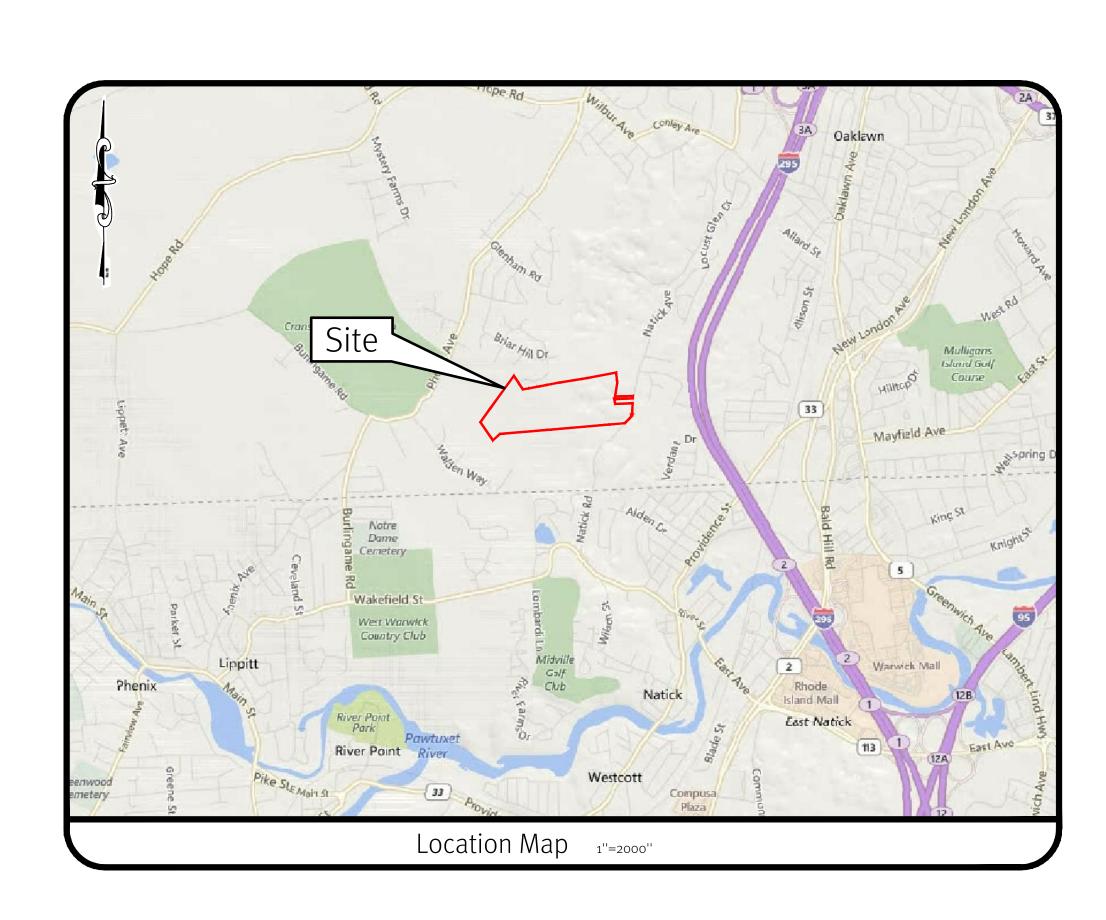
# Natick Avenue Solar

Located on Natick Avenue Cranston, Rhode Island

Assessor's Plat 22-3 Lots 108 & 119



# **Sheet List Table**

- Cover Sheet
- 2 Half Mile Radius Aerial & USGS Map
- General Notes & Legend
- 4 Existing Conditions Plan
- Site Layout Plan
- 6 Site Development Plan
- Soil Erosion and Sediment Control Plan
- BMP Details A & E
- 9 BMP Details B & H
- 10 BMP Details C, G & F
- 11 BMP Details D & Swales
- 12 Detail Sheet
- 13 Boundary Survey

Cover S Natick

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

## **General Notes:**

- 1. THE SITE IS LOCATED ON THE CITY OF CRANSTON ASSESSOR'S PLAT 22-3 LOTS 108 AND 119.
- 2. THE SITE IS APPROXIMATELY 64.03 ACRES AND IS ZONED A-80.
- 3. THE OWNER OF AP 22-3 LOTS 108 AND 119 IS: RONALD ROSSI 1935 PHOENIX AVE CRANSTON, RI 02920
- THIS SITE IS LOCATED IN FEMA FLOOD ZONES X UNSHADED. REFERENCE FEMA FLOOD INSURANCE RATE MAP 44007C0407G & 44007C0246H, MAPS REVISED OCTOBER 2, 2015. (FLOOD PLAIN DESCRIPTIONS SHOWN BELOW)
  - ZONE X (UNSHADED) THIS SITE IS LOCATED IN FEMA FLOOD ZONE X. ZONE X ARE AREAS WHERE THERE IS MINIMAL FLOODING.
- 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. PLEASE REFER TO THE BOUNDARY SURVEY AT THE END OF THIS PLANSET.
- 6. THE SITE IS NOT WITHIN A: GROUNDWATER PROTECTION AREA (RIDEM) NATURAL HERITAGE AREA (RIDEM) GROUNDWATER PROTECTION OVERLAY DISTRICT (TOWN)
- 7. THE FOLLOWING DOCUMENTS ARE CONSIDERED PART OF THE PROJECT PLANS AND THE CONTRACTOR/OWNER MUST MAINTAIN THESE DOCUMENTS AS PART OF A FULL
  - SOIL EROSION AND SEDIMENT CONTROL PLAN (SESC). THE SESC CONTAINS THE

