

MEMORANDUM

TO: North Yarmouth Planning Board
Through Ben Scipione, Code Enforcement Officer

CC: Chris Beyers, Branch Renewable Energy

From: Kate Burch, Planner, North Star Planning

RE: Boundary Line Solar Preapplication – Planning Board meeting April 26,
2023

Date: March 31, 2023

Overview

The applicant proposes to construct a 1 MW ground-mounted solar project on Doughty Road, to be owned by Boundary Line Solar, a subsidiary of Branch Renewable Energy. The property is owned by the Yarmouth Water District. It is listed as 0 Doughty Road on North Yarmouth Tax Maps. Approximately 7-8 acres of the 20.4 acre property will be disturbed. The property is in the Village Residential and Groundwater Protection Overlay zones.

The property is bisected by a CMP transmission line. It is a wooded lot that was formerly a gravel pit. This land cannot be used as residential or commercial development. It is not within any mapped habitat areas, and a formal consultation with Maine Inland Fisheries and Wildlife, as well as a formal natural resource and vernal pool survey, will take place in the spring.

Because this is a preapplication meeting, the Board is not expected to vote on the project. The findings of fact are included below to let the applicant know the standards that are relevant to this project and the standards that are not applicable.

Based on review of solar projects from other Towns, if the application moves forward, the Board should consider the following:

- The inclusion of a decommissioning or removal plan if the solar facility ceases to produce power after twelve (12) consecutive months.
 - The inclusion of an Operations and Maintenance Plan.
 - Any performance guarantees.
 - Provisions for security and emergency access.
-

Applicant: Chris Beyers

Owner: Branch Renewable Energy

Location: 0 Doughty Road

Zoning: Village Residential, Groundwater Protection Overlay

Tax Map Number: Map 1 Lot 3

Existing Land Use: former gravel pit

Proposed Land Use: ground-mounted solar

Acreage: 20.4 acres

Waivers: The applicant has not requested any waivers.

Site Walk: The Board should decide if a site walk for this project is necessary.

Public Hearing: A public hearing for this project has not been scheduled.

Preapplication Completeness Review: NSP reviewed the project for completeness and the project meets the preapplication submission requirements.

Site Plan Review - Findings of Fact:

1. Utilization of the Site

- The applicant plans to construct ground-mounted solar on the site of a former gravel pit.
- Approximately 7-8 acres of the 20 acre site will be disturbed.
- No habitat is identified on state maps; the applicant will consult with state agencies and conduct a vernal pool and natural resource survey in the spring.

2. Utilities

- The project will connect to the CMP power grid.
- No other utilities are required.

3. Building Standards

- Not applicable.

4. Impact on Community Facilities

- No negative impact on community facilities will result from this project.

5. Hazardous Materials and Emissions

- No hazardous materials or emissions will result from the project.

6. Exterior Lighting

- The applicant should clarify if any exterior lighting will be proposed for the project.

7. Financial and Technical Capacity

- The applicant should provide a deed or lease for the property in their next submission.
- The applicant should provide an itemized decommissioning estimate.

8. Landscaping, Buffers and Screening

- The solar array will be constructed in a forested area.

- The applicant should confirm if the solar array will be visible from any abutting property or public road.
- The applicant should confirm that existing vegetation on site will be retained and minimal grading is proposed.
- The applicant should confirm if any landscaping is being proposed.

9. Noise

- No noise levels in excess of the town standards will result from the project.
- The applicant should submit information on noise levels on inverters, transformers, and other electrical equipment.

10. Signs

- The applicant should confirm if any signs, particularly containing emergency contact information, will be installed for the project.

11. Storage of Materials

- No outside storage areas will be included for the project.

12. Stormwater Control

- The applicant should show what provisions are being made for stormwater control on the site plan.
- The applicant should clarify and discuss the DEP Standards for Stormwater Management that are relevant to this project.

13. Protection of Significant Wildlife Habitat

- The applicant should confirm if any significant wildlife habitat is located within the project area in the next submission.

14. Access Management and Vehicular Circulation

- The project will not produce vehicular traffic other than for construction and maintenance needs.

- The applicant should confirm if there is existing driveway access to the property, or if a new driveway is proposed.
- The applicant should confirm that the access road hammerhead turnaround is adequate for emergency vehicle access.

15. Pedestrian Ways and Bicycle Access

- No pedestrian or bicycle ways are being proposed for this project.

