

Keeseville - APA Public Comments



#	Commenter	Public Comments	Formal Response to Comments
1	John Charles VanSplinter	<p>John Charles VanSplinter opposes the project for the following reasons:</p> <ul style="list-style-type: none"> - Project outline does not include information regarding environmentally responsible disposal of panels and auxiliary systems during the life of the site and after its decommissioning - Site plan documentation provided on this site all but illegible when enlarged enough to see detail - Organization is an entity outside of New York State, and projects of this type should be biased towards in state entities to ensure responsiveness to local needs and considerations 	<p>Project documents are available for public viewing at https://apany.govqa.us/WEBAPP/_rs/(S(3th5ctlefzvgxafxdr1spf))/BusinessDirectory.aspx?sSessionID=</p> <p>The Decommissioning Plan that includes a NY State licensed, PE stamped, cost estimate begin on page 506 of 675 of the Submission from Applicant.</p> <p>This decommissioning Plan includes a cost estimate with 2.5% annual escalator for the bond amount. The Decommissioning Plan includes the submission to the Town of Ausable a Decommissioning Bond that will name the Town of Ausable as the Obligatee, bond holder, and will remain for the life of the project.</p> <p>The Final Plans are accessible on the APA website at https://apany.govqa.us/WEBAPP/_rs/(S(asbtvpxodcdfiqjuebbsyxh4))/DownloadFile.aspx?sSessionID=&aid=1407&fid=4343</p> <p>These plans are clearly visible and can be enlarged to view detail.</p> <p>The Applicant, Catalyze Ausable Grove Street Microgrid, LLC is a NY Domestic Limited Liability Company. This LLC is a wholly owner subsidiary of Catalyze. Catalyze has an office in Purchase, NY. Catalyze currently has 30 solar facilities in operation in NY state of which 27 projects are community solar projects similar to the Keeseville solar project under this review. Catalyze builds, owns and operates these solar facilities. The facilities are monitored by Catalyze staff and have local staff to respond to any operation needs.</p>
2	Stephanie Kiyak	<p>Stephanie Kiyak supports the project:</p> <ul style="list-style-type: none"> - Any solar projects helps move us in a more environmentally friendly direction for energy use - This project has my vote for yes, please proceed! 	<p>Thank you for your support of the solar project.</p>
3	Lorraine Torgesen	<p>Lorraine Torgesen opposes the project for the following reasons:</p> <ul style="list-style-type: none"> - Considering all the downsides of solar panels and the fact that it will take 35 acres of presumably open space to generate minimal electricity, I submit that its inefficiencies outweigh its benefits - If Catalyze is going to be the owner of the property it might limit other sustainable uses in the future that are more in line with the visually important landscapes that the ADK economy depends on - I would prefer to see solar in the ADK park limited to small private installations on farms and businesses that could offset their own energy cost and sell excess to the grid 	<p>The fenced area of the solar facility is 27 acres. The solar facility system size is 7.567 MWDC/5.0MWAC. This will generate approximately 8,997,438 kwh of electricity annually. EPA provides a greenhouse gas equivalency calculator at https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator</p> <p>Results from the EPA calculator indicate the solar facility will offset approximately 3,949, metric tons of carbon dioxide annually. Equivalent greenhouse gas emissions are:</p> <ol style="list-style-type: none"> 1. 921 gasoline powered passenger vehicles driven for one year 2. Equivalent carbon dioxide emissions - 930 home's energy use for one year or 2,467 homes' electricity use for one year 3. Equivalent of carbon sequestered 3,961 acres of U.S. forests in one year. <p>Catalyze will not be the owner of the parcel. Catalyze site control of the parcel is through a long term lease and easement agreement which was submitted with the APA application. These documents begin on page 7 of the Submissions from Applicant.</p> <p>Visual photo simulations are submitted beginning on page 302 of 311 of the Final Plans on the APA website. The visual simulations indicate the project will not negatively impact the surrounding area or any of the visually important landscapes that the ADK economy depends on.</p> <p>Catalyze submitted a Notice of Intent to undertake an action within an agricultural district to the NY State Department of Agricultural and Markets (NYSDAM). NYSDAM issued a letter dated 3/3/2025 - "the proposed action would not have an unreasonably adverse effect on the continuing viability of farm enterprises." As part of this Notice of Intent Catalyze has agreed to comply with the NYSDAM Solar Guidelines dated 10/18/2019, which is a requirement of this application. This compliance is for the construction and restoration of the site after decommissioning. After the site is decommissioned it will be planted with vegetative cover and the property owner will have returned use of the land the solar facility previously had site control of. The parcel has been previously logged and does not have a historical agricultural use.</p> <p>The project is a community solar project. The current program the project will enroll in is the Statewide Solar For All program through the utility, NYSEG. 100% of the electricity generated will be delivered to the utility and credits will be applied to those enrolled in the Energy Assistance Program (EAP). The energy produced by this solar facility will directly help to reduce electricity costs for low to middle income electricity customers participating in the EAP program.</p>
4	Jacob Reed	<p>Jacob Reed opposes the project for the following reasons:</p> <ul style="list-style-type: none"> - I do not support the project in its current form - The parcel of land is heavily wooded which sequesters CO2, absorbs rainfall, and provides habitats for wildlife - Constructing this solar array would mean acres of trees cut down which would release CO2 stored in the soil, increase runoff, and force wildlife to move 	<p>Results from the EPA calculator indicate that the solar facility will offset approximately 3,949 metric tons of carbon dioxide annually—the equivalent of the carbon sequestered by 3,961 acres of U.S. forests in a single year.</p> <p>The historical use of the parcel indicates that it has been wooded and overgrown vegetation since at least the 1940s and appears to have been cleared/logged around 2008. The tree clearing area for the project is approximately 22 acres of a 64.81 acre parcel.</p> <p>The APA staff completed 2 pre- application site visits. A letter dated 10/20/2023 the APA staff</p> <ol style="list-style-type: none"> 1. Agency staff confirmed existing site conditions and the accuracy of the provided wetland delineation. 2. During the site visit staff observed that the project site has historically been subject to logging activities and other site disturbances. <p>A letter following the 2nd APA site visit dated 12/4/2023</p> <ol style="list-style-type: none"> 1. Staff confirmed that the property is vegetated with young forest consistently throughout, excluding a former landing area near Grove Street and an internal network of skidder/ATV trails. As discussed during the site visit, the property appears to have been logged approximately 10-12 years ago. <p>A Stormwater Pollution and Prevention Plan has been submitted and is included in the Submission from Applicant beginning on page 82 of 675 pages. This plan was updated in May 2025 and is included in the Final Plans beginning on page 2 of the Final Plans on the APA website. This SWPPP has been developed in accordance with the "New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity," Permit No. GP-0-25-001, effective January 29, 2025 through January 28, 2030. This plan has been reviewed and accepted by the APA.</p>

