurred due to locations of existing utilities. See 'Utility Note' on sheet 3.

No.	Date	Description	By:
1	10-08-2020	RIDEM Submission Response to Comments	S.R.
0	05-01-2020	RIDEM Submission	S.R.

Drawn By: S.R.
Design By: C.D./P.A.A.

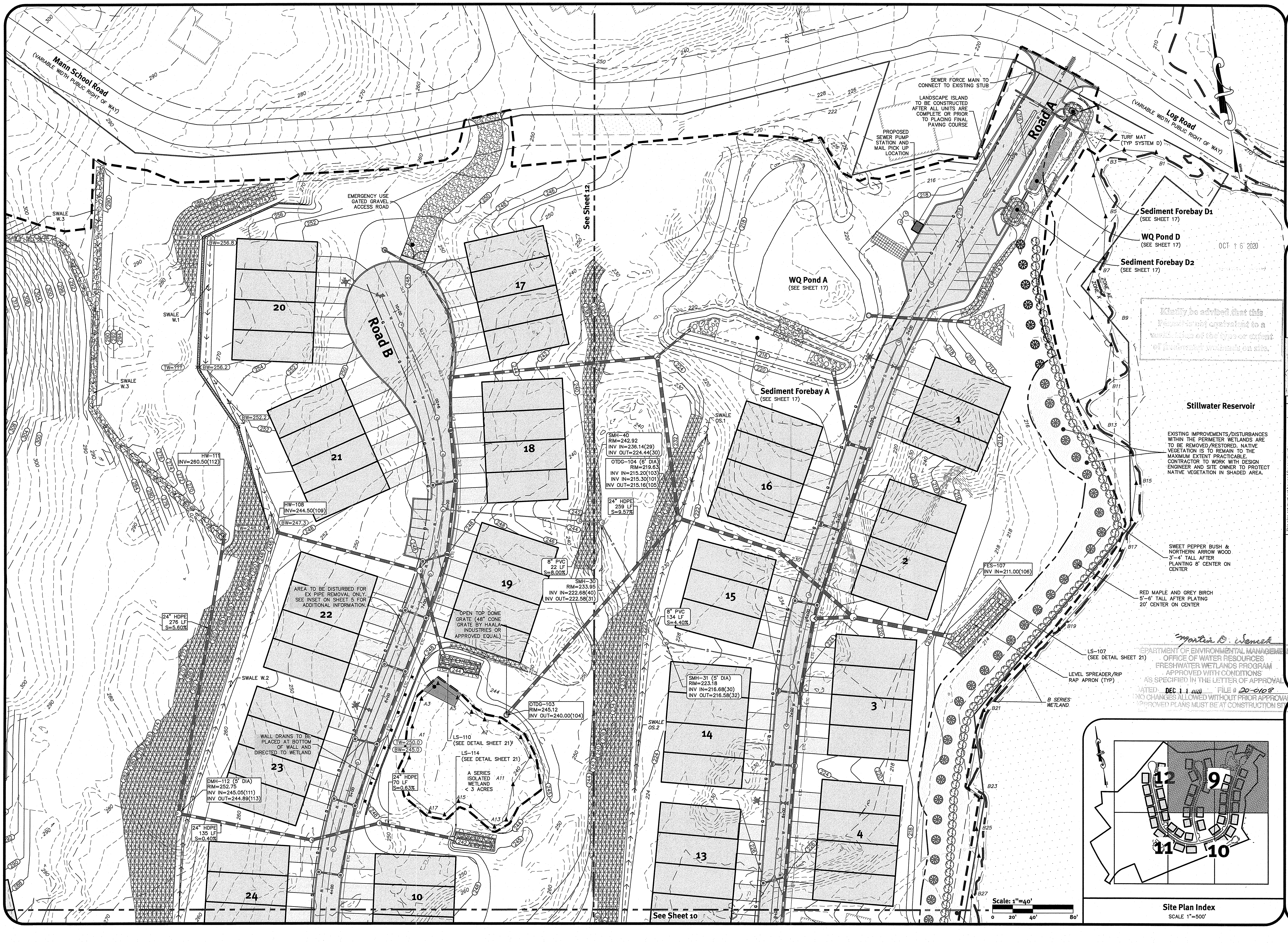
Overall Site Plan
Sand Trace
Assessor's Plat 46 Lot 10, Zone R-20M, Area: 54.95 ±Acres
Smithfield, Rhode Island

Applicant
Sand Trace LLC
10B Appian Way, Smithfield, Rhode Island 02917
tel 401-231-4700 fax 401-232-3203

DE Job No: 0214-017

SHEET 8 OF 23

z:\demain\projects\0214-017 the village on stillwater\autocad drawings\0214-017-plan.dwg Plotted: 10/16/2020


Mann School Road
(VARIABLE WIDTH PUBLIC RIGHT OF WAY)
Log Road
(VARIABLE WIDTH PUBLIC RIGHT OF WAY)
Road A
Road B
See Sheet 12
See Sheet 10
North
SEWER FORCE MAIN TO CONNECT TO EXISTING STUB
LANDSCAPE ISLAND TO BE CONSTRUCTED AFTER ALL UNITS ARE COMPLETE OR PRIOR TO PLACING FINAL PAVING COURSE
PROPOSED SEWER PUMP STATION AND MAIL PICK UP LOCATION
TURF MAT (TYP SYSTEM D)
Sediment Forebay D1
(SEE SHEET 17)
WQ Pond D
(SEE SHEET 17)
Sediment Forebay D2
(SEE SHEET 17)
WQ Pond A
(SEE SHEET 17)
Sediment Forebay A
(SEE SHEET 17)
Stillwater Reservoir
EXISTING IMPROVEMENTS/DISTURBANCES WITHIN THE PERIMETER WETLANDS ARE TO BE REMOVED/RESTORED. NATIVE VEGETATION IS TO REMAIN TO THE MAXIMUM EXTENT PRACTICABLE. CONTRACTOR TO WORK WITH DESIGN ENGINEER AND SITE OWNER TO PROTECT NATIVE VEGETATION IN SHADED AREA.
SWEET PEPPER BUSH & NORTHERN ARROW WOOD 3'–4' TALL AFTER PLANTING 8' CENTER ON CENTER
RED MAPLE AND GREY BIRCH 5'–6' TALL AFTER PLATING 20' CENTER ON CENTER
FES-107
INV IN=211.00(106)
LS–107
(SEE DETAIL SHEET 21)
LEVEL SPREADER/RIP RAP APRON (TYP)
B SERIES WETLAND
ZONE AE
ZONE X
B1
B3
B5
B7
B9
B11
B13
B15
B17
B19
B21
B23
B25
B27
EMERGENCY USE GATED GRAVEL ACCESS ROAD
SWALE W.3
SWALE W.1
SWALE W.2
SWALE OS.1
SWALE OS.2
TW=271.8
BW=256.8
TW=???
BW=256.2
BW=252.2
TW=248.0
BW=247.3
HW-111
INV=260.50(112)
HW-108
INV=244.50(109)
24" HDPE
276 LF
S=5.60%
DMH-112 (5' DIA)
RIM=252.75
INV IN=245.05(111)
INV OUT=244.89(113)
24" HDPE
135 LF
S=0.40%
AREA TO BE DISTURBED FOR EX PIPE REMOVAL ONLY. SEE INSET ON SHEET 5 FOR ADDITIONAL INFORMATION.
WALL DRAINS TO BE PLACED AT BOTTOM OF WALL AND DIRECTED TO WETLAND
OPEN TOP DOME GRATE (48" CONE GRATE BY HAALA INDUSTRIES OR APPROVED EQUAL)
TW=250.0
BW=245.0
24" HDPE
70 LF
S=0.63%
LS–110
(SEE DETAIL SHEET 21)
LS–114
(SEE DETAIL SHEET 21)
A SERIES ISOLATED WETLAND < 3 ACRES
A1
A3
A5
A7
A11
A13
A15
A17
OTDG–103
RIM=245.12
INV OUT=240.00(104)
8" PVC
22 LF
S=8.00%
SMH–30
RIM=233.95
INV IN=222.68(40)
INV OUT=222.58(31)
SMH–40
RIM=242.92
INV IN=236.14(29)
INV OUT=224.44(30)
OTDG–104 (6' DIA)
RIM=219.63
INV IN=215.20(103)
INV IN=215.30(101)
INV OUT=215.16(105)
24" HDPE
259 LF
S=9.57%
8" PVC
134 LF
S=4.40%
SMH–31 (5' DIA)
RIM=223.18
INV IN=216.68(30)
INV OUT=216.58(32)
1
2
3
4
10
13
14
15
16
17
18
19
20
21
22
23
24
Scale: 1"=40'
0
20'
40'
80'
12
9
11
10
Site Plan Index
SCALE 1"=500'

OCT 16 2020

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

Martin D. Wencek
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED DEC 1 1 2020 FILE # 20-0108
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

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DiPrete Engineering
Two Stafford Court Cranston, RI 02920
tel 401-943-1000 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

AUDIE D. OSGOOD
No. 9015
10/08/2020
REGISTERED
PROFESSIONAL ENGINEER
CIVIL

Mann School Rd
Log Rd
Pleasant View Ave
Swann Rd
Site
LOCATION MAP N.T.S.

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No.	Date	Description	By:
1	10-08-2020	RIDEM Submission Response to Comments	S.R.
0	05-01-2020	RIDEM Submission	S.R.

Drawn By: S.R.
Design By: C.D./P.A.A.

Site Plan - 1

Sand Trace

Assessor's Plat 46 Lot 10, Zone R-20M, Area: 54.95 ±Acres
Smithfield, Rhode Island

Applicant
Sand Trace LLC
10B Appian Way, Smithfield, Rhode Island 02917
tel 401-231-4700 fax 401-232-3203

SHEET 9 OF 23

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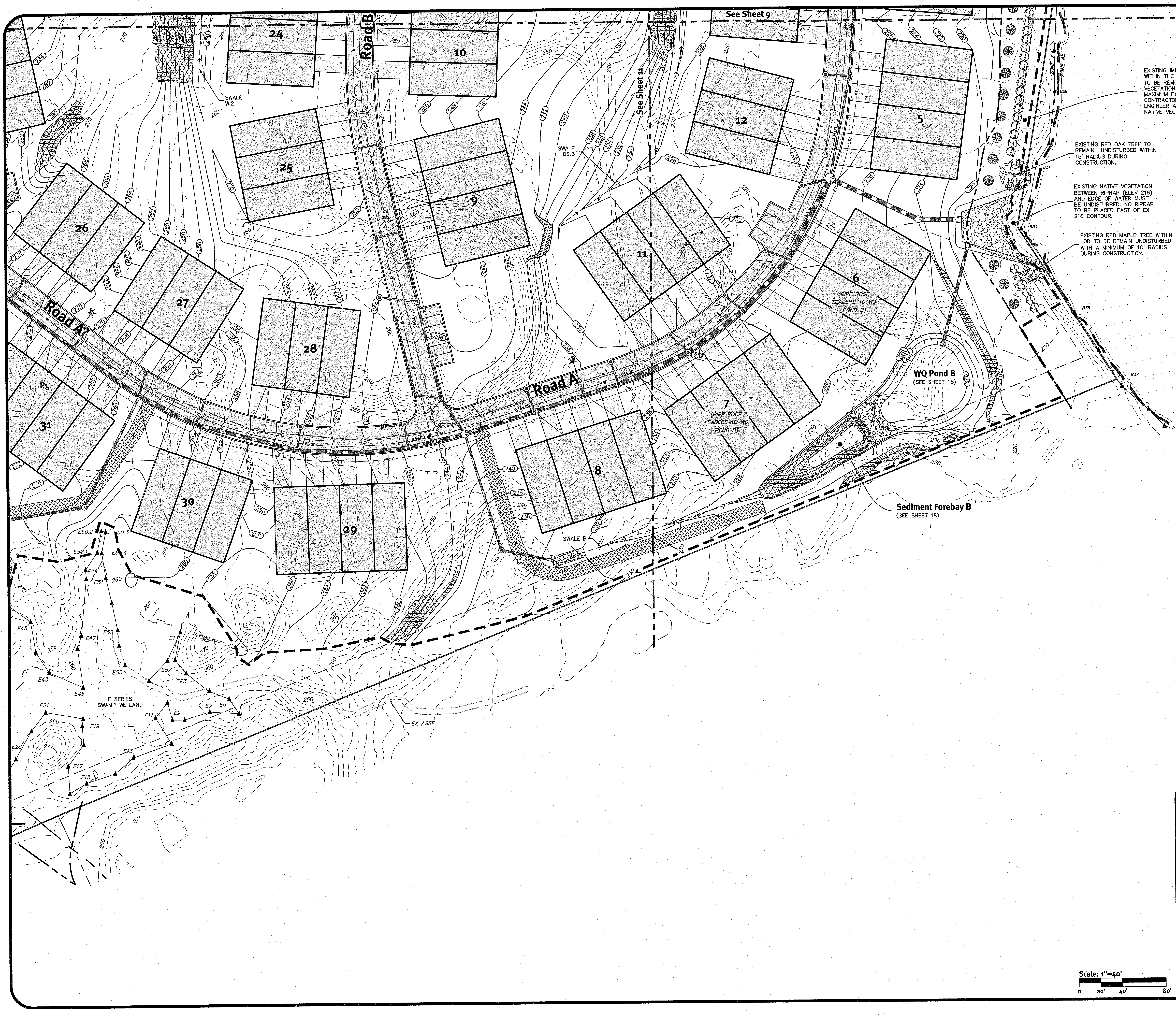
See Sheet 9
See Sheet 11
Road A
Road B
24
25
26
27
28
29
30
31
5
6
7
8
9
10
11
12
(PIPE ROOF LEADERS TO WQ POND B)
SWALE W.2
SWALE OS.3
SWALE B
WQ Pond B
(SEE SHEET 18)
Sediment Forebay B
(SEE SHEET 18)
E SERIES SWAMP WETLAND
EX ASSE
ZONE X
ZONE AE
B29
B31
B33
B35
B37
Scale: 1"=40'
0 20' 40' 80'

EXISTING IMPROVEMENTS/DISTURBANCES WITHIN THE PERIMETER WETLANDS ARE TO BE REMOVED/RESTORED. NATIVE VEGETATION IS TO REMAIN TO THE MAXIMUM EXTENT PRACTICABLE. CONTRACTOR TO WORK WITH DESIGN ENGINEER AND SITE OWNER TO PROTECT NATIVE VEGETATION IN SHADED AREA.

EXISTING RED OAK TREE TO REMAIN UNDISTURBED WITHIN 15' RADIUS DURING CONSTRUCTION.

EXISTING NATIVE VEGETATION BETWEEN RIPRAP (ELEV 216) AND EDGE OF WATER MUST BE UNDISTURBED. NO RIPRAP TO BE PLACED EAST OF EX 216 CONTOUR.

EXISTING RED MAPLE TREE WITHIN LOD TO BE REMAIN UNDISTURBED WITH A MINIMUM OF 10' RADIUS DURING CONSTRUCTION.

Stillwater Reservoir

OCT 1 6 2020

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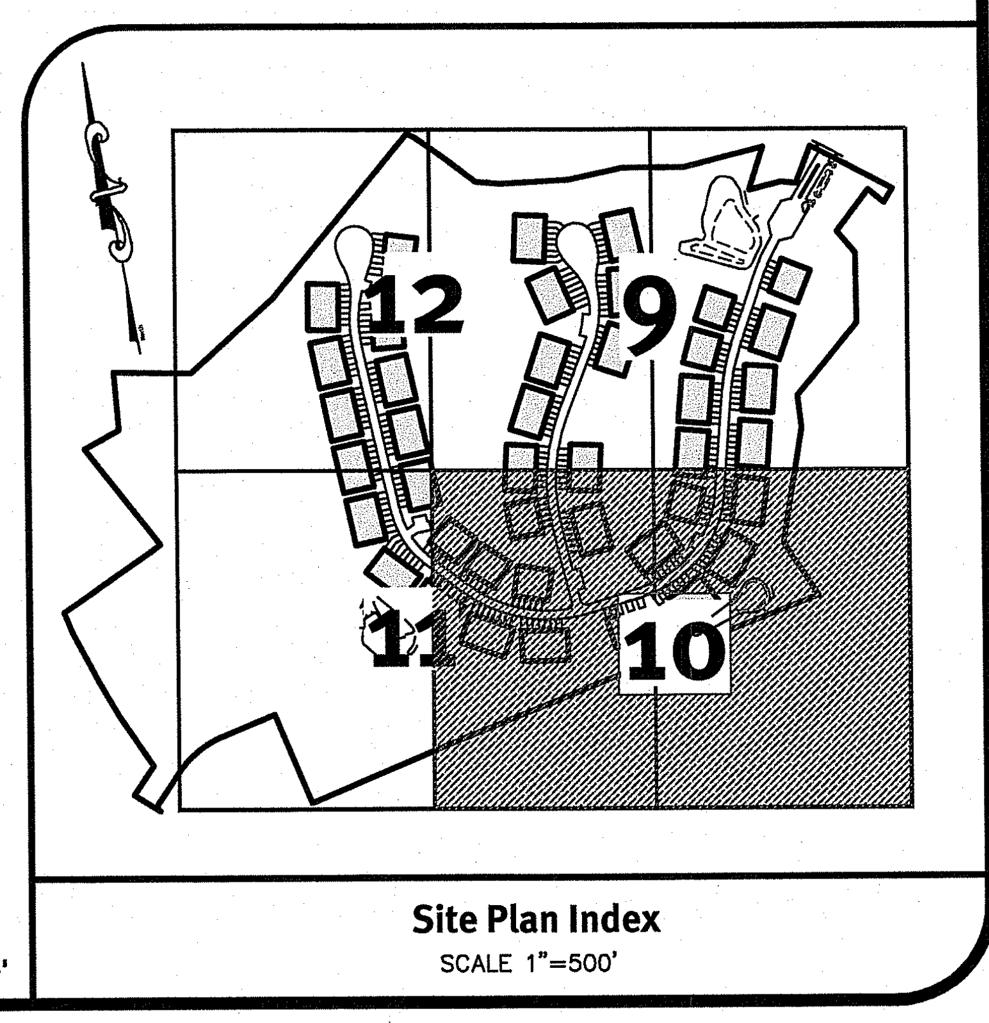
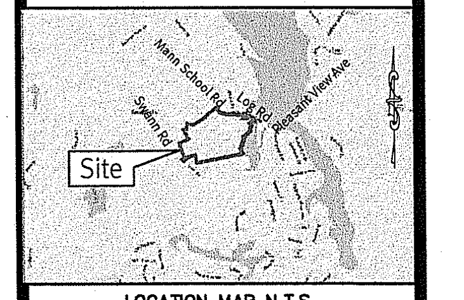
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED DEC 1 1 2020 FILE # 20-0108
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Martin D. Wencek



Site Plan Index
SCALE 1"=500'

DiPrete Engineering
Two Stafford Court Cranston, RI 02920
tel 401-943-1000 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

AUDIE D. OSGOOD
No 9015
10/08/2020
REGISTERED PROFESSIONAL ENGINEER CIVIL


Mann School Rd
Log Rd
Swann Rd
Pleasant View Ave
Site

LOCATION MAP N.T.S.

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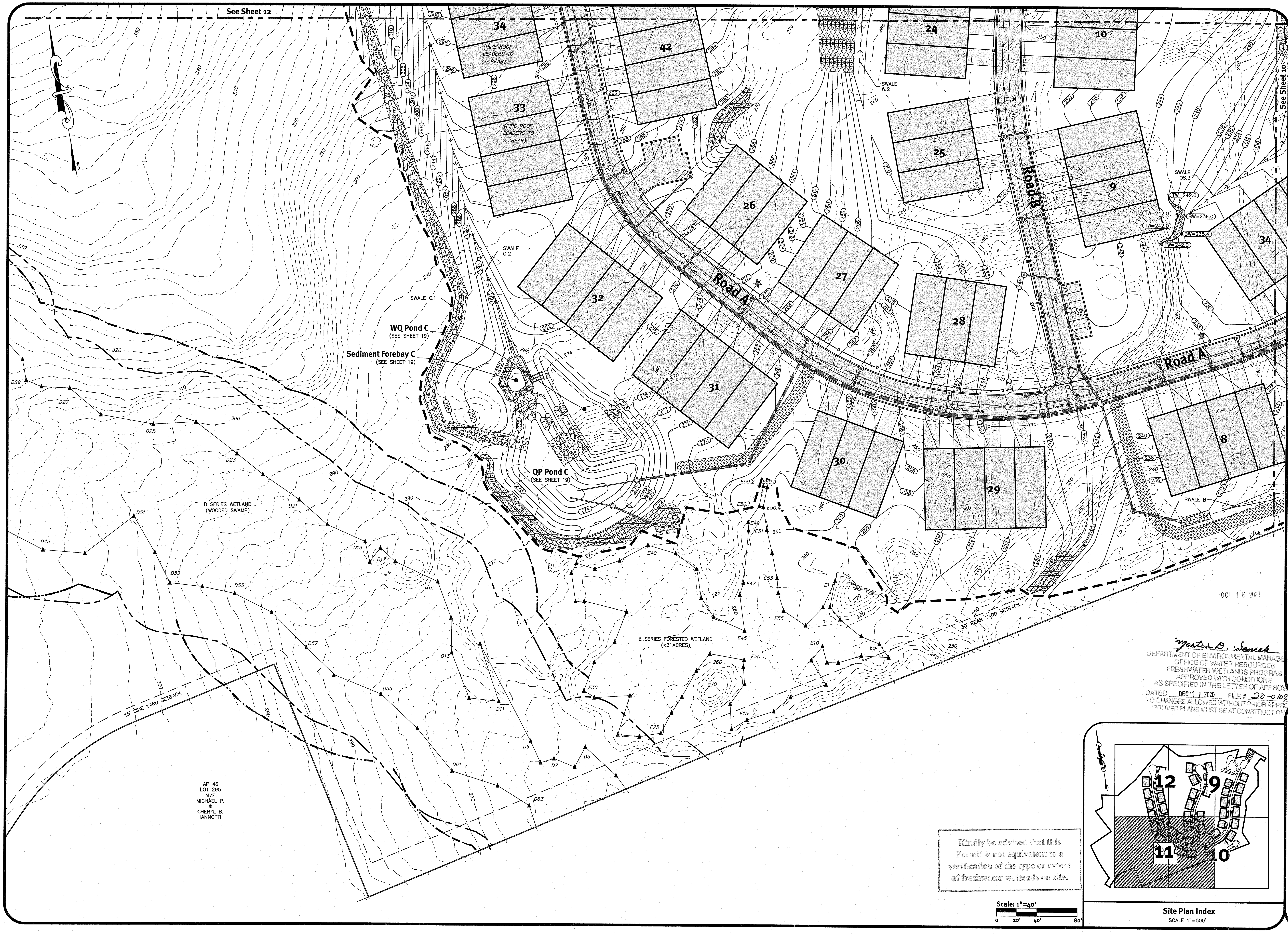
No.	Date	Description	By:
1	10-08-2020	RIDEM Submission Response to Comments	S.R.
0	05-01-2020	RIDEM Submission	S.R.

Drawn By: S.R.
Design By: C.D./P.A.A.

Site Plan - 2
Sand Trace
Assessor's Plat 46 Lot 10, Zone R-20M, Area: 54.95 ±Acres
Smithfield, Rhode Island

Applicant
Sand Trace LLC
10B Appian Way, Smithfield, Rhode Island 02917
tel 401-231-4700 fax 401-232-3203

DE Job No: 0214-017


See Sheet 12
See Sheet 10
Road A
Road B
34
42
24
10
33
25
9
26
32
27
28
31
30
29
8
(PIPE ROOF LEADERS TO REAR)
SWALE W.2
SWALE OS.3
SWALE C.2
SWALE C.1
SWALE B
WQ Pond C
(SEE SHEET 19)
Sediment Forebay C
(SEE SHEET 19)
QP Pond C
(SEE SHEET 19)
TW=242.0
BW=236.0
BW=235.4
D SERIES WETLAND
(WOODED SWAMP)
E SERIES FORESTED WETLAND
(<3 ACRES)
30' REAR YARD SETBACK
15' SIDE YARD SETBACK
AP 46
LOT 295
N/F
MICHAEL P.
&
CHERYL B.
IANNOTTI
Scale: 1"=40'
0
20'
40'
80'
Site Plan Index
SCALE 1"=500'
12
9
11
10

OCT 1 6 2020

Martin D. Wencek

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED DEC 1 1 2020 FILE # 20-0108
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DiPrete Engineering

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No. 9015
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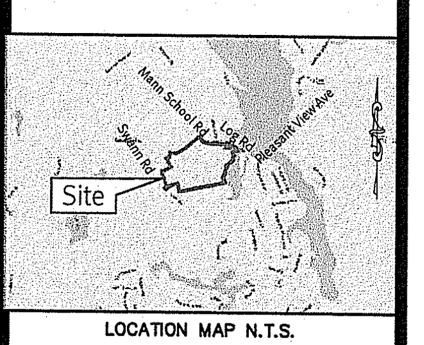
CIVIL

10/08/2020


Site
School Rd
Log Rd
Pleasant View Av
Swann Rd

LOCATION MAP N.T.S.

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0	05-01-2020	RIDEM Submission	S.R.

Drawn By: S.R. Design By: C.D./P.A.A.

Site Plan - 3

Sand Trace

Assessor's Plat 46 Lot 10, Zone R-20M, Area: 54.95 ±Acres
Smithfield, Rhode Island

Applicant
Sand Trace LLC
10B Appian Way, Smithfield, Rhode Island 02917
tel 401-231-4700 fax 401-232-3203

DE Job No: 0214-017

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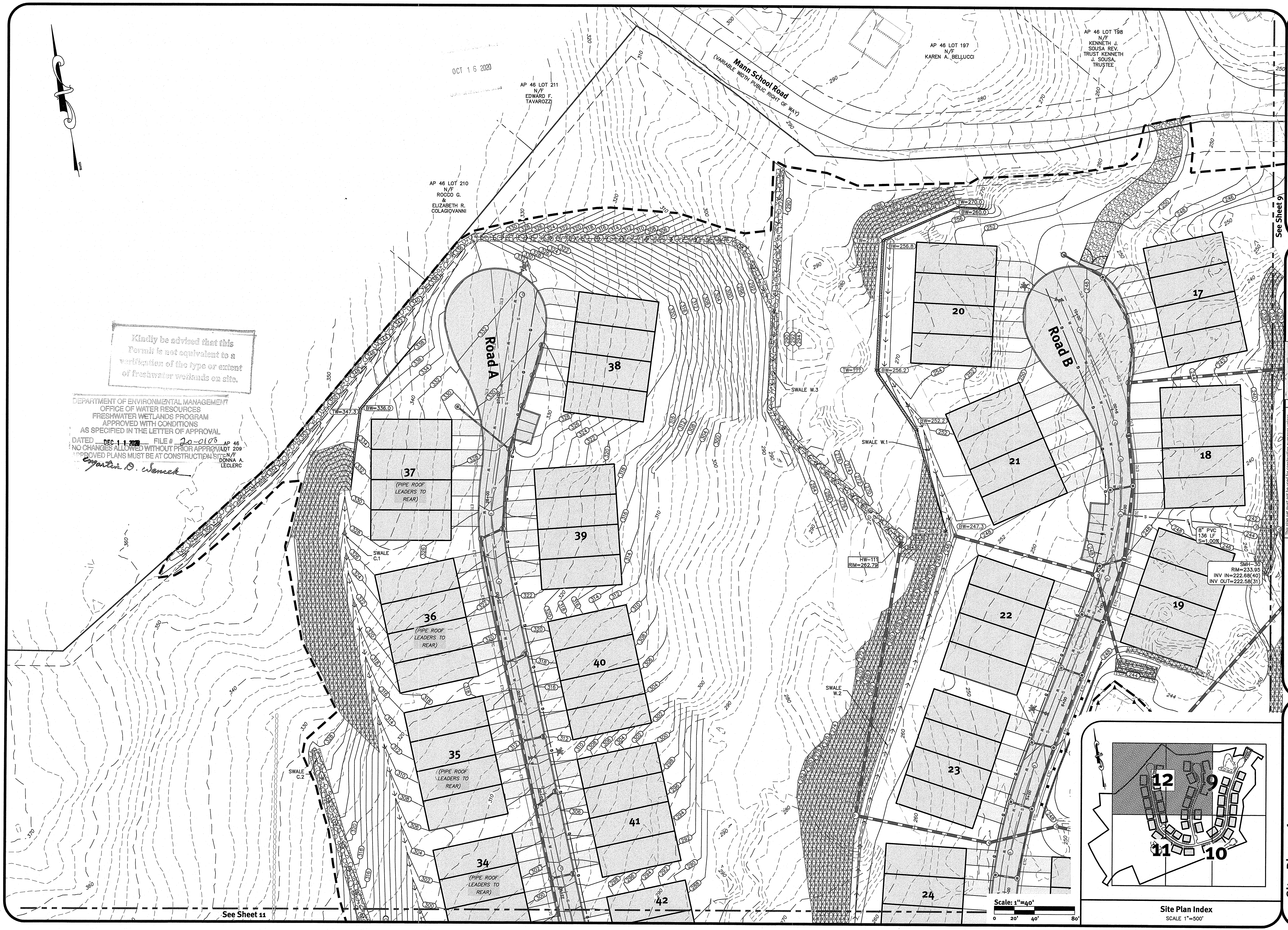
OCT 1 6 2020


Mann School Road
(VARIABLE WIDTH PUBLIC RIGHT OF WAY)
AP 46 LOT 211
N/F
EDWARD F.
TAVAROZZI
AP 46 LOT 197
N/F
KAREN A. BELLUCCI
AP 46 LOT 198
N/F
KENNETH J.
SOUSA REV.
TRUST KENNETH
J. SOUSA,
TRUSTEE
AP 46 LOT 210
N/F
ROCCO G.
&
ELIZABETH R.
COLAGIOVANNI
AP 46
LOT 209
N/F
DONNA A.
LECLERC
Road A
Road B
TW=347.3
BW=336.0
TW=270.0
BW=260.0
TW=271.8
BW=256.8
TW=???
BW=256.2
BW=252.2
BW=247.3
TW=248.0
SWALE W.3
SWALE W.1
SWALE W.2
SWALE C.1
SWALE C.2
HW-111
RIM=262.79
8" PVC
136 LF
S=1.00%
SMH-30
RIM=233.95
INV IN=222.68(40)
INV OUT=222.58(31)
17
18
19
20
21
22
23
24
34
35
36
37
38
39
40
41
42
(PIPE ROOF LEADERS TO REAR)
See Sheet 9
See Sheet 11
Scale: 1"=40'
0
20'
40'
80'
12
9
11
10

Site Plan Index
SCALE 1"=500'

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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 DEC 1 1 2020 FILE # 20-0103
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Martin D. Wencek

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DiPrete Engineering

Two Stafford Court Cranston, RI 02920
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Boston • Providence • Newport

AUDIE D. OSGOOD
No. 9013
10/08/2020
REGISTERED
PROFESSIONAL ENGINEER
CIVIL

Site

LOCATION MAP N.T.S.

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1	10-08-2020	RIDEM Submission Response to Comments	S.R.
0	05-01-2020	RIDEM Submission	S.R.

Drawn By: S.R.
Design By: C.D./P.A.A.

Site Plan - 4
Sand Trace

Assessor's Plat 46 Lot 10, Zone R-20M, Area: 54.95 ±Acres
Smithfield, Rhode Island

Applicant
Sand Trace LLC
10B Appian Way, Smithfield, Rhode Island 02917
tel 401-231-4700 fax 401-232-3203

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SHEET 12 OF 23

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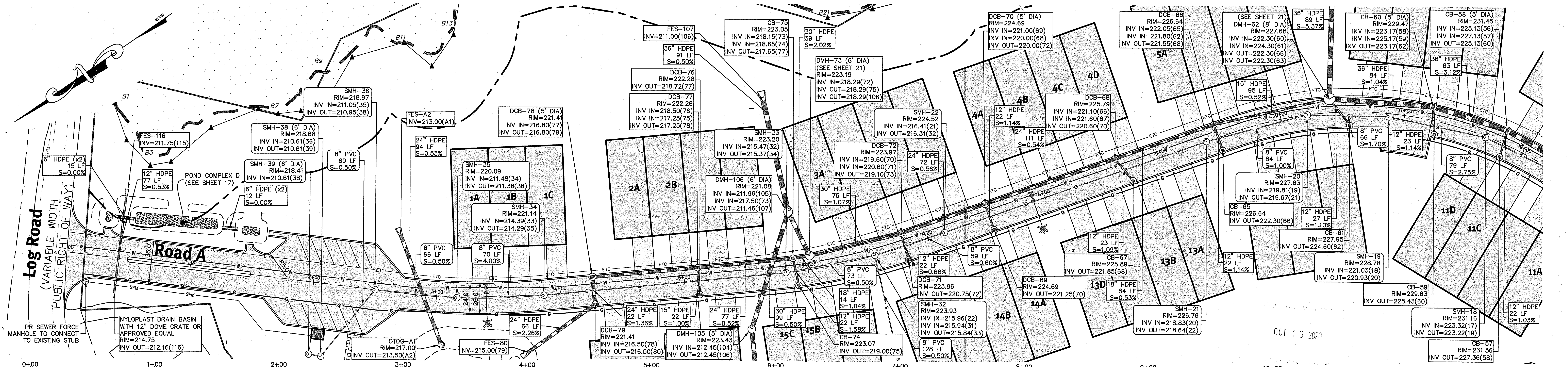
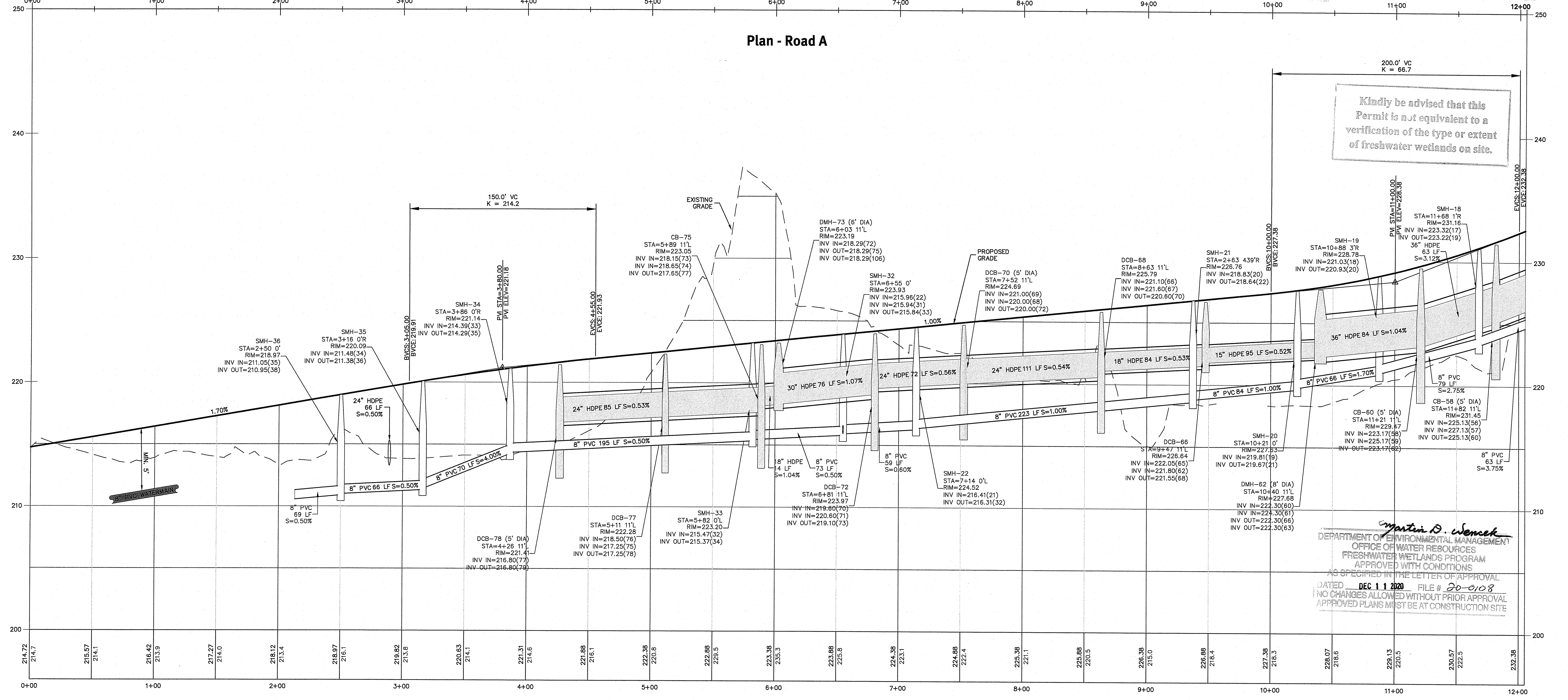

North
B1
B3
B7
B9
B11
B13
B21
Log Road
(VARIABLE WIDTH PUBLIC RIGHT OF WAY)
Road A
36.0'
R5.0'
24.0'
26.0'
ETC
W
G
S
SFM
6" HDPE (x2) 15 LF S=0.00%
FES-116 INV=211.75(115)
12" HDPE 77 LF S=0.53%
POND COMPLEX D (SEE SHEET 17)
SMH-38 (6' DIA) RIM=218.68 INV IN=210.61(36) INV OUT=210.61(39)
SMH-39 (6' DIA) RIM=218.41 INV IN=210.61(38)
6" HDPE (x2) 12 LF S=0.00%
SMH-36 RIM=218.97 INV IN=211.05(35) INV OUT=210.95(38)
8" PVC 69 LF S=0.50%
FES-A2 INV=213.00(A1)
24" HDPE 94 LF S=0.53%
DCB-78 (5' DIA) RIM=221.41 INV IN=216.80(77) INV OUT=216.80(79)
SMH-35 RIM=220.09 INV IN=211.48(34) INV OUT=211.38(36)
SMH-34 RIM=221.14 INV IN=214.39(33) INV OUT=214.29(35)
1A
1B
1C
8" PVC 66 LF S=0.50%
8" PVC 70 LF S=4.00%
PR SEWER FORCE MANHOLE TO CONNECT TO EXISTING STUB
NYLOPLAST DRAIN BASIN WITH 12" DOME GRATE OR APPROVED EQUAL RIM=214.75 INV OUT=212.16(116)
OTDG-A1 RIM=217.00 INV OUT=213.50(A2)
FES-80 INV=215.00(79)
24" HDPE 66 LF S=2.26%
FES-107 INV=211.00(106)
36" HDPE 91 LF S=0.50%
DCB-76 RIM=222.28 INV OUT=218.72(77)
DCB-77 RIM=222.28 INV IN=218.50(76) INV IN=217.25(75) INV OUT=217.25(78)
CB-75 RIM=223.05 INV IN=218.15(73) INV IN=218.65(74) INV OUT=217.65(77)
30" HDPE 39 LF S=2.02%
DMH-73 (6' DIA) (SEE SHEET 21) RIM=223.19 INV IN=218.29(72) INV OUT=218.29(75) INV OUT=218.29(106)
SMH-33 RIM=223.20 INV IN=215.47(32) INV OUT=215.37(34)
DMH-106 (6' DIA) RIM=221.08 INV IN=211.96(105) INV IN=217.50(73) INV OUT=211.46(107)
2A
2B
3A
30" HDPE 76 LF S=1.07%
DCB-72 RIM=223.97 INV IN=219.60(70) INV IN=220.60(71) INV OUT=219.10(73)
SMH-22 RIM=224.52 INV IN=216.41(21) INV OUT=216.31(32)
24" HDPE 72 LF S=0.56%
DCB-79 RIM=221.41 INV IN=216.50(78) INV OUT=216.50(80)
24" HDPE 22 LF S=1.36%
15" HDPE 22 LF S=1.00%
24" HDPE 77 LF S=0.52%
DMH-105 (5' DIA) RIM=223.43 INV IN=212.45(104) INV OUT=212.45(106)
30" HDPE 99 LF S=0.50%
15C
15B
8" PVC 73 LF S=0.50%
18" HDPE 14 LF S=1.04%
12" HDPE 22 LF S=1.58%
CB-74 RIM=223.07 INV OUT=219.00(75)
12" HDPE 22 LF S=0.68%
DCB-71 RIM=223.96 INV OUT=220.75(72)
SMH-32 RIM=223.93 INV IN=215.96(22) INV IN=215.94(31) INV OUT=215.84(33)
8" PVC 128 LF S=0.50%
8" PVC 59 LF S=0.60%
14B
14A
DCB-69 RIM=224.69 INV OUT=221.25(70)
DCB-70 (5' DIA) RIM=224.69 INV IN=221.00(69) INV IN=220.00(68) INV OUT=220.00(72)
4A
4B
4C
4D
12" HDPE 22 LF S=1.14%
24" HDPE 111 LF S=0.54%
DCB-68 RIM=225.79 INV IN=221.10(66) INV IN=221.60(67) INV OUT=220.60(70)
12" HDPE 23 LF S=1.09%
CB-67 RIM=225.89 INV OUT=221.85(68)
13D
18" HDPE 84 LF S=0.53%
13B
13A
SMH-21 RIM=226.76 INV IN=218.83(20) INV OUT=218.64(22)
12" HDPE 22 LF S=1.14%
DCB-66 RIM=226.64 INV IN=222.05(65) INV IN=221.80(62) INV OUT=221.55(68)
5A
(SEE SHEET 21) DMH-62 (8' DIA) RIM=227.68 INV IN=222.30(60) INV IN=224.30(61) INV OUT=222.30(66) INV OUT=222.30(63)
15" HDPE 95 LF S=0.52%
8" PVC 84 LF S=1.00%
SMH-20 RIM=227.63 INV IN=219.81(19) INV OUT=219.67(21)
CB-65 RIM=226.64 INV OUT=222.30(66)
12" HDPE 27 LF S=1.10%
CB-61 RIM=227.95 INV OUT=224.60(62)
36" HDPE 89 LF S=5.37%
36" HDPE 84 LF S=1.04%
8" PVC 66 LF S=1.70%
12" HDPE 23 LF S=1.14%
SMH-19 RIM=228.78 INV IN=221.03(18) INV OUT=220.93(20)
CB-60 (5' DIA) RIM=229.47 INV IN=223.17(58) INV IN=225.17(59) INV OUT=223.17(62)
CB-58 (5' DIA) RIM=231.45 INV IN=225.13(56) INV IN=227.13(57) INV OUT=225.13(60)
36" HDPE 63 LF S=3.12%
8" PVC 79 LF S=2.75%
CB-59 RIM=229.63 INV OUT=225.43(60)
SMH-18 RIM=231.16 INV IN=223.32(17) INV OUT=223.22(19)
CB-57 RIM=231.56 INV OUT=227.36(58)
12" HDPE 22 LF S=1.03%
11D
11C
11A
1+00
2+00
3+00
4+00
5+00
6+00
7+00
8+00
9+00
10+00
11+00
12+00

OCT 1 6 2020

Plan - Road A


0+00
1+00
2+00
3+00
4+00
5+00
6+00
7+00
8+00
9+00
10+00
11+00
12+00
250
240
230
220
210
200
150.0' VC K = 214.2
200.0' VC K = 66.7
EXISTING GRADE
PROPOSED GRADE
1.70%
1.00%
MIN. 5'
8" PVC WATERMAIN
BVCS: 3+05.00 BVCE: 219.91
PVI STA=3+80.00 PVI ELEV=221.18
EVCS: 4+55.00 EVCE: 221.93
BVCS: 10+00.00 BVCE: 227.38
PVI STA=11+00.00 PVI ELEV=228.38
EVCS: 12+00.00 EVCE: 232.38
SMH-36 STA=2+50 0' RIM=218.97 INV IN=211.05(35) INV OUT=210.95(38)
SMH-35 STA=3+16 0'R RIM=220.09 INV IN=211.48(34) INV OUT=211.38(36)
SMH-34 STA=3+86 0'R RIM=221.14 INV IN=214.39(33) INV OUT=214.29(35)
24" HDPE 66 LF S=0.50%
8" PVC 69 LF S=0.50%
8" PVC 66 LF S=0.50%
8" PVC 70 LF S=4.00%
8" PVC 195 LF S=0.50%
24" HDPE 85 LF S=0.53%
DCB-78 (5' DIA) STA=4+26 11'L RIM=221.41 INV IN=216.80(77) INV OUT=216.80(79)
DCB-77 STA=5+11 11'L RIM=222.28 INV IN=218.50(76) INV IN=217.25(75) INV OUT=217.25(78)
SMH-33 STA=5+82 0'L RIM=223.20 INV IN=215.47(32) INV OUT=215.37(34)
CB-75 STA=5+89 11'L RIM=223.05 INV IN=218.15(73) INV IN=218.65(74) INV OUT=217.65(77)
DMH-73 (6' DIA) STA=6+03 11'L RIM=223.19 INV IN=218.29(72) INV OUT=218.29(75) INV OUT=218.29(106)
30" HDPE 76 LF S=1.07%
18" HDPE 14 LF S=1.04%
8" PVC 73 LF S=0.50%
DCB-72 STA=6+81 11'L RIM=223.97 INV IN=219.60(70) INV IN=220.60(71) INV OUT=219.10(73)
SMH-32 STA=6+55 0' RIM=223.93 INV IN=215.96(22) INV IN=215.94(31) INV OUT=215.84(33)
24" HDPE 72 LF S=0.56%
8" PVC 59 LF S=0.60%
SMH-22 STA=7+14 0'L RIM=224.52 INV IN=216.41(21) INV OUT=216.31(32)
DCB-70 (5' DIA) STA=7+52 11'L RIM=224.69 INV IN=221.00(69) INV IN=220.00(68) INV OUT=220.00(72)
24" HDPE 111 LF S=0.54%
8" PVC 223 LF S=1.00%
DCB-68 STA=8+63 11'L RIM=225.79 INV IN=221.10(66) INV IN=221.60(67) INV OUT=220.60(70)
18" HDPE 84 LF S=0.53%
DCB-66 STA=9+47 11'L RIM=226.64 INV IN=222.05(65) INV IN=221.80(62) INV OUT=221.55(68)
SMH-21 STA=2+63 439'R RIM=226.76 INV IN=218.83(20) INV OUT=218.64(22)
15" HDPE 95 LF S=0.52%
8" PVC 84 LF S=1.00%
SMH-20 STA=10+21 0' RIM=227.63 INV IN=219.81(19) INV OUT=219.67(21)
DMH-62 (8' DIA) STA=10+40 11'L RIM=227.68 INV IN=222.30(60) INV IN=224.30(61) INV OUT=222.30(66) INV OUT=222.30(63)
8" PVC 66 LF S=1.70%
36" HDPE 84 LF S=1.04%
SMH-19 STA=10+88 3'R RIM=228.78 INV IN=221.03(18) INV OUT=220.93(20)
CB-60 (5' DIA) STA=11+21 11'L RIM=229.47 INV IN=223.17(58) INV IN=225.17(59) INV OUT=223.17(62)
SMH-18 STA=11+68 1'R RIM=231.16 INV IN=223.32(17) INV OUT=223.22(19)
36" HDPE 63 LF S=3.12%
8" PVC 79 LF S=2.75%
CB-58 (5' DIA) STA=11+82 11'L RIM=231.45 INV IN=225.13(56) INV IN=227.13(57) INV OUT=225.13(60)
8" PVC 63 LF S=3.75%
214.72 214.7
215.57 214.1
216.42 213.9
217.27 214.0
218.12 213.4
218.97 216.1
219.82 213.8
220.63 214.1
221.31 214.6
221.88 216.1
222.38 220.8
222.88 229.5
223.38 235.3
223.88 225.8
224.38 223.1
224.88 222.4
225.38 221.1
225.88 220.5
226.38 215.0
226.88 218.4
227.38 218.3
228.07 218.6
229.13 220.5
230.57 222.5
232.38

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

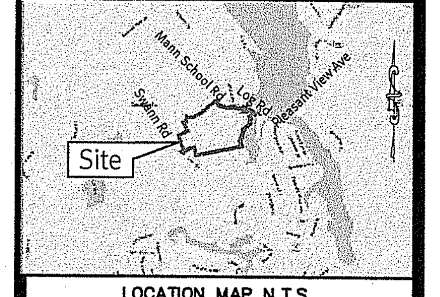
Martin D. Wencek
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED DEC 1 1 2020 FILE # 20-0108
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Sta. 0+00 To 12+05
Profile - Road A

Vertical: 0 2' 4' 8'
Horizontal: 0 20' 40' 80'

DiPrete Engineering
Two Stafford Court Cranston, RI 02920
tel 401-943-1000 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

AUDIE D. OSGOOD
No. 9015
10/08/2020
REGISTERED PROFESSIONAL ENGINEER CIVIL


Mann School Rd
Swann Rd
Log Rd
Pleasant View Ave
Site

LOCATION MAP N.T.S.