  - EROSION CONTROL MEASURES SHORT TERM MAINTENANCE
  - ESTABLISHMENT OF VEGETATIVE COVER
  - CONSTRUCTION POLLUTION PREVENTION
  - SEQUENCE OF CONSTRUCTION
  - OPERATION AND MAINTENANCE PLAN (0&M). THE 0&M CONTAINS: LONG TERM MAINTENANCE • LONG TERM POLLUTION PREVENTION
- THE SITE DOES NOT REQUIRE ANY WATER OR SEWER SERVICE.
- ALL PROPOSED CRUSHED STONE ACCESS PATHS ARE TO BE 20' WIDE.
- 10. NO LIGHTING IS PROPOSED ON-SITE.
- 11. TEST PITS AND SOIL EVALUATIONS WERE COMPLETED BY DIPRETE ENGINEERING ON FEBRUARY 21, 2019.
- 12. WETLANDS ON THIS SITE WERE FLAGGED BY NATURAL RESOURCE SERVICES, INC. (NRS). REFER TO THE NRS REPORT DATED JULY 11, 2018.

## **Soil Information:**

(REFERENCE: USDA NATURAL RESOURCES CONSERVATION SERVICE) SOIL NAME <u>DESCRIPTION</u>

CANTON-CHARLTON-ROCK OUTCROP COMPLEX, 15 TO 35 PERCENT CaD

CeC CANTON AND CHARLTON FINE SANDY LOAMS, VERY ROCKY, 3 TO 15

PERCENT SLOPES ChB CANTON AND CHARLTON VERY STONY FINE SANDY LOAMS, 3 TO 8

PERCENT SLOPES RIDGEBURY, WHITMAN, AND LEICESTER EXTREMELY STONY FINE SANDY

WAPPING VERY STONY SILT LOAM, 0 TO 8 PERCENT SLOPES

## **Soil Erosion and Sedimentation Control Notes:**

- 1. ALL EROSION CONTROL, TEMPORARY SWALES, TEMPORARY SEDIMENT TRAPS, ETC. MUST BE INSTALLED PER THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK (LATEST EDITION) AND THE SOIL EROSION AND SEDIMENT CONTROL PLAN
- 2. TEMPORARY SWALES MUST BE USED TO CONTROL RUNOFF DURING CONSTRUCTION OF THE PROPOSED ROADWAY. TEMPORARY SWALES MUST BE VEGETATED AFTER CONSTRUCTION. EROSION CONTROL MATS MUST BE INSTALLED IF NECESSARY TO PREVENT EROSION AND SUPPORT VEGETATION. AFTER CONSTRUCTION IS COMPLETE AND TRIBUTARY ARES TO THE SWALES HAVE BEEN STABILIZED, THE TEMPORARY SWALES MUST BE CLEARED AND FINAL CONSTRUCTION, INCLUDING INSTALLATION OF THE GRASS SWALE MUST BE PER THE DESIGN PLANS.
- 3. ONCE THE SEDIMENT TRAPS ARE NO LONGER REQUIRED AND ALL TRIBUTARY AREAS HAVE BEEN STABILIZED, THE SEDIMENT TRAPS MUST BE CLEANED AND BROUGHT TO
- 4. SEE SECTION 2.2 OF THE SESC FOR SEQUENCE OF CONSTRUCTION ACTIVITY, AND
- 5. CONTRACTOR MAY MODIFY SEQUENCE OF CONSTRUCTION WITH APPROVAL FROM DESIGN
- 6. AS NOTED IN THE OPERATION & MAINTENANCE PLAN, IF SOIL EROSION IS OBSERVED BELOW THE DRIP EDGE OF THE SOLAR PANELS, TURF REINFORCEMENT MUST BE INSTALLED PER ENGINEER-APPROVED MANUFACTURER SPECIFICATIONS, ALONG AND DOWNGRADIENT OF ALL DRIP EDGES WHERE EROSION IS OBSERVED.

## **General Notes - Gas Pipeline Easement**

- 1. PRIOR TO CONSTRUCTION, THE CONTRACTOR MUST MARK OUT AND COORDINATE WITH THE TENNESSEE GAS COMPANY (TGC) PRIOR TO CUTTING ANY TREES ALONG THE SOUTHERN PROPERTY LINE.
- 2. PRIOR TO CLEARING ALONG THE SOUTHERN PROPERTY LINE, CONTRACTOR MUST ERECT A LINE OF ORANGE SNOW FENCE ALL ALONG THE NORTHERN LIMIT OF THE TGC PIPELINE EASEMENT.
- 3. PRIOR TO CONSTRUCTION, CONTRACTOR MUST EMPLOY APPROPRIATE CONSTRUCTION PROTECTION MATS FOR EQUIPMENT TRAVELING OVER THE TGC PIPELINE EASEMENT. CONTRACTOR MUST COORDINATE WITH TGC PRIOR TO INSTALLING CONSTRUCTION PROTECTION MATS.
- 4. WHILE CLEARING ALONG THE SOUTHERN PROPERTY LINE, CONTRACTOR MUST ENSURE THAT FELLED TREES DO NOT FALL WITHIN THE TGC PIPELINE EASEMENT.
- 5. CONTRACTOR MUST ERECT THE PERMANENT FENCE ALONG THE SOUTHERN PROPERTY LINE AS SOON AS POSSIBLE.
- 6. ANY BLASTING WITHIN 300 FEET OF THE TGC PIPELINE EASEMENT MUST BE APPROVED BY TGC. MAXIMUM ALLOWABLE PEAK PARTICLE VELOCITY IS 4.0 INCHES/SEC.

