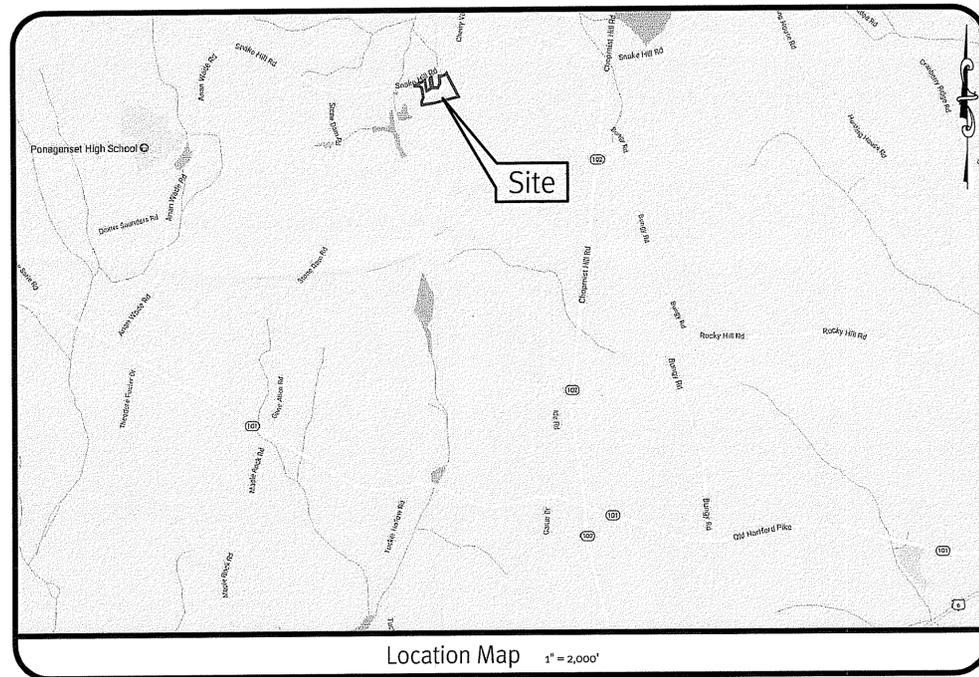


Master/Preliminary Submission

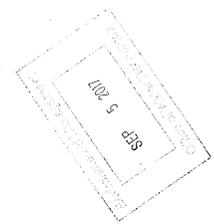
# Snake Hill Road Solar

Snake Hill Road  
Glocester, Rhode Island 02814  
Assessor's Plat 12 Lot 205



## Sheet Index

1. Cover Sheet
  2. Half Mile Aerial & USGS Map
  3. Existing Conditions Plan
  4. Site Layout Plan
  5. Detail Sheet
- 1 of 1. Boundary Survey



**DiPrete Engineering**  
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DAVID A. RUSSO  
No. 14305  
REGISTERED PROFESSIONAL ENGINEER CIVIL

No.	Date	Description	By
1	08-22-2017	REDESIGN SUBMISSION	J.A.R.
2	08-22-2017	MASTER PLAN SUBMISSION	J.A.R.
3	08-23-2017	DESIGNATION SUBMISSION	J.A.R.

Drawn By: J.A.R. Design By: D.A.R.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED OCT 13 2017 FILE # 17-0205  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

*David A. Russo*

Cover Sheet  
**Snake Hill Road Solar**  
AP 12, Lot 205  
Glocester, Rhode Island 02814  
Owner:  
**Kenneth A. Hopkins c/o SSRE-RI, LLC**  
117 Metro Center Boulevard, Suite 2007, Warwick, RI 02886  
tel 401-562-0213