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DiPrete Engineering only warrants plans on a DiPrete Engineering title block stamped by registered Professional Engineer of DiPrete Engineering. DiPrete Engineering does not warrant plans by any other party.

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No.	Date	Description	By:
1	10-08-2020	RIDEM Submission Response to Comments	S.R.
0	05-01-2020	RIDEM Submission	S.R.

Drawn By: S.R.
Design By: C.D./P.A.A.

Plan & Profile - Road A Sta 00+00 - 12+00

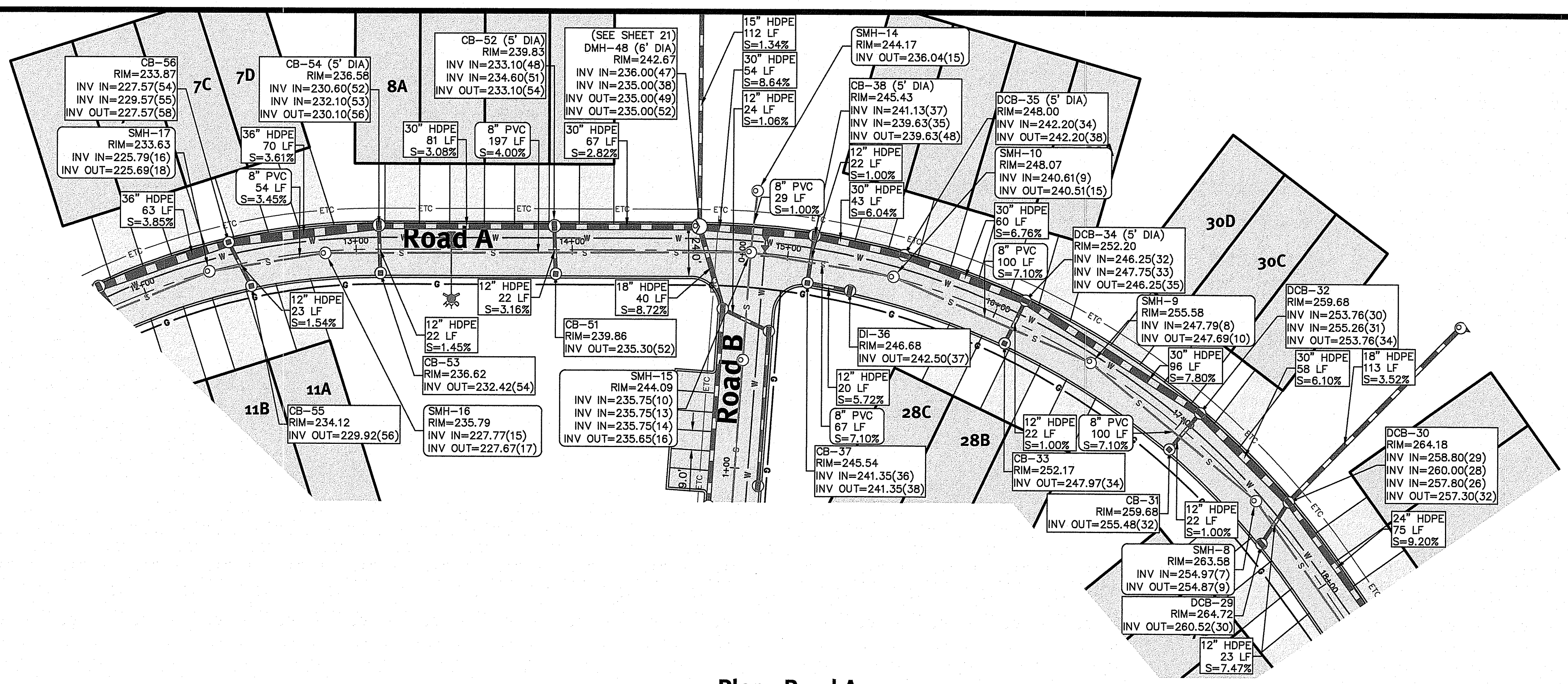
Sand Trace
Assessor's Plat 46 Lot 10, Zone R-20M, Area: 54.95 ±Acres
Smithfield, Rhode Island

Applicant
Sand Trace LLC
10B Appian Way, Smithfield, Rhode Island 02917
tel 401-231-4700 fax 401-232-3203

SHEET 13 OF 23

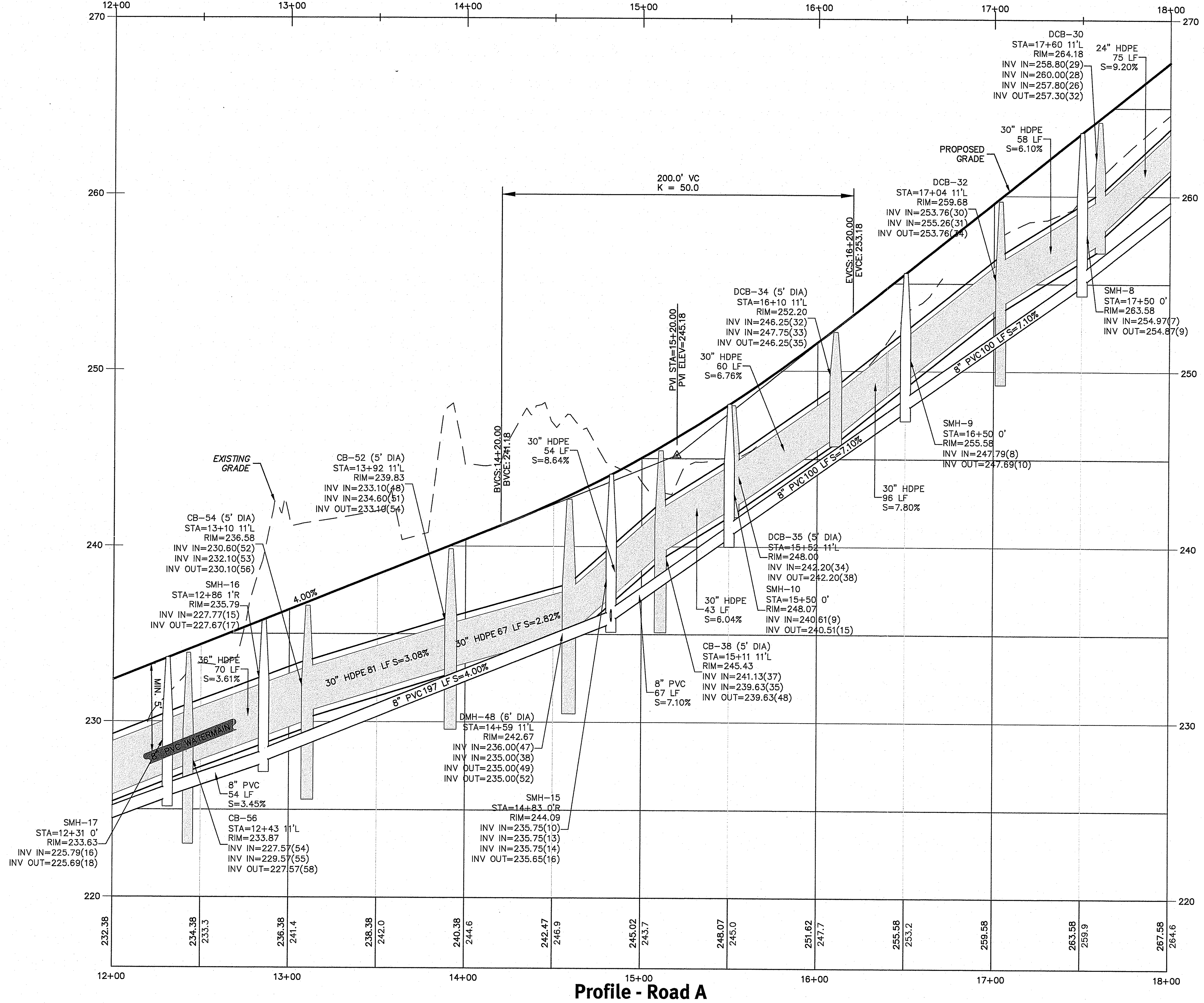
DE Job No: 0214-017

z:\dernain\projects\0214-017 the village on stillwater\autocad drawings\0214-017-plan.dwg Plotted: 10/16/2020


CB-56
RIM=233.87
INV IN=227.57(54)
INV IN=229.57(55)
INV OUT=227.57(58)
7C
7D
CB-54 (5' DIA)
RIM=236.58
INV IN=230.60(52)
INV IN=232.10(53)
INV OUT=230.10(56)
8A
CB-52 (5' DIA)
RIM=239.83
INV IN=233.10(48)
INV IN=234.60(51)
INV OUT=233.10(54)
(SEE SHEET 21)
DMH-48 (6' DIA)
RIM=242.67
INV IN=236.00(47)
INV IN=235.00(38)
INV OUT=235.00(49)
INV OUT=235.00(52)
15" HDPE
112 LF
S=1.34%
30" HDPE
54 LF
S=8.64%
12" HDPE
24 LF
S=1.06%
SMH-14
RIM=244.17
INV OUT=236.04(15)
CB-38 (5' DIA)
RIM=245.43
INV IN=241.13(37)
INV IN=239.63(35)
INV OUT=239.63(48)
DCB-35 (5' DIA)
RIM=248.00
INV IN=242.20(34)
INV OUT=242.20(38)
SMH-10
RIM=248.07
INV IN=240.61(9)
INV OUT=240.51(15)
SMH-17
RIM=233.63
INV IN=225.79(16)
INV OUT=225.69(18)
36" HDPE
70 LF
S=3.61%
8" PVC
54 LF
S=3.45%
36" HDPE
63 LF
S=3.85%
30" HDPE
81 LF
S=3.08%
8" PVC
197 LF
S=4.00%
30" HDPE
67 LF
S=2.82%
12" HDPE
22 LF
S=1.00%
30" HDPE
43 LF
S=6.04%
8" PVC
29 LF
S=1.00%
30" HDPE
60 LF
S=6.76%
8" PVC
100 LF
S=7.10%
DCB-34 (5' DIA)
RIM=252.20
INV IN=246.25(32)
INV IN=247.75(33)
INV OUT=246.25(35)
30D
30C
Road A
Road B
12" HDPE
23 LF
S=1.54%
12" HDPE
22 LF
S=3.16%
12" HDPE
22 LF
S=1.45%
CB-53
RIM=236.62
INV OUT=232.42(54)
18" HDPE
40 LF
S=8.72%
CB-51
RIM=239.86
INV OUT=235.30(52)
11A
11B
CB-55
RIM=234.12
INV OUT=229.92(56)
SMH-16
RIM=235.79
INV IN=227.77(15)
INV OUT=227.67(17)
SMH-15
RIM=244.09
INV IN=235.75(10)
INV IN=235.75(13)
INV IN=235.75(14)
INV OUT=235.65(16)
DI-36
RIM=246.68
INV OUT=242.50(37)
12" HDPE
20 LF
S=5.72%
8" PVC
67 LF
S=7.10%
28C
28B
CB-37
RIM=245.54
INV IN=241.35(36)
INV OUT=241.35(38)
SMH-9
RIM=255.58
INV IN=247.79(8)
INV OUT=247.69(10)
30" HDPE
96 LF
S=7.80%
12" HDPE
22 LF
S=1.00%
8" PVC
100 LF
S=7.10%
CB-33
RIM=252.17
INV OUT=247.97(34)
DCB-32
RIM=259.68
INV IN=253.76(30)
INV IN=255.26(31)
INV OUT=253.76(34)
30" HDPE
58 LF
S=6.10%
18" HDPE
113 LF
S=3.52%
DCB-30
RIM=264.18
INV IN=258.80(29)
INV IN=260.00(28)
INV IN=257.80(26)
INV OUT=257.30(32)
24" HDPE
75 LF
S=9.20%
CB-31
RIM=259.68
INV OUT=255.48(32)
12" HDPE
22 LF
S=1.00%
SMH-8
RIM=263.58
INV IN=254.97(7)
INV OUT=254.87(9)
DCB-29
RIM=264.72
INV OUT=260.52(30)
12" HDPE
23 LF
S=7.47%
13+00
14+00
15+00
16+00
ETC

OCT 1 6 2020

Plan - Road A


12+00
13+00
14+00
15+00
16+00
17+00
18+00
270
260
250
240
230
220
DCB-30
STA=17+60 11'L
RIM=264.18
INV IN=258.80(29)
INV IN=260.00(28)
INV IN=257.80(26)
INV OUT=257.30(32)
24" HDPE
75 LF
S=9.20%
30" HDPE
58 LF
S=6.10%
PROPOSED GRADE
DCB-32
STA=17+04 11'L
RIM=259.68
INV IN=253.76(30)
INV IN=255.26(31)
INV OUT=253.76(34)
200.0' VC
K = 50.0
EVCS:16+20.00
EVCE:253.18
SMH-8
STA=17+50 0'
RIM=263.58
INV IN=254.97(7)
INV OUT=254.87(9)
DCB-34 (5' DIA)
STA=16+10 11'L
RIM=252.20
INV IN=246.25(32)
INV IN=247.75(33)
INV OUT=246.25(35)
8" PVC 100 LF S=7.10%
PVI STA=15+20.00
PVI ELEV=245.18
30" HDPE
60 LF
S=6.76%
SMH-9
STA=16+50 0'
RIM=255.58
INV IN=247.79(8)
INV OUT=247.69(10)
EXISTING GRADE
CB-52 (5' DIA)
STA=13+92 11'L
RIM=239.83
INV IN=233.10(48)
INV IN=234.60(51)
INV OUT=233.10(54)
BVCS:14+20.00
BVCE:241.18
30" HDPE
54 LF
S=8.64%
8" PVC 100 LF S=7.10%
30" HDPE
96 LF
S=7.80%
CB-54 (5' DIA)
STA=13+10 11'L
RIM=236.58
INV IN=230.60(52)
INV IN=232.10(53)
INV OUT=230.10(56)
SMH-16
STA=12+86 1'R
RIM=235.79
INV IN=227.77(15)
INV OUT=227.67(17)
4.00%
DCB-35 (5' DIA)
STA=15+52 11'L
RIM=248.00
INV IN=242.20(34)
INV OUT=242.20(38)
SMH-10
STA=15+50 0'
RIM=248.07
INV IN=240.61(9)
INV OUT=240.51(15)
30" HDPE
43 LF
S=6.04%
30" HDPE 81 LF S=3.08%
30" HDPE 67 LF S=2.82%
8" PVC 197 LF S=4.00%
36" HDPE
70 LF
S=3.61%
MIN. 5'
PVC WATERMAIN
CB-38 (5' DIA)
STA=15+11 11'L
RIM=245.43
INV IN=241.13(37)
INV IN=239.63(35)
INV OUT=239.63(48)
8" PVC
67 LF
S=7.10%
DMH-48 (6' DIA)
STA=14+59 11'L
RIM=242.67
INV IN=236.00(47)
INV IN=235.00(38)
INV OUT=235.00(49)
INV OUT=235.00(52)
8" PVC
54 LF
S=3.45%
SMH-17
STA=12+31 0'
RIM=233.63
INV IN=225.79(16)
INV OUT=225.69(18)
CB-56
STA=12+43 11'L
RIM=233.87
INV IN=227.57(54)
INV IN=229.57(55)
INV OUT=227.57(58)
SMH-15
STA=14+83 0'R
RIM=244.09
INV IN=235.75(10)
INV IN=235.75(13)
INV IN=235.75(14)
INV OUT=235.65(16)
232.38
234.38
233.3
236.38
241.4
238.38
242.0
240.38
244.6
242.47
246.9
245.02
243.7
248.07
245.0
251.62
247.7
255.58
253.2
259.58
263.58
259.9
267.58
264.6

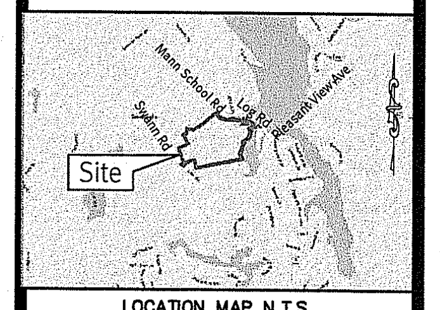
Profile - Road A
Sta. 12+00 To 18+00

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED DEC 1 1 2020 FILE # 20-0108
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Martin D. Wencek

Vertical: 0 2' 4' 8'
Horizontal: 0 20' 40' 80'

DiPrete Engineering
Two Stafford Court Cranston, RI 02920
tel 401-943-1000 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

AUDIE D. OSGOOD
No.
10/08/2020
REGISTERED PROFESSIONAL ENGINEER CIVIL


Site
Swann Rd
School Rd
Log Rd
Pleasant View Av

LOCATION MAP N.T.S.

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No.	Date	Description	By:
1	10-08-2020	RIDEM Submission Response to Comments	S.R.
0	05-01-2020	RIDEM Submission	S.R.

Drawn By: S.R.
Design By: C.D./P.A.A.

Plan & Profile - Road A Sta 12+00 - 18+00

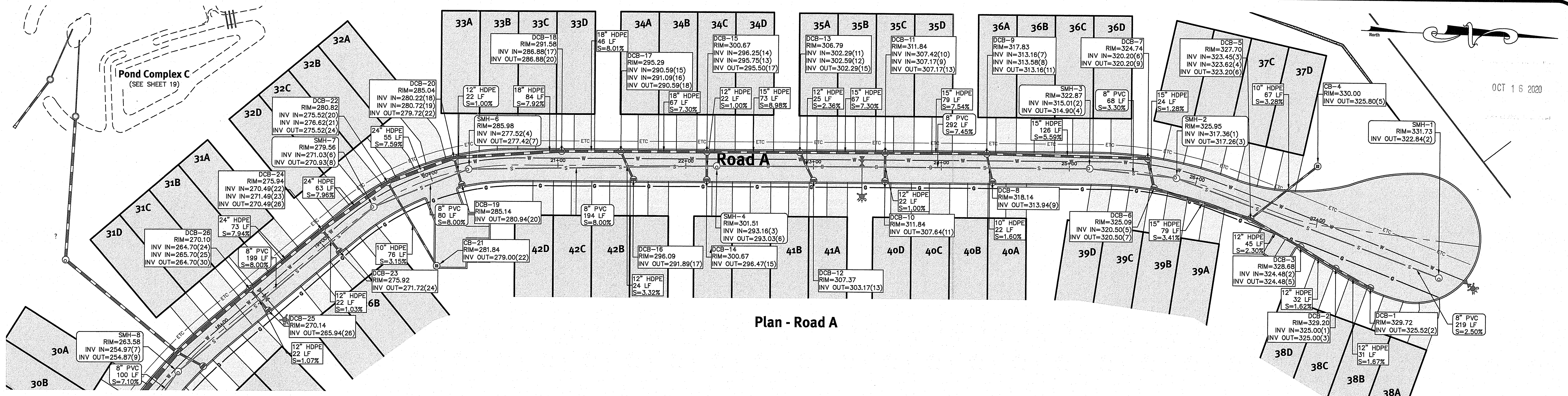
Sand Trace

Assessor's Plat 46 Lot 10, Zone R-20M, Area: 54.95 ±Acres
Smithfield, Rhode Island

Applicant
Sand Trace LLC
10B Appian Way, Smithfield, Rhode Island 02917
tel 401-231-4700 fax 401-232-3203

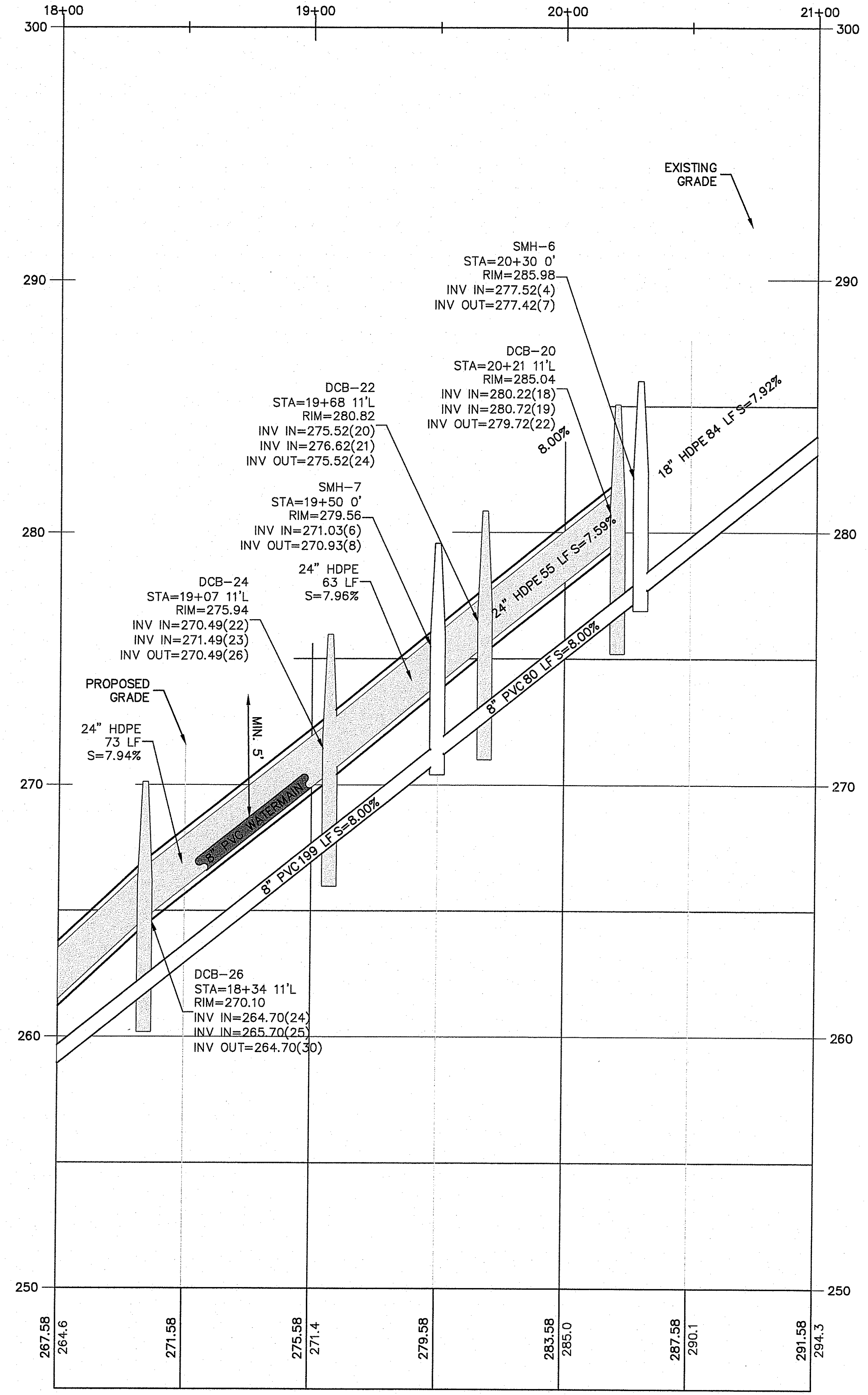
SHEET 14 OF 23

DE Job No: 0214-017

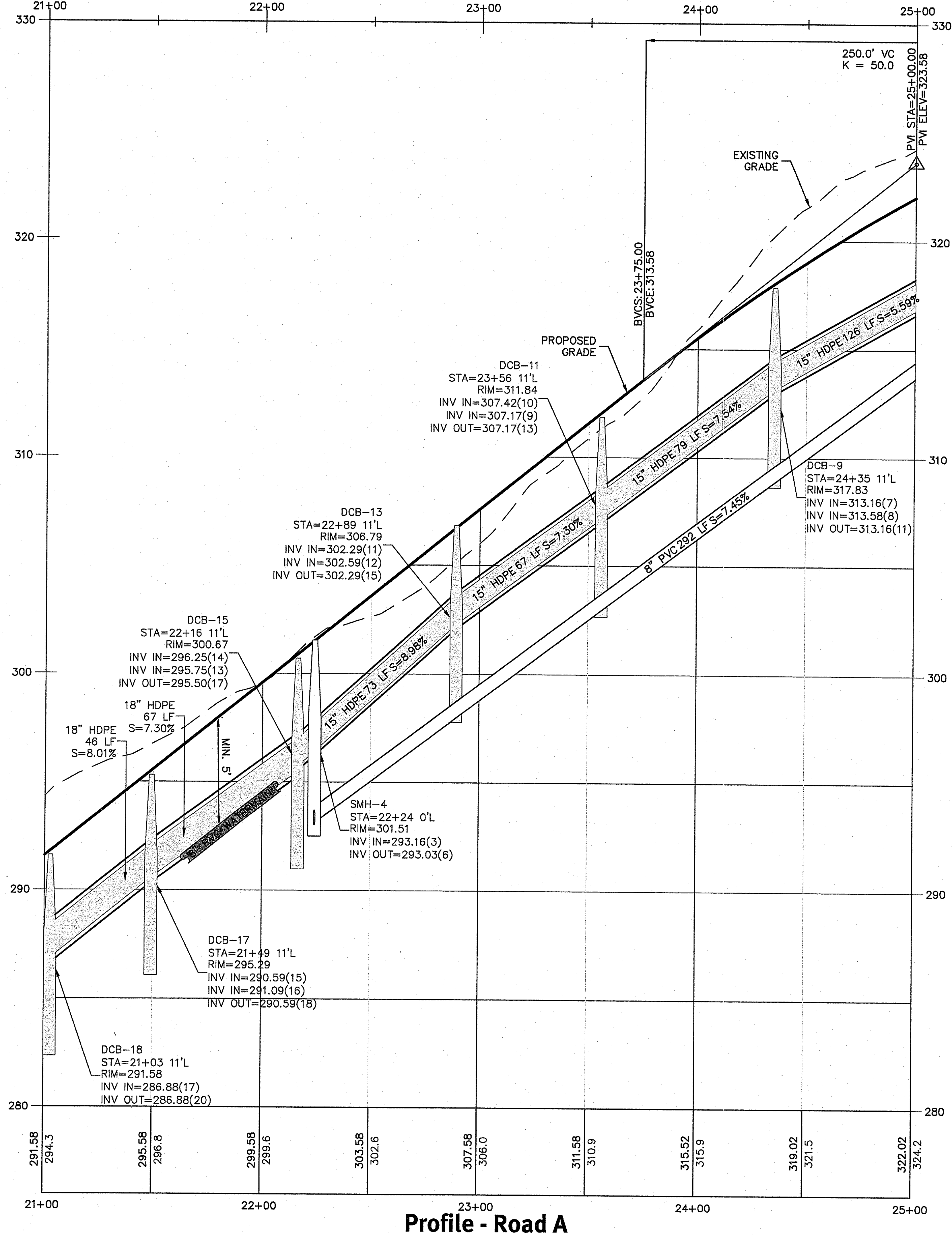

Pond Complex C
(SEE SHEET 19)
North
Road A
ETC
W
S
21+00
22+00
23+00
24+00
25+00
26+00
27+00
33A
33B
33C
33D
34A
34B
34C
34D
35A
35B
35C
35D
36A
36B
36C
36D
37C
37D
32A
32B
32C
32D
31A
31B
31C
31D
30A
30B
6B
42D
42C
42B
41B
41A
40D
40C
40B
40A
39D
39C
39B
39A
38D
38C
38B
38A
DCB-18 RIM=291.58 INV IN=286.88(17) INV OUT=286.88(20)
18" HDPE 46 LF S=8.01%
DCB-17 RIM=295.29 INV IN=290.59(15) INV IN=291.09(16) INV OUT=290.59(18)
DCB-15 RIM=300.67 INV IN=296.25(14) INV IN=295.75(13) INV OUT=295.50(17)
DCB-13 RIM=306.79 INV IN=302.29(11) INV IN=302.59(12) INV OUT=302.29(15)
DCB-11 RIM=311.84 INV IN=307.42(10) INV IN=307.17(9) INV OUT=307.17(13)
DCB-9 RIM=317.83 INV IN=313.16(7) INV IN=313.58(8) INV OUT=313.16(11)
DCB-7 RIM=324.74 INV IN=320.20(6) INV OUT=320.20(9)
DCB-5 RIM=327.70 INV IN=323.45(3) INV IN=323.62(4) INV OUT=323.20(6)
CB-4 RIM=330.00 INV OUT=325.80(5)
SMH-1 RIM=331.73 INV OUT=322.84(2)
12" HDPE 22 LF S=1.00%
18" HDPE 84 LF S=7.92%
18" HDPE 67 LF S=7.30%
12" HDPE 22 LF S=1.00%
15" HDPE 73 LF S=8.98%
12" HDPE 25 LF S=2.36%
15" HDPE 67 LF S=7.30%
15" HDPE 79 LF S=7.54%
8" PVC 292 LF S=7.45%
SMH-3 RIM=322.87 INV IN=315.01(2) INV OUT=314.90(4)
8" PVC 68 LF S=3.30%
15" HDPE 126 LF S=5.59%
15" HDPE 24 LF S=1.28%
10" HDPE 67 LF S=3.28%
SMH-2 RIM=325.95 INV IN=317.36(1) INV OUT=317.26(3)
DCB-20 RIM=285.04 INV IN=280.22(18) INV IN=280.72(19) INV OUT=279.72(22)
DCB-22 RIM=280.82 INV IN=275.52(20) INV IN=276.62(21) INV OUT=275.52(24)
SMH-7 RIM=279.56 INV IN=271.03(6) INV OUT=270.93(8)
SMH-6 RIM=285.98 INV IN=277.52(4) INV OUT=277.42(7)
24" HDPE 55 LF S=7.59%
DCB-24 RIM=275.94 INV IN=270.49(22) INV IN=271.49(23) INV OUT=270.49(26)
24" HDPE 63 LF S=7.96%
DCB-26 RIM=270.10 INV IN=264.70(24) INV IN=265.70(25) INV OUT=264.70(30)
24" HDPE 73 LF S=7.94%
8" PVC 199 LF S=8.00%
8" PVC 80 LF S=8.00%
DCB-19 RIM=285.14 INV OUT=280.94(20)
CB-21 RIM=281.84 INV OUT=279.00(22)
10" HDPE 76 LF S=3.15%
DCB-23 RIM=275.92 INV OUT=271.72(24)
12" HDPE 22 LF S=1.03%
DCB-25 RIM=270.14 INV OUT=265.94(26)
12" HDPE 22 LF S=1.07%
SMH-8 RIM=263.58 INV IN=254.97(7) INV OUT=254.87(9)
8" PVC 100 LF S=7.10%
8" PVC 194 LF S=8.00%
DCB-16 RIM=296.09 INV OUT=291.89(17)
12" HDPE 24 LF S=3.32%
SMH-4 RIM=301.51 INV IN=293.16(3) INV OUT=293.03(6)
DCB-14 RIM=300.67 INV OUT=296.47(15)
DCB-12 RIM=307.37 INV OUT=303.17(13)
12" HDPE 22 LF S=1.00%
DCB-10 RIM=311.84 INV OUT=307.64(11)
DCB-8 RIM=318.14 INV OUT=313.94(9)
10" HDPE 22 LF S=1.60%
DCB-6 RIM=325.09 INV IN=320.50(5) INV OUT=320.50(7)
15" HDPE 79 LF S=3.41%
12" HDPE 45 LF S=2.30%
DCB-3 RIM=328.68 INV IN=324.48(2) INV OUT=324.48(5)
12" HDPE 32 LF S=1.62%
DCB-2 RIM=329.20 INV IN=325.00(1) INV OUT=325.00(3)
DCB-1 RIM=329.72 INV OUT=325.52(2)
8" PVC 219 LF S=2.50%
12" HDPE 31 LF S=1.67%

OCT 16 2020

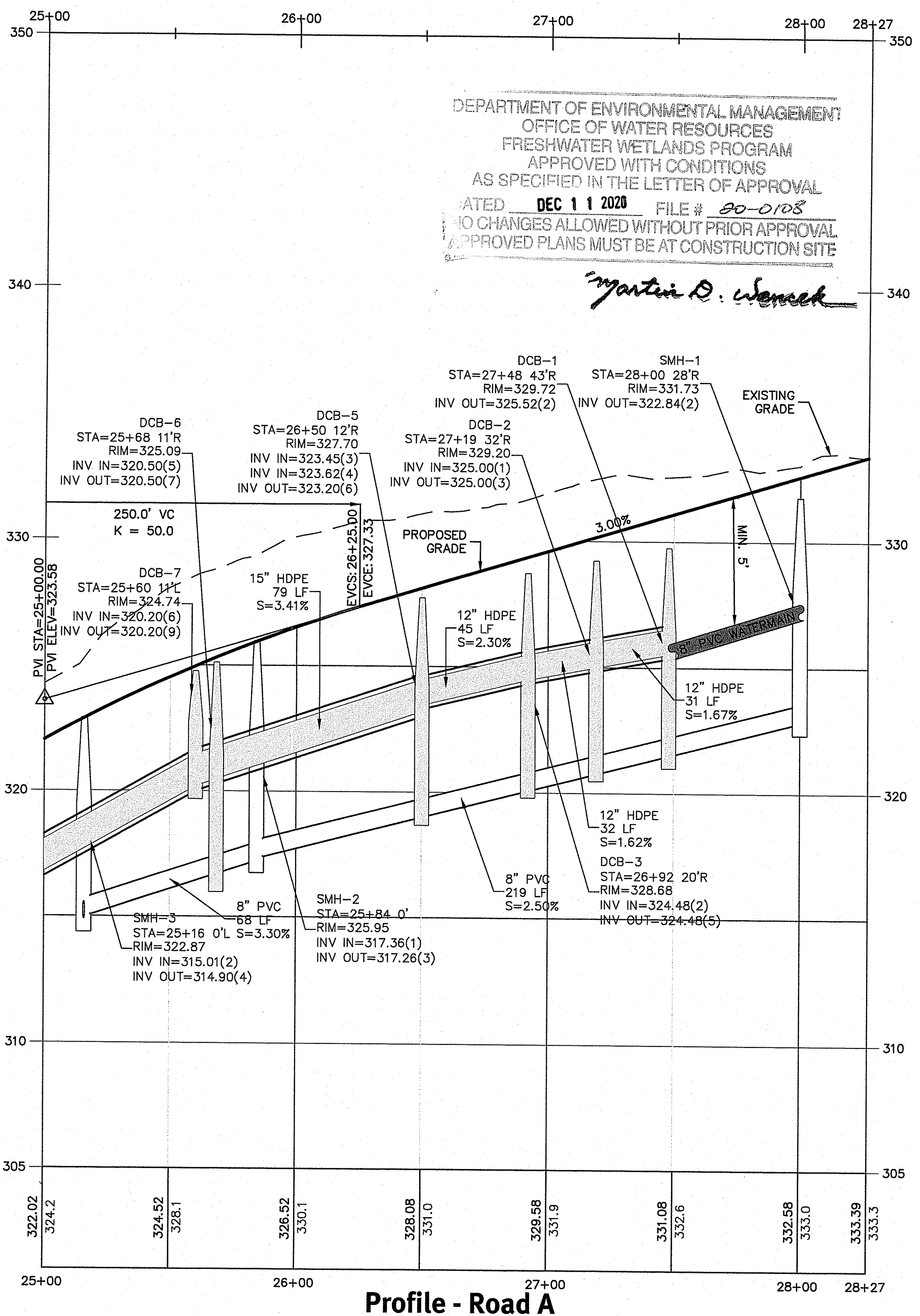
Plan - Road A


18+00
19+00
20+00
21+00
300
290
280
270
260
250
EXISTING GRADE
PROPOSED GRADE
MIN. 5'
SMH-6 STA=20+30 0' RIM=285.98 INV IN=277.52(4) INV OUT=277.42(7)
DCB-20 STA=20+21 11'L RIM=285.04 INV IN=280.22(18) INV IN=280.72(19) INV OUT=279.72(22)
DCB-22 STA=19+68 11'L RIM=280.82 INV IN=275.52(20) INV IN=276.62(21) INV OUT=275.52(24)
SMH-7 STA=19+50 0' RIM=279.56 INV IN=271.03(6) INV OUT=270.93(8)
24" HDPE 63 LF S=7.96%
DCB-24 STA=19+07 11'L RIM=275.94 INV IN=270.49(22) INV IN=271.49(23) INV OUT=270.49(26)
24" HDPE 73 LF S=7.94%
DCB-26 STA=18+34 11'L RIM=270.10 INV IN=264.70(24) INV IN=265.70(25) INV OUT=264.70(30)
8.00%
18" HDPE 84 LF S=7.92%
24" HDPE 55 LF S=7.59%
8" PVC 80 LF S=8.00%
8" PVC 199 LF S=8.00%
8" PVC WATERMAIN
267.58
264.6
271.58
275.58
271.4
279.58
283.58
285.0
287.58
290.1
291.58
294.3

Profile - Road A
Sta. 18+00 To 21+00


21+00
22+00
23+00
24+00
25+00
330
320
310
300
290
280
250.0' VC
K = 50.0
PVI STA=25+00.00
PVI ELEV=323.58
EXISTING GRADE
BVCS:23+75.00
BVCE:313.58
PROPOSED GRADE
MIN. 5'
DCB-11 STA=23+56 11'L RIM=311.84 INV IN=307.42(10) INV IN=307.17(9) INV OUT=307.17(13)
DCB-9 STA=24+35 11'L RIM=317.83 INV IN=313.16(7) INV IN=313.58(8) INV OUT=313.16(11)
DCB-13 STA=22+89 11'L RIM=306.79 INV IN=302.29(11) INV IN=302.59(12) INV OUT=302.29(15)
DCB-15 STA=22+16 11'L RIM=300.67 INV IN=296.25(14) INV IN=295.75(13) INV OUT=295.50(17)
18" HDPE 67 LF S=7.30%
18" HDPE 46 LF S=8.01%
SMH-4 STA=22+24 0'L RIM=301.51 INV IN=293.16(3) INV OUT=293.03(6)
DCB-17 STA=21+49 11'L RIM=295.29 INV IN=290.59(15) INV IN=291.09(16) INV OUT=290.59(18)
DCB-18 STA=21+03 11'L RIM=291.58 INV IN=286.88(17) INV OUT=286.88(20)
15" HDPE 126 LF S=5.59%
15" HDPE 79 LF S=7.54%
15" HDPE 67 LF S=7.30%
15" HDPE 73 LF S=8.98%
8" PVC 292 LF S=7.45%
8" PVC WATERMAIN
291.58
294.3
295.58
296.8
299.58
299.6
303.58
302.6
307.58
306.0
311.58
310.9
315.52
315.9
319.02
321.5
322.02
324.2

Profile - Road A
Sta. 21+00 To 25+00


25+00
26+00
27+00
28+00
28+27
350
340
330
320
310
305
DCB-1 STA=27+48 43'R RIM=329.72 INV OUT=325.52(2)
SMH-1 STA=28+00 28'R RIM=331.73 INV OUT=322.84(2)
EXISTING GRADE
DCB-6 STA=25+68 11'R RIM=325.09 INV IN=320.50(5) INV OUT=320.50(7)
DCB-5 STA=26+50 12'R RIM=327.70 INV IN=323.45(3) INV IN=323.62(4) INV OUT=323.20(6)
DCB-2 STA=27+19 32'R RIM=329.20 INV IN=325.00(1) INV OUT=325.00(3)
250.0' VC
K = 50.0
EVCS:26+25.00
EVCE:327.33
PROPOSED GRADE
3.00%
MIN. 5'
DCB-7 STA=25+60 11'L RIM=324.74 INV IN=320.20(6) INV OUT=320.20(9)
15" HDPE 79 LF S=3.41%
PVI STA=25+00.00
PVI ELEV=323.58
12" HDPE 45 LF S=2.30%
8" PVC WATERMAIN
12" HDPE 31 LF S=1.67%
12" HDPE 32 LF S=1.62%
DCB-3 STA=26+92 20'R RIM=328.68 INV IN=324.48(2) INV OUT=324.48(5)
8" PVC 219 LF S=2.50%
SMH-2 STA=25+84 0' RIM=325.95 INV IN=317.36(1) INV OUT=317.26(3)
SMH-3 STA=25+16 0'L RIM=322.87 INV IN=315.01(2) INV OUT=314.90(4)
8" PVC 68 LF S=3.30%
322.02
324.2
324.52
328.1
326.52
330.1
328.08
331.0
329.58
331.9
331.08
332.6
332.58
333.0
333.39
333.3

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED DEC 1 1 2020 FILE # 20-0108
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Martin D. Wencek

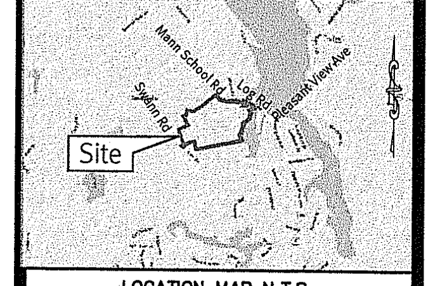
Profile - Road A
Sta. 25+00 To 28+27

Vertical: 0 2' 4' 8'
Horizontal: 0 20' 40' 80'

z:\demain\projects\0214-017 the village on stillwater\autocad drawings\0214-017-plan.dwg Plotted: 10/16/2020

DiPrete Engineering
Two Stafford Court Cranston, RI 02920
tel 401-943-1000 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

AUDIE D. OSGOOD
No. 5015
10/08/2020
REGISTERED
PROFESSIONAL ENGINEER
CIVIL


Site
Mann School Rd
Log Rd
Pleasant View Ave
Swan Rd

LOCATION MAP N.T.S.