## **Grading and Utility Notes:**

- THE CONTRACTOR IS RESPONSIBLE FOR ALL SOIL EROSION AND SEDIMENT CONTROL ON-SITE. THE CONTRACTOR IS TO NOTIFY THE DESIGN ENGINEER, THE DIRECTOR OF PUBLIC WORKS, THE TOWN ENGINEER, AND RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR MUST OBTAIN ALL FEDERAL, STATE AND MUNICIPAL APPROVALS PRIOR TO THE START OF CONSTRUCTION.
- CONSTRUCTION TO COMMENCE SPRING 2021 OR UPON RECEIPT OF ALL NECESSARY APPROVALS.
- 4. ALL WORK PERFORMED HEREIN IS TO BE GOVERNED BY CURRENT EDITIONS OF THE RHODE ISLAND STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION AND CITY OF CRANSTON STANDARD SPECIFICATIONS AND DETAILS.
- THE CONTRACTOR MUST COORDINATE WITH ALL OF THE APPROPRIATE UTILITY COMPANIES FOR AGREEMENTS TO SERVICE THE PROPOSED BUILDING. THIS MUST BE DONE PRIOR TO CONSTRUCTION. NO REPRESENTATIONS ARE MADE BY DIPRETE ENGINEERING THAT UTILITY SERVICE IS AVAILABLE.
- 6. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING FINISH GRADING AND DRAINAGE AROUND THE STRUCTURES TO ENSURE SURFACE WATER AND/OR GROUNDWATER ARE DIRECTED AWAY FROM THE STRUCTURE.
- 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.
- ALL PROPOSED UTILITIES SERVING THE SITE AND BUILDINGS TO BE COORDINATED WITH APPLICANT, ARCHITECT, AND ENGINEER PRIOR TO INSTALLATION.
- ALL TRAFFIC CONTROL MUST CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION INCLUDING ALL REVISIONS.
- ALL RETAINING WALLS AND STEEP SLOPES ARE SHOWN SCHEMATICALLY ONLY AND DIPRETE ENGINEERING IS NOT PROVIDING THE DESIGN OF THESE ITEMS. THE ACTUAL WALLS AND 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 MUST SUBMITTED PRIOR TO CONSTRUCTION.
- ALL CUT AND FILL AREAS MUST BE CONSTRUCTED UNDER THE DIRECTION OF A PROFESSIONAL GEOTECHNICAL ENGINEER, WITH TESTING AND CERTIFICATION TO BE PROVIDED TO THE OWNER AT THE COMPLETION OF THE PROJECT. DIPRETE ENGINEERING IS NOT PROVIDING THE FILL SPECIFICATIONS, GEOTECHNICAL ENGINEERING, STRUCTURAL ENGINEERING SERVICES, OR SUPERVISION AS PART OF
- 12. ALL COMPONENTS OF THE DRAINAGE MUST BE ASBUILT PRIOR TO COVERING. ENGINEER MUST BE NOTIFIED PRIOR TO COVERING SURVEY ASBUILT LOCATIONS. ENGINEER WILL NOT ACCEPT FIELD MEASUREMENTS FROM THE SITE CONTRACTOR.
- 13. NO STOCKPILING OF MATERIAL TO BE LOCATED IN THE RIGHT OF WAY AND NO OPEN TRENCHES ARE TO BE LEFT OVERNIGHT.
- ALL TOPSOIL IN DISTURBED AREAS MUST BE STOCKPILED ON SITE FOR FUTURE USE. NO TOPSOIL SHALL LEAVE THE SITE.
- ALL EXCESS SOIL, TREES, ROCKS, BOULDERS, AND OTHER REFUSE, MUST BE DISPOSED OFF SITE IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. STUMPS MUST BE GROUND ON SITE OR REMOVED.
- 16. NO STUMP DUMPS ARE PROPOSED ON SITE.
- ALL EXISTING UTILITIES SHOWN ARE FROM VISIBLE INFORMATION, DRAWINGS FROM OTHERS, OR INFORMATION PROVIDED TO DIPRETE ENGINEERING AND ARE SUBJECT TO CHANGE. THE LOCATIONS OF UNDERGROUND PIPES AND CONDUITS HAVE BEEN DETERMINED FROM AFOREMENTIONED PLANS OF RECORD AND ARE APPROXIMATE ONLY. PRIOR TO CONSTRUCTION, THE PROPER UTILITY ENGINEERING DEPARTMENTS MUST BE CONTACTED AND THE ACTUAL LOCATION OF SUBSURFACE STRUCTURES MUST BE DETERMINED IN THE FIELD BY THE CONTRACTOR. CALL THE DIG SAFE CENTER TOLL FREE AT 1-888-344-7233 IN MA, ME, NH, RI, & VT PRIOR TO EXCAVATION. NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES PRIOR TO EXCAVATION. ANY DAMAGE TO UTILITIES WHICH ARE SHOWN ON THE PLANS OR DETAILED BY DIG SAFE MUST BE THE SITE CONTRACTORS RESPONSIBILITIES.
- 18. IF CONCRETE TRUCKS ARE WASHED OUT ON-SITE, ALL WASHOUT MUST BE COMPLETED IN THE DESIGNATED CONCRETE WASHOUT AREA.
- 19. ALL DRAINAGE PIPE INSTALLED WITHIN THE SEASONAL HIGH GROUNDWATER TABLE MUST BE WATER TIGHT.

## **Lidar Note:**

CONTOUR DATA 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.