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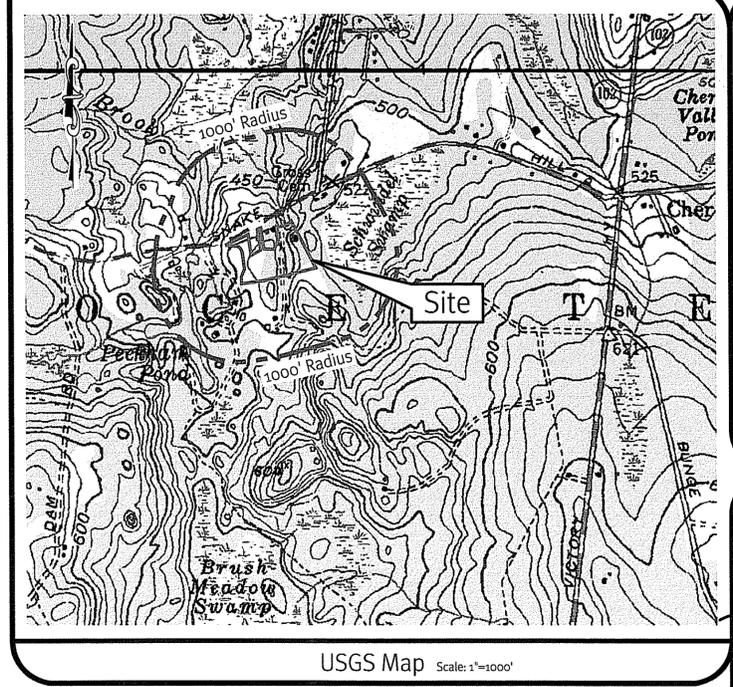
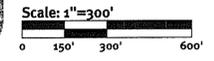


Photo obtained from the RI-GIS.

**Legend**

- 1000' RADIUS LINE
- HALF MILE RADIUS LINE



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 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

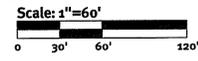
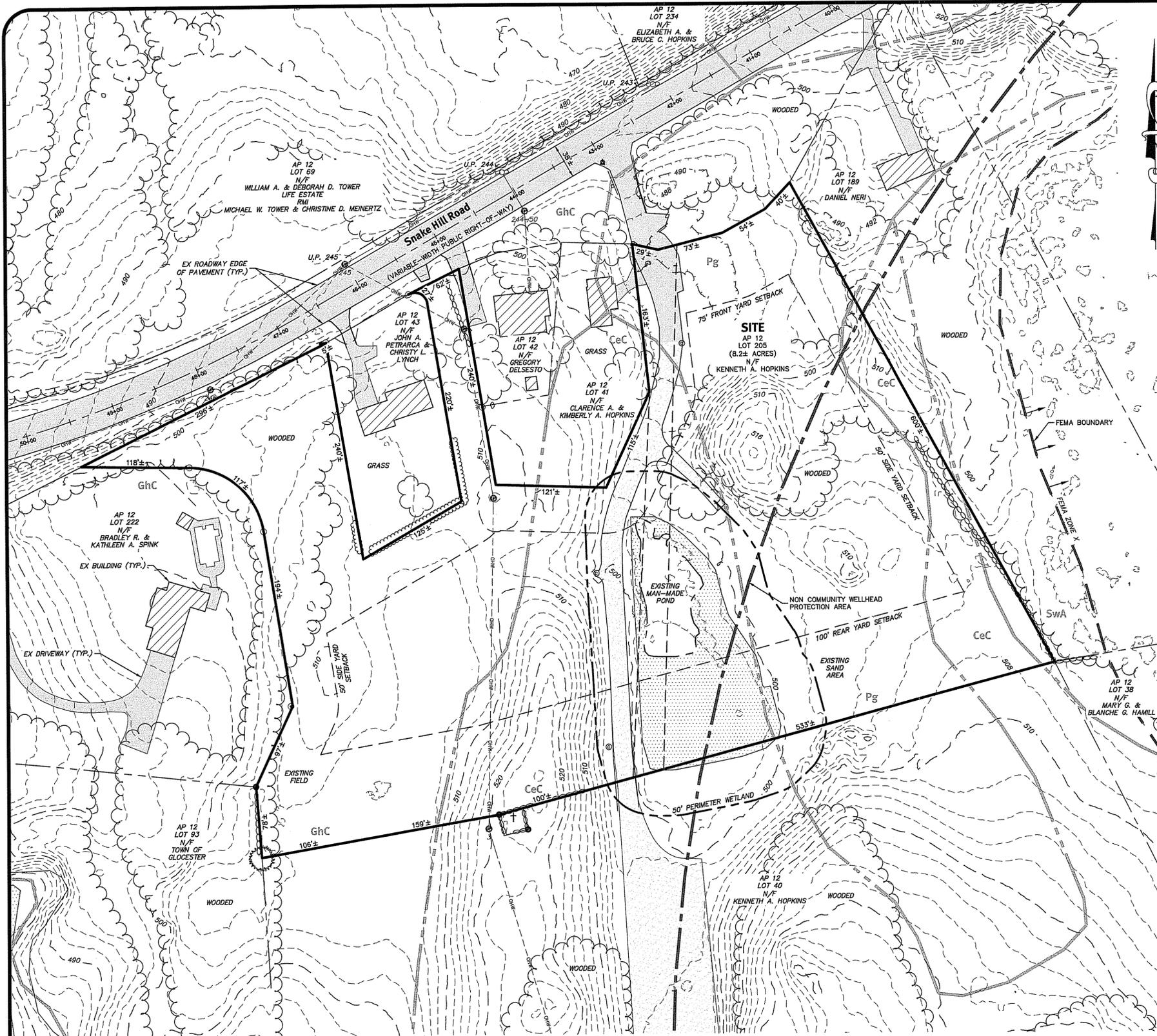
*John A. Russo*