This plan set must not be used for construction purposes unless stamped 'Issued for Construction' and stamped by a registered Professional Engineer of DiPrete Engineering.

DiPrete Engineering only warrants plans on a DiPrete Engineering title block stamped by registered Professional Engineer of DiPrete Engineering. DiPrete Engineering does not warrant plans by any other party.

The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA conformance in the implementation of this plan and design.

Existing utilities shown on this plan are approximate only. DiPrete Engineering assumes no responsibility for damages incurred due to locations of existing utilities. See 'Utility Note' on sheet 3.

No.	Date	Description	By:
1	10-08-2020	RIDEM Submission Response to Comments	S.R.
0	05-01-2020	RIDEM Submission	S.R.

Drawn By: S.R.
Design By: C.D./P.A.A.

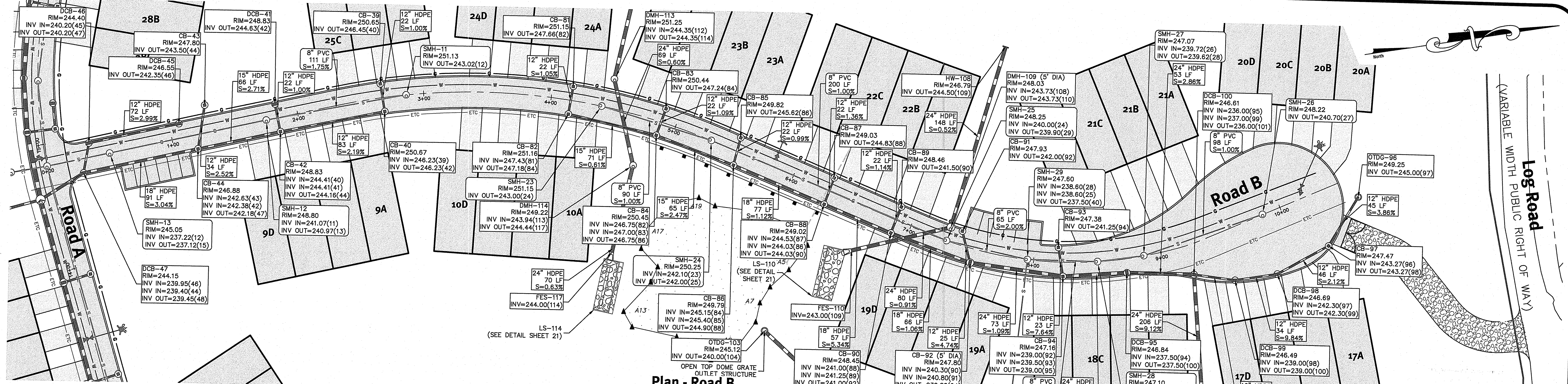
Plan & Profile - Road A Sta 18+00 - 28+27

Sand Trace

Assessor's Plat 46 Lot 10, Zone R-20M, Area: 54.95 ±Acres
Smithfield, Rhode Island

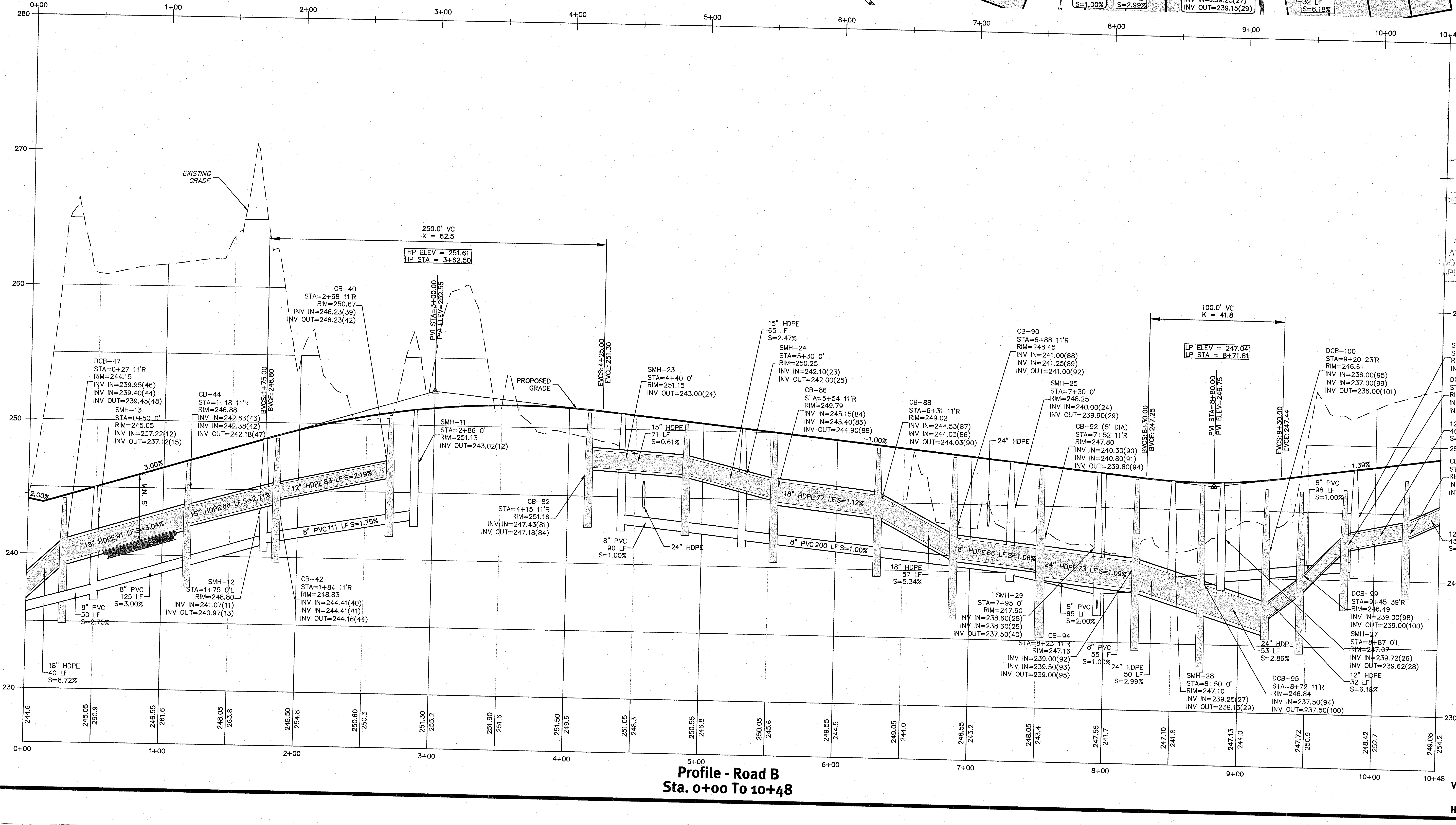
Applicant
Sand Trace LLC
10B Appian Way, Smithfield, Rhode Island 02917
tel 401-231-4700 fax 401-232-3203

DE Job No: 0214-017


DCB-46
RIM=244.40
INV IN=240.20(45)
INV OUT=240.20(47)
28B
DCB-41
RIM=248.63
INV OUT=244.63(42)
CB-43
RIM=247.80
INV OUT=243.50(44)
DCB-45
RIM=246.55
INV OUT=242.35(46)
CB-39
RIM=250.65
INV OUT=246.45(40)
12" HDPE
22 LF
S=1.00%
24D
CB-81
RIM=251.15
INV OUT=247.66(82)
24A
DMH-113
RIM=251.25
INV IN=244.35(112)
INV OUT=244.35(114)
25C
8" PVC
111 LF
S=1.75%
SMH-11
RIM=251.13
INV OUT=243.02(12)
24" HDPE
69 LF
S=0.60%
23B
23A
SMH-27
RIM=247.07
INV IN=239.72(26)
INV OUT=239.62(28)
20D
20C
20B
20A
North
15" HDPE
66 LF
S=2.71%
12" HDPE
22 LF
S=1.00%
12" HDPE
22 LF
S=1.05%
CB-83
RIM=250.44
INV OUT=247.24(84)
CB-85
RIM=249.82
INV OUT=245.62(86)
8" PVC
200 LF
S=1.00%
HW-108
RIM=246.79
INV OUT=244.50(109)
DMH-109 (5' DIA)
RIM=248.03
INV IN=243.73(108)
INV OUT=243.73(110)
24" HDPE
53 LF
S=2.86%
21A
Log Road
(VARIABLE WIDTH PUBLIC RIGHT OF WAY)
12" HDPE
72 LF
S=2.99%
12" HDPE
22 LF
S=1.09%
12" HDPE
22 LF
S=1.36%
22C
22B
SMH-25
RIM=248.25
INV IN=240.00(24)
INV OUT=239.90(29)
21C
21B
DCB-100
RIM=246.61
INV IN=236.00(95)
INV IN=237.00(99)
INV OUT=236.00(101)
SMH-26
RIM=248.22
INV OUT=240.70(27)
12" HDPE
83 LF
S=2.19%
CB-40
RIM=250.67
INV IN=246.23(39)
INV OUT=246.23(42)
CB-82
RIM=251.16
INV IN=247.43(81)
INV OUT=247.18(84)
15" HDPE
71 LF
S=0.61%
12" HDPE
22 LF
S=0.99%
CB-87
RIM=249.03
INV OUT=244.83(88)
24" HDPE
148 LF
S=0.52%
CB-91
RIM=247.93
INV OUT=242.00(92)
8" PVC
98 LF
S=1.00%
12" HDPE
34 LF
S=2.52%
CB-42
RIM=248.83
INV IN=244.41(40)
INV IN=244.41(41)
INV OUT=244.16(44)
SMH-23
RIM=251.15
INV OUT=243.00(24)
12" HDPE
22 LF
S=1.14%
CB-89
RIM=248.46
INV OUT=241.50(90)
SMH-29
RIM=247.60
INV IN=238.60(28)
INV IN=238.60(25)
INV OUT=237.50(40)
Road B
OTDG-98
RIM=249.25
INV OUT=245.00(97)
18" HDPE
91 LF
S=3.04%
CB-44
RIM=246.88
INV IN=242.63(43)
INV IN=242.38(42)
INV OUT=242.18(47)
9A
10D
8" PVC
90 LF
S=1.00%
DMH-114
RIM=249.22
INV IN=243.94(113)
INV OUT=244.44(117)
15" HDPE
65 LF
S=2.47%
18" HDPE
77 LF
S=1.12%
8" PVC
65 LF
S=2.00%
CB-93
RIM=247.38
INV OUT=241.25(94)
12" HDPE
45 LF
S=3.86%
Road A
SMH-13
RIM=245.05
INV IN=237.22(12)
INV OUT=237.12(15)
9D
SMH-12
RIM=248.80
INV IN=241.07(11)
INV OUT=240.97(13)
10A
CB-84
RIM=250.45
INV IN=246.75(82)
INV IN=247.00(83)
INV OUT=246.75(86)
CB-88
RIM=249.02
INV IN=244.53(87)
INV IN=244.03(86)
INV OUT=244.03(90)
CB-97
RIM=247.47
INV IN=243.27(96)
INV OUT=243.27(98)
DCB-47
RIM=244.15
INV IN=239.95(46)
INV IN=239.40(44)
INV OUT=239.45(48)
24" HDPE
70 LF
S=0.63%
SMH-24
RIM=250.25
INV IN=242.10(23)
INV OUT=242.00(25)
LS-110
(SEE DETAIL SHEET 21)
12" HDPE
46 LF
S=2.12%
DCB-98
RIM=246.69
INV IN=242.30(97)
INV OUT=242.30(99)
FES-117
INV=244.00(114)
CB-86
RIM=249.79
INV IN=245.15(84)
INV IN=245.40(85)
INV OUT=244.90(88)
FES-110
INV=243.00(109)
24" HDPE
80 LF
S=0.91%
19D
24" HDPE
73 LF
S=1.09%
12" HDPE
23 LF
S=7.64%
24" HDPE
206 LF
S=9.12%
12" HDPE
34 LF
S=9.84%
LS-114
(SEE DETAIL SHEET 21)
A13
A7
A17
A19
18" HDPE
66 LF
S=1.06%
12" HDPE
25 LF
S=4.74%
CB-94
RIM=247.16
INV IN=239.00(92)
INV IN=239.50(93)
INV OUT=239.00(95)
DCB-95
RIM=246.84
INV IN=237.50(94)
INV OUT=237.50(100)
DCB-99
RIM=246.49
INV IN=239.00(98)
INV OUT=239.00(100)
17A
OTDG-103
RIM=245.12
INV OUT=240.00(104)
OPEN TOP DOME GRATE
OUTLET STRUCTURE
18" HDPE
57 LF
S=5.34%
CB-90
RIM=248.45
INV IN=241.00(88)
INV IN=241.25(89)
INV OUT=241.00(92)
CB-92 (5' DIA)
RIM=247.80
INV IN=240.30(90)
INV IN=240.80(91)
INV OUT=239.80(94)
19A
8" PVC
55 LF
S=1.00%
24" HDPE
50 LF
S=2.99%
18C
SMH-28
RIM=247.10
INV IN=239.25(27)
INV OUT=239.15(29)
17D
12" HDPE
32 LF
S=6.18%
1+00
2+00
3+00
4+00
5+00
6+00
7+00
8+00
9+00
10+00
ETC
W
S

Plan - Road B

OCT 1 6 2020


0+00
1+00
2+00
3+00
4+00
5+00
6+00
7+00
8+00
9+00
10+00
10+48
280
270
260
250
240
230
EXISTING GRADE
PROPOSED GRADE
250.0' VC
K = 62.5
HP ELEV = 251.61
HP STA = 3+62.50
PVI STA=3+00.00
PVI ELEV=252.55
BVCS:1+75.00
BVCE:248.80
EVCS:4+25.00
EVCE:251.30
100.0' VC
K = 41.8
LP ELEV = 247.04
LP STA = 8+71.81
BVCS:8+30.00
BVCE:247.25
PVI STA=8+80.00
PVI ELEV=246.75
EVCS:9+30.00
EVCE:247.44
2.00%
3.00%
-1.00%
1.39%
MIN. 5'
DCB-47
STA=0+27 11'R
RIM=244.15
INV IN=239.95(46)
INV IN=239.40(44)
INV OUT=239.45(48)
SMH-13
STA=0+50 0'
RIM=245.05
INV IN=237.22(12)
INV OUT=237.12(15)
CB-44
STA=1+18 11'R
RIM=246.88
INV IN=242.63(43)
INV IN=242.38(42)
INV OUT=242.18(47)
CB-40
STA=2+68 11'R
RIM=250.67
INV IN=246.23(39)
INV OUT=246.23(42)
SMH-11
STA=2+86 0'
RIM=251.13
INV OUT=243.02(12)
18" HDPE 91 LF S=3.04%
8" PVC WATERMAIN
15" HDPE 66 LF S=2.71%
12" HDPE 83 LF S=2.19%
8" PVC 111 LF S=1.75%
8" PVC
50 LF
S=2.75%
8" PVC
125 LF
S=3.00%
18" HDPE
40 LF
S=8.72%
SMH-12
STA=1+75 0'L
RIM=248.80
INV IN=241.07(11)
INV OUT=240.97(13)
CB-42
STA=1+84 11'R
RIM=248.83
INV IN=244.41(40)
INV IN=244.41(41)
INV OUT=244.16(44)
CB-82
STA=4+15 11'R
RIM=251.16
INV IN=247.43(81)
INV OUT=247.18(84)
8" PVC
90 LF
S=1.00%
24" HDPE
SMH-23
STA=4+40 0'
RIM=251.15
INV OUT=243.00(24)
15" HDPE
71 LF
S=0.61%
15" HDPE
65 LF
S=2.47%
SMH-24
STA=5+30 0'
RIM=250.25
INV IN=242.10(23)
INV OUT=242.00(25)
CB-86
STA=5+54 11'R
RIM=249.79
INV IN=245.15(84)
INV IN=245.40(85)
INV OUT=244.90(88)
18" HDPE 77 LF S=1.12%
8" PVC 200 LF S=1.00%
18" HDPE
57 LF
S=5.34%
CB-88
STA=6+31 11'R
RIM=249.02
INV IN=244.53(87)
INV IN=244.03(86)
INV OUT=244.03(90)
24" HDPE
CB-90
STA=6+88 11'R
RIM=248.45
INV IN=241.00(88)
INV IN=241.25(89)
INV OUT=241.00(92)
SMH-25
STA=7+30 0'
RIM=248.25
INV IN=240.00(24)
INV OUT=239.90(29)
CB-92 (5' DIA)
STA=7+52 11'R
RIM=247.80
INV IN=240.30(90)
INV IN=240.80(91)
INV OUT=239.80(94)
18" HDPE 66 LF S=1.06%
24" HDPE 73 LF S=1.09%
SMH-29
STA=7+95 0'
RIM=247.60
INV IN=238.60(28)
INV IN=238.60(25)
INV OUT=237.50(40)
8" PVC
65 LF
S=2.00%
CB-94
STA=8+23 11'R
RIM=247.16
INV IN=239.00(92)
INV IN=239.50(93)
INV OUT=239.00(95)
8" PVC
55 LF
S=1.00%
24" HDPE
50 LF
S=2.99%
SMH-28
STA=8+50 0'
RIM=247.10
INV IN=239.25(27)
INV OUT=239.15(29)
24" HDPE
53 LF
S=2.86%
DCB-95
STA=8+72 11'R
RIM=246.84
INV IN=237.50(94)
INV OUT=237.50(100)
12" HDPE
32 LF
S=6.18%
DCB-100
STA=9+20 23'R
RIM=246.61
INV IN=236.00(95)
INV IN=237.00(99)
INV OUT=236.00(101)
8" PVC
98 LF
S=1.00%
DCB-99
STA=9+45 39'R
RIM=246.49
INV IN=239.00(98)
INV OUT=239.00(100)
SMH-27
STA=8+87 0'L
RIM=247.07
INV IN=239.72(26)
INV OUT=239.62(28)
SMH-26
STA=9+85 0'L
RIM=248.22
INV OUT=240.70(27)
DCB-98
STA=9+78 47'R
RIM=246.69
INV IN=242.30(97)
INV OUT=242.30(99)
12" HDPE
46 LF
S=2.12%
CB-97
STA=10+23 42'R
RIM=247.47
INV IN=243.27(96)
INV OUT=243.27(98)
12" HDPE
45 LF
S=3.86%
244.6
245.05
260.9
246.55
261.6
248.05
263.8
249.50
254.8
250.60
250.3
251.30
255.2
251.60
251.6
251.50
249.6
251.05
248.3
250.55
246.8
250.05
246.6
249.55
244.5
249.05
244.0
248.55
243.2
248.05
243.4
247.55
241.7
247.10
241.8
247.13
244.0
247.72
250.9
248.42
252.7
249.08
254.2

Profile - Road B
Sta. 0+00 To 10+48

Vertical: 0 2' 4' 8'

Horizontal: 0 20' 40' 80'

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

Martin D. Wencek
DEPARTMENT OF ENVIRONMENTAL MANAGEME
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
ATED DEC 1 1 2020 FILE # 20-0108
O CHANGES ALLOWED WITHOUT PRIOR APPROV
APPROVED PLANS MUST BE AT CONSTRUCTION SI

z:\demain\projects\0214-017 the village on stillwater\autocad drawings\0214-017-plan.dwg Plotted: 10/16/2020

DiPrete Engineering
Two Stafford Court Cranston, RI 02920
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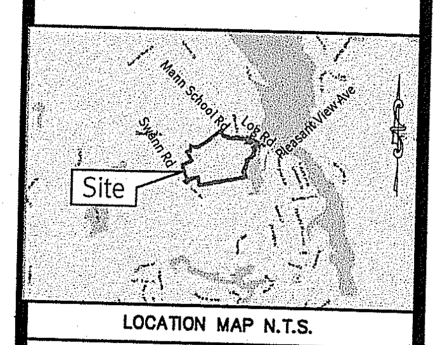
Boston • Providence • Newport

AUDIE D. OSGOOD
No. 5015
10/08/2020
REGISTERED
PROFESSIONAL ENGINEER
CIVIL


Mann School Rd
Log Rd
Pleasant View Ave
Swan Rd
Site

LOCATION MAP N.T.S.

This plan set must not be used for construction purposes unless stamped 'Issued for Construction' and stamped by a registered Professional Engineer of DiPrete Engineering.

DiPrete Engineering only warrants plans on a DiPrete Engineering title block stamped by registered Professional Engineer of DiPrete Engineering. DiPrete Engineering does not warrant plans by any other party.

The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA conformance in the implementation of this plan and design.

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No.	Date	Description	By:
1	10-08-2020	RIDEM Submission Response to Comments	S.R.
0	05-01-2020	RIDEM Submission	S.R.

Drawn By: S.R.
Design By: C.D./P.A.A.

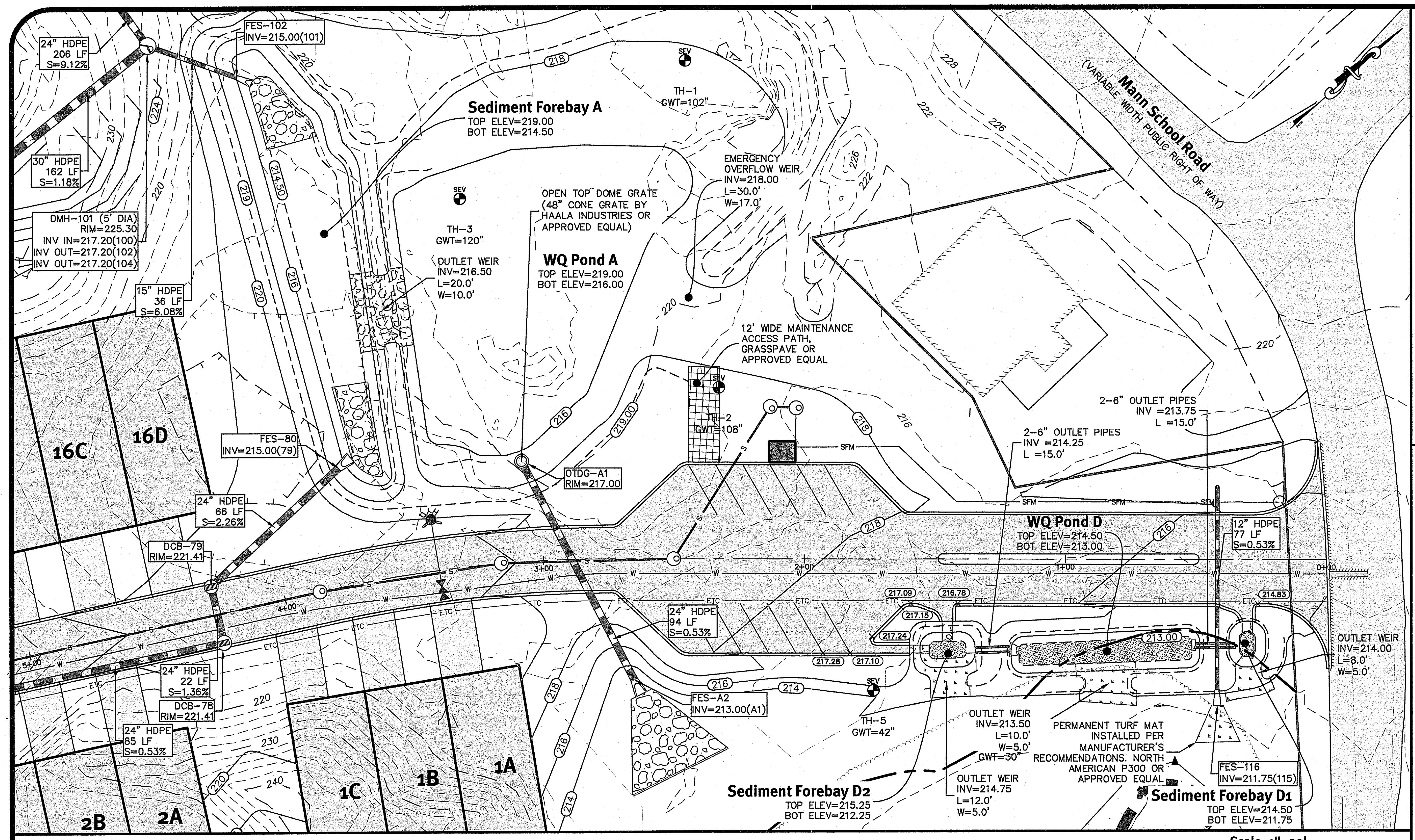
Plan & Profile - Road B

Sand Trace

Assessor's Plat 46 Lot 10, Zone R-20M, Area: 54.95 ±Acres
Smithfield, Rhode Island

Applicant
Sand Trace LLC
10B Appian Way, Smithfield, Rhode Island 02917
tel 401-231-4700 fax 401-232-3203

DE Job No: 0214-017 Copyright 2019 by DiPrete Engineering Associates, Inc.

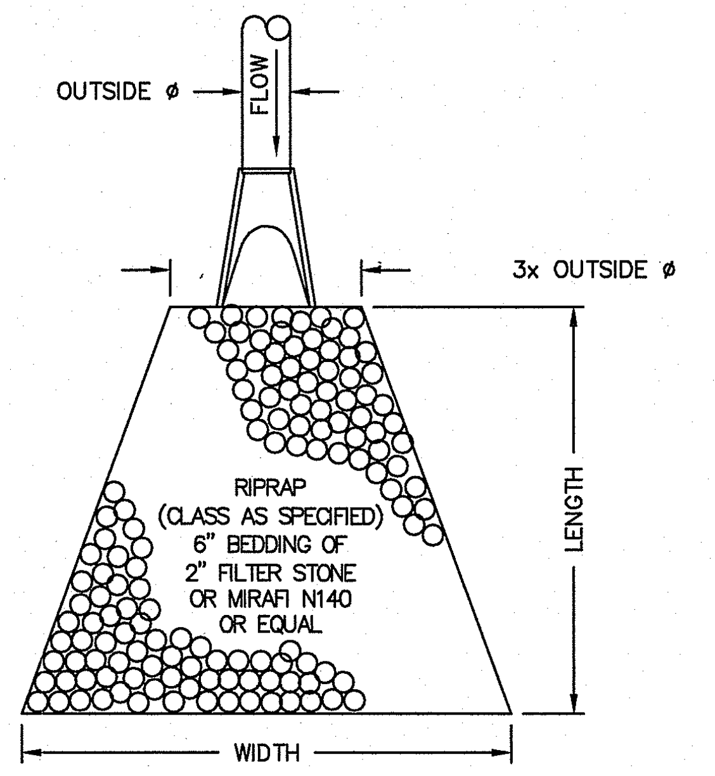

Sediment Forebay A
TOP ELEV=219.00
BOT ELEV=214.50
WQ Pond A
TOP ELEV=219.00
BOT ELEV=216.00
WQ Pond D
TOP ELEV=214.50
BOT ELEV=213.00
Sediment Forebay D2
TOP ELEV=215.25
BOT ELEV=212.25
Sediment Forebay D1
TOP ELEV=214.50
BOT ELEV=211.75
Mann School Road
(VARIABLE WIDTH PUBLIC RIGHT OF WAY)
FES-102
INV=215.00(101)
24" HDPE
206 LF
S=9.12%
30" HDPE
162 LF
S=1.18%
DMH-101 (5' DIA)
RIM=225.30
INV IN=217.20(100)
INV OUT=217.20(102)
INV OUT=217.20(104)
15" HDPE
36 LF
S=6.08%
TH-1
GWT=102"
TH-3
GWT=120"
EMERGENCY OVERFLOW WEIR
INV=218.00
L=30.0'
W=17.0'
OPEN TOP DOME GRATE (48" CONE GRATE BY HAALA INDUSTRIES OR APPROVED EQUAL)
OUTLET WEIR
INV=216.50
L=20.0'
W=10.0'
12' WIDE MAINTENANCE ACCESS PATH, GRASSPAVE OR APPROVED EQUAL
TH-2
GWT=108"
FES-80
INV=215.00(79)
OTDG-A1
RIM=217.00
2-6" OUTLET PIPES
INV =213.75
L =15.0'
2-6" OUTLET PIPES
INV =214.25
L =15.0'
24" HDPE
66 LF
S=2.26%
DCB-79
RIM=221.41
12" HDPE
77 LF
S=0.53%
24" HDPE
94 LF
S=0.53%
OUTLET WEIR
INV=214.00
L=8.0'
W=5.0'
24" HDPE
22 LF
S=1.36%
DCB-78
RIM=221.41
24" HDPE
85 LF
S=0.53%
FES-A2
INV=213.00(A1)
TH-5
GWT=42"
OUTLET WEIR
INV=213.50
L=10.0'
W=5.0'
GWT=30"
PERMANENT TURF MAT INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. NORTH AMERICAN P300 OR APPROVED EQUAL
OUTLET WEIR
INV=214.75
L=12.0'
W=5.0'
FES-116
INV=211.75(115)
16C
16D
2B
2A
1C
1B
1A

Pond Complex A & D

Scale: 1"=30'

0 15' 30' 60'

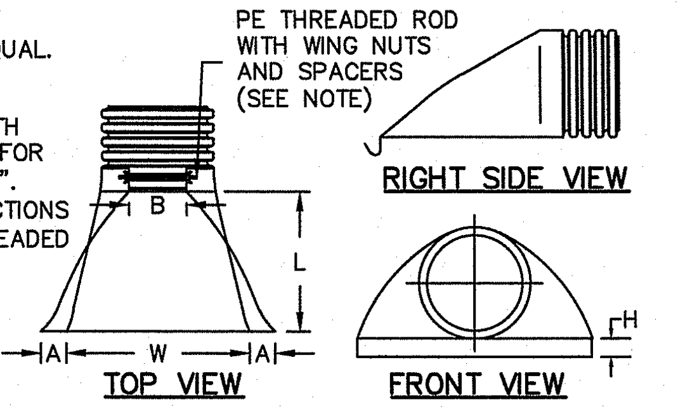
FLARED END	LENGTH	WIDTH	CLASS
FLARED END A2	33.00	39.00	R-4


OUTSIDE ø
FLOW
3x OUTSIDE ø
RIPRAP (CLASS AS SPECIFIED) 6" BEDDING OF 2" FILTER STONE OR MIRAFI N140 OR EQUAL
LENGTH
WIDTH

Riprap Apron/ FE Detail

NOT TO SCALE

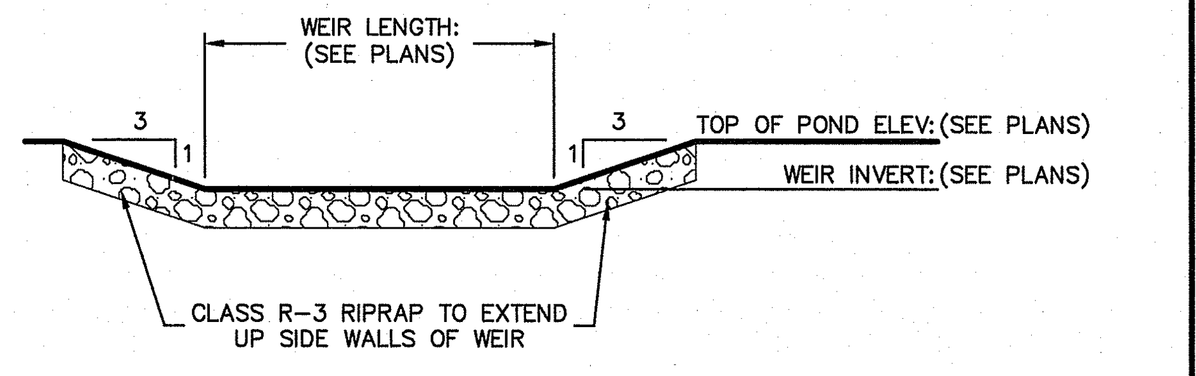
NOTE:
1. ADS OR APPROVED EQUAL.
2. ALL DIMENSIONS ARE NOMINAL.
3. PE THREADED ROD WITH WING NUTS PROVIDED FOR END SECTIONS 12"–24".
4. 30" AND 36" END SECTIONS REQUIRE TWO (2) THREADED RODS FOR ASSEMBLE.


PE THREADED ROD WITH WING NUTS AND SPACERS (SEE NOTE)
B
L
A
W
A
TOP VIEW
RIGHT SIDE VIEW
H
FRONT VIEW

PART #	PIPE SIZE	A	B (MAX)	H	L	W
1210NP	12 IN (300 MM)	6.50 IN (165 MM)	10 IN (254 MM)	6.50 IN (165 MM)	25 IN (635 MM)	29 IN (737 MM)
1510NP	15 IN (375 MM)	6.50 IN (165 MM)	10 IN (254 MM)	6.50 IN (165 MM)	25 IN (635 MM)	29 IN (737 MM)
1810 NP	18 IN (450 MM)	7.50 IN (191 MM)	15 IN (381 MM)	6.50 IN (165 MM)	32 IN (813 MM)	35 IN (889 MM)
2410NP	24 IN (600 MM)	7.50 IN (191 MM)	18 IN (457 MM)	6.50 IN (165 MM)	36 IN (914 MM)	45 IN (1143 MM)
3015NP	30 IN (750 MM)	7.50 IN (191 MM)	12 IN (305 MM)	8.60 IN (218 MM)	58 IN (1473 MM)	63 IN (1600MM)
3615NP	36 IN (900 MM)	7.50 IN (191 MM)	25 IN (635 MM)	8.60 IN (218 MM)	58 IN (1473 MM)	63 IN (1600 MM)

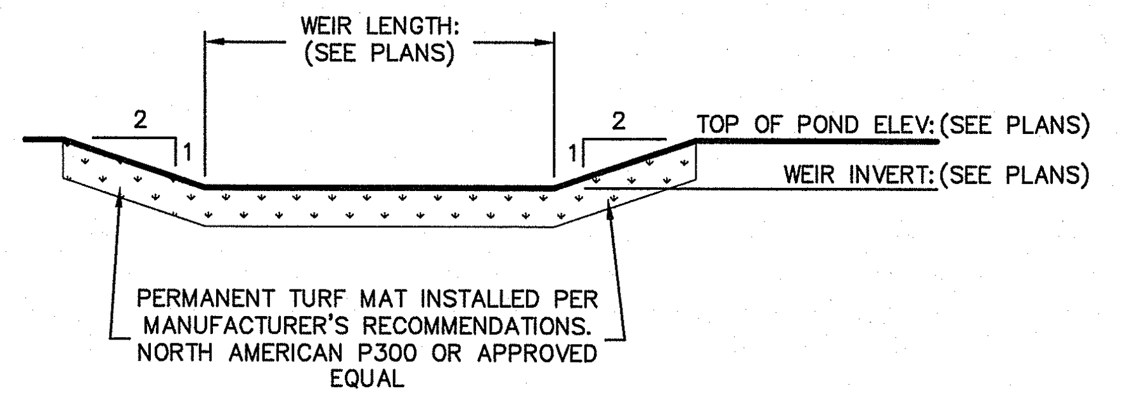
HDPE Flared End Section

NOT TO SCALE


WEIR LENGTH: (SEE PLANS)
3
1
3
1
TOP OF POND ELEV: (SEE PLANS)
WEIR INVERT: (SEE PLANS)
CLASS R-3 RIPRAP TO EXTEND UP SIDE WALLS OF WEIR

Outlet Weir (BMP A)

NOT TO SCALE

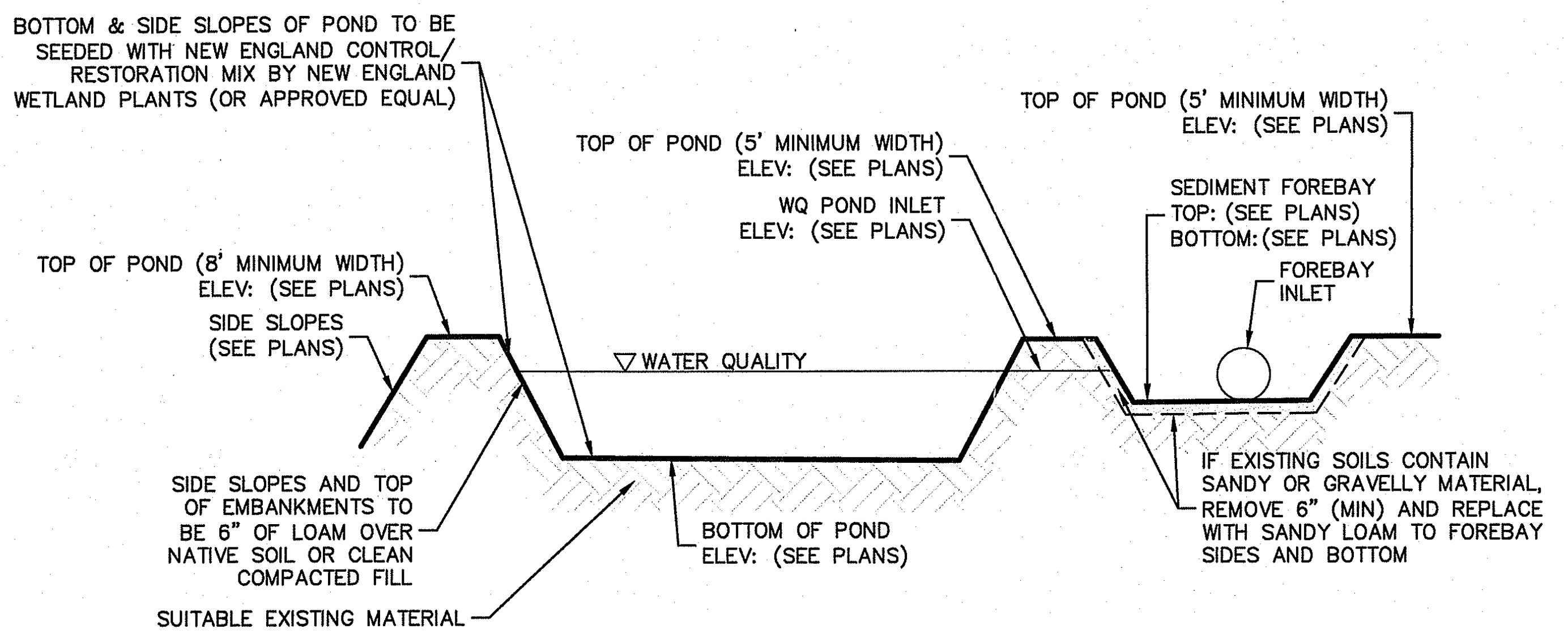

WEIR LENGTH: (SEE PLANS)
2
1
2
1
TOP OF POND ELEV: (SEE PLANS)
WEIR INVERT: (SEE PLANS)
PERMANENT TURF MAT INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. NORTH AMERICAN P300 OR APPROVED EQUAL

Outlet Weir (BMP D)

NOT TO SCALE

DESCRIPTION	WQ–A
TOP OF POND ELEVATION	219.00
100 YEAR STORM ELEVATION	217.93
10 YEAR STORM ELEVATION	217.54
1 YEAR STORM ELEVATION	217.23
WQ STORM ELEVATION	216.53
BOTTOM OF POND ELEVATION	216.00
SEASONAL HIGH GWT ELEVATION	212.50
SOIL EVALUATION	TH–3

NOTE:
WQ INFILTRATION PONDS ARE USED AS TEMPORARY SEDIMENTATION BASINS. CONTRACTOR MUST REMOVE ALL SEDIMENTS WITHIN BASIN LIMITS, EXCAVATE TO BASIN FINISH ELEVATION AND SCARIFY BOTTOM OF BASIN A MINIMUM 12" BELOW FINAL POND ELEVATION.