16. Off-Street Parking and Loading

- No off-street parking or loading will be included for the project.

Conclusions of Law:

1. The development **will/will not** reflect the natural capabilities of the site to support development.
2. Utilities serving developments in the Village Center District and Village Residential District **will/will not** be installed underground.
3. The proposed development **will/will not** result in a negative impact to the environment or to the community facilities or services.
4. The development **will/will not** contribute emission of dust, ash, smoke or other particular matter.
5. The proposed development **will/will not** have adequate exterior lighting to provide for its safe use during nighttime hours.
6. The landscape **will/will not** be preserved in its natural state, insofar as practicable, by minimizing tree and soil removal, retaining existing vegetation where desirable, and keeping any grade changes in character with the general appearance of neighboring areas.
7. The development **will/will not** control noise levels such that it **will/will not** create a nuisance for neighboring properties.
8. The size, location, design, color, texture, lighting and materials of all exterior signs **will/will not** detract from the design of proposed buildings and structures.
9. Exposed non-residential storage areas, exposed machinery, and areas used for storage **will/will not** have sufficient setbacks and screening.
10. Adequate provisions **will/will not** be made for the collection and disposal of all storm water that runs off proposed roads, parking areas, roofs and other surfaces.
11. Developments **will/will not** be designed to protect and conserve important wildlife habitat to the greatest extent feasible.
12. The layout of the site **will/will not** provide for the safe movement of passenger, service, and emergency vehicles throughout the site.
13. The site plan **will/will not** provide for a system of pedestrian ways within the development appropriate to the type and scale of development.
14. Parking areas **will/will not** be constructed to protect the natural environment and visual character of the community, improve pedestrian safety and accessibility, and promote the quality of life in developed areas.



3/9/23

Ben Scipione
Code Enforcement Officer
Town of North Yarmouth
10 Village Square Road
North Yarmouth, ME 04097

RE: Boundary Line Solar Project: Pre-Application Request for Planning Board Presentation

Ben,

Branch Renewable Energy (Branch) has initiated early-stage development activities on a proposed 1 MW ground mounted solar project located on Doughty Road; the special purpose entity owning the project is Boundary Line Solar, LLC (Project), a subsidiary of Branch. In order to take the first steps of the Site Plan Review Application process, I am requesting to attend the April 11, 2023, Planning Board meeting to preview the project with the Planning Board.

The Project is located on Map 1, Lot 3 (Property) (See Attachment A). While the Property doesn't have a formal address, it is listed as 0 Doughty Road on the North Yarmouth Tax Maps and is owned by the Yarmouth Water District (YWD). The property is zoned as Village Residential and is within the Groundwater Protection Overlay (GPO)(See Attachment B). The previously approved solar project on Sweetser Road permitted by Branch on land owned by the YWD is also within the GPO and directly adjacent to 3 operating wells. YWD and its engineers did not deem that project a risk to the GPO even with the greater proximity to active wells.

The Property is bisected by a CMP transmission line and is a mostly wooded, former gravel pit. The Project is proposed on the southern portion of the Property, south of the transmission line. The total Limit of Disturbance (LOD) footprint of the Project is expected to be 7-8 acres (See Attachment C). This land cannot be used for housing or commercial building development, and solar likely serves as the highest and best use of the property. In fact, the previous disturbed nature of the gravel pit makes this an ideal location for a solar project.

The Project is not within any mapped rare, threatened, and endangered species habitats per the Beginning With Habitat Maps (See Attachment D), but formal agency consultation will be initiated with Maine Department of Inland Fisheries and Wildlife as well as Maine Natural Areas Program. Branch will also conduct a formal natural resources and vernal pool survey in the spring.

My goal is to present this initial due diligence of the Project to the Planning Board at the April 11 meeting and solicit feedback prior to submitting a formal Site Plan Review Application. Please let me know if you have any other questions in the meantime and if I can provide additional materials prior to the Planning Board meeting.