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DAVID A. RUSSO  
 No. 4255  
 REGISTERED PROFESSIONAL ENGINEER  
 CIVIL

No.	Date	Description	Drawn By: J.A.R.	Design By: D.A.R.
1	08-27-2017	PROJ. SUBMISSION		
2	08-27-2017	Master Plan Submittal		
3	02-16-2017	Master Plan Submittal		
4	08-27-2017	Final Plan Submission		

**Half Mile Aerial & USGS Map**  
**Snake Hill Road Solar**  
 AP 53, Lot 205  
 Gloucester, Rhode Island 02884  
 Owners:  
**Kenneth A. Hopkins c/o SSRE-RI, LLC**  
 117 Metro Center Boulevard, Suite 2007, Warwick, RI 02886  
 Tel: 401-592-0213



**General Notes:**

- THE SITE IS LOCATED ON THE TOWN OF GLOCESTER, RHODE ISLAND ASSESSOR'S PLAT 12 LOT 205.
- THE SITE IS APPROXIMATELY 8.2± ACRES AND IS ZONED A-3.
- THE OWNER OF AP 12 LOT 205 IS: KENNETH A. HOPKINS  
1378 SNAKE HILL ROAD  
P.O. BOX 141  
CHEPACHET, RI 02814
- THIS SITE IS LOCATED IN FEMA FLOOD ZONE X UNSHADED. ZONE X UNSHADED ARE AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN. REFERENCE FEMA FLOOD INSURANCE RATE MAP 4400702555, MAP REVISED MARCH 2, 2009.
- THIS PLAN IS SUBSTANTIALLY CORRECT IN ACCORDANCE WITH A CLASS IV STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS. THIS PLAN IS NOT TO BE CONSTRUED AS AN ACCURATE BOUNDARY SURVEY AND MAY BE SUBJECT TO SUCH CHANGES AS AN ACCURATE BOUNDARY SURVEY MAY DISCLOSE.
- SOIL MAPPING OBTAINED FROM SOIL SURVEY OF RHODE ISLAND, PREPARED BY U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE.
- THE SITE IS WITHIN A:  
NATURAL HERITAGE AREA (RIDEM)
- THE SITE NOT WITHIN A:  
GAA GROUNDWATER QUALITY CLASSIFICATION (RIDEM)
- A PORTION OF THE SITE, NOT WITHIN THE PROJECT LIMIT OF WORK, IS WITHIN:  
NON COMMUNITY WELLHEAD PROTECTION AREA (RIDEM)
- A SUITABLY QUALIFIED PROFESSIONAL FROM DIPRETE ENGINEERING INSPECTED THE SITE ON 06-13-2017 - WETLAND FEATURES WERE OBSERVED WITHIN PROXIMITY OF THE PROPOSED DEVELOPMENT AREA.

**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 AUTHORITY FIELD SURVEY MAY DISCLOSE.

**Legend:**

CONTOUR	---	300
SOIL BOUNDARY LINE	-----	HkC CaD
EDGE OF PAVEMENT	---	
BUILDING	▭	
TREELINE	~~~~~	
SHRUBS	~~~~~	
FEMA BOUNDARY	---	FEMA ZONE X FEMA ZONE X
PROPERTY LINE	---	
ASSESSOR LINE	---	
STATE HIGHWAY LINE	---	
SETBACK	---	
EASEMENT	---	
WETLAND EDGE	---	
WETLAND HATCH	▨	
50' PERIMETER WETLAND	---	50' PERIMETER WETLAND
WATER/POND EDGE	---	
NAIL FOUND/SET	▲/△	
DRILL HOLE FOUND/SET	●/⊙	
IRON ROD/PIPE FOUND/SET	○/⊙	
BOUND FOUND/SET	■/□	
UTILITY POLE (AERIAL)	⊕	
UTILITY POLE (SURVEYED)	⊙	
CATCH BASIN (SURVEYED)	⊙	

