



WATERSHED RESOURCE CONSULTANTS, LLC
NATURAL RESOURCE AND SOIL SCIENCE CONSULTING

February 14, 2024

Samuel Sheppard, PM
Maine Department of Environmental Protection
312 Canco Road
Portland, Maine 04103

RE: MDEP Permit by Rule Application for Allen Solar, LLC – Roosevelt Trail, Raymond, Maine

Dear Sam,

Watershed Resource Consultants, LLC is assisting Mainely Solar, LLC with a Maine Department of Environmental Protection (MDEP) Permit-By-Rule (PBR) Application for the proposed Allen Solar, LLC project on Roosevelt Trail in Raymond, ME, shown as Lots 68 and 68A on Map 4 of the Town of Raymond tax maps. The applicant is applying for a permit to construct a commercial solar development.

The applicant proposes to construct a 4.6-acre commercial solar development. The total Critical Terrestrial Habitat (CTH) associated with Significant Vernal Pools on the parcels is estimated to be 563,209 square feet (sqft). The existing clearing on the parcels is 67,171 sqft, of which 51,003 sqft will be restored naturally, and 16,168 sqft, or 2.8% of the total CTH, will remain cleared. The new development will require disturbing approximately 113,558 sqft, or 20.2%, of the CTH on the property. The total area of new and existing clearing on the site will be 129,756 sqft, or 23.0% of the total CTH on the property. No other natural resources will be altered due to this project that require MDEP permitting. The activity will adhere to the standards and conditions under Section 19 of MDEP Chapter 305 Permit by Rule (PBR) and the current version of the Maine Erosion and Sediment Control BMPs. Post construction photos will be provided as required under the DEP PBR standards.

Please find attached the MDEP Permit-By-Rule application and associated attachments. Please contact us if you require any further information.

Sincerely,

Roger St. Amand, CSS, LSE, LPF, PWS, CPESC
Principal | Watershed Resource Consultants, LLC
rstamand@wrcmaine.com

WWW.WRCMAINE.COM

BAR HARBOR OFFICE: 1366 STATE HIGHWAY 102, #6 | BAR HARBOR, ME 04609 | (207) 944-7288
ORRINGTON OFFICE: P.O. BOX 145 | ORRINGTON, ME 04474 | (207) 385-6056

**DEPARTMENT OF ENVIRONMENTAL PROTECTION
PERMIT BY RULE NOTIFICATION FORM**
(For use with DEP Regulation, Natural Resources Protection Act - Permit by Rule Standards, Chapter 305)

APPLICANT INFORMATION (Owner)		AGENT INFORMATION (If Applying on Behalf of Owner)	
Name:	DAVID FOWLER, ALLEN SOLAR, LLC	Name:	KIRK BALL, ACHERON ENGINEERING SERVICE
Mailing Address:	143 HIGHLAND SHORE ROAD	Mailing Address:	153 MAIN STREET
Mailing Address:		Mailing Address:	
Town/State/Zip:	CASCO, MAINE 04015	Town/State/Zip:	NEWPORT, ME 04953
Daytime Phone #:	(207) 461-0666 Ext:	Daytime Phone #:	(207) 368-5700 Ext:
Email Address:	DFOWLER@NEXTPHASEENERGYSERVIC	Email Address:	KBALL@ACHERONENGINEERING.COM
PROJECT INFORMATION			
Part of a larger project? (check 1):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	After the Fact? (check 1):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Project involves work below mean low water? (check 1):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Name of waterbody:	UNNAMED SVPS
Project Town:	RAYMOND	Town Email Address:	sandy.fredricks@raymondmaine.org
Map and Lot Number:			004-068, 004-068B
Brief Project Description:	DEVELOP AN 4.6-ACRE COMMERCIAL SOLAR FACILITY . PROJECT WILL RESULT IN NEW AND EXISTING ALTERATIONS TO APPROXIMATELY 129,756 SQUARE FEET (23%) OF THE CTH OF SEVERAL SIGNIFICANT VERNAL POOLS ON THE PROPERTY		
Project Location & Brief Directions to Site:	FROM THE CENTER OF NORTH WINDHAM, TRAVEL NORTH ON RT. 302 (ROOSEVELT TRAIL) FOR 6.9 MILES. SITE WILL BE ON RIGHT, IN A SHARED DRIVEWAY WITH RAYMOND MARINE. APPROXIMATELY 1555 ROOSEVELT TRAIL ROAD		

PERMIT BY RULE (PBR) SECTIONS (Check at least one): I am filing notice of my intent to carry out work that meets the requirements for Permit-by-Rule (PBR) under DEP Rules, [Chapter 305](#). I and my agent(s), if any, have read and will comply with all of the standards in the Sections checked below.

- | | | |
|---|--|---|
| <input type="checkbox"/> Sec. (2) Act. Adj. to Prot. Natural Res. | <input type="checkbox"/> Sec. (9) Utility Crossing | <input type="checkbox"/> Sec. (16) Coastal Sand Dune Projects |
| <input type="checkbox"/> Sec. (3) Intake Pipes | <input type="checkbox"/> Sec. (10) Stream Crossing | <input type="checkbox"/> Sec. (16-A) Beach Nourishment |
| <input type="checkbox"/> Sec. (4) Replacement of Structures | <input type="checkbox"/> Sec. (11) State Transportation Facilities | <input type="checkbox"/> Sec. (17) Transfer/Permit Extension |
| <input type="checkbox"/> Sec. (6) Movement of Rocks or Veg. | <input type="checkbox"/> Sec. (12) Restoration of Natural Areas | <input type="checkbox"/> Sec. (18) Maintenance Dredging |
| <input type="checkbox"/> Sec. (7) Outfall Pipes | <input type="checkbox"/> Sec. (13) F&W Creat./Water Qual. Improv. | <input checked="" type="checkbox"/> Sec. (19) Act. Near SVP Habitat |
| <input type="checkbox"/> Sec. (8) Shoreline Stabilization | <input type="checkbox"/> Sec. (15) Public Boat Ramps | <input type="checkbox"/> Sec. (20) Act. Near Waterfowl/Bird Habitat |

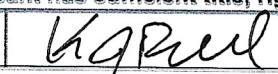
NOTE: Municipal permits also may be required. Contact your local code enforcement office for information. Federal permits may be required for stream crossings and for projects involving wetland fill. Contact the Army Corps of Engineers at the Maine Project Office for information.