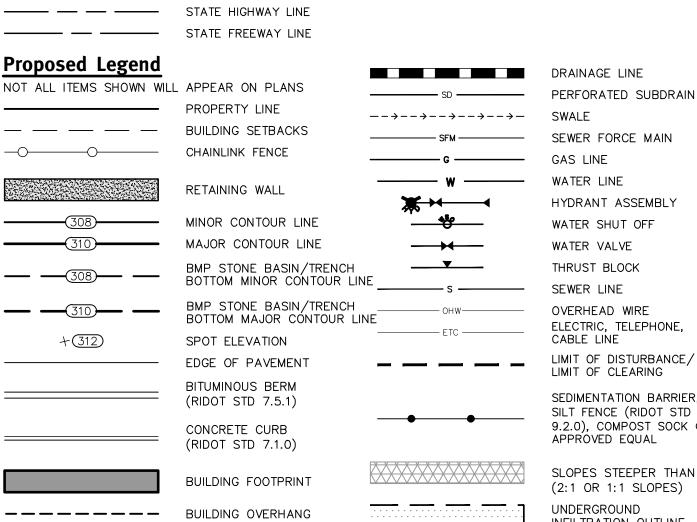
## **Dimensional Regulations:**

CURREN	Γ ZONING:	A-80	
MINIMUM MINIMUM MINIMUM	LOT AREA: FRONTAGE AND LOT WIDTH: FRONT YARD: SIDE YARD: REAR YARD:	80,000 200' 40' 20' 100'	SF

## **Existing Legend**

NOT ALL ITEMS SHOWN WILL APPEAR ON PLANS

	PROPERTY LINE	<b>△</b> /△
	ASSESSORS LINE	<b>0</b> /©
	BUILDING	<b>○</b> /⊚ ■/□
	BRUSHLINE	۵
MMMM.	TREELINE	•
	GUARDRAIL	SEV
x x	FENCE	©
	RETAINING WALL	
00000000000000	STONE WALL	
	MINOR CONTOUR LINE	
10	MAJOR CONTOUR LINE	-0
	WATER LINE	
s	SEWER LINE	
SFM	SEWER FORCE MAIN	
	GAS LINE	<u>(S)</u>
	ELECTRIC LINE	SV
	OVERHEAD WIRES	
	DRAINAGE LINE	Ø
HkC	SOILS LINES	8
CaD	50' PERIMETER WETLAND	WV
	100' RIVERBANK WETLAND	<b>®</b>
	200' RIVERBANK WETLAND	
ZONE X	FEMA BOUNDARY	(?) GV
	STREAM	⋈
B1 B2	WETLAND LINE & FLAG	<b>─√</b> •
ASSF1 ASSF2	AREA SUBJECT TO STORM FLOWAGE LINE & FLAG	
	STATE HIGHWAY LINE	
	STATE FREEWAY LINE	
Proposed Legend		
NOT ALL ITEMS SHOWN WILL	APPEAR ON PLANS	
	PROPERTY LINE	
	BUILDING SETBACKS	



ASPHALT PAVEMENT

ASPHALT PAVEMENT

HEAVY DUTY

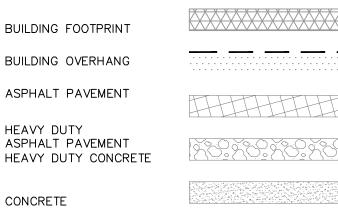
CONCRETE

SAWCUT LINE

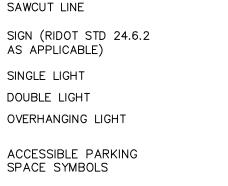
SINGLE LIGHT

DOUBLE LIGHT

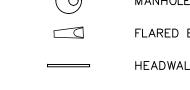
AS APPLICABLE)



ASPHALT SIDEWALK



CATCH BASIN MANHOLE



ELECTRIC UTILITY POLE

BUILDING INGRESS/EGRESS

ZONING LINE Zone A8

LIMIT OF DISTURBANCE

Zone A8o

SOLAR ARRAY (TYP)

NAIL FOUND/SET

BOUND FOUND/SET

SOIL EVALUATION

SIGN

CB

S SMH

BOLLARD

CATCH BASIN

DCB DOUBLE CATCH BASIN

DMH DRAINAGE MANHOLE

GUY POLE

EMH ELECTRIC MANHOLE

LIGHTPOST

CLEANOUT

HYDRANT

UP UTILITY/POWER POLE

SEWER VALVE

IRRIGATION VALVE

MONITORING WELL

UNKNOWN MANHOLE

STREAM FLOW DIRECTION

WATER LINE

HYDRANT ASSEMBLY

WATER SHUT OFF

WATER VALVE

THRUST BLOCK

OVERHEAD WIRE

ELECTRIC, TELEPHONE,

LIMIT OF DISTURBANCE/

SEDIMENTATION BARRIER.

SILT FENCE (RIDOT STD

APPROVED EQUAL

UNDERGROUND

POND ACCESS

9.2.0), COMPOST SOCK OR

SLOPES STEEPER THAN 3

(2:1 OR 1:1 SLOPES)