**Abbreviations:**

EXISTING	EX
PROPOSED	PR
TYPICAL	TYP
ASSESSOR'S PLAT	AP
NOW OR FORMERLY	N/F

**Soil Information:**

(REFERENCE: SOIL SURVEY OF RHODE ISLAND, U.S.D.A. SOIL CONSERVATION SERVICE)

SOIL NAME	DESCRIPTION
CeC	CANTON AND CHARLTON FINE SANDY LOAMS, VERY ROCKY, 3 TO 15 PERCENT SLOPES
GhC	GLOUCESTER-HINCKLEY VERY STONY SANDY LOAMS, ROLLING
Pg	PITS, GRAVEL
SwA	SWANSEA MUCKY PEAT, 0 TO 2 PERCENT SLOPES

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
APPROVED IN THE LETTER OF APPROVAL  
AS SPECIFIED IN THE LETTER OF APPROVAL  
06/13/2017 FILE # **D-0205**  
DATED \_\_\_\_\_  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION

*James A. Hopkins*

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DAVID A. RUSSO  
No. 14355  
REGISTERED PROFESSIONAL ENGINEER CIVIL

3	08-17-2017	RDMA Submission	J.A.R.	Design By: D.A.R.
1	07-14-2017	Main File Submission	J.A.R.	
0	06-23-2017	Pre-Application Submission	J.A.R.	
		Date	Description	By:

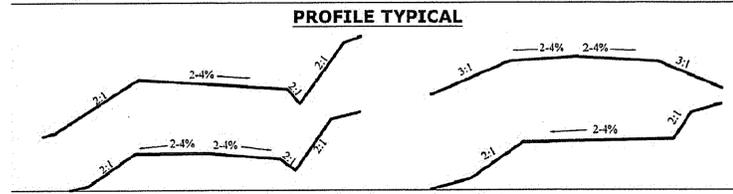
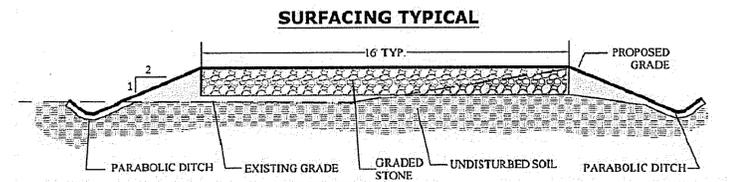
Existing Conditions Plan  
**Snake Hill Road Solar**  
AP 12, Lot 205  
Glocester, Rhode Island 02814  
Owner: **Kenneth A. Hopkins c/o SSRE-RI, LLC**  
137 Mato Center Boulevard, Suite 2007, Warwick, RI 02886  
Tel 401-562-0213

DESIGN NO. 2497-009 Copyright 2017 by DiPrete Engineering Associates, Inc.

SHEET **3** OF 5

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**SURFACING SPECIFICATIONS**

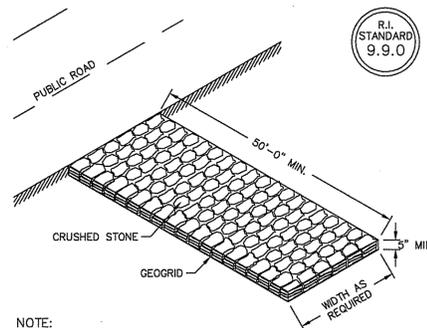
Conditions:	Road Thickness	Stone Size	Fines
Base Layer with Geotextile Fabric (not excessively wet)	4" Min.	3-3 1/2	0-6%
Base Layer with Geotextile Fabric (wet conditions)	6" Min.	3-3 1/2	0-6%

**MATERIAL SPECIFICATIONS**

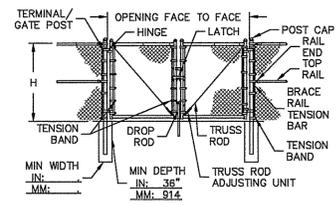
Sieve Designation	Percentage by Mass (Weight) Passing Square Mesh Sieves
90mm (3.5 inch)	100
75 mm (3 inch)	90-100
50 mm (2 inch)	75-100
25 mm (1 inch)	50-80
12.5mm (1/2 inch)	30-40
4.75 mm (No. 4)	15-40
75um (No. 200)	0-6

- SOURCES:**
- Surfacing Typical and Surfacing Specs: Derived from USDA NRCS drawing "Access Road; ME-ENG-AR1"
  - Profile Typical: Derived from USDA Forest Service Publication "Forest Road Construction and Maintenance"
  - Material Specs: Derived from VTRANS 704.06 Subbase

**PERMEABLE ACCESS DETAIL**  
NTS



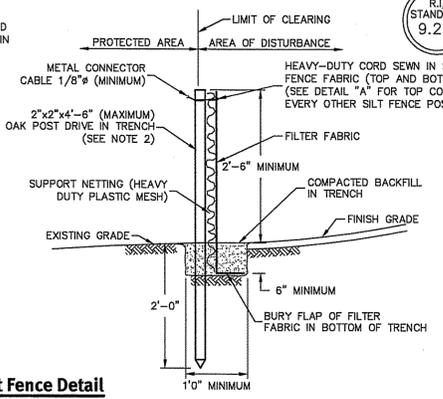
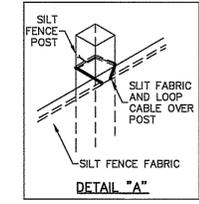
**CONSTRUCTION ACCESS**  
NOT TO SCALE



- NOTE:**
- METRIC DIMENSIONS ARE NOMINAL EQUIVALENTS TO U.S. DIMENSIONS.
  - SPECIFICATIONS SHOWN CAN BE CHANGED BY THE MANUFACTURER ONLY.
  - FOOTING WIDTH TO BE (4)X POST WIDTH.

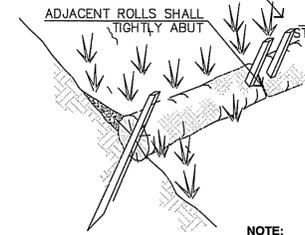
**DOUBLE SWING GATE 12' OPENING**  
NOT TO SCALE

- NOTES:**
- SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE R.I. STANDARD SPECIFICATIONS.
  - 2"x2"x4'-6" (MAXIMUM) OAK POSTS FOR SILT FENCE SHALL BE LOCATED 8'-0" (MAXIMUM) O.C. IN WETLAND AREAS AND 4'-0" (MAXIMUM) O.C. IN WETLAND RAVIDE, GULLY OR DROP-OFF AREAS AS SHOWN ON PLANS.
  - 1"x1"x4'-6" (MINIMUM) POSTS PERMITTED FOR PRE-FABRICATED SILT FENCE.
  - SILT FENCE SHALL BE INSTALLED BEFORE ANY GRUBBING OR EARTH EXCAVATION TAKES PLACE.



**Silt Fence Detail**  
NOT TO SCALE

1"x1"x3" WOODEN STAKES TO BE INSTALLED EVERY 4' AND AT THE END OF EACH WATTLE (6 STAKES PER WATTLE)

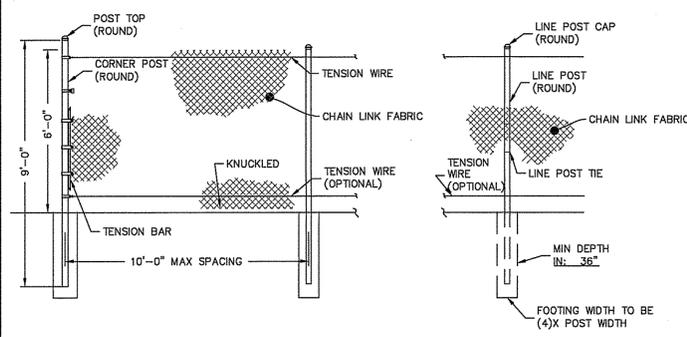


1"x1"x3" WOODEN STAKES TO BE INSTALLED EVERY 4' AND AT THE END OF EACH WATTLE (6 STAKES PER WATTLE)  
(11.5" DIA. X 25' LENGTH)  
STRAW WATTLES MANUFACTURED BY EARTH SAVERS  
ITEM # ES11.518PRP  
WWW.EARTH-SAVERS.COM