#	Commenter	Public Comments	Formal Response to Comments
5	Protect the Adirondacks (PROTECT)	<p>PROTECT supports the responsible development of the project suggesting the following diligence:</p> <ul style="list-style-type: none"> - A comprehensive bat survey, and, if warranted, that an application for an incidental take permit be submitted to DEC - An updated wetland assessment to include vernal pools - Documentation or reevaluation of pitch pine habitat potential and mitigation or restoration efforts; and a carbon offset analysis for the proposed forest clearing 	<p>The project completed consultation with the U.S. Fish and Wildlife Service and received "Not Likely to Adversely Affect" (NLAA) determinations for both the Northern Long-Eared Bat and the Tricolored Bat. With these findings, coordination with the Service is considered complete, and no further consultation is required.</p> <p>As part of the wetland delineation conducted by LaBella Associates, the presence of vernal pools was evaluated. If vernal pools had been identified, they would have been flagged and mapped in the report; however, none were observed within the project area.</p> <p>The site is also outside the Pitch Pine–Heath Barrens community. For additional detail, please refer to the attached Solar Habitat Assessment Report.</p> <p>Finally, the project is expected to offset approximately 3,949 metric tons of CO₂, supporting long-term carbon reduction goals.</p>
6	Rickie Barber - Proposed Access Road	<p>Rickie and Patti Barber is the landowner adjacent to the project and expresses concerns related to the proposed access road</p> <ul style="list-style-type: none"> - We are concerned with the proposed access road, how close it will be to our property, the access off Route 22, and the added traffic on the road from this access - Potential flooding onto our property during the Spring season - Why is the access not off Grove Street - The town waterline that supplies our water also runs along Route 22 on the access side - Hopefully there will be consideration to how close this access road will be from our property 	<p>Photo simulations have been included in the Submission from Applicant and begin on page 630 of 675 of the Submission from Applicant on the APA website.</p> <p>The access is located off of NY State Route 22 as this is the location approved by the utility, NYSEG and the location of the 3 phase electric distribution line that the solar facility will interconnect to. The electric line off of Grove Street does not have the hosting capacity to interconnect the solar facility.</p> <p>The access road has been designed to minimize impact on the residential properties. The access road is a 20 foot wide gravel road. NYSEG has agreed to a distribution line extension through parcel 315-2-7 to move the electrical equipment for the Point of Interconnection onto the subject parcel 305-6-1.9. The improvements along the eastern length of the parcel owned by Rickie and Patricia Barber parcel 315-2-6 will include a 20 foot wide gravel access and 1 over head electric line with 4 new utility poles supporting this line approximately 60 feet from their eastern property line. This section of the distribution line and utility poles will be owned by NYSEG. The solar facility equipment will not be located on a property line adjacent to the parcel 315-2-6.</p> <p>Additional visual impact mitigation will be subject to Town of Ausable Planning Board review.</p>
7	Rebekah Price	<p>Rebekah Price strongly supports the project:</p> <ul style="list-style-type: none"> - Rebekah is a farmer to the north of the project site, citing an income opportunity for the current landowner, PILOT payments, positive pollinator impacts, and potential for rotational grazing - Emphasizes that ensuring proper management and development of the property, choosing solar development provides an income source that will allow (ideally) farmers to continue to farm, lower energy prices, and increase local tax revenue 	<p>Thank you for your support of the solar project.</p>
8	Rickie Barber - Noise Generation	<p>Rickie and Patti Barber is a landowner adjacent to the project and expresses concerns related to the extent of noise generated by the solar farm:</p> <ul style="list-style-type: none"> - How does this affect our comfort and general way of life, possibility of health effects, wildlife impacts, and property value? - Rickie Barber also references an understanding that the town has offered other sites that would be "much more suitable" regarding all the impact possibilities 	<p>Please see the attached Noise Analysis for the project. As outlined in the report, the proposed inverters are not expected to have a measurable effect on ambient noise levels within the community. The minimum distance between an inverter and the nearest property line is approximately 230 feet, while the closest residence is located 483 feet from the inverters. The residence located on parcel 315-2-6, owned by Rickie and Patricia Barber, is more than 900 feet from the inverters.</p> <p>Page 3 of the Submission from Applicant, Item 21 indicates 3 alternative parcel that were reviewed for the location of the solar facility and the reasons those parcels were not selected.</p>
9	The Sun Community News	<p>Sun Community News published article emphasizing the importance of intentional solar development, highlighted by Town of Ausable Supervisor Tim Bresett. The article informs of concerns around the project being sited in a residential zone, namely one of the last prime residential locations. Tim Bresett mentions that the project could potentially be sited on a nearby brownfield parcel rather than property designated for housing. Bresett emphasizes that the project will need to go through planning and likely zoning should the APA approve the project. The highest importance to the Town of Ausable is ensuring that the town and its residents are not negatively impacted nor have to pay for the project</p>	<p>The Applicant reviewed multiple parcels in the Town of Ausable in determining the proposed location of the solar facility. Items considered are utility approval, environmental considerations, landowner response, among other factors in determining location to proceed with development. The proposed site and design have utility approval, have landowners that have responded to outreach and executed site control documents, has environmental considerations that the project design has been able to mitigate. The proposed application has provided documentation that supports the proposed design will not have a negative impact on the site from stormwater, visual, and environmental considerations.</p> <p>Alternative parcels were considered in the Town of Ausable. Page 3 of the Submission from Applicant, Item 21 indicates 3 alternative parcels that were reviewed for the location of the solar facility and the reasons those parcels were not selected. The article mentioned a brownfield site. This site was included in landowner outreach and high-level environmental review. Our outreach and diligence at the time of development decision identified some environmental concerns (brownfield, property is within the Pitch Pine Heath Barrens) and did not have landowner response.</p> <p>The current site has no negative environmental impact and creates no costs for the local residents. The Mission of the APA remains as Protecting Park Resources, which is accomplished with the proposed site.</p>
10	Town Posting - Solar in Ausable	<p>Town of Ausable's formal announcement sharing important information about the proposed Catalyze Solar project. The town posting highlights important project details, highlights the APA's desire to field public comments, and provides directions on how to submit feedback</p>	<p>Town notification to residents of public comment. Applicant response not indicated.</p>



HABITAT ASSESSMENT REPORT

Keeseville Solar
217 Grove Street, Keeseville, New York
LaBella Project No. 2231157

Prepared For: Catalyze Holdings, LLC
6325 Gunpark Drive, Suite C
Boulder, Colorado

Prepared By: LaBella Associates, D.P.C.
4 British American Boulevard
Latham, New York 12110

