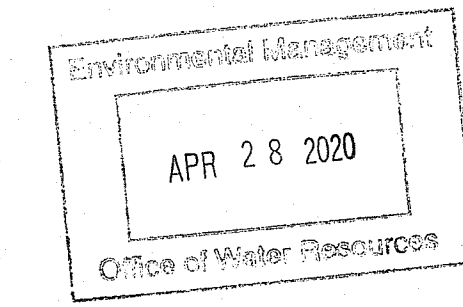


Development Plan Review

ISM Solar Richmond

35 Stilson Road (Buttonwoods Road)
Richmond, Rhode Island

Assessor's Plat 4B Lot 61



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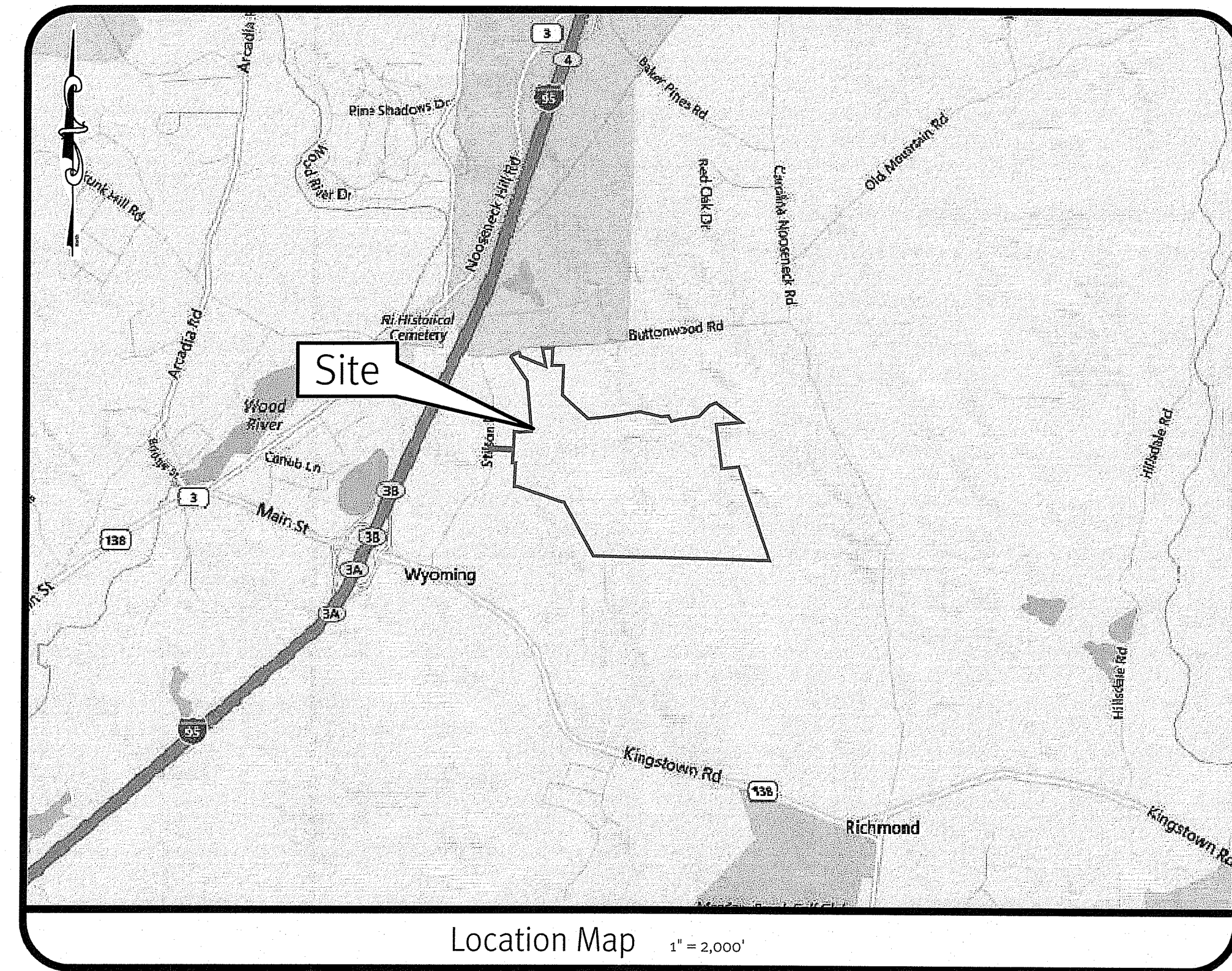


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No.	Date	Description	By:
1	05-24-2020	Response to DEMA Comments	DAAR
2	08-24-2020	Response to Town Comments - IPR	DAAR
3	08-24-2020	Response to Town Comments - IPR	DAAR
4	08-24-2020	Response to Town Comments - IPR	DAAR
5	08-24-2020	Response to Town Comments - IPR	DAAR

Design By: D.A.R.