BOTTOM & SIDE SLOPES OF POND TO BE SEEDED WITH NEW ENGLAND CONTROL/ RESTORATION MIX BY NEW ENGLAND WETLAND PLANTS (OR APPROVED EQUAL)
TOP OF POND (5' MINIMUM WIDTH) ELEV: (SEE PLANS)
TOP OF POND (5' MINIMUM WIDTH) ELEV: (SEE PLANS)
WQ POND INLET ELEV: (SEE PLANS)
SEDIMENT FOREBAY TOP: (SEE PLANS) BOTTOM: (SEE PLANS)
FOREBAY INLET
TOP OF POND (8' MINIMUM WIDTH) ELEV: (SEE PLANS)
SIDE SLOPES (SEE PLANS)
WATER QUALITY
SIDE SLOPES AND TOP OF EMBANKMENTS TO BE 6" OF LOAM OVER NATIVE SOIL OR CLEAN COMPACTED FILL
BOTTOM OF POND ELEV: (SEE PLANS)
IF EXISTING SOILS CONTAIN SANDY OR GRAVELLY MATERIAL, REMOVE 6" (MIN) AND REPLACE WITH SANDY LOAM TO FOREBAY SIDES AND BOTTOM
SUITABLE EXISTING MATERIAL

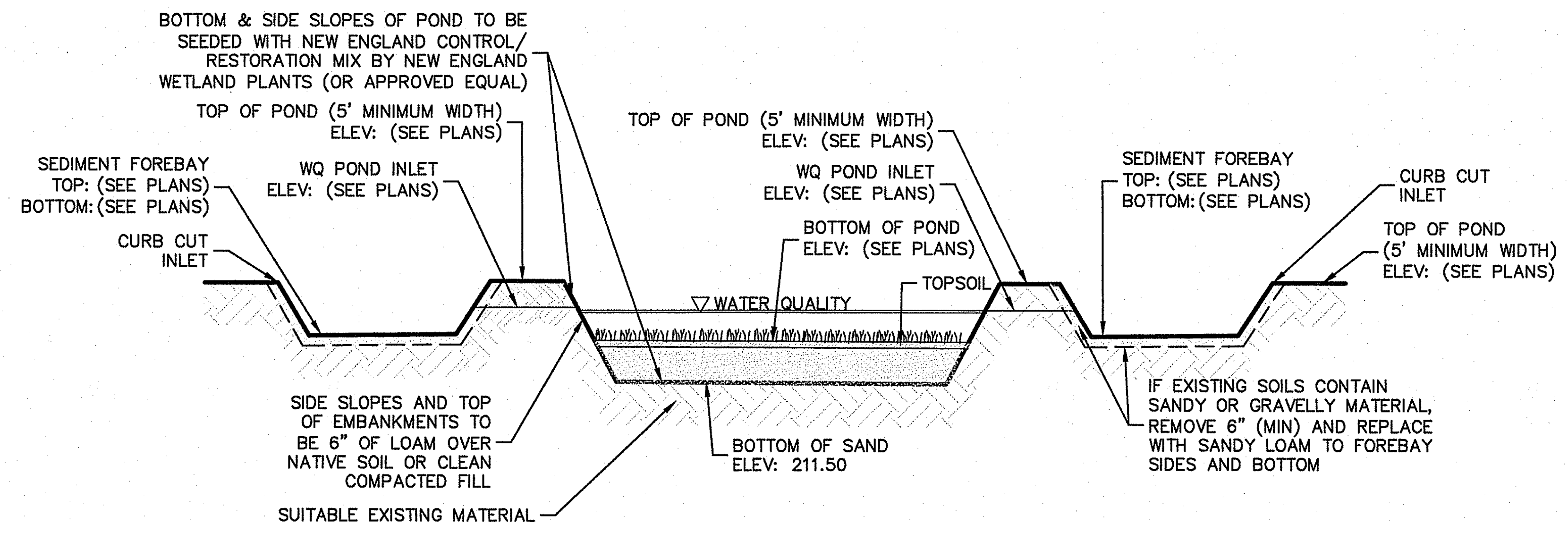
WQ INFILTRATION POND
NOT TO SCALE

SEDIMENT FOREBAY
NOT TO SCALE

WQ Infiltration Pond A BMP System

NOT TO SCALE

DESCRIPTION	WQ–D
TOP OF POND ELEVATION	214.50
100 YEAR STORM ELEVATION	213.65
10 YEAR STORM ELEVATION	213.62
1 YEAR STORM ELEVATION	213.59
WQ STORM ELEVATION	213.05
BOTTOM OF POND ELEVATION	213.00
SEASONAL HIGH GWT ELEVATION	210.00
SOIL EVALUATION	TH–4


BOTTOM & SIDE SLOPES OF POND TO BE SEEDED WITH NEW ENGLAND CONTROL/ RESTORATION MIX BY NEW ENGLAND WETLAND PLANTS (OR APPROVED EQUAL)
TOP OF POND (5' MINIMUM WIDTH) ELEV: (SEE PLANS)
TOP OF POND (5' MINIMUM WIDTH) ELEV: (SEE PLANS)
SEDIMENT FOREBAY TOP: (SEE PLANS) BOTTOM: (SEE PLANS)
WQ POND INLET ELEV: (SEE PLANS)
WQ POND INLET ELEV: (SEE PLANS)
SEDIMENT FOREBAY TOP: (SEE PLANS) BOTTOM: (SEE PLANS)
CURB CUT INLET
CURB CUT INLET
BOTTOM OF POND ELEV: (SEE PLANS)
TOP OF POND (5' MINIMUM WIDTH) ELEV: (SEE PLANS)
WATER QUALITY
TOPSOIL
SIDE SLOPES AND TOP OF EMBANKMENTS TO BE 6" OF LOAM OVER NATIVE SOIL OR CLEAN COMPACTED FILL
BOTTOM OF SAND ELEV: 211.50
IF EXISTING SOILS CONTAIN SANDY OR GRAVELLY MATERIAL, REMOVE 6" (MIN) AND REPLACE WITH SANDY LOAM TO FOREBAY SIDES AND BOTTOM
SUITABLE EXISTING MATERIAL

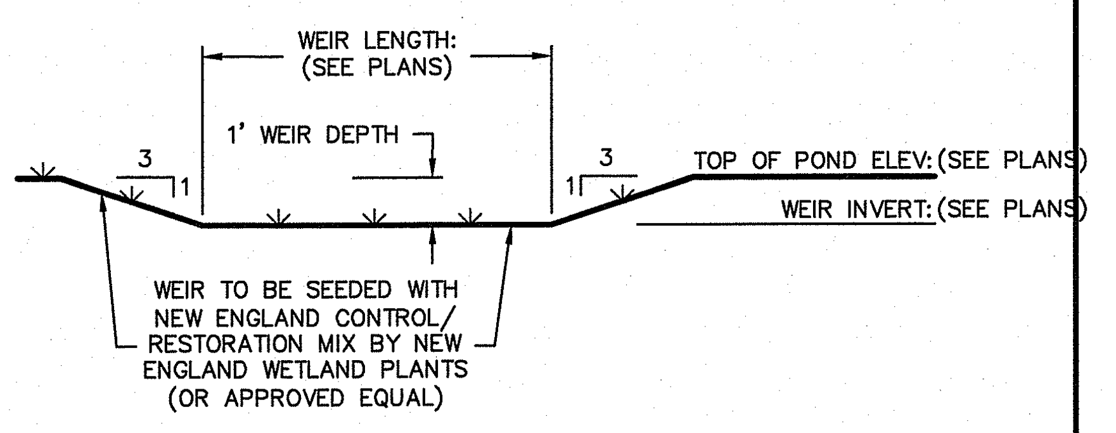
SEDIMENT FOREBAY
NOT TO SCALE

WQ INFILTRATION POND
NOT TO SCALE

SEDIMENT FOREBAY
NOT TO SCALE

WQ Infiltration Pond D BMP System

NOT TO SCALE


WEIR LENGTH: (SEE PLANS)
1' WEIR DEPTH
3
1
3
1
TOP OF POND ELEV: (SEE PLANS)
WEIR INVERT: (SEE PLANS)
WEIR TO BE SEEDED WITH NEW ENGLAND CONTROL/ RESTORATION MIX BY NEW ENGLAND WETLAND PLANTS (OR APPROVED EQUAL)

Emergency Overflow Weir

NOT TO SCALE

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

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED DEC 1 1 2020 FILE # 20-0108
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Martin W. Wencek

DiPrete Engineering
Two Stafford Court Cranston, RI 02920
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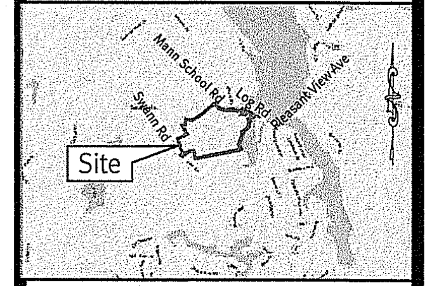
AUDIE D. OSGOOD
No.
REGISTERED PROFESSIONAL ENGINEER CIVIL
10/08/2020

OCT 16 2020



LOCATION MAP N.T.S.

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No.	Date	Description	By:
1	10-08-2020	RIDEM Submission Response to Comments	S.R.
0	05-01-2020	RIDEM Submission	S.R.

Drawn By: S.R.
Design By: C.D./P.A.A.

Pond Complex A & D Details

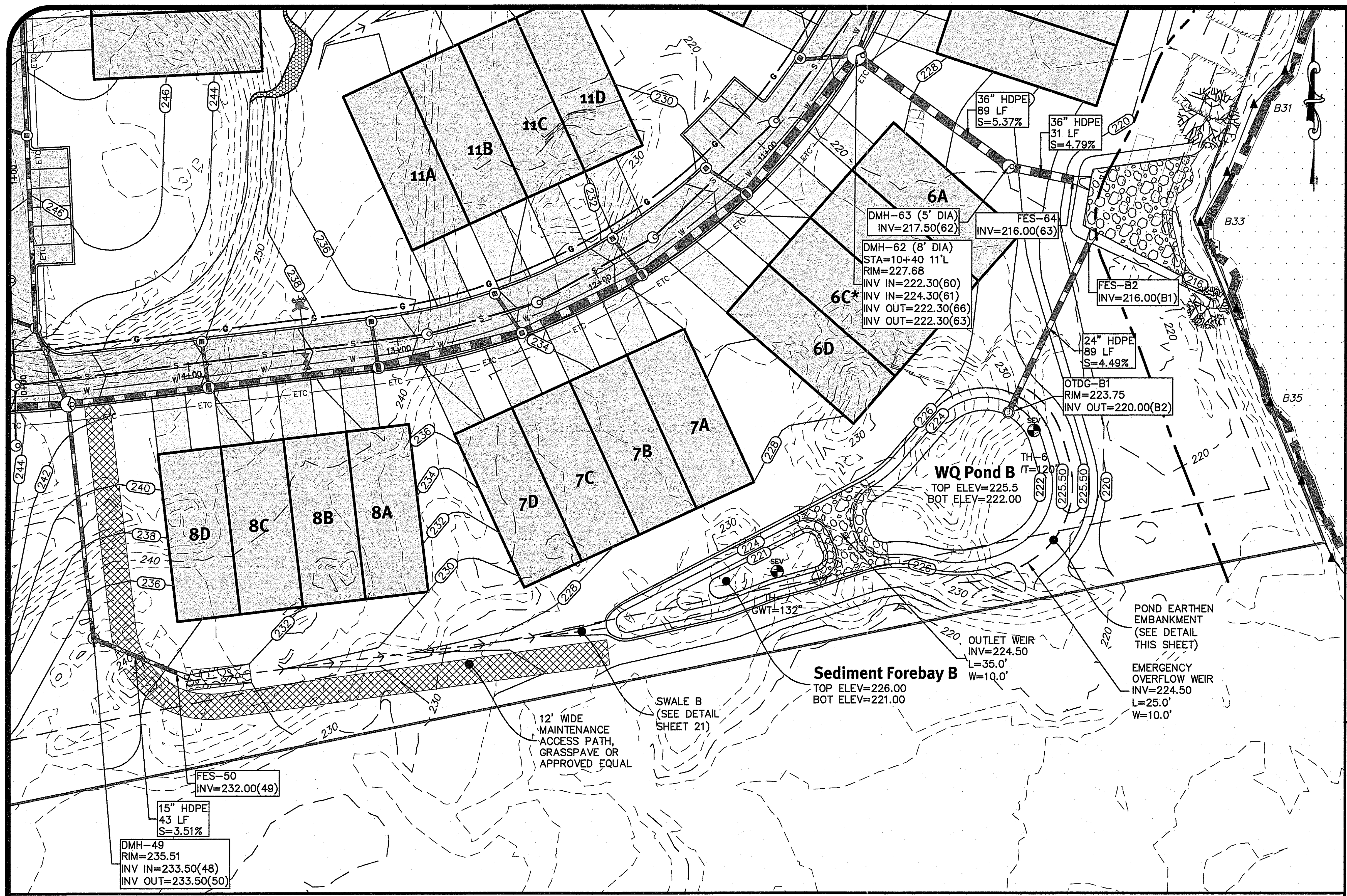
Sand Trace
Assessor's Plat 46 Lot 10, Zone R-20M, Area: 54.95 ±Acres
Smithfield, Rhode Island

Applicant
Sand Trace LLC
10B Appian Way, Smithfield, Rhode Island 02917
tel 401-231-4700 fax 401-232-3203

SHEET 17 OF 23

DE Job No: 0214-017

z:\demain\projects\0214-017 the village on stillwater\autocad drawings\0214-017-plan.dwg Plotted: 10/16/2020



11A
11B
11C
11D
6A
6C*
6D
7A
7B
7C
7D
8A
8B
8C
8D
B31
B33
B35
36" HDPE
89 LF
S=5.37%
36" HDPE
31 LF
S=4.79%
DMH-63 (5' DIA)
INV=217.50(62)
DMH-62 (8' DIA)
STA=10+40 11'L
RIM=227.68
INV IN=222.30(60)
INV IN=224.30(61)
INV OUT=222.30(66)
INV OUT=222.30(63)
FES-64
INV=216.00(63)
FES-B2
INV=216.00(B1)
24" HDPE
89 LF
S=4.49%
OTDG-B1
RIM=223.75
INV OUT=220.00(B2)
WQ Pond B
TOP ELEV=225.5
BOT ELEV=222.00
TH-6
GWT=132"
POND EARTHEN EMBANKMENT (SEE DETAIL THIS SHEET)
OUTLET WEIR
INV=224.50
L=35.0'
W=10.0'
EMERGENCY OVERFLOW WEIR
INV=224.50
L=25.0'
W=10.0'
Sediment Forebay B
TOP ELEV=226.00
BOT ELEV=221.00
SWALE B (SEE DETAIL SHEET 21)
12' WIDE MAINTENANCE ACCESS PATH, GRASSPAVE OR APPROVED EQUAL
FES-50
INV=232.00(49)
15" HDPE
43 LF
S=3.51%
DMH-49
RIM=235.51
INV IN=233.50(48)
INV OUT=233.50(50)

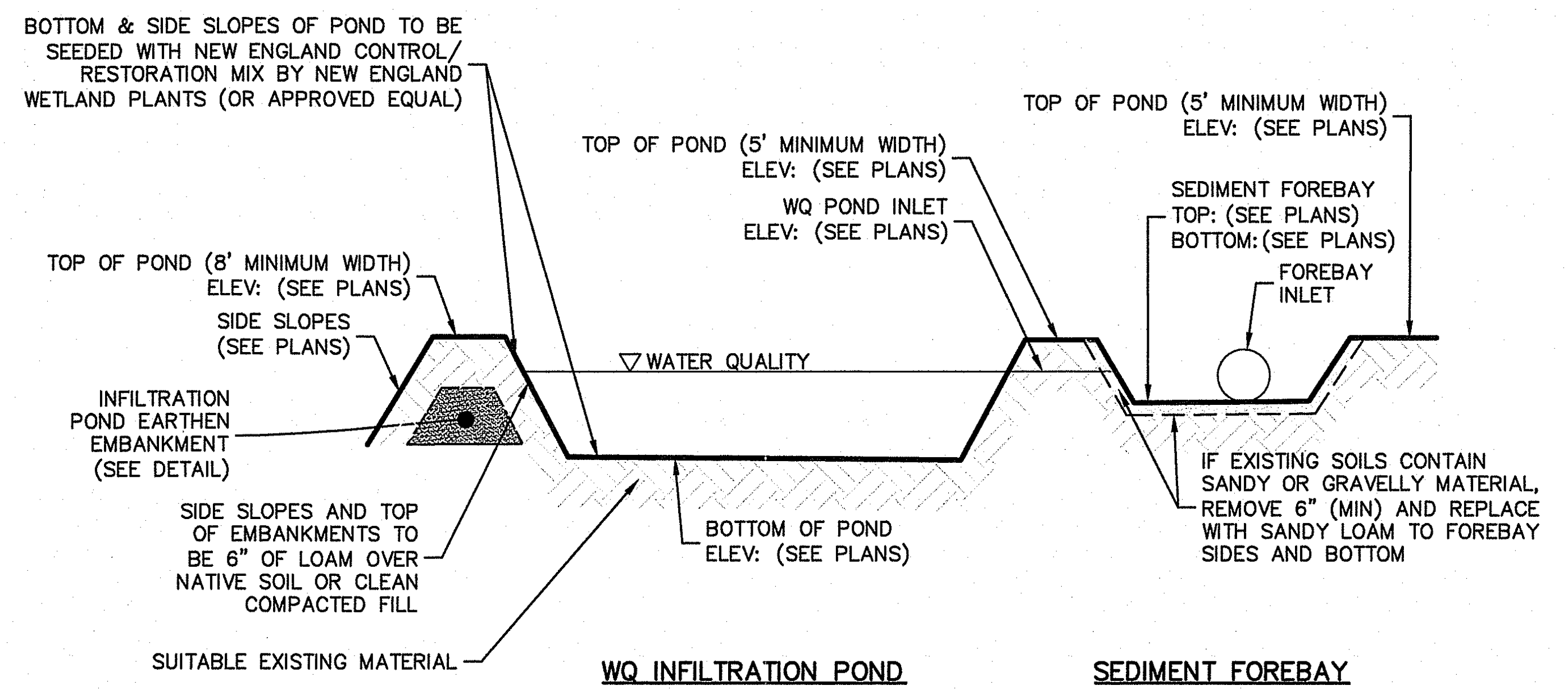
Pond Complex B

Scale: 1"=40'

0 20' 40' 80'

DESCRIPTION	WQ-B
TOP OF POND ELEVATION	225.50
100 YEAR STORM ELEVATION	224.36
10 YEAR STORM ELEVATION	224.16
1 YEAR STORM ELEVATION	224.03
WQ STORM ELEVATION	223.45
BOTTOM OF POND ELEVATION	222.00
SEASONAL HIGH GWT ELEVATION	216.00
SOIL EVALUATION	TH-6

NOTE:
WQ INFILTRATION PONDS ARE USED AS TEMPORARY SEDIMENTATION BASINS. CONTRACTOR MUST REMOVE ALL SEDIMENTS WITHIN BASIN LIMITS, EXCAVATE TO BASIN FINISH ELEVATION AND SCARIFY BOTTOM OF BASIN A MINIMUM 12" BELOW FINAL POND ELEVATION.



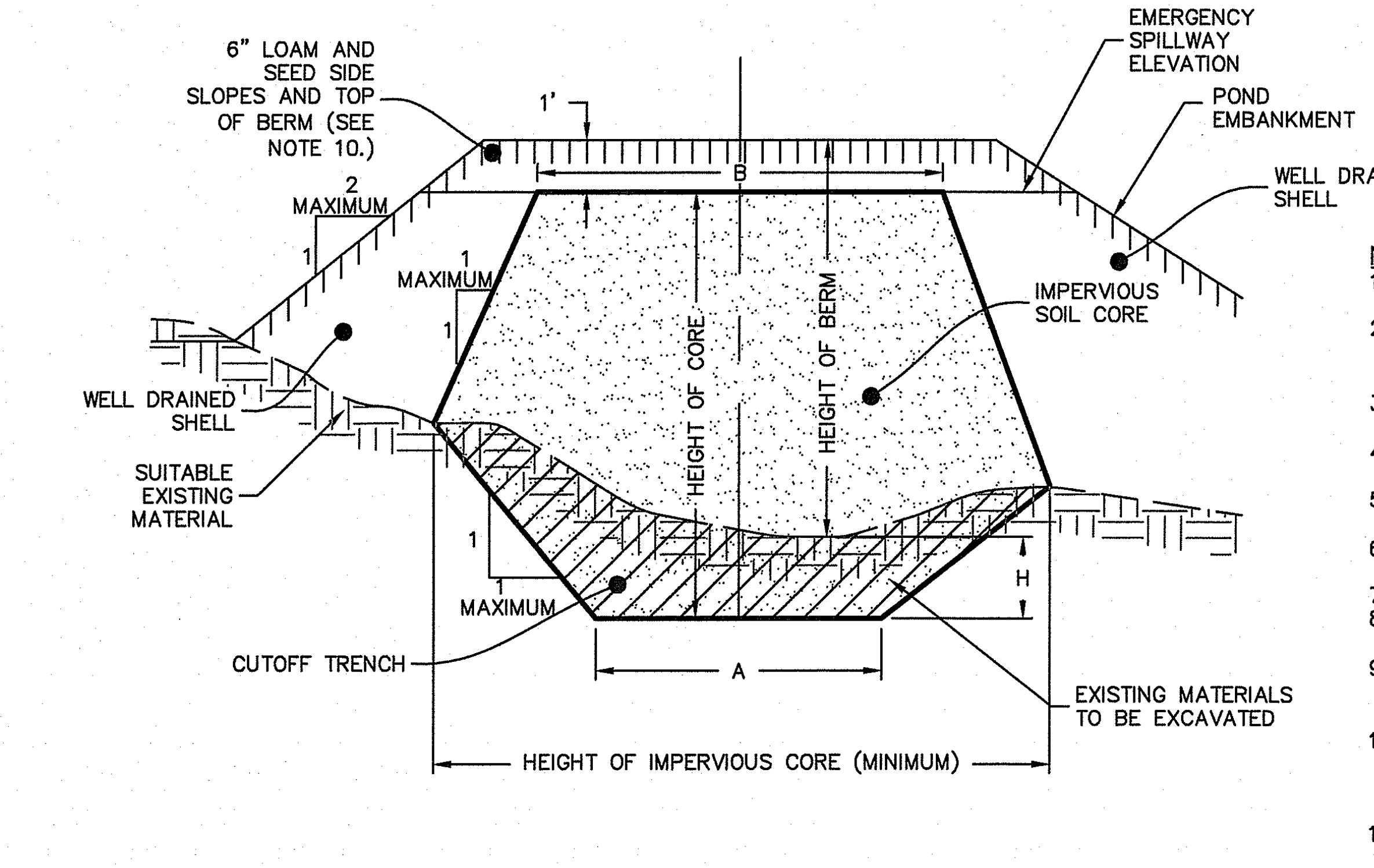
BOTTOM & SIDE SLOPES OF POND TO BE SEEDED WITH NEW ENGLAND CONTROL/ RESTORATION MIX BY NEW ENGLAND WETLAND PLANTS (OR APPROVED EQUAL)
TOP OF POND (5' MINIMUM WIDTH) ELEV: (SEE PLANS)
WQ POND INLET ELEV: (SEE PLANS)
TOP OF POND (5' MINIMUM WIDTH) ELEV: (SEE PLANS)
SEDIMENT FOREBAY TOP: (SEE PLANS) BOTTOM: (SEE PLANS)
FOREBAY INLET
TOP OF POND (8' MINIMUM WIDTH) ELEV: (SEE PLANS)
SIDE SLOPES (SEE PLANS)
WATER QUALITY
INFILTRATION POND EARTHEN EMBANKMENT (SEE DETAIL)
SIDE SLOPES AND TOP OF EMBANKMENTS TO BE 6" OF LOAM OVER NATIVE SOIL OR CLEAN COMPACTED FILL
BOTTOM OF POND ELEV: (SEE PLANS)
IF EXISTING SOILS CONTAIN SANDY OR GRAVELLY MATERIAL, REMOVE 6" (MIN) AND REPLACE WITH SANDY LOAM TO FOREBAY SIDES AND BOTTOM
SUITABLE EXISTING MATERIAL

WQ INFILTRATION POND
NOT TO SCALE

SEDIMENT FOREBAY
NOT TO SCALE

WQ Infiltration Pond B BMP System

NOT TO SCALE



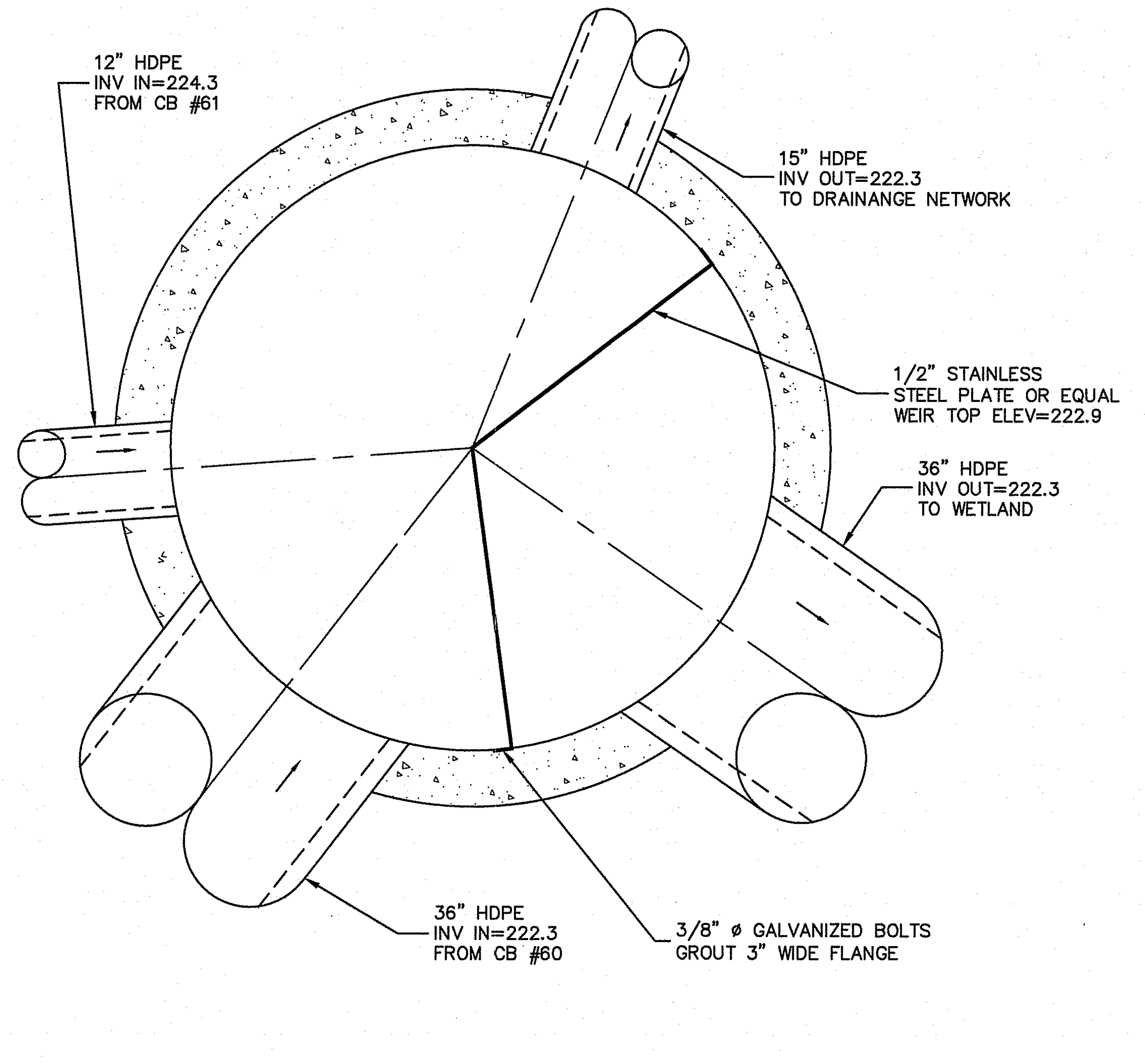
6" LOAM AND SEED SIDE SLOPES AND TOP OF BERM (SEE NOTE 10.)
1'
B
2 MAXIMUM
1
MAXIMUM
EMERGENCY SPILLWAY ELEVATION
POND EMBANKMENT
WELL DRAINED SHELL
IMPERVIOUS SOIL CORE
WELL DRAINED SHELL
SUITABLE EXISTING MATERIAL
HEIGHT OF CORE
HEIGHT OF BERM
H
CUTOFF TRENCH
A
EXISTING MATERIALS TO BE EXCAVATED
HEIGHT OF IMPERVIOUS CORE (MINIMUM)

BERM HEIGHT (FT)	TOP WIDTH OF CORE – B (FT)
0–6.5	8.2
6.6–9.8	9.2
9.9–13.1	9.8
13.2–16.4	10.8
16.5–19.7	11.5

NOTES:
1. IMPERVIOUS SOIL CORE TO BE PROVIDED FOR ALL POND EMBANKMENTS.
2. IMPERVIOUS SOIL CORE TO BE CONSTRUCTED OF A MATERIAL WITH A MINIMUM OF 55% PASSING THE #200 SIEVE AND A MAXIMUM PERMEABILITY OF 0.00005 CM/S.
3. WELL DRAINED SHELL TO BE CONSTRUCTED OF GRAVEL AND/OR SAND WITH LESS THAN 5% PASSING THE #200 SIEVE.
4. MINIMUM DEPTH OF CUTOFF TRENCH (H) SHALL BE 3/4 OF THE TOTAL BERM HEIGHT.
5. THE IMPERVIOUS CORE AT A MINIMUM SHALL EXTEND UP BOTH ABUTMENTS TO THE EMERGENCY SPILLWAY ELEVATION.
6. THE MINIMUM BOTTOM WIDTH (A) SHALL BE 5'–8', AND WIDE ENOUGH TO PERMIT OPERATION OF COMPACTION EQUIPMENT.
7. SIDE SLOPES OF THE TRENCH SHALL BE NO STEEPER THAN 1:1.
8. IF BEDROCK IS ENCOUNTERED BELOW THE DAM THE CUT OFF TRENCH CAN BE REDUCED TO 1'x1' (AxH)
9. COMPACTION REQUIREMENTS FOR THE SHELL AND IMPERVIOUS CORE TO BE 95% OF THE MODIFIED PROCTOR PER ASTM D1557. ALL FILL TO BE PLACED IN LIFTS NOT EXCEEDING 12".
10. SIDE SLOPE OF POND EMBANKMENT TO BE 2:1 MAXIMUM. IF SIDE SLOPES ARE STEEPER THAN 3:1, SLOPE PROTECTION MUST BE UTILIZED ON POND EMBANKMENT. THIS INCLUDES, BUT NOT LIMITED TO, RIPRAP AND EROSION CONTROL MATS.
11. THE IMPERVIOUS CORE SHALL BE KEPT FREE FROM STANDING WATER DURING THE BACKFILL OPERATION.
12. ALL EMBANKMENTS TO BE DESIGNED BY A GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION. ALL EMBANKMENT INSTALLATIONS TO BE SUPERVISED BY A GEOTECHNICAL ENGINEER.

Pond Earthen Embankment

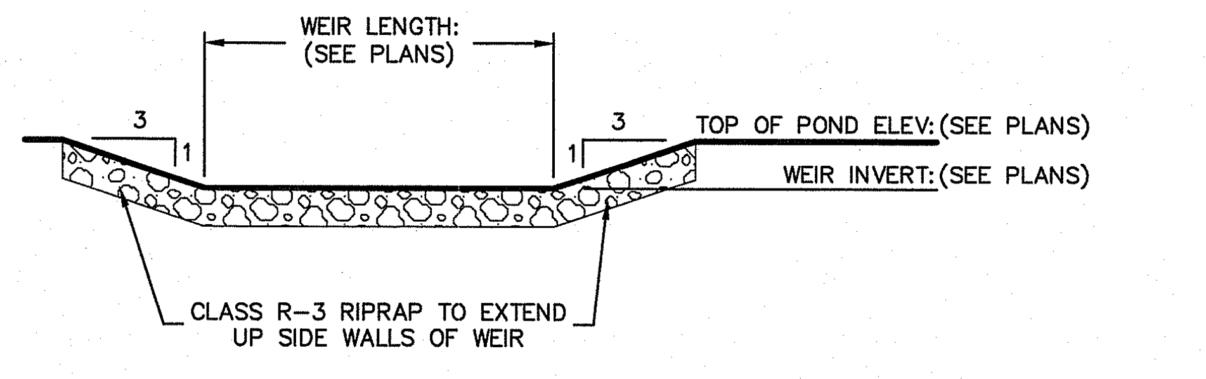
NOT TO SCALE



12" HDPE
INV IN=224.3
FROM CB #61
15" HDPE
INV OUT=222.3
TO DRAINANGE NETWORK
1/2" STAINLESS STEEL PLATE OR EQUAL
WEIR TOP ELEV=222.9
36" HDPE
INV OUT=222.3
TO WETLAND
36" HDPE
INV IN=222.3
FROM CB #60
3/8" ø GALVANIZED BOLTS
GROUT 3" WIDE FLANGE

BYPASS-62(8'Ø MANHOLE)

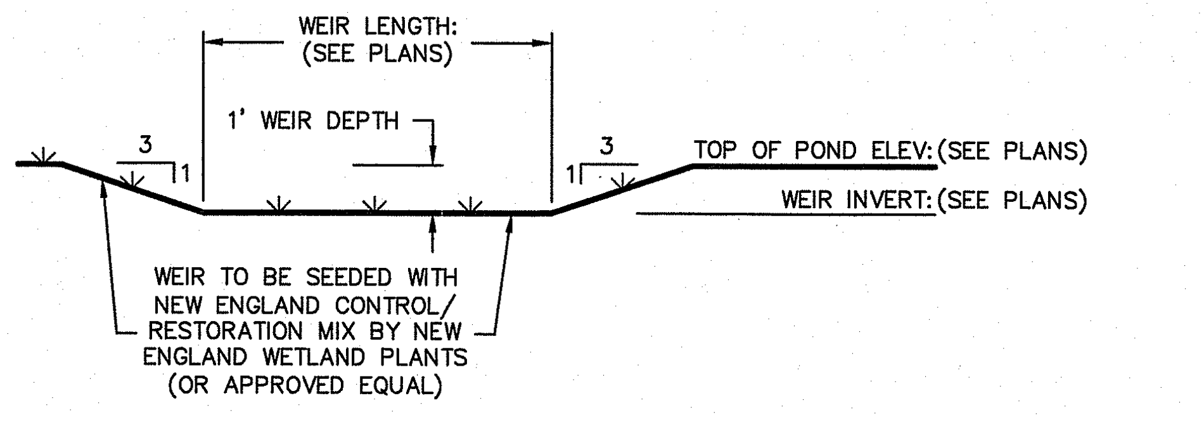
SCALE 1"=2'



WEIR LENGTH: (SEE PLANS)
3
1
3
1
TOP OF POND ELEV: (SEE PLANS)
WEIR INVERT: (SEE PLANS)
CLASS R-3 RIPRAP TO EXTEND UP SIDE WALLS OF WEIR

Outlet Weir

NOT TO SCALE

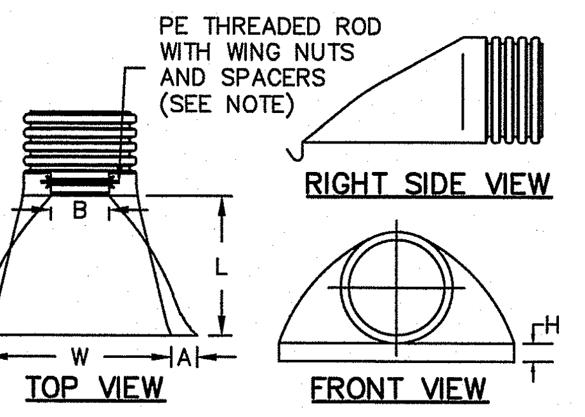


WEIR LENGTH: (SEE PLANS)
1' WEIR DEPTH
3
1
3
1
TOP OF POND ELEV: (SEE PLANS)
WEIR INVERT: (SEE PLANS)
WEIR TO BE SEEDED WITH NEW ENGLAND CONTROL/ RESTORATION MIX BY NEW ENGLAND WETLAND PLANTS (OR APPROVED EQUAL)

Emergency Overflow Weir

NOT TO SCALE

NOTE:
1. ADS OR APPROVED EQUAL.
2. ALL DIMENSIONS ARE NOMINAL.
3. PE THREADED ROD WITH WING NUTS PROVIDED FOR END SECTIONS 12"–24".
4. 30" AND 36" END SECTIONS REQUIRE TWO (2) THREADED RODS FOR ASSEMBLE.



PE THREADED ROD WITH WING NUTS AND SPACERS (SEE NOTE)
B
L
A
W
A
H
RIGHT SIDE VIEW
TOP VIEW
FRONT VIEW

PART #	PIPE SIZE	A	B (MAX)	H	L	W
1210NP	12 IN (300 MM)	6.50 IN (165 MM)	10 IN (254 MM)	6.50 IN (165 MM)	25 IN (635 MM)	29 IN (737 MM)
1510NP	15 IN (375 MM)	6.50 IN (165 MM)	10 IN (254 MM)	6.50 IN (165 MM)	25 IN (635 MM)	29 IN (737 MM)
1810 NP	18 IN (450 MM)	7.50 IN (191 MM)	15 IN (381 MM)	6.50 IN (165 MM)	32 IN (813 MM)	35 IN (889 MM)
2410NP	24 IN (600 MM)	7.50 IN (191 MM)	18 IN (457 MM)	6.50 IN (165 MM)	36 IN (914 MM)	45 IN (1143 MM)
3015NP	30 IN (750 MM)	7.50 IN (191 MM)	12 IN (305 MM)	8.60 IN (218 MM)	58 IN (1473 MM)	63 IN (1600MM)
3615NP	36 IN (900 MM)	7.50 IN (191 MM)	25 IN (635 MM)	8.60 IN (218 MM)	58 IN (1473 MM)	63 IN (1600 MM)

HDPE Flared End Section

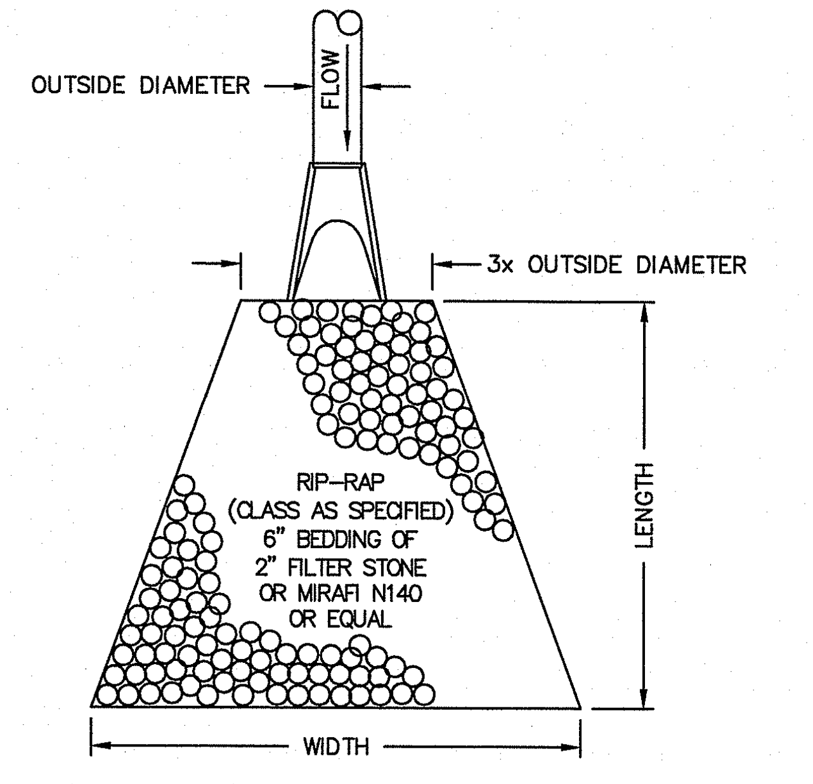
NOT TO SCALE

OCT 1 6 2020

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

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED DEC 1 1 2020 FILE # 20-0108
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Martin D. Wencek

FLARED END	LENGTH	WIDTH	CLASS
B2	48	57	R-6
63			



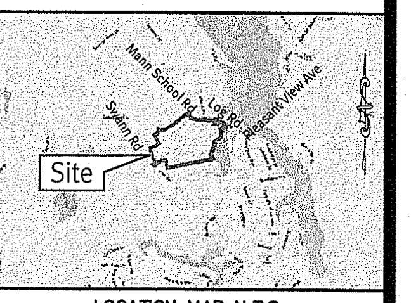
OUTSIDE DIAMETER
FLOW
3x OUTSIDE DIAMETER
RIP-RAP (CLASS AS SPECIFIED)
6" BEDDING OF 2" FILTER STONE OR MIRAFI N140 OR EQUAL
LENGTH
WIDTH

Rip-Rap Apron/ FE Detail

NOT TO SCALE

DiPrete Engineering
Two Stafford Court Cranston, RI 02920
tel 401-943-1000 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

AUDIE D. OSGOOD
No.
10/08/2020
REGISTERED
PROFESSIONAL ENGINEER
CIVIL



Site
Main School Rd
Log Rd
Pleasant View Ave

LOCATION MAP N.T.S.

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No.	Date	Description	By:
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0	05-01-2020	RIDEM Submission	S.R.

Drawn By: S.R.
Design By: C.D./P.A.A.