Date: June 2023



TABLE OF CONTENTS

1.0	INTRODUCTION.....	4
1.1	PROJECT DESCRIPTION	4
1.2	PURPOSE	4
2.0	METHODOLOGY	4
2.1	RESOURCES	4
3.0	PROPOSED PROJECT AND SITE DESCRIPTION.....	4
4.0	SPECIES OF CONCERN.....	5
4.1	NORTHERN LONG-EARED BAT - MYOTIS SEPTENTRIONALIS	5
4.2	INDIANA BAT - MYOTIS SODALIS	6
4.3	MONARCH BUTTERFLY – DANAUS PLEXIPPUS	7
5.0	RESULTS AND CONCLUSIONS.....	7
6.0	SIGNATURE OF ECOLOGICAL PROFESSIONALS	8
8.0	REFERENCES.....	9



LIST OF TABLES

TABLE 1. SPECIES LISTED BY USFWS AND NYSDEC/NYNHP FOR THE STUDY AREA	5
--	---

LIST OF APPENDICES

APPENDIX A – FIGURES

FIGURE 1 – USGS SITE LOCATION

FIGURE 2 – SITE LOCATION ON AERIAL IMAGERY

FIGURE 3 – NYNHP SIGNIFICANT NATURAL COMMUNITIES

APPENDIX B – CONCEPT SITE PLAN

APPENDIX C – PHOTOLOG

APPENDIX D – AGENCY RESOURCES

APPENDIX E – PLANT SPECIES LIST

1.0 INTRODUCTION

1.1 PROJECT DESCRIPTION

Catalyze Holdings, LLC (Client) retained LaBella Associates, D.P.C. (LaBella) to perform a habitat survey for the Keeseville Solar Project (Project) located at 217 Grove Street. For the purposes of the habitat survey, the Study Area is defined as a 66-acre area consisting of Tax Parcel ID: 305-6-1.9 in the Town of Ausable, Clinton County, New York. Please refer to Appendix A, Figure 1 for the Study Area location and boundary. The geographic coordinates of the approximate Study Area center are: 44.517307, -73.490309 (NAD83). LaBella conducted a field survey to document existing habitats, plants, and wildlife within the Study Area on May 11, 2023.

1.2 PURPOSE

This report was prepared for the purpose of obtaining concurrence from the United States Fish and Wildlife Service (USFWS) and the New York State Department of Environmental Conservation (NYSDEC) Region 5 on the potential for protected species habitat within the Study Area, in support of the Project. Specific tasks performed for this report include a field survey to document vegetation cover types and plant species composition on-site and noting existing conditions including any structures or disturbances.

This report describes the results of the survey and data collection efforts performed by LaBella, and a description of the habitats that were surveyed. This document is intended to provide the information required to support consultation with USFWS and NYSDEC on state and federally listed species.

2.0 METHODOLOGY

2.1 RESOURCES

Materials and literature supporting this investigation are derived from a number of sources, including: USFWS list of protected species that may occur at the Study Area (May 18, 2023); NYSDEC Environmental Resource Mapper (ERM) for protected wildlife, plants, and significant habitats in the vicinity of the Study Area; NYSDEC Environmental Assessment Form (EAF) Mapper; United States Geological Survey (USGS) topographic mapping; New York Natural Heritage Program (NYNHP) report on state listed species (October, 2017); NYNHP New York State November 2021 Rare Plant Status Lists (Ring, 2022); NYNHP October 2017 Rare Animal Status List (Schlesinger, 2017) and concept plans for potential development (March 2023).

3.0 PROPOSED PROJECT AND SITE DESCRIPTION

The proposed Project entails the construction of proposed solar array, access road, fencing, utility installation, tree clearing, and grading at the southernmost portion of the Study Area. Tree clearing limits have not been finalized onsite. The Study Area consists of undeveloped forest that gently slopes from south to north leading to a small wetland and stream in the northwestern corner of the Study Area. Land cover within the Study Area consists of undeveloped forest and an existing right-of-way (ROW). The surrounding area is comprised of undeveloped forest, agricultural fields, and residential areas. Elevations within the Study Area range from approximately 450 feet above mean sea level

(AMSL) to approximately 500 feet AMSL. Photographs of the Study Area and impact areas are attached as Appendix C. A complete list of plant species observed within the Study Area is included as Appendix E.

4.0 SPECIES OF CONCERN

LaBella reviewed USFWS correspondence (USFWS Species List dated May 18, 2023) which lists three species that may occur within the general vicinity of the Study Area. Similarly, the NYSDEC ERM and EAF Mapper were reviewed, which provided a record of known occurrences of state listed species within the vicinity of the Study Area. The Species indicated by USFWS and NYSDEC are listed below:

Table 1. Species listed by USFWS and NYSDEC/NYNHP for the Study Area

Scientific Name	Common Name	Federal Listing	State Listing	Flagged by
Mammals				
<i>Myotis septentrionalis</i>	Northern Long-eared Bat	Endangered	Endangered	USFWS, NYSDEC
<i>Myotis sodalis</i>	Indiana Bat	Endangered	Endangered	USFWS
Butterflies				
<i>Danaus plexippus</i>	Monarch Butterfly	Candidate	Not Listed	USFWS

There are no mapped USFWS critical habitats within the Study Area.

There is one NYNHP significant natural community mapped within the vicinity of the Study Area: pitch pine-heath barrens. The pitch pine-heath barren is mapped approximately 0.2 miles east of the Study Area. Pitch pine-heath barrens occur on well-drained, sandy, or rocky soils. Pitch pine-heath barren communities are found throughout northern and north-central New York State, in areas such as the Champlain Valley of Clinton County and Erie-Ontario Plain of Oneida County. The sites are structurally intermediate between a forested and an open upland community (NYNHP, 2023). Common plants found include pitch pine (*Pinus rigida*), big tooth aspen (*Populus grandidentata*), black huckleberry (*Gaylussacia baccata*), blueberries (*Vaccinium angustifolium*), wild sarsaparilla (*Aralia nudicaulis*), Pennsylvania sedge (*Carex pensylvanica*), and bracken fern (*Pteridium aquilinum*). The pitch pine-heath barrens have been found at elevations ranging from 100 feet ASML to 761 feet ASML (NYNHP, 2023B).

The 66-acre Study Area was reviewed by LaBella during the site visit to determine the potential presence of suitable habitat for listed species within the vicinity the Study Area. Descriptions of each of the species flagged for the Study Area are provided below, along with information gathered from USFWS and NYSDEC/NYNHP, and the results of the on-site survey.

4.1 Northern Long-Eared Bat - *Myotis septentrionalis*

The northern long-eared bat (NLEB) was relatively common in New York prior to the wide-spread fungal infection known as “white-nose syndrome” (WNS) (NYNHP, 2023D). NLEB was listed as endangered by both USFWS and NYSDEC in March 2023.