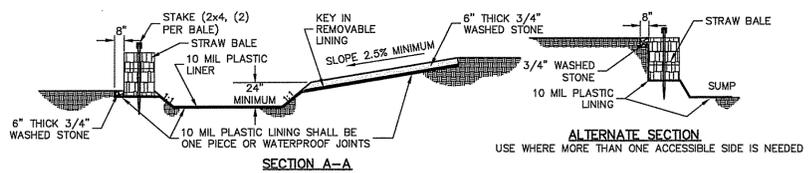
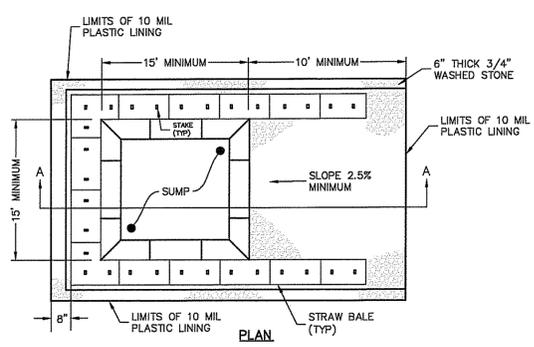
- NOTE:**
- EROSION CONTROL BARRIER TO BE INSTALLED PER MANUFACTURERS SPECIFICATIONS

**CROSS SECTION VIEW**

**STRAW WATTLE SEDIMENT BARRIER**  
NOT TO SCALE



**FENCE DETAIL**  
NOT TO SCALE



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



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

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
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OCT 13 2017  
FILE # 17-0205  
DATED  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION

**Detail Sheet - Erosion Control**  
**Snake Hill Road Solar**  
AP 12, Lot 205  
Glocester, Rhode Island 02854  
Owner:  
**Kenneth A. Hopkins c/o SSRE-RI, LLC**  
117 Metro Center Boulevard, Suite 2007, Warwick, RI 02886  
Tel: 401-562-0213  
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DAVID A. RUSSO  
No. 4338  
REGISTERED PROFESSIONAL ENGINEER  
CIVIL

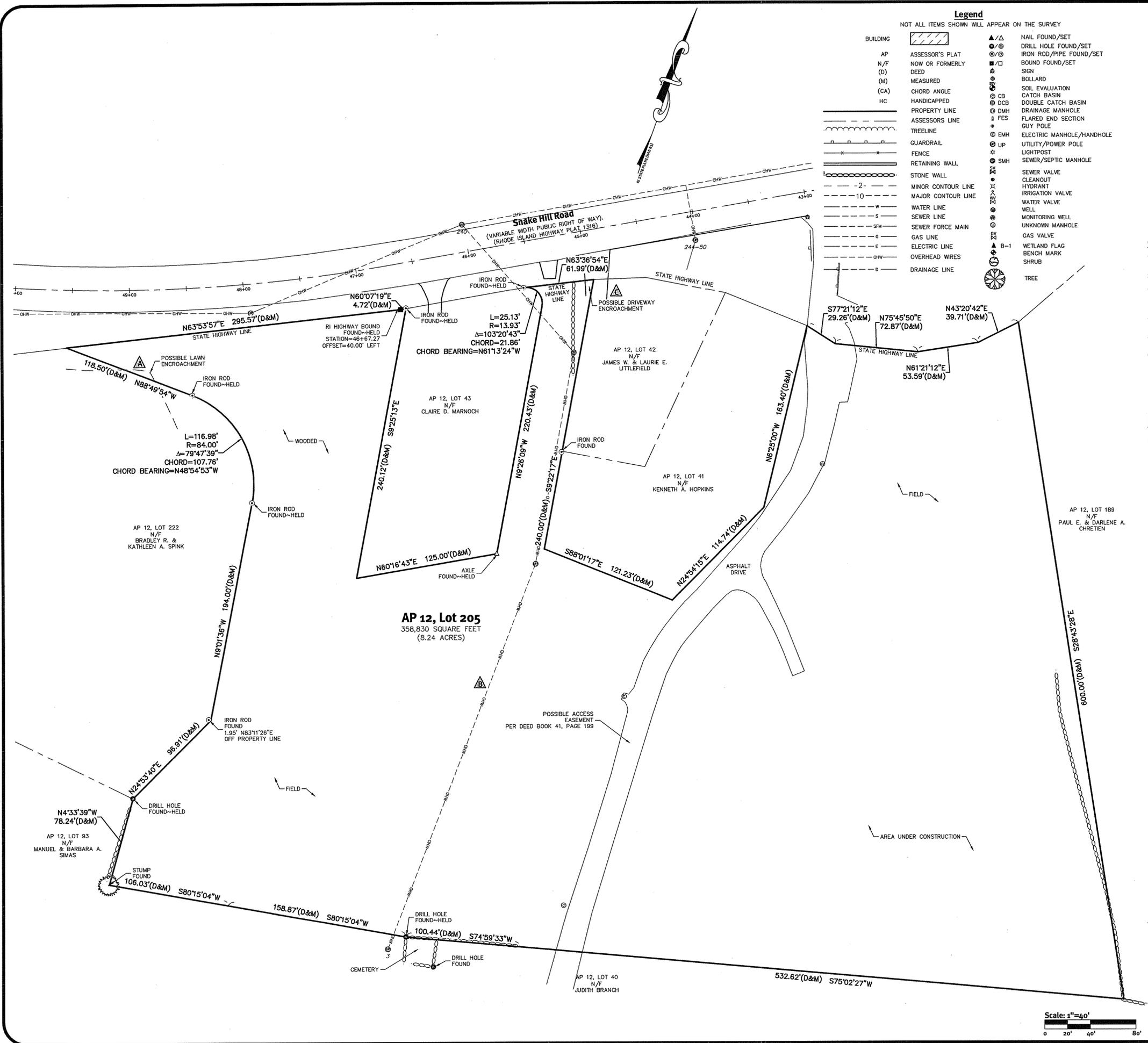
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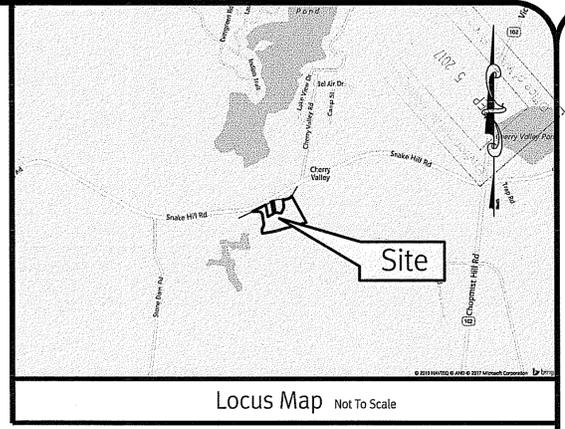
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**Legend**  
NOT ALL ITEMS SHOWN WILL APPEAR ON THE SURVEY

AP	ASSESSOR'S PLAT	▲/△	NAIL FOUND/SET
N/F	NOW OR FORMERLY	●/◎	DRILL HOLE FOUND/SET
(D)	DEED	⊙/⊗	IRON ROD/PIPE FOUND/SET
(M)	MEASURED	■/□	BOUND FOUND/SET
(CA)	CHORD ANGLE	+	SIGN
HC	HANDICAPPED	⊙	BOLLARD
	PROPERTY LINE	⊙	SOIL EVALUATION
	ASSESSOR'S LINE	⊙	CATCH BASIN
	TREELINE	⊙	DOUBLE CATCH BASIN
	GUARDRAIL	⊙	DRAINAGE MANHOLE
	FENCE	⊙	FLARED END SECTION
	RETAINING WALL	⊙	GUY POLE
	STONE WALL	⊙	ELECTRIC MANHOLE/HANDHOLE
	MINOR CONTOUR LINE	⊙	UTILITY/POWER POLE
	MAJOR CONTOUR LINE	⊙	LIGHTPOST
	SEWER LINE	⊙	SEWER/SEPTIC MANHOLE
	SEWER FORCE MAIN	⊙	SEWER VALVE
	GAS LINE	⊙	CLEANOUT
	ELECTRIC LINE	⊙	HYDRANT
	OVERHEAD WIRES	⊙	IRRIGATION VALVE
	DRAINAGE LINE	⊙	WATER VALVE
		⊙	WELL
		⊙	MONITORING WELL
		⊙	UNKNOWN MANHOLE
		⊙	GAS VALVE
		⊙	ELECTRIC LINE
		⊙	WETLAND FLAG
		⊙	BENCH MARK
		⊙	SHRUB
		⊙	TREE



**General Notes**

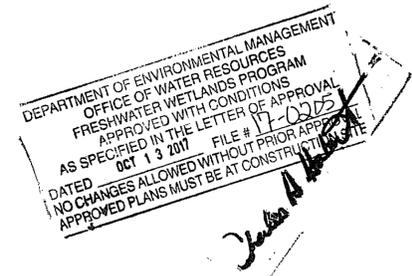
1. THE PARCEL IS FOUND ON ASSESSOR'S PLAT 12, LOT 205 IN THE TOWN OF GLOUCESTER, PROVIDENCE COUNTY, RHODE ISLAND.
2. THE OWNER PER TOWN TAX INFORMATION AND PLAN REFERENCE #1 IS KENNETH A. HOPKINS.
3. BASED ON GRAPHICAL PLOTTING ONLY, THE PARCEL IS LOCATED IN X PER FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP 4407C02556, DATED AUGUST 2, 2009. THIS DESIGNATION MAY CHANGE BASED UPON REVIEW BY A FLOOD ZONE SPECIALIST OR BY THE RESULTS OF A COMPREHENSIVE FLOOD STUDY.
4. THERE WERE NO CEMETERIES, GRAVE SITES AND OR BURIAL GROUNDS OBSERVED WITHIN THE LIMITS OF THE SURVEY.
5. FIELD SURVEY PERFORMED BY DIPRETE ENGINEERING ON AUGUST 24, 2017. THIS PLAN REFLECTS ON THE GROUND CONDITIONS AS OF THAT DATE.
6. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT. DIPRETE ENGINEERING IS NOT RESPONSIBLE FOR ANY UNKNOWN OR UNRECORDED EASEMENTS, DEEDS OR CLAIMS THAT A TITLE REPORT WOULD DISCLOSE.
7. DIPRETE ENGINEERING IS NOT RESPONSIBLE FOR AN ARCHAEOLOGICAL INVESTIGATION NEEDED TO DETERMINE THE BOUNDARIES OF THE UNMARKED CEMETERY AS REQUIRED BY RHODE ISLAND GENERAL LAW § 23-23-18-11 SUBSECTION 2C. THE APPROXIMATE AREA OF THE UNMARKED CEMETERY THE AREA SHOWN ON THIS SURVEY IS BASED SOLELY ON THE LOCATION OF THE HEADSTONE FOUND IN THE FIELD AT THE TIME OF THE SURVEY ON OCTOBER 17, 2011.

**Plan References:**

1. "ADMINISTRATIVE SUBDIVISION PLAN, A.P. 12, LOTS 205 & 222, 1414 SNAKE HILL ROAD, GLOUCESTER, RI FOR BRADLEY SPINK," DATE: OCTOBER 22, 2012, SCALE: 1"=50', SURGUE & ASSOC., INC., RECORDED IN THE TOWN OF GLOUCESTER LAND EVIDENCE RECORDS ON HANGING FILE #201, MAP #809.
2. RHODE ISLAND HIGHWAY PLAT 1316.
3. "LOT 1, DIVISION OF LAND FOR THOMAS CASH, ASSESSOR'S PLAT 12, LOT 44" FILED IN PLAT BOOK MAP 242, PAGE DRAWER 5 RECORDED 05/30/1979.
4. "PLAN OF LAND FOR KENNETH A. HOPKINS, GLOUCESTER, RI" DATED APRIL, 1988, SCALE 1"=40' RECORDED IN THE TOWN OF GLOUCESTER LAND EVIDENCE RECORDS MAP 331A.

**List of Possible Encroachments:**

- ▲ LAWN OVER PROPERTY LINE
- △ OVERHEAD WIRE OVER PROPERTY LINE
- △ DRIVEWAY OVER PROPERTY LINE

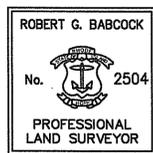


**Certification**

THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO SECTION 9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS ON JANUARY 1, 2016, AS FOLLOWS:

TYPE OF SURVEY: PERIMETER BOUNDARY SURVEY  
MEASUREMENT SPECIFICATION: CLASS 1

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



ROBERT G. BABCOCK, RIPLS #2504, COA #LS.000A160  
08/24/2017

**DiPrete Engineering**  
Two Stafford Court, Cranston, RI 02920  
tel. 401-949-1000 fax. 401-664-6006 www.diprete-eng.com  
Boston • Providence • Newport

No.	Date	Description	By:
0	8/23/2017	Boundary Survey	E.L.T.
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

**Boundary Survey**  
**Snake Hill Road Solar Site**  
Gloucester, Rhode Island

Client:  
**Southern Sky Renewable Energy RI, LLC**  
17 Metro Center Boulevard, Suite 2007, Warwick, Rhode Island 02886

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SHEET 1 OF 1