NOTIFICATION FORMS CANNOT BE ACCEPTED WITHOUT THE NECESSARY ATTACHMENTS AND FEE

- Attach** all required submissions for the PBR Section(s) checked above. The required submissions for each PBR Section are outlined in Chapter 305 and may differ depending on the Section you are submitting under.
- Attach** a location map that clearly identifies the site (U.S.G.S. topo map, Maine Atlas & Gazetteer, or similar).
- Attach Proof of Legal Name** if applicant is a corporation, LLC, or other legal entity. Provide a copy of Secretary of State's registration information (available at <http://icrs.informe.org/nei-sos-icrs/ICRS?MainPage=x>). Individuals and municipalities are not required to provide any proof of identity.

FEE: Pay by credit card at the [Payment Portal](#). The Permit-by-Rule fee may be found here <https://www.maine.gov/dep/feeschedule.pdf> and is currently \$288.

- Attach** payment confirmation from the Payment Portal when filing this notification form.

Signature & Certification:	
<ul style="list-style-type: none"> • I authorize staff of the Departments of Environmental Protection, Inland Fisheries & Wildlife, and Marine Resources to access the project site for the purpose of determining compliance with the rules. • I understand that this PBR becomes effective 14 calendar days after receipt by the Department of this completed form, the required submissions, and fee, <i>unless the Department approves or denies the PBR prior to that date.</i> 	
By signing this Notification Form, I represent that the project meets all applicability requirements and standards in Chapter 305 rule and that the applicant has sufficient title, right, or interest in the property where the activity takes place.	
Signature of Agent or Applicant (may be typed):	Date:
	2/16/2024

Keep a copy as a record of permit. Email this completed form with attachments to DEP at: DEP.PBRNotification@maine.gov. DEP will send a copy to the Town Office as evidence of DEP's receipt of notification. No further authorization will be issued by DEP after receipt of notice. A PBR is valid for two years, except Section 4, "Replacement of Structures," are valid for three years. Work carried out in violation of the Natural Resources Protection Act or any provision in Chapter 305 is subject to enforcement.

ALLEN SOLAR, LLC
143 Highland Shores Road
Casco, Maine 04015

September 5, 2023

RE: Agent Authorization for Application Submission(s)

To Whom it May Concern:

The undersigned, being a duly authorized Manager of Allen Solar, LLC (the “Company” or the “Applicant”), do hereby appoint and name Kirk Ball of Acheron Engineering Services to act as an Agent of the Company and to represent and bind the Company before the following agencies/authorities concerning the proposed solar development project located on Roosevelt Trail (Route 302) in the Town of Raymond, Maine (hereinafter, the “Allen Solar Project”);

1. Before all departments, agencies, and bureaus of the State of Maine, including without limitation, the Department of Environmental Protection for matters related to the application and approval of the Allen Solar Project;
2. Before the United State Army Corps of Engineers for matters related to the application and approval of the Allen Solar Project; and
3. Before all departments of the Town of Raymond, including without limitation, the Town of Raymond Planning Board for matters related to the application and approval of the Allen Solar Project.

Thank you.

Allen Solar, LLC

By: 

Name: David Fowler

Title: Manager



MAINE

Department of the Secretary of State
Bureau of Corporations, Elections and Commissions

Corporate Name Search

Information Summary

[Subscriber activity report](#)

This record contains information from the CEC database and is accurate as of: Mon Aug 28 2023 08:39:36. Please print or save for your records.

Legal Name	Charter Number	Filing Type	Status
ALLEN SOLAR, LLC	20219308DC	LIMITED LIABILITY COMPANY (DOMESTIC)	GOOD STANDING

Filing Date	Expiration Date	Jurisdiction
04/15/2021	N/A	MAINE

Other Names (A=Assumed ; F=Former)
NONE

Clerk/Registered Agent

LUCY FOWLER
143 HIGHLAND SHORES ROAD
CASCO, ME 04015

[New Search](#)

Click on a link to obtain additional information.

List of Filings

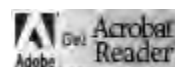
[View list of filings](#)

Obtain additional information:

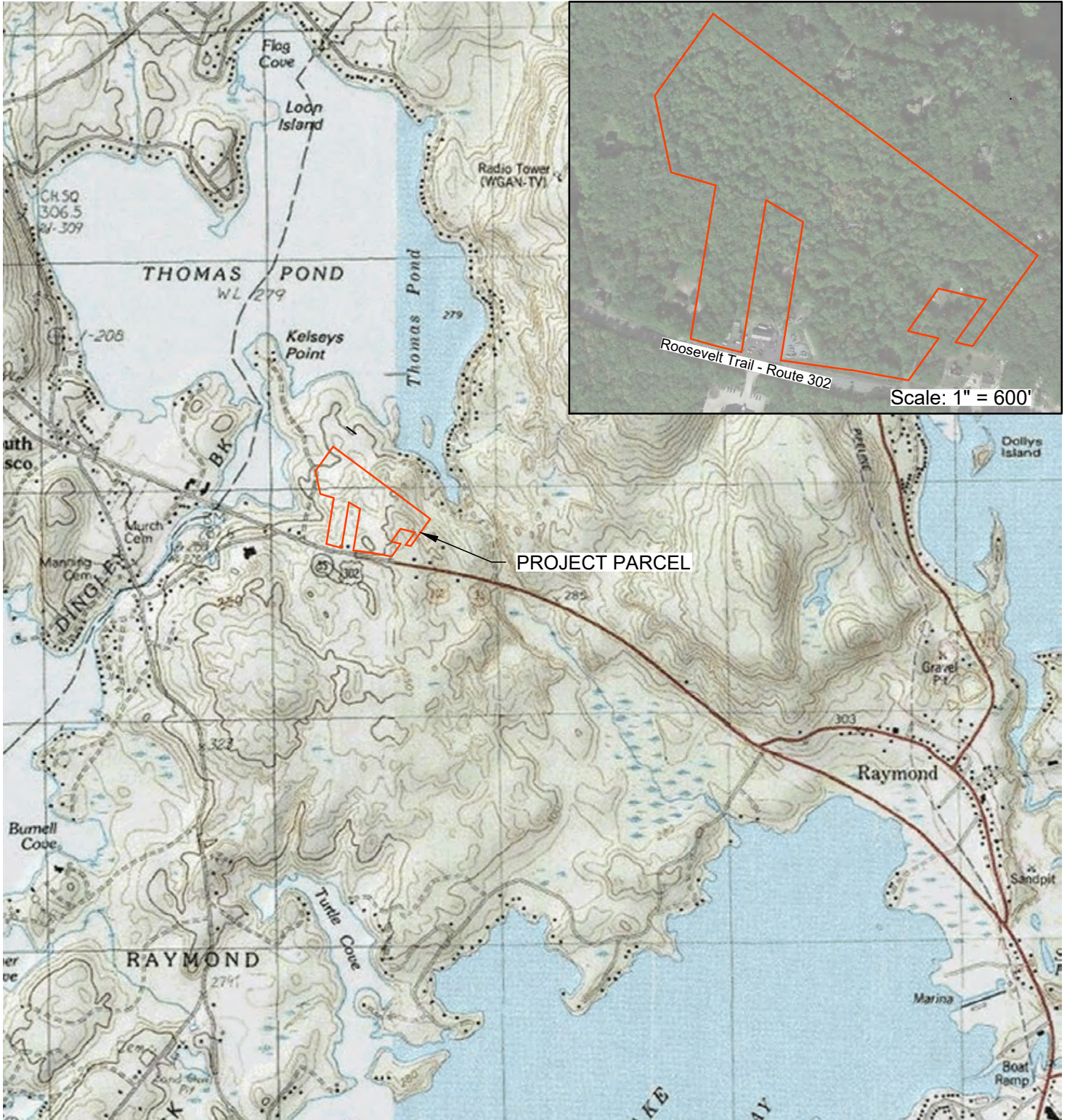
Certificate of Existence ([more info](#))

<u>Short Form without amendments</u> (\$30.00)	<u>Long Form with amendments</u> (\$30.00)
---	---

You will need Adobe Acrobat version 3.0 or higher in order to view PDF files. If you encounter problems, visit the [troubleshooting page](#).



If you encounter technical difficulties while using these services, please contact the [Webmaster](#). If you are unable to find the information you need through the resources provided on this web site, please contact the Division of Corporations, UCC & Commissions Reporting and Information



Do Not Use for Construction
For Regulatory Review Only

Site Location Map	
Mainely Solar, LLC. 143 Highland Shores Road Casco, Maine	
Job No.: MS001	Scale: As Noted
Date: 8/24/2023	Sheet: 1