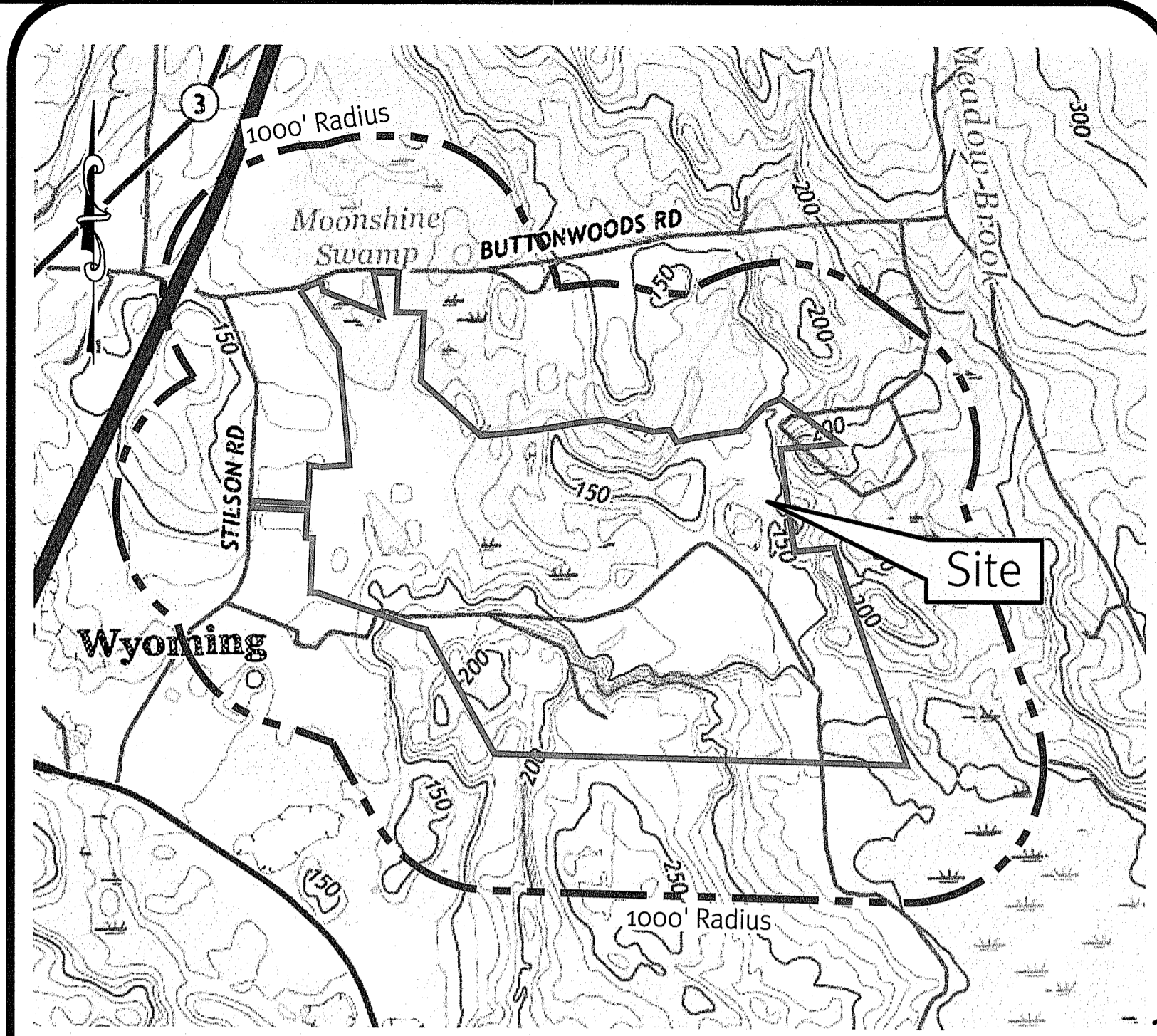
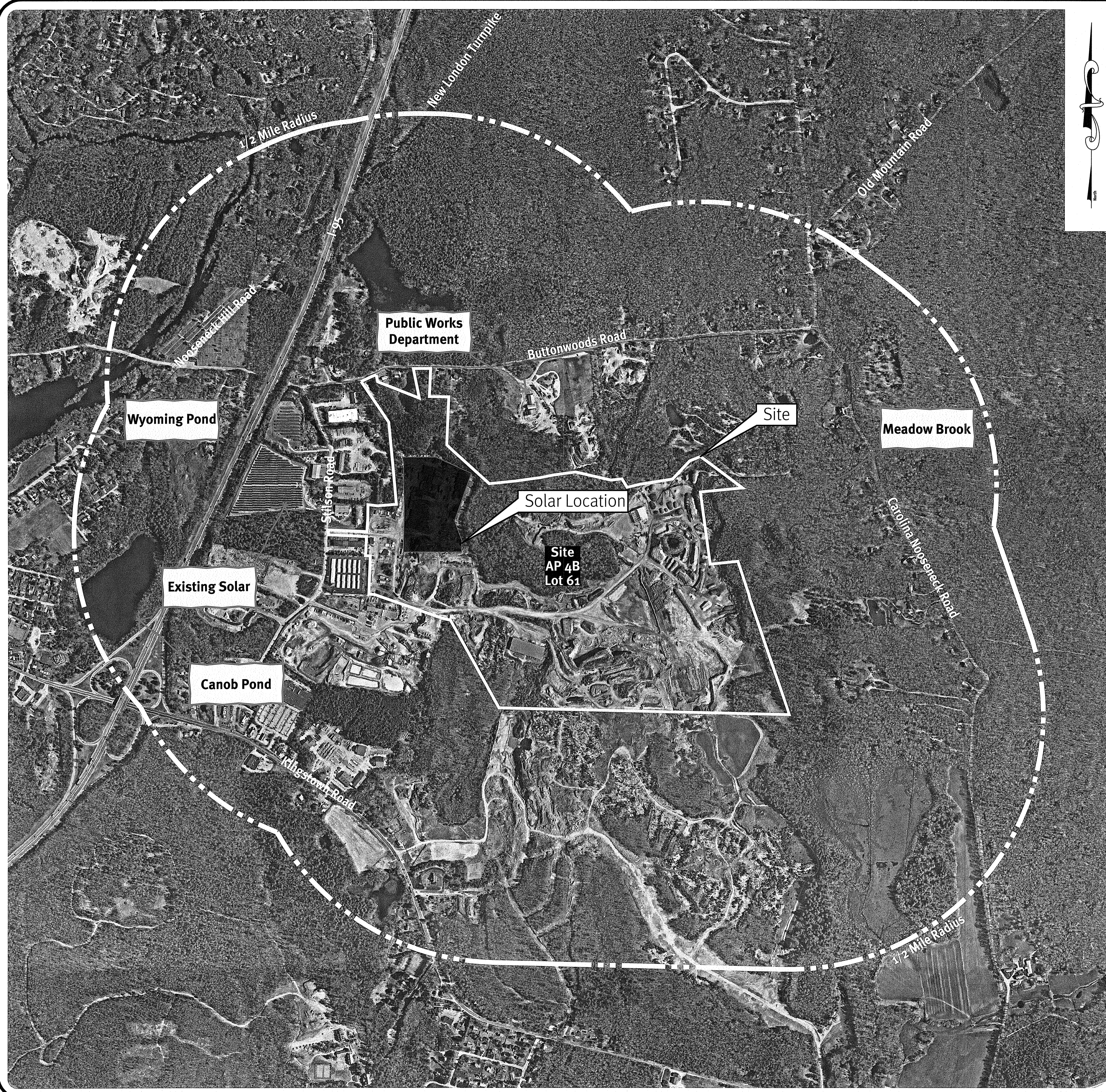
Cover Sheet
ISM Solar Richmond
35 Stilson Road (Buttonwoods Rd)
Assessor's Plat 4B Lot 61
Applicant
ISM Solar Development Inc.
240 Wickham Avenue, East Providence, Rhode Island 02914
Tel: (401) 437-7900



Sheet Index

- 1 Cover Sheet
- 2 Aerial Half Mile Radius and USGS Map
- 3 Existing Analysis Plan
- 4 Site Layout Plan
- 5 Detail Sheet

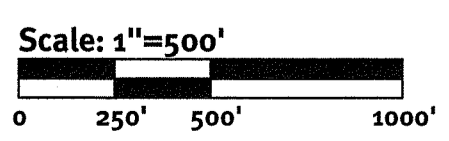
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED JUN 3 2020 FILE # 19-0320
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Nancy L. Freeman



USGS Map Scale: 1"=1000'

Environmental Management
 APR 28 2020
 Office of Water Resources

Photo Obtained from RIGIS. Date of Photography 08/12/2013.



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
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Kenneth C. Freeman

DiPrete Engineering
 Two Stafford Court, Cranston, RI 02920
 Tel: 401-943-1000 Fax: 401-664-6006 www.diprete-eng.com

DAVID A. RUSSO
 No. 4235
 REGISTERED PROFESSIONAL ENGINEER
 CIVIL

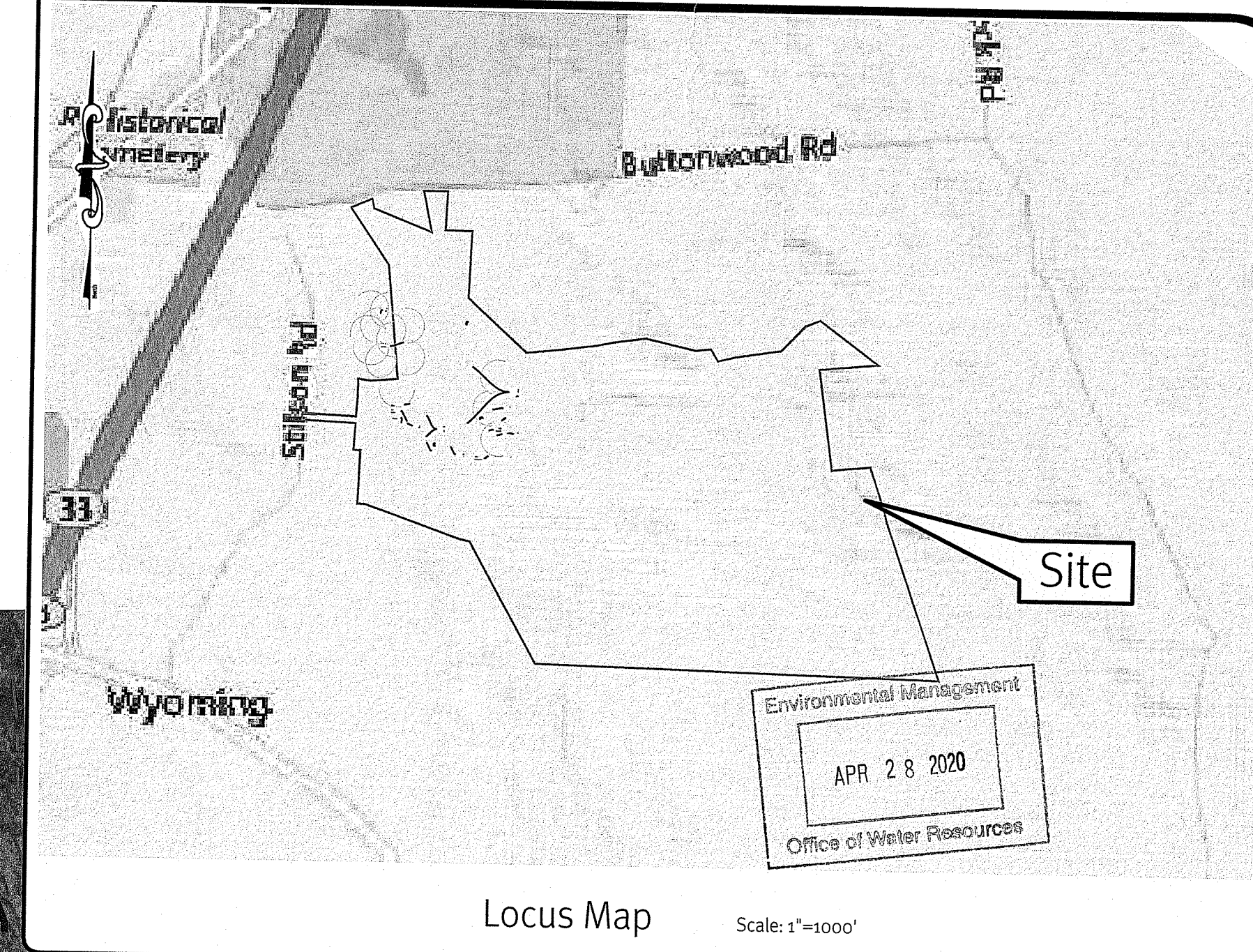
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No.	Date	Description	By:
1	02-14-2020	Response to RFP Comments	D.A.R.
2	03-15-2020	Response to Town Comments - DPR	D.A.R.
3	08-26-2019	Response to Town Comments - DPR	D.A.R.
4	07-19-2019	Development Plan Review	S.R.