Sincerely,

Chris Byers
Principal
Branch Renewable Energy
cbyers@branchrenewables.com

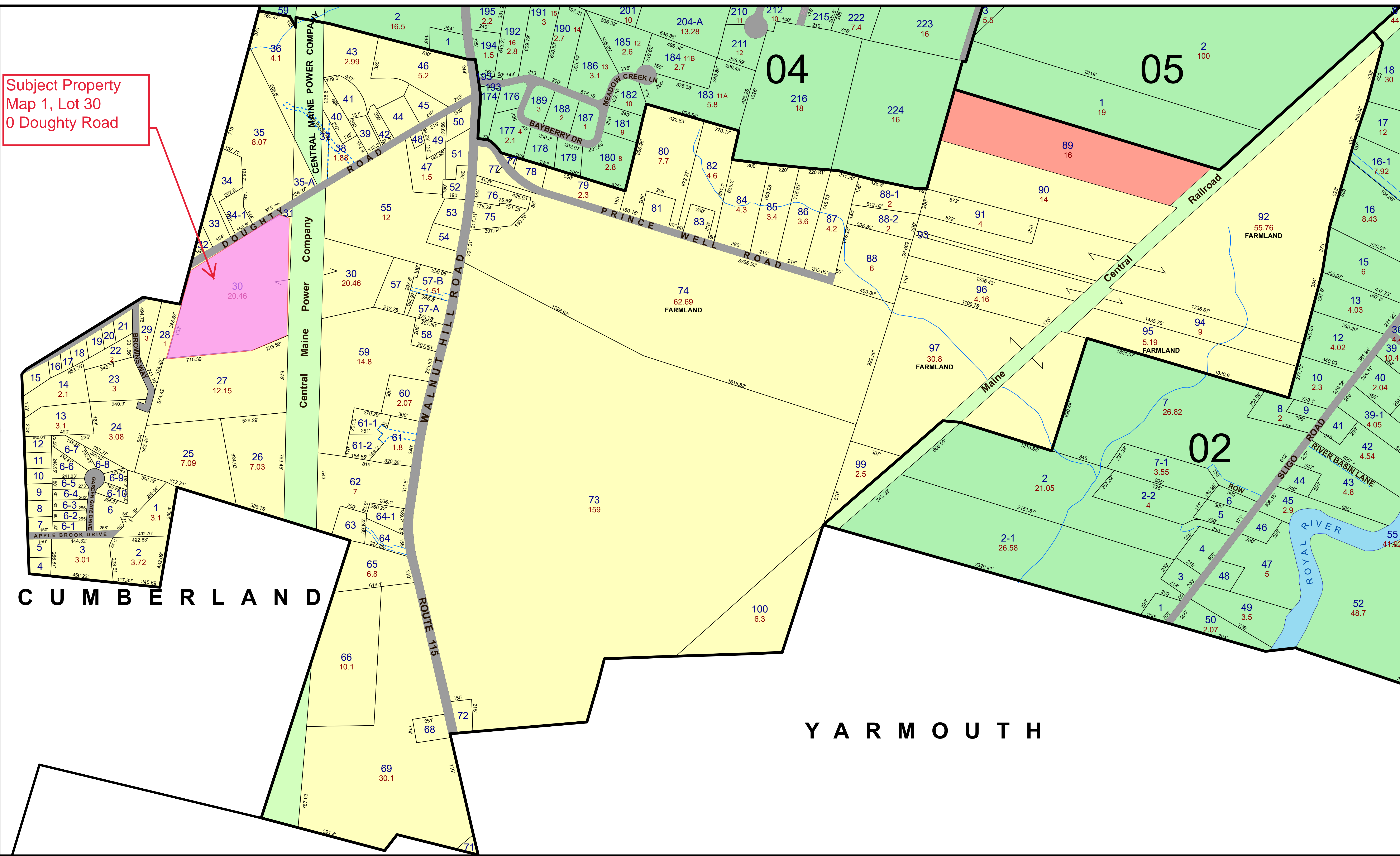


BRANCH
RENEWABLE ENERGY

Attachment A

North Yarmouth Tax Map

Subject Property
Map 1, Lot 30
0 Doughty Road



CUMBERLAND

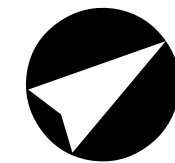
YARMOUTH

Tax Sheets are intended for assessing purposes only.
Boundary locations are approximate and should not be
used for conveyance of property.