Patrick A. & Catherine M. Young
Volume 18079, Page 111
Tax Map 4 - Lot 66

Jacqueline Dougherty
Volume 5501, Page 55
Tax Map 4 - Lot 55A

Richard P. & Deborah S. Cabana
Volume 36304, Page 122
Map 4 - Lot 55A

Daniel & Amber R. Trzebiak
Volume 3404, Page 329
Tax Map 4 - Lot 54

Patrick A. & Catherine M. Young
Volume 18079, Page 111
Tax Map 4 - Lot 67

Michael R. Knights
Volume 31830, Page 236
Tax Map 4 - Lot 69C

Raymond Marine and Recreation LLC
Volume 31507, Page 187
Tax Map 4 - Lot 68

Raymond Marine and Recreation LLC
Volume 31507, Page 187
Tax Map 4 - Lot 68

Raymond Marine and Recreation LLC
Volume 31507, Page 187
Tax Map 4 - Lot 68

Raymond Marine and Recreation LLC
Volume 31507, Page 187
Tax Map 4 - Lot 68

Raymond Marine and Recreation LLC
Volume 31507, Page 187
Tax Map 4 - Lot 68

Raymond Marine and Recreation LLC
Volume 31507, Page 187
Tax Map 4 - Lot 68

Raymond Marine and Recreation LLC
Volume 31507, Page 187
Tax Map 4 - Lot 68

Raymond Marine and Recreation LLC
Volume 31507, Page 187
Tax Map 4 - Lot 68

Raymond Marine and Recreation LLC
Volume 31507, Page 187
Tax Map 4 - Lot 68

Raymond Marine and Recreation LLC
Volume 31507, Page 187
Tax Map 4 - Lot 68

Raymond Marine and Recreation LLC
Volume 31507, Page 187
Tax Map 4 - Lot 68

Raymond Marine and Recreation LLC
Volume 31507, Page 187
Tax Map 4 - Lot 68

Raymond Marine and Recreation LLC
Volume 31507, Page 187
Tax Map 4 - Lot 68

Raymond Marine and Recreation LLC
Volume 31507, Page 187
Tax Map 4 - Lot 68

Raymond Marine and Recreation LLC
Volume 31507, Page 187
Tax Map 4 - Lot 68

Raymond Marine and Recreation LLC
Volume 31507, Page 187
Tax Map 4 - Lot 68

Planning Board Approval

THIS IS TO CERTIFY THAT AFTER REVIEWING THE SOLAR FIELD SHOWN BY THIS PLAN AND CONSIDERING EACH OF THE CRITERIA SET FORTH IN TOWN OF RAYMOND ORDINANCES, AS AMENDED, AND CONSIDERING EACH OF THE CRITERIA SET FORTH IN THE SOLAR ENERGY SYSTEMS ORDINANCE OF THE TOWN OF RAYMOND, THE UNDERSIGNED HAVING MADE FINDINGS OF FACT ESTABLISHING THAT THE PROPOSED SOLAR FIELD MEETS ALL OF THE CRITERIA SET FORTH THERE IN, AND THEREFORE THE SOLAR FIELD IS APPROVED.

- THE PROTECTED NATURAL RESOURCES FIELD DELINEATION SERVICES WERE CONDUCTED BY WATERSHED RESOURCE CONSULTANTS, LLC. PROTECTED NATURAL RESOURCES FIELD DELINEATION SERVICES WERE CONDUCTED ON MAY 2022, AND APRIL & MAY 2023. RESOURCE FEATURES WERE LOCATED BY WATERSHED RESOURCE CONSULTANTS, LLC USING A MAPPING GRADE GPS RECEIVER (SUBMETER ACCURACY AS PER MANUFACTURER).
- 2 FT BUFFER ZONES WERE DEVELOPED FROM MEGIS LIDAR DOWNLOADED FROM USGS NATIONAL MAP PLAN REFERENCE: "SURVEY PLAN PROPERTY OF SCOTT ALLEN" DATED MAY 8, 2023, PROVIDED BY PLISGA & DAY LAND SURVEYORS. CAD FILE: 23084 to Acheron 20230508.dwg
- ZONING DISTRICTS: RURAL RESIDENTIAL (RR), APPROXIMATELY 5.8 ACRES WITHIN LRRI SHORELAND ZONE.
- EXISTING IMPERVIOUS AREA ON LOT: 17,602 SF
- PROPOSED IMPERVIOUS AREA: 19,538 SF
- LOT COVERAGE: EXISTING = 1.3%, PROPOSED = 1.5%, TOTAL = 2.8%
- 100-YEAR FLOODPLAIN IS NOT WITHIN 300 FEET OF THE PROJECT PARCEL.
- ALL EXISTING STRUCTURES WITHIN THE PARCEL BOUNDARY TO REMAIN.
- ALL BUILDINGS WITHIN 100 FEET OF PARCEL BOUNDARY LOCATED USING AERIAL IMAGERY.
- THE CLOSEST FIRE HYDRANT IS NOT LOCATED WITHIN 200 FEET.
- MORE THAN 78.5% OF CTH TO BE MAINTAINED AS UNFRAGMENTED FORESTED CANOPY.
- PROPOSED WETLAND FILL: 325 SF
- SOILS: HhB - HERMON SANDY LOAM, 0 - 8% SLOPES, VERY STONY AND HSG A
HhC - HERMON SANDY LOAM, 8 - 15% SLOPES, VERY STONY AND HSG A
WsB - WOODBRIDGE VERY STONY FINE SANDY LOAM, 0 - 8% SLOPES AND HSG C
- PV TOTAL SYSTEM SUMMARY:
• 2,570 PV MODULES TOTAL
• 590W PV MODULES
• 1,516 KW DC TOTAL
• 995 KW PV AC TOTAL
• 19,230 PV MODULES PER STRING (TYP.)
• 144 STRINGS TOTAL
• 24 STRINGS PER INVERTER
• 6 X 166 KW INVERTERS
• 1 X 1000 KVA TRANSFORMER
- INSTALLATION, COMMISSIONING AND INTERCONNECTION TO THE ELECTRIC UTILITY CIRCUIT TO BE PERFORMED BY LICENSED ELECTRICIAN.
- APPROXIMATE AREA OF LOTS WITHIN LRRI SHORELAND ZONE = 256,018 SF. CLEARING REQUIRED WITHIN LRRI REQUIRED = 60,817 SF OR 24% OF LOT AREA WITHIN LRRI.

Dated: _____
The Town of Raymond Planning Board

- ACCESS ROAD, BYPASS LANE SHALL BE CONSTRUCTED AND MAINTAINED TO SUPPORT A 75,000 GVWR FIRE APPARATUS
- THE ENTRANCE GATE AREA, BYPASS AND HAMMERHEAD ARE DESIGNATED FIRE LANES.
- ALL FIRE LANES SHALL BE MARKED WITH SIGNS THAT READ, "FIRE LANE," "NO PARKING," "VEHICLES TOWED AT OWNER'S EXPENSE." SIGN LOCATIONS TO BE APPROVED BY RAYMOND FIRE DEPARTMENT.
- THE ACCESS ROAD SHALL BE CONSTRUCTED AND MAINTAINED TO PROVIDE A MINIMUM OF 13'-6" UNOBSTRUCTED CLEARANCE
- MAXIMUM ANGLE OF APPROACH: 8 DEGREES.
- MAXIMUM DEPARTURE ANGLE: 9 DEGREES.
- MAXIMUM BREAKOVER ANGLE: 13 DEGREES.
- MAXIMUM ROAD GRADE: 10 DEGREES.
- ALL ENTRANCE GATES SHALL HAVE A MINIMUM OPEN CLEARANCE OF 20 FEET.
- ALL GATES SHALL HAVE A RAYMOND FIRE & RESCUE DEPARTMENT KNOX BOX THAT INCLUDE ALL KEYS OR KEY CARDS, AND CURRENT SITE EMERGENCY CONTACT INFORMATION.
- THE FIRE STANDPIPE SYSTEM SHOWN ON THE PLAN IS IN LIEU OF PROVIDING FIRE LANE ACCESS AROUND THE ENTIRE SITE TO MEET NFPA REQUIREMENTS.
- THE OPERATIONAL READINESS OF THE FIRE CISTERN, COMPONENTS, AND STANDPIPE SYSTEM INCLUDING REPAIRS AND REPLACEMENT, IS THE RESPONSIBILITY OF THE OWNER OF THE SOLAR FACILITY.
- THE FIRE CISTERN SHALL BE INSTALLED, INSPECTED, AND APPROVED BY THE RAYMOND FIRE & RESCUE DEPARTMENT PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
- AN EASEMENT SHALL BE GRANTED TO THE TOWN OF RAYMOND FIRE & RESCUE DEPARTMENT TO ACCESS TO THE FACILITY FOR ANNUAL TESTING AND TRAINING.
- A RAYMOND FIRE & RESCUE DEPARTMENT FIRE PERMIT FOR THE FIRE CISTERN/DRY HYDRANT SHALL BE OBTAINED BY THE APPLICANT PRIOR TO ITS INSTALLATION.
- THE FACILITY STREET ADDRESS SHALL BE INSTALLED ON EACH BUILDING OR DWELLING UNIT ON ROOSEVELT TRAIL IN THE IMMEDIATE AREA OF THE FACILITY ENTRANCE AND ON A FACILITY SIGN(S) AT THE FACILITY ENTRANCE.
- THE FACILITY E-911 ADDRESS SHALL BE VISIBLE FROM BOTH APPROACH DIRECTIONS ON ROOSEVELT TRAIL, AND LOCATED TO BE VISIBLE FROM WITHIN THE FIRE APPARATUS CAB.
- THE STREET ADDRESS LETTERING SHALL BE NO LESS THAN 6" IN HEIGHT, SHALL BE OF A CONTRASTING COLOR TO THE SIGN BACKGROUND, AND PREFERABLY THE LETTERS SHOULD BE REFLECTIVE FOR NIGHT OR REDUCED LIGHT CONDITIONS. THE PLACEMENT OF STREET ADDRESS SIGNS SHALL BE APPROVED BY THE RAYMOND FIRE RESCUE DEPARTMENT AND E-911 COORDINATOR.
- DURING THE CONSTRUCTION, A TEMPORARY E-911 STREET ADDRESS SIGN SHALL BE POSTED AT THE ENTRANCE AND VISIBLE FROM ROOSEVELT TRAIL.
- THE PROJECT SHALL FOLLOW THE RELEVANT SOLAR PHOTOVOLTAIC AND FIRE SAFETY STANDARDS SUCH AS, BUT NOT LIMITED TO: NFPA 70, NFPA 70B, NFPA 70E, UL1471, NFPA 855, AND NFPA 1.
- ALL REQUIRED RAYMOND FIRE & RESCUE FIRE PERMITS FOR EMERGENCY VEHICLE ACCESS OR FIRE PROTECTION SYSTEMS SHALL BE SUBMITTED AND APPROVED BY THE RAYMOND FIRE RESCUE DEPARTMENT PRIOR TO ISSUANCE OF BUILDING PERMITS.
- PRIOR TO SCHEDULING ANY FIRE PERMIT INSPECTIONS, INCLUDING THE RAYMOND FIRE & RESCUE DEPARTMENT CERTIFICATE OF OCCUPANCY INSPECTION, THE APPLICANT SHALL PROVIDE PROOF TO THE TOWN THAT THE FIRE PERMIT FEE PAYMENTS HAVE BEEN RECEIVED AT THE TOWN CLERKS OFFICE. RE-INSPECTION APPOINTMENTS ARE SUBJECT TO A RE-INSPECTION FEE, PAYABLE PRIOR TO SCHEDULING ANY RE-INSPECTION. ALL INSPECTIONS WITH THE RFRD MUST BE SATISFACTORILY COMPLETED AND APPROVED PRIOR TO ISSUANCE OF THE CERTIFICATE OF OCCUPANCY FOR THE FACILITY.
- RAYMOND BUILDING, ELECTRICAL AND FIRE PERMIT APPLICATIONS SHALL INCLUDE: A MAP OR DIAGRAM OF THE PROPOSED PV SYSTEM DESIGN THAT INCLUDES LOCATIONS OF ALL PV GROUND PANELS, AC & DC ELECTRICAL DISCONNECTS, REMOTE EMERGENCY DISCONNECTS, AND ANY SYSTEM PANELS, CONDUIT, COMBINER BOXES, OR INVERTERS. THE MAP OR DIAGRAMS SHALL NOTE THE LOCATIONS OF GROUND FAULT, SURGE PROTECTION, LIGHTNING PROTECTION SYSTEMS, ARC FAULT PROTECTION OR DETECTION DEVICES, GROUND FAULT OR PV ARRAY ISOLATION SENSING DEVICES, MODULE LEVEL CONTROLS OR "SMART MODULES," AUTOMATED PERFORMANCE MONITORING INSTRUMENTATION, AND DIFFERENTIAL CURRENT SENSORS OR RESIDUAL CURRENT DETECTORS. DATA SHEETS THAT DETAIL THE EQUIPMENT LISTINGS AND CERTIFICATIONS FOR WIND AND HAIL RESISTANCE AND ANY ADDITIONAL SYSTEM INFORMATION SHOULD BE NOTED ON THE MAP OR DIAGRAM. WRITTEN PLAN FOR SITE MAINTENANCE OF VEGETATION AND DEBRIS CONTROL IN AND AROUND THE SOLAR PV ARRAYS, COMBINER BOXES, TRANSFORMERS, AND INVERTERS.
- AN EMERGENCY RESPONSE PLAN SHALL BE SUBMITTED TO THE RAYMOND FIRE & RESCUE DEPARTMENT WHEN FILING FOR A RAYMOND FIRE PERMIT.
- PARKING: THERE SHALL BE NO ON-STREET PARKING ON ("E-911 ASSIGNED STREET NAME-TBD") IN THE IMMEDIATE AREA AND BOTH SIDES OF THE ENTRANCE GATE, FIRE APPARATUS TURNAROUND AND BY-PASS LANE AREAS. NO UNATTENDED VEHICLES, EQUIPMENT, ETC. SHALL BE LEFT IN SUCH A MANNER AS TO IMPEDE THE PASSAGE OF TRAFFIC OR TO IMPAIR ACCESS TO THE ENTRANCE OR FIRE APPARATUS TURNAROUNDS/BYPASS AREAS. THE FACILITY OWNER OR PROJECT DIRECTORS MAY TAKE ALL ACTIONS NECESSARY TO ENFORCE ALL PARKING AND VEHICLE USE REGULATIONS, INCLUDING BUT NOT LIMITED TO REMOVAL OF VEHICLES OR EQUIPMENT IN VIOLATION OF ANY SUCH REGULATIONS. FURTHER, ANY VEHICLE PARKED IN A FIRE LANE WILL BE TOWED AT THE OWNER'S EXPENSE WITHOUT ANY PRIOR NOTICE TO THE OWNER. THE FACILITY OWNER OR PROJECT DIRECTORS WILL ESTABLISH WRITTEN AUTHORIZATIONS WITH ONE OR MORE TOWING COMPANIES FOR THE PURPOSE OF TOWING ANY VEHICLE OR EQUIPMENT PARKED IN A MANNER WHICH VIOLATES APPLICABLE PARKING RULES OR REGULATIONS, OR OTHERWISE INTERFERES WITH EMERGENCY VEHICLE ACCESS.
- VEGETATION WITHIN AND AROUND THE SOLAR PROJECT PERIMETER SHALL UTILIZE FIRE RESISTANT PLANTS AS LISTED IN THE MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION AND FORESTRY WEBSITE THAT ARE ACCEPTABLE FOR SOLAR FACILITIES.
- KNOX BOXES SHALL BE LOCATED AT ALL GATES AND SHALL CONTAIN KEYS OR KEY CARDS, EMERGENCY CONTACT INFORMATION AND SITE MAP. SITE MAP SHALL BE WEATHER PROOF, SHOW LAYOUT AND FEATURES AND ALL EMERGENCY SHUT DOWN POINT LOCATIONS.
- ANY DESIGN CHANGES TO THE FIRE & RESCUE DEPARTMENT ACCESS OR FIRE PROTECTION SHALL BE APPROVED BY THE RAYMOND FIRE & RESCUE DEPARTMENT.

FIRE PROTECTION:

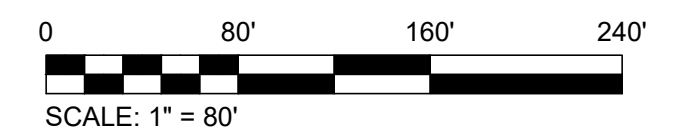
- ACCESS ROAD, BYPASS LANE SHALL BE CONSTRUCTED AND MAINTAINED TO SUPPORT A 75,000 GVWR FIRE APPARATUS
- THE ENTRANCE GATE AREA, BYPASS AND HAMMERHEAD ARE DESIGNATED FIRE LANES.
- ALL FIRE LANES SHALL BE MARKED WITH SIGNS THAT READ, "FIRE LANE," "NO PARKING," "VEHICLES TOWED AT OWNER'S EXPENSE." SIGN LOCATIONS TO BE APPROVED BY RAYMOND FIRE DEPARTMENT.
- THE ACCESS ROAD SHALL BE CONSTRUCTED AND MAINTAINED TO PROVIDE A MINIMUM OF 13'-6" UNOBSTRUCTED CLEARANCE
- MAXIMUM ANGLE OF APPROACH: 8 DEGREES.
- MAXIMUM DEPARTURE ANGLE: 9 DEGREES.
- MAXIMUM BREAKOVER ANGLE: 13 DEGREES.
- MAXIMUM ROAD GRADE: 10 DEGREES.
- ALL ENTRANCE GATES SHALL HAVE A MINIMUM OPEN CLEARANCE OF 20 FEET.
- ALL GATES SHALL HAVE A RAYMOND FIRE & RESCUE DEPARTMENT KNOX BOX THAT INCLUDE ALL KEYS OR KEY CARDS, AND CURRENT SITE EMERGENCY CONTACT INFORMATION.
- THE FIRE STANDPIPE SYSTEM SHOWN ON THE PLAN IS IN LIEU OF PROVIDING FIRE LANE ACCESS AROUND THE ENTIRE SITE TO MEET NFPA REQUIREMENTS.
- THE OPERATIONAL READINESS OF THE FIRE CISTERN, COMPONENTS, AND STANDPIPE SYSTEM INCLUDING REPAIRS AND REPLACEMENT, IS THE RESPONSIBILITY OF THE OWNER OF THE SOLAR FACILITY.
- THE FIRE CISTERN SHALL BE INSTALLED, INSPECTED, AND APPROVED BY THE RAYMOND FIRE & RESCUE DEPARTMENT PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
- AN EASEMENT SHALL BE GRANTED TO THE TOWN OF RAYMOND FIRE & RESCUE DEPARTMENT TO ACCESS TO THE FACILITY FOR ANNUAL TESTING AND TRAINING.
- A RAYMOND FIRE & RESCUE DEPARTMENT FIRE PERMIT FOR THE FIRE CISTERN/DRY HYDRANT SHALL BE OBTAINED BY THE APPLICANT PRIOR TO ITS INSTALLATION.
- THE FACILITY STREET ADDRESS SHALL BE INSTALLED ON EACH BUILDING OR DWELLING UNIT ON ROOSEVELT TRAIL IN THE IMMEDIATE AREA OF THE FACILITY ENTRANCE AND ON A FACILITY SIGN(S) AT THE FACILITY ENTRANCE.
- THE FACILITY E-911 ADDRESS SHALL BE VISIBLE FROM BOTH APPROACH DIRECTIONS ON ROOSEVELT TRAIL, AND LOCATED TO BE VISIBLE FROM WITHIN THE FIRE APPARATUS CAB.
- THE STREET ADDRESS LETTERING SHALL BE NO LESS THAN 6" IN HEIGHT, SHALL BE OF A CONTRASTING COLOR TO THE SIGN BACKGROUND, AND PREFERABLY THE LETTERS SHOULD BE REFLECTIVE FOR NIGHT OR REDUCED LIGHT CONDITIONS. THE PLACEMENT OF STREET ADDRESS SIGNS SHALL BE APPROVED BY THE RAYMOND FIRE RESCUE DEPARTMENT AND E-911 COORDINATOR.
- DURING THE CONSTRUCTION, A TEMPORARY E-911 STREET ADDRESS SIGN SHALL BE POSTED AT THE ENTRANCE AND VISIBLE FROM ROOSEVELT TRAIL.
- THE PROJECT SHALL FOLLOW THE RELEVANT SOLAR PHOTOVOLTAIC AND FIRE SAFETY STANDARDS SUCH AS, BUT NOT LIMITED TO: NFPA 70, NFPA 70B, NFPA 70E, UL1471, NFPA 855, AND NFPA 1.
- ALL REQUIRED RAYMOND FIRE & RESCUE FIRE PERMITS FOR EMERGENCY VEHICLE ACCESS OR FIRE PROTECTION SYSTEMS SHALL BE SUBMITTED AND APPROVED BY THE RAYMOND FIRE RESCUE DEPARTMENT PRIOR TO ISSUANCE OF BUILDING PERMITS.
- PRIOR TO SCHEDULING ANY FIRE PERMIT INSPECTIONS, INCLUDING THE RAYMOND FIRE & RESCUE DEPARTMENT CERTIFICATE OF OCCUPANCY INSPECTION, THE APPLICANT SHALL PROVIDE PROOF TO THE TOWN THAT THE FIRE PERMIT FEE PAYMENTS HAVE BEEN RECEIVED AT THE TOWN CLERKS OFFICE. RE-INSPECTION APPOINTMENTS ARE SUBJECT TO A RE-INSPECTION FEE, PAYABLE PRIOR TO SCHEDULING ANY RE-INSPECTION. ALL INSPECTIONS WITH THE RFRD MUST BE SATISFACTORILY COMPLETED AND APPROVED PRIOR TO ISSUANCE OF THE CERTIFICATE OF OCCUPANCY FOR THE FACILITY.
- RAYMOND BUILDING, ELECTRICAL AND FIRE PERMIT APPLICATIONS SHALL INCLUDE: A MAP OR DIAGRAM OF THE PROPOSED PV SYSTEM DESIGN THAT INCLUDES LOCATIONS OF ALL PV GROUND PANELS, AC & DC ELECTRICAL DISCONNECTS, REMOTE EMERGENCY DISCONNECTS, AND ANY SYSTEM PANELS, CONDUIT, COMBINER BOXES, OR INVERTERS. THE MAP OR DIAGRAMS SHALL NOTE THE LOCATIONS OF GROUND FAULT, SURGE PROTECTION, LIGHTNING PROTECTION SYSTEMS, ARC FAULT PROTECTION OR DETECTION DEVICES, GROUND FAULT OR PV ARRAY ISOLATION SENSING DEVICES, MODULE LEVEL CONTROLS OR "SMART MODULES," AUTOMATED PERFORMANCE MONITORING INSTRUMENTATION, AND DIFFERENTIAL CURRENT SENSORS OR RESIDUAL CURRENT DETECTORS. DATA SHEETS THAT DETAIL THE EQUIPMENT LISTINGS AND CERTIFICATIONS FOR WIND AND HAIL RESISTANCE AND ANY ADDITIONAL SYSTEM INFORMATION SHOULD BE NOTED ON THE MAP OR DIAGRAM. WRITTEN PLAN FOR SITE MAINTENANCE OF VEGETATION AND DEBRIS CONTROL IN AND AROUND THE SOLAR PV ARRAYS, COMBINER BOXES, TRANSFORMERS, AND INVERTERS.
- AN EMERGENCY RESPONSE PLAN SHALL BE SUBMITTED TO THE RAYMOND FIRE & RESCUE DEPARTMENT WHEN FILING FOR A RAYMOND FIRE PERMIT.
- PARKING: THERE SHALL BE NO ON-STREET PARKING ON ("E-911 ASSIGNED STREET NAME-TBD") IN THE IMMEDIATE AREA AND BOTH SIDES OF THE ENTRANCE GATE, FIRE APPARATUS TURNAROUND AND BY-PASS LANE AREAS. NO UNATTENDED VEHICLES, EQUIPMENT, ETC. SHALL BE LEFT IN SUCH A MANNER AS TO IMPEDE THE PASSAGE OF TRAFFIC OR TO IMPAIR ACCESS TO THE ENTRANCE OR FIRE APPARATUS TURNAROUNDS/BYPASS AREAS. THE FACILITY OWNER OR PROJECT DIRECTORS MAY TAKE ALL ACTIONS NECESSARY TO ENFORCE ALL PARKING AND VEHICLE USE REGULATIONS, INCLUDING BUT NOT LIMITED TO REMOVAL OF VEHICLES OR EQUIPMENT IN VIOLATION OF ANY SUCH REGULATIONS. FURTHER, ANY VEHICLE PARKED IN A FIRE LANE WILL BE TOWED AT THE OWNER'S EXPENSE WITHOUT ANY PRIOR NOTICE TO THE OWNER. THE FACILITY OWNER OR PROJECT DIRECTORS WILL ESTABLISH WRITTEN AUTHORIZATIONS WITH ONE OR MORE TOWING COMPANIES FOR THE PURPOSE OF TOWING ANY VEHICLE OR EQUIPMENT PARKED IN A MANNER WHICH VIOLATES APPLICABLE PARKING RULES OR REGULATIONS, OR OTHERWISE INTERFERES WITH EMERGENCY VEHICLE ACCESS.
- VEGETATION WITHIN AND AROUND THE SOLAR PROJECT PERIMETER SHALL UTILIZE FIRE RESISTANT PLANTS AS LISTED IN THE MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION AND FORESTRY WEBSITE THAT ARE ACCEPTABLE FOR SOLAR FACILITIES.
- KNOX BOXES SHALL BE LOCATED AT ALL GATES AND SHALL CONTAIN KEYS OR KEY CARDS, EMERGENCY CONTACT INFORMATION AND SITE MAP. SITE MAP SHALL BE WEATHER PROOF, SHOW LAYOUT AND FEATURES AND ALL EMERGENCY SHUT DOWN POINT LOCATIONS.
- ANY DESIGN CHANGES TO THE FIRE & RESCUE DEPARTMENT ACCESS OR FIRE PROTECTION SHALL BE APPROVED BY THE RAYMOND FIRE & RESCUE DEPARTMENT.

LEGEND

EXISTING	PROPOSED
PROJECT PARCEL	EQUIPMENT PAD
MDEP CLASSIFIED "WETLANDS NOT OF SPECIAL SIGNIFICANCE" (PRELIMINARY CLASSIFICATION)	UNDERGROUND UTILITY
MDEP CLASSIFIED "WETLANDS OF SPECIAL SIGNIFICANCE"	6" FIRE FORCE MAIN
SIGNIFICANT VERNAL POOL (SVP)	UTILITY POLE
NON-SIGNIFICANT VERNAL POOL (NSVP)	TREELINE
APPROXIMATE SHORELAND ZONE BOUNDARY	SOLAR ARRAY
CRITICAL TERRESTRIAL HABITAT (CTH)	WILDLIFE PERMEABLE FENCE
PREVIOUSLY IMPACTED CTH AREA	2 FT CONTOURS
UTILITY POLE	SILT FENCE
PAVEMENT	STONE CHECK DAM
TREELINE	TEST PITS
2 FT CONTOURS	SIGNS
NRCS SOILS BOUNDARY	LIGHT POLE
NRCS SOILS LABEL	FIRE STANDPIPE

PROJECT CRITICAL TERRESTRIAL HABITAT AREA IMPACTS

DESCRIPTION	AREA (SF)	PERCENT CTH IMPACTED
CRITICAL TERRESTRIAL HABITAT AREA	563,209	-
EXISTING CTH IMPACT	67,171	-
EXISTING CTH IMPACT TO REMAIN	16,168	2.8%
AREA OF CTH TO BE RESTORED NATURALLY	51,003	-
PROPOSED CTH IMPACT	113,588	20.2%
TOTAL CTH IMPACT	129,756	23.0%



Do Not Use for Construction For Regulatory Review Only



Rev	Description	Date
1	Project perimeter fence and tree line adjusted to minimize impact to Shore Land Zone.	8/29/23
2	Modifications to access road and solar array regarding the components for fire protection.	11/07/23
3	Modifications solar array layout, stormwater, fence type, edits to address fire dept comments & revised CTH impact area.	01/09/24

Drawn By:	BG
Design By:	BG / KJB
Checked By:	KJB
Approved By:	KJB
Date:	8/14/2023

Acheron Engineering, LLC.
Engineering & Environmental Consultants
www.AcheronEngineering.com
153 Main St.
113 Winter East
Williamstown, PA 23188
(207) 341-2590

Proposed Condition Site Plan
& Erosion / Sedimentation Control Plan
Mainely Solar, LLC
143 Highland Shores Road
Casco, Maine

Job Number:
MS001

Drawing No:
C-2

Sheet 3 of 9



Photo 1: Significant vernal pool SVP-JL5, looking north. Photograph taken May 3, 2022.



Photo 2: Significant vernal pool SVP-JL7, looking east. Photograph taken April 12, 2022.



22207



Photo 3: Typical upland in proposed development area. Photograph taken June 12, 2023.



Photo 4: Typical upland surrounding SVP-JL7. Photograph taken April 14, 2023.