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

Aerial Half Mile Radius and USGS Map
ISM Solar Richmond
 35 Stilson Road (Buttonwoods Rd)
 Richmond, RI
 Assessor's Plat: 4B Lot 61
Applicant
ISM Solar Development Inc.
 940 Waterman Avenue, East Providence, Rhode Island 02914
 Tel: (401) 435-7900

DE Job No: 2355-004 Copyright 2020 by DiPrete Engineering Associates, Inc.



- General Notes:**
- THE SITE IS LOCATED ON THE TOWN OF RICHMOND ASSESSOR'S PLAT 4B LOT 61.
 - THE SITE IS APPROXIMATELY 208.6± ACRES AND IS ZONED INDUSTRIAL & FLEX TECH.
 - THE OWNER OF AP 4B LOT 61 IS: RICHMOND 208 REALTY LLC
80 CENTRE OF NEW ENGLAND BLVD
COVENTRY, RI 02816
 - THIS SITE IS LOCATED IN FEMA FLOOD ZONES X AND AE. REFERENCE FEMA FLOOD INSURANCE RATE MAP 44008C00684, MAP REVISED OCT 19, 2010. THE PORTION OF THE SITE BEING DEVELOPED IS ENTIRELY LOCATED IN ZONE X.

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 (UNSHADED) – THIS SITE IS LOCATED IN FEMA FLOOD ZONE X. ZONE X ARE AREAS WHERE THERE IS MINIMAL FLOODING.
 - THE SITE IS WITHIN A:
GROUND WATER RECHARGE AREA (RIDEM)
NATURAL HERITAGE AREA (RIDEM)
 - TO THE BEST OF OUR KNOWLEDGE THE SITE CONTAINS NO HISTORIC STRUCTURES AND IS NOT WITHIN A HISTORIC DISTRICT.
 - SOIL MAPPING OBTAINED FROM SOIL SURVEY OF RHODE ISLAND, PREPARED BY U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE.

Lidar Note (Source of Topography):
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.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
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AS SPECIFIED IN THE LETTER OF APPROVAL
DATED JUN 3 2020 FILE # 19-0320
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Emily T. Freeman

Legend
NOT ALL ITEMS SHOWN WILL APPEAR ON PLANS

	EXISTING (EX)		PROPOSED (PR)
	ASSESSORS LINE		PROPERTY LINE
	INTERIOR LOT LINE		BUILDING SETBACKS
	SOILS LINES		MAJOR CONTOUR LINE
	APPROXIMATE STREAM LOCATION		100' PERIMETER STREAM
	50' PERIMETER WETLAND		FEMA BOUNDARY
	CHAINLINK FENCE		ELECTRIC LINE
	WETLAND EDGE AND FLAG		LIMIT OF WORK - NO EROSION CONTROL
	STRAW WATTLE, SILT FENCE (RIDOT STD 9.2.0) OR APPROVED EQUAL AT LIMIT OF WORK		

DiPrete Engineering
Two Stafford Court Cranston, RI 02920
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DAVID A. RUSSO
No. 1335
REGISTERED PROFESSIONAL ENGINEER
CIVIL

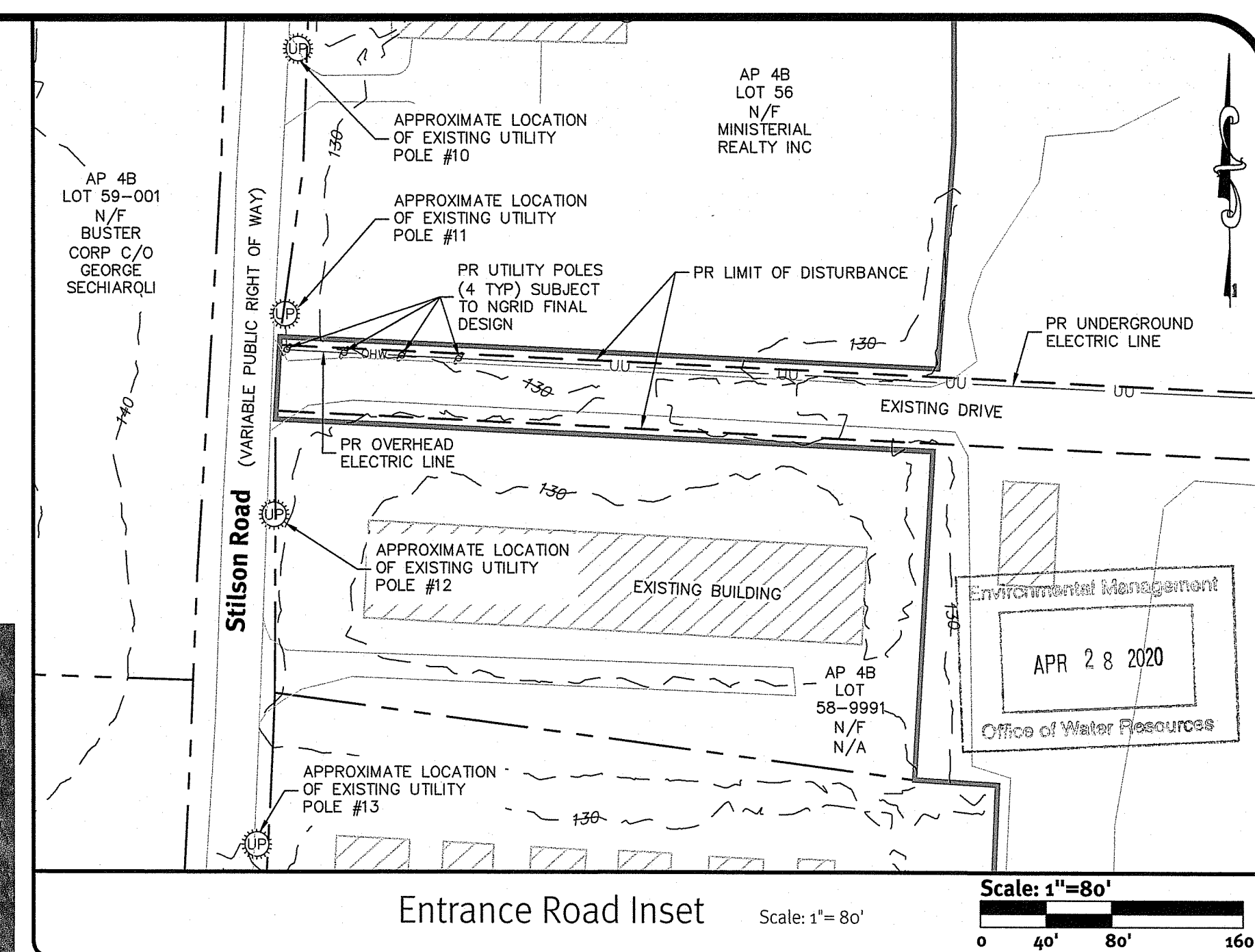
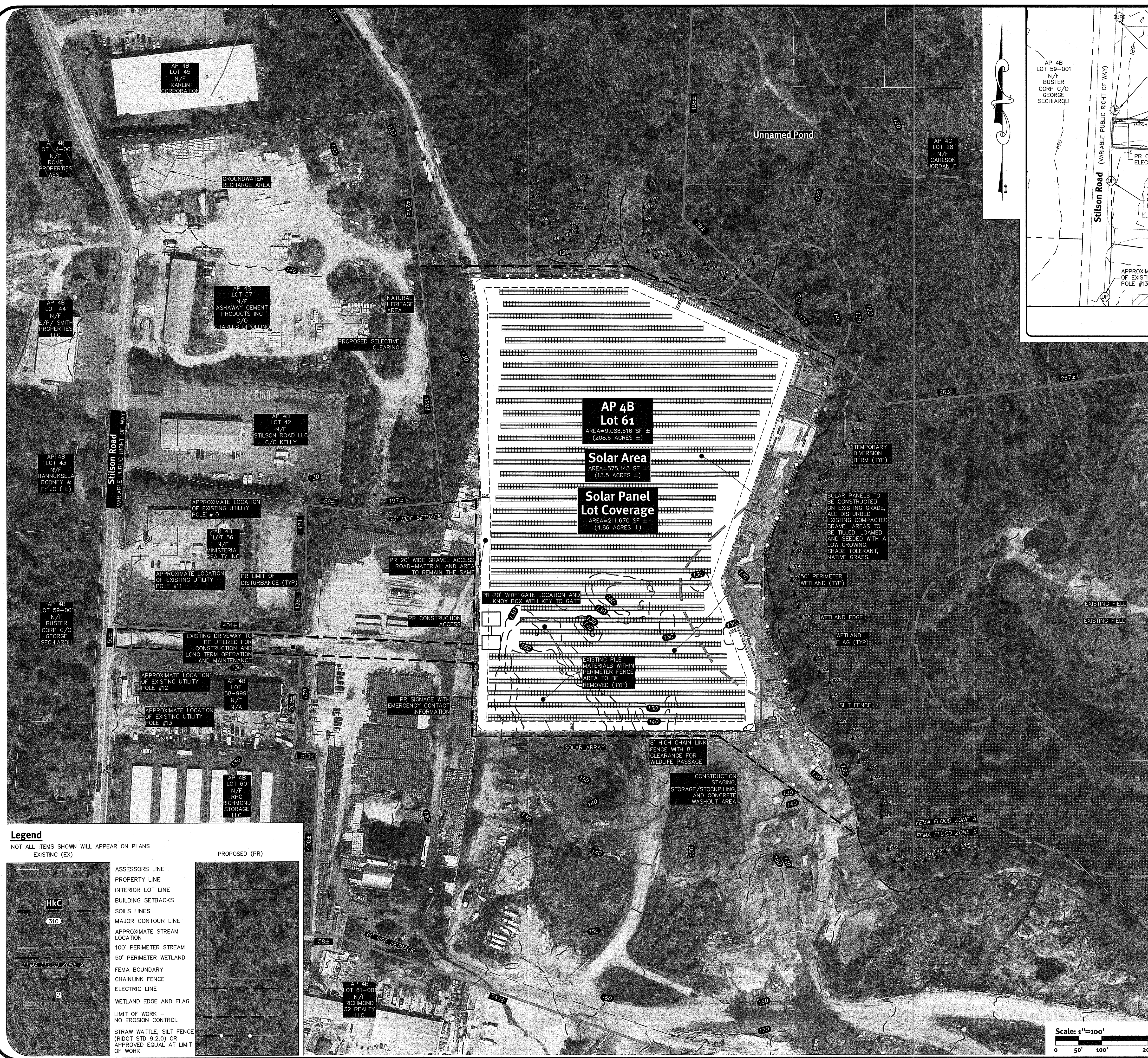
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4	02-24-2020	Response to RIBER Comments	DPR	S.S.	By:
3	01-22-2020	Response to Town Comments	DPR	S.S.	Design By: D.A.R.
2	08-22-2019	Response to Town Comments	DPR	S.S.	
1	07-12-2019	Development Plan Review	DPR	S.S.	
0					

Existing Analysis Plan
ISM Solar Richmond
35 Stilson Road (Buttonwoods Rd)
Richmond, RI
Applicant
ISM Solar Development INC.
940 Waterman Avenue, East Providence, Rhode Island 02914
tel. (401) 435-7900
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- Site Layout Notes:**
- DETAILED SOIL EROSION AND SEDIMENT CONTROL MEASURES TO BE INCORPORATED AT THE PRELIMINARY DESIGN STAGE AND WILL CONFORM TO RIDEEM BEST MANAGEMENT PRACTICES.
 - NO NEW WELLS OR OWTS PROPOSED.
 - THE MINIMUM FRONT AND SIDE YARD DEPTHS AND THE MAXIMUM HEIGHT APPLICABLE TO PERMITTED USES IN THE ZONING DISTRICT SHALL APPLY TO SOLAR ENERGY SYSTEMS. THE MINIMUM REAR DEPTH FOR SOLAR ENERGY SYSTEMS IS 40 FEET.
 - 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.
 - THERE IS NO SIGNIFICANT PROPOSED GRADING ON SITE.
 - NO NEW LIGHTING INSTALLATIONS ARE PROPOSED.
 - PROPOSED SIGNAGE IS LIMITED TO SECURITY SIGNS (OR SIMILAR) INSTALLED ON THE FACILITY PERIMETER FENCING.
 - PROJECT WORK WILL BE UNDERTAKEN IN ONE PHASE AND IS ANTICIPATED TO BEGIN WINTER 2019 AND CONCLUDE SPRING 2020.
 - NO PRIME AGRICULTURAL SOILS OR TOPSOIL ARE TO BE REMOVED DURING CONSTRUCTION AND INSTALLATION OF THE SYSTEM.
 - 25' MINIMUM SEPARATION IS REQUIRED BETWEEN THE SOLAR ARRAY AND PERIMETER FENCE.
 - CONSTRUCTION STAGING AREA TO INCLUDE CONCRETE WASHOUT AREA AND VEHICLE FUELING/ STORAGE/ MAINTENANCE AREA.
 - GATE WILL BE LOCKED WITH A KNOX-BOX TO ALLOW FOR EMERGENCY SERVICES ACCESS.
 - SITE FENCING WILL BE RAISED 8" FROM GROUND TO ALLOW FOR PASSAGE OF WILDLIFE.

Dimensional Regulations:

CURRENT ZONING:	REQUIRED	1/FT (INDUSTRIAL/FLEX TECH)	PROVIDED
MINIMUM LOT AREA:	2 AC		40 AC ±
MINIMUM FRONTAGE AND LOT WIDTH:	200'		50'
MINIMUM FRONT AND CORNER SIDE YARD:	50'		88'
MINIMUM SIDE YARD:	35'		35'
MINIMUM REAR YARD:	40' (FOR SOLAR)		2,444'
MAXIMUM STRUCTURE HEIGHT:	40'		12'
MAXIMUM LOT COVERAGE:	N/A		N/A

Legend
NOT ALL ITEMS SHOWN WILL APPEAR ON PLANS

EXISTING (EX)	PROPOSED (PR)
ASSESSORS LINE	ASSESSORS LINE
PROPERTY LINE	PROPERTY LINE
INTERIOR LOT LINE	INTERIOR LOT LINE
BUILDING SETBACKS	BUILDING SETBACKS
SOILS LINES	SOILS LINES
MAJOR CONTOUR LINE	MAJOR CONTOUR LINE
APPROXIMATE STREAM LOCATION	APPROXIMATE STREAM LOCATION
100' PERIMETER STREAM	100' PERIMETER STREAM
50' PERIMETER WETLAND	50' PERIMETER WETLAND
FEMA BOUNDARY	FEMA BOUNDARY
CHAINLINK FENCE	CHAINLINK FENCE
ELECTRIC LINE	ELECTRIC LINE
WETLAND EDGE AND FLAG	WETLAND EDGE AND FLAG
LIMIT OF WORK - NO EROSION CONTROL	LIMIT OF WORK - NO EROSION CONTROL
STRAW WATTLE, SILT FENCE (RIDOT STD 9.2.0) OR APPROVED EQUAL AT LIMIT OF WORK	STRAW WATTLE, SILT FENCE (RIDOT STD 9.2.0) OR APPROVED EQUAL AT LIMIT OF WORK

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Henry T. Freeman

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DAVID A. RUSSO
No. 14305
REGISTERED PROFESSIONAL ENGINEER CIVIL

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No.	Date	Description	By:	Design By:
1	03-24-2020	Response to BIRL Comments		D.A.R.
2	05-15-2020	Response to Town Comments		D.A.R.
3	08-26-2020	Response to Town Comments		D.A.R.
4	07-19-2020	Development Plan Review		S.R.

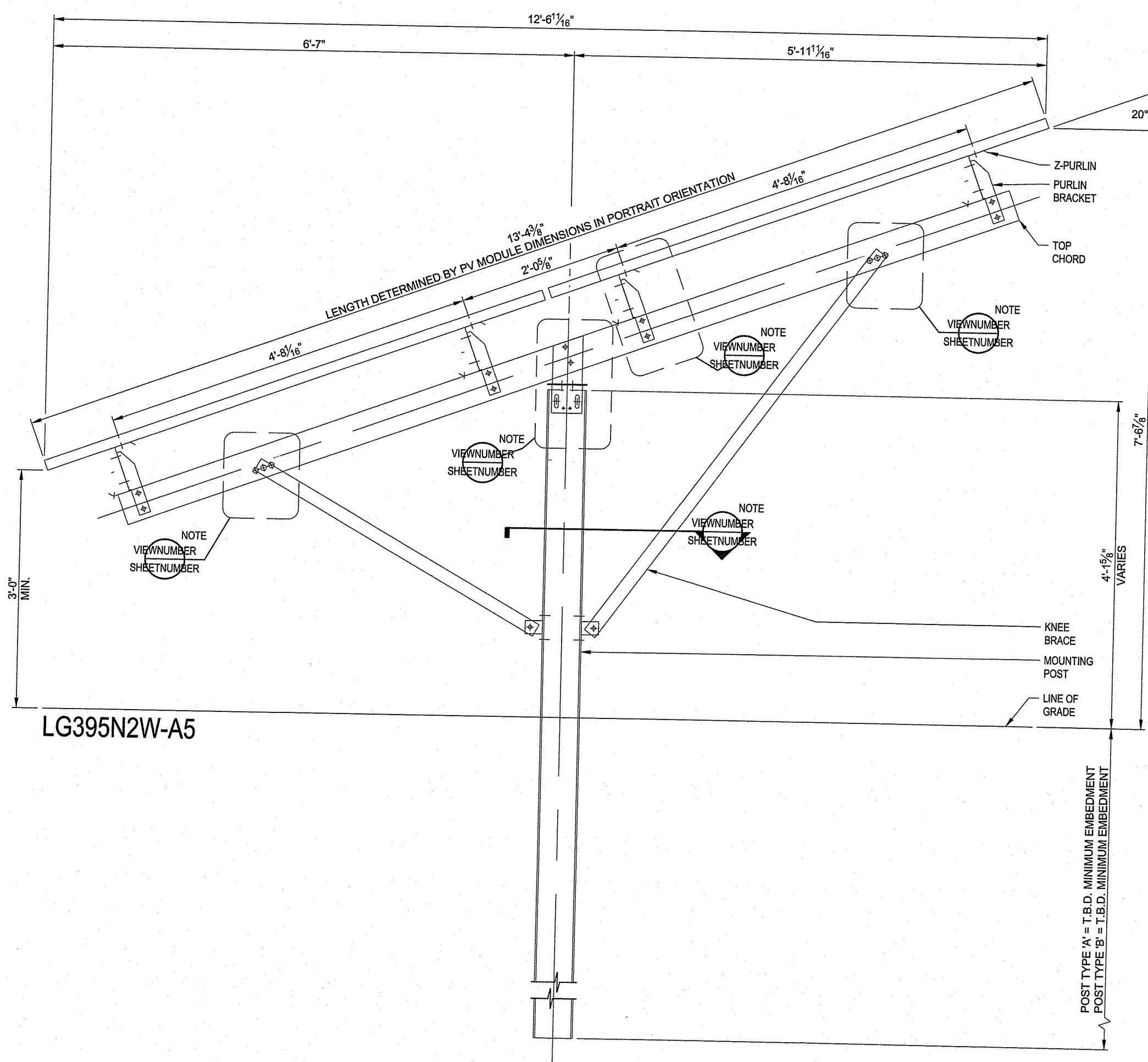
Drawn By: S.R.

Site Layout Plan
ISM Solar Richmond
940 Waterman Avenue, East Providence, Rhode Island 02914
tel (401) 435-2990

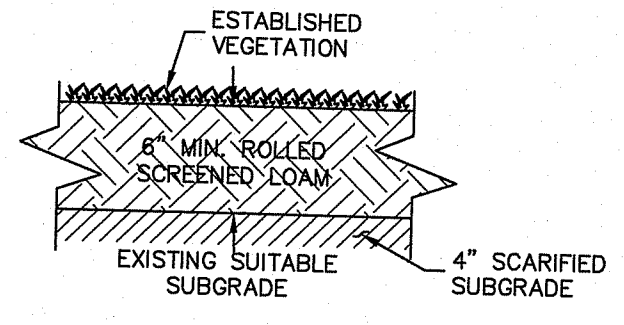
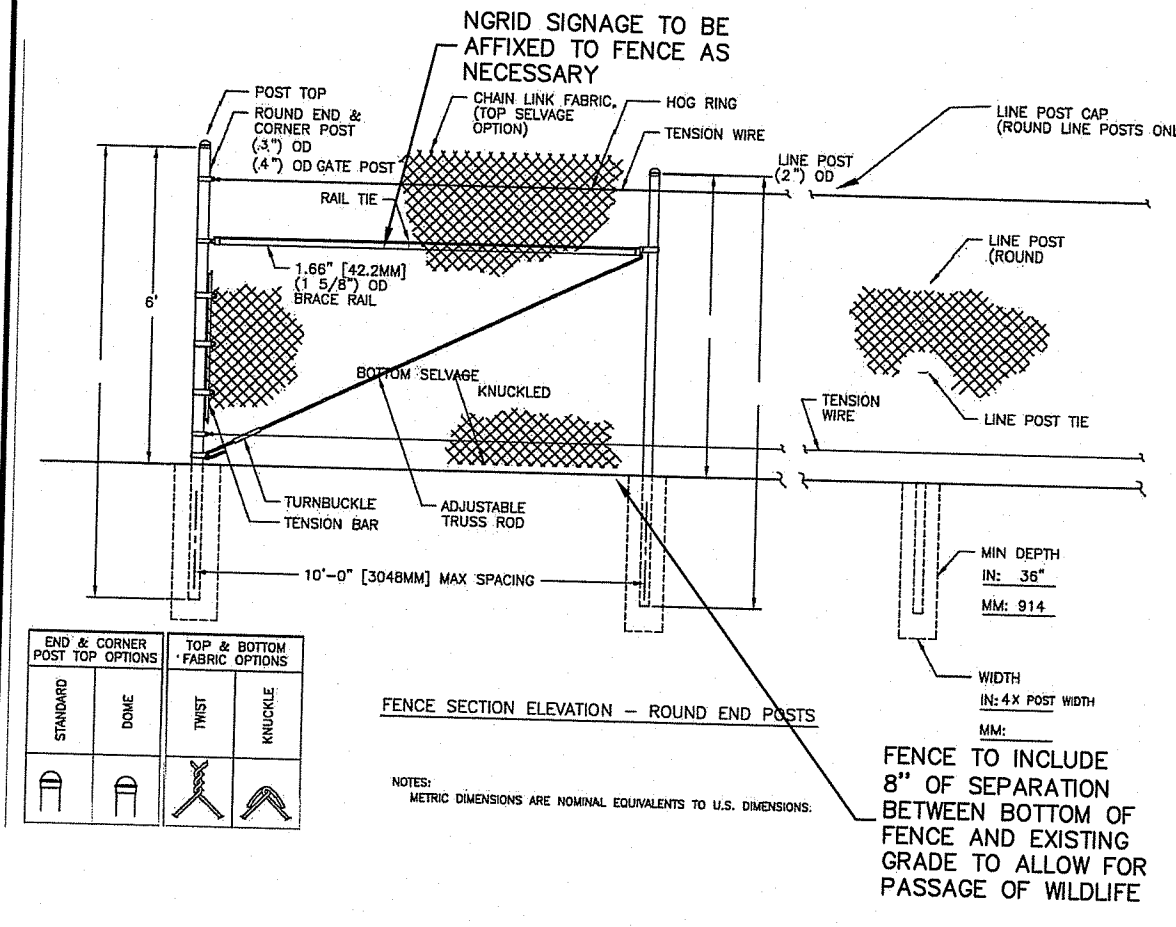
ISM Solar Development INC.
940 Waterman Avenue, East Providence, Rhode Island 02914
tel (401) 435-2990

SHEET 4 OF 5

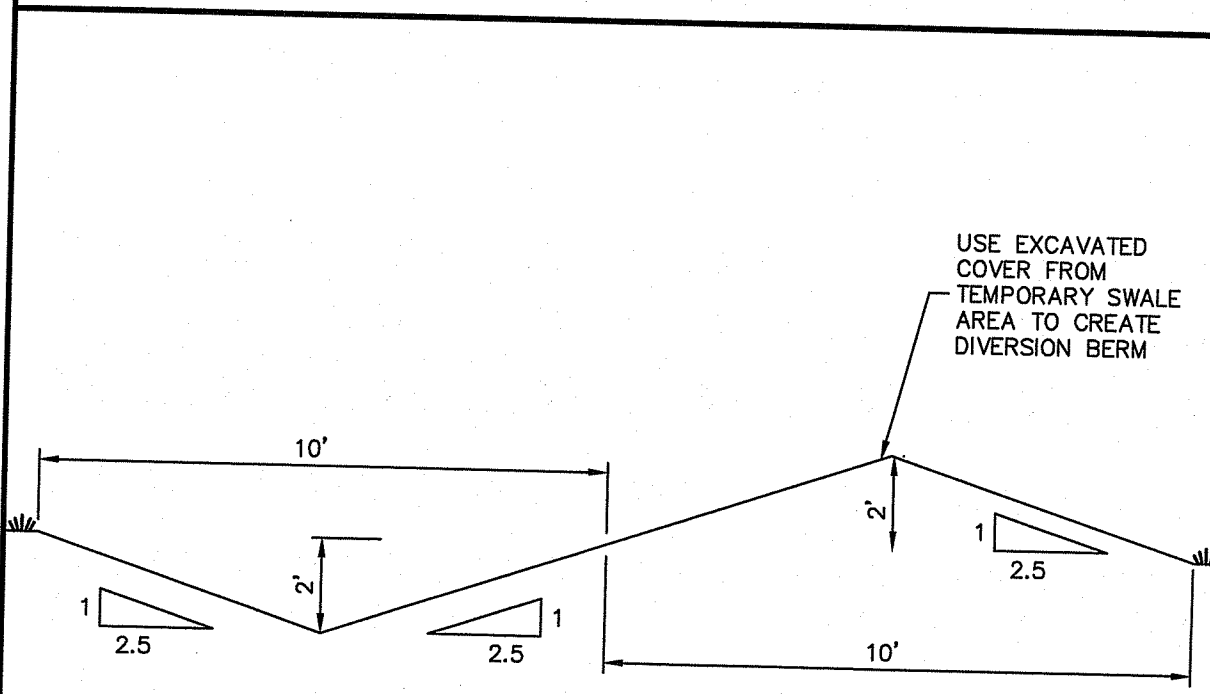
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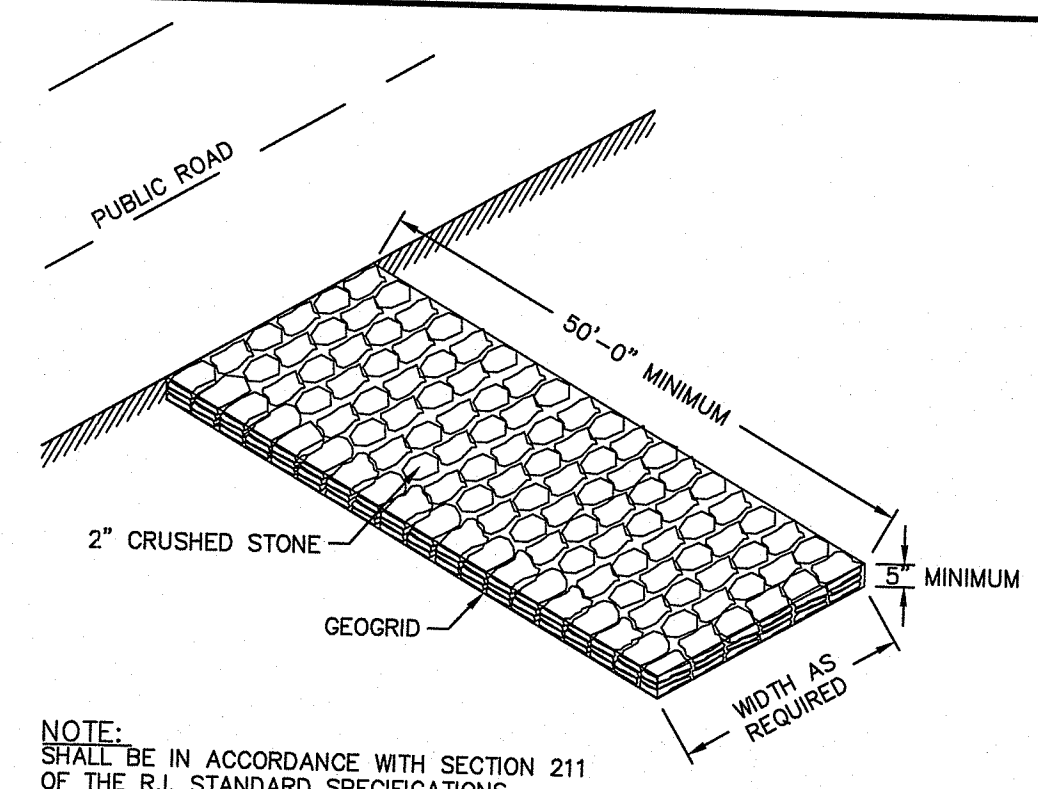
Solar Rack Detail
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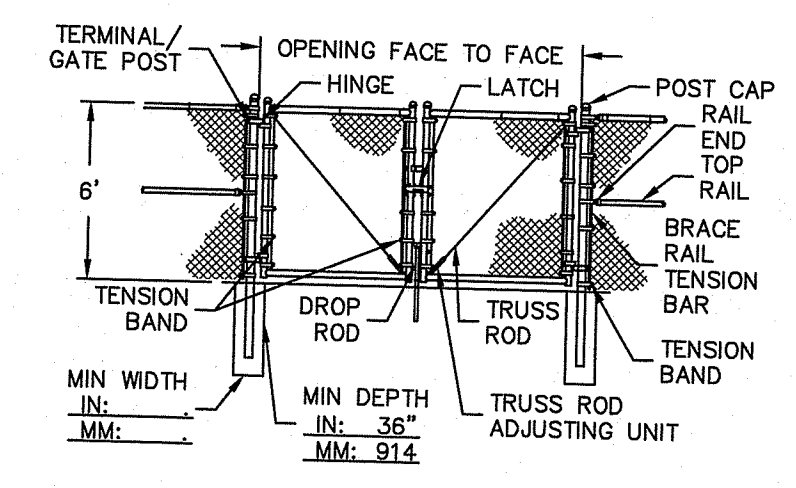
Loam & Seed Detail
NOT TO SCALE



Temporary Diversion Channel
NOT TO SCALE

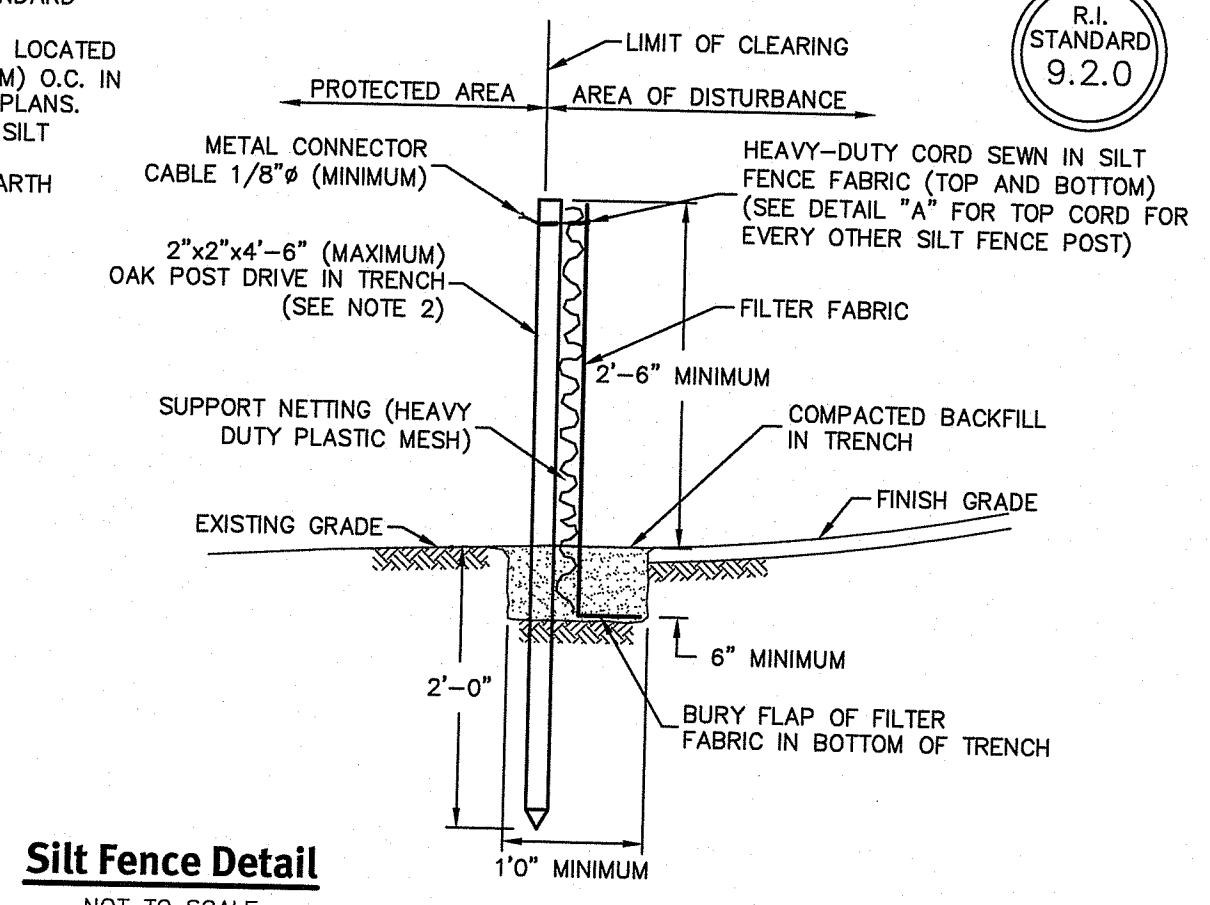
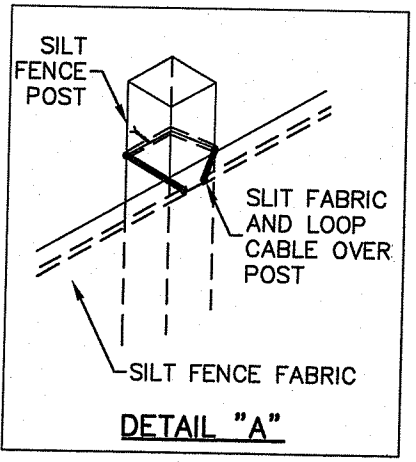


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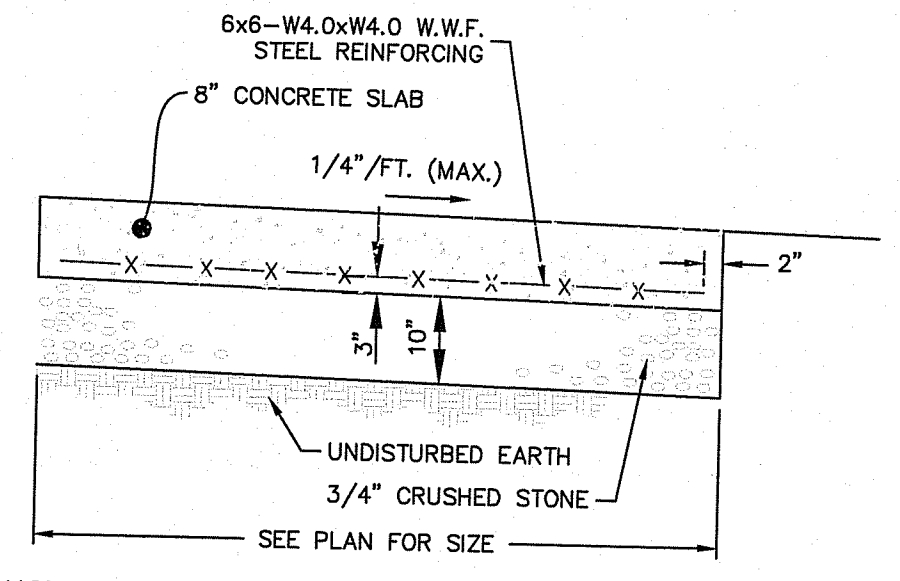


DOUBLE SWING GATE 20' OPENING
NOT TO SCALE

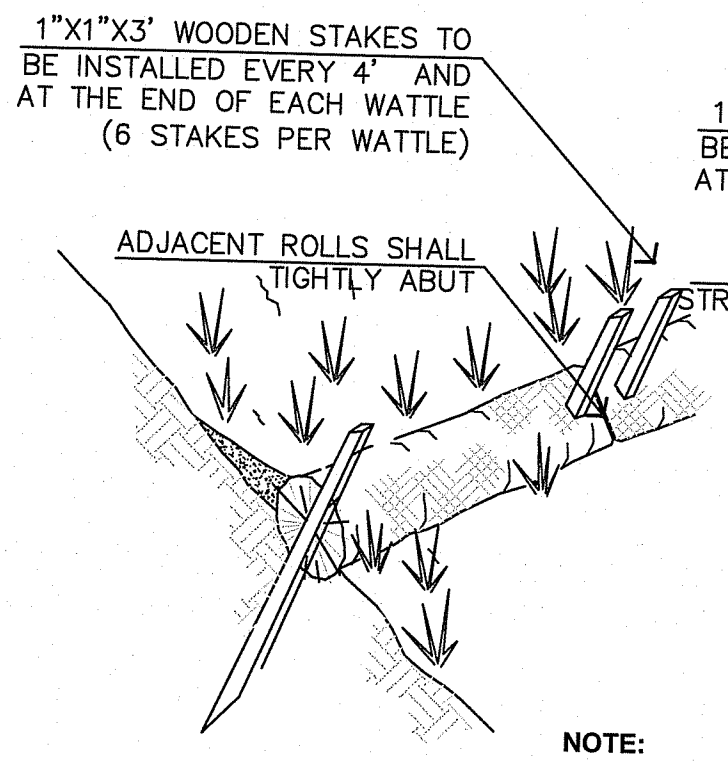
- NOTES:**
- SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE R.I. STANDARD SPECIFICATIONS.
 - 2"x2"x4'-8" (MAXIMUM) OAK POSTS FOR SILT FENCE SHALL BE LOCATED 8'-0" (MAXIMUM) O.C. IN WETLAND AREAS AND 4'-0" (MAXIMUM) O.C. IN WETLAND RAVINE, GULLY OR DROP-OFF AREAS AS SHOWN ON PLANS.
 - 1"x1"x4'-6" (MINIMUM)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



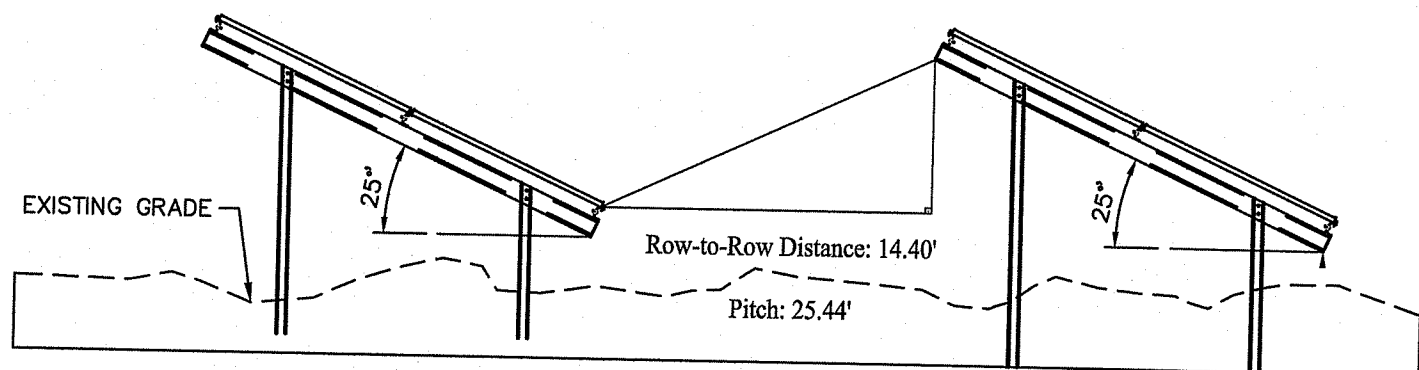
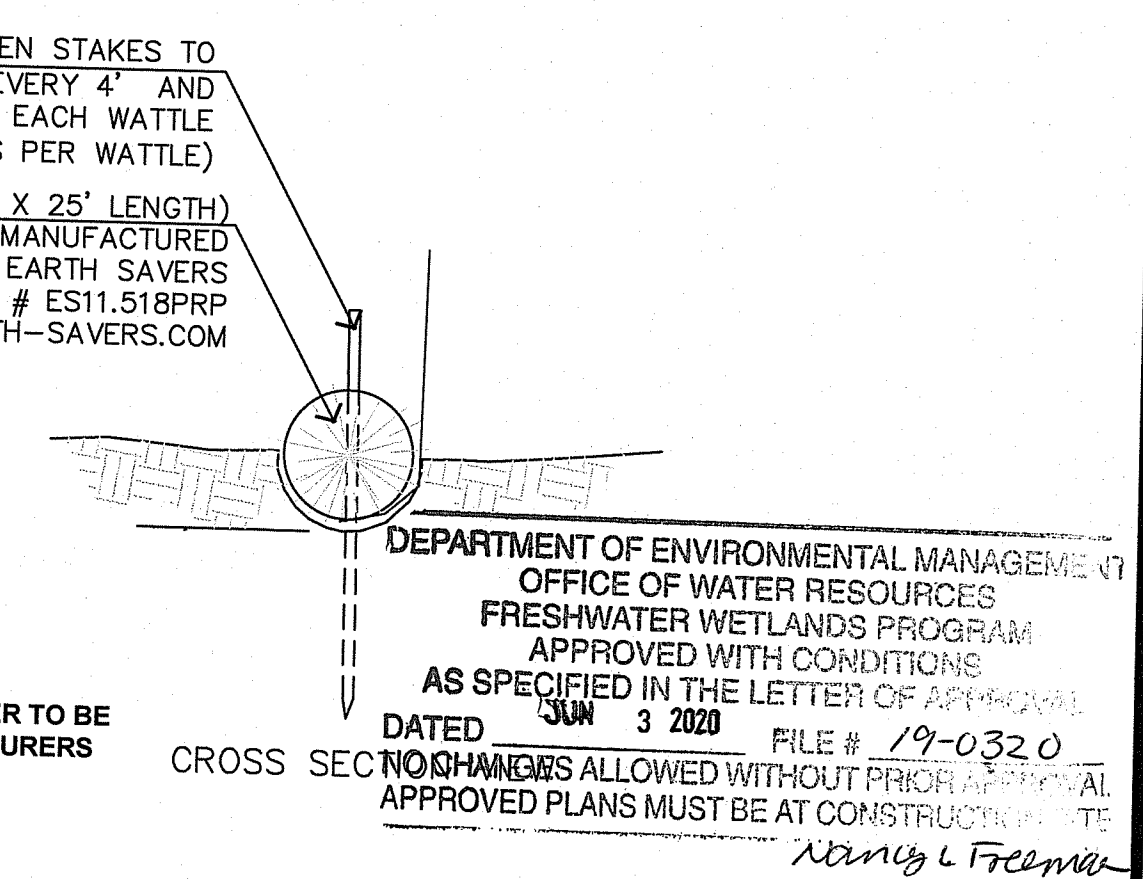
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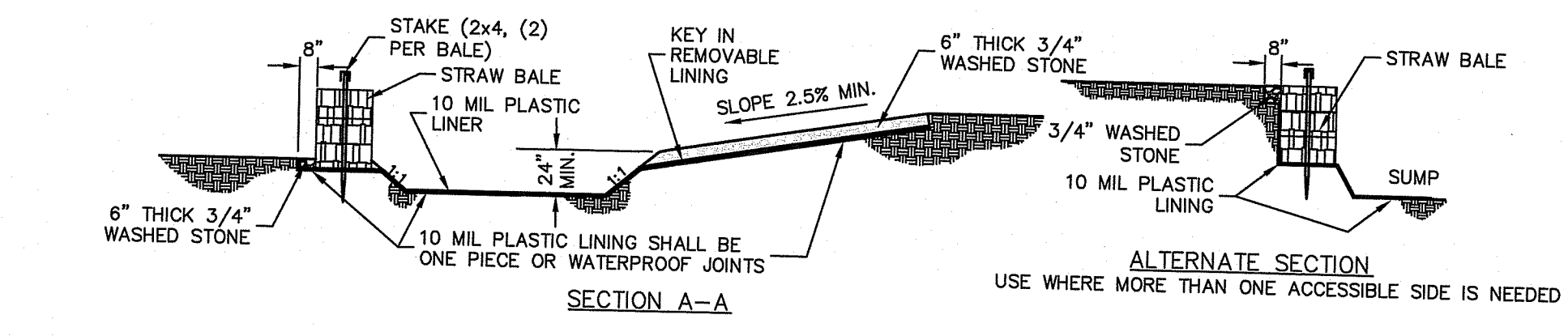
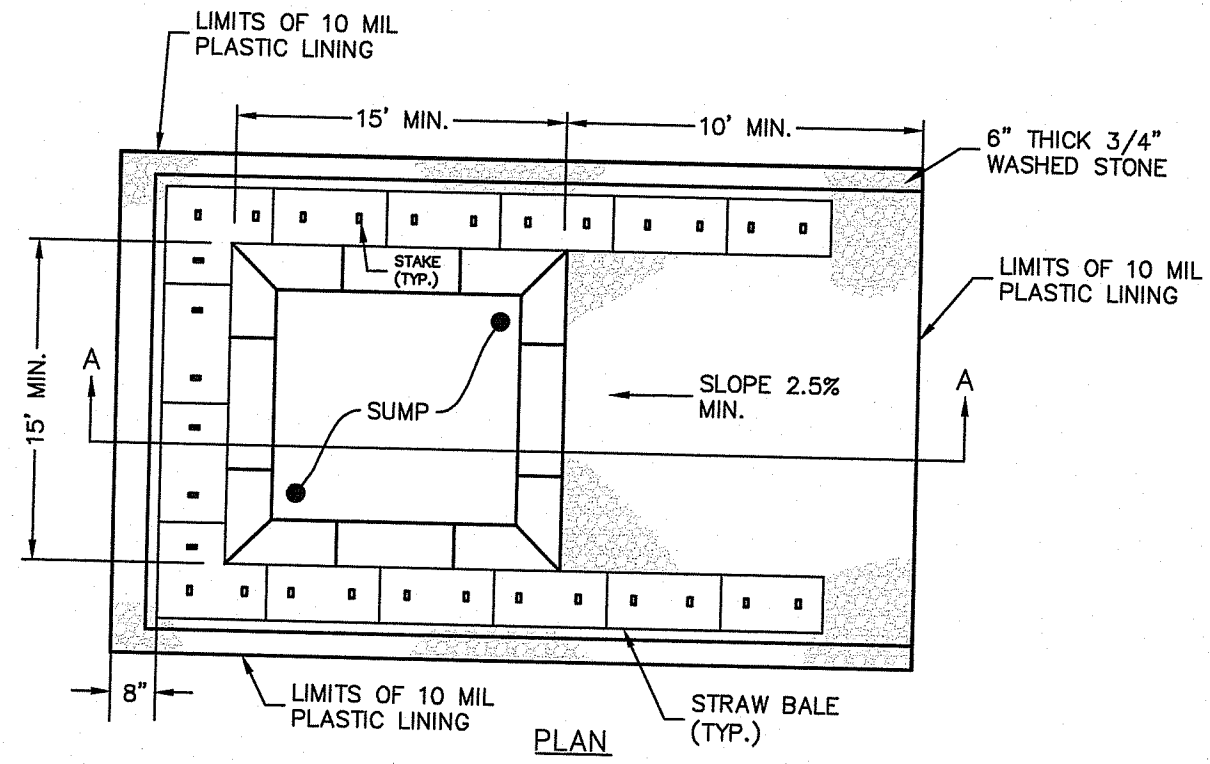
TYP. CONCRETE EQUIPMENT PAD
NOT TO SCALE



STRAW WATTLE SEDIMENT BARRIER
NOT TO SCALE



Onsite Grading Material and PV Array Distance Scheme - Tilt, Angle, and Shading Detail
NOT TO SCALE



CONCRETE WASHOUT AREA
NOT TO SCALE

Diprete Engineering
Two Stafford Court, Cranston, RI 02920
tel 401-943-1000 fax 401-641-6006 www.diprete-eng.com

DAVID A. RUSSO
No. 11355
REGISTERED PROFESSIONAL ENGINEER
CIVIL

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No.	Date	Description
1	02-28-2020	Response to RFP Comments
2	03-26-2020	Response to RFP Comments
3	05-29-2020	Response to RFP Comments
4	06-03-2020	Response to RFP Comments

ISM Solar Richmond
35 Silsion Road (Bulfinchwoods Rd)
Richmond, RI 02881
Assessors' Plat 48 Lot 61

ISM Solar Development INC.
940 Waterman Avenue, East Providence, Rhode Island 02914
tel (401) 435-7900