NLEB overwinter in hibernacula that include caves and abandoned mines. After emerging from hibernation in the spring, NLEB will typically migrate about 40 to 50 miles to summer roost sites. Suitable summer roosting habitat typically consists of trees (dead, dying, or alive) with loose or peeling bark. Trees such as shagbark hickory (*Carya ovata*) and black locust (*Robinia pseudoacacia*) often have loose exfoliating bark, though many other tree species can be considered suitable roosting habitat. NLEB could also potentially use cracks or crevices in trees and have also been known to occasionally use tree cavities. In general, suitable roost trees are over 3 inches in diameter at breast height (DBH) and include snags (dead trees/tree sections) and trees with exfoliating bark.

To avoid potential impacts to roosting NLEB, tree removal is generally recommended by USFWS to occur between November 1 and March 31 of any given year. NYSDEC guidelines for the newly listed species have not yet been officially released, though it is likely that their recommendations will be consistent with USFWS for winter tree clearing.

From our review, the nearest known NLEB hibernacula is located in the Town of Ausable, New York, approximately 5 miles southwest of the Study Area. With respect to potential summer NLEB occurrences or known maternity roost trees, LaBella found no record of summer occurrences in the Town of Ausable, which includes the Study Area.

LaBella assessed the area of disturbance for potential summer roosting habitat for the NLEB, which entailed documenting the presence of suitable roost trees over 3 inches DBH, such as snags (dead trees/tree sections) and trees with exfoliating bark. The Study Area contains trees larger than 3 inches DBH, with several trees containing suitable roosting habitat. Winter tree removal between November 1 and March 31, will be required to avoid potential impacts to NLEB. Coordination with appropriate agencies is suggested once tree clearing limits are finalized to ensure winter tree clearing alone is suitable mitigation.

4.2 Indiana Bat - *Myotis sodalis*

The Indiana bat hibernates during the winter in suitable hibernacula such as caves and abandoned mines. Only 17 extant hibernacula are documented in New York State according to the NYNHP (NYNHP, 2023C). Like the NLEB and other cave-dwelling bats, the Indiana bat is subject to WNS, and populations within New York continue to decline. Additional threats to this species include loss of summer roosting habitat, environmental toxins, and hibernacula disturbance. Critical habitat was designated for the Indiana bat in 1976; however, no designated critical habitat occurs in New York State (USFWS, 2023A).

This species generally hibernates from October through mid-April in New York. After emerging from hibernation in the spring, both males and females migrate to traditional summer roost sites, typically within 40 miles of the hibernacula. Males generally choose separate roost areas from the females and are known to migrate somewhat further than females. Indiana bats utilize habitats similar to NLEB for summertime maternal roosts (as described above); however, the Indiana bat could also potentially use cracks or crevices in trees and have also been known to occasionally use tree cavities. Larger trees have been shown to be preferred over smaller trees for roosting, however Indiana bats have been observed roosting in trees that are as small as 2.5 inches DBH. Generally, Indiana bats will roost in trees that are greater than or equal to 9 inches DBH that receive a good amount of solar exposure.

The Indiana bat is listed by both USFWS and NYSDEC as an endangered species. The USFWS Draft Recovery Plan (2007) for Indiana bats prioritizes the protection of hibernacula for recovery of the species (USFWS, 2007). The closest known hibernacula for Indiana bat is likely located 30 miles south of the Study Area, associated with the Barton Hill Mine in Essex County, New York.

There are many dead, mature trees with peeling or exfoliating bark that could be utilized as roost trees by Indiana bats within the Study Area, specifically along the stream and within the forested wetland. Although not fully determined due to ongoing layout and planning of the site, tree clearing will occur onsite. Winter tree removal, between November 1 and March 31, will be required to avoid potential direct impacts to Indiana bats (while Indiana bats are hibernating and not active on the landscape); however, coordination with appropriate agencies is suggested once tree clearing limits are finalized.

4.3 Monarch Butterfly – *Danaus plexippus*

The monarch butterfly is large, easily recognizable butterfly with orange and black wings that is well known for its transcontinental migrations each year. This butterfly is found throughout New York in the summer months, and prefers weedy areas along roadsides, pastures, and fields where milkweed (*Asclepias spp.*) is found. Female monarch butterflies lay eggs on milkweed, their obligate host plant species, in the spring and monarch caterpillars feed on the milkweed plant. Habitat loss and fragmentation has occurred throughout the range of the monarch butterfly, and populations have declined significantly over the past 20 years (USFWS, 2023).

After extensive review by USFWS, it was determined in December 2020 that listing the monarch butterfly under the Endangered Species Act is warranted but precluded at this time due to higher priority listing actions. Therefore, the monarch butterfly is currently unlisted federally, and is considered a candidate species for future listing. USFWS will review the status of monarch butterfly each year. Since the monarch butterfly is an unlisted candidate species and is not currently listed, there are generally no USFWS Section 7 requirements (USFWS, 2022). Similarly, the monarch butterfly is not a State-listed species in New York. If listing status for this species changes following this report, coordination with the appropriate regulatory agencies will be warranted. The Study Area lacks open field and/or pasture which are typically used by butterflies.

5.0 RESULTS AND CONCLUSIONS

Indiana Bat and Northern Long-Eared Bat

Suitable roosting habitat for NLEB and Indiana bat is found throughout the forested areas of the Study Area and both bats are known to occur in the general range of the Study Area. NYSDEC indicates there are known occurrences of NLEB in the vicinity of the Study Area. LaBella recommends that any tree clearing be conducted during the inactive season (November 1 through March 31), while bats are in hibernaculum, to avoid direct impacts to either bat species. Further coordination with NYSDEC and USFWS is recommended once the Project tree cleaning limits have been finalized to ensure winter cutting alone is suitable.

Monarch Butterfly

The monarch butterfly is currently unlisted federally and unlisted statewide though it is considered a candidate species for future listing. Due to the status, there are no USFWS Section 7 requirements for the monarch butterfly at this time. The Study Area lacks open field and/or pasture which are typically used by butterflies. The Study Area lacks milkweed, a plant used widely by monarchs. It is LaBella's opinion that the proposed Project will have no effect on monarch butterflies as there is no habitat found onsite.

6.0 SIGNATURE OF ECOLOGICAL PROFESSIONALS

We appreciate the opportunity to serve your professional environmental needs. If you have any questions, please do not hesitate to contact Mark Kiburz at 518-231-1437.