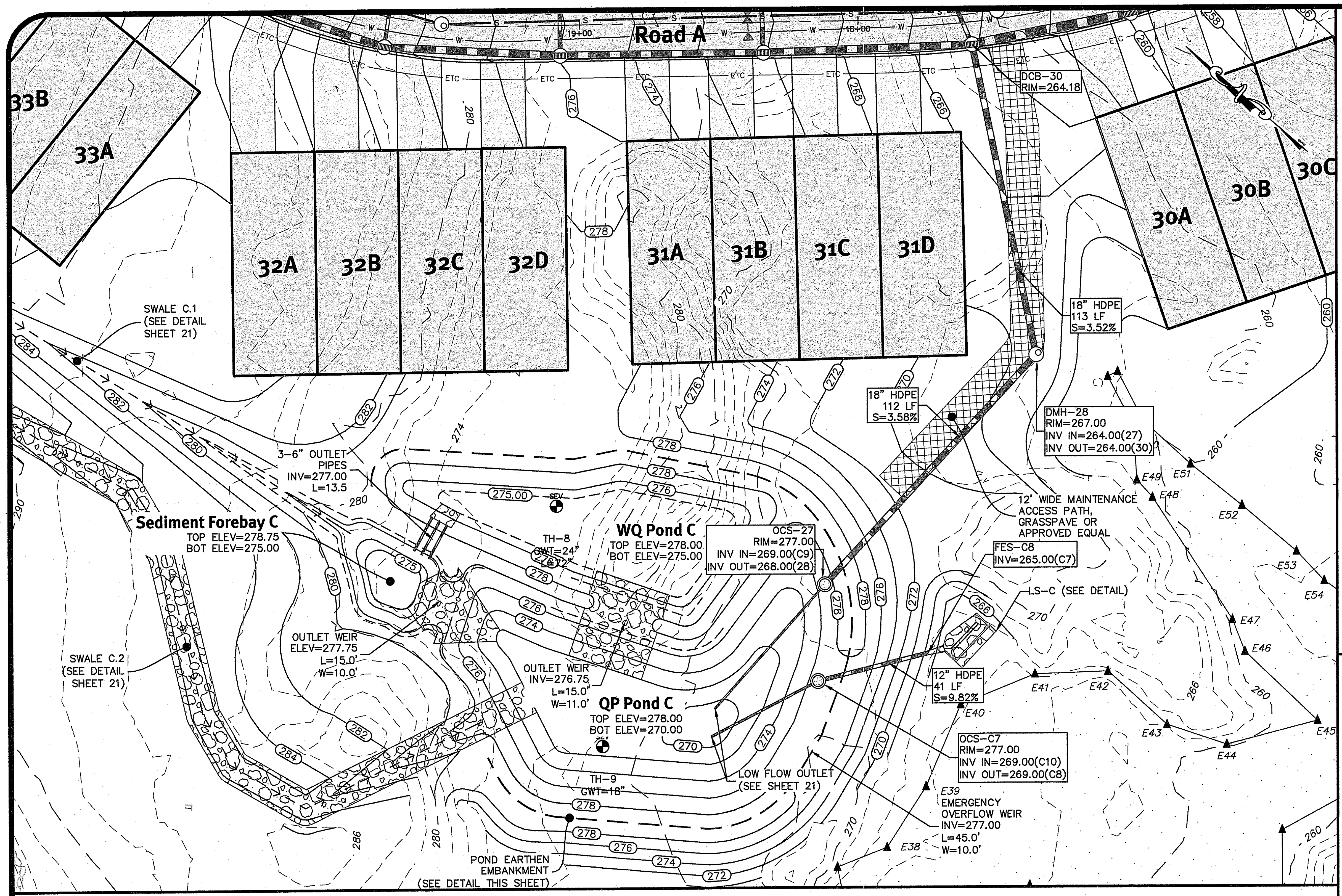
Pond Complex B Details

Sand Trace
Assessor's Plat 46 Lot 10, Zone R-20M, Area: 54.95 ±Acres
Smithfield, Rhode Island

Applicant
Sand Trace LLC
10B Appian Way, Smithfield, Rhode Island 02917
tel 401-231-4700 fax 401-232-3203

DE Job No: 0214-017 Copyright 2019 by DiPrete Engineering Associates, Inc.

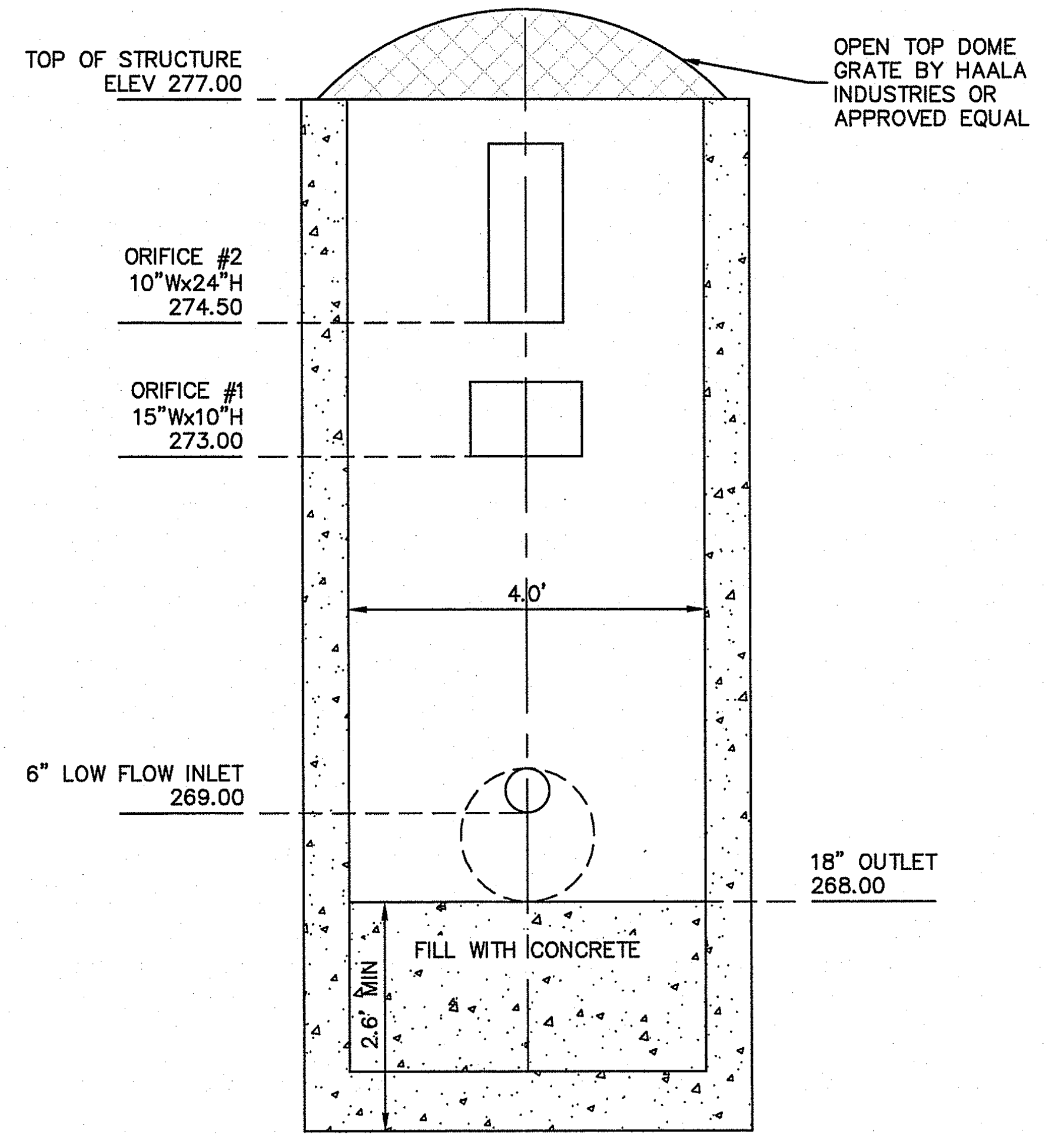
z:\demain\projects\0214-017 the village on stillwater\autocad drawings\0214-017-plan.dwg Plotted: 10/16/2020


Road A
19+00
18+00
ETC
33B
33A
32A
32B
32C
32D
31A
31B
31C
31D
30A
30B
30C
DCB-30
RIM=264.18
18" HDPE
113 LF
S=3.52%
18" HDPE
112 LF
S=3.58%
DMH-28
RIM=267.00
INV IN=264.00(27)
INV OUT=264.00(30)
SWALE C.1
(SEE DETAIL
SHEET 21)
3-6" OUTLET
PIPES
INV=277.00
L=13.5
Sediment Forebay C
TOP ELEV=278.75
BOT ELEV=275.00
WQ Pond C
TOP ELEV=278.00
BOT ELEV=275.00
TH-8
GWT=24"
L=72"
OCS-27
RIM=277.00
INV IN=269.00(C9)
INV OUT=268.00(28)
12' WIDE MAINTENANCE
ACCESS PATH,
GRASSPAVE OR
APPROVED EQUAL
FES-C8
INV=265.00(C7)
LS-C (SEE DETAIL)
SWALE C.2
(SEE DETAIL
SHEET 21)
OUTLET WEIR
ELEV=277.75
L=15.0'
W=10.0'
OUTLET WEIR
INV=276.75
L=15.0'
W=11.0'
QP Pond C
TOP ELEV=278.00
BOT ELEV=270.00
12" HDPE
41 LF
S=9.82%
OCS-C7
RIM=277.00
INV IN=269.00(C10)
INV OUT=269.00(C8)
LOW FLOW OUTLET
(SEE SHEET 21)
TH-9
GWT=18"
E39
EMERGENCY
OVERFLOW WEIR
INV=277.00
L=45.0'
W=10.0'
POND EARTHEN
EMBANKMENT
(SEE DETAIL THIS SHEET)
E38
E40
E41
E42
E43
E44
E45
E46
E47
E48
E49
E51
E52
E53
E54
284
282
280
278
276
275
275.00
274
272
270
268
266
260
258
286
290

Pond Complex C

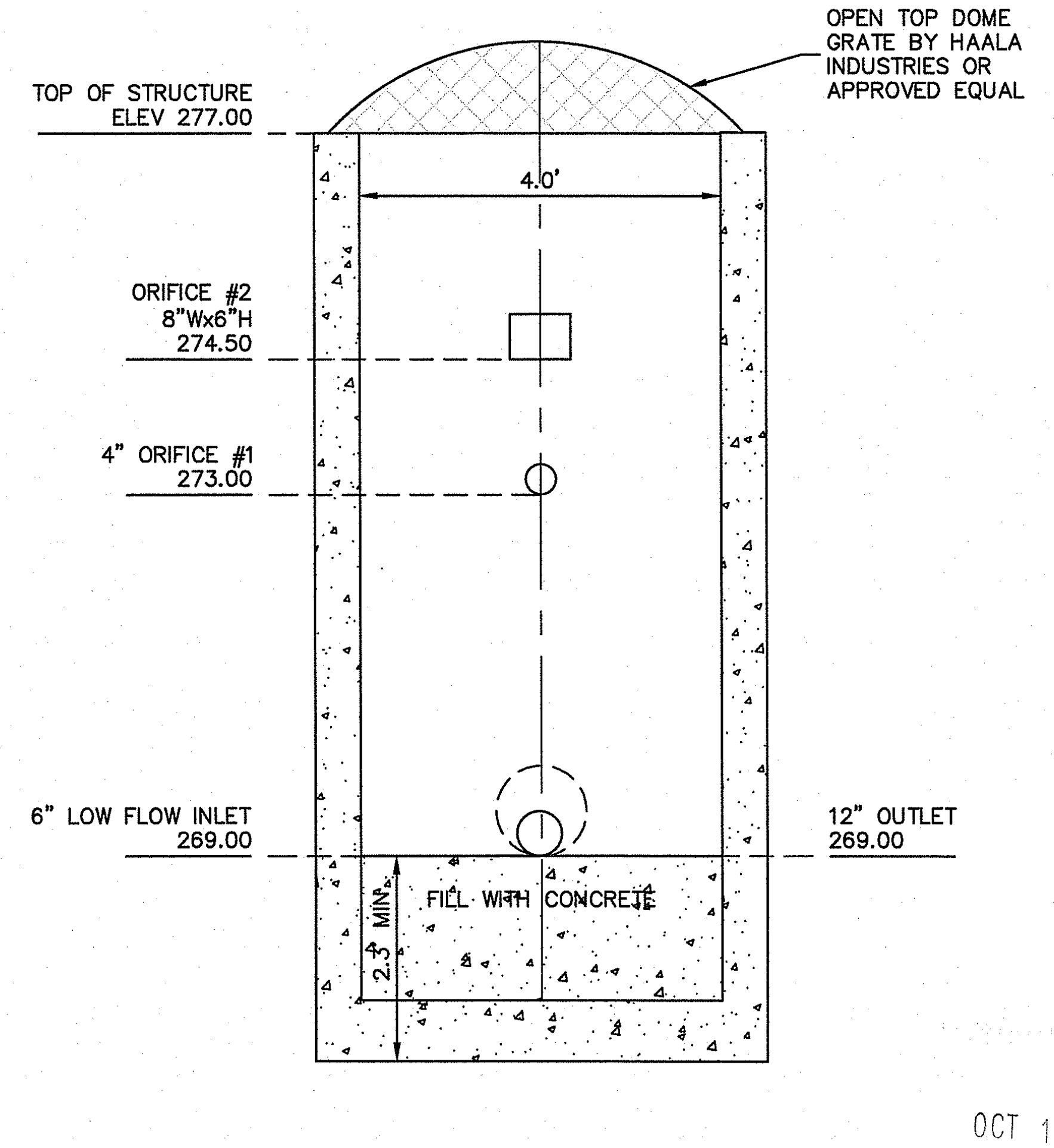
Scale: 1"=30'

0 15' 30' 60'


TOP OF STRUCTURE
ELEV 277.00
OPEN TOP DOME
GRATE BY HAALA
INDUSTRIES OR
APPROVED EQUAL
ORIFICE #2
10"Wx24"H
274.50
ORIFICE #1
15"Wx10"H
273.00
4.0'
6" LOW FLOW INLET
269.00
18" OUTLET
268.00
FILL WITH CONCRETE
2.6' MIN

Outlet Control Structure
4' Diameter Manhole (OCS-27)

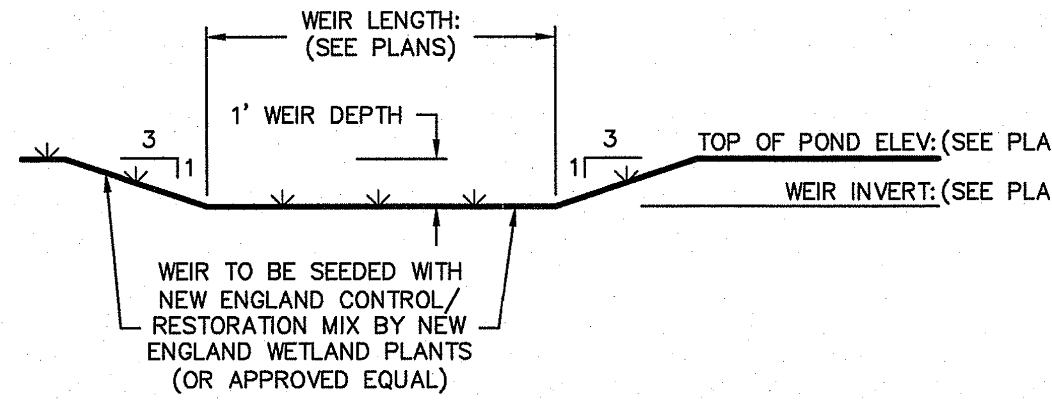
SCALE: 1"=2'


TOP OF STRUCTURE
ELEV 277.00
OPEN TOP DOME
GRATE BY HAALA
INDUSTRIES OR
APPROVED EQUAL
4.0'
ORIFICE #2
8"Wx6"H
274.50
4" ORIFICE #1
273.00
6" LOW FLOW INLET
269.00
12" OUTLET
269.00
FILL WITH CONCRETE
2.5' MIN

OCT 1 6 2020

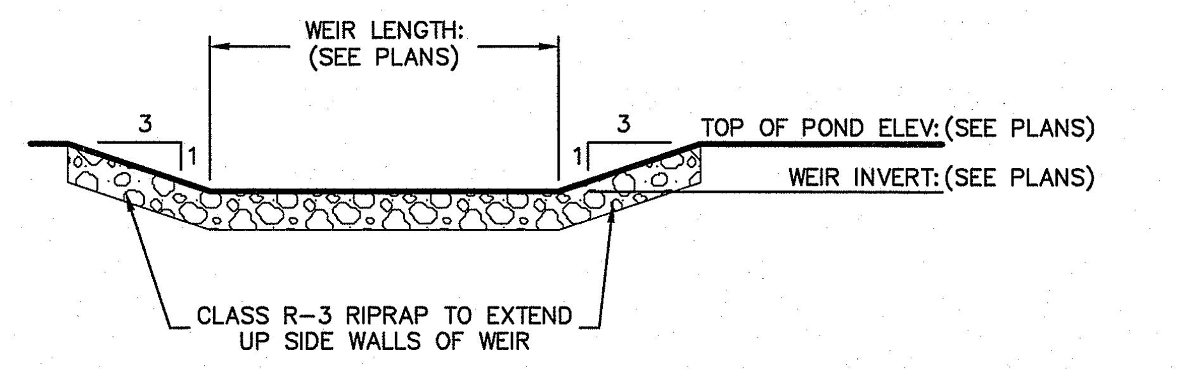
Outlet Control Structure
4' Diameter Manhole (OCS-C7)

SCALE: 1"=2'


WEIR LENGTH:
(SEE PLANS)
1' WEIR DEPTH
3
1
3
1
TOP OF POND ELEV: (SEE PLANS)
WEIR INVERT: (SEE PLANS)
WEIR TO BE SEEDED WITH
NEW ENGLAND CONTROL/
RESTORATION MIX BY NEW
ENGLAND WETLAND PLANTS
(OR APPROVED EQUAL)

Emergency Overflow Weir

NOT TO SCALE


WEIR LENGTH:
(SEE PLANS)
3
1
3
1
TOP OF POND ELEV: (SEE PLANS)
WEIR INVERT: (SEE PLANS)
CLASS R-3 RIPRAP TO EXTEND
UP SIDE WALLS OF WEIR

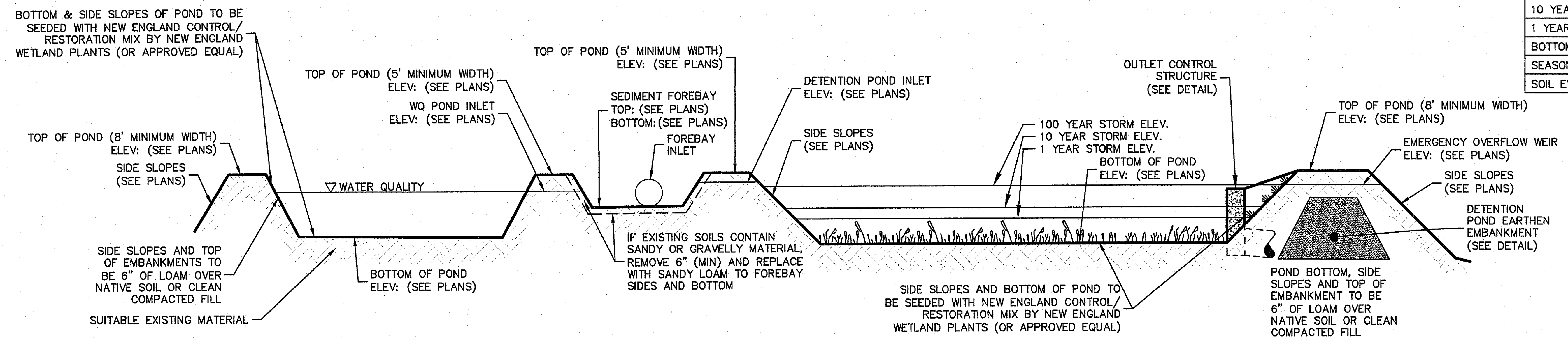
Outlet Weir

NOT TO SCALE

DESCRIPTION	WQ-C
TOP OF POND ELEVATION	278.00
100 YEAR STORM ELEVATION	277.01
10 YEAR STORM ELEVATION	276.91
1 YEAR STORM ELEVATION	276.78
WQ STORM ELEVATION	275.65
BOTTOM OF POND ELEVATION	275.00
SEASONAL HIGH GWT ELEVATION	272.00
SOIL EVALUATION	TH-8

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

DESCRIPTION	QP-C
TOP OF POND ELEVATION	278.00
100 YEAR STORM ELEVATION	276.98
10 YEAR STORM ELEVATION	274.18
1 YEAR STORM ELEVATION	270.64
BOTTOM OF POND ELEVATION	270.00
SEASONAL HIGH GWT ELEVATION	268.50
SOIL EVALUATION	TH-9


BOTTOM & SIDE SLOPES OF POND TO BE
SEEDED WITH NEW ENGLAND CONTROL/
RESTORATION MIX BY NEW ENGLAND
WETLAND PLANTS (OR APPROVED EQUAL)
TOP OF POND (8' MINIMUM WIDTH)
ELEV: (SEE PLANS)
SIDE SLOPES
(SEE PLANS)
WATER QUALITY
SIDE SLOPES AND TOP
OF EMBANKMENTS TO
BE 6" OF LOAM OVER
NATIVE SOIL OR CLEAN
COMPACTED FILL
SUITABLE EXISTING MATERIAL
BOTTOM OF POND
ELEV: (SEE PLANS)
TOP OF POND (5' MINIMUM WIDTH)
ELEV: (SEE PLANS)
WQ POND INLET
ELEV: (SEE PLANS)
SEDIMENT FOREBAY
TOP: (SEE PLANS)
BOTTOM: (SEE PLANS)
FOREBAY
INLET
TOP OF POND (5' MINIMUM WIDTH)
ELEV: (SEE PLANS)
IF EXISTING SOILS CONTAIN
SANDY OR GRAVELLY MATERIAL,
REMOVE 6" (MIN) AND REPLACE
WITH SANDY LOAM TO FOREBAY
SIDES AND BOTTOM
DETENTION POND INLET
ELEV: (SEE PLANS)
SIDE SLOPES
(SEE PLANS)
100 YEAR STORM ELEV.
10 YEAR STORM ELEV.
1 YEAR STORM ELEV.
BOTTOM OF POND
ELEV: (SEE PLANS)
OUTLET CONTROL
STRUCTURE
(SEE DETAIL)
SIDE SLOPES AND BOTTOM OF POND TO
BE SEEDED WITH NEW ENGLAND CONTROL/
RESTORATION MIX BY NEW ENGLAND
WETLAND PLANTS (OR APPROVED EQUAL)
TOP OF POND (8' MINIMUM WIDTH)
ELEV: (SEE PLANS)
EMERGENCY OVERFLOW WEIR
ELEV: (SEE PLANS)
SIDE SLOPES
(SEE PLANS)
DETENTION
POND EARTHEN
EMBANKMENT
(SEE DETAIL)
POND BOTTOM, SIDE
SLOPES AND TOP OF
EMBANKMENT TO BE
6" OF LOAM OVER
NATIVE SOIL OR CLEAN
COMPACTED FILL

WQ INFILTRATION POND
NOT TO SCALE

SEDIMENT FOREBAY
NOT TO SCALE

DETENTION POND
NOT TO SCALE

Pond C BMP System

NOT TO SCALE

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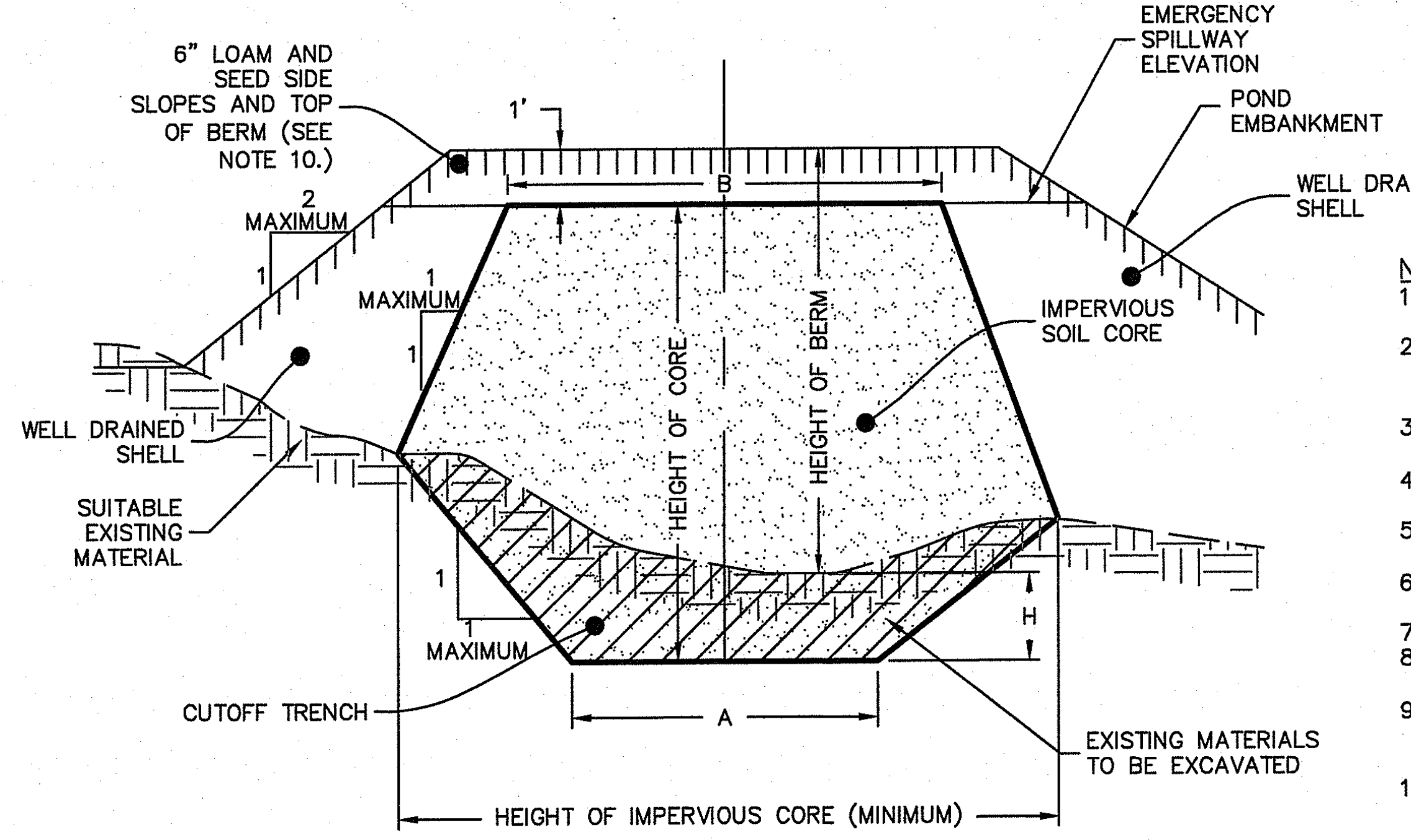
6" LOAM AND
SEED SIDE
SLOPES AND TOP
OF BERM (SEE
NOTE 10.)
1'
B
2
MAXIMUM
1
1
MAXIMUM
1
EMERGENCY
SPILLWAY
ELEVATION
POND
EMBANKMENT
WELL DRAINED
SHELL
IMPERVIOUS
SOIL CORE
HEIGHT OF CORE
HEIGHT OF BERM
WELL DRAINED
SHELL
SUITABLE
EXISTING
MATERIAL
1
1
MAXIMUM
H
CUTOFF TRENCH
A
EXISTING MATERIALS
TO BE EXCAVATED
HEIGHT OF IMPERVIOUS CORE (MINIMUM)

BERM HEIGHT (FT)	TOP WIDTH OF CORE – B (FT)
0–6.5	8.2
6.6–9.8	9.2
9.9–13.1	9.8
13.2–16.4	10.8
16.5–19.7	11.5

NOTES:
1. IMPERVIOUS SOIL CORE TO BE PROVIDED FOR ALL POND EMBANKMENTS.
2. IMPERVIOUS SOIL CORE TO BE CONSTRUCTED OF A MATERIAL WITH A MINIMUM OF 55% PASSING THE #200 SIEVE AND A MAXIMUM PERMEABILITY OF 0.00005 CM/S.
3. WELL DRAINED SHELL TO BE CONSTRUCTED OF GRAVEL AND/OR SAND WITH LESS THAN 5% PASSING THE #200 SIEVE.
4. MINIMUM DEPTH OF CUTOFF TRENCH (H) SHALL BE 3/4 OF THE TOTAL BERM HEIGHT.
5. THE IMPERVIOUS CORE AT A MINIMUM SHALL EXTEND UP BOTH ABUTMENTS TO THE EMERGENCY SPILLWAY ELEVATION.
6. THE MINIMUM BOTTOM WIDTH (A) SHALL BE 5'-8', AND WIDE ENOUGH TO PERMIT OPERATION OF COMPACTION EQUIPMENT.
7. SIDE SLOPES OF THE TRENCH SHALL BE NO STEEPER THAN 1:1.
8. IF BEDROCK IS ENCOUNTERED BELOW THE DAM THE CUT OFF TRENCH CAN BE REDUCED TO 1'x1' (AxH)
9. COMPACTION REQUIREMENTS FOR THE SHELL AND IMPERVIOUS CORE TO BE 95% OF THE MODIFIED PROCTOR PER ASTM D1557. ALL FILL TO BE PLACED IN LIFTS NOT EXCEEDING 12".
10. SIDE SLOPE OF POND EMBANKMENT TO BE 2:1 MAXIMUM. IF SIDE SLOPES ARE STEEPER THAN 3:1, SLOPE PROTECTION MUST BE UTILIZED ON POND EMBANKMENT. THIS INCLUDES, BUT NOT LIMITED TO, RIPRAP AND EROSION CONTROL MATS.
11. THE IMPERVIOUS CORE SHALL BE KEPT FREE FROM STANDING WATER DURING THE BACKFILL OPERATION.
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Pond Earthen Embankment

NOT TO SCALE

NOTE:
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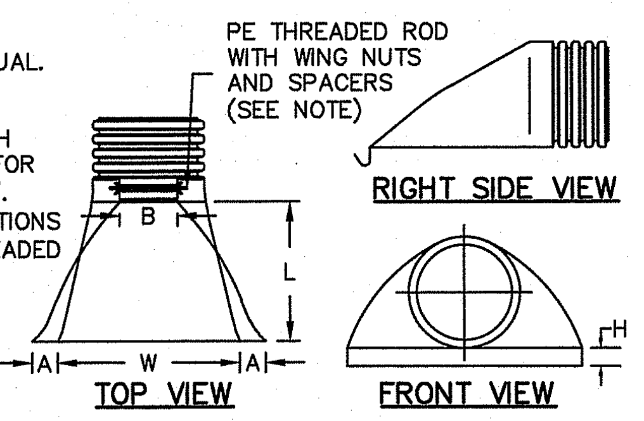
PE THREADED ROD
WITH WING NUTS
AND SPACERS
(SEE NOTE)
RIGHT SIDE VIEW
B
L
A
W
A
TOP VIEW
FRONT VIEW
H

PART #	PIPE SIZE	A	B (MAX)	H	L	W
1210NP	12 IN (300 MM)	6.50 IN (165 MM)	10 IN (254 MM)	6.50 IN (165 MM)	25 IN (635 MM)	29 IN (737 MM)
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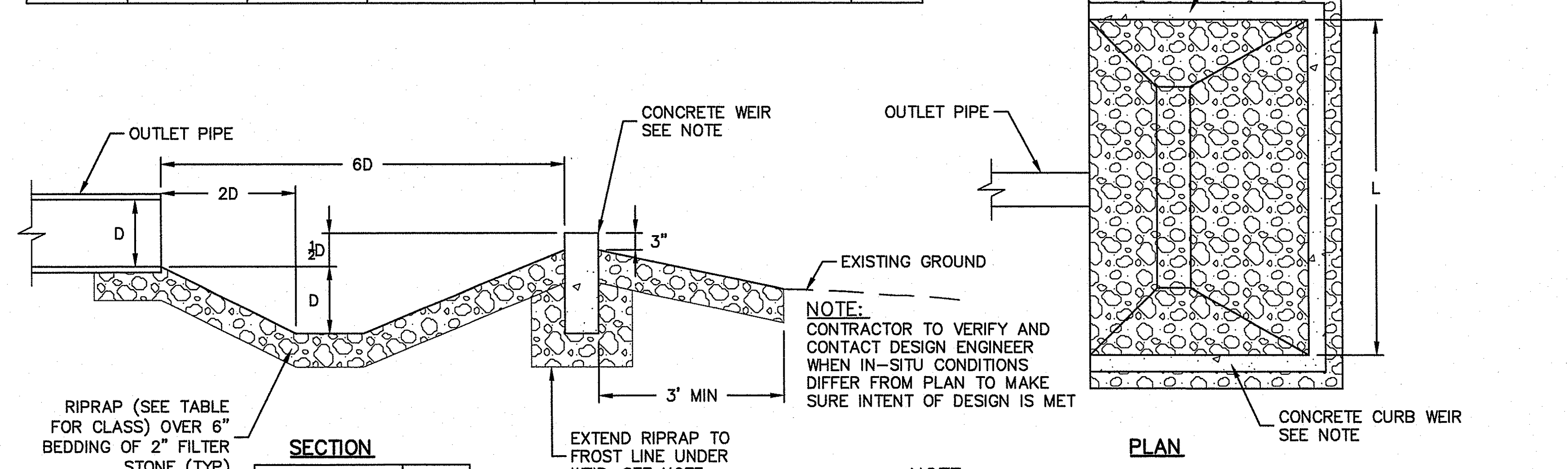
HDPE Flared End Section

NOT TO SCALE

LOCATION	PIPE INVERT	PIPE DIA (D)	WIDTH (6D)	LENGTH (L)	CONCRETE CURB WEIR ELEV	RIPRAP CLASS
LS-C	265.00	1.00	6.00	15.00	265.50	R-3


OUTLET PIPE
2D
6D
D
D
CONCRETE WEIR
SEE NOTE
3"
EXISTING GROUND
3' MIN
RIPRAP (SEE TABLE
FOR CLASS) OVER 6"
BEDDING OF 2" FILTER
STONE (TYP)
EXTEND RIPRAP TO
FROST LINE UNDER
WEIR. SEE NOTE.
PROJECT ENDS UPSLOPE
OUTLET PIPE
L
CONCRETE CURB WEIR
SEE NOTE

NOTE:
CONTRACTOR TO VERIFY AND CONTACT DESIGN ENGINEER WHEN IN-SITU CONDITIONS DIFFER FROM PLAN TO MAKE SURE INTENT OF DESIGN IS MET

SECTION

PLAN

RIP RAP CLASS	DEPTH
R-3	12"
R-4	21"
R-5	30"
R-6	39"

Level Spreader

NOT TO SCALE

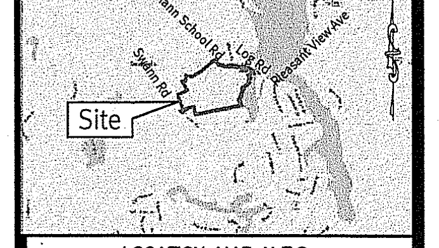
NOTE:
CONCRETE WEIR MAY BE:
- MONOLITHIC, CAST IN PLACE CONCRETE WITH INVERT BELOW THE FROST LINE (MINIMAL MAINTENANCE)
- SERIES OF PRECAST CONCRETE CURB SECTIONS, NO END CHAMFERS (FREQUENT MAINTENANCE TO KEEP WEIR LEVEL) – MUST INCLUDE GRAVEL BASE DOWN TO FROST DEPTH
- TIMBER NOT PERMITTED

DiPrete Engineering

Two Stafford Court Cranston, RI 02920
tel 401-943-1000 fax 401-464-6006 www.diprete-eng.com

Boston • Providence • Newport

AUDIE D. OSGOOD
No. 9015
REGISTERED PROFESSIONAL ENGINEER CIVIL
10/08/2020


Mann School Rd
Log Rd
Pleasant View Ave
Swann Rd
Site

LOCATION MAP N.T.S.

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Drawn By: S.R.
Design By: C.D./P.A.A.

Pond Complex C Details

Sand Trace
Assessor's Plat 46 Lot 10, Zone R-20M, Area: 54.95 ±Acres
Smithfield, Rhode Island

Applicant
Sand Trace LLC
10B Appian Way, Smithfield, Rhode Island 02917
tel 401-231-4700 fax 401-232-3203

DE Job No: 0214-017

z:\demain\projects\0214-017 the village on stillwater\autocad drawings\0214-017-plan.dwg Plotted: 10/16/2020

SEDIMENT TRAP DIMENSIONS	TRAP 1A	TRAP 1B	TRAP 1C	TRAP 1D	TRAP 1E	TRAP 2A	TRAP 2B	TRAP 3A	TRAP 3B
TRIBUTARY DRAINAGE AREA (AC)	4.17	4.03	4.73	2.98	2.18	1.31	2.46	3.91	3.48
WET STORAGE DEPTH (Dw)(FT)	0.5	2.5	2.0	1.5	2.0	1.0	2.5	1.5	1.5
DRY STORAGE DEPTH (Dd) (FT)	0.5	0.5	1.0	1.0	1.0	1.0	1.5	1.0	1.0
TOTAL DEPTH (D)(FT)	1.0	3.0	3.0	2.5	3.0	2.0	4.0	2.5	2.5
BOTTOM OF TRAP AREA (Ab)(SF)	18,619	3,385	5,122	4,609	2,392	1,747	875	5.865	4,230
WETTED SURFACE AREA(Aw)(SF)	19,444	5,615	6,971	5,946	3,794	2,850	2,349	7,484	5,676
SURFACE AREA AT OUTLET (Ad)(SF)	20,284	6,103	8,011	6,907	4,580	3,701	3,421	8,633	6,665
MAX TRIBUTARY AREA	5.00	4.03	5.00	3.75	2.75	1.50	2.75	4.75	3.95

GENERAL NOTES:

1. THE TEMPORARY SEDIMENT TRAP 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.

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

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.

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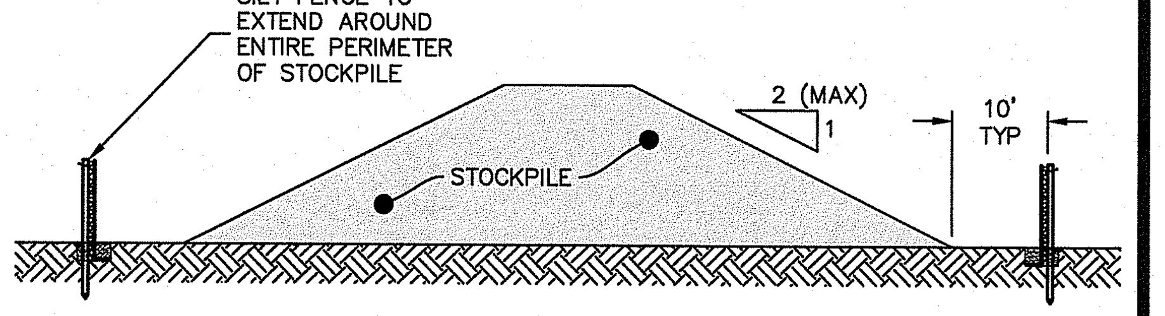

SILT FENCE TO EXTEND AROUND ENTIRE PERIMETER OF STOCKPILE
STOCKPILE
2 (MAX)
1
10' TYP

NOTES:

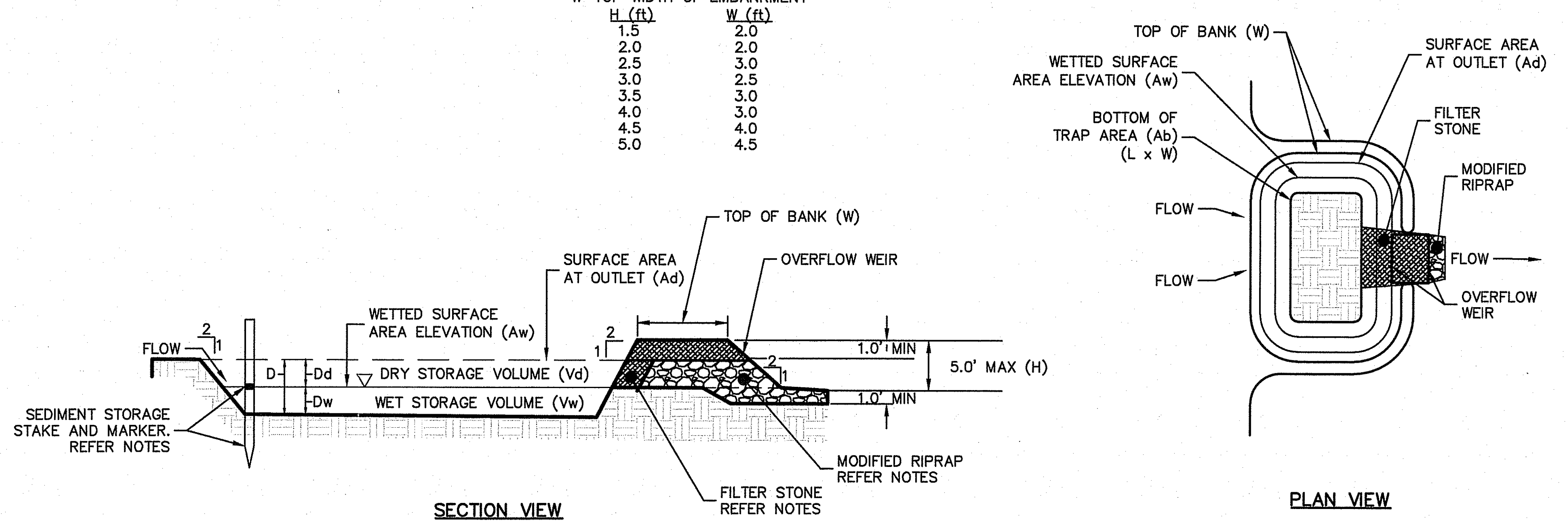
1. ALL STOCKPILES MUST BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH SECTION 3 "STOCKPILE AND STAGING AREA MANAGEMENT" OF THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HAND BOOK (CURRENT EDITION).
2. DIVERT ALL STORMWATER AWAY FROM STOCKPILES.
3. SOIL STOCKPILES THAT ARE NOT TO BE USED WITHIN 30 DAYS MUST BE SEEDED AND MULCHED IMMEDIATELY AFTER FORMATION OF THE STOCKPILE WITH SEED MIX COMPATIBLE WITH THE SOIL TYPE.
4. STOCKPILE AND SILT FENCE MUST BE INSPECTED AT LEAST ONCE PER WEEK AND AFTER RAIN EVENTS IN EXCESS OF ½" OF RAINFALL. REPAIR/ REPLACE SILT FENCE (AND STOCKPILE COVERS WHERE APPLICABLE) AS NEEDED TO KEEP THEM FUNCTIONING ADEQUATELY.
5. SEDIMENT TRAPPED BY SILT FENCES MUST BE REMOVED AND PROPERLY DISPOSED OF WHENEVER SIGNIFICANT ACCUMULATION OCCURS.

Stockpile Protection

NOT TO SCALE

TOP WIDTH VS HEIGHT
H=HEIGHT OF EMBANKMENT
W=TOP WIDTH OF EMBANKMENT

H (ft)	W (ft)
1.5	2.0
2.0	2.0
2.5	3.0
3.0	2.5
3.5	3.0
4.0	3.0
4.5	4.0
5.0	4.5


TOP OF BANK (W)
SURFACE AREA AT OUTLET (Ad)
OVERFLOW WEIR
WETTED SURFACE AREA ELEVATION (Aw)
FLOW
2
1
D
Dd
Dw
DRY STORAGE VOLUME (Vd)
WET STORAGE VOLUME (Vw)
1.0' MIN
5.0' MAX (H)
1.0' MIN
SEDIMENT STORAGE STAKE AND MARKER. REFER NOTES
MODIFIED RIPRAP REFER NOTES
FILTER STONE REFER NOTES
SECTION VIEW
TOP OF BANK (W)
WETTED SURFACE AREA ELEVATION (Aw)
BOTTOM OF TRAP AREA (Ab) (L x W)
SURFACE AREA AT OUTLET (Ad)
FILTER STONE
MODIFIED RIPRAP
FLOW
FLOW
FLOW
OVERFLOW WEIR
PLAN VIEW

Temporary Sediment Trap Detail

NOT TO SCALE

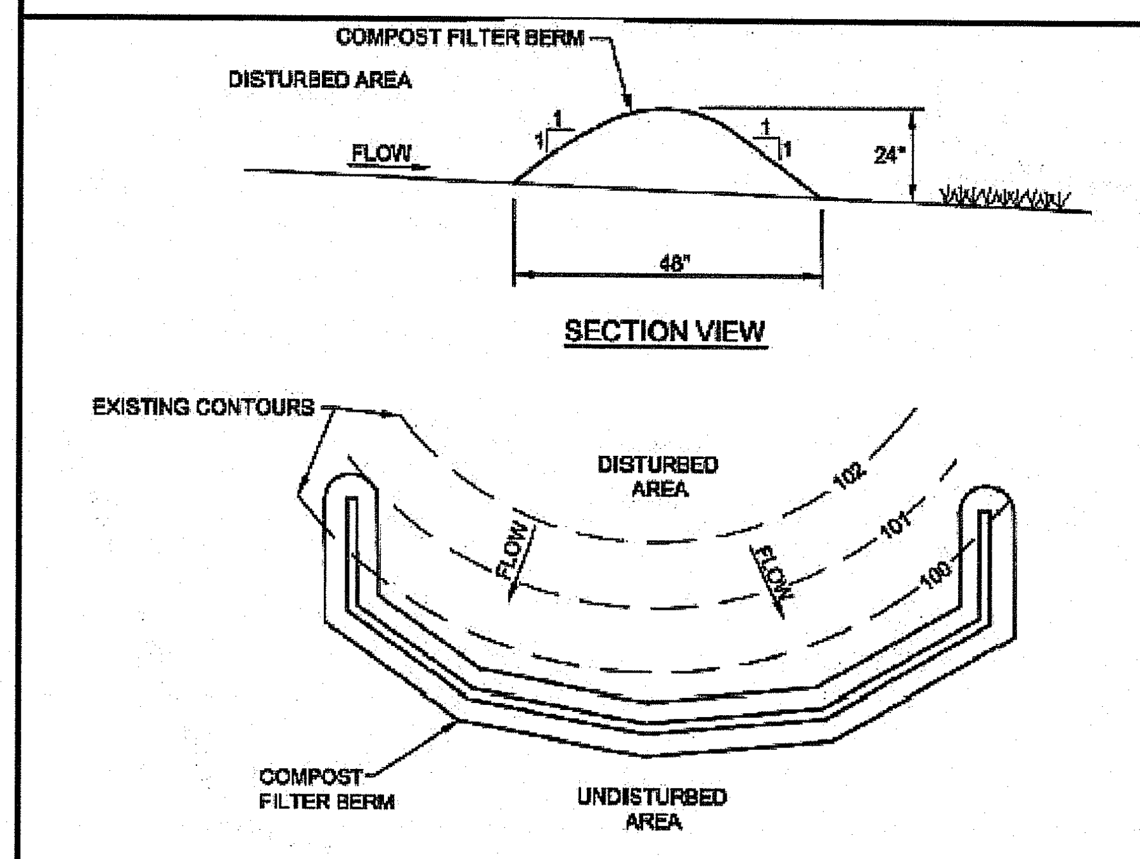

COMPOST FILTER BERM
DISTURBED AREA
FLOW
1
1
24"
48"
SECTION VIEW
EXISTING CONTOURS
DISTURBED AREA
FLOW
FLOW
102
101
100
COMPOST FILTER BERM
UNDISTURBED AREA
PLAN VIEW

TABLE 4.2
Compost Standards

Organic Matter Content	80% - 100% (dry weight basis)
Organic Portion	Fibrous and elongated
pH	5.5 - 8.0
Moisture Content	35% - 55%
Particle Size	98% pass through 1" screen
Soluble Salt Concentration	5.0 dS/m (mmhos/cm) Maximum

Slope %	Maximum slope length above compost filter sock in ft (m) Diameter of compost filter sock required 8-inch (200-mm)	12-inch (300-mm)	18-inch (450-mm)	24-inch (600-mm)
2 (or less)	300 (90)	375 (110)	500 (150)	650 (200)
5	200 (60)	250 (75)	275 (85)	325 (100)
10	100 (30)	125 (35)	150 (45)	200 (60)
15	70 (20)	85 (25)	100 (30)	160 (50)
20	50 (15)	65 (20)	70 (20)	130 (40)
25	40 (12)	50 (15)	55 (16)	100 (30)
30	30 (9)	40 (12)	45 (13)	65 (20)
35	30 (9)	40 (12)	45 (13)	55 (18)
40	30 (9)	40 (12)	45 (13)	50 (15)
45	20 (6)	25 (8)	30 (9)	40 (12)
50	20 (6)	25 (8)	30 (9)	35 (10)

NOTES:

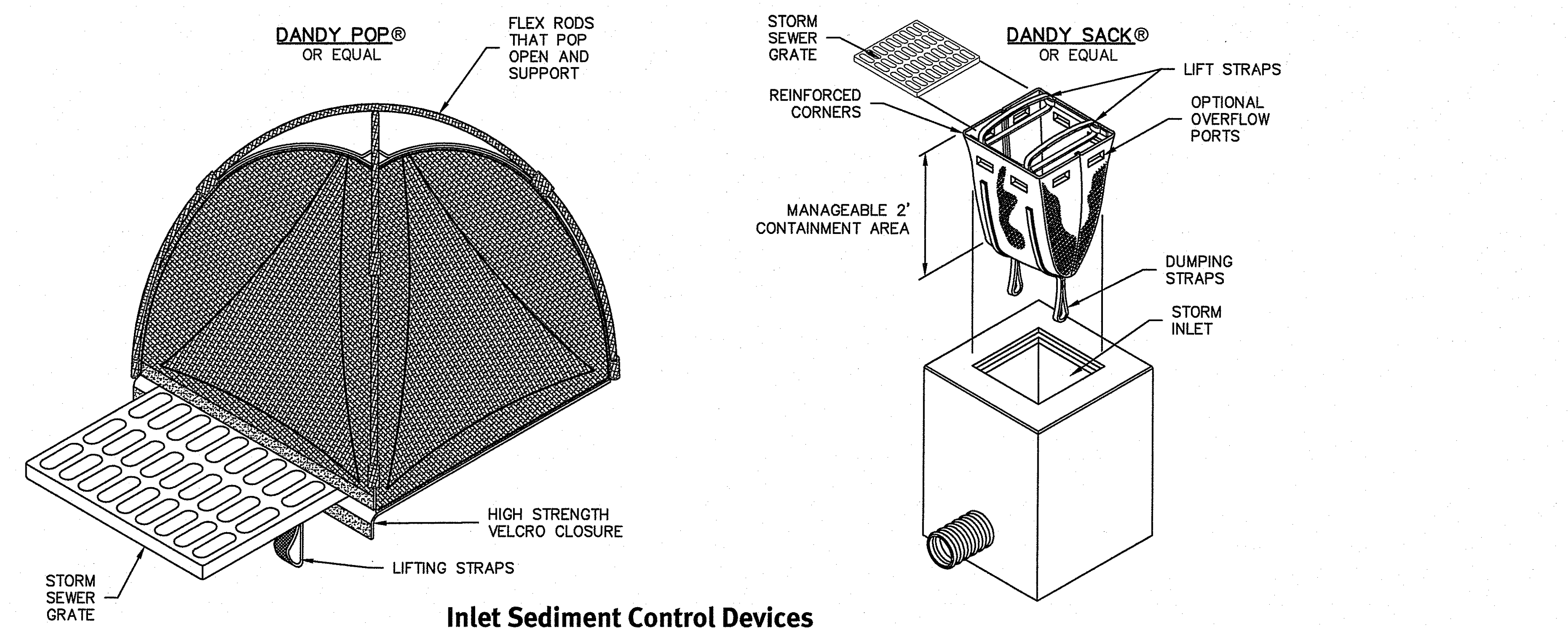
1. WOODS CHIPS CAN BE USED TO CONSTRUCT THE FILTER BERM.
2. FILTER BERMS SHALL BE USED ON SIGNIFICANT FLOW PATHS AND PLACED PARALLEL TO THE SLOPE OF THE FLOW BASED ON THE COMPOST FILTER SOCK/FIBER ROLL REQUIREMENTS IN THE RI SOIL EROSION AND SEDIMENT CONTROL HAND BOOK (2014).

SLOPE STEEPNESS	MAXIMUM LENGTH (FT)
2:1	25
3:1	50
4:1	75
5:1 OR FLATTER	100

2. TALL GRASSES SHALL BE CUT PRIOR TO INSTALLATION TO MINIMIZE POTENTIAL FOR UNDERCUTTING. BERM SHALL BE NETTED OR OTHERWISE ANCHORED AFTER INSTALLATION.
3. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH ⅓ THE ABOVE GROUND HEIGHT OF THE BERM.
4. ANY SECTION COMPOST FILTER BERM WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED. CONCENTRATED FLOWS SHALL NOT BE DIRECTED TOWARDS ANY COMPOST FILTER BERM.
5. CONTRACTOR SHALL FIELD ADJUST FILTER BERMS AS NECESSARY. CERTAIN AREAS MAY BE OMITTED AS NECESSARY OR ADDITIONAL MEASURES ADDED BASED ON FIELD CONDITIONS.
6. FILTER BERMS MAY BE SUBSTITUTED WITH COMPOST FILTER SOCKS PER THE RI SOIL EROSION AND SEDIMENT CONTROL HAND BOOK OF SILT FENCE.
7. CONTRACTOR TO MODIFY BERM CONDITIONS AS SITE GRADING IS REVISED. BERMS MUST BE IN PLACE WHEN A RAINFALL GREATER THAN 0.25" IS EXPECTED.
8. WATTLES AND FIBER ROLLS AT THE TOE OF SLOPES GREATER THAN 5:1 MUST BE AT LEAST 20 INCHES IN DIAMETER. AN EQUIVALENT INSTALLATION, SUCH AS STACKED SMALLER DIAMETER ROLLS, CAN BE USED TO ACHIEVE A SIMILAR LEVEL OF PROTECTION.

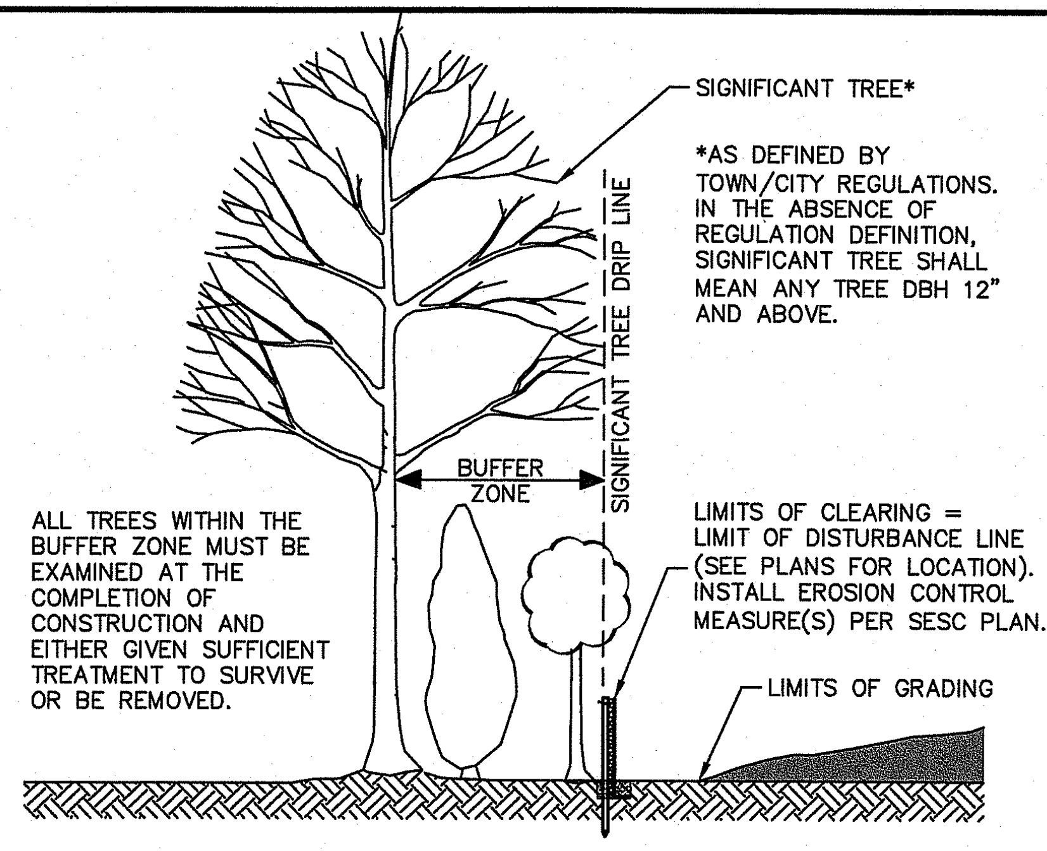
Filter Berm Details

NOT TO SCALE


DANDY POP®
OR EQUAL
FLEX RODS THAT POP OPEN AND SUPPORT
HIGH STRENGTH VELCRO CLOSURE
LIFTING STRAPS
STORM SEWER GRATE
STORM SEWER GRATE
DANDY SACK®
OR EQUAL
LIFT STRAPS
REINFORCED CORNERS
OPTIONAL OVERFLOW PORTS
MANAGEABLE 2' CONTAINMENT AREA
DUMPING STRAPS
STORM INLET

Inlet Sediment Control Devices

NOT TO SCALE


SIGNIFICANT TREE*
SIGNIFICANT TREE DRIP LINE
BUFFER ZONE
LIMITS OF GRADING

*AS DEFINED BY TOWN/CITY REGULATIONS. IN THE ABSENCE OF REGULATION DEFINITION, SIGNIFICANT TREE SHALL MEAN ANY TREE DBH 12" AND ABOVE.

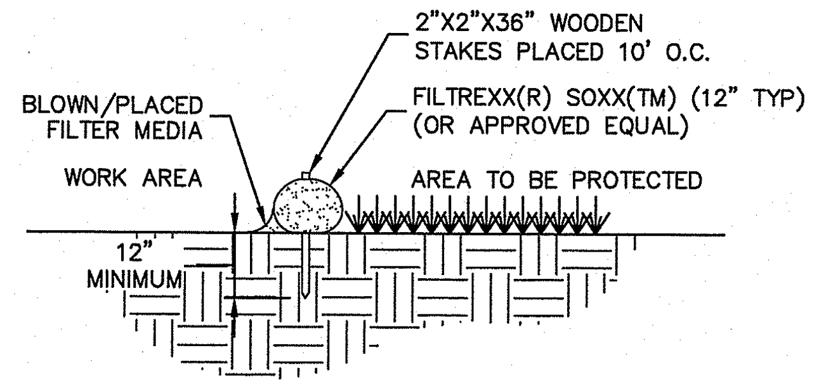
ALL TREES WITHIN THE BUFFER ZONE MUST BE EXAMINED AT THE COMPLETION OF CONSTRUCTION AND EITHER GIVEN SUFFICIENT TREATMENT TO SURVIVE OR BE REMOVED.

LIMITS OF CLEARING = LIMIT OF DISTURBANCE LINE (SEE PLANS FOR LOCATION). INSTALL EROSION CONTROL MEASURE(S) PER SESC PLAN.

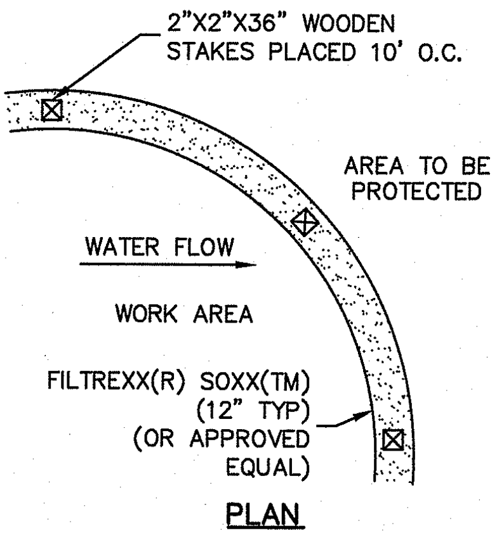
NOTE: LIMIT OF DISTURBANCE (LOD) MUST BE STAKED OUT PRIOR TO CONSTRUCTION. IF ANY SIGNIFICANT TREE DRIP LINE IS ENCROACHING PAST THE LOD, CONTRACTOR MUST CONTACT SITE ENGINEER PRIOR TO CONSTRUCTION.

Limit of Disturbance at Vegetation

NOT TO SCALE


2"X2"X36" WOODEN STAKES PLACED 10' O.C.
FILTREXX(R) SOXX(TM) (12" TYP) (OR APPROVED EQUAL)
BLOWN/PLACED FILTER MEDIA
WORK AREA
AREA TO BE PROTECTED
12" MINIMUM

SECTION


2"X2"X36" WOODEN STAKES PLACED 10' O.C.
AREA TO BE PROTECTED
WATER FLOW
WORK AREA
FILTREXX(R) SOXX(TM) (12" TYP) (OR APPROVED EQUAL)

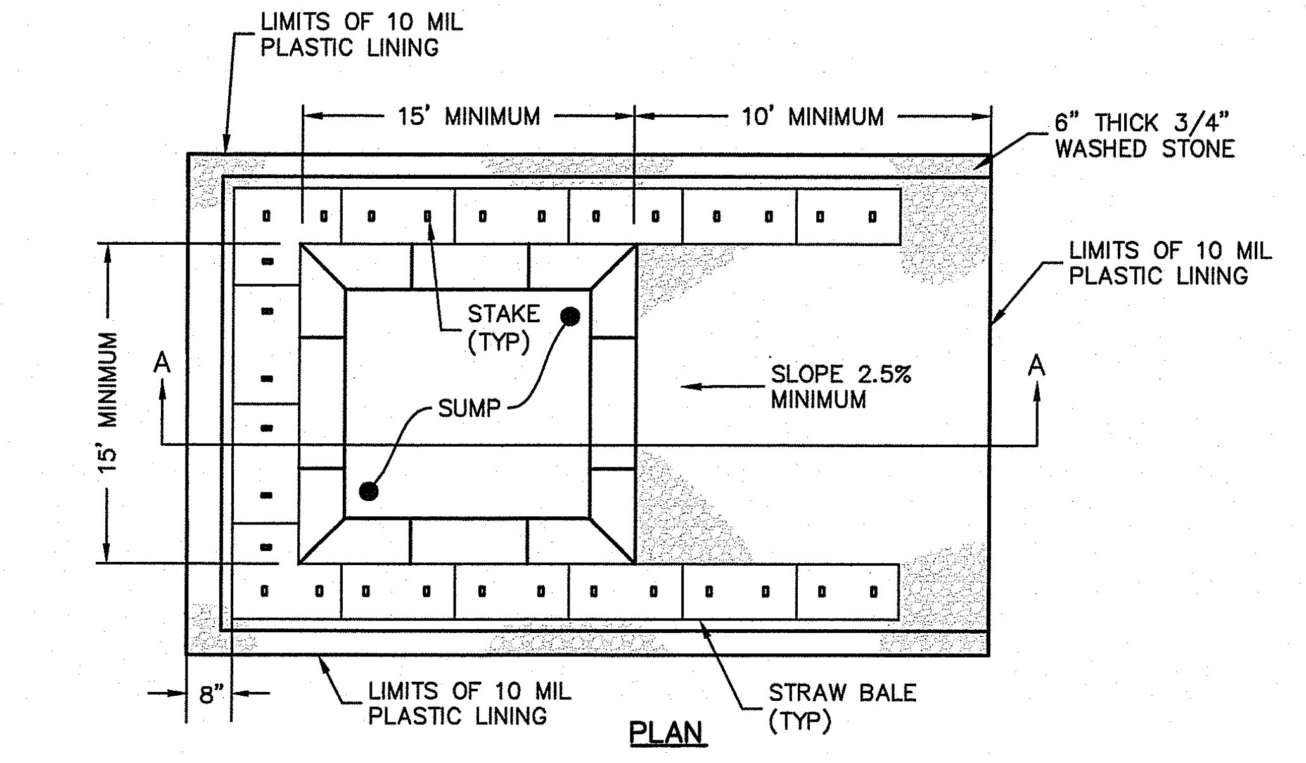
PLAN

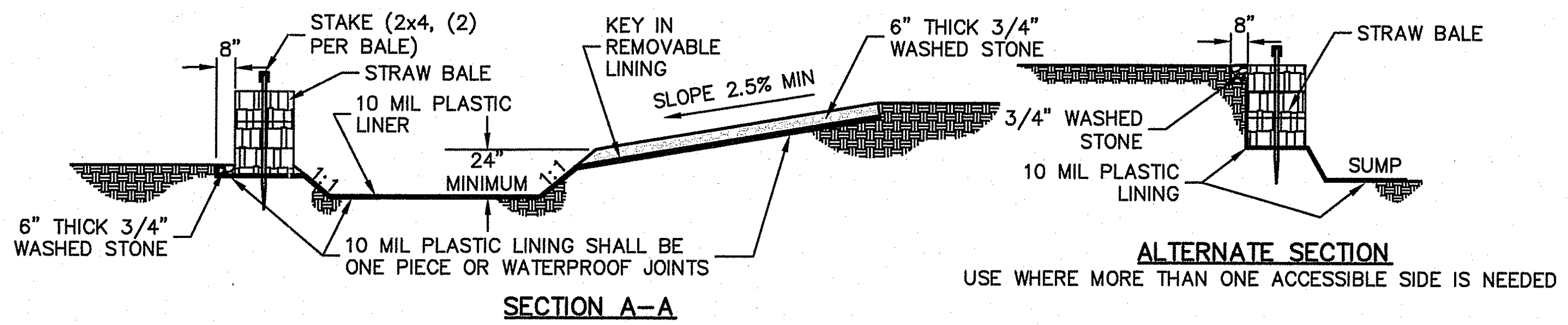
NOTES:

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.

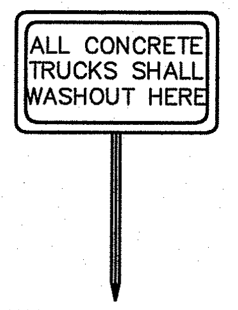
Filtrexx Sediment Control (or Approved Equal)

NOT TO SCALE


LIMITS OF 10 MIL PLASTIC LINING
15' MINIMUM
10' MINIMUM
6" THICK 3/4" WASHED STONE
LIMITS OF 10 MIL PLASTIC LINING
STAKE (TYP)
SUMP
SLOPE 2.5% MINIMUM
A
A
15' MINIMUM
8"
LIMITS OF 10 MIL PLASTIC LINING
STRAW BALE (TYP)
PLAN


8"
STAKE (2x4, (2) PER BALE)
STRAW BALE
10 MIL PLASTIC LINER
KEY IN REMOVABLE LINING
SLOPE 2.5% MIN
6" THICK 3/4" WASHED STONE
24" MINIMUM
1:1
1:1
6" THICK 3/4" WASHED STONE
10 MIL PLASTIC LINING SHALL BE ONE PIECE OR WATERPROOF JOINTS
SECTION A–A
8"
STRAW BALE
3/4" WASHED STONE
10 MIL PLASTIC LINING
SUMP
ALTERNATE SECTION

USE WHERE MORE THAN ONE ACCESSIBLE SIDE IS NEEDED


ALL CONCRETE TRUCKS SHALL WASHOUT HERE

WASHOUT SIGN

NOTES:

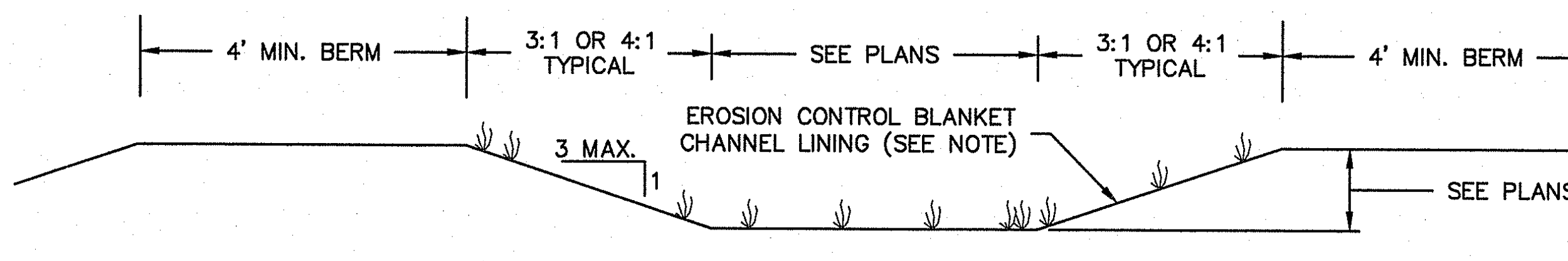
1. PIT IS SPECIFICALLY DESIGNATED, DIKED AND IMPERVIOUS CONTAINMENT TO PREVENT CONTACT BETWEEN CONCRETE WASH AND STORMWATER.
2. WASH WATER SHALL NOT BE ALLOWED TO FLOW TO SURFACE WATER.
3. FACILITY MUST HOLD SUFFICIENT VOLUME TO CONTAIN CONCRETE WASTE WITH A MINIMUM FREEBOARD OF 12."
4. FACILITY SHALL 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

NOTES:

1. TEMPORARY EROSION CONTROL BLANKETS TO HANDLE MINIMUM VELOCITY OF 5 FPS. CONTRACTOR TO PROVIDE SHOP DRAWINGS TO DESIGN ENGINEER.
2. CONTRACTOR SHALL FIELD ADJUST TEMPORARY SWALES AS NECESSARY, AND ENSURE PROPER FLOW TO THE APPROPRIATE SEDIMENTATION PRACTICE.
3. SWALES TO BE ADJUSTED TO MAXIMIZE TRIBUTARY AREA TO EACH SEDIMENT TRAP PER DETAIL ABOVE.


4' MIN. BERM
3:1 OR 4:1 TYPICAL
SEE PLANS
3:1 OR 4:1 TYPICAL
4' MIN. BERM
3 MAX.
1
EROSION CONTROL BLANKET CHANNEL LINING (SEE NOTE)
SEE PLANS

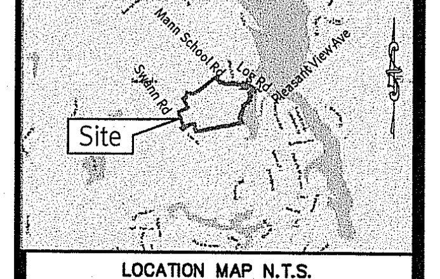
Temporary Grass Swale Cross Section

NOT TO SCALE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED DEC 1 1 2020 FILE # 20-0108
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Martin D. Wencek

DiPrete Engineering
Two Stafford Court Cranston, RI 02920
tel 401-943-1000 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

AUDIE D. OSGOOD
No. 9815
10/08/2020
REGISTERED PROFESSIONAL ENGINEER CIVIL


Mann School Rd
Log Rd
Pleasant View Ave
Swann Rd
Site

LOCATION MAP N.T.S.

This plan set must not be used for construction purposes unless stamped 'Issued for Construction' and stamped by a registered Professional Engineer of DiPrete Engineering.

DiPrete Engineering only warrants plans on a DiPrete Engineering title block stamped by registered Professional Engineer of DiPrete Engineering. DiPrete Engineering does not warrant plans by any other party.

The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA conformance in the implementation of this plan and design.

Existing utilities shown on this plan are approximate only. DiPrete Engineering assumes no responsibility for damages incurred due to locations of existing utilities. See 'Utility Note' on sheet 3.

No.	Date	Description	By:
1	10-08-2020	RIDEM Submission Response to Comments	S.R.
0	05-01-2020	RIDEM Submission	S.R.

Drawn By: S.R. Design By: C.D./P.A.A.

SESC Detail Sheet

Sand Trace

Assessor's Plat 46 Lot 10, Zone R-20M, Area: 54.95 ±Acres
Smithfield, Rhode Island

Applicant
Sand Trace LLC
10B Appian Way, Smithfield, Rhode Island 02917
tel 401-231-4700 fax 401-232-3203

DE Job No: 0214-017

SHEET 20 OF 23

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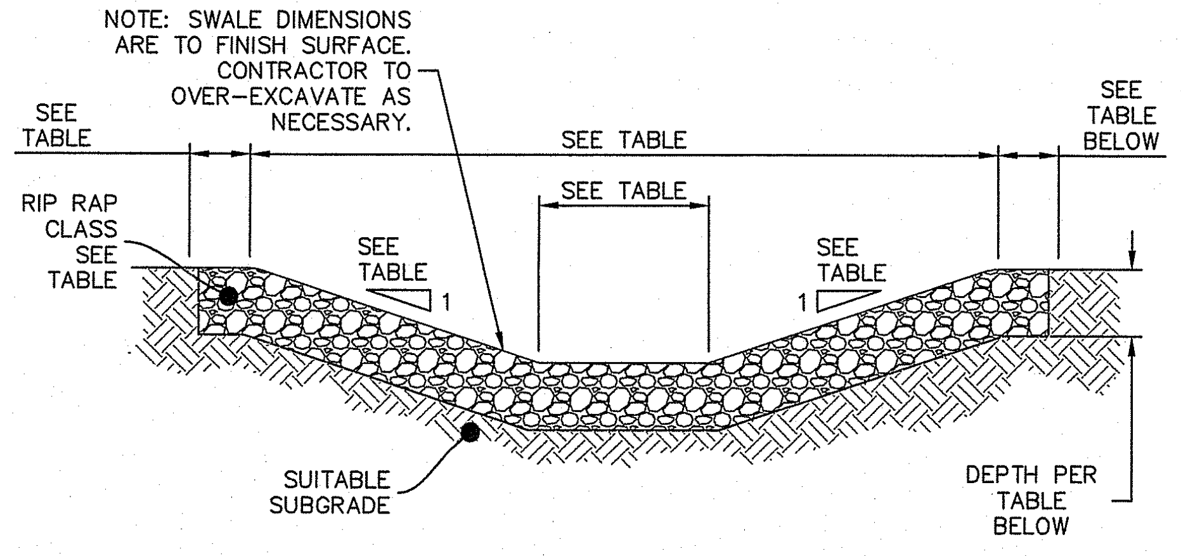
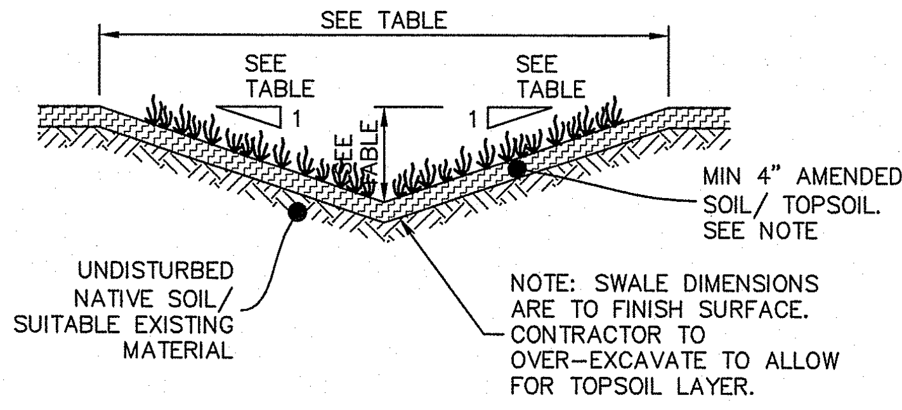

NOTE: SWALE DIMENSIONS ARE TO FINISH SURFACE. CONTRACTOR TO OVER-EXCAVATE AS NECESSARY.
SEE TABLE
SEE TABLE
SEE TABLE BELOW
SEE TABLE
RIP RAP CLASS SEE TABLE
SEE TABLE
1
SEE TABLE
1
SUITABLE SUBGRADE
DEPTH PER TABLE BELOW

RIP RAP CLASS	DEPTH
R-3	12"
R-4	21"
R-5	30"
R-6	39"

Riprap Swale

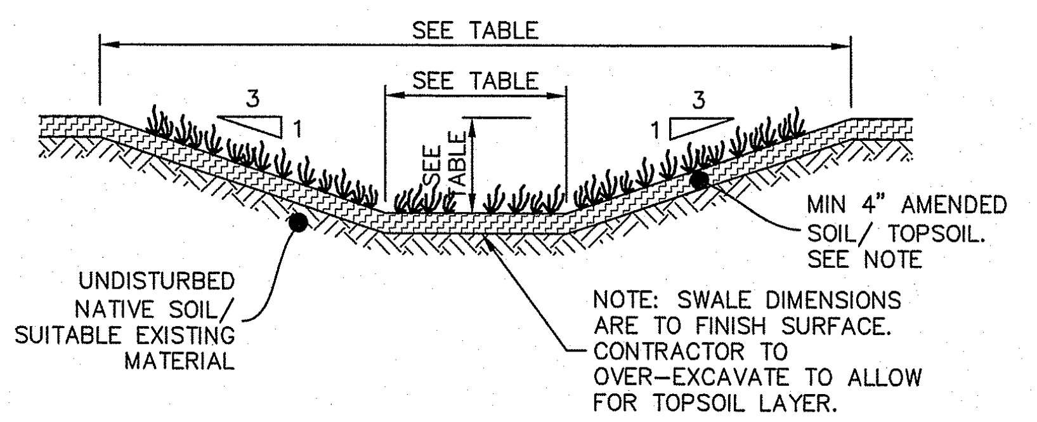
NOT TO SCALE


SEE TABLE
SEE TABLE
SEE TABLE
1
1
SEE TABLE
MIN 4" AMENDED SOIL/ TOPSOIL. SEE NOTE
UNDISTURBED NATIVE SOIL/ SUITABLE EXISTING MATERIAL
NOTE: SWALE DIMENSIONS ARE TO FINISH SURFACE. CONTRACTOR TO OVER-EXCAVATE TO ALLOW FOR TOPSOIL LAYER.

Grass Swale Cross Section

NOT TO SCALE

OCT 1 6 2020


SEE TABLE
SEE TABLE
3
1
1
3
SEE TABLE
MIN 4" AMENDED SOIL/ TOPSOIL. SEE NOTE
UNDISTURBED NATIVE SOIL/ SUITABLE EXISTING MATERIAL
NOTE: SWALE DIMENSIONS ARE TO FINISH SURFACE. CONTRACTOR TO OVER-EXCAVATE TO ALLOW FOR TOPSOIL LAYER.

Grass Swale (Wide Bottom) Cross Section

SWALE DESIGN	OS.1	OS.2	B	W.1	W.2	W.3	C.1	C.2
DEPTH (D) (FT)	2	2	2	2	2	1	2	2
SIDE SLOPE (S) (X:1)	3	3	3	3	3	2	3	2
BOTTOM WIDTH (BW) (FT)	0	0	0	0	0	4	0	4
TOP WIDTH (TW) (FT)	12	12	12	12	12	8	12	12
LENGTH (FT)	70	630	225	308	442	370	770	664
AVERAGE SLOPE	0.005	0.022	0.032	0.032	0.007	0.136	0.066	0.074
MAXIMUM SLOPE	0.006	0.070	0.032	0.050	0.009	0.150	0.100	0.130
MATERIAL	VEGETATED	VEGETATED	VEGETATED	VEGETATED	VEGETATED	R-6	VEGETATED	R-6

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
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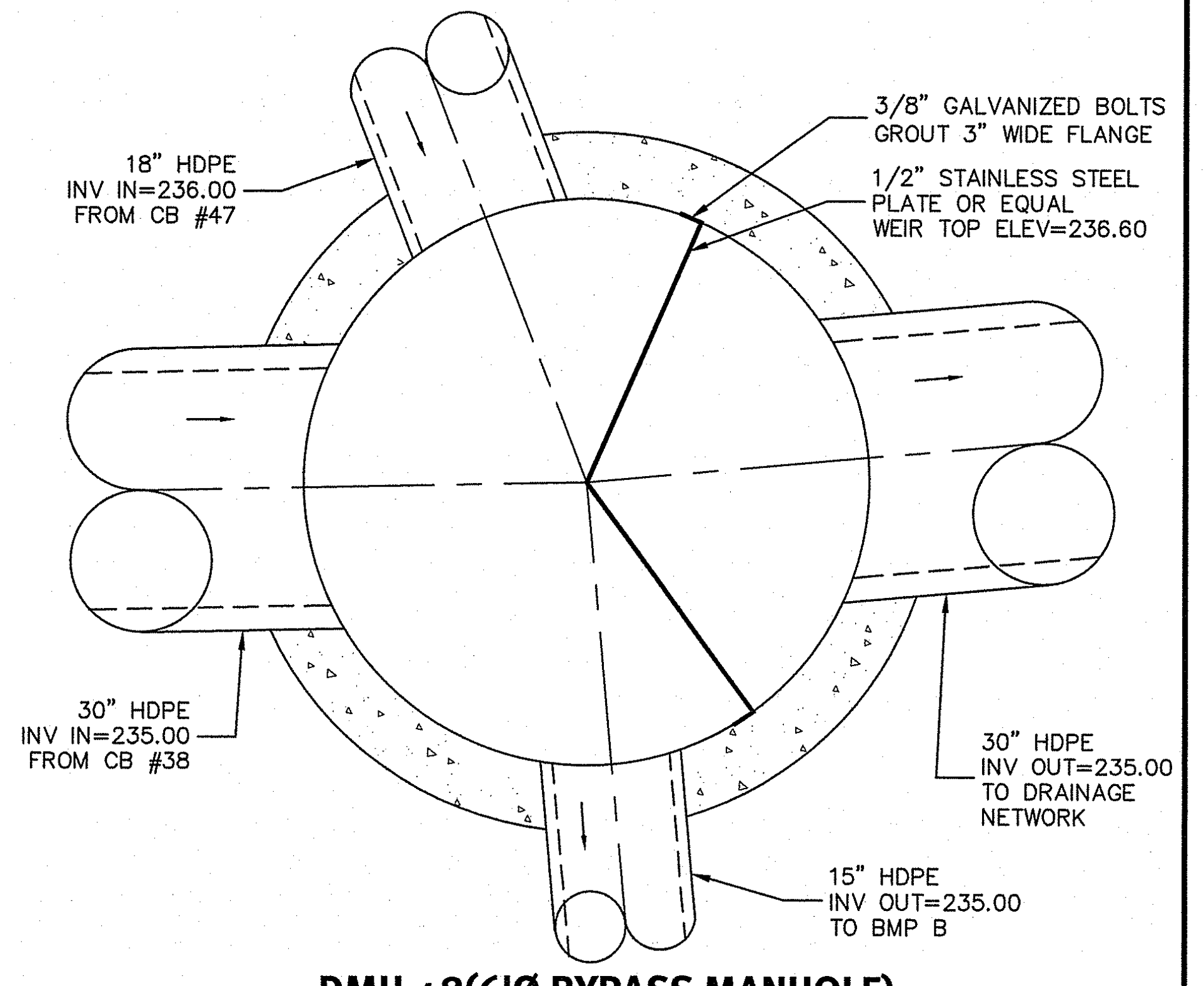
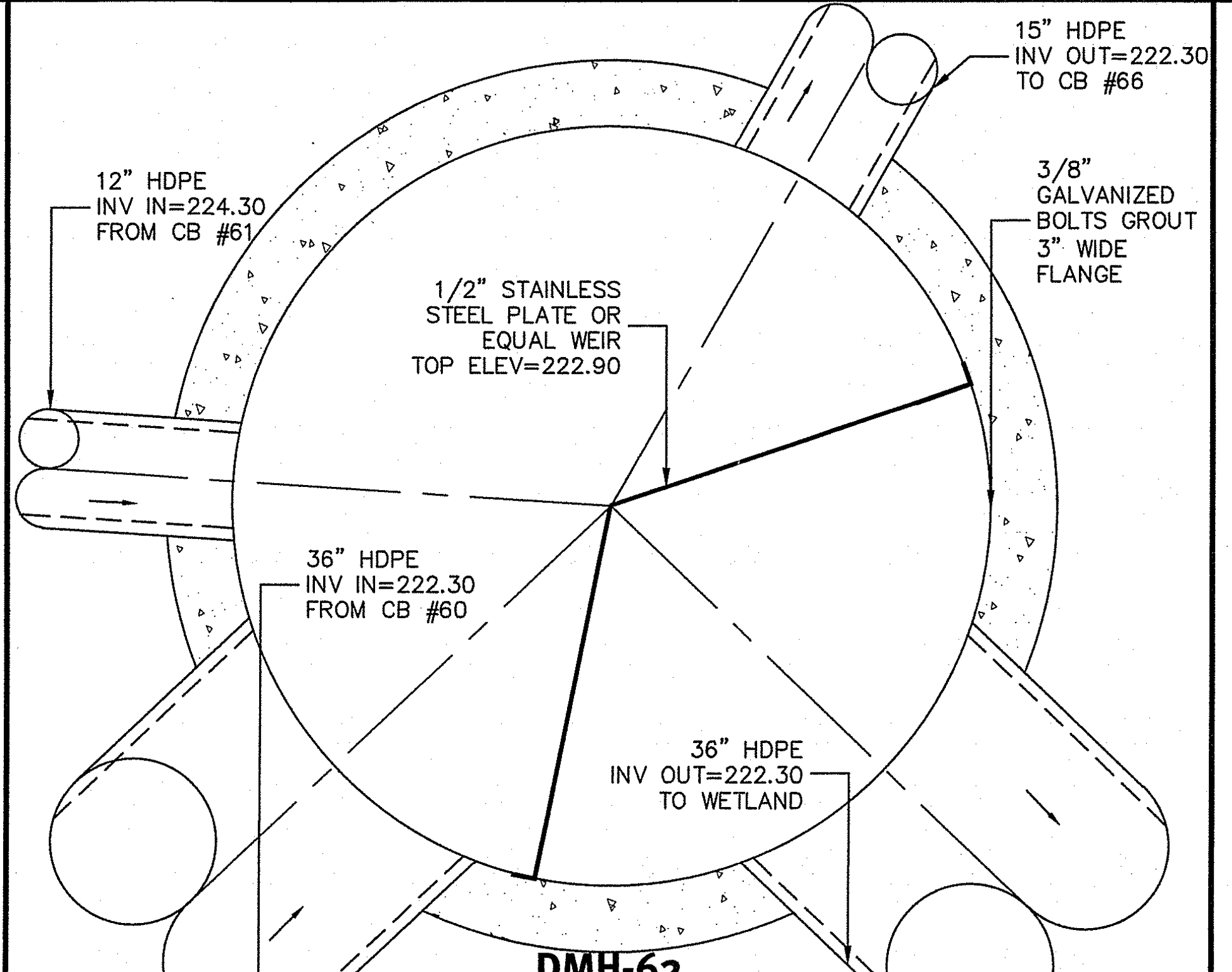
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Martin D. Wencek


18" HDPE INV IN=236.00 FROM CB #47
3/8" GALVANIZED BOLTS GROUT 3" WIDE FLANGE
1/2" STAINLESS STEEL PLATE OR EQUAL WEIR TOP ELEV=236.60
30" HDPE INV IN=235.00 FROM CB #38
30" HDPE INV OUT=235.00 TO DRAINAGE NETWORK
15" HDPE INV OUT=235.00 TO BMP B

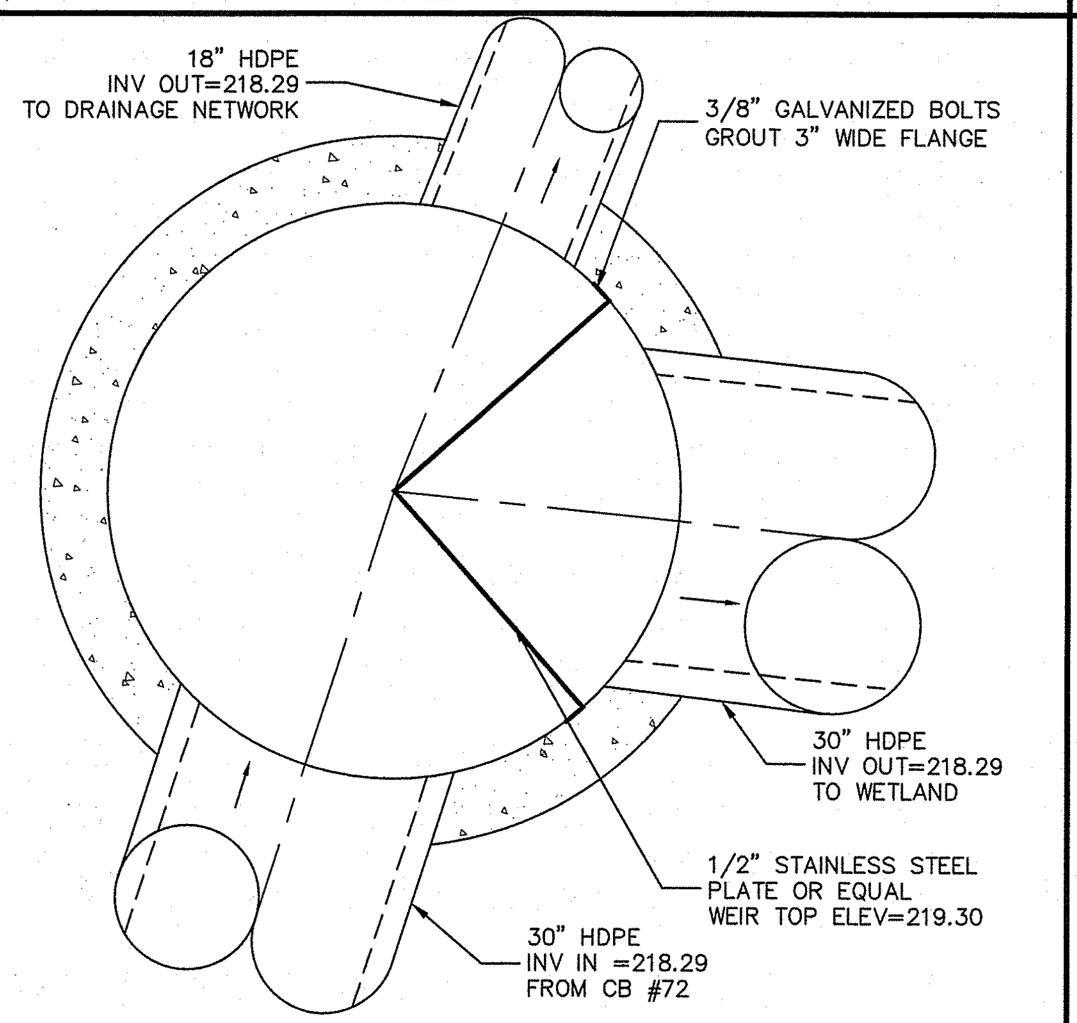
DMH-48(6'Ø BYPASS MANHOLE)

SCALE 1"=2'


15" HDPE INV OUT=222.30 TO CB #66
12" HDPE INV IN=224.30 FROM CB #61
3/8" GALVANIZED BOLTS GROUT 3" WIDE FLANGE
1/2" STAINLESS STEEL PLATE OR EQUAL WEIR TOP ELEV=222.90
36" HDPE INV IN=222.30 FROM CB #60
36" HDPE INV OUT=222.30 TO WETLAND

DMH-62 (8'Ø BYPASS MANHOLE)

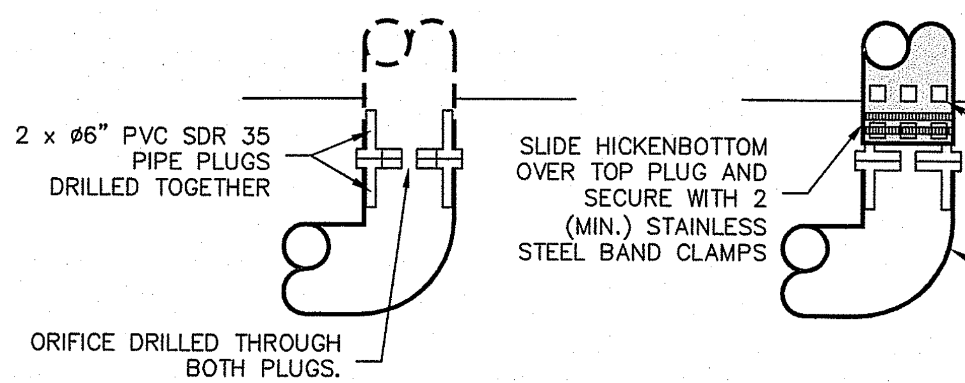
SCALE 1"=2'


18" HDPE INV OUT=218.29 TO DRAINAGE NETWORK
3/8" GALVANIZED BOLTS GROUT 3" WIDE FLANGE
30" HDPE INV OUT=218.29 TO WETLAND
1/2" STAINLESS STEEL PLATE OR EQUAL WEIR TOP ELEV=219.30
30" HDPE INV IN =218.29 FROM CB #72

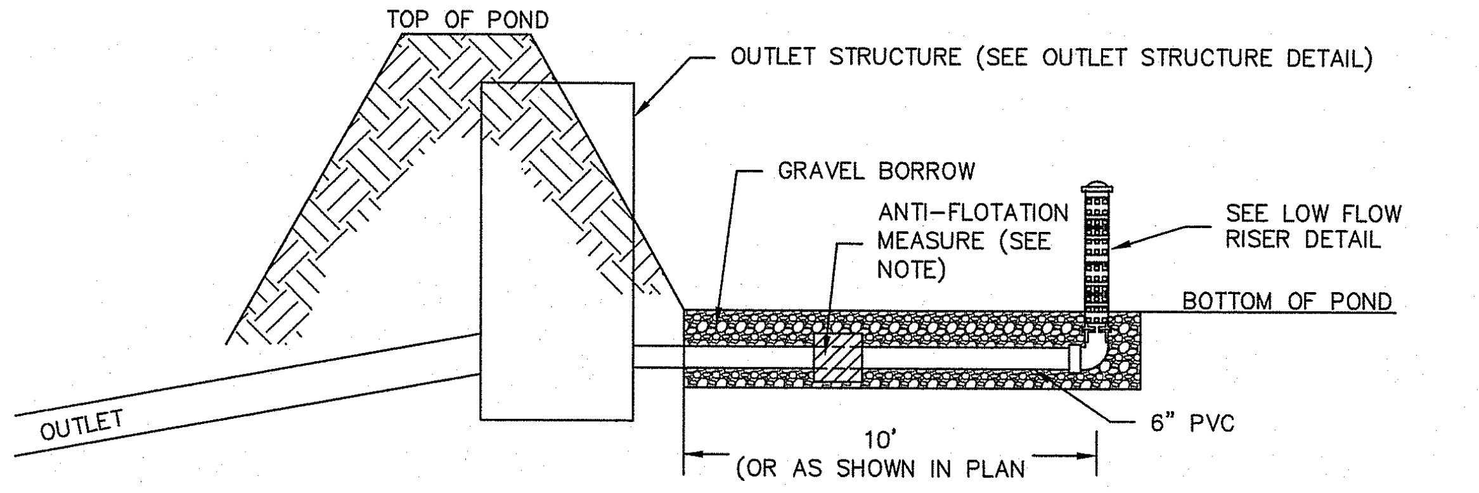
DMH-73(6'Ø BYPASS MANHOLE)

SCALE 1"=2'

INTERNAL ORIFICE SCHEDULE	
LOCATION	DIAMETER
POND C (OCS-27 TO DRAINAGE NETWORK)	3.00"
POND C (OCS-C7 TO WETLAND)	2.00"


2 x ø6" PVC SDR 35 PIPE PLUGS DRILLED TOGETHER
ORIFICE DRILLED THROUGH BOTH PLUGS. SEE TABLE FOR DIAMETER
SLIDE HICKENBOTTOM OVER TOP PLUG AND SECURE WITH 2 (MIN.) STAINLESS STEEL BAND CLAMPS
ALIGN OPEN SLOTS WITH BOTTOM OF POND
90° PVC ELBOW

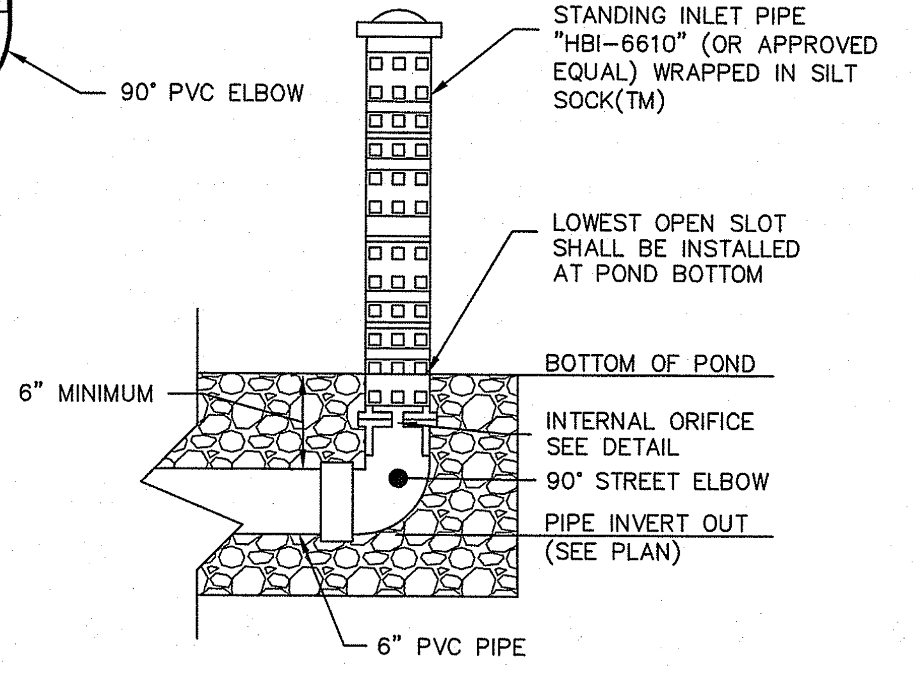
INTERNAL ORIFICE DETAIL


TOP OF POND
OUTLET STRUCTURE (SEE OUTLET STRUCTURE DETAIL)
GRAVEL BORROW
ANTI-FLOTATION MEASURE (SEE NOTE)
SEE LOW FLOW RISER DETAIL
BOTTOM OF POND
6" PVC
OUTLET
10' (OR AS SHOWN IN PLAN

NOTE: ANTI-FLOTATION TO BE CONCRETE WITH MINIMUM DIMENSIONS OF 13"Wx13"Hx45"L. (APPROXIMATELY 6x80LB BAGS OF CONCRETE)

Low Flow Outlet

NOT TO SCALE

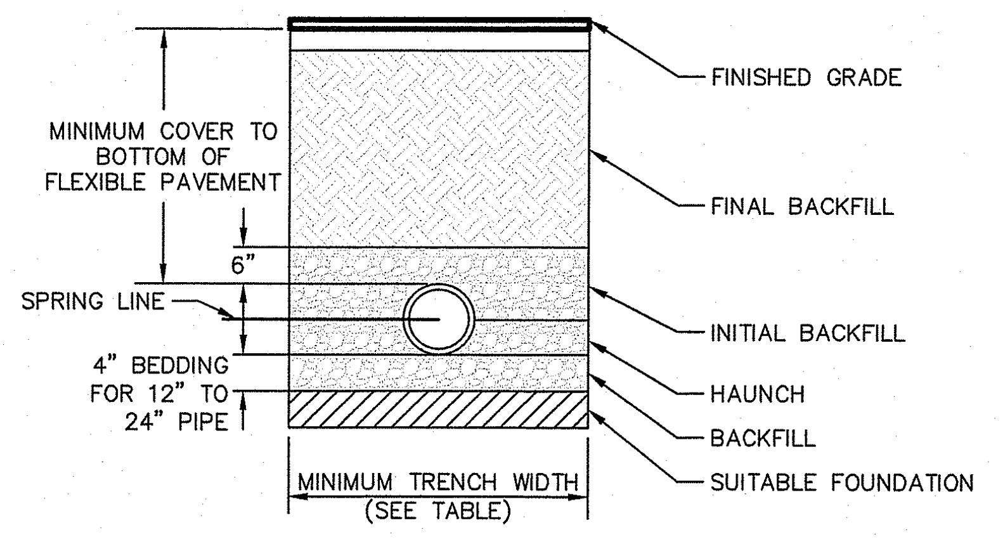

6" HICKENBOTTOM INC. STANDING INLET PIPE "HBI-6610" (OR APPROVED EQUAL) WRAPPED IN SILT SOCK(TM)
LOWEST OPEN SLOT SHALL BE INSTALLED AT POND BOTTOM
6" MINIMUM
BOTTOM OF POND
INTERNAL ORIFICE SEE DETAIL
90° STREET ELBOW
PIPE INVERT OUT (SEE PLAN)
6" PVC PIPE

LOW FLOW RISER DETAIL

INSTALLATION NOTES:

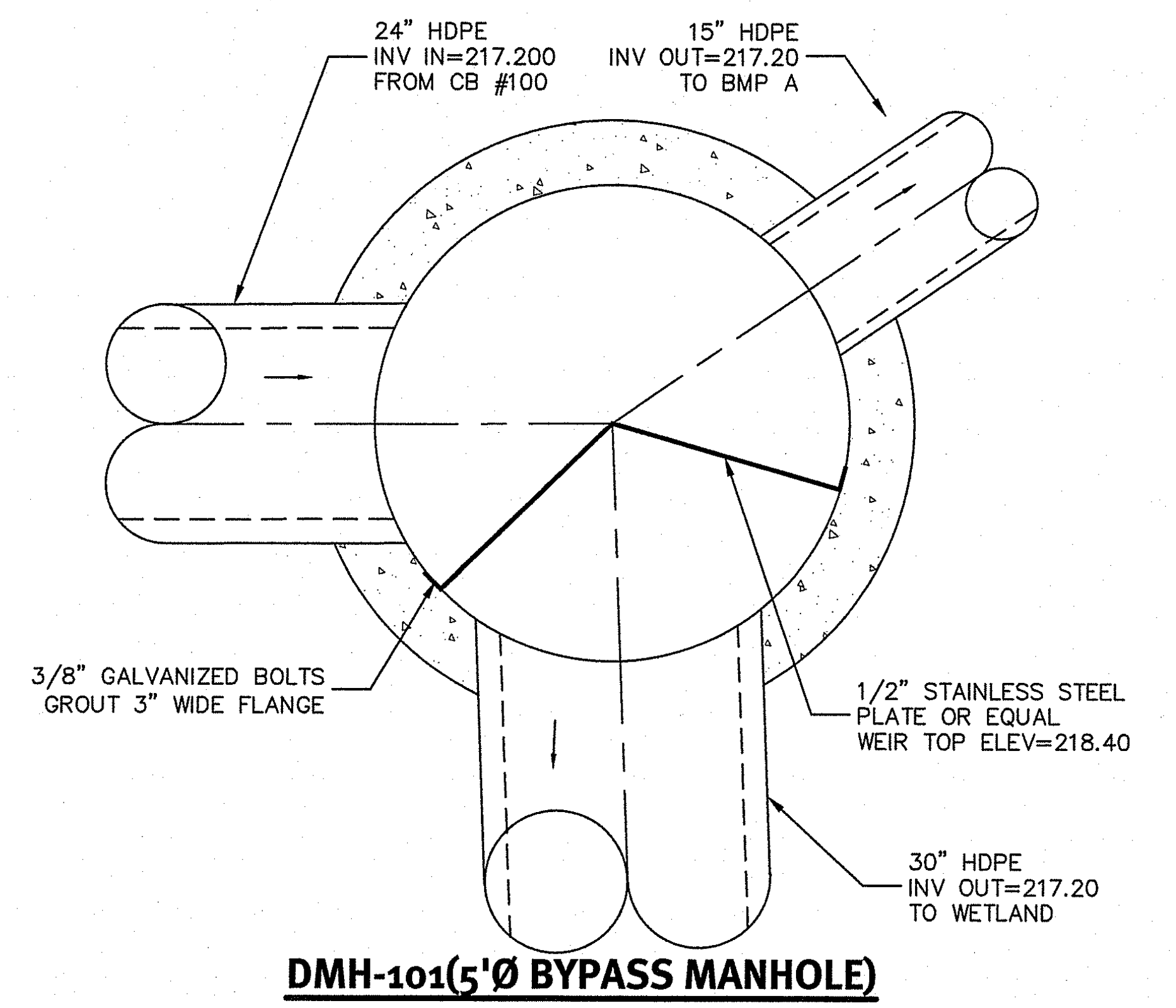
1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS, LATEST ADDITION.
2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
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"


MINIMUM COVER TO BOTTOM OF FLEXIBLE PAVEMENT
6"
SPRING LINE
4" BEDDING FOR 12" TO 24" PIPE
MINIMUM TRENCH WIDTH (SEE TABLE)
FINISHED GRADE
FINAL BACKFILL
INITIAL BACKFILL
HAUNCH
BACKFILL
SUITABLE FOUNDATION

HDPE Trench Detail

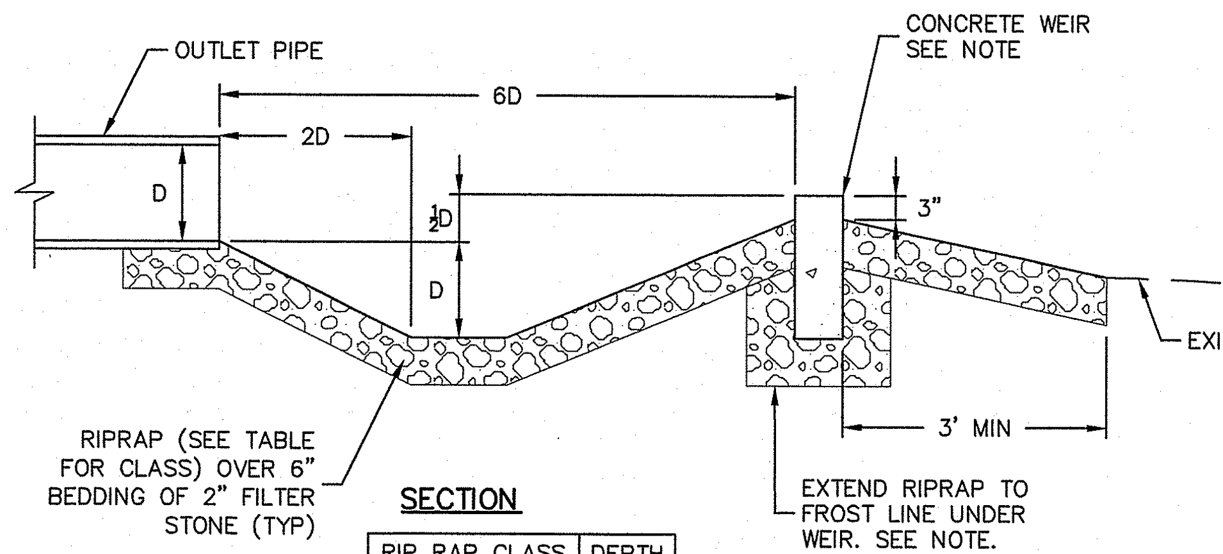
NOT TO SCALE


24" HDPE INV IN=217.200 FROM CB #100
15" HDPE INV OUT=217.20 TO BMP A
3/8" GALVANIZED BOLTS GROUT 3" WIDE FLANGE
1/2" STAINLESS STEEL PLATE OR EQUAL WEIR TOP ELEV=218.40
30" HDPE INV OUT=217.20 TO WETLAND

DMH-101(5'Ø BYPASS MANHOLE)

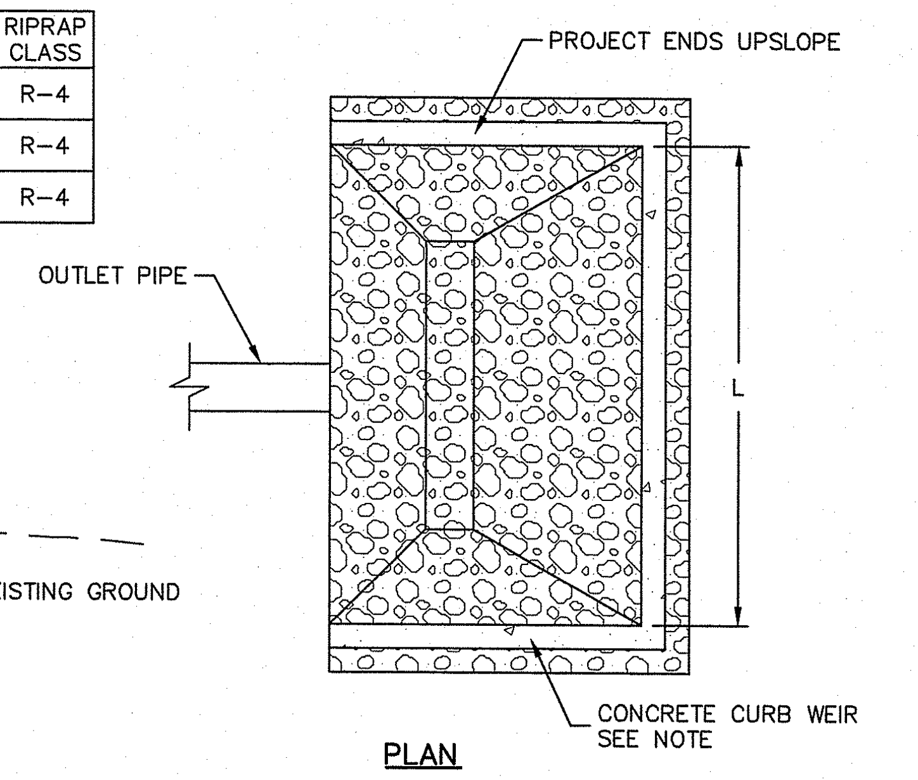
SCALE 1"=2'

LOCATION	PIPE INVERT	PIPE DIA (D)	WIDTH (6D)	LENGTH (L)	CONCRETE CURB WEIR ELEV	RIPRAP CLASS
LS-110	243.00	2.0	12.0	40.0	244.00	R-4
LS-114	243.50	2.0	12.0	40.0	244.50	R-4
LS-107	211.00	3.0	18.0	75.0	212.50	R-4


OUTLET PIPE
6D
2D
D
½D
D
CONCRETE WEIR SEE NOTE
3"
EXISTING GROUND
3' MIN
RIPRAP (SEE TABLE FOR CLASS) OVER 6" BEDDING OF 2" FILTER STONE (TYP)
EXTEND RIPRAP TO FROST LINE UNDER WEIR. SEE NOTE.

SECTION

RIP RAP CLASS	DEPTH
R-3	12"
R-4	21"
R-5	30"
R-6	39"


PROJECT ENDS UPSLOPE
OUTLET PIPE
L
CONCRETE CURB WEIR SEE NOTE

PLAN

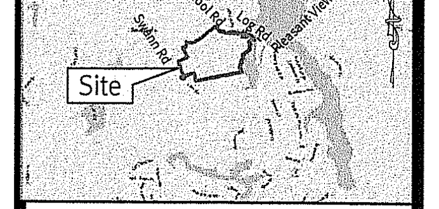
Level Spreader

NOT TO SCALE

NOTE:
CONCRETE WEIR MAY BE:
- MONOLITHIC, CAST IN PLACE CONCRETE WITH INVERT BELOW THE FROST LINE (MINIMAL MAINTENANCE)
- SERIES OF PRECAST CONCRETE CURB SECTIONS, NO END CHAMFERS, (FREQUENT MAINTENANCE TO KEEP WEIR LEVEL) - MUST INCLUDE GRAVEL BASE DOWN TO FROST DEPTH
- TIMBER NOT PERMITTED

DiPrete Engineering
Two Stafford Court Cranston, RI 02920
tel 401-943-1000 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

AUDIE D. OSGOOD
No.
10/08/2020
REGISTERED
PROFESSIONAL ENGINEER
CIVIL


Mann School Rd
Swann Rd
Log Rd
Pleasant View Ave
Site

LOCATION MAP N.T.S.

This plan set must not be used for construction purposes unless stamped 'Issued for Construction' and stamped by a registered Professional Engineer of DiPrete Engineering.

DiPrete Engineering only warrants plans on a DiPrete Engineering title block stamped by registered Professional Engineer of DiPrete Engineering. DiPrete Engineering does not warrant plans by any other party.

The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA conformance in the implementation of this plan and design.

Existing utilities shown on this plan are approximate only. DiPrete Engineering assumes no responsibility for damages incurred due to locations of existing utilities. See 'Utility Note' on sheet 3.

No.	Date	Description	By:
1	10-08-2020	RIDEM Submission Response to Comments	S.R.
0	05-01-2020	RIDEM Submission	S.R.

Drawn By: S.R.
Design By: C.D./P.A.A.

Detail Sheet - 1

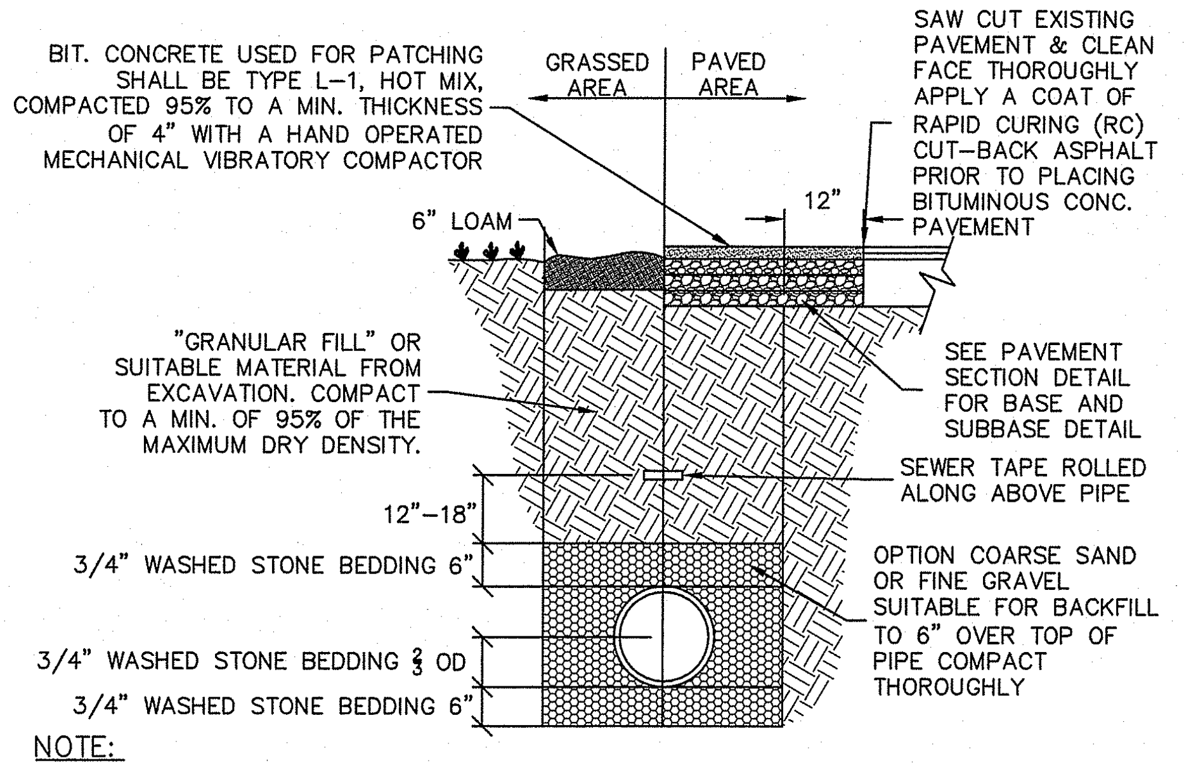
Sand Trace

Assessor's Plat 46 Lot 10, Zone R-20M, Area: 54.95 ±Acres
Smithfield, Rhode Island

Applicant
Sand Trace LLC
10B Appian Way, Smithfield, Rhode Island 02917
tel 401-231-4700 fax 401-232-3203

DE Job No: 0214-017

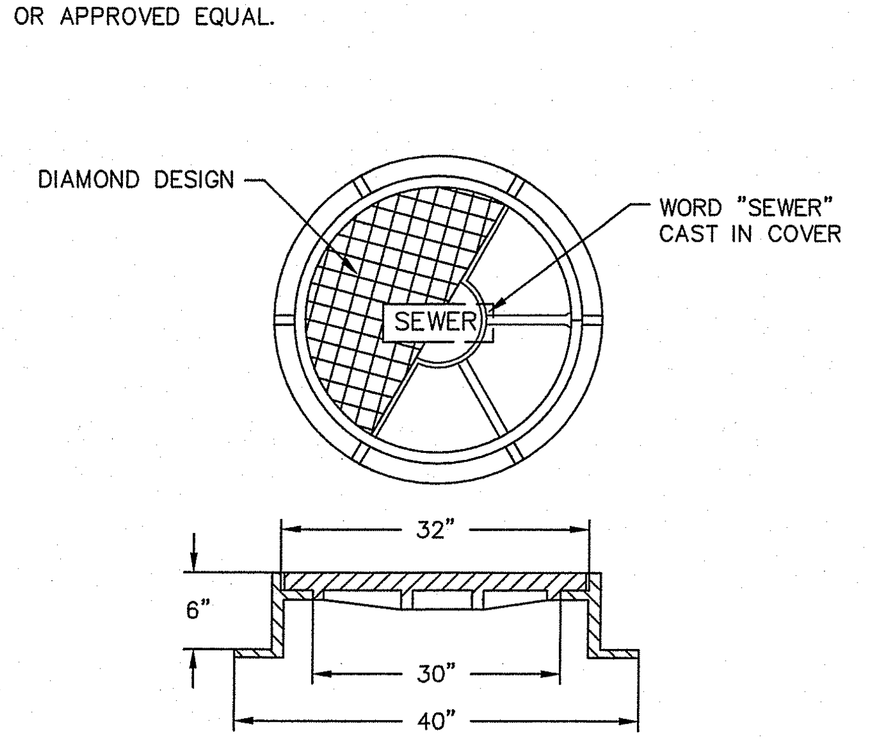
Sewer Line Trench Detail


BIT. CONCRETE USED FOR PATCHING SHALL BE TYPE L–1, HOT MIX, COMPACTED 95% TO A MIN. THICKNESS OF 4" WITH A HAND OPERATED MECHANICAL VIBRATORY COMPACTOR
GRASSED AREA
PAVED AREA
SAW CUT EXISTING PAVEMENT & CLEAN FACE THOROUGHLY APPLY A COAT OF RAPID CURING (RC) CUT–BACK ASPHALT PRIOR TO PLACING BITUMINOUS CONC. PAVEMENT
12"
6" LOAM
"GRANULAR FILL" OR SUITABLE MATERIAL FROM EXCAVATION. COMPACT TO A MIN. OF 95% OF THE MAXIMUM DRY DENSITY.
SEE PAVEMENT SECTION DETAIL FOR BASE AND SUBBASE DETAIL
SEWER TAPE ROLLED ALONG ABOVE PIPE
12"–18"
3/4" WASHED STONE BEDDING 6"
OPTION COARSE SAND OR FINE GRAVEL SUITABLE FOR BACKFILL TO 6" OVER TOP OF PIPE COMPACT THOROUGHLY
3/4" WASHED STONE BEDDING ⅔ OD
3/4" WASHED STONE BEDDING 6"

NOTE:
1. WIDTH (W) OF TRENCH IS EQUAL TO THE INSIDE DIAMETER OF THE PIPE PLUS 12".
2. SOIL UNDER CRUSHED STONE FOUNDATION SHALL BE UNDISTURBED AND COMPACTED MATERIAL WITH SEVERAL PASSES OF A VIBRATORY PLATE COMPACTOR.
3. CRUSHED STONE FOUNDATION ¾" MAXIMUM SIZE, SHALL BE PLACED 6" UNDER THE PIPE ND UP TO THE PIPE LAID THEREON, CRUSHED STONE PULLED AGAINST THE PIPE SIDES TO FIRMLY HOLD THE PIPE IN PLACE.
4. CRUSHED STONE HUNCHING ¾" MAXIMUM SIZE SHALL BE BROUGHT LEVEL TO THE TOP OF THE PIPE AND OUT TO THE TRENCH WALL AT THIS ELEVATION FOR ALL PIPE.

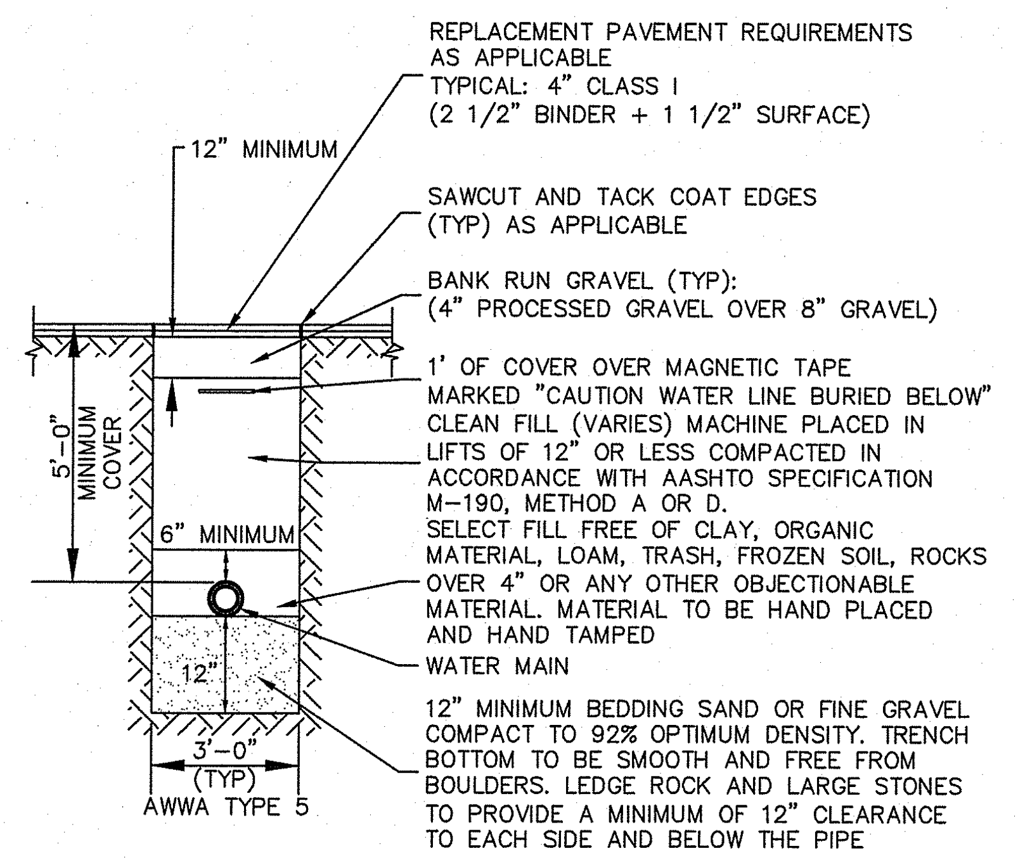
Sewer Line Trench Detail
NOT TO SCALE

NOTE:
1. SEWER MANHOLE FRAME AND COVER SHALL BE LEBARON MODEL LC326–2 OR APPROVED EQUAL.


DIAMOND DESIGN
WORD "SEWER" CAST IN COVER
SEWER
32"
6"
30"
40"

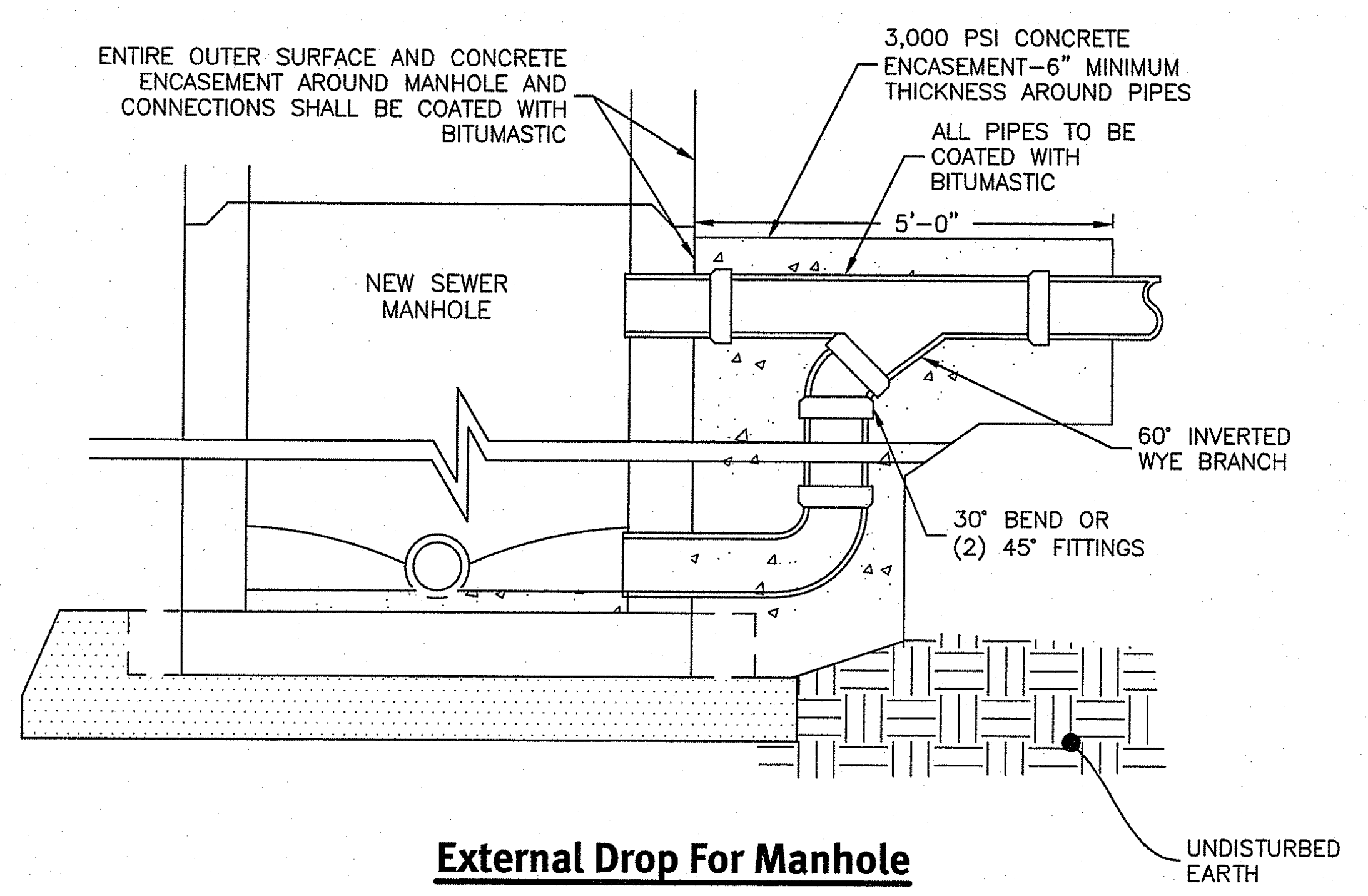
Water-Tight Sewer Manhole Frame & Cover Detail

NOT TO SCALE


REPLACEMENT PAVEMENT REQUIREMENTS AS APPLICABLE
TYPICAL: 4" CLASS I
(2 1/2" BINDER + 1 1/2" SURFACE)
12" MINIMUM
SAWCUT AND TACK COAT EDGES (TYP) AS APPLICABLE
BANK RUN GRAVEL (TYP): (4" PROCESSED GRAVEL OVER 8" GRAVEL)
1' OF COVER OVER MAGNETIC TAPE MARKED "CAUTION WATER LINE BURIED BELOW"
CLEAN FILL (VARIES) MACHINE PLACED IN LIFTS OF 12" OR LESS COMPACTED IN ACCORDANCE WITH AASHTO SPECIFICATION M–190, METHOD A OR D.
SELECT FILL FREE OF CLAY, ORGANIC MATERIAL, LOAM, TRASH, FROZEN SOIL, ROCKS OVER 4" OR ANY OTHER OBJECTIONABLE MATERIAL. MATERIAL TO BE HAND PLACED AND HAND TAMPED
WATER MAIN
12" MINIMUM BEDDING SAND OR FINE GRAVEL COMPACT TO 92% OPTIMUM DENSITY. TRENCH BOTTOM TO BE SMOOTH AND FREE FROM BOULDERS. LEDGE ROCK AND LARGE STONES TO PROVIDE A MINIMUM OF 12" CLEARANCE TO EACH SIDE AND BELOW THE PIPE
5'–0" MINIMUM COVER
6" MINIMUM
12"
3'–0" (TYP)
AWWA TYPE 5

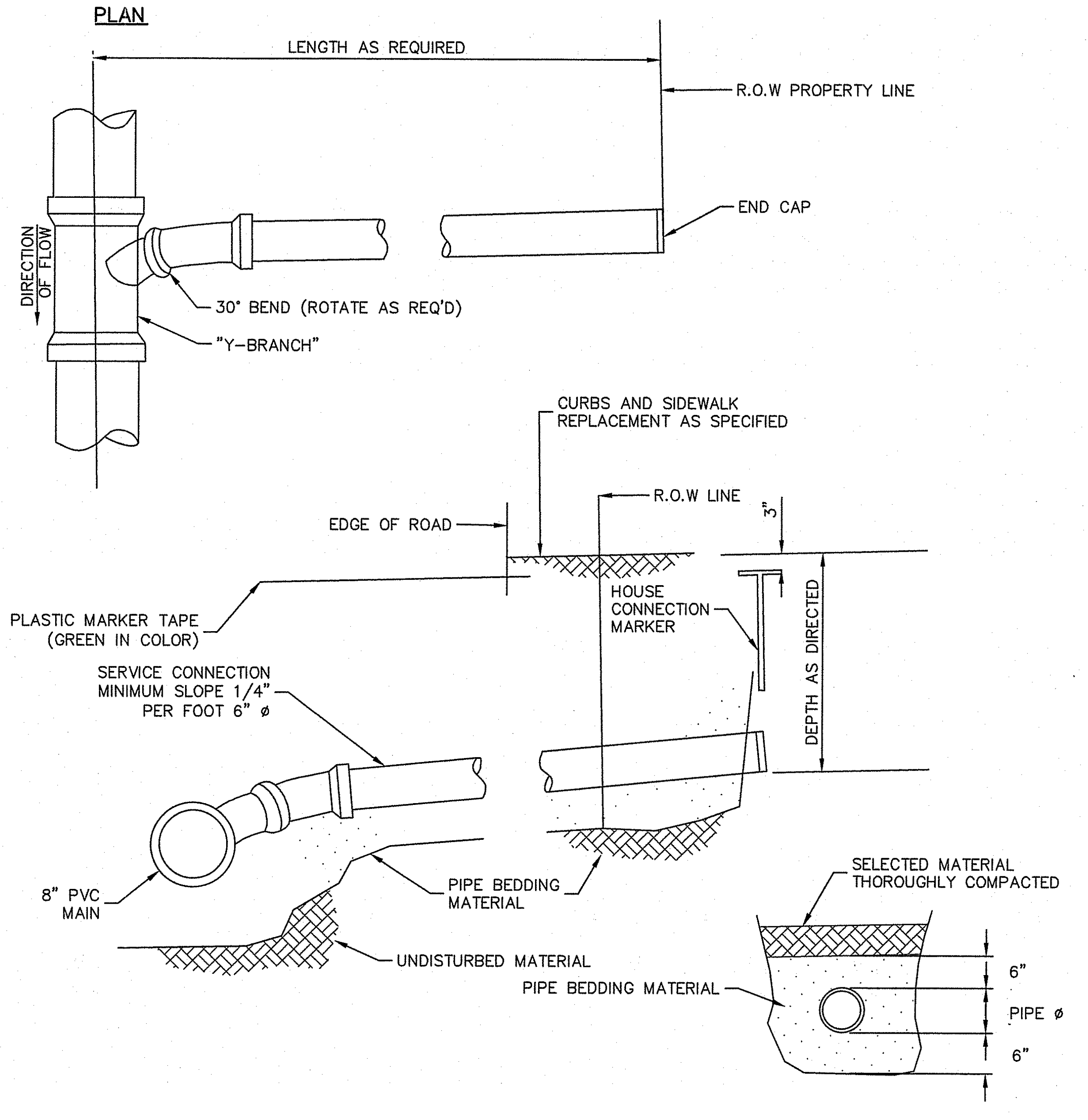
Water Trench Detail

NOT TO SCALE


ENTIRE OUTER SURFACE AND CONCRETE ENCASEMENT AROUND MANHOLE AND CONNECTIONS SHALL BE COATED WITH BITUMASTIC
3,000 PSI CONCRETE ENCASEMENT–6" MINIMUM THICKNESS AROUND PIPES
ALL PIPES TO BE COATED WITH BITUMASTIC
5'–0"
NEW SEWER MANHOLE
60° INVERTED WYE BRANCH
30° BEND OR (2) 45° FITTINGS
UNDISTURBED EARTH

External Drop For Manhole

NOT TO SCALE

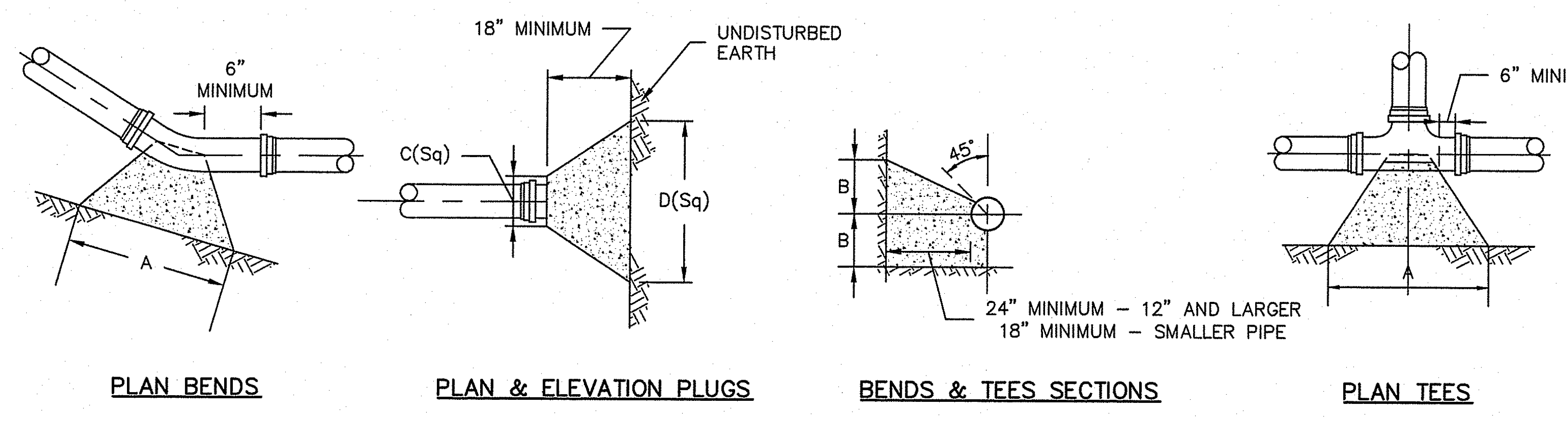

PLAN
LENGTH AS REQUIRED
R.O.W PROPERTY LINE
END CAP
DIRECTION OF FLOW
30° BEND (ROTATE AS REQ'D)
"Y–BRANCH"
CURBS AND SIDEWALK REPLACEMENT AS SPECIFIED
R.O.W LINE
3'
EDGE OF ROAD
HOUSE CONNECTION MARKER
DEPTH AS DIRECTED
PLASTIC MARKER TAPE (GREEN IN COLOR)
SERVICE CONNECTION MINIMUM SLOPE 1/4" PER FOOT 6" ø
8" PVC MAIN
PIPE BEDDING MATERIAL
UNDISTURBED MATERIAL
PIPE BEDDING MATERIAL
SELECTED MATERIAL THOROUGHLY COMPACTED
6"
PIPE ø
6"
SECTION THROUGH SERVICE TRENCH

Service Connection Detail

NOT TO SCALE

NOTES:
1. ALL CONCRETE SHALL BE 4,000 P.S.I. @ 28 DAYS
2. CONCRETE THRUST BLOCKS SHALL BEAR AGAINST UNDISTURBED EARTH
3. FORMS TO BE USED AS NECESSARY
4. ALL BOLTS AND NUTS TO BE PROTECTED FROM CONCRETE AND EASILY ACCESSIBLE WHEN THRUST BLOCK INSTALLED
5. REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF RHODE ISLAND SHALL VERIFY CALCULATIONS DURING DESIGN TO MEET CONDITIONS OF PROJECT.

SIZE	TEES		PLUGS		90° BEND		45° BEND		22.5° BEND		11.25° BEND	
	A	B	C	D	A	B	A	B	A	B	A	B
6"	20"	10"	10"	21"	24"	12"	18"	9"	13"	7"	9"	5"
8"	26"	13"	12"	26"	32"	16"	24"	12"	17"	9"	12"	6"
10"	34"	17"	14"	34"	40"	20"	30"	15"	22"	11"	15"	8"
12"	41"	20"	16"	41"	48"	24"	35"	18"	25"	13"	18"	9"
16"	54"	27"	20"	54"	64"	32"	47"	23"	34"	17"	24"	12"

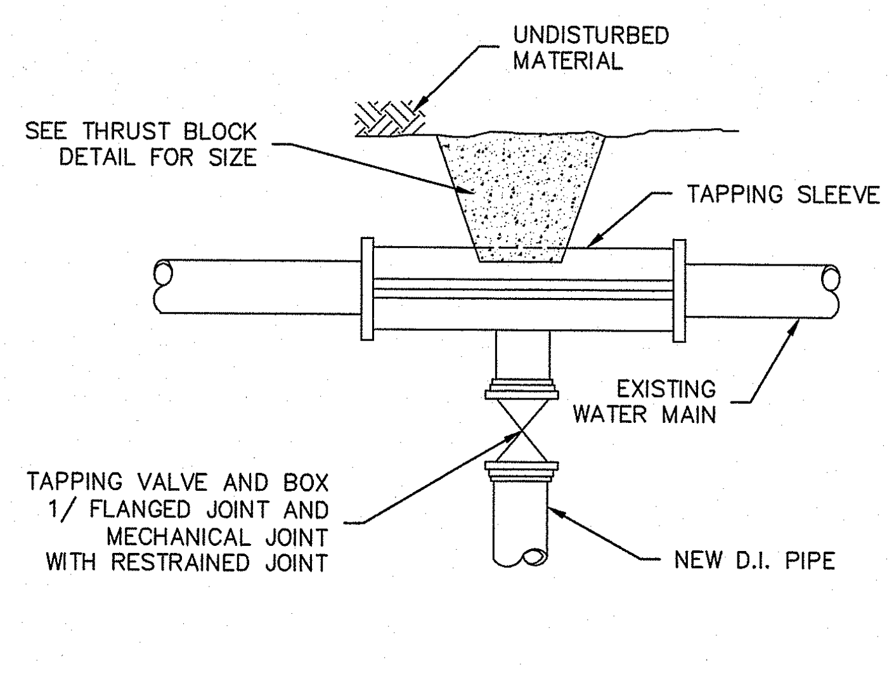

6" MINIMUM
A
18" MINIMUM
UNDISTURBED EARTH
C(Sq)
D(Sq)
45°
B
B
24" MINIMUM – 12" AND LARGER
18" MINIMUM – SMALLER PIPE
6" MINIMUM
PLAN BENDS
PLAN & ELEVATION PLUGS
BENDS & TEES SECTIONS
PLAN TEES

Thrust Block

NOT TO SCALE

NOTES:
1. TAPPING SLEEVE AND VALVE TO BE SWABBED WITH CHLORINE SOLUTION.
2. FROM KENT COUNTY WATER AUTHORITY DETAIL DATE: 09/2006
2. SEE ERRATUM TO RULES AND REGULATIONS OF THE KENT COUNTY WATER AUTHORITY 4.9.1.3 TAPPING SLEEVE AND VALVE APPROVED FEBRUARY 15, 2007.

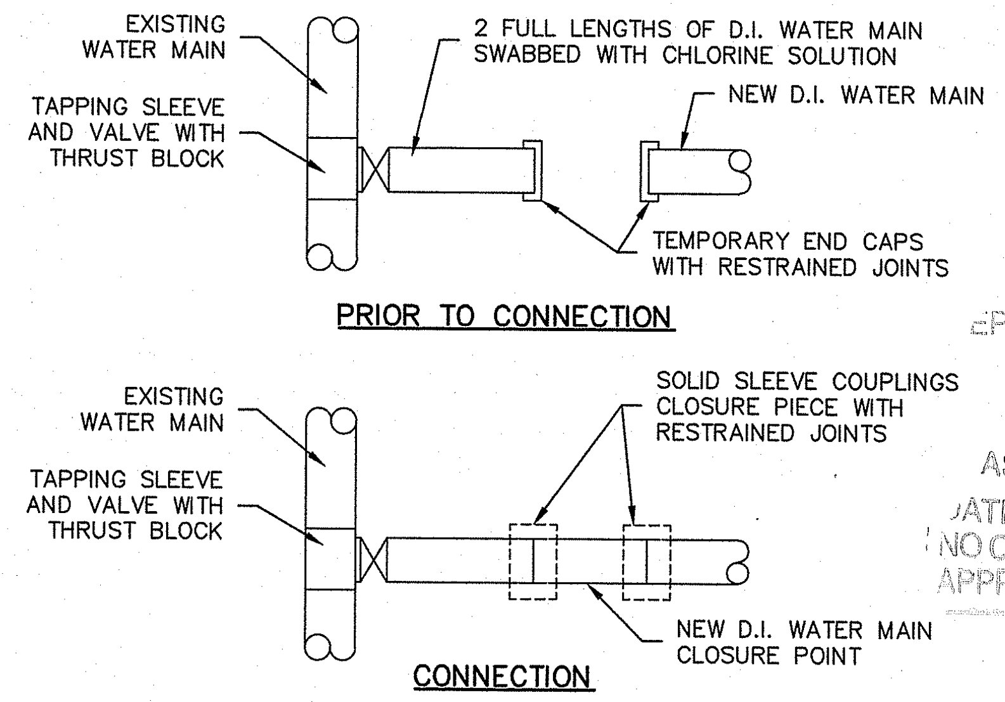
OCT 1 6 2020


UNDISTURBED MATERIAL
SEE THRUST BLOCK DETAIL FOR SIZE
TAPPING SLEEVE
EXISTING WATER MAIN
TAPPING VALVE AND BOX 1/ FLANGED JOINT AND MECHANICAL JOINT WITH RESTRAINED JOINT
NEW D.I. PIPE

Tapping Sleeve & Valve

NOT TO SCALE

NOTES:
1. PRIOR TO FINAL APPROVAL FOR PERMANENT CONNECTION FROM , CONTRACTOR SHALL PERFORM PRESSURE TESTING AND CHLORINATION.
2. SLEEVE FOR CLOSURE TO BE SWABBED WITH CHLORINE SOLUTION.
3. FROM KENT COUNTY WATER AUTHORITY DETAIL DATE: 09/2006


EXISTING WATER MAIN
2 FULL LENGTHS OF D.I. WATER MAIN SWABBED WITH CHLORINE SOLUTION
NEW D.I. WATER MAIN
TAPPING SLEEVE AND VALVE WITH THRUST BLOCK
TEMPORARY END CAPS WITH RESTRAINED JOINTS
PRIOR TO CONNECTION
EXISTING WATER MAIN
SOLID SLEEVE COUPLINGS CLOSURE PIECE WITH RESTRAINED JOINTS
TAPPING SLEEVE AND VALVE WITH THRUST BLOCK
NEW D.I. WATER MAIN CLOSURE POINT
CONNECTION

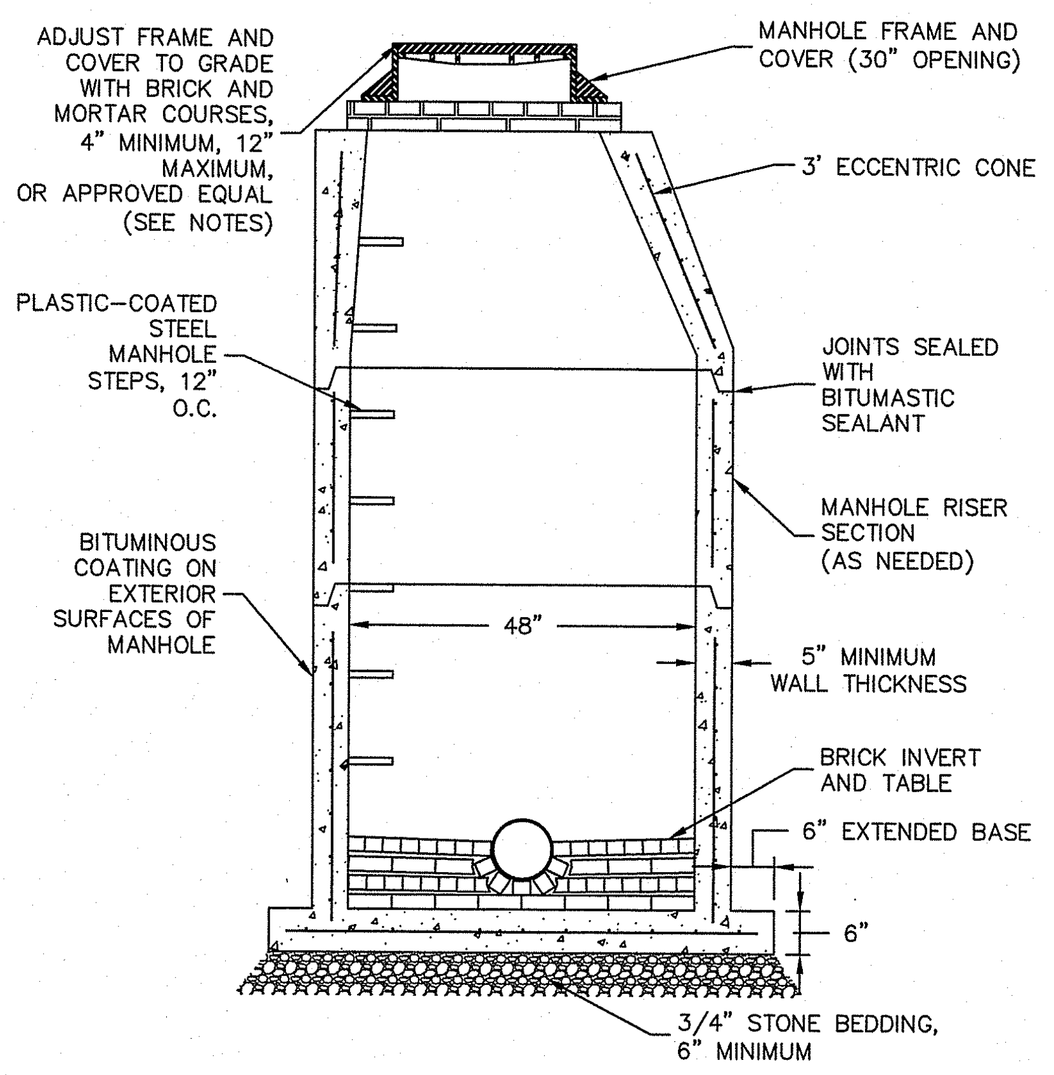
Connection Of New Water Main To Existing Water Main

NOT TO SCALE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED DEC 1 1 2020 FILE # 20-0108
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Martin D. Wencek

NOTES:
1. MANHOLE SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM–C478.
2. INVERT AND TABLE SHALL CONSIST ENTIRELY OF BRICK AND MORTAR. NO SAND FILLER SHALL BE ALLOWED.
3. MANHOLES SHALL BE VACUUM TESTED PRIOR TO ACCEPTANCE, IN ACCORDANCE WITH THE SEWER AUTHORITY SANITARY RULES AND REGULATIONS. UNDER NO CIRCUMSTANCES WILL EXFILTRATION TESTING BE ACCEPTED.
4. BOLTED AND GASKETED COVERS SHALL BE USED ON MANHOLES IN OFF–ROAD AREAS.
5. TAPPING OF MANHOLES MUST BE AUTHORIZED AND INSPECTED BY THE SEWER AUTHORITY. THE ONLY APPROVED METHOD FOR TAPPING MANHOLES SHALL BE BY CORE–DRILLING THE MANHOLE AND INSTALLING A "KOR–N–SEAL" BOOT.
6. PRECAST CONCRETE GRADE RINGS, HDPE GRADE RINGS, OR OTHER RIM ADJUSTMENT PRODUCTS MAY BE USED IN LIEU OF BRICK AND MORTAR WITH THE PERMISSION OF THE SEWER AUTHORITY.


ADJUST FRAME AND COVER TO GRADE WITH BRICK AND MORTAR COURSES, 4" MINIMUM, 12" MAXIMUM, OR APPROVED EQUAL (SEE NOTES)
MANHOLE FRAME AND COVER (30" OPENING)
3' ECCENTRIC CONE
PLASTIC–COATED STEEL MANHOLE STEPS, 12" O.C.
JOINTS SEALED WITH BITUMASTIC SEALANT
MANHOLE RISER SECTION (AS NEEDED)
BITUMINOUS COATING ON EXTERIOR SURFACES OF MANHOLE
48"
5" MINIMUM WALL THICKNESS
BRICK INVERT AND TABLE
6" EXTENDED BASE
6"
3/4" STONE BEDDING, 6" MINIMUM

Sewer Manhole

NOT TO SCALE

Sewer Line/Water Main Separation Policy For Design Of Sanitary Sewers

A. LATERAL PLACEMENT OF SEWERS AND WATER MAINS

SEWERS SHALL BE LAID AT LEAST 10' HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. THE DISTANCE SHALL BE MEASURED OUTSIDE EDGE–TO–OUTSIDE EDGE. THERE IS NO MINIMUM VERTICAL SEPARATION REQUIRED PROVIDED THE 10' HORIZONTAL SEPARATION IS MAINTAINED.

IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10' HORIZONTAL SEPARATION, THE DIVISION MAY ALLOW DEVIATION ON A CASE BY CASE BASIS, IF SUPPORTED BY DATA FROM THE DESIGN ENGINEER. SUCH DEVIATION MAY ALLOW INSTALLATION OF THE SEWER CLOSER TO A WATER MAIN, PROVIDED THAT:

1. THE SEWER AND WATER MAIN ARE LAID IN SEPARATE TRENCHES, OR
2. THE SEWER AND WATER MAIN MAY BE INSTALLED IN THE SAME TRENCH WITH THE WATER MAIN PLACED ON A BENCH OF UNDISTURBED EARTH, AND
3. IN EITHER CASE, THE CROWN OF THE SEWER SHALL BE AT LEAST 18" BELOW THE INVERT OF THE WATER MAIN.

IN SITUATIONS WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS STIPULATED ABOVE, THE FOLLOWING PROTECTION SHALL BE PROVIDED:

4. ENCASEMENT OF THE SEWER PIPE IN CONCRETE (MINIMUM 6" THICKNESS) OR A CARRIER PIPE FOR AT LEAST 10' EITHER SIDE OF THE AREA NOT COMPLYING WITH THE MINIMUM HORIZONTAL AND VERTICAL SEPARATION, OR
5. DESIGN AND CONSTRUCTION OF THE SEWER EQUAL TO WATER MAIN PIPE (CEMENT–LINED DUCTILE IRON OR OTHER AWWA–APPROVED MATERIAL FOR POTABLE WATER CONVEYANCE), AND PRESSURE TESTED IN ACCORDANCE WITH AWWA SPECIFICATIONS.

B. SEWERS CROSSING WATER MAINS

SEWERS CROSSING OVER WATER MAINS SHOULD BE AVOIDED, BUT IF CONDITIONS WARRANT THIS SITUATION, THEN ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO MAINTAIN LINE AND GRADE. SEWERS CROSSING UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL SEPARATION OF 18" BETWEEN THE INVERT OF THE WATER MAIN AND THE CROWN OF THE SEWER. THE CROSSING SHALL BE ARRANGED SO THAT SEWER JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATER MAIN JOINTS.

WHERE CONDITIONS PREVENT AN 18" VERTICAL SEPARATION FROM BEING MAINTAINED, THE FOLLOWING METHODS SHALL BE SPECIFIED:

A. THE SEWER SHALL BE DESIGNED AND CONSTRUCTED EQUAL TO WATER MAIN PIPE (CEMENT–LINED DUCTILE IRON PIPE, PVC OR OTHER AWWA APPROVED MATERIAL FOR POTABLE WATER CONVEYANCE) FOR A DISTANCE Of 12' ON EACH SIDE OF THE CROSSING, MEASURED PERPENDICULAR TO THE WATER MAIN AND PRESSURE TESTED IN ACCORDANCE WITH AWWA SPECIFICATIONS, OR
B. EITHER THE WATER MAIN OR THE SEWER MAY BE ENCASED IN CONCRETE (MINIMUM 6" THICKNESS) OR A CARRIER PIPE FOR A DISTANCE Of 12' ON EACH SIDE OF THE CROSSING, MEASURED PERPENDICULAR TO THE WATER MAIN. THE CARRIER PIPE SHALL BE DESIGNED AND CONSTRUCTED OF MATERIALS WHICH ARE SATISFACTORY TO THE DIVISION, OR
C. ANY OTHER METHODS, IF SUPPORTED BY DATA FROM THE DESIGN ENGINEER, WHICH ENSURE ADEQUATE WATER TIGHTNESS AND ARE SATISFACTORY TO THE DIVISION.

DiPrete Engineering
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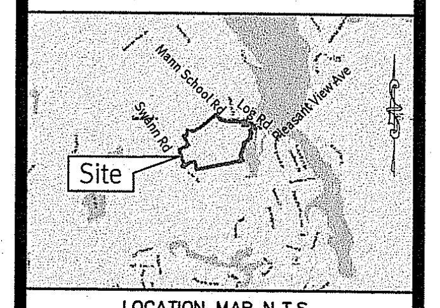
Boston • Providence • Newport

AUDIE D. OSGOOD
No. 9015
10/08/2020
REGISTERED PROFESSIONAL ENGINEER CIVIL


Mann School Rd
Swann Rd
Log Rd
Pleasant View Ave
Site

LOCATION MAP N.T.S.

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No.	Date	Description	By:
1	10-08-2020	RIDEM Submission Response to Comments	S.R.
0	05-01-2020	RIDEM Submission	S.R.

Drawn By: S.R.
Design By: C.D./P.A.A.

Detail Sheet - 2
Sand Trace
Assessor's Plat 46 Lot 10, Zone R-20M, Area: 54.95 ±Acres
Smithfield, Rhode Island

Applicant
Sand Trace LLC
10B Appian Way, Smithfield, Rhode Island 02917
tel 401-231-4700 fax 401-232-3203

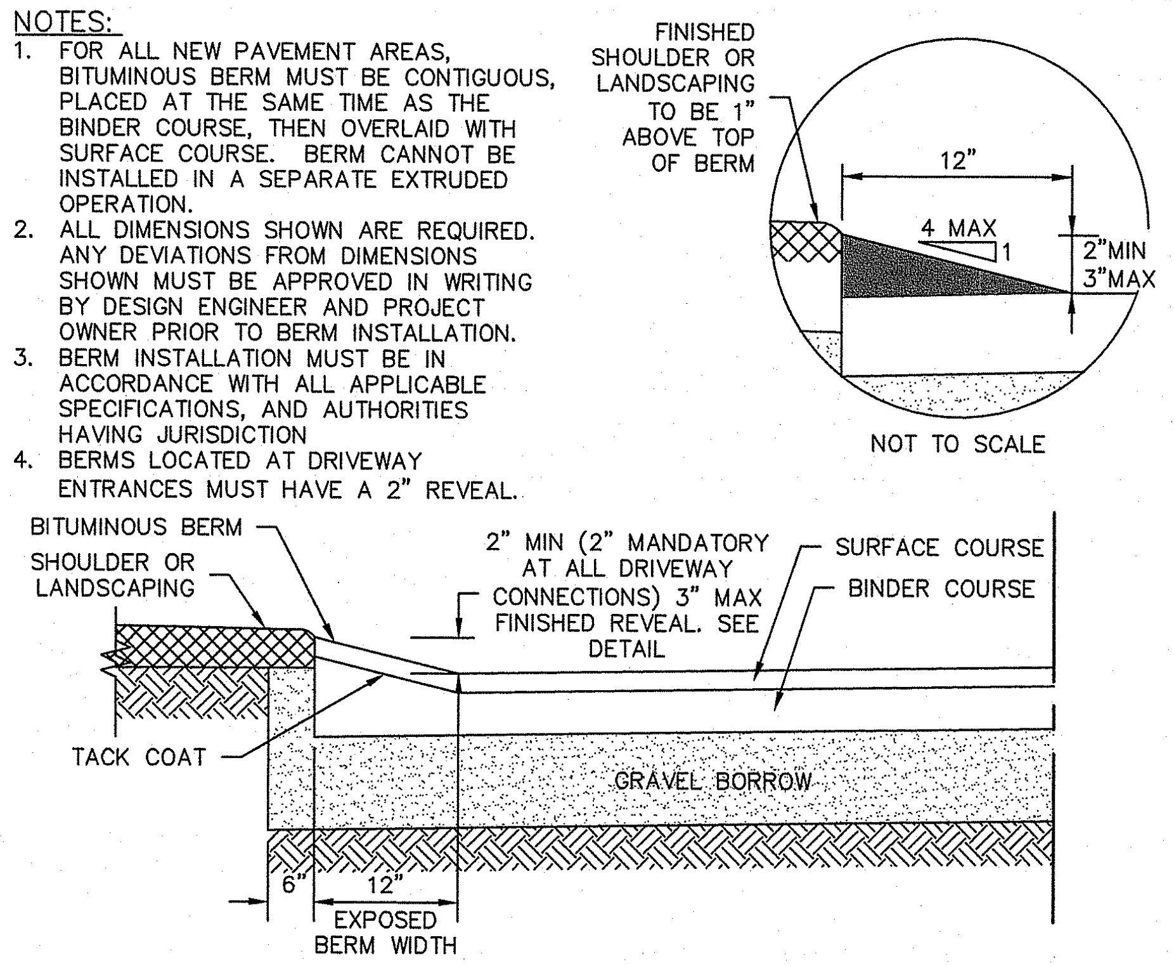
DE Job No: 0214-017

SHEET 22 OF 23

z:\demain\projects\0214-017 the village on stillwater\autocad drawings\0214-017-cvar.dwg Plotted: 10/16/2020

OCT 16 2020

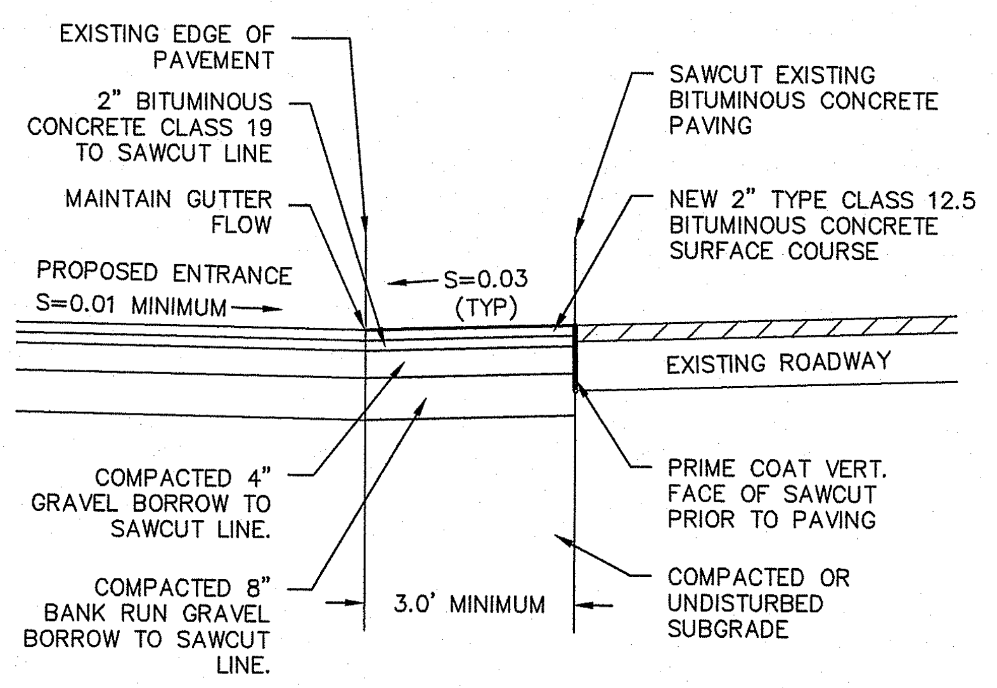
NOTES:
1. FOR ALL NEW PAVEMENT AREAS, BITUMINOUS BERM MUST BE CONTIGUOUS, PLACED AT THE SAME TIME AS THE BINDER COURSE, THEN OVERLAID WITH SURFACE COURSE. BERM CANNOT BE INSTALLED IN A SEPARATE EXTRUDED OPERATION.
2. ALL DIMENSIONS SHOWN ARE REQUIRED. ANY DEVIATIONS FROM DIMENSIONS SHOWN MUST BE APPROVED IN WRITING BY DESIGN ENGINEER AND PROJECT OWNER PRIOR TO BERM INSTALLATION.
3. BERM INSTALLATION MUST BE IN ACCORDANCE WITH ALL APPLICABLE SPECIFICATIONS, AND AUTHORITIES HAVING JURISDICTION
4. BERMS LOCATED AT DRIVEWAY ENTRANCES MUST HAVE A 2" REVEAL.


FINISHED SHOULDER OR LANDSCAPING TO BE 1" ABOVE TOP OF BERM
12"
4 MAX
1
2"MIN
3"MAX
NOT TO SCALE
BITUMINOUS BERM
SHOULDER OR LANDSCAPING
TACK COAT
2" MIN (2" MANDATORY AT ALL DRIVEWAY CONNECTIONS) 3" MAX FINISHED REVEAL. SEE DETAIL
SURFACE COURSE
BINDER COURSE
GRAVEL BORROW
6"
12"
EXPOSED BERM WIDTH

Bituminous Berm

NOT TO SCALE

NOTE:
MINIMUM COMPACTION FOR GRAVEL SUBBASE OR SUBGRADE: 95% MODIFIED PROCTOR.

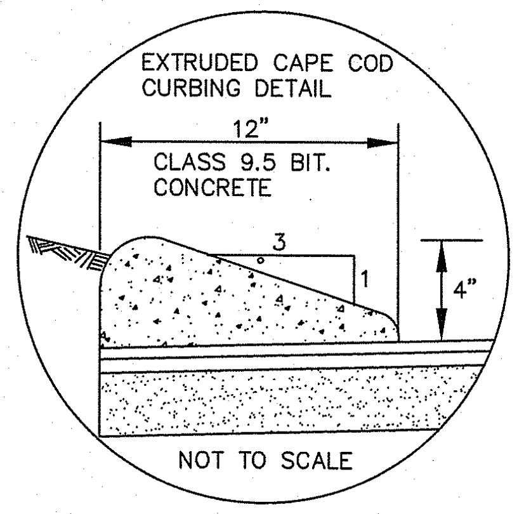

EXISTING EDGE OF PAVEMENT
2" BITUMINOUS CONCRETE CLASS 19 TO SAWCUT LINE
MAINTAIN GUTTER FLOW
PROPOSED ENTRANCE S=0.01 MINIMUM
S=0.03 (TYP)
SAWCUT EXISTING BITUMINOUS CONCRETE PAVING
NEW 2" TYPE CLASS 12.5 BITUMINOUS CONCRETE SURFACE COURSE
EXISTING ROADWAY
COMPACTED 4" GRAVEL BORROW TO SAWCUT LINE.
COMPACTED 8" BANK RUN GRAVEL BORROW TO SAWCUT LINE.
3.0' MINIMUM
PRIME COAT VERT. FACE OF SAWCUT PRIOR TO PAVING
COMPACTED OR UNDISTURBED SUBGRADE

Entrance Access Sawcut & Match

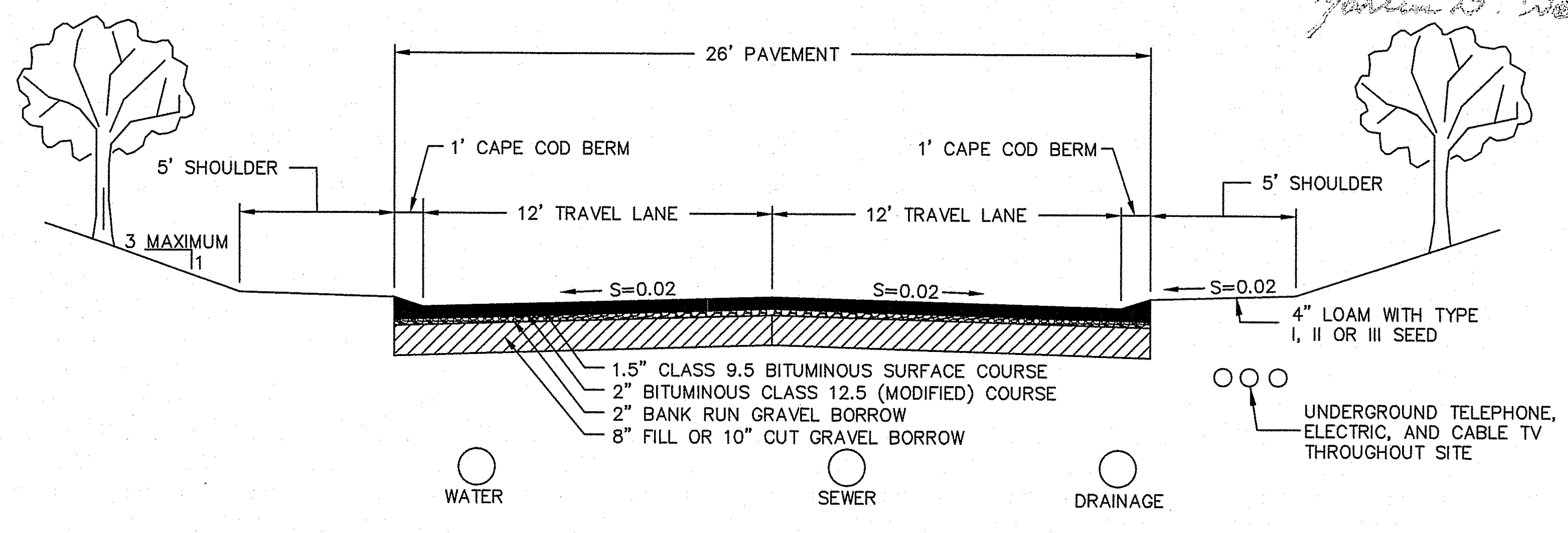
NOT TO SCALE

GENERAL NOTES:
1. ROADWAY CROSS SECTION AND MATERIALS SHALL CONFORM TO TOWN/CITY STANDARDS FOR ROAD CONSTRUCTION AND UTILITY LOCATIONS.
2. CAPE COD CURBING HALL MANUFACTURING CO. MOLD JEX OR D.P.W. APPROVED EQUAL, SLOPE FACED PRECAST CONCRETE CURBING REQUIRED AT ALL INTERSECTION FILLET CURVES. SEE RIDOT STD. 7.2.0.
3. WATER MAIN LOCATION SUBJECT TO APPROVAL OF THE DIRECTOR OF PUBLIC WORKS.
4. STORM DRAIN MATERIALS AND METHODS SHALL CONFORM TO APPLICABLE TOWN OF SMITHFIELD AND RIDOT STANDARDS.
5. FIRE ALARMS ARE REQUIRED AND SHALL BE INSTALLED ACCORDING TO TOWN FIRE DEPARTMENT REQUIREMENTS.
6. UNDERGROUND UTILITY TRENCH CONSTRUCTION TO CONFORM TO THE NATIONAL GRID "DEVELOPER/CONTRACTOR/CUSTOMER RESPONSIBILITIES AND CONSTRUCTION SPECIFICATIONS FOR UNDERGROUND RESIDENTIAL DEVELOPMENTS"
7. SEWER FORCE MAIN SEPARATION TO WATER MAIN: 10' HORIZONTAL OR 2' VERTICAL BELOW WATER MAIN.

CONSTRUCTION NOTES:
1. CLEARING AND GRUBBING: ALL ROOT SYSTEMS, TREES, STUMPS, BUSHES, AND OTHER OBJECTIONABLE MATERIALS SHALL BE REMOVED AND DISPOSED OF AS INDICATED BY THE MUNICIPAL ENGINEER. HEALTHY TREES WITHIN THE RIGHTS-OF-WAY WIDTH AND OUTSIDE THE PAVEMENT WIDTH MAY BE LEFT STANDING, PROVIDED SAID TREES ARE NOT MORE THAN 5' FROM THE RIGHT-OF-WAY LINE, EXCEPT WHERE SIDEWALKS ARE REQUIRED.
2. EARTH EXCAVATIONS SHALL INCLUDE, BUT NOT BE LIMITED TO, THE REMOVAL OF CLAY, SAND, GRAVEL, LOAM, SOFT OR DISINTEGRATED ROCK WHICH CAN BE REMOVED WITHOUT BLASTING; BOULDERS OF LESS THAN 1/2 CUBIC YARD IN VOLUME; AND, OTHER UNACCEPTABLE MATERIALS WITHIN THE LIMITS OF ROADWAY, DRAINAGE, OR OTHER EXCAVATION.
3. ROCK AND LEDGE EXCAVATION SHALL INCLUDE REMOVAL AND DISPOSAL OF ALL BOULDERS OF 1/2 CUBIC YARD OR MORE IN VOLUME AND ALL HARD LEDGE ROCK WHICH CAN BE REMOVED ONLY BY DRILLING AND SPLITTING MECHANICALLY BY HAND OR BLASTING
4. WHERE GROUND WATER IS ENCOUNTERED WITHIN 5' OF FINISHED GRADE AS DETERMINED BY RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, "GROUND WATER PROCEDURES", DURING THE WET SEASON, ADEQUATE SUBSURFACE DRAINAGE SHALL BE CONSTRUCTED TO LOWER THE GROUND WATER LEVEL TO A DEPTH OF AT LEAST 5' BELOW FINISHED GRADE.
5. PAVEMENT SHALL BE CONSTRUCTED SO AS TO PROVIDE A MINIMUM CROSS SECTION AFTER COMPACTION OF 8" GRAVEL BORROW BASE COURSE SUBBASE IN FILL AND 10" GRAVEL BORROW BASE COURSE IN CUTS WITH 2" OF CRUSHED BANK RUN GRAVEL BORROW (MEETING TOWN SPECIFICATIONS) AND HOT-MIX ASPHALTIC AND BITUMINOUS CONCRETE MATERIALS CONFORMING TO R.I. STANDARD SPECIFICATIONS.


EXTRUDED CAPE COD CURBING DETAIL
12"
CLASS 9.5 BIT. CONCRETE
3
1
4"
NOT TO SCALE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATE: DEC 11 2020 FILE # 20-0108
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE


26' PAVEMENT
5' SHOULDER
1' CAPE COD BERM
1' CAPE COD BERM
5' SHOULDER
3 MAXIMUM
1
12' TRAVEL LANE
12' TRAVEL LANE
S=0.02
S=0.02
S=0.02
4" LOAM WITH TYPE I, II OR III SEED
1.5" CLASS 9.5 BITUMINOUS SURFACE COURSE
2" BITUMINOUS CLASS 12.5 (MODIFIED) COURSE
2" BANK RUN GRAVEL BORROW
8" FILL OR 10" CUT GRAVEL BORROW
UNDERGROUND TELEPHONE, ELECTRIC, AND CABLE TV THROUGHOUT SITE
WATER
SEWER
DRAINAGE

Typical Road Construction (Private Road)

NOT TO SCALE

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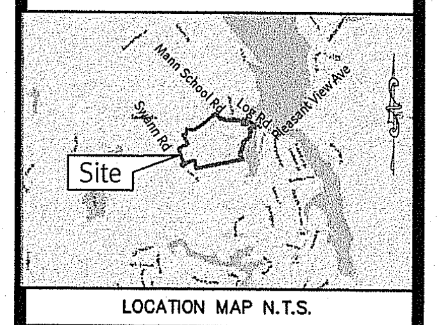
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SHEET 23 OF 23

DE Job No: 0214-017