

Attachment B. Full Environmental Assessment Form (FEAF)

Full Environmental Assessment Form
Part 1 - Project and Setting

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either “Yes” or “No”. If the answer to the initial question is “Yes”, complete the sub-questions that follow. If the answer to the initial question is “No”, proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1 is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project:		
Project Location (describe, and attach a general location map):		
Brief Description of Proposed Action (include purpose or need):		
Name of Applicant/Sponsor:		Telephone:
		E-Mail:
Address:		
City/PO:	State:	Zip Code:
Project Contact (if not same as sponsor; give name and title/role):		Telephone:
		E-Mail:
Address:		
City/PO:	State:	Zip Code:
Property Owner (if not same as sponsor):		Telephone:
		E-Mail:
Address:		
City/PO:	State:	Zip Code:

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. (“Funding” includes grants, loans, tax relief, and any other forms of financial assistance.)

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Counsel, Town Board, or Village Board of Trustees <input type="checkbox"/> Yes <input type="checkbox"/> No		
b. City, Town or Village Planning Board or Commission <input type="checkbox"/> Yes <input type="checkbox"/> No		
c. City, Town or Village Zoning Board of Appeals <input type="checkbox"/> Yes <input type="checkbox"/> No		
d. Other local agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
e. County agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
f. Regional agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
g. State agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
h. Federal agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
<p>i. Coastal Resources.</p> <p><i>i.</i> Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>ii.</i> Is the project site located in a community with an approved Local Waterfront Revitalization Program? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><i>iii.</i> Is the project site within a Coastal Erosion Hazard Area? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>		

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? Yes No

- **If Yes**, complete sections C, F and G.
- **If No**, proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? Yes No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? Yes No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) Yes No

If Yes, identify the plan(s):

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? Yes No

If Yes, identify the plan(s):

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. Yes No
If Yes, what is the zoning classification(s) including any applicable overlay district?

b. Is the use permitted or allowed by a special or conditional use permit? Yes No

c. Is a zoning change requested as part of the proposed action? Yes No

If Yes,

i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? _____

b. What police or other public protection forces serve the project site?

c. Which fire protection and emergency medical services serve the project site?

d. What parks serve the project site?

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)?

b. a. Total acreage of the site of the proposed action? _____ acres
b. Total acreage to be physically disturbed? _____ acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? _____ acres

c. Is the proposed action an expansion of an existing project or use? Yes No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? Yes No
If Yes,

i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)

ii. Is a cluster/conservation layout proposed? Yes No

iii. Number of lots proposed? _____

iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will the proposed action be constructed in multiple phases? Yes No

i. If No, anticipated period of construction: _____ months

ii. If Yes:

- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____ year

• Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

f. Does the project include new residential uses? Yes No
 If Yes, show numbers of units proposed.

	<u>One Family</u>	<u>Two Family</u>	<u>Three Family</u>	<u>Multiple Family (four or more)</u>
Initial Phase	_____	_____	_____	_____
At completion	_____	_____	_____	_____
of all phases	_____	_____	_____	_____

g. Does the proposed action include new non-residential construction (including expansions)? Yes No
 If Yes,

i. Total number of structures N/A- facility components do not meet the description of a "structure"
ii. Dimensions (in feet) of largest proposed structure: NA height; NA width; and NA length
iii. Approximate extent of building space to be heated or cooled: _____ square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? Yes No
 If Yes,

i. Purpose of the impoundment: _____
ii. If a water impoundment, the principal source of the water: Ground water Surface water streams Other specify: _____

iii. If other than water, identify the type of impounded/contained liquids and their source.

iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres
v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length
vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete): _____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? Yes No
 (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)
 If Yes:

i. What is the purpose of the excavation or dredging? _____
ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?
 • Volume (specify tons or cubic yards): _____
 • Over what duration of time? _____
iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

iv. Will there be onsite dewatering or processing of excavated materials? Yes No
 If yes, describe. _____

v. What is the total area to be dredged or excavated? _____ acres
vi. What is the maximum area to be worked at any one time? _____ acres
vii. What would be the maximum depth of excavation or dredging? _____ feet
viii. Will the excavation require blasting? Yes No
ix. Summarize site reclamation goals and plan: _____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? Yes No
 If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

iii. Will the proposed action cause or result in disturbance to bottom sediments? Yes No

If Yes, describe: _____

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? Yes No

If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____
- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

c. Will the proposed action use, or create a new demand for water? Yes No

If Yes:

i. Total anticipated water usage/demand per day: _____ gallons/day

ii. Will the proposed action obtain water from an existing public water supply? Yes No

If Yes:

- Name of district or service area: _____
- Does the existing public water supply have capacity to serve the proposal? Yes No
- Is the project site in the existing district? Yes No
- Is expansion of the district needed? Yes No
- Do existing lines serve the project site? Yes No

iii. Will line extension within an existing district be necessary to supply the project? Yes No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____
- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? Yes No

If Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? Yes No

If Yes:

i. Total anticipated liquid waste generation per day: _____ gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____

iii. Will the proposed action use any existing public wastewater treatment facilities? Yes No

If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of district: _____
- Does the existing wastewater treatment plant have capacity to serve the project? Yes No
- Is the project site in the existing district? Yes No
- Is expansion of the district needed? Yes No

• Do existing sewer lines serve the project site? Yes No
 • Will a line extension within an existing district be necessary to serve the project? Yes No
 If Yes:
 • Describe extensions or capacity expansions proposed to serve this project: _____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? Yes No
 If Yes:
 • Applicant/sponsor for new district: _____
 • Date application submitted or anticipated: _____
 • What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? Yes No
 If Yes:
 i. How much impervious surface will the project create in relation to total size of project parcel?
 _____ Square feet or _____ acres (impervious surface)
 _____ Square feet or _____ acres (parcel size)
 ii. Describe types of new point sources. _____

 iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

 • If to surface waters, identify receiving water bodies or wetlands: _____

 • Will stormwater runoff flow to adjacent properties? **Per the SWPPP, off-site runoff will not exceed pre-existing conditions and will be treated.* Yes No

iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? Yes No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? Yes No
 If Yes, identify:
 i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

 ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

 iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? Yes No
 If Yes:
 i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) Yes No
 ii. In addition to emissions as calculated in the application, the project will generate:
 • _____ Tons/year (short tons) of Carbon Dioxide (CO₂)
 • _____ Tons/year (short tons) of Nitrous Oxide (N₂O)
 • _____ Tons/year (short tons) of Perfluorocarbons (PFCs)
 • _____ Tons/year (short tons) of Sulfur Hexafluoride (SF₆)
 • _____ Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflouorocarbons (HFCs)
 • _____ Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? Yes No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? Yes No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? Yes No

If Yes:

i. When is the peak traffic expected (Check all that apply): Morning Evening Weekend
 Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? Yes No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:

vi. Are public/private transportation service(s) or facilities available within 1/2 mile of the proposed site? Yes No

vii. Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? Yes No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? Yes No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? Yes No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):

iii. Will the proposed action require a new, or an upgrade, to an existing substation? Yes No

l. Hours of operation. Answer all items which apply.

<p><i>i.</i> During Construction:</p> <ul style="list-style-type: none"> • Monday - Friday: _____ • Saturday: _____ • Sunday: _____ • Holidays: _____ 	<p><i>ii.</i> During Operations:</p> <ul style="list-style-type: none"> • Monday - Friday: _____ • Saturday: _____ • Sunday: _____ • Holidays: _____
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m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? Yes No
 If yes:
 i. Provide details including sources, time of day and duration:

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? Yes No
 Describe: _____

n. Will the proposed action have outdoor lighting? Yes No
 If yes:
 i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? Yes No
 Describe: _____

o. Does the proposed action have the potential to produce odors for more than one hour per day? Yes No
 If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? Yes No
 If Yes:
 i. Product(s) to be stored _____
 ii. Volume(s) _____ per unit time _____ (e.g., month, year)
 iii. Generally, describe the proposed storage facilities: _____

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? Yes No
 If Yes:
 i. Describe proposed treatment(s):

ii. Will the proposed action use Integrated Pest Management Practices? Yes No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? Yes No
 If Yes:
 i. Describe any solid waste(s) to be generated during construction or operation of the facility:
 • Construction: _____ tons per _____ (unit of time)
 • Operation : _____ tons per _____ (unit of time)
 ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:
 • Construction: _____

 • Operation: _____

 iii. Proposed disposal methods/facilities for solid waste generated on-site:
 • Construction: _____

 • Operation: _____

s. Does the proposed action include construction or modification of a solid waste management facility? Yes No
 If Yes:
 i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____
 ii. Anticipated rate of disposal/processing:
 • _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
 • _____ Tons/hour, if combustion or thermal treatment
 iii. If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? Yes No
 If Yes:
 i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

 ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

 iii. Specify amount to be handled or generated _____ tons/month
 iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

 v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? Yes No
 If Yes: provide name and location of facility: _____

 If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.
 i. Check all uses that occur on, adjoining and near the project site.
 Urban Industrial Commercial Residential (suburban) Rural (non-farm)
 Forest Agriculture Aquatic Other (specify): _____
 ii. If mix of uses, generally describe:

b. Land uses and covertypes on the project site.

Land use or Covertypes	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces			
• Forested			
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)			
• Agricultural (includes active orchards, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)			
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: _____ _____			

c. Is the project site presently used by members of the community for public recreation? Yes No
i. If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? Yes No
If Yes,
i. Identify Facilities:

e. Does the project site contain an existing dam? Yes No
If Yes:
i. Dimensions of the dam and impoundment:

- Dam height: _____ feet
- Dam length: _____ feet
- Surface area: _____ acres
- Volume impounded: _____ gallons OR acre-feet

ii. Dam's existing hazard classification: _____
iii. Provide date and summarize results of last inspection:

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? Yes No
If Yes:
i. Has the facility been formally closed? Yes No

- If yes, cite sources/documentation: _____

ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? Yes No
If Yes:
i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? Yes No
If Yes:
i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: Yes No
 Yes – Spills Incidents database Provide DEC ID number(s): _____
 Yes – Environmental Site Remediation database Provide DEC ID number(s): _____
 Neither database
ii. If site has been subject of RCRA corrective activities, describe control measures: _____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? Yes No
If yes, provide DEC ID number(s): _____
iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

v. Is the project site subject to an institutional control limiting property uses? Yes No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? Yes No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? _____ feet

b. Are there bedrock outcroppings on the project site? Yes No
 If Yes, what proportion of the site is comprised of bedrock outcroppings? _____%

c. Predominant soil type(s) present on project site: _____ %
 _____ %
 _____ %

d. What is the average depth to the water table on the project site? Average: _____ feet

e. Drainage status of project site soils: Well Drained: _____ % of site
 Moderately Well Drained: _____ % of site
 Poorly Drained _____ % of site

f. Approximate proportion of proposed action site with slopes: 0-10%: _____ % of site
 10-15%: _____ % of site
 15% or greater: _____ % of site

g. Are there any unique geologic features on the project site? Yes No
 If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? Yes No

ii. Do any wetlands or other waterbodies adjoin the project site? Yes No
 If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? Yes No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name _____ Classification _____
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name _____ - See Attachment C - Wetland Delineation Report. Approximate Size _____
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? Yes No
 If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? Yes No

j. Is the project site in the 100-year Floodplain? Yes No

k. Is the project site in the 500-year Floodplain? Yes No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? Yes No
 If Yes:
 i. Name of aquifer: _____ (located over) _____

<p>m. Identify the predominant wildlife species that occupy or use the project site: _____</p> <p>_____</p> <p>_____</p>	<p>_____</p> <p>_____</p> <p>_____</p>
<p>n. Does the project site contain a designated significant natural community? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Describe the habitat/community (composition, function, and basis for designation): _____</p> <p style="margin-left: 20px;">_____</p> <p style="margin-left: 20px;">ii. Source(s) of description or evaluation: _____</p> <p style="margin-left: 20px;">iii. Extent of community/habitat:</p> <ul style="list-style-type: none"> • Currently: _____ acres • Following completion of project as proposed: _____ acres • Gain or loss (indicate + or -): _____ acres 	
<p>o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Species and listing (endangered or threatened): _____</p> <p style="margin-left: 20px;">_____, Northern Harrier, Bald Eagle (see Attachment B)</p> <p>_____</p>	
<p>p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Species and listing: _____</p> <p>_____</p>	
<p>q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes, give a brief description of how the proposed action may affect that use: _____</p> <p>_____</p>	
<p>E.3. Designated Public Resources On or Near Project Site</p>	
<p>a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes, provide county plus district name/number: _____</p>	
<p>b. Are agricultural lands consisting of highly productive soils present? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 20px;">i. If Yes: acreage(s) on project site? _____</p> <p style="margin-left: 20px;">ii. Source(s) of soil rating(s): _____</p>	
<p>c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Nature of the natural landmark: <input type="checkbox"/> Biological Community <input type="checkbox"/> Geological Feature</p> <p style="margin-left: 20px;">ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____</p> <p>_____</p> <p>_____</p>	
<p>d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. CEA name: _____</p> <p style="margin-left: 20px;">ii. Basis for designation: _____</p> <p style="margin-left: 20px;">iii. Designating agency and date: _____</p>	

<p>e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Nature of historic/archaeological resource: <input type="checkbox"/> Archaeological Site <input type="checkbox"/> Historic Building or District</p> <p style="margin-left: 20px;">ii. Name: _____</p> <p style="margin-left: 20px;">iii. Brief description of attributes on which listing is based: _____</p>
<p>f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>g. Have additional archaeological or historic site(s) or resources been identified on the project site? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Describe possible resource(s): _____</p> <p style="margin-left: 20px;">ii. Basis for identification: _____</p>
<p>h. Is the project site within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Identify resource: _____</p> <p style="margin-left: 20px;">ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____</p> <p style="margin-left: 20px;">iii. Distance between project and resource: _____ miles.</p>
<p>i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Identify the name of the river and its designation: _____</p> <p style="margin-left: 20px;">ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name _____ Date _____

Signature  Title _____

Attachments:

- Figure 1. Project Location Map
- Attachment A. Property Owner Information
- Attachment B. Government Approvals and Correspondence
- Attachment C. Wetlands and Watercourse Delineation and Preliminary Threatened & Endangered Species Habitat Study Report



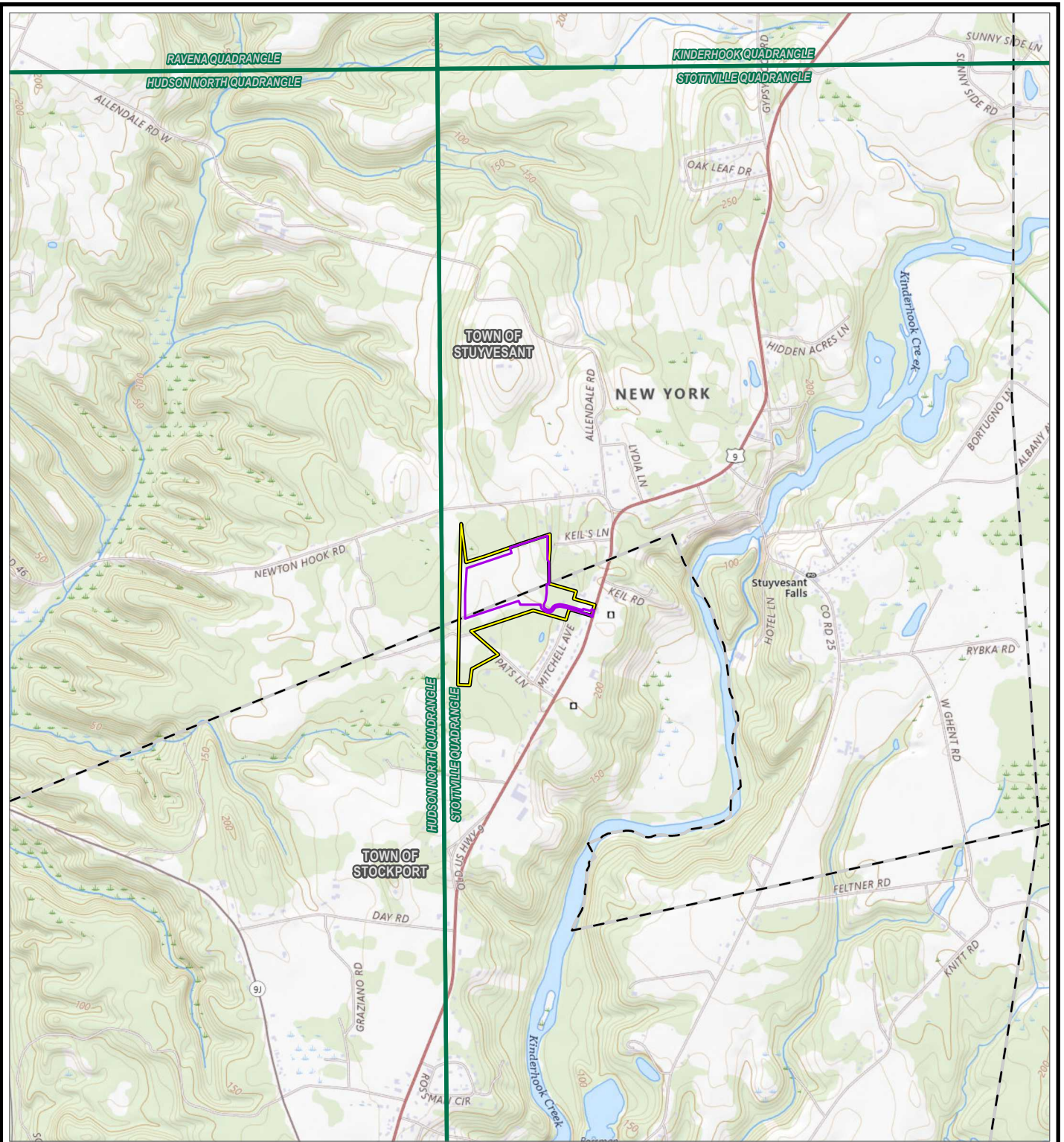
Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.







B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	Yes
E.1.h.iii [Within 2,000' of DEC Remediation Site - DEC ID]	C411020
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	Yes
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.iv [Surface Water Features - Wetlands Name]	Federal Waters
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.j. [100 Year Floodplain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.k. [500 Year Floodplain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.


E.2.i. [Aquifers]	Yes
E.2.i. [Aquifer Names]	Principal Aquifer
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	Yes
E.2.o. [Endangered or Threatened Species - Name]	Indiana Bat
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	Yes
E.3.a. [Agricultural District]	COLU005
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	No
E.3.i. [Designated River Corridor]	No

COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW YORK EAST FIPS 3101 FEET, MAP ROTATION: 0
 -- SAVED BY: AKAILAS ON 10/1/2024, 11:12:32 AM. FILE PATH: \\EMPLOYEE\GIS\ARC\GSPROJ1-PROJECTS\RENEWABLE_PROPERTIES_LLC\596829_MITCHELL_AVE_SOLAR2-APRX\MITCHELLAVE_LOCATION_FIGURES.APRX - LAYOUT NAME: MITCHELLAVE FIG 1 8X11P




	LIMITS OF DISTURBANCE
	PROPERTY BOUNDARY
	USGS 24K QUAD BOUNDARY
	MUNICIPAL BOUNDARY


BASE MAP: USGS NATIONAL TOPO MAP.
 DATA SOURCES: ESRI, USGS, TRC.


 0 1,000 2,000
 FEET
 1:24,000 1" = 2,000'

NEW YORK OVERVIEW



SITE LOCATION

PROJECT:		RPNY SOLAR 12, LLC MITCHELL AVENUE AGRIVOLTAIC PROJECT TOWNS OF STUYVESANT & STOCKPORT, COLUMBIA COUNTY, NY	
TITLE:		PROJECT LOCATION MAP	
DRAWN BY:	A. KAILAS	PROJ. NO.:	596829.EVIR.0000
CHECKED BY:	T. LATHAM	FIGURE 1	
APPROVED BY:	V. DEBRITA		
DATE:	OCTOBER 2024		
		3 CORPORATE DRIVE SUITE 202 CLIFTON PARK, NY 12065 PHONE: 518.348.1190	
FILE:	MITCHELLAVE_LOCATION_FIGURES.APRX		

**Full Environmental Assessment Form (FEAF) Addendum
Property Owner Information
Mitchell Avenue Agrivoltaic Project**

A. Project and Applicant/Sponsor Information, Property Owner

Tax Parcels 62-1-47.6, 62-1-8.6 62.4-1-5

Property Owner(s):

Anthony J. Altomer & Frank L. Altomer Jr.

Telephone:

Anthony: 518-755-3498

Frank: 518-929-3972

E-Mail:

Anthony: aaltomer@yahoo.com

Frank: N/A

Address:

Anthony J. Altomer and Frank L. Altomer Jr.

Attn: Anthony J Altomer

1596 US Route 9

Stuyvesant, NY 12173

**Full Environmental Assessment Form (FEAF) Addendum
Government Approvals and Correspondence
Mitchell Avenue Agrivoltaic Project**

B. Government Approvals, Funding, or Sponsorship.

Government Agency	Yes or No	Identify Agency and Approval(s) Required	Application Date (Actual or Projected)
a. City Counsel, Town Board, or Village Board of Trustees	No	N/A	N/A
b. City, Town or Village Planning Board or Commission	Yes	Town of Stockport Planning Board, Special Use Permit and Site Plan Approval	Q1 2025
		Town of Stuyvesant Planning Board, Special Use Permit and Site Plan Approval	Q1 2025
c. City, Town or Village Zoning Board of Appeals	No	N/A	N/A
d. Other local agencies	No	N/A	N/A
e. County agencies	Yes	Columbia County Planning Board (239-m)	Q1 2025
f. Regional agencies	No	N/A	N/A
g. State agencies	Yes	NYSHPO, No Effect Determination	March 8, 2024
		NYSDEC, Incidental Take Permit	March 2025
		NYSDEC, 401 Water Quality Certification	Following Local Entitlement Awards
		NYSAGM, Notice of Intent	Q1 2025
		NYSDOT, Commercial Driveway/Access Permit	Q4 2025
h. Federal agencies	Yes	USACE Nationwide Permit (404)	Q1 2025
		USFWS Consultation	Will be completed as part of Section 7 under the USACE permitting.

Agency Correspondence Attached:

- NYNHP, Listed Species Review, February 15, 2024
- NYSHPO, No Effect Determination, March 8, 2024
- NYSDEC, Jurisdictional Inquiry Response, May 28, 2024

Agency Correspondence with USFWS and NYSDEC is on-going and will be completed prior to construction. No impacts to listed bats are anticipated to occur as vegetation removal is minimal (0.083 acres), is located on the edge of forested areas (i.e., primarily canopy trimming/understory cutting), and will occur during the inactive season (November 1 to March 31). No impacts to bald eagles are anticipated as the known nest locations are outside of the USFWS and NYSDEC buffer distances. Additionally, no nests were observed within the Project Site, the majority of the site is open agricultural field, and as previously mentioned there will be limited vegetation removal. There is occupied habitat for the northern harrier within the Project Site (state-threatened species); however the Project will be getting an Incidental Take Permit for impacts to the occupied habitat, which will require a net conservation benefit plan for the species.



Engineering
& Design

Wetland and Watercourse Delineation and Preliminary Threatened & Endangered Species Habitat Study Report

March 20, 2024

Mitchell Ave Solar Project

Parcel I.D. No: 62.-1-8, 62.-1-47.1, & 62.4-1-5

Towns of Stuyvesant and Stockport, Columbia County, New York

Prepared for:

Mr. Anthony Bell
Renewable Properties, LLC
44 Montgomery St, Suite #3150
San Francisco, California 94111

Prepared by:

Jacob Erle

Jacob Erle

Colliers Engineering & Design

71 State Street 1st Floor Suite 104

Binghamton New York 13901

Main: 877 627 3772

Colliersengineering.com

Project No. 23010613A

Introduction

In accordance with our Scope of Services, Colliers Engineering and Design (“CED”) performed a Wetland and Watercourse Delineation and Preliminary Threatened and Endangered Species Habitat Study of the Mitchell Ave Solar Project (“Project”) for Renewable Properties, LLC (“Renewable Properties” or RPNY”) referred to herein as “the Client”. The Project is located on three (3) Columbia County Tax Parcel ID’s: 62.-1-8, 62.-1-47.1, & 62.4-1-5 in the Towns of Stuyvesant and Stockport, Columbia County, New York (refer to Figure 1, Study Area Location Map). The Client requested CED to review approximately 57.4-acres of the Property (the “Study Area”). A map that depicts the outlined Property and Study Area can be found on Figure 2, Aerial Imagery Map.

The field delineation and preliminary habitat study (“Field Study”) was performed by CED on January 3, 2024. The intent of the Field Study was to identify and delineate the boundaries of any potentially jurisdictional aquatic resources (i.e., wetlands and streams) and to assess habitat within the Study Area in relation to potential threatened and/or endangered species that may be located within the Study Area.

Preliminary Data Gathering

Preliminary data gathering was used to compile and review information that may be helpful in identifying wetlands and/or areas of interest during the Field Study. Preliminary data gathering included a review of the following resources:

- United States Natural Resources Conservation Service (“NRCS”) Hydric Soil Survey Map and NRCS Hydric Soils Report for Columbia County, New York
- United States Federal Emergency Management Agency (“FEMA”) Flood Hazard Area Map for Columbia County, New York,
- United States Fish and Wildlife Service (“USFWS”) National Wetlands Inventory (“NWI”) mapping, New York State Department of Environmental Conservation (“NYSDEC”) Freshwater Wetlands (“FWW”) mapping, and
- New York State Water Quality Classifications mapping.

The NRCS Hydric Soil Survey Map for Columbia County, New York showed that the Study Area contained the following seventeen (17) soil types and their hydric soil classifications (refer to Figure 3, NRCS Hydric Soil Survey Map and Attachment B, NRCS Hydric Soils Report):

- Bernardston silt loam, 8 to 15 percent slopes (BeC). Rated 5% hydric,
- Collamer silt loam, 3 to 8 percent slopes (CoB). Rated 5% hydric,
- Elnora fine sandy loam (En). Rated 5% hydric,
- Hoosic gravelly sandy loam, 3 to 8 percent slopes (HoB). Rated 0% hydric,
- Hoosic gravelly sandy loam, rolling (HoC). Rated 10% hydric.
- Hudson and Vergennes soils, 3 to 8 percent slopes (HvB). Rated 4% hydric.
- Kingsbury and Rhinebeck soils, 0 to 3 percent slopes (KnA). Rated 6% hydric.
- Kingsbury and Rhinebeck soils, 3 to 8 percent slopes (KnB). Rated 6% hydric.
- Knickerbocker fine sandy loam, 0 to 3 percent slopes (KrA). Rated 5% hydric.

- Livingston and Madalin soils (Lt). Rated 95% hydric.
- Nassau channery silt loam, undulating, rocky (NaB). Rated 5% hydric.
- Nassau channery silt loam, rolling, very rocky (NbC). Rated 5% hydric.
- Niagara silt loam, 0 to 3 percent slopes (NgA). Rated 10% hydric.
- Pittstown silt loam, 3 to 8 percent slopes (PtB). Rated 5% hydric.
- Pittstown silt loam, 8 to 15 percent slopes (PtC). Rated 5% hydric.
- Scio silt loam, 3 to 8 percent slopes (ScB). Rated 10% hydric.
- Shaker loam (Sh). Rated 10% hydric.

Review of the available FEMA data indicated that the Study Area is located on two (2) Flood Insurance Rate Map ("FIRM") panels (Panel #3613220005B and Panel #3613230002B). The FEMA Flood Insurance Rate Maps indicated that the Study Area is located in Zone C – "500-year Floodplain, area of minimal flood hazard" (refer to Figure 4, FEMA Flood Hazard Area Map).

Review of the available USFWS NWI Map indicated that the Study Area is located within the Middle Hudson Watershed (HUC 02020006). There are two (2) Freshwater Forested/Shrub Wetland (PFO1A/PFO1E) NWI features mapped within the Study Area (refer to Figure 5, National Wetlands Inventory Map).

Review of the available NYSDEC FWW mapping revealed there are no NYSDEC FWW or associated 500-foot checkzones mapped within the Study Area (refer to Figure 6, NYSDEC Freshwater Wetland & Stream Map).

Review of the New York State Water Quality Classification mapping identified no New York State streams mapped within the Study Area (refer to Figure 6).

Field Delineation Results

During the Field Study, wetlands were identified and delineated in accordance with the United States Army Corps of Engineers ("USACE" or "Corps") 1987 Wetland Delineation Manual and accompanying 2012 Regional Supplement to the Corps Wetland Delineation Manual: Regional Supplement to the USACE Wetland Delineation Manual: Northeast and Northcentral Region Version 2.0. Any location meeting the three (3) wetland criteria (wetland hydrology, hydrophytic vegetation and hydric soils) was identified and delineated. Streams were identified and delineated based on morphological and hydrological characteristics of the channel. For streams with a top-of-bank width of less than ten feet (<10') the centerline of the stream was delineated. If a stream was observed to have a top-of-bank width of ten feet or greater (≥10') both streambanks were delineated.

The January 3, 2024 Field Study was conducted under "winter conditions"; which is a result of being outside the growing season for indicator vegetation and snow cover or ice cover obscuring the ground and hydrology features. Therefore, the extent of wetlands was determined by assessing upland areas, as well as probable wetlands that exhibited any of the three (3) wetland criteria (wetland hydrology, hydrophytic vegetation and hydric soils). Wetlands were identified and

delineated with the available criteria. A subsequent on-site investigation must be completed during the growing season to verify the delineated boundaries of the January 3, 2024 Field Study.

The regulatory jurisdiction of each delineated feature was assessed using current Waters of the United States (WOTUS) guidelines (September 2023). Jurisdictional status is based on the professional opinion of CED and must be confirmed through the Jurisdictional Determination (JD) process by the Corps. CED recommends obtaining a JD from the USACE for the Study Area prior to any development in the area.

Generally, the upland habitat observed within the Study Area consisted of mixed softwood-hardwood forest and mowed agricultural hay fields. The Study Area is bounded to the north by residential properties, mowed agricultural fields, forested habitat, and County Route 46, to the east by forested habitat, residential properties, and US-9, to the south by residential properties, mowed agricultural fields, and forested habitat, and to the west by mowed agricultural fields and forested habitat. An electrical utility right-of-way ("ROW") runs north to south through the center of the Study Area (refer to Attachment D, Representative Study Area Photographs).

Three (3) wetlands were identified and delineated within the Study Area. The wetlands were comprised of one (1) Palustrine Emergent (PEM) wetland, one (1) Palustrine Forested (PFO) wetland, and one (1) Palustrine Emergent/Palustrine Shrub/Scrub/Palustrine Forested/Palustrine Unconsolidated Bottom (PEM/PSS/PFO/PUB) wetland complex (refer to Figure 7, Delineated Resources Map). To document site conditions, a Corps Wetland Determination Data Form was completed for each of the wetland cover types as well as upland references (refer to Attachment E, USACE Wetland Determination Data Forms). Information on the delineated wetlands can be found in Table 1 and representative photographs of the wetlands are included in Attachment D.

No streams were identified or delineated within the Study Area (refer to Figure 7).

Table 1: Wetlands Identified within the Study Area

Wetland I.D. ¹	Cover Type ²	Latitude ³	Longitude ³	Size ⁴ (acres)	Jurisdiction ⁵	Hydrology Indicator(s) ⁶	Dominant Species ⁶	Hydric Soil Indicator(s) ⁶
Wetland 1	PEM	42.353754	-73.747602	1.07	USACE	A1, A2, A3, B8, C9, D2, D3, D5	<i>Frangula alnus, Phalaris arundinacea, Phragmites australis</i>	F3, F8
	PSS	42.35174	-73.750234	1.18	USACE	A1, A2, A3, B16, C9, D2, D4	<i>Fraxinus pennsylvanica, Quercus rubra, Rhamnus cathartica, Symphyotrichum lateriflorum, Solidago canadensis</i>	F3
	PFO	42.354026	-73.744886	2.15	USACE	A1, A2, A3, B16, C9, D2, D4	<i>Fraxinus pennsylvanica, Acer rubrum, Lonicera tatarica, Geum canadense</i>	F3
	PUB*	42.354346	-73.74439	0.25	USACE	N/A	N/A	N/A
Wetland 2	PEM	42.356036	-73.747568	1.32	USACE	A1, A2, A3, C9, D2, D5	<i>Phalaris arundinacea, Juncus effusus, Scirpus cyperinus, Typha latifolia</i>	F3, F8
Wetland 3	PFO	42.354201	-73.750347	4.28	USACE	A1, A2, A3, B8, D2	<i>Acer rubrum, Frangula alnus</i>	F3, F8

Notes:

1. CED map designation.
2. PEM = Palustrine Emergent, PSS = Palustrine Shrub/Scrub, PFO = Palustrine Forested, PUB = Palustrine Unconsolidated Bottom.
* Please note: a Corps Wetland Determination Data Form was not completed due to inundation at the time of survey.
3. Center of wetland in North American Datum, 1983.
4. Total acreage of wetland located within the Study Area.
5. Jurisdictional status is the opinion of CED and must be confirmed by the USACE and/or state agencies through the JD process.
6. As determined using the USACE Wetland Determination Data Form, Northeast and Northcentral Regional Supplement.

Preliminary Threatened and Endangered Species Habitat Study Results

The Study Area was reviewed using the USFWS's online Information, Planning and Consultation System (IPaC) and an updated Official Species List was obtained on March 18, 2024 (Project Code: 2024-0031402). The Official Species List identified three (3) federally endangered, threatened or candidate species that may occur within the Study Area:

- Indiana bat (*Myotis sodalis*); federally endangered,
- Northern long-eared bat (*Myotis septentrionalis*); federally endangered,
- Monarch butterfly (*Danaus plexippus*); federal candidate.

There is no USFWS designated critical habitat located within the Study Area (refer to Attachment C, IPaC Official Species List, & NYNHP Results).

Please note that the Indiana Bat ("INBA") is covered by the Northeast Region Endangered Species ("NRES") Determination Key and the Northern Long-eared Bat ("NLEB") is covered by the NLEB Rangelwide Determination Key. A Determination Key ("DKey") is logically structured set of questions that assist a user in determining whether a project qualifies for a predetermined consultation outcome based on an existing programmatic consultation or internal USFWS standing analysis. The NRES and the NLEB DKeys should be used to evaluate the proposed Project's potential effect on the INBA and the NLEB once Project design progresses. USFWS recommends and requires tree clearing to be completed between November 1 and March 31.

The Study Area was reviewed using the NYSDEC Environmental Resource Mapper. The Study Area occurs within the "Rare Plants and Rare Animals Layer" mapped by the New York State Natural Heritage Program ("NYNHP") indicating that there may be known records of federal or state listed threatened or endangered species within the Study Area (refer to Attachment C). A response from NYNHP was received on February 15, 2024, indicating that the state-threatened bald eagle (*Haliaeetus leucocephalus*) has been documented nesting within one (1) mile of the Study Area (refer to Attachment C). Coordination with NYSDEC is recommended if tree clearing is anticipated once Project design progresses.

The Species Conclusion Table (Table 2) provides identification of suitable habitat for each of these species, and a determination and rationale regarding the Project's effects on each species. The Monarch butterfly is a candidate for listing and is not protected under the Endangered Species Act ("ESA"). Images of suitable habitat for each of the listed species are located in Attachment D, Representative Study Area Photographs.

Table 2: Species Conclusion Table

Common Name	Scientific Name	Suitable Habitat	Listing Status ¹	Critical Habitat Present within Study Area	Suitable Habitat Present Within the Study Area?	Effect Determination ²
<i>Mammals</i>						
Indiana bat	<i>Myotis sodalis</i>	Trees >5" dbh, caves abandoned mines, wooded areas with loose tree bark or dead or dying trees. Eat a variety of flying insects found along rivers or lakes, ponds, wetlands, reservoirs, etc. They forage primarily within the canopy of upland forests, over successional old fields, and pastures, and along borders of croplands.	FE, SE	No - Not designated	Yes	May affect but not adversely affect; Suitable summer habitat is present within the Study Area. If tree cutting/clearing is anticipated, it should be performed between November 1 to March 31 (as recommend and required by USFWS and NYSDEC) when bats would be in their winter hibernaculum. The NRES DKey should be used to evaluate the proposed Project's potential effect on the INBA once Project design progresses.
Northern long-eared bat	<i>Myotis septentrionalis</i>	Roost in cavities or in crevices of both live trees and snags; Hibernate in caves and mines with constant temperatures, high humidity, and no air currents.	FE, SE	No - Not Designated	Yes	May affect but not adversely affect; Suitable summer habitat is present within the Study Area. If tree cutting/clearing is anticipated, it should be performed between November 1 to March 31 (as recommended and required by USFWS) when bats would be in their winter hibernaculum. The NLEB DKey should be used to evaluate the proposed Project's potential effect on the NLEB once Project design progresses.
<i>Birds</i>						
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Nest in large, tall trees close to bodies of water; tend to avoid areas with high levels of human activity nearby	ST	No	Yes	May affect but not adversely affect; NYNHP records identified documented nesting within 1 mile of the Study Area. The Study Area is within 0.5 miles of a large stream (Kinderhook Creek) in addition to forested habitat, which may serve as suitable foraging and nesting habitat. It is expected that bald eagles may periodically occur within or near the Study Area. If tree cutting/clearing is anticipated, coordination with NYSDEC is recommended once Project design progresses.
<i>Insects</i>						
Monarch butterfly	<i>Danaus plexippus</i>	Prairies, meadows, grasslands and along roadsides with milkweed	FC	No - Not Designated	Yes	N/A; Species is a candidate for listing and is not protected under the Endangered Species Act.

Notes

1. FE = Federally Endangered, SE= State Endangered, ST = State Threatened, FC = Federal Candidate.
2. Effect determination should be considered with each iteration of Project Design.

If you have any questions or require additional information, contact me by phone at 607-621-7136 or email me at Jacob.Erle@collierseng.com.

Sincerely,

Jacob Erle

Jacob Erle

Natural Resource Scientist

Attachments:

- Attachment A: Figures
 - Figure 1. Study Area Location Map
 - Figure 2. Aerial Imagery Map
 - Figure 3. NRCS Hydric Soil Survey Map
 - Figure 4.0 FEMA Flood Hazard Area Map – Town of Stuyvesant
 - Figure 4.1 FEMA Flood Hazard Area Map – Town of Stockport
 - Figure 5. National Wetlands Inventory Map
 - Figure 6. NYSDEC Freshwater Wetland & Stream Map
 - Figure 7. Delineated Resources Map
- Attachment B: NRCS Hydric Soils Report
- Attachment C: IPaC Official Species List & NYNHP Results
- Attachment D: Representative Study Area Photographs
- Attachment E: USACE Wetland Determination Data Forms



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*Civil/Site • Traffic/Transportation • Governmental • Survey/Geospatial
Infrastructure • Geotechnical/Environmental • Telecommunications • Utilities/Energy*

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ATTACHMENT A

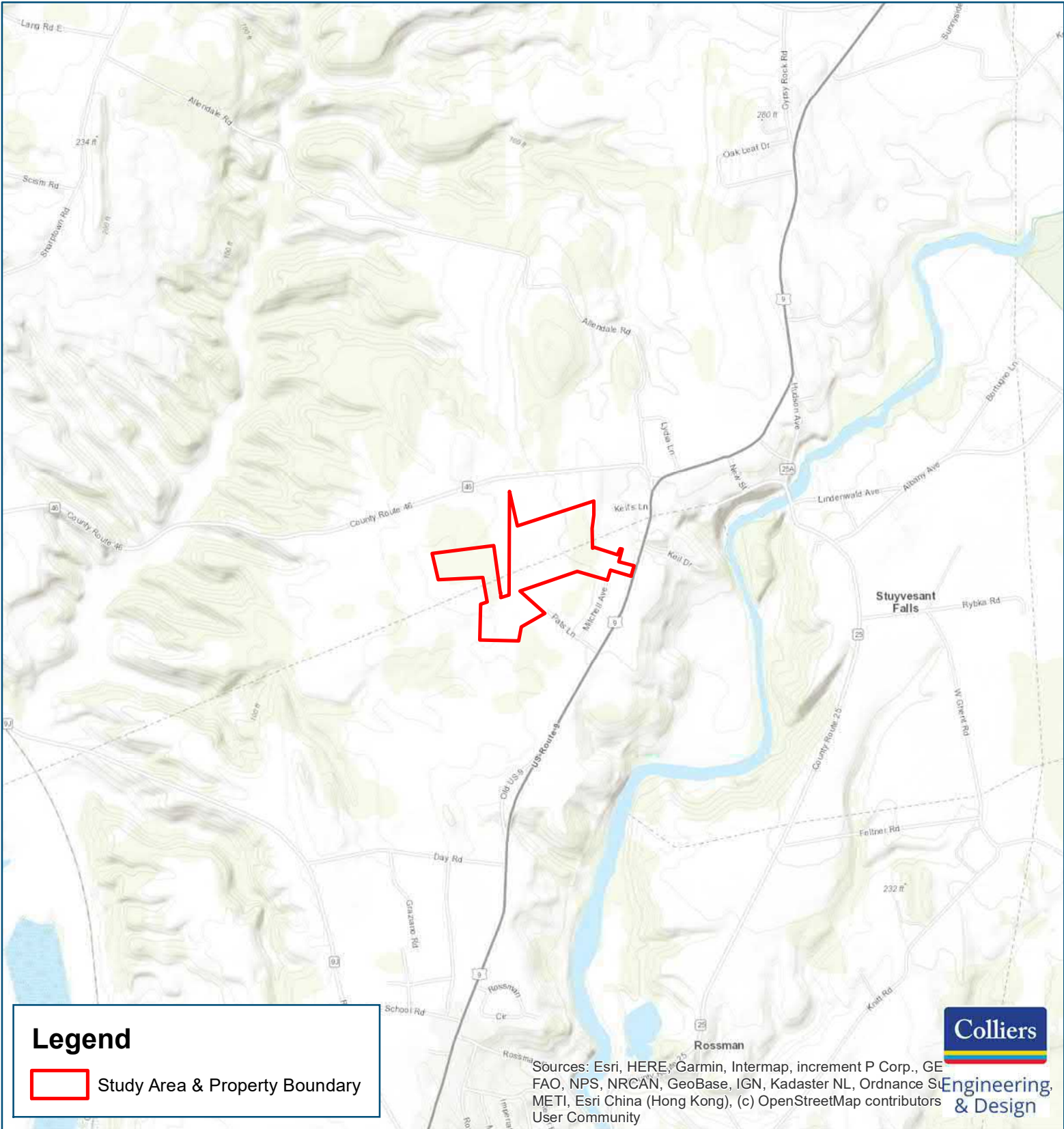
Figures

Renewable Properties Mitchell Avenue Solar Project


2,000 Feet



Towns of Stuyvesant and Stockport, Columbia County, New York



Legend

 Study Area & Property Boundary

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GE FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri China (Hong Kong), (c) OpenStreetMap contributors, User Community



Renewable Properties Mitchell Avenue Solar Project



400 Feet



Towns of Stuyvesant and Stockport, Columbia County, New York



Legend

-  Study Area & Property Boundary
-  Municipal Boundary

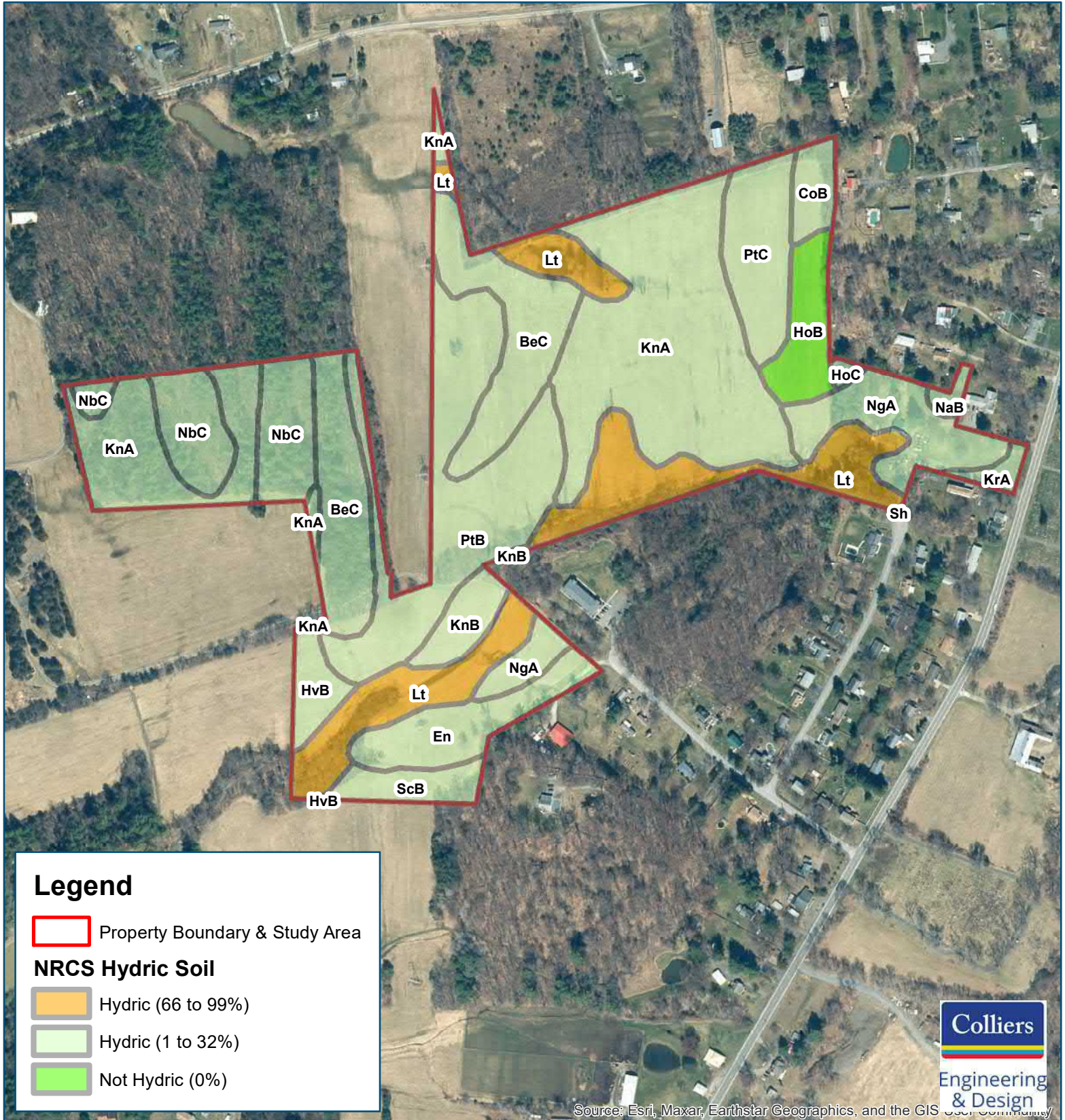


Renewable Properties Mitchell Ave Solar Project

400 Feet



Towns of Stuyvesant and Stockport, Columbia County, New York

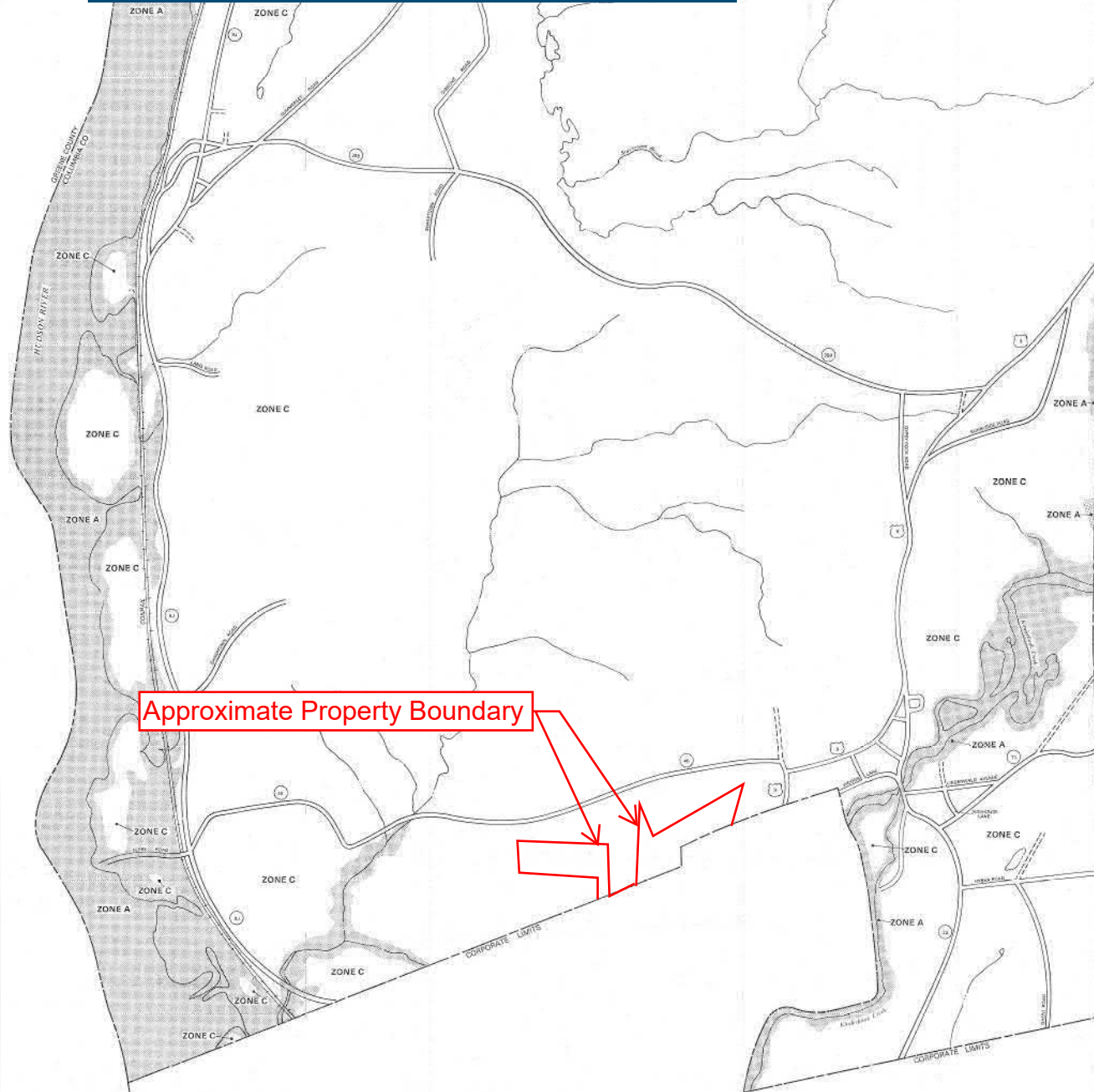




Renewable Properties Mitchell Ave Solar Project

FEMA FLOOD AREA
HAZARD MAP

Fig. 4.0



KEY TO MAP

ZONE C
ZONE A
ZONE C

Base Flood Elevation Line
With Elevation in Feet**

Base Flood Elevation in Feet
When Datum is Mean Zoned**

Complex Reference Mark

Scale Mile

**Reference to the National Geodetic Vertical Datum of 1929

***EXPLANATION OF ZONE DESIGNATIONS**

ZONE A
Area of 100-year flood base flood frequency and flood hazard factors not determined.

AD
Area of 100-year design flooding where depth of inundation is shown but no flood hazard factors are determined.

AE
Area of 100-year design flooding where depths of inundation are shown but no flood hazard factors are determined.

AE-1
Area of 100-year flood base flood frequency and flood hazard factors not determined.

AE-2
Area of 100-year flood to be protected by flood protection against wind construction base flood frequency and flood hazard factors not determined.

B
Area between levels of the 100-year flood and 500-year flood at certain areas subject to 100-year flood with average depth less than one (1) foot above the corresponding 100-year flood. The area may be used for any purpose by local authority base flood.

C
Area of minimal flooding.

D
Area of 100-year coastal flood with wind surge action base flood frequency and flood hazard factors not determined.

V
Area of 100-year coastal flood with wind surge action base flood frequency and flood hazard factors not determined.

V-100
Area of 100-year coastal flood with wind surge action base flood frequency and flood hazard factors not determined.

NOTES TO USER

Certain areas may be the special flood hazard area (Zone A and V) may be protected by flood control structures.

This map is for flood insurance purposes only. It does not guarantee, show, or area subject to flooding or the probability of all structures located within special flood hazard areas.

INITIAL DEDICATION
OCTOBER 16, 1979

FLOOD HAZARD BOUNDARY MAP REVISIONS
4-17-78

FLOOD INSURANCE RATE MAP EFFECTIVE
SEPTEMBER 14, 1979

FLOOD INSURANCE RATE MAP REVISIONS:

This is the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on the map is accurate and actual may vary in structure in the cases where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program at (800) 658-6620 or (410) 424-6870.



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE
RATE MAP

TOWN OF
STUYVESANT,
NEW YORK
COLUMBIA COUNTY

PANEL 2 OF 2
USE MAP INDEX FOR PANELS PRINTED

COMMUNITY PANEL NUMBER:
361323 0002 R

EFFECTIVE DATE:
SEPTEMBER 14, 1979

U.S. DEPARTMENT OF HOUSING
AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION

Renewable Properties Mitchell Ave Solar Project

FEMA FLOOD AREA
HAZARD MAP

Fig. 4.1

KEY TO MAP

100-Year Flood Boundary	ZONE B
100-Year Flood Boundary	ZONE A1
Zone Designation	ZONE A5
100-Year Flood Boundary	ZONE B
100-Year Flood Boundary	ZONE B
Base Flood Elevation Line With Elevation in Feet**	012'
Base Flood Elevation in Feet When Uniform Within Zone**	011.50 FT
Special Flood Hazard	000%
Zone B Boundary	
Spot Elevation	+011.5

**Referenced to the National Geodetic Vertical Datum of 1929.

***EXPLANATION OF ZONE DESIGNATIONS**

ZONE	EXPLANATION
A	Area of 100-year flood has flood elevation and flood hazard factors not determined.
AO	Area of 100-year flood elevation above design base elevation and (1) and (2) but not (3) but not (4) and (5) all hazard factors not determined.
A1	Area of 100-year flood elevation above design base elevation and (1) and (2) but not (3) but not (4) and (5) all hazard factors not determined.
A1-A20	Area of 100-year flood has flood elevation and flood hazard factors determined.
AOB	Area of 100-year flood is to be protected by flood protection system under construction, but flood elevation and flood hazard factors not determined.
B	Area between limits of the 100-year flood and 500-year flood or other area subject to 100-year flooding with average depths less than one (1) foot or with the maximum depth less than one (1) foot and one (1) foot or area protected by levee from the base flood (includes diking).
C	Area of minimal flooding (no shading).
D	Area of development, but possible flood hazard.
W	Area of 100-year special flood with velocity (wave action) from flood elevation and flood hazard factors not determined.
VI-300	Area of 100-year special flood with velocity (wave action) from flood elevation and flood hazard factors not determined.

ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION (IN FEET - NAVD83)	DESCRIPTION OF LOCATION
RM 1	59.43	1/4 sec. 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 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1690, 1691, 1692, 1693, 1694, 1695, 1696, 1697, 1698, 1699, 1700, 1701, 1702, 1703, 1704, 1705, 1706, 1707, 1708, 1709, 1710, 1711, 1712, 1713, 1714, 1715, 1716, 1717, 1718, 1719, 1720, 1721, 1722, 1723, 1724, 1725, 1726, 1727, 1728, 1729, 1730, 1731, 1732, 1733, 1734, 1735, 1736, 1737, 1738, 1739, 1740, 1741, 1742, 1743, 1744, 1745, 1746, 1747, 1748, 1749, 1750, 1751, 1752, 1753, 1754, 1755, 1756, 1757, 1758, 1759, 1760, 1761, 1762, 1763, 1764, 1765, 1766, 1767, 1768, 1769, 1770, 1771, 1772, 1773, 1774, 1775, 1776, 1777, 1778, 1779, 1780, 1781, 1782, 1783, 1784, 1785, 1786, 1787, 1788, 1789, 1790, 1791, 1792, 1793, 1794, 1795, 1796, 1797, 1798, 1799, 1800, 1801, 1802, 1803, 1804, 1805, 1806, 1807, 1808, 1809, 1810, 1811, 1812, 1813, 1814, 1815, 1816, 1817, 1818, 1819, 1820, 1821, 1822, 1823, 1824, 1825, 1826, 1827, 1828, 1829, 1830, 1831, 1832, 1833, 1834, 1835, 1836, 1837, 1838, 1839, 1840, 1841, 1842, 1843, 1844, 1845, 1846, 1847, 1848, 1849, 1850, 1851, 1852, 1853, 1854, 1855, 1856, 1857, 1858, 1859, 1860, 1861, 1862, 1863, 1864, 1865, 1866, 1867, 1868, 1869, 1870, 1871, 1872, 1873, 1874, 1875, 1876, 1877, 1878, 1879, 1880, 1881, 1882, 1883, 1884, 1885, 1886, 1887, 1888, 1889, 1890, 1891, 1892, 1893, 1894, 1895, 1896, 1897, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908, 1909, 1910, 1911, 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919, 1920, 1921, 1922, 1923, 1924, 1925, 1926, 1927, 1928, 1929, 1930, 1931, 1932, 1933, 1934, 1935, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 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Renewable Properties Mitchell Ave Solar Project

400 Feet



Towns of Stuyvesant and Stockport, Columbia County, New York



Renewable Properties Mitchell Ave Solar Project





400
Feet



Towns of Stuyvesant and Stockport, Columbia County, New York



Legend

-  Property Boundary & Study Area
-  NYS Stream
-  NYSDEC FWW
-  NYSDEC FWW 500ft Checkzone



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Renewable Properties Mitchell Ave Solar Project












400
Feet



Towns of Stuyvesant and Stockport, Columbia County, New York



Legend

	Property Boundary & Study Area	Wetland	Data Point
	Open Ended Wetland Boundary		 Upland
	Drainage Feature		 Wetland
			 Culvert
			
			



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

ATTACHMENT B

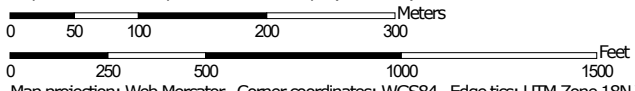
NRCS Hydric Soils Report

Custom Soil Resource Report Map—Hydric Rating by Map Unit



Soil Map may not be valid at this scale.


Map Scale: 1:5,890 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84







MAP LEGEND

Area of Interest (AOI)







 Area of Interest (AOI)

Soils







Soil Rating Polygons

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available


Soil Rating Lines

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available






Soil Rating Points

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available


Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Columbia County, New York
 Survey Area Data: Version 19, Sep 5, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 15, 2021—Nov 8, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BeC	Bernardston silt loam, 8 to 15 percent slopes	5	6.9	12.0%
CoB	Collamer silt loam, 3 to 8 percent slopes	5	0.9	1.6%
En	Elnora fine sandy loam	5	2.5	4.4%
HoB	Hoosic gravelly sandy loam, 3 to 8 percent slopes	0	1.8	3.2%
HoC	Hoosic gravelly sandy loam, rolling	10	0.2	0.3%
HvB	Hudson and Vergennes soils, 3 to 8 percent slopes	4	1.0	1.8%
KnA	Kingsbury and Rhinebeck soils, 0 to 3 percent slopes	6	14.8	25.8%
KnB	Kingsbury and Rhinebeck soils, 3 to 8 percent slopes	6	1.1	2.0%
KrA	Knickerbocker fine sandy loam, 0 to 3 percent slopes	5	0.4	0.7%
Lt	Livingston and Madalin soils	95	7.9	13.7%
NaB	Nassau channery silt loam, undulating, rocky	5	0.3	0.5%
NbC	Nassau channery silt loam, rolling, very rocky	5	3.9	6.8%
NgA	Niagara silt loam, 0 to 3 percent slopes	10	3.7	6.5%
PtB	Pittstown silt loam, 3 to 8 percent slopes	5	8.0	13.9%
PtC	Pittstown silt loam, 8 to 15 percent slopes	5	2.8	4.9%
ScB	Scio silt loam, 3 to 8 percent slopes	10	1.2	2.1%
Sh	Shaker loam	10	0.0	0.0%
Totals for Area of Interest			57.4	100.0%

Rating Options—Hydric Rating by Map Unit

Aggregation Method: Percent Present

Component Percent Cutoff: None Specified

ATTACHMENT C

IPaC Official Species List & NYNHP Results



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
Phone: (607) 753-9334 Fax: (607) 753-9699
Email Address: fw5es_nyfo@fws.gov

In Reply Refer To:

03/18/2024 18:41:36 UTC

Project Code: 2024-0031402

Project Name: RPNY Mitchell Ave Solar Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through IPaC by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2))

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: <https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see [Migratory Bird Permit | What We Do | U.S. Fish & Wildlife Service \(fws.gov\)](#).

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
(607) 753-9334

PROJECT SUMMARY

Project Code: 2024-0031402
Project Name: RPNY Mitchell Ave Solar Project
Project Type: Power Gen - Solar
Project Description: Proposed solar project in Columbia County, New York
Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@42.35441,-73.74571608120633,14z>



Counties: Columbia County, New York

ENDANGERED SPECIES ACT SPECIES

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Colliers Engineering and Design

Name: Jacob Erle

Address: 71 State St

City: Binghamton

State: NY

Zip: 13910

Email: jerle@bergmannpc.com

Phone: 6076217136

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish and Wildlife, New York Natural Heritage Program
625 Broadway, Fifth Floor, Albany, NY 12233-4757
P: (518) 402-8935 | F: (518) 402-8925
www.dec.ny.gov

February 15, 2024

Jake Hill
Colliers Engineering & Design
18 Corporate Woods Boulevard, 4th Floor
Albany, NY 12211

Re: RPNY Mitchell Ave Solar Project
County: Columbia Town/City: Stockport, Stuyvesant

Dear Jake Hill:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project.

Enclosed is a report of rare or state-listed animals and plants, and significant natural communities that our database indicates occur in the vicinity of the project site.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our database. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the NYS DEC Region 4 Office, Division of Environmental Permits, at dep.r4@dec.ny.gov.

Sincerely,



Heidi Krahlting
Environmental Review Specialist
New York Natural Heritage Program



The following state-listed animals have been documented in the vicinity of the project site.

The following list includes animals that are listed by NYS as Endangered, Threatened, or Special Concern; and/or that are federally listed.

For information about any permit considerations for the project, contact the NYSDEC Region 4 Office, Division of Environmental Permits, at dep.r4@dec.ny.gov, 518-357-2449.

The following species has been documented nesting within about 1 mile of the project site.

<i>COMMON NAME</i>	<i>SCIENTIFIC NAME</i>	<i>NY STATE LISTING</i>	<i>FEDERAL LISTING</i>
Birds			
Bald Eagle <i>Breeding</i>	<i>Haliaeetus leucocephalus</i>	Threatened	17252

The following species has been documented within 2 miles of the project site. Individual animals may travel 2.5 miles from documented locations. The main impact of concern is the cutting or removal of potential roost trees.

<i>COMMON NAME</i>	<i>SCIENTIFIC NAME</i>	<i>NY STATE LISTING</i>	<i>FEDERAL LISTING</i>
Mammals			
Indiana Bat <i>Maternity colony</i>	<i>Myotis sodalis</i>	Endangered	Endangered 13692

This report only includes records from the NY Natural Heritage database.

Information about many of the listed animals in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage’s Conservation Guides at www.guides.nynhp.org, and from NYSDEC at www.dec.ny.gov/animals/7494.html.

ATTACHMENT D

Representative Study Area Photographs



Photo 1: Wetland 1 (PEM). View facing east.



Photo 2: Wetland 1 (PEM). View facing north.



Photo 3: Wetland 1 (PUB). View facing north.



Photo 4: Wetland 1 (PUB). View facing east.



Photo 5: Wetland 1 (PFO). View facing south.



Photo 6: Wetland 1 (PFO). View facing west.



Photo 7: Wetland 1 (PSS). View facing south.



Photo 8: Wetland 1 (PSS). View facing north.



Photo 9: Wetland 2 (PEM). View facing east.



Photo 10: Wetland 2 (PEM). View facing south.



Photo 11: Wetland 3 (PFO). View facing north.



Photo 12: Wetland 3 (PFO). View facing west.



Photo 13: Representative upland habitat. View facing east.



Photo 14: Representative upland habitat. View facing west.



Photo 15: Representative upland habitat. View facing south.



Photo 16: Representative upland habitat. View facing east.



Photo 17: Representative upland habitat, suitable for Monarch Butterfly. View facing north.



Photo 18: Representative upland habitat, suitable for Northern Long-eared Bat and Indiana Bat. View facing north.

ATTACHMENT E

USACE Wetland Determination Data Forms

Project/Site: Mitchell Ave Solar Project City/County: Stuyvesant and Stockport/ Columbia Sampling Date: 1/3/2024
 Applicant/Owner: RPNY State: NY Sampling Point: W001 (PEM)
 Investigator(s): J. Hill, J. Erle Section, Township, Range: No PLSS
 Landform (hillside, terrace, etc.): depressional field Local relief (concave, convex, none): concave Slope %: 1
 Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 42.353791 Long: -73.747666 Datum: NAD83
 Soil Map Unit Name: Lt-Livingston and Madalin soils NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u> If yes, optional Wetland Site ID: <u> </u>
---	---

Remarks: (Explain alternative procedures here or in a separate report.)
 Signs of mowing were present surrounding the wetland, however the wetland was observed to not be mowed/disturbed. Delineation was conducted during winter conditions. PEM representative to Wetland 1 (W001).

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input checked="" type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
---	--

Field Observations: Surface Water Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>1</u> Water Table Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u> Saturation Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 wetland hydrology present.

VEGETATION – Use scientific names of plants.

Sampling Point: W001 (PEM)

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30'</u>)					
1. <u>N/A</u>				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)	
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
				Prevalence Index worksheet:	
				Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
Sapling/Shrub Stratum (Plot size: <u>15'</u>)					
1. <u>Frangula alnus</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
	<u>25</u>		=Total Cover	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u>X</u> No _____	
Herb Stratum (Plot size: <u>5'</u>)					
1. <u>Phalaris arundinacea</u>	<u>45</u>	<u>Yes</u>	<u>FACW</u>		
2. <u>Phragmites australis</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>		
3. <u>Symphotrichum puniceum</u>	<u>20</u>	<u>No</u>	<u>OBL</u>		
4. <u>Juncus effusus</u>	<u>15</u>	<u>No</u>	<u>OBL</u>		
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
12. _____					
	<u>110</u>		=Total Cover		
Woody Vine Stratum (Plot size: <u>15'</u>)					
1. <u>N/A</u>					
2. _____					
3. _____					
4. _____					
			=Total Cover		

Remarks: (Include photo numbers here or on a separate sheet.)
 Hydrophytic vegetation present. Sparsley vegetated.

Project/Site: Mitchell Ave Solar Project City/County: Stuyvesant and Stockport/ Columbia Sampling Date: 1/3/2024
 Applicant/Owner: RPNY State: NY Sampling Point: W001 (PSS)
 Investigator(s): J. Hill, J. Erle Section, Township, Range: No PLSS
 Landform (hillside, terrace, etc.): depressional woodland Local relief (concave, convex, none): concave Slope %: 1
 Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 42.351778 Long: -73.750122 Datum: NAD83
 Soil Map Unit Name: En - Enora fine sandy loam NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u> If yes, optional Wetland Site ID: <u> </u>
---	---

Remarks: (Explain alternative procedures here or in a separate report.)
 Signs of mowing were present surrounding the wetland, however the wetland was observed to not be mowed/disturbed. Delineation was conducted during winter conditions. PSS representative to Wetland 1 (W001)

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input checked="" type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
--	--

Field Observations: Surface Water Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>1</u> Water Table Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>8</u> Saturation Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 wetland hydrology present.

VEGETATION – Use scientific names of plants.

Sampling Point: W001 (PSS)

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30'</u>)					
1. <u>Fraxinus pennsylvanica</u>	20	Yes	FACW	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60.0%</u> (A/B)	
2. <u>Quercus rubra</u>	15	Yes	FACU		
3. <u>Acer platanoides</u>	2	No	UPL		
4. _____					
5. _____					
6. _____					
7. _____					
	<u>37</u>	=Total Cover		Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
Sapling/Shrub Stratum (Plot size: <u>15'</u>)					
1. <u>Rhamnus cathartica</u>	70	Yes	FAC		
2. <u>Fraxinus pennsylvanica</u>	15	No	FACW		
3. <u>Lonicera tatarica</u>	5	No	FACU		
4. <u>Juniperus virginiana</u>	2	No	FACU		
5. <u>Berberis vulgaris</u>	1	No	FACU		
6. <u>Rosa multiflora</u>	1	No	FACU		
7. _____					
	<u>94</u>	=Total Cover			
Herb Stratum (Plot size: <u>5'</u>)					
1. <u>Symphytotrichum lanceolatum</u>	8	Yes	FACW	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. <u>Solidago canadensis</u>	8	Yes	FACU		
3. <u>Geum canadense</u>	5	No	FAC		
4. <u>Carex sp.</u>	5	No			
5. <u>Fraxinus pennsylvanica</u>	1	No	FACW		
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
12. _____					
	<u>27</u>	=Total Cover			
Woody Vine Stratum (Plot size: <u>15'</u>)					
1. <u>N/A</u>				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.	
2. _____					
3. _____					
4. _____					
				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
=Total Cover					

Remarks: (Include photo numbers here or on a separate sheet.)
 Hydrophytic vegetation present. Not all vegetation observed could be identified to species level due to lack of distinguishing characteristics absent outside the growing season (e.g., inflorescence).

Project/Site: Mitchell Ave Solar Project City/County: Stuyvesant and Stockport/ Columbia Sampling Date: 1/3/2024
 Applicant/Owner: RPNY State: NY Sampling Point: W001 (PFO)
 Investigator(s): J. Hill, J. Erle Section, Township, Range: No PLSS
 Landform (hillside, terrace, etc.): depressional woodland Local relief (concave, convex, none): concave Slope %: 1
 Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 42.353928 Long: -73.746496 Datum: NAD83
 Soil Map Unit Name: Lt - Livingston and Madalin soils NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u> If yes, optional Wetland Site ID: <u> </u>
Remarks: (Explain alternative procedures here or in a separate report.) Signs of mowing were present surrounding the wetland, however the wetland was observed to not be mowed/disturbed. Delineation was conducted during winter conditions. PFO representative to Wetland 1 (W001)	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input checked="" type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>1</u> Water Table Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>10</u> Saturation Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 wetland hydrology present.

VEGETATION – Use scientific names of plants.

Sampling Point: W001 (PFO)

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30'</u>)					
1. <u>Fraxinus pennsylvanica</u>	35	Yes	FACW	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75.0%</u> (A/B)	
2. <u>Acer rubrum</u>	35	Yes	FAC		
3. <u>Juniperus virginiana</u>	5	No	FACU		
4. _____					
5. _____					
6. _____					
7. _____					
	<u>75</u>	=Total Cover		Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
Sapling/Shrub Stratum (Plot size: <u>15'</u>)					
1. <u>Lonicera tatarica</u>	50	Yes	FACU		
2. <u>Juniperus virginiana</u>	5	No	FACU		
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
	<u>55</u>	=Total Cover			
Herb Stratum (Plot size: <u>5'</u>)					
1. <u>Geum canadense</u>	10	Yes	FAC	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. <u>Parathelypteris noveboracensis</u>	2	No	FAC		
3. <u>Carex sp.</u>	1	No			
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
12. _____					
	<u>13</u>	=Total Cover			
Woody Vine Stratum (Plot size: <u>15'</u>)					
1. <u>N/A</u>				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.	
2. _____					
3. _____					
4. _____					
				Hydrophytic Vegetation Present? Yes <u>X</u> No _____	

Remarks: (Include photo numbers here or on a separate sheet.)
 Hydrophytic vegetation present. Not all vegetation observed could be identified to species level due to lack of distinguishing characteristics absent outside the growing season (e.g., inflorescence).

Project/Site: Mitchell Ave Solar Project City/County: Stuyvesant and Stockport/ Columbia Sampling Date: 1/3/2024
 Applicant/Owner: RPNY State: NY Sampling Point: W001 (UPL)
 Investigator(s): J. Hill, J. Erle Section, Township, Range: No PLSS
 Landform (hillside, terrace, etc.): mowed field Local relief (concave, convex, none): none Slope %: 0
 Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 42.354474 Long: -73.744645 Datum: NAD83
 Soil Map Unit Name: En - Enora fine sandy loam NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation Y, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u> If yes, optional Wetland Site ID: <u> </u>
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Remarks: (Explain alternative procedures here or in a separate report.)
 Signs of mowing were present. Delineation was conducted during winter conditions. Upland representative to Wetland 1 (W001).

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1) ___ Water-Stained Leaves (B9) ___ High Water Table (A2) ___ Aquatic Fauna (B13) ___ Saturation (A3) ___ Marl Deposits (B15) ___ Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) ___ Sediment Deposits (B2) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Drift Deposits (B3) ___ Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Iron Deposits (B5) ___ Thin Muck Surface (C7) ___ Inundation Visible on Aerial Imagery (B7) ___ Other (Explain in Remarks) ___ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) ___ Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) ___ FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u> </u> No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 wetland hydrology not present.

VEGETATION – Use scientific names of plants.

Sampling Point: W001 (UPL)

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30'</u>)				
1. <u>N/A</u>				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
				Prevalence Index worksheet:
				Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>N/A</u>				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
				Definitions of Vegetation Strata:
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Phalaris arundinacea</u>	<u>85</u>	<u>Yes</u>	<u>FACU</u>	Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
2. <u>Solidago canadensis</u>	<u>5</u>	<u>No</u>	<u>UPL</u>	
3. <u>Carex sp.</u>	<u>5</u>	<u>No</u>		
4. <u>Prunella vulgaris</u>	<u>1</u>	<u>No</u>	<u>FAC</u>	
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
12. _____				
	<u>96</u>			Hydrophytic Vegetation Present? Yes <u>_____</u> No <u>X</u>
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				

Remarks: (Include photo numbers here or on a separate sheet.)

Hydrophytic vegetation not present. Not all vegetation observed could be identified to species level due to lack of distinguishing characteristics absent outside the growing season (e.g., inflorescence).

Project/Site: Mitchell Ave Solar Project City/County: Stuyvesant and Stockport/ Columbia Sampling Date: 1/3/2024
 Applicant/Owner: RPNY State: NY Sampling Point: W002 (PEM)
 Investigator(s): J. Hill, J. Erle Section, Township, Range: No PLSS
 Landform (hillside, terrace, etc.): depressional field Local relief (concave, convex, none): concave Slope %: 1
 Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 42.356061 Long: -73.747823 Datum: NAD83
 Soil Map Unit Name: Lt - Livingston and Madalin soils NWI classification: PFO1E
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u> If yes, optional Wetland Site ID: <u> </u>
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Remarks: (Explain alternative procedures here or in a separate report.)
 Signs of mowing were present surrounding the wetland, however the wetland was observed to not be mowed/disturbed. Delineation was conducted during winter conditions. Sampled area is within a mapped NWI wetland. PEM representative to Wetland 2 (W002).

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>1</u> Water Table Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u> Saturation Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 wetland hydrology present.

VEGETATION – Use scientific names of plants.

Sampling Point: W002 (PEM)

<u>Tree Stratum</u> (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
				_____ =Total Cover
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)				
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
				_____ =Total Cover
<u>Herb Stratum</u> (Plot size: <u>5'</u>)				
1. <u>Phalaris arundinacea</u>	25	Yes	FACW	
2. <u>Juncus effusus</u>	20	Yes	OBL	
3. <u>Scirpus cyperinus</u>	15	Yes	OBL	
4. <u>Typha latifolia</u>	15	Yes	OBL	
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
12. _____				
				_____ =Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>15'</u>)				
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
				_____ =Total Cover

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)
Prevalence Index = B/A = _____	

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0¹

___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No _____

Remarks: (Include photo numbers here or on a separate sheet.)
Hydrophytic vegetation present.

Project/Site: Mitchell Ave Solar Project City/County: Stuyvesant and Stockport/ Columbia Sampling Date: 1/3/2024
 Applicant/Owner: RPNY State: NY Sampling Point: w002 (UPL)
 Investigator(s): J. Hill, J. Erle Section, Township, Range: No PLSS
 Landform (hillside, terrace, etc.): Mowed field Local relief (concave, convex, none): None Slope %: 0
 Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 42.355663 Long: -73.748191 Datum: NAD83
 Soil Map Unit Name: BeC- Bernardston silt loam, 8 to 15% slopes NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation Y, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u> If yes, optional Wetland Site ID: <u> </u>
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Remarks: (Explain alternative procedures here or in a separate report.)
 Signs of mowing were present. Delineation was conducted during winter conditions. Upland representative to Wetland 2 (W002)

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1) ___ Water-Stained Leaves (B9) ___ High Water Table (A2) ___ Aquatic Fauna (B13) ___ Saturation (A3) ___ Marl Deposits (B15) ___ Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) ___ Sediment Deposits (B2) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Drift Deposits (B3) ___ Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Iron Deposits (B5) ___ Thin Muck Surface (C7) ___ Inundation Visible on Aerial Imagery (B7) ___ Other (Explain in Remarks) ___ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) ___ Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) ___ FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u> </u> No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 wetland hydrology not present.

VEGETATION – Use scientific names of plants.

Sampling Point: W002 (UPL)

<u>Tree Stratum</u> (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>N/A</u>				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>100</u> x 4 = <u>400</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>100</u> (A) <u>400</u> (B) Prevalence Index = B/A = <u>4.00</u>
_____ =Total Cover				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)				
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
_____ =Total Cover				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
<u>Herb Stratum</u> (Plot size: <u>5'</u>)				
1. <u>Dactylis glomerata</u>	<u>90</u>	<u>Yes</u>	<u>FACU</u>	
2. <u>Cirsium arvense</u>	<u>10</u>	<u>No</u>	<u>FACU</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
12. _____				
_____ =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u>15'</u>)				Hydrophytic Vegetation Present? Yes <u>_____</u> No <u>X</u>
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
_____ =Total Cover				

Remarks: (Include photo numbers here or on a separate sheet.)
 Hydrophytic vegetation not present.

Project/Site: Mitchell Ave Solar Project City/County: Stuyvesant and Stockport/ Columbia Sampling Date: 1/3/2024

Applicant/Owner: RPNY State: NY Sampling Point: W003 (PFO)

Investigator(s): J. Hill, J. Erle Section, Township, Range: No PLSS

Landform (hillside, terrace, etc.): depressional forest Local relief (concave, convex, none): concave Slope %: 1

Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 42.353402 Long: -73.750116 Datum: NAD83

Soil Map Unit Name: BeC - Bernardson silt loam, 8 to 15% slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u> If yes, optional Wetland Site ID: <u> </u>
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Remarks: (Explain alternative procedures here or in a separate report.)
 Delineation was conducted during winter conditions. PFO representative to Wetland 3 (W003).

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>0.5</u> Water Table Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u> Saturation Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 wetland hydrology present.

VEGETATION – Use scientific names of plants.

Sampling Point: W003 (PFO)

	Absolute % Cover	Dominant Species?	Indicator Status																	
Tree Stratum (Plot size: <u>30'</u>)																				
1. <u>Acer rubrum</u>	75	Yes	FAC	<p>Dominance Test worksheet:</p> <p>Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)</p> <p>Total Number of Dominant Species Across All Strata: <u>2</u> (B)</p> <p>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)</p> <p>Prevalence Index worksheet:</p> <table style="width:100%; border:none;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: _____</td> <td>(A) _____ (B) _____</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x 1 = _____	FACW species _____	x 2 = _____	FAC species _____	x 3 = _____	FACU species _____	x 4 = _____	UPL species _____	x 5 = _____	Column Totals: _____	(A) _____ (B) _____	Prevalence Index = B/A = _____	
Total % Cover of:	Multiply by:																			
OBL species _____	x 1 = _____																			
FACW species _____	x 2 = _____																			
FAC species _____	x 3 = _____																			
FACU species _____	x 4 = _____																			
UPL species _____	x 5 = _____																			
Column Totals: _____	(A) _____ (B) _____																			
Prevalence Index = B/A = _____																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
75 =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Frangula alnus</u>	25	Yes	FAC	<p>Hydrophytic Vegetation Indicators:</p> <p><u> </u> 1 - Rapid Test for Hydrophytic Vegetation</p> <p><u>X</u> 2 - Dominance Test is >50%</p> <p><u> </u> 3 - Prevalence Index is ≤3.0¹</p> <p><u> </u> 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)</p> <p><u> </u> Problematic Hydrophytic Vegetation¹ (Explain)</p> <p>¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</p> <p>Definitions of Vegetation Strata:</p> <p>Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.</p> <p>Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.</p> <p>Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.</p> <p>Woody vines – All woody vines greater than 3.28 ft in height.</p>																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
25 =Total Cover																				
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>N/A</u>	_____	_____	_____	<p>Hydrophytic Vegetation Present? Yes <u>X</u> No _____</p>																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ =Total Cover																				
Woody Vine Stratum (Plot size: <u>15'</u>)																				
1. <u>N/A</u>	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

Remarks: (Include photo numbers here or on a separate sheet.)
Hydrophytic vegetation present. Sparsley vegetated.

Project/Site: Mitchell Ave Solar Project City/County: Stuyvesant and Stockport/ Columbia Sampling Date: 1/3/2024
 Applicant/Owner: RPNY State: NY Sampling Point: w003 (UPL)
 Investigator(s): J. Hill, J. Erle Section, Township, Range: No PLSS
 Landform (hillside, terrace, etc.): Forest Local relief (concave, convex, none): None Slope %: 0
 Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 42.353434 Long: -73.749853 Datum: NAD83
 Soil Map Unit Name: BeC- Bernardston silt loam, 8 to 15% slopes NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation Y, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u> If yes, optional Wetland Site ID: <u> </u>
Remarks: (Explain alternative procedures here or in a separate report.) Delineation was conducted during winter conditions. Upland representative to Wetland 3 (W003).	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u> </u> No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 wetland hydrology not present.

VEGETATION – Use scientific names of plants.

Sampling Point: W003 (UPL)

	Absolute % Cover	Dominant Species?	Indicator Status																	
Tree Stratum (Plot size: <u>30'</u>)																				
1. <u><i>Pinus strobus</i></u>	<u>25</u>	Yes	FACU	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B) Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:50%;">Total % Cover of:</th> <th style="width:50%;">Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>30</u></td> <td>x 4 = <u>120</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>40</u> (A)</td> <td><u>150</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A = <u>3.75</u></td> </tr> </tbody> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>30</u>	x 4 = <u>120</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>40</u> (A)	<u>150</u> (B)	Prevalence Index = B/A = <u>3.75</u>	
Total % Cover of:	Multiply by:																			
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UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>40</u> (A)	<u>150</u> (B)																			
Prevalence Index = B/A = <u>3.75</u>																				
2. <u><i>Acer rubrum</i></u>	<u>5</u>	No	FAC																	
3. <u><i>Quercus rubra</i></u>	<u>5</u>	No	FACU																	
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	<u>35</u>	=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>N/A</u>				Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u> </u> No <u> X </u>																
2. _____																				
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7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
		=Total Cover																		
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>N/A</u>																				
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
		=Total Cover																		
Woody Vine Stratum (Plot size: <u>15'</u>)																				
1. <u><i>Vitis riparia</i></u>	<u>5</u>	Yes	FAC																	
2. _____																				
3. _____																				
4. _____																				
	<u>5</u>	=Total Cover																		

Remarks: (Include photo numbers here or on a separate sheet.)
Hydrophytic vegetation not present.