INFILTRATION OUTLINE

SEWER LINE

CABLE LINE

WATER VALVE

GAS VALVE

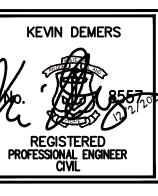
BENCH MARK

SEWER/SEPTIC MANHOLE

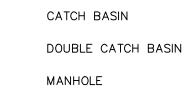
FES FLARED END SECTION

DRILL HOLE FOUND/SET

Ш



SAND FILTER BIO RETENTION

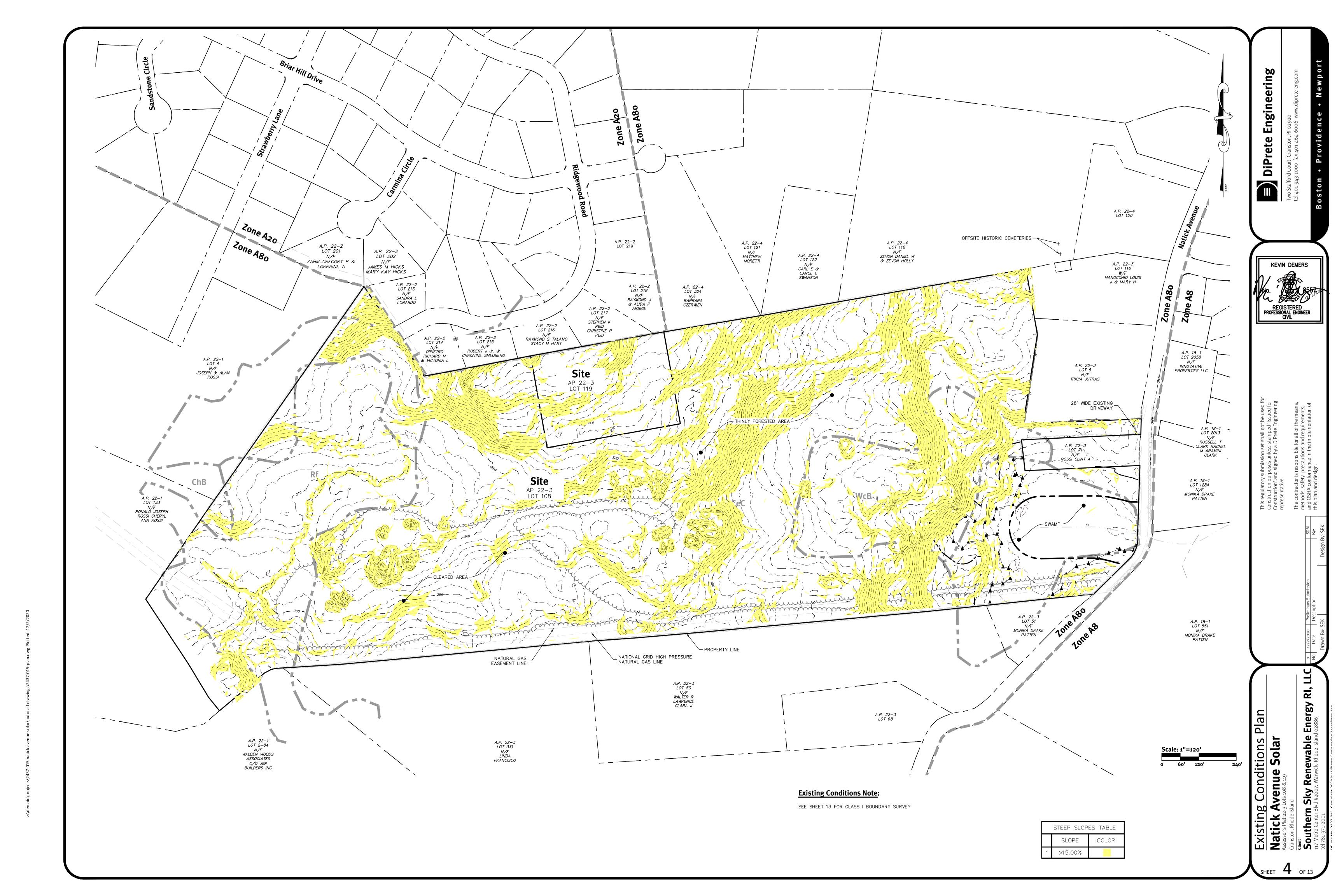


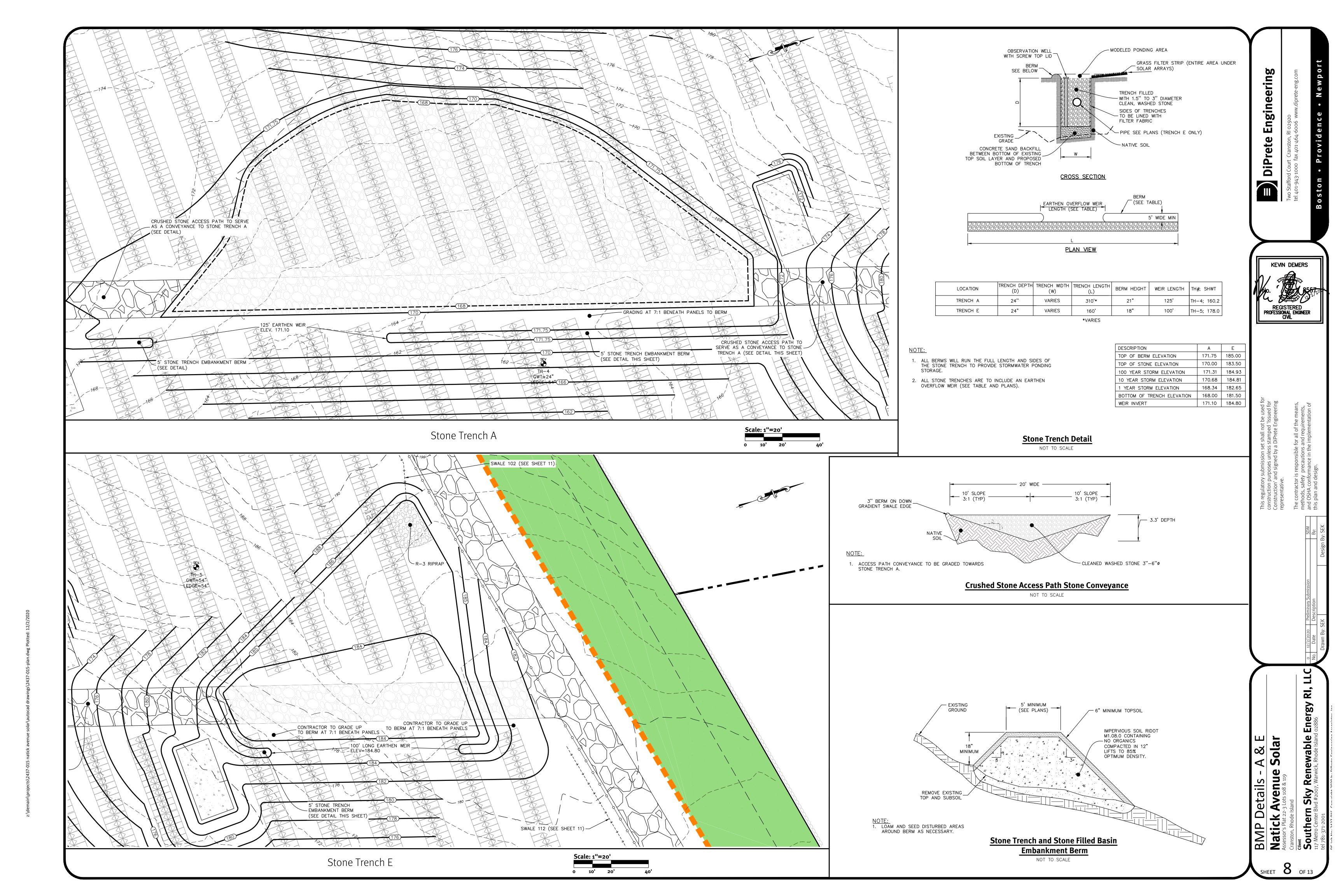
FLARED END SECTION HEADWALL

> 못, 3 e 0 S

<u>e</u> 100 Ven **>** 4

**4** en ati





BMP D

Natick
Assessor's Plat 22

POND BERM FILL MATERIAL TO MEET

└ 95% MODIFIED

PROCTOR TEST

(ASTM D1557)

\_BASIN BERM

BACKFILL

CONCRETE SAND

BACKFILL FROM BOTTOM

TO BOTTOM OF BMP

OF EXISTING LOAM LAYER

**Stone Filled Basin** 

NOT TO SCALE

BOTTOM OF POND

SUITABLE EXISTING MATERIAL

ELEV: (SEE PLANS)

ACCORDANCE WITH RHODE ISLAND STATE STANDARD

SECTION A-A

NOT TO SCALE

PLAN VIEW

NOT TO SCALE

SPECIFICATIONS. GRAVEL BORROW TO EXTEND MINIMUM 6"

BELOW EXISTING TOP/SUBSOIL. ALL BACKFILL MUST BE FREE FROM ORGANIC MATERIALS. ALL MATERIAL PLACED BELOW CURBING MUST BE COMPACTED TO 95% DENSITY.

**Curb Outlet Weir** 

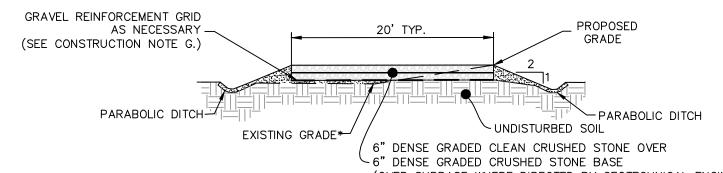
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SECTION B-B