Report Prepared By:



Mark Kiburz, PWS, CPESC
Lead Wetland Delineator

Report Prepared By:



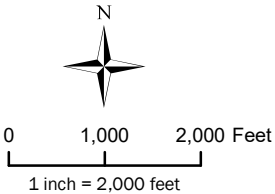
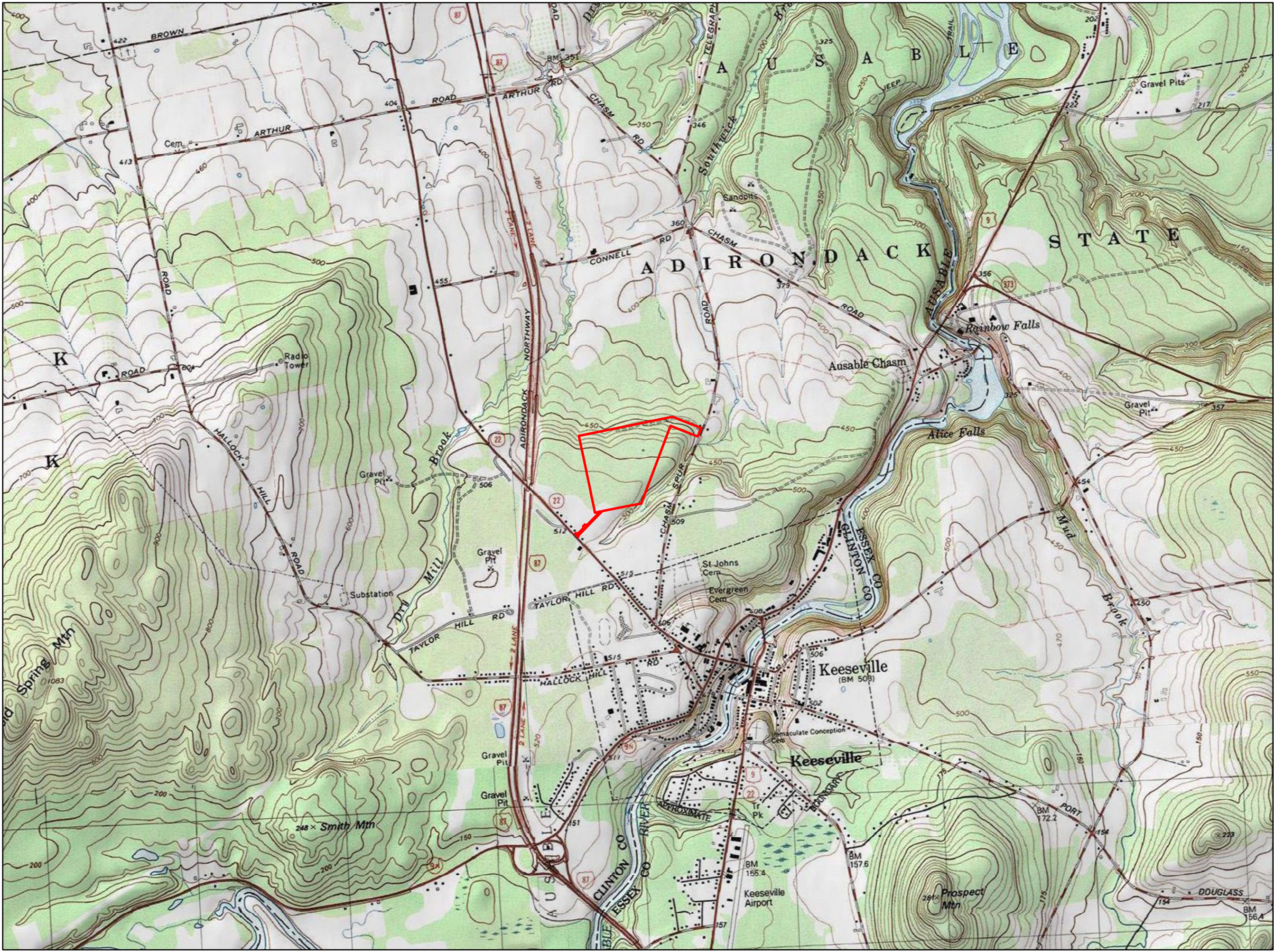
Samantha Carey
Environmental Scientist

8.0 REFERENCES

- NYNHP. 2023A. Project Screening. Available at: <https://legacy.nynhp.org/project-screening>. Accessed May 2023.
- NYNHP. 2023B. Online Conservation Guide for Pitch Pine-heath Barrens. Available from: <https://guides.nynhp.org/pitch-pine-heath-barrens/>. Accessed June 2023.
- NYNHP. 2023C. Online Conservation Guide for *Myotis sodalis*. Available from: <https://guides.nynhp.org/indiana-bat/>. Accessed June 2023.
- NYNHP. 2023D. Online Conservation Guide for *Myotis septentrionalis*. Available from: <http://www.acris.nynhp.org/guide.php?id=7407> (Accessed June 2023).
- NYSDEC. 2023A. Environmental Assessment Form Mapper. New York State Department of Environmental Conservation, Albany, NY. Available at: <https://gisservices.dec.ny.gov/eafmapper/>. Accessed June 2023.
- NYSDEC. 2023B. Environmental Resource Mapper. New York State Department of Environmental Conservation, Albany, NY. Available at: <https://gisservices.dec.ny.gov/gis/erm/>. Accessed June 2023.
- NYSDEC. 2023C. Northern Long-eared Bat. Available at: <https://www.dec.ny.gov/animals/106713.html> Accessed June 2023.
- NYSDEC. 2018. Northern Long-eared Bat Occurrences by Town (June 28, 2018). Bureau of Wildlife, Albany, NY.
- Ring, R.M. 2022. New York Rare Plant Status Lists. New York Natural Heritage Program, State University of New York College of Environmental Science and Forestry, Albany, NY. December 2022. 121 pp.
- Schlesinger, M.D. 2017. New York Rare Animal Status List. New York Natural Heritage Program, State University of New York College of Environmental Science and Forestry, Albany, NY. October 2017. 31 pp.
- USFWS. 2023A. USFWS Critical Habitat. Available at: <https://ecos.fws.gov/ecp/report/table/critical-habitat.html>. Accessed May 2023.
- USFWS. 2023B. Information for Planning and Consultation. United States Fish and Wildlife Service. Available at <https://ecos.fws.gov/ipac/> Accessed June 2023.
- USFWS. 2023C. Environmental Conservation Online System for Indiana Bat. Available from: <https://ecos.fws.gov/ecp/species/5949>. Accessed June 2023.
- USFWS. 2023D. Online Informational Guides to Monarch Butterflies. Available At: <https://www.fws.gov/initiative/pollinators/monarchs>. Accessed June 2023.
- USFWS. 2007. Indiana Bat (*Myotis sodalis*) Draft Recovery Plan: First Revision. USFWS, Fort Snelling, MN. 258 p.

APPENDIX A

FIGURES



Legend
Study Area

Sources:
1. Study Area: Created by LaBella using information provided by the client.
2. Basemap: ESRI, USA Topo Map (Updated: 2020) in reference to USGS Topographic Keeseville Quadrangle (1966).