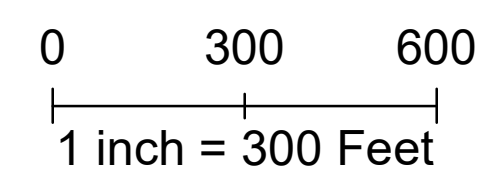
Maps updated - 11/01/2021

- Legend**
- Parcel
 - Town
 - Railroad
 - Road
 - Water
 - Cemetery
 - ROW
 - Stream

North Yarmouth, Maine



Maps Prepared by:
**Cumberland County
Regional Assessing**



Tax Sheet

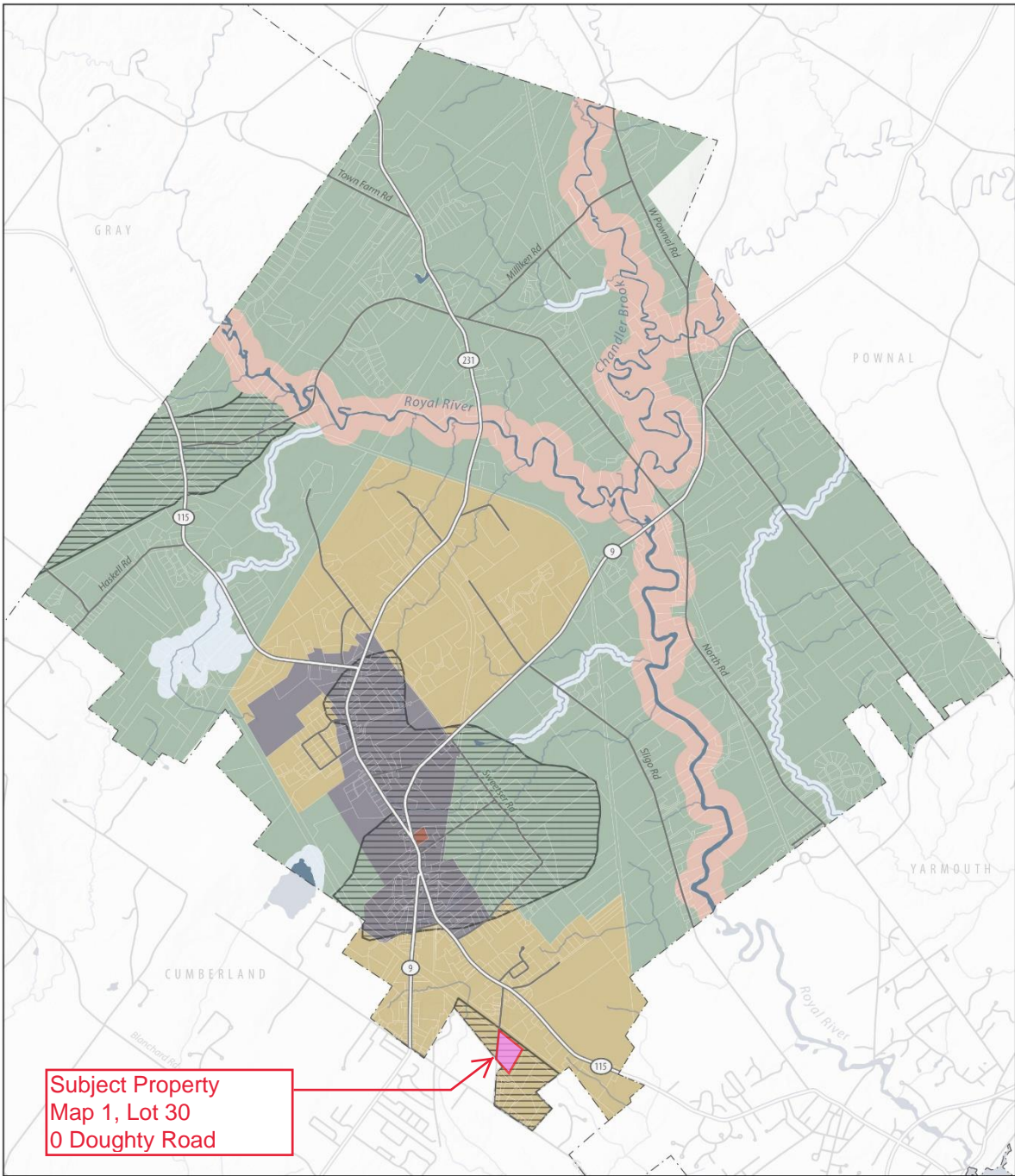
01



BRANCH
RENEWABLE ENERGY

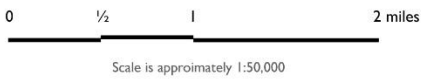
Attachment B

North Yarmouth Zoning Map



Subject Property
 Map 1, Lot 30
 0 Doughty Road

North Yarmouth Zoning Map



- Contract Zone Agreement
- Village Center
- Village Residential
- Farm and Forest
- Groundwater Protection Overlay
- Shoreland Zoning & Resource Protection
- Royal River Corridor

The boundaries for Shoreland Zoning, Groundwater Protection, and the Royal River Corridor are subject to on-site field verification.

All geographic data are provided for the purpose of reference, some error is to be expected with these layers. They are from the State of Maine GIS catalog, Town of North Yarmouth, and other public sources not from official surveys - they are meant to illustrate and are not intended for the purpose of conveyance.

Data may easily be updated with new files, please contact ben@rhumbline.com for more details about this map.

Sources:
 Roads, parcels - Maine Office of GIS
 Hydrography - National Hydro Dataset
 Zones - Town of North Yarmouth
 Groundwater Protection - WDMZ, RLM.

Rhumb Line Maps, 2018.



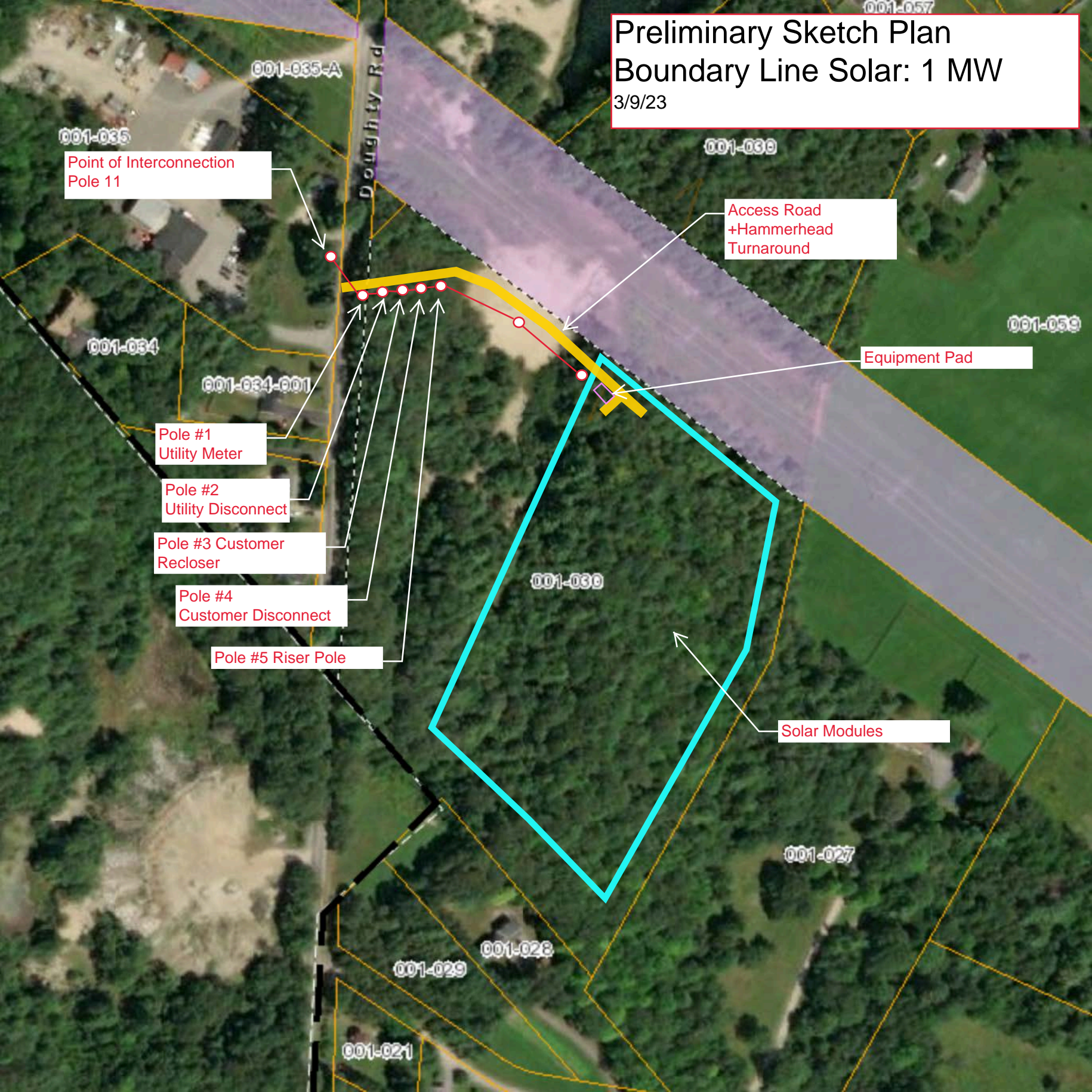
BRANCH
RENEWABLE ENERGY

Attachment C

Preliminary Site Plan

Preliminary Sketch Plan Boundary Line Solar: 1 MW

3/9/23



Point of Interconnection
Pole 11

Access Road
+ Hammerhead
Turnaround

Equipment Pad

Pole #1
Utility Meter

Pole #2
Utility Disconnect

Pole #3 Customer
Recloser

Pole #4
Customer Disconnect

Pole #5 Riser Pole

Solar Modules

001-035-A

001-035

001-030

001-057

001-059

001-034

001-034-001

001-030

001-027

001-028

001-029

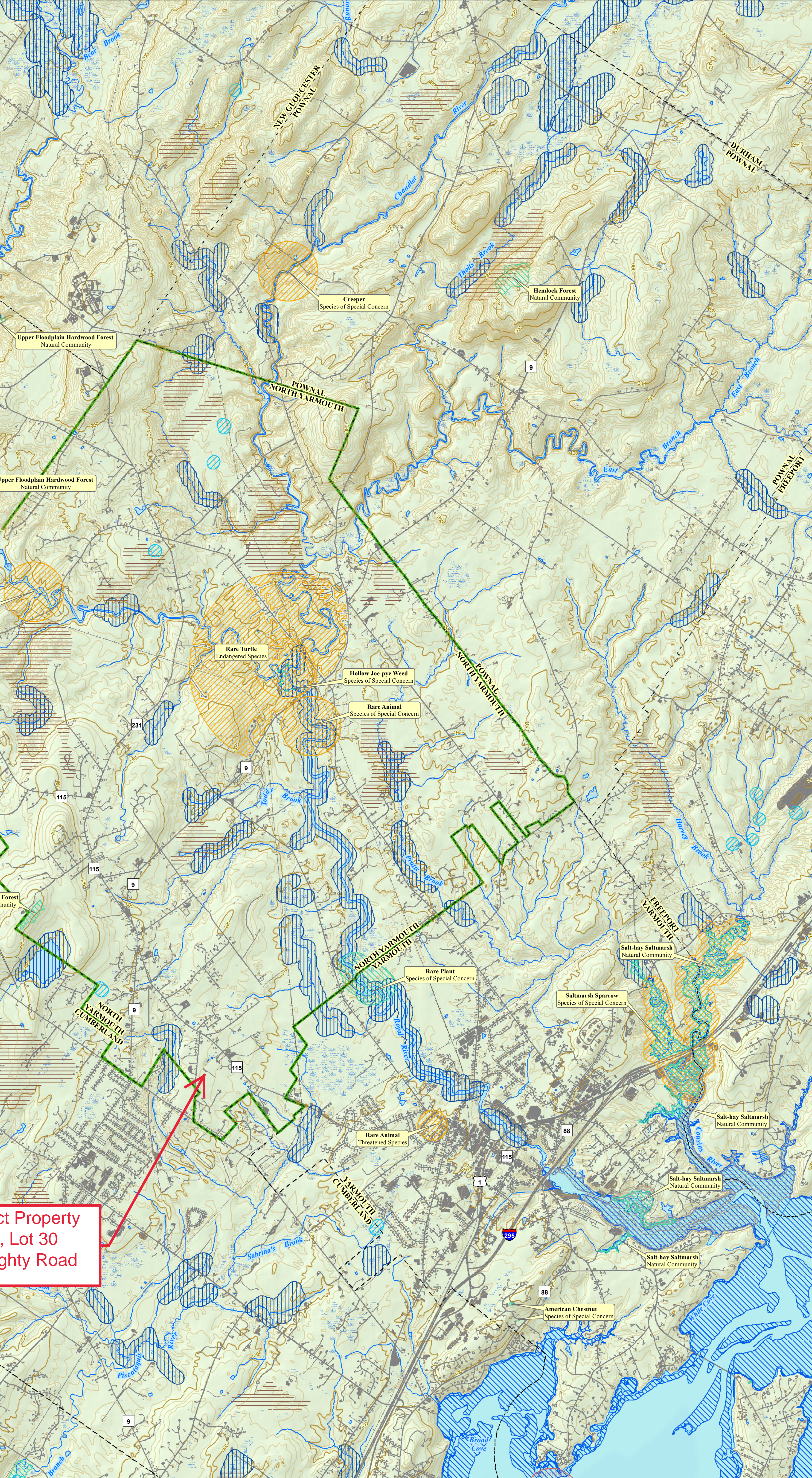
001-021



BRANCH
RENEWABLE ENERGY

Attachment D

Beginning With Habitat Map (North Yarmouth)



Subject Property
Map 1, Lot 30
0 Doughty Road

LEGEND

Beginning with Habitat (BwH) is a voluntary tool intended to assist landowners, resource managers, planners, and municipalities in identifying and making informed decisions about areas of potential special resource concern. This data includes the best available information provided through BwH's coalition partners as of the map date, and is intended for information purposes only. It should not be interpreted as a comprehensive analysis of plant and animal occurrences or other local resources, but rather as an initial screen to flag areas where agency consultation may be appropriate. Habitat data sets are updated continuously as more accurate and current data becomes available. However, as many areas have not been completely surveyed, features may be present that are not yet mapped, and the boundaries of some depicted features may need to be revised. Local knowledge is critical in providing accurate data. If errors are noted in the current depiction of resources, please contact our office. Some habitat features depicted on this map are regulated by the State of Maine through the Maine Endangered Species Act (Essential Habitats and Threatened and Endangered Species Occurrences) and Natural Resources Protection Act (Significant Wildlife Habitat). We recommend consultation with MDIFW Regional Biologists or MNAP Ecologists if activities are proposed within resource areas depicted on this map. Consultation early in the planning process usually helps to resolve regulatory concerns and minimize agency review time. For MDIFW and MNAP contact information, visit <http://www.beginningwithhabitat.org/contacts/index.html>.

- Organized Township Boundary
- Unorganized Township
- Selected Town or Area of Interest
- Developed: Impervious surfaces such as buildings and roads

Rare, Threatened, or Endangered Wildlife

- Known rare, threatened, or endangered species occurrence and/or the associated habitats based on species sightings.

Consult with a MDIFW regional biologist to determine the relative importance and conservation needs of the specific location and supporting habitat. For more information regarding individual species visit our website, http://www.maine.gov/wildlife/species/endangered_species/state_list.htm, for species specific fact sheets.

The Federal Endangered Species Act requires actions authorized, funded, or carried out by federal agencies be reviewed by the U. S. Fish and Wildlife Service. If your project occurs near an occurrence of the Atlantic Salmon, Roseate Tern, Piping Plover, Canada Lynx, New England Cottontail, Fish's Lousewort, or Small-whorled Pagonia contact the Maine Field Office, USFWS, 1168 Main St., Old Town, ME 04468.

Rare or Exemplary Plants and Natural Communities

- Rare Plant Locations

Known rare, threatened, or endangered plant occurrences are based on field observations. Consult with a Maine Natural Areas Program (MNAP) Ecologist to determine conservation needs of particular species. For more information regarding rare plants, the complete list of tracked species and fact sheets for those species can be found at: <http://www.maine.gov/doc/nimc/map/features/plantlist.htm>

- Rare or Exemplary Natural Community Locations

The MNAP has classified and distinguished 98 different natural community types that collectively cover the state's landscape. These include such habitats as floodplain forests, coastal bogs, alpine summits, and many others. Each type is assigned a rarity rank of 1 (rare) through 5 (common). Mapped rare natural communities or ecosystems, or exemplary examples of common natural communities or ecosystems, are based on field surveys and aerial photo interpretation. Consult with an MNAP Ecologist to determine conservation needs of particular communities or ecosystems.

Essential Wildlife Habitats

- Roseate Tern Nesting Area or Piping Plover-Least Tern Nesting, Feeding, & Brood-Rearing Area

Maine's Department of Inland Fisheries & Wildlife (MDIFW, www.state.me.us/ifw) maps areas currently or historically providing habitat essential to the conservation of endangered or threatened species protected by the Maine Endangered Species Act (12 MRSA, Chapter 925, Subchapter 3, Sections 12804 and 12806) and regulations (MDIFW Rules, Chapter 8.05). Identification of Essential Habitat areas is based on species observations and confirmed habitat use. If a project occurs partly or wholly within an Essential Habitat, it must be evaluated by MDIFW before state and/or municipal permits can be approved or project activities can take place.

Significant Wildlife Habitats

- Candidate Deer Wintering Area

Forested area possibly used by deer for shelter during periods of deep snow and cold temperatures. Assessing the current value of a deer wintering area requires on-site investigation and verification by IF&W staff. Locations depicted should be considered as approximate only.

- Inland Waterfowl / Wading Bird
- Freshwater breeding, migration/staging, and wintering habitats for inland waterfowl or breeding, feeding, loafing, migration, or roosting habitats for inland wading birds.
- Seabird Nesting Island
- An island, ledge, or portion thereof in tidal waters with documented, nesting seabirds or suitable nesting habitat for endangered seabirds.
- Shorebird Areas
- Coastal staging areas that provide feeding habitat like tidal mud flats or roosting habitat like gravel bars or sand spits for migrating shorebirds
- Tidal Waterfowl / Wading Bird
- Breeding, migrating/staging, or wintering areas for coastal waterfowl or breeding, feeding, loafing, migration, or roosting areas for coastal wading birds. Tidal Waterfowl/Wading Bird habitats include aquatic beds, eelgrass, emergent wetlands, mudflats, seaweed communities, and reefs.
- Significant Vernal Pools
- A pool depression used for breeding by amphibians and other indicator species and that portion of the critical terrestrial habitat within 250 ft of the spring or fall high water mark. A vernal pool must have the following characteristics: natural origin, nonpermanently hydroperiod, lack permanently flowing inlet or outlet, and lack predatory fish.

Maine's Natural Resources Protection Act

Maine's Natural Resources Protection Act (NRPA, 1988) is administered by the Maine Department of Environmental Protection (MDEP; <http://www.maine.gov/dep/bw/dodstanc/nrpapage.htm>) and is intended to prevent further degradation and loss of natural resources in the state, including the above Significant Wildlife Habitats that have been mapped by MDIFW. MDEP has regulatory authority over most Significant Wildlife Habitat types. The regional MDEP office should be consulted when considering a project in these areas.

Atlantic Salmon Spawning/Rearing Habitat

- Atlantic Salmon Rearing Habitat
- Atlantic Salmon Spawning Habitat
- Atlantic Salmon Limited Spawning Habitat

Mapped by Atlantic Salmon Commission (ASC) and US Fish & Wildlife Service (USFWS) from field surveys on selected Penobscot and Kennebec River tributaries and the Dennys, Ducktrap, East Machias, Machias, Pleasant, Narragagus, and Sheepscot Rivers.

Data Sources

DATA SOURCE INFORMATION

TOWNSHIP BOUNDARIES
 Maine Office of GIS: Metwp24 (2013)

ROADS
 Maine Office of GIS, Maine Department of Transportation: Medotpub (2015)

HYDROLOGY
 U.S. Geological Survey National Hydrography Dataset (NHD) Maine (2012)

DEVELOPED
 Maine Office of GIS, Maine Department of Inland Fisheries and Wildlife, and multiple other agencies: Imperv (2015)

ESSENTIAL & SIGNIFICANT WILDLIFE HABITATS
 Maine Office of GIS, Maine Department of Inland Fisheries & Wildlife: DWA, ETSC, Eplvnm, Ehrtern, JWWH, Sni, Shorebird, TWWH (2003-2015)

RARE NATURAL COMMUNITIES & PLANTS
 Maine Natural Areas Program: MNAP_rccs (2015)

ATLANTIC SALMON HABITAT
 Maine Office of GIS, Maine Atlantic Salmon Commission, U.S. Fish & Wildlife Service: Aash3 (2013)

DATA SOURCE CONTACT INFORMATION

Maine Office of GIS: <http://www.maine.gov/mgis/catalog/>
 Maine Natural Areas Program: <http://www.maine.gov/dep/nimc/index.html>
 Maine Department of Inland Fisheries & Wildlife: <http://www.maine.gov/ifw/>
 U.S. Fish & Wildlife Service, Gulf of Maine Program: <http://gulfofmaine.fws.gov>
 Maine Atlantic Salmon Commission: <http://www.maine.gov/asc/>
 Maine Department of Transportation: <http://www.maine.gov/mdot/>

DIGITAL DATA REQUEST
 To request digital data for a town or organization, please visit our website: http://www.beginningwithhabitat.org/the_mapsgis_data_request.html

Map Prepared by Maine Department of Inland Fisheries & Wildlife March 2018

Sponsored in part by Maine Outdoor Heritage Fund. Money is not for sale.

Sponsored in part by Local Conservation Place funds.

THANK YOU