

Master Plan Submission

GD NS Old Smithfield Solar I

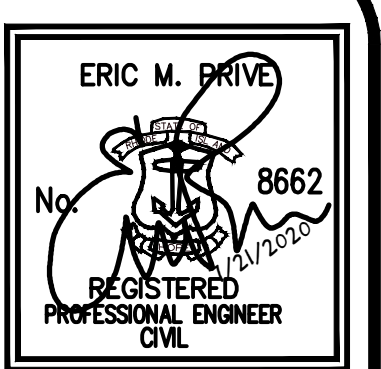
Old Smithfield Road
North Smithfield, Rhode Island

Assessor's Plat 13 Lot 26



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- 2 Aerial Half Mile Radius & USGS Map
- 3 Existing Analysis Plan
- 4 Site Layout Plan
- 1 of 1 Property Line Survey

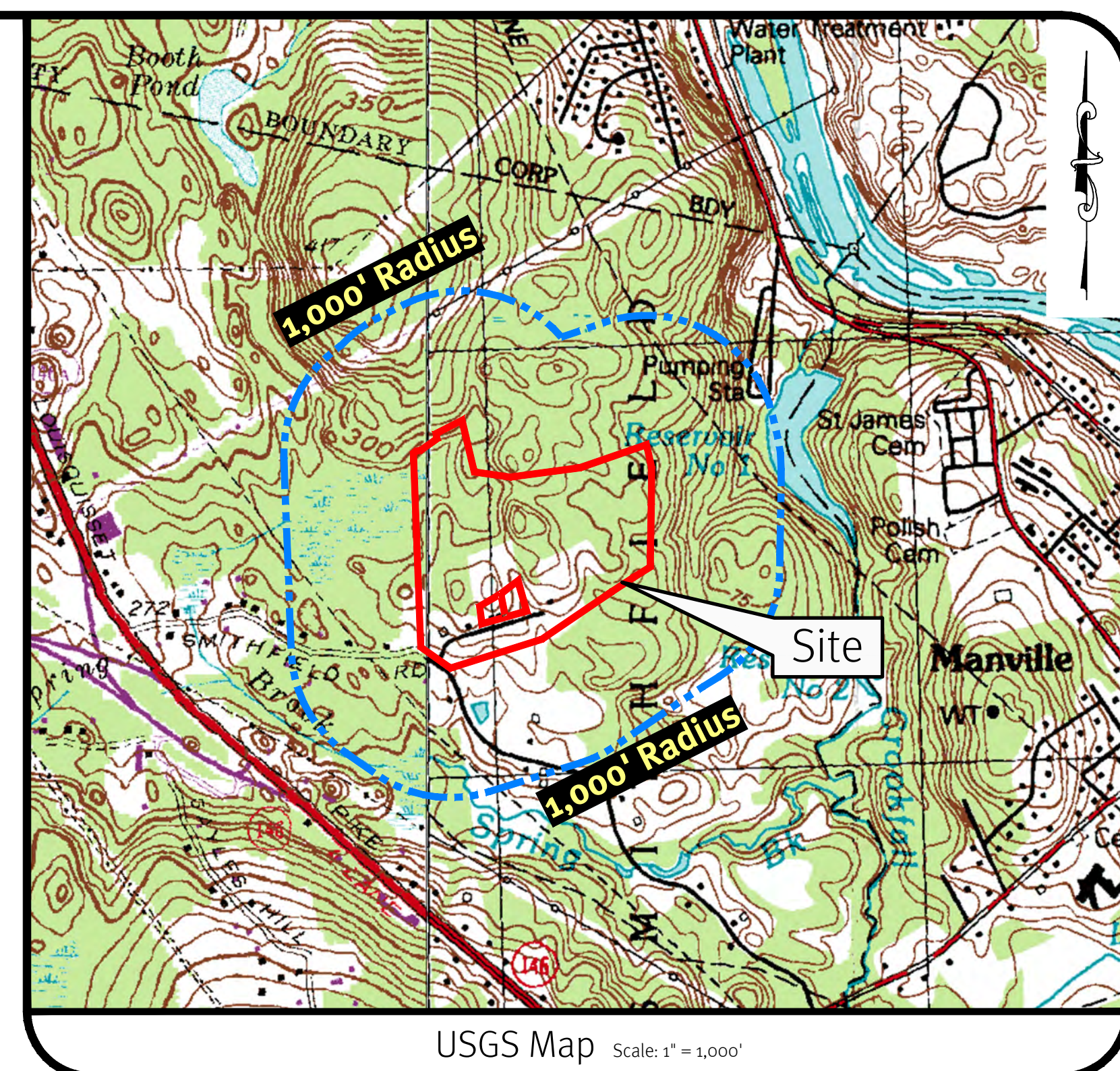
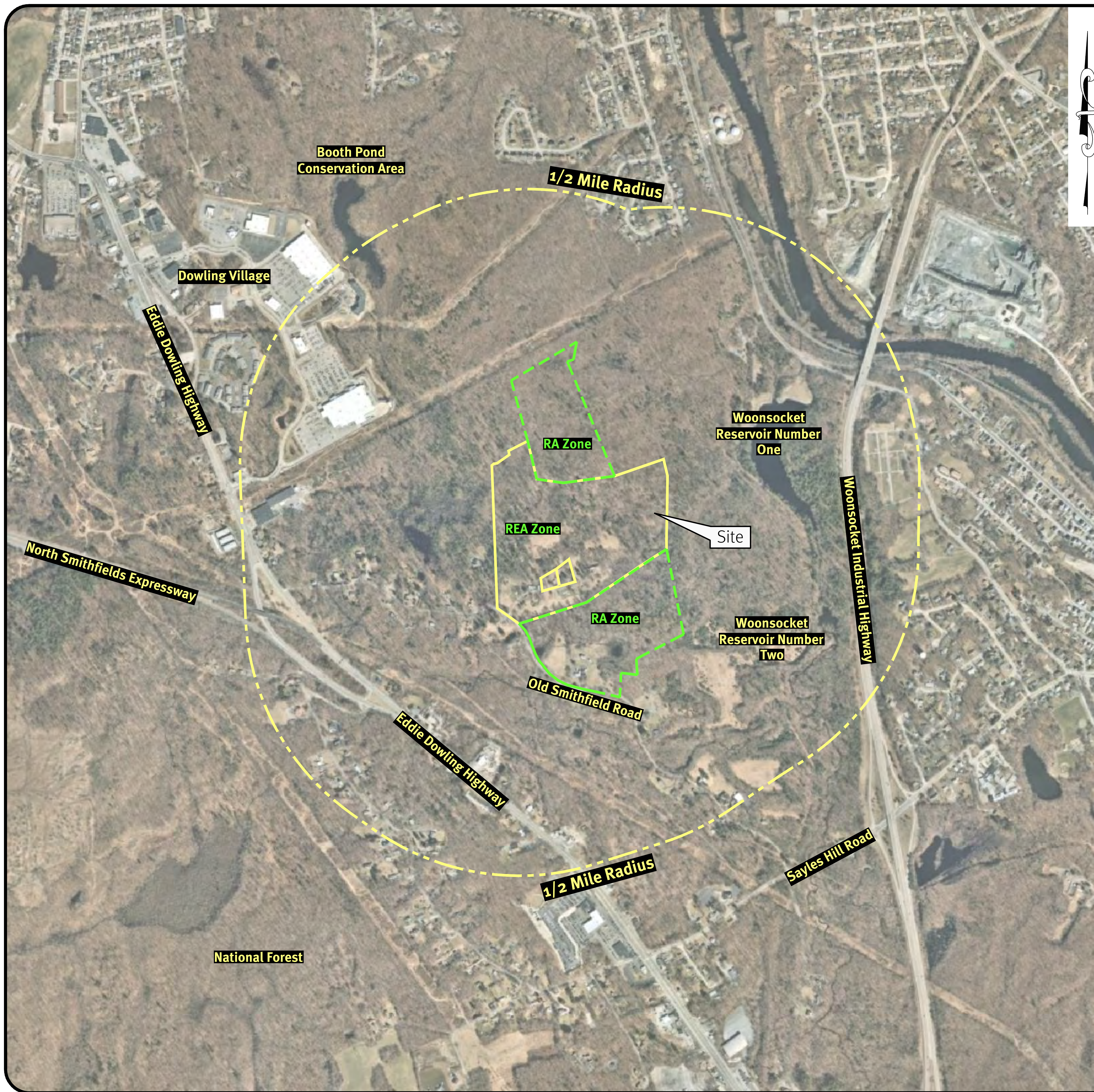


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Rev.	Date	Description	By	Design By
1	7/27/2020	Master Plan Submission	S.E.H.	K.C.M.
0	10/22/2019	Pre-Submittal Submission	J.R.R.	

Drawn By: D.R.N. Design By: K.C.M.

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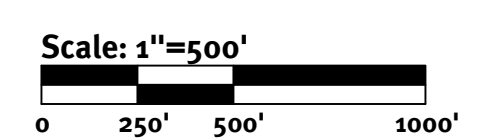


USGS Map Scale: 1" = 1,000'

Legend:

- PROPERTY LINE
- 1000' RADIUS LINE
- HALF MILE RADIUS LINE
- ZONE LINE

Photo obtained from the NearMAP 2020 database.



DiPrete Engineering
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ERIC M. DRIVE
 No. 8662
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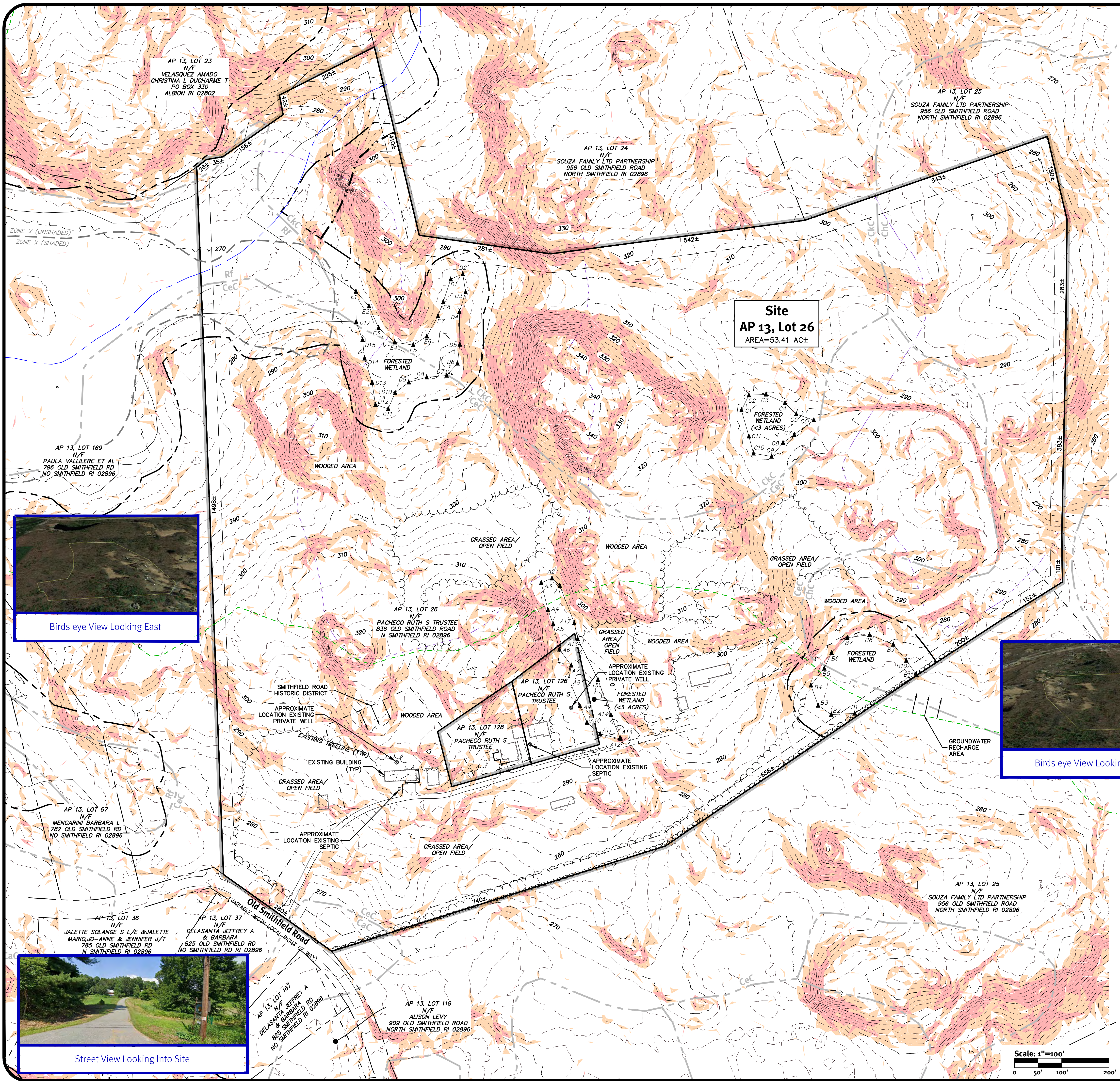
Rev.	Date	Description	By	Design By
1	7/27/2020	Master Plan Submission	S.E.H.	K.C.M.
2	10/22/2019	Pre-Submittal Submission	J.R.R.	

Drawn By: D.R.N.

Aerial Half Mile & USGS Map
GD NS Old Smithfield Solar I
 Assessor's Plat 13, Lot 26
 North Smithfield, Rhode Island
WED North Smithfield One, LLC
 2000 Chapel View Blvd., Suite 500, Cranston, RI 02920
 Tel: (401) 295-4998

DE JOB No: 0601-010 Copyright: 2020 by DiPrete Engineering Associates, Inc.

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Birds eye View Looking East



Birds eye View Looking West



Street View Looking Into Site

General Notes:

- THE SITE IS LOCATED ON THE TOWN OF NORTH SMITHFIELD, RHODE ISLAND ASSESSOR'S PLAT 13 LOT 26.
- THE SITE IS APPROXIMATELY 53.41 ACRES AND IS ZONED REA.
- THE OWNER OF AP 13 LOT 26 IS: PACHECO RUTH S TRUSTEE
836 OLD SMITHFIELD ROAD
NORTH SMITHFIELD RI 02896
- THIS SITE IS LOCATED IN FEMA FLOOD ZONES X. REFERENCE FEMA FLOOD INSURANCE RATE MAP 44007C0176G, MAP REVISED MARCH 2, 2009.
- THE BOUNDARY LINE SHOWN ON THIS PLAN DEPICTS THE RESULTS OF A CLASS I BOUNDARY SURVEY AS PERFORMED BY NATIONAL SURVEYORS-DEVELOPERS. THIS PLAN IS NOT TO BE CONSTRUED AS A CLASS I BOUNDARY PLAN AND IS NOT SUITABLE FOR RECORDING AS A CLASS I STANDARD SURVEY PLAN.
- SOIL MAPPING OBTAINED FROM SOIL SURVEY OF RHODE ISLAND, PREPARED BY U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE.
- THE SITE IS WITHIN A:
GROUNDWATER PROTECTION OVERLAY DISTRICT (TOWN)

THE SITE IS NOT WITHIN A:
GROUNDWATER PROTECTION AREA
NATURAL HERITAGE AREAS
- THE DRAINAGE SYSTEM WILL BE DESIGNED TO MEET THE TOWN OF NORTH SMITHFIELD SUBDIVISION AND LAND DEVELOPMENT REGULATIONS WITH THE USE OF DRAINAGE BEST MANAGEMENT PRACTICES (BMP). THE STORMWATER MANAGEMENT SYSTEM WILL MEET THE RIDEM BEST MANAGEMENT PRACTICES.
- THE SITE IS PROPOSED TO BE BUILT IN ONE PHASE.
- THE BOUNDARY DEPICTED HAS BEEN COMPILED TO A CLASS 1 STANDARD AS ADOPTED BY THE R.I. STATE BOARD OF REGISTRATIONS FOR PROFESSIONAL LAND SURVEYORS AS REFERENCED WITHIN THE PLAN: "PROPERTY LINE SURVEY; RUTH S. PACHECO, TRUSTEE; AP 13 LOTS 26, 126 & 128; 810, 826 & 836 OLD SMITHFIELD ROAD; NORTH SMITHFIELD, RHODE ISLAND"; DATED APRIL 2019, SHEET 1 OF 1; PREPARED BY: NORBERT A. THERIEN, PLS #1739 OF NATIONAL SURVEYORS-DEVELOPERS INC.; SIGNED/SEALED ON 4/15/19.

Soils Definitions:

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

SOIL NAME	DESCRIPTION
CcC	CANTON-CHARLTON-ROCK OUTCROP COMPLEX, 3 TO 15 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
CkC	CANTON AND CHARLTON EXTREMELY STONY FINE SANDY LOAMS, 3 TO 15 PERCENT SLOPES
Rf	RIDGEBURY, WHITMAN, AND LEICESTER EXTREMELY STONY FINE SANDY LOAMS

Abbreviations:

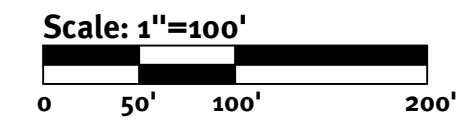
EXISTING	EX
PROPOSED	PR
TYPICAL	TYP
ASSESSOR'S PLAT	TYP
NOW OR FORMERLY	N/F
UTILITY POLE	U.P.

Legend:

PROPERTY LINE	—————
ASSESSOR LINE	- - - - -
SETBACK LINE	—————
EX MAJOR FOOT CONTOUR	————— 160
EX MINOR FOOT CONTOUR	————— 158
SOIL BOUNDARY LINE	————— CeC ————— CaD
WETLAND EDGE	—————
WETLAND FLAG	▲ 45
WETLAND STREAM (RI-OIS)	—————
50' PERIMETER WETLAND	—————
100' RIVERBANK WETLAND	—————
FEMA BOUNDARY	————— ZONE X ————— ZONE X
EX EDGE OF PAVEMENT	—————
EXISTING STONE WALL	—————
EX TREELINE	—————
EX BUILDING	—————
EX FENCE	—————
EX OVERHEAD WIRES	—————
EX UTILITY POLE	⊙
RIDGELINE	—————
EX WELL	⊙
EX SEPTIC	⊙

Slopes Table

	MIN SLOPE	MAX SLOPE	COLOR
1	15.00%	25.00%	Orange
2	25.00%	Vertical	Red



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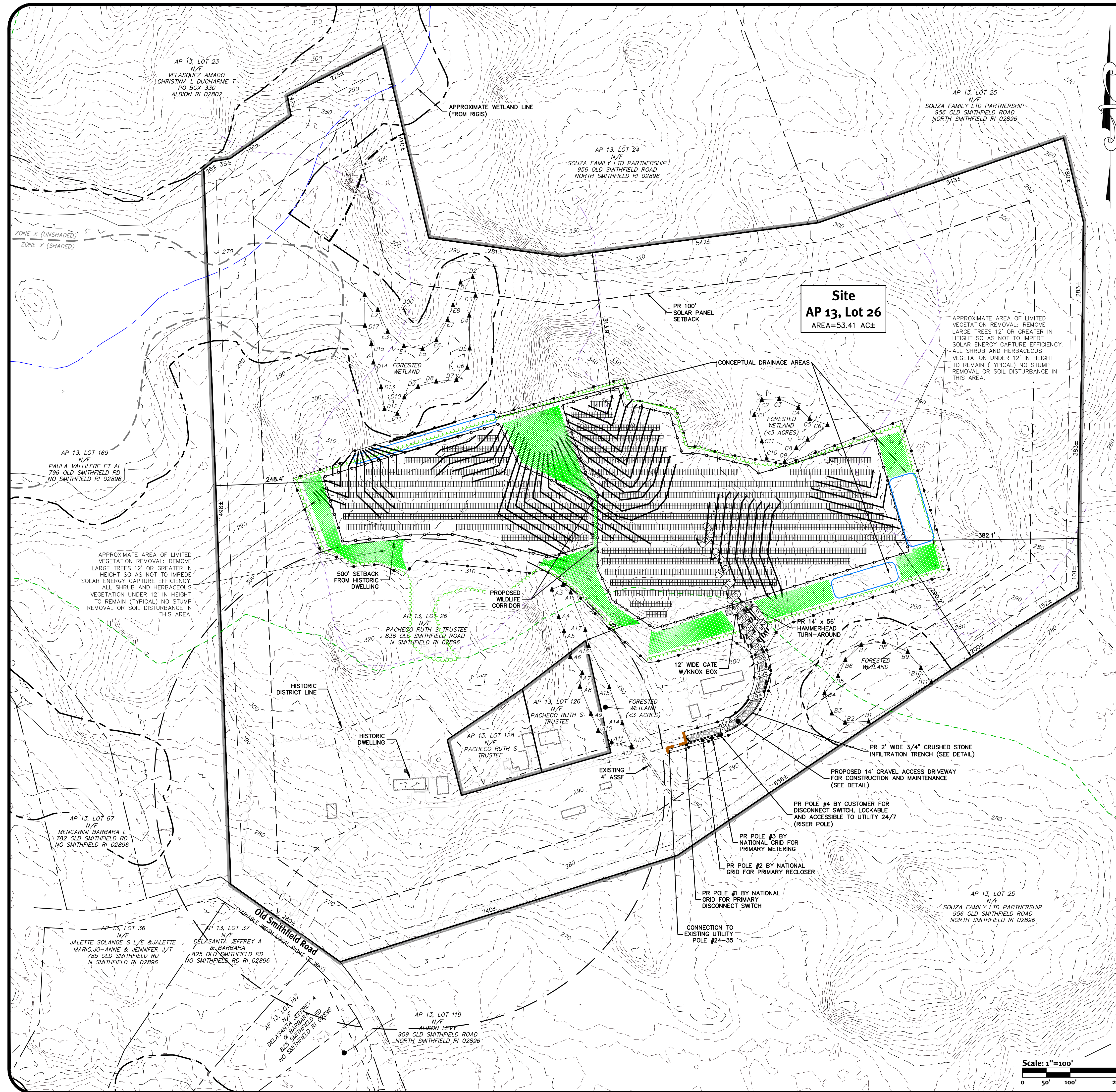
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NO.	DATE	DESCRIPTION	S.E.H.	D.R.	BY
1	1/21/2020	Master Plan Submission			
2	10/22/2019	Pre-Application Submission			

Drawn By: D.R.N. Design By: K.C.M.

Existing Analysis Plan
GD NS Old Smithfield Solar I
Assessor's Plat 13, Lot 26
North Smithfield, Rhode Island
WED North Smithfield One, LLC
2000 Chapel View Blvd, Suite 500, Cranston, RI 02920
tel (401) 295-4998
DE JOB NO: 0601-0310 Copyright 2020 by DiPrete Engineering Associates, Inc.



Site Layout Notes:

1. THE SITE IS LOCATED ON A.P. 13 LOT 26 WITHIN THE TOWN OF NORTH SMITHFIELD, RI.
2. DETAILED SOIL EROSION AND SEDIMENT CONTROL MEASURES WILL CONFORM TO RIDEM BEST MANAGEMENT PRACTICES. A COMPREHENSIVE SOIL EROSION AND SEDIMENTATION CONTROL (SESC) PLAN WILL BE SUBMITTED AT PRELIMINARY PLAN STAGE.
3. THE PROJECT DOES NOT PROPOSE ANY NEW WELLS NOR SEPTIC SYSTEMS.
4. ALL ELECTRICAL CONNECTION AND DISTRIBUTION LINES WITHIN THE FACILITY SHALL BE UNDERGROUND. ELECTRICAL EQUIPMENT BETWEEN THE FACILITY AND THE UTILITY CONNECTION MAY BE ABOVE GROUND IF REQUIRED BY THE UTILITY.
5. NO LIGHTING IS PROPOSED AT THIS TIME FOR THE PROPOSED SOLAR FACILITY.
6. PROPOSED SIGNAGE IS LIMITED TO SECURITY SIGNS AND VOLTAGE WARNING SIGNS (OR SIMILAR) INSTALLED ON THE FACILITY PERIMETER FENCING.
7. PROJECT WORK WILL BE COMPLETED IN ONE PHASE.
8. NO PRIME AGRICULTURAL SOILS ARE TO BE REMOVED DURING CONSTRUCTION AND INSTALLATION OF THE SYSTEM.
9. THE SOLAR ARRAY SHALL BE ENCLOSED BY A 7' HIGH PERIMETER FENCE WITH A 12' WIDE GATE WITH KNOX BOX. PERIMETER FENCE TO BE RAISED 6" FROM GRADE TO ALLOW FOR SMALL WILDLIFE MOVEMENT.
10. GROUND MOUNTED SOLAR INSTALLATIONS SHALL NOT EXCEED 15 FEET IN HEIGHT (ZONING ORDINANCE 5.7.5.j), TYPICALLY, HEIGHT OF PROPOSED SOLAR PANEL INSTALLATION RANGES FROM 3 FEET TO 12 FEET.
11. THE DRAINAGE SYSTEM WILL MEET THE NORTH SMITHFIELD SUBDIVISION AND LAND DEVELOPMENT REGULATIONS WITH THE USE OF SWALES, DRAINAGE BASINS, AND INFILTRATION TRENCHES. THE STORMWATER MANAGEMENT SYSTEM WILL MEET THE RIDEM BEST MANAGEMENT PRACTICES.
12. A DETAILED LANDSCAPE PLAN WILL BE SUBMITTED AT THE PRELIMINARY STAGE.

Viewshed Analysis:

THE PROPOSED SOLAR DEVELOPMENT WILL BE SCREENED FROM ADJACENT STREETS AND NEIGHBORING PARCELS WITH AN EXISTING VEGETATED BUFFER AND/OR LANDSCAPE SCREENING ALONG WITH EXISTING UNDISTURBED TREELINE.

Dimensional Regulations:

CURRENT ZONING:	REA (RURAL ESTATE AGRICULTURE) REQUIRED	PROVIDED
MINIMUM LOT AREA:	120,000 SF	53.41 AC± (EXISTING)
MINIMUM FRONTAGE AND LOT WIDTH:	300'	280' (EXISTING)
MINIMUM FRONT YARD:	46'- 100'	290.2'
MINIMUM SIDE YARD:	25'- 100'	135.2'
MINIMUM REAR YARD:	46'- 100'	313.9'
MAXIMUM STRUCTURE HEIGHT:	35'	3'-12'
MAXIMUM LOT COVERAGE:	28% 30% or 6 ACRES, WHICHEVER IS LESS	5.97± ACRES (11.2%)

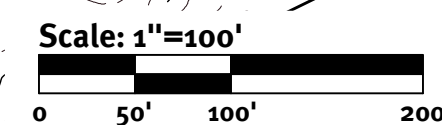
* - ZONING ORDINANCE SECTION 5.7.5 (d) SETBACKS:
 (1) CONSISTENT WITH SECTION 5.7.5 (g) VISUAL BUFFER AND SETBACK, ALL SOLAR ARRAYS MUST BE SET BACK A MINIMUM OF 100' FROM PROPERTY LINES.

Solar Panel Area Information:

AREA OF SOLAR PANELS AND INTER-ROW SPACING:	5.97± ACRES
AREA ENCLOSED WITHIN PERIMETER FENCE:	6.95± ACRES
LIMIT OF DISTURBANCE AREA: (INCLUDING SELECTIVE TREE CUTTING)	10.9± ACRES

Legend:

- PR ELECTRIC LINE
- PR UTILITY POLE
- PR 14' WIDE GRAVEL ACCESS ROAD
- LIMIT OF DISTURBANCE
- STAKED SILT FENCE (RIDOT STD 9.2.0)
- 7' HIGH PERIMETER FENCE
- SOLAR ARRAY



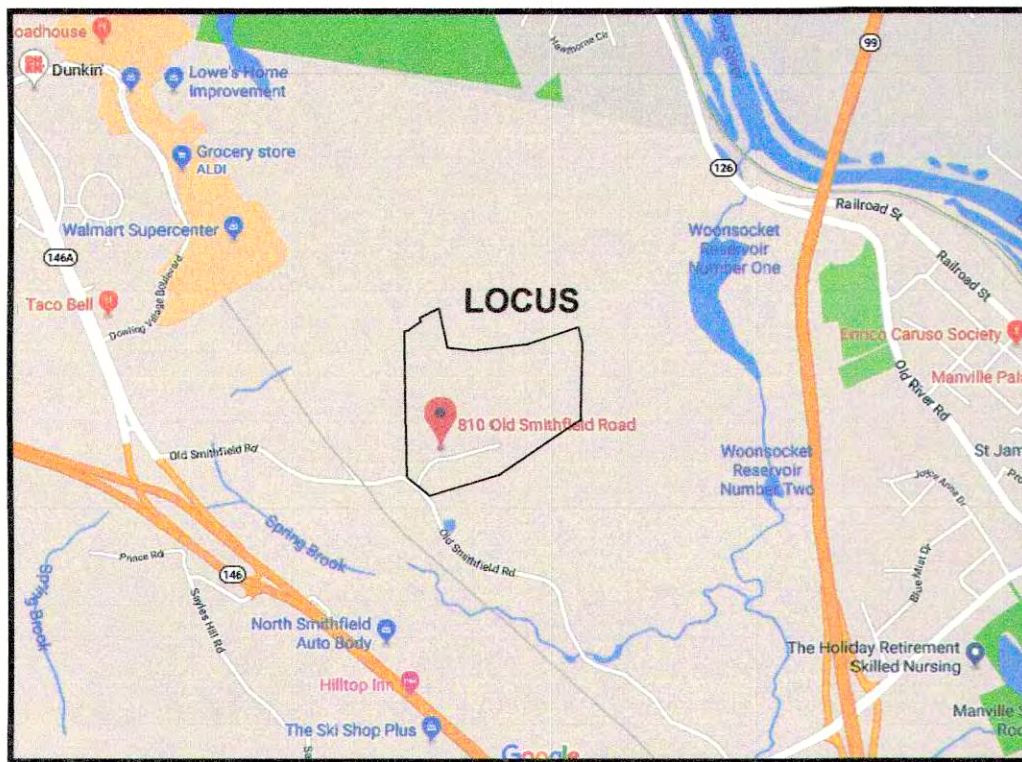
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1	12/21/2020	Master Plan Submission	
2	10/22/2019	Pre-Application Submission	
3			

Site Layout Plan
GD NS Old Smithfield Solar I
 Accessory's Plot 13, Lot 26
 North Smithfield, Rhode Island
 Consultant
WED North Smithfield One, LLC
 2000 Chapel View Blvd, Suite 500, Cranston, RI 02920
 Tel: (401) 295-4998
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LOCUS MAP
NOT TO SCALE

NO.	DATE	DESCRIPTION	BY

ZONING CRITERIA

ZONING DISTRICT	RA (AKA RR)
MINIMUM LOT AREA	65,000 SQ. FT.
MINIMUM LOT FRONTAGE	200'
MINIMUM FRONT YARD SETBACK	40'
MINIMUM SIDE YARD SETBACK	25'
MINIMUM REAR YARD SETBACK	40'
MAXIMUM BUILDING COVERAGE	25%
MAXIMUM BUILDING HEIGHT	35'

LEGEND
NOT TO SCALE

- BOUNDARY
- ABUTTER
- STONEWALL
- IRON PIN
- BOUND
- DRILL HOLE

PLAN REFERENCES:

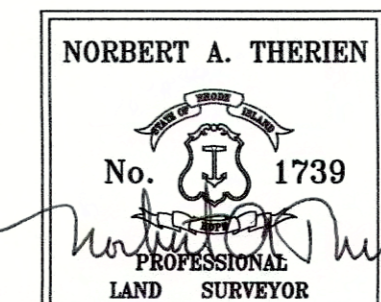
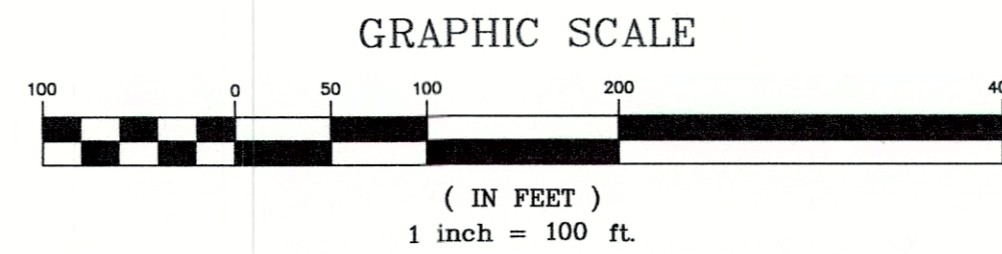
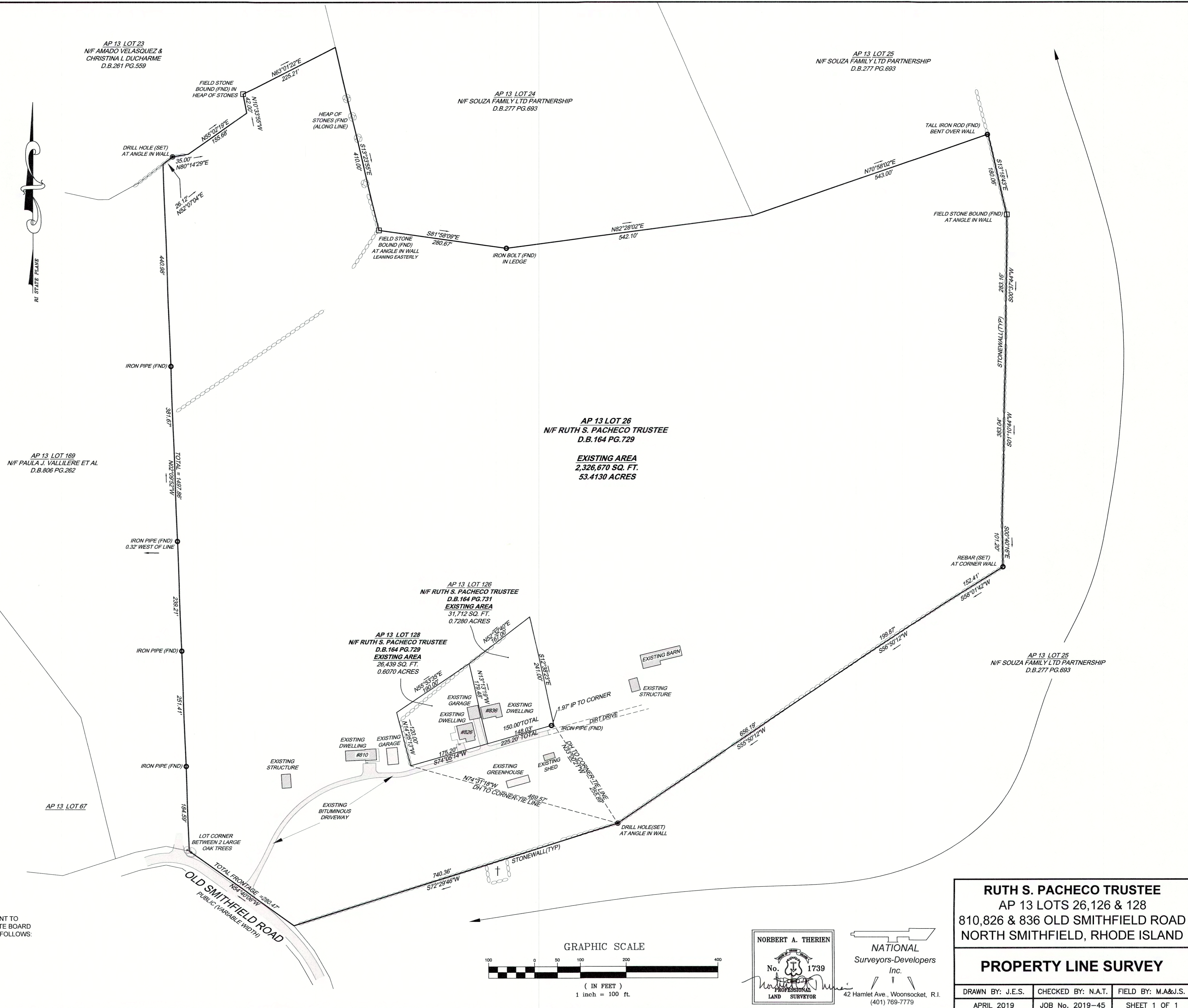
- A PLAN ENTITLED "PLAN OF LAND, NORTH SMITHFIELD, RI BELONGING TO CAROL ALLEN ET UX BEING EASTERLY PART OF SIMEON C. ALLEN FARM DEC. 1964 SCALE 1IN = 100FT. STANLEY H. MOWRY SURVEYOR" SHELF 28
- A PLAN ENTITLED "PLAN OF LAND, NORTH SMITHFIELD, RI BELONGING TO HAROLD ALLEN ET UX BEING WESTERLY PART OF SIMEON C. ALLEN FARM DEC. 1964 SCALE 1IN = 100FT. STANLEY H. MOWRY SURVEYOR" SHELF 28
- A PLAN ENTITLED "DIVISION OF LAND OWNED BY PETER A. & BARBARA L. VOSE NORTH SMITHFIELD, RHODE ISLAND DECEMBER 1991 SCALE 1 INCH EQUALS 90 FEET BY NORBERT A. THERIEN PLS" CAB 1A
- A PLAN ENTITLED "ADMINISTRATIVE SUBDIVISION PLAN AP 13 LOT 169 - LEO & SHARON MAYEWSKI 769 OLD SMITHFIELD ROAD NORTH SMITHFIELD, RI 02896, AP 13 LOT 67 - BARBARA L. MENCARINI 782 OLD SMITHFIELD ROAD NORTH SMITHFIELD, RI 02896, BY DAVID M. GARRIGAN PLS #1580 CUMBERLAND, RI 02864" BOOK 1 PAGE 213

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 REGISTRATIONS FOR PROFESSIONAL LAND SURVEYORS NOVEMBER 25, 2015 AS FOLLOWS:

TYPE OF SURVEY: COMPREHENSIVE BOUNDARY SURVEY
MEASUREMENT SPECIFICATION: CLASS 1 STANDARD

PURPOSE OF SURVEY: BOUNDARY SURVEY FOR AP 13 LOT 26

BY: DATE: 4/15/19
NORBERT A. THERIEN, PLS NO. 1739



NATIONAL
Surveyors-Developers
Inc.
42 Hamlet Ave., Woonsocket, R.I.
(401) 769-7779

RUTH S. PACHECO TRUSTEE
AP 13 LOTS 26, 126 & 128
810,826 & 836 OLD SMITHFIELD ROAD
NORTH SMITHFIELD, RHODE ISLAND

PROPERTY LINE SURVEY

DRAWN BY: J.E.S.	CHECKED BY: N.A.T.	FIELD BY: M.A.&J.S.
APRIL 2019	JOB No. 2019-45	SHEET 1 OF 1