**USGS
Site Location**

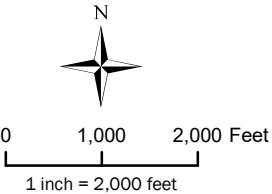
FIGURE 1



Catalyze Holdings, LLC

Habitat
Assessment Report

217 Grove Street
Keeseville, NY

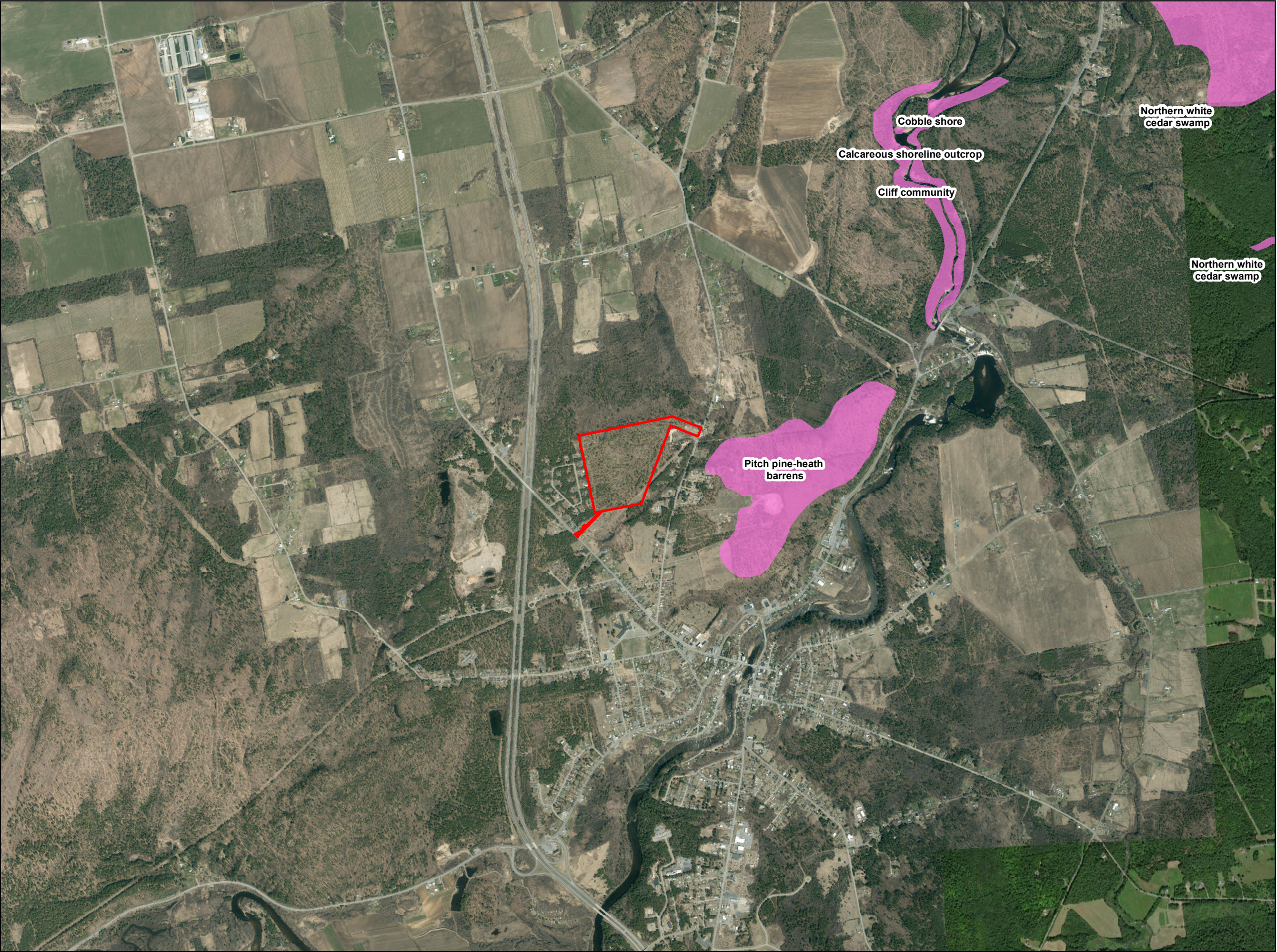


Legend
Study Area

Sources:
1. Study Area: Created by LaBella using information provided by the client.
2. Basemap Esri, DigitalGlobe, GeoEye, Earthstar, Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and GIS User Community, 2021.

Site Location
on Aerial Imagery

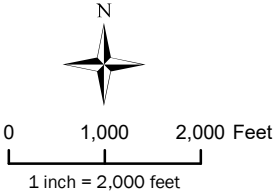
FIGURE 2





Catalyze Holdings, LLC

**Habitat
Assessment Report**

**217 Grove Street
Keeseville, NY**



Legend

-  Study Area
-  NYNHP Significant Natural Community

Sources:
1. Study Area: Created by LaBella using information provided by the client.
2. Basemap Esri, DigitalGlobe, GeoEye, Earthstar, Geographics, CNES/Airbus DS, USDA, USGS AeroGRID, IGN, and GIS User Community, 2021.
3. NYNHP Significant Natural Community data (2022) from NYSGIS Clearinghouse.

**NYNHP Significant
Natural Communities**

FIGURE 3

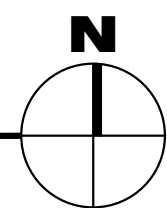
APPENDIX B

Concept Site Plan

3/3/2023 11:28 AM
\\PROJECTS\PROJECTS\CATALYZE\2231168 - KEESEVILLE SOLAR\08 - DRAWINGS\ELECTRICAL\E-100 - SITE LAYOUT - KEESEVILLE.DWG



1 OVERALL SITE LAYOUT
SCALE: 1" = 100'



GENERAL NOTES:

1. PROVIDE PULL CORDS IN ALL EMPTY CONDUITS.
2. THE USE OF PLASTIC ZIP TIES IS NOT AN APPROVED METHOD TO SUPPORT OR ATTACH WIRE IN OUTDOOR APPLICATIONS. PLASTIC ZIP TIES ARE ONLY PERMITTED FOR SUPPLEMENTAL GROUPING OR BUNDLING OF CONDUCTORS INSIDE OF EQUIPMENT. PV-SPECIFIC STAINLESS STEEL CLIPS AND VINYL JACKETED STEEL CABLE TIES (HEYCO SUNBUNDLER) OR AN APPROVED EQUAL ARE ALLOWED FOR USE IN THIS APPLICATION.
3. PROTECT WIRE FROM SHARP EDGES WITH UV RATED SPIRAL WRAP, EDGE-GUARD, OR SPLIT LOOM.

KEYNOTES:

- (A) POLE SHOWN FOR REFERENCE ONLY. POLE, EQUIPMENT AND OVERHEAD CABLE TO BE PROVIDED AND INSTALLED BY UTILITY.
- (B) OVERHEAD CABLE BETWEEN CUSTOMER POLE AND UTILITY POLE TO BE PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. UTILITY TO MAKE FINAL CONNECTION AT UTILITY POLE.
- (C) ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL POLE. UTILITY TO PROVIDE EQUIPMENT AND MAKE FINAL CONNECTIONS. ELECTRICAL CONTRACTOR TO INSTALL EQUIPMENT.
- (D) COORDINATE INSTALLATION OF COMMUNICATION LINE FROM ROAD TO ELECTRIC UTILITY DEMARCATION BOX AT UTILITY METER POLE.

SYMBOL LIST

- DE — DE — EXISTING DISTRIBUTION CIRCUIT
- DE — DE — NEW OVERHEAD LINE
- MV — MV — NEW UNDERGROUND ELECTRICAL MV TRENCH
- DE — DE — NEW UNDERGROUND ELECTRICAL TRENCH
- C — C — NEW UNDERGROUND COMMUNICATIONS TRENCH
- O — EXISTING POLE TO REMAIN
- NEW POLE
- GUY ANCHOR

SITE SUMMARY

AC PLANT PEAK PRODUCTION	5.00 MW
DC PLANT PEAK PRODUCTION	7.50 MW
DC/AC PRODUCTION RATIO	1.50
INVERTER OUTPUT	125 KW
INVERTER QTY	40
MODULE STC RATING	540 W
TOTAL MODULE QTY	13,884
TILT	20°
AZIMUTH	0°

GPS COORDINATES:
44°31'07.2"N 73°29'21.7"W

300 State Street, Suite 201
Rochester, NY 14614
585-454-6110

labellapc.com



CERTIFICATE OF AUTHORIZATION NUMBER:
PROFESSIONAL ENGINEERING: 018281
LAND SURVEYING: 017976
GEOLOGICAL: 018750

It is a violation of New York Education Law Art. 145 Sec. 7209 & Art. 147 Sec. 7307, for any person, unless acting under the direction of a licensed architect, professional engineer, or land surveyor, to alter an item in any way. If an item bearing the seal of an architect, engineer, or land surveyor is altered; the altering architect, engineer, or land surveyor shall affix to the item their seal and notation "altered by" followed by their signature and date of such alteration, and a specific description of the alteration.

© 2023 LaBella Associates

CATALYZE HOLDINGS, LLC

6325 GUNPARK DRIVE, SUITE C
BOULDER, CO 80301

KEESEVILLE SOLAR

217 GROVE STREET
KEESEVILLE, NY 12944

PROJECT NUMBER: 2231157

DRAWN BY: BPK

REVIEWED BY: SJB

ISSUED FOR: INTERCONNECTION APPLICATION

DATE: MARCH 2023

DRAWING NAME:

OVERALL SITE LAYOUT

DRAWING NUMBER:

E-100

APPENDIX C

Photo Log



Habitat Assessment Photos – Keeseville Solar

217 Grove Street, Keeseville, NY – May 11, 2023



View from site entrance at the northeastern portion of the study area.



View from site entrance at the northeastern portion of the study area.



View of Wetland 1.



View of Wetland 1.



Habitat Assessment Photos – Keeseville Solar

217 Grove Street, Keeseville, NY – May 11, 2023



View of Stream 1.



View of Stream 1.



View from the center portion of the parcel.



View from the center portion of the parcel.



Habitat Assessment Photos – Keeseville Solar

217 Grove Street, Keeseville, NY – May 11, 2023



View from the western portion of the parcel.



View from the western portion of the parcel.



View from the northern portion of the parcel.



View from the northern portion of the parcel.



Habitat Assessment Photos – Keeseville Solar

217 Grove Street, Keeseville, NY – May 11, 2023



View from the eastern portion of the parcel.



View from the eastern portion of the parcel.



View from the southern portion of the parcel.



View from the southern portion of the parcel and existing access road.



Habitat Assessment Photos – Keeseville Solar

217 Grove Street, Keeseville, NY – May 11, 2023



View from the proposed access road location.



View from the proposed access road location.



View from the proposed access road location.



View from the proposed access road location.

APPENDIX D

Agency Resources



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:
Project Code: 2023-0083492
Project Name: Keeseville Solar

May 18, 2023

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 ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system 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:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.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 <https://www.fws.gov/birds/policies-and-regulations.php>.

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/birds/bird-enthusiasts/threats-to-birds.php>.

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/birds/policies-and-regulations/executive-orders/e0-13186.php>.

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: 2023-0083492
Project Name: Keeseville Solar
Project Type: Power Gen - Solar
Project Description: proposed solar
Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@44.516855899999996,-73.49061360054337,14z>



Counties: Clinton 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: LaBella Associates