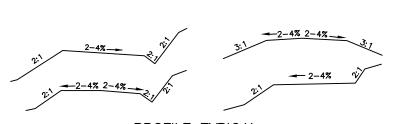
NOT TO SCALE

ALL CONCRETE CURB WEIRS MUST BE MONOLITHIC.
CONCRETE CURB WEIRS CANNOT BE MULTIPLE PRECAST

CURBS JOINED IN SEQUENCE.



(OVER SUBBASE WHERE DIRECTED BY GEOTECHNICAL ENGINEER. SEE NOTES AND DETAILS BELOW)



**Crushed Stone Access Path Detail** 

NOT TO SCALE

\*NOTE: WHERE ROAD BASE IS AT OR ABOVE EXISTING GRADE, ORGANICS MUST BE REMOVED PRIOR TO INSTALLATION OF ROAD BASE.

PROFILE TYPICAL

CLEAN CRUSHED STONE SPECIFICATIONS				
SIEVE DESIGNATION	PERCENTAGE BY MASS (WEIGHT) PASSING SQUARE MESH SIEVES			
90mm (3.5in)	100			
75mm (3in)	90-100			
50mm (2in)	75–100			
25mm (1in)	50-80			
12.5mm (0.5in)	30-60			
4.75mm (No.4)	0-40			
7.5um (No. 200)	0			

DENSE GRADED CLEAN CRUSHED STONE:

A. DENSE GRADED CLEAN CRUSHED STONE MUST CONSIST OF CLEAN WASHED, HARD, UNIFORMLY GRADED, CRUSHED STONE. IT MUST BE SUFFICIENTLY FREE FROM DIRT, DELETERIOUS MATERIAL, AND PIECES
THAT ARE STRUCTURALLY WEAK AND
MUST MEET THE FOLLOWING REQUIREMENTS: B. SOURCE OF MATERIAL MUST BE OBTAINED FROM AREAS STRIPPED

C. MATERIAL COARSER THAN THE 4.75mm (No. 4) SIEVE MUST NOT BE MORE THAN 30 PERCENT, BY MASS (WEIGHT), OF THIN AND/OR ELONGATED PIECES.

AND CLEANED OF SOIL AND DEBRIS

BEFORE BLASTING

SUBBASE SPECIFICATIONS (WHERE DIRECTED)					
CONDITIONS:	ROAD THICKNESS	STONE SIZE	FINES		
SUBBASE LAYER WITH GEOTEXTILE FABRIC (NOT EXCESSIVELY WET)	4" MIN.	3-3 1/2	0-6%		
SUBBASE LAYER WITH GEOTEXTILE	6" MIN.	3-3 1/2	0-6%		

BASE SPECIFICATIONS PERCENTAGE BY SIEVE DESIGNATION MASS (WEIGHT) PASSING SQUARE MESH SIEVES 90mm (3.5in) 75mm (3in) 90–100 75–100 50mm (2in) 50-80 30-60 25mm (1in) 12.5mm (0.5in)

4.75mm (No.4)

7.5um (No. 200)

DENSE GRADED CRUSHED STONE FOR BASE: A. DENSE GRADED CRUSHED STONE FOR BASE MUST CONSIST OF CLEAN, HARD, UNIFORMLY GRADED, CRUSHED

STONE. IT MUST BE SUFFICIENTLY FREE FROM DIRT, DELETERIOUS MATERIAL, AND PIECES THAT ARE STRUCTURALLY WEAK AND MUST MEET THE FOLLOWING REQUIREMENTS: B. SOURCE OF MATERIAL MUST BE
OBTAINED FROM AREAS STRIPPED
AND CLEANED OF SOIL AND DEBRIS
BEFORE BLASTING C. MATERIAL COARSER THAN THE

4.75mm (No. 4) SIEVE MUST NOT BE MORE THAN 30 PERCENT, BY MASS (WEIGHT), OF THIN AND/OR ELONGATED PIECES.

**CONSTRUCTION NOTE:** A. CONSTRUCTION OPERATIONS MUST BE CARRIED OUT IN SUCH A MANNER TO MINIMIZE POTENTIAL EROSION AND WATER QUALITY DEGRADATION.

B. FIXED EROSION CONTROLS AND SITE STABILIZATION MUST BE CONDUCTED IN ACCORDANCE WITH APPROVED BMP'S OR PURSUANT TO PROJECT SPECIFIC PERMITS.

15-40

0-6

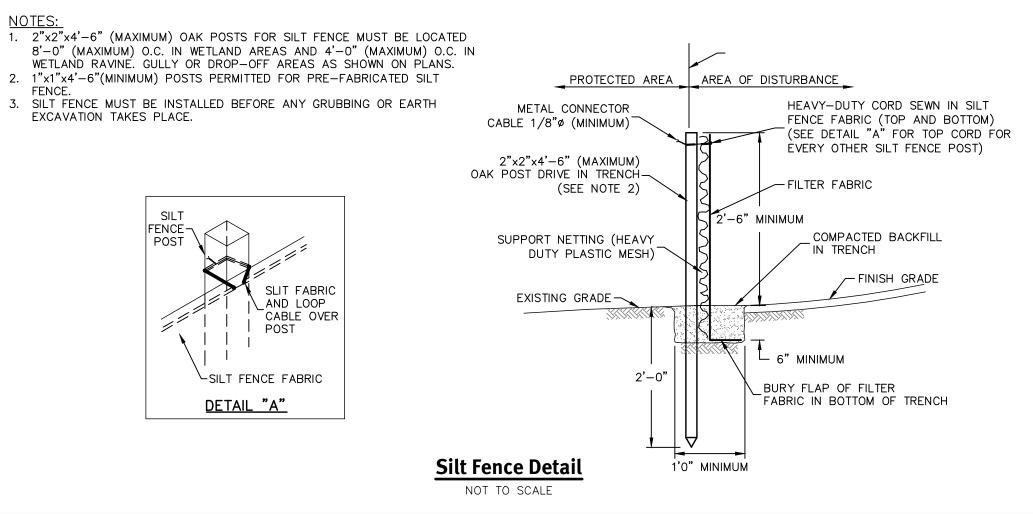
C. TREES, STUMPS, ROOTS, BRUSH AND WEEDS MUST BE REMOVED FROM THE WORK AREA IF DETERMINED NECESSARY TO SAFELY CONSTRUCT ROADWAY. D.ON WEAK BEARING SOIL SUCH AS LOOSE ALLUVIAL, OR WETLAND SOILS, SURFACE TREATMENTS SHOULD BE UNDERLAIN WITH WOVEN GEOTEXTILES E. AT MINIMUM, ROADSIDE DITCHES MUST BE 1FT BELOW ROAD SURFACE. F. DISCHARGE POINTS. FOR DITCHES MUST NOT BE NEAR WETLANDS OR STREAMS, AND OR BE LOCATED AT THE DIRECTION OF THE DESIGN

G. CONTRACTOR TO INSTALL GRAVEL REINFORCEMENT GRID AS NECESSARY TO PREVENT EROSION AND/OR VEHICULAR DAMAGE TO THE ACCESS ROAD.

# CRUSHED STONE

**Construction Access** 

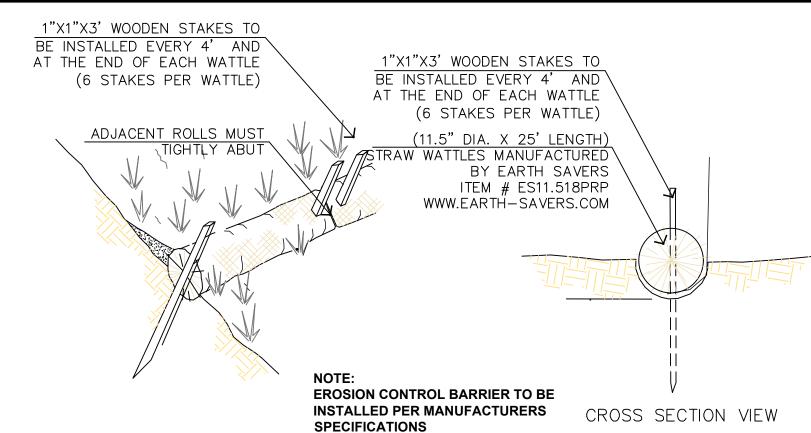
NOT TO SCALE



**TENSION** TENSION . ROD ROD TENSION TRUSS ROD ADJUSTING UNIT

1. METRIC DIMENSIONS ARE NOMINAL EQUIVALENTS TO U.S. DIMENSIONS. 2. SPECIFICATIONS SHOWN CAN BE CHANGED BY THE MANUFACTURER ONLY. 3. FOOTING WIDTH TO BE (4)X POST WIDTH.

> **Double Swing Gate 12' Opening** NOT TO SCALE



**Straw Wattle Sediment Barrier** 

- KNUCKLED

- TENSION WIRE

- CHAIN LINK FABRIC

TENSION WIRE

(OPTIONAL)

ROUND END POSTS, WITHOUT TOP RAIL &

GAP BETWEEN GROUND AND BOTTOM OF FENCE, FOR SMALL ANIMAL PASSAGE.

**Typical High Fence** 

NOT TO SCALE

NOTE: ENTIRE FENCE LINE TO HAVE 6-INCH

WITHOUT BARBED WIRE

LINE POST CAP

- CHAIN LINK FABRIC

(ROUND)

LINE POST (ROUND)

- LINE POST TIE

MINIMUM DEPTH

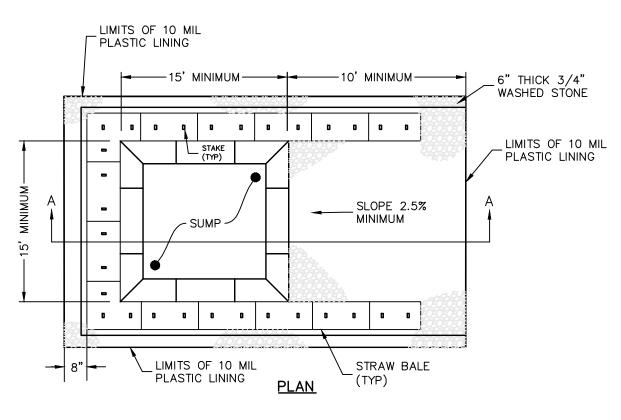
FOOTING WIDTH TO BE

(4)X POST WIDTH

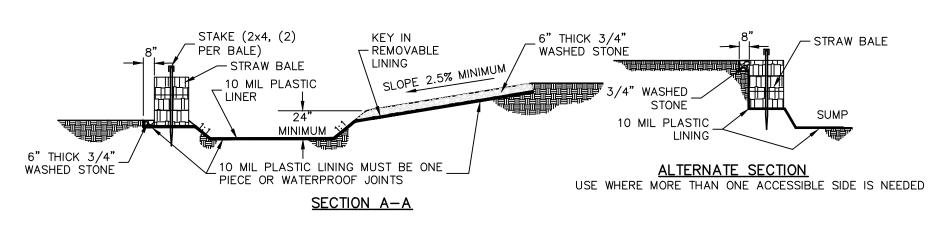
TENSION

(OPTIONAL)

- WIRE



CONDTIONS)



- 1. PIT IS SPECIFICALLY DESIGNATED, DIKED AND IMPERVIOUS TO PREVENT CONTACT BETWEEN CONCRETE WASH AND
- 2. WASH WATER MUST NOT BE ALLOWED TO FLOW TO SURFACE WATER.
- 4. FACILITY MUST NOT BE FILLED BEYOND 95% CAPACITY UNLESS A NEW FACILITY IS CONSTRUCTED.
- 6. CONCRETE WASHOUTS MUST BE LOCATED A MINIMUM OF 100' FROM DRAINAGE WAYS, INLETS AND SURFACE WATERS.

## **Concrete Washout Area** (NOT TO SCALE)

ALL CONCRETE

TRUCKS MUST

WASHOUT HERE

WASHOUT SIGN

# STORMWATER.

- 3. FACILITY MUST HOLD SUFFICIENT VOLUME TO CONTAIN CONCRETE WASTE WITH A MINIMUM FREEBOARD OF 12."
- 5. SAWCUT PORTLAND CEMENT CONCRETE, RESIDUE FROM SAWCUT AND GRINDING MUST BE DISPOSED OF IN THE PIT.

## 7. MANUFACTURED CONCRETE WASHOUT DEVICES MAY BE USED IF REMOVED FROM THE SITE WHEN 95% FULL CAPACITY.

# **GENERAL NOTES:**

- 1. THE TEMPORARY SEDIMENT TRAP MUST 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 MUST HAVE AN INITIAL STORAGE VOLUME OF 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA.
- 3. ALL CUT AND FILL SLOPES MUST BE 2:1 OR FLATTER EXCEPT FOR THE
- EXCAVATED WET STORAGE AREA WHERE SLOPES MUST NOT EXCEED 1.5:1. 4. THE OUTLET MUST BE LOCATED AT THE MOST DISTANT HYDRAULIC POINT
- 5. THE OUTLET MUST CONSIST 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 MUST BE 2:1 OR FLATTER.
- 9. MODIFIED RIPRAP: MUST MEET THE REQUIREMENTS OF RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SUBSECTION
- 10. FILTER STONE: MUST MEET THE REQUIREMENTS OF RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SUBSECTION M.01.03 TABLE I, COLUMN V FILTER STONE.

## INSPECTION, MAINTENANCE, AND REMOVAL REQUIREMENTS:

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

**Temporary Sediment Trap Notes** 

## **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 REQUIRÉMENTS. 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

# 'MINIMUM (TYP) EXISTING GRADE TO BE 4"-6" OF EXISTING SEEDED WHERE NECESSARY LOAM COVER WITH SHADE AND DROUGHT TOLERANT GRASS SPECIES CLEAN WASHED STONE DETENTION BASIN OR -STONE TRENCH

. TOPSOIL ON SITE MUST BE PRESERVED. TOPSOIL MUST NOT BE EXPORTED FROM THE SITE.

POST TOP

CORNER POST

- TENSION BAR

10'-0" MAXIMUM SPACING

(ROUND)

(ROUND)

Onsite Grading Material and PV Array **Distance Scheme - Tilt, Angle and Shading Detail** 

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**KEVIN DEMERS** 

REGISTERED PROFESSIONAL ENGINEER CIVIL