Name: Samantha Carey

Address: 4 British American Boulevard

City: Latham

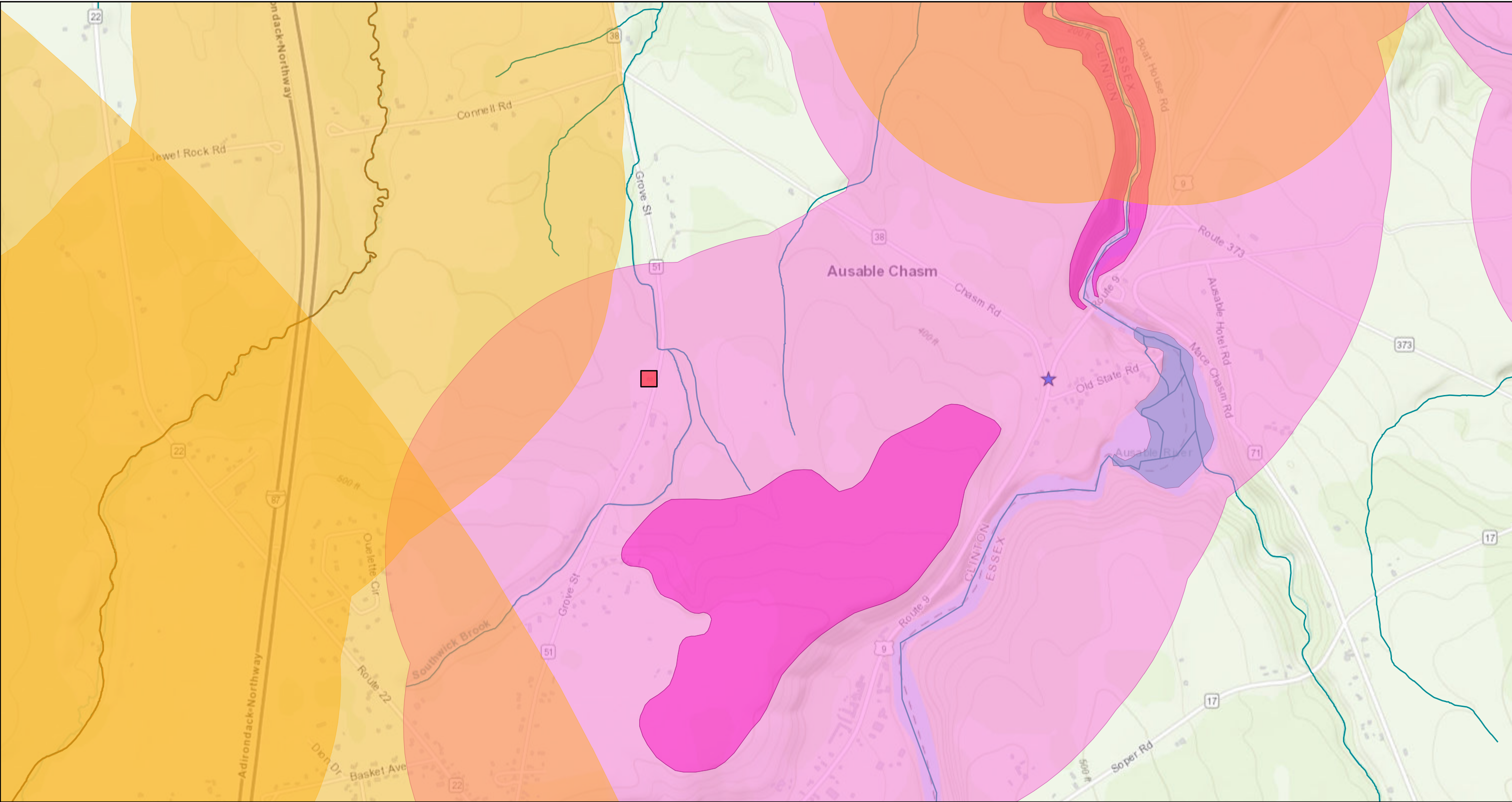
State: NY

Zip: 12110

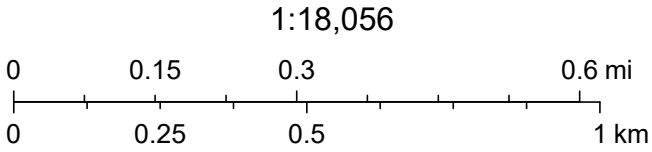
Email: scarey@labellapc.com

Phone: 6316035234

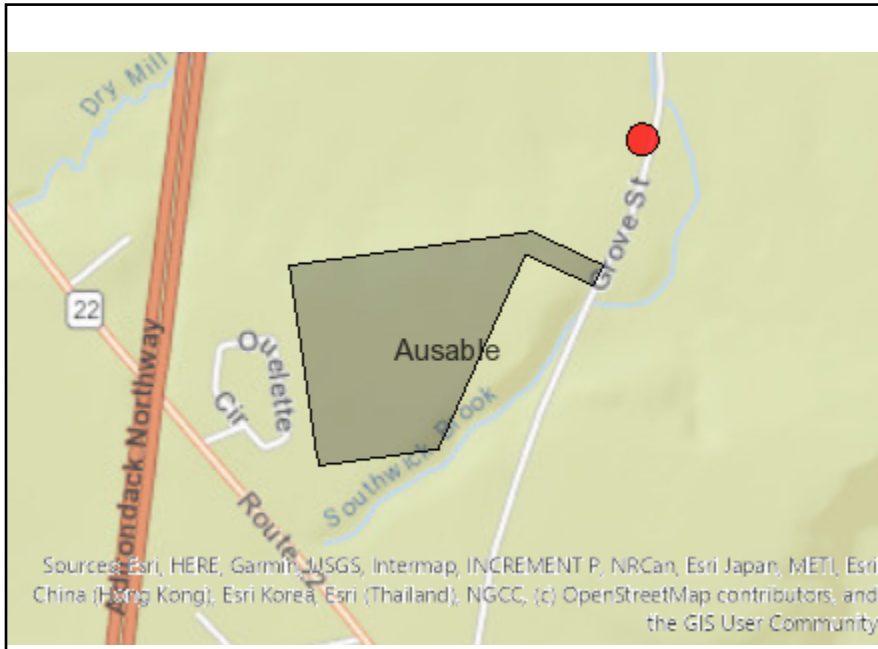
NYSDEC ERM



May 18, 2023



Esri, Canada, Esri, HERE, Garmin, INCREMENT P, USGS, METI/
NASA, EPA, USDA



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]	No
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	No
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.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	No
E.2.j. [100 Year Floodplain]	No
E.2.k. [500 Year Floodplain]	No
E.2.l. [Aquifers]	Yes
E.2.l. [Aquifer Names]	Principal Aquifer
E.2.n. [Natural Communities]	Yes
E.2.n.i [Natural Communities - Name]	Pitch Pine-Heath Barrens

E.2.n.i [Natural Communities - Acres]	130.0
E.2.o. [Endangered or Threatened Species]	Yes
E.2.o. [Endangered or Threatened Species - Name]	Northern Long-eared Bat
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	Yes
E.3.a. [Agricultural District]	CLINcn7
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

APPENDIX E

PLANT SPECIES LIST

Table 1. Species observed within the Study Area	
Scientific Name	Common Name
<i>Acer rubrum</i>	Red maple
<i>Acer saccharum</i>	Sugar maple
<i>Alnus incana</i>	Speckled alder
<i>Betula papyrifera</i>	Paper birch
<i>Bidens cernua</i>	Nodding burr-marigold
<i>Carex spp.</i>	Sedge species
<i>Cladonia rangiferina</i>	Reindeer lichen
<i>Comptonia peregrina</i>	Sweet fern
<i>Convallaria majuscula</i>	Lil-of-the-valley
<i>Fagus grandifolia</i>	American beech
<i>Fraxinus pennsylvanica</i>	Green ash
<i>Impatiens capensis</i>	Spotted touch-me-not
<i>Lysimachia nummularia</i>	Creeping-jenny
<i>Maianthemum racemosum</i>	Feathery false solomon's-seal
<i>Onoclea sensibilis</i>	Sensitive fern
<i>Osmundastrum cinnamomeum</i>	Cinnamon fern
<i>Pinus strobus</i>	Eastern white pine
<i>Populus tremula</i>	European aspen
<i>Quercus rubra</i>	Northern red oak
<i>Trillium erectum</i>	Stinking-Benjamin

Noise Level Narrative

Keeseville Solar

The applicant is proposing to install Solectria XGI 1500-250 Series inverters for the proposed solar field. Per the attached manufacturer's information, the inverters generate a maximum sound pressure level (SPL) of 73 decibels (dB) at a receptor distance of 1 meter. This SPL will attenuate as the receptor moves away from the inverter. As shown in the site plan, the inverters are located towards the bottom of the project parcel. The shortest distance between an inverter and the property line – the "receptor" in this case – is about 230 feet. The shortest distance to any residence is 483 feet from the inverters.

Since there will be 20 inverters located together on a rack, the sound produced will be greater than one individual inverter. The publication "Assessing and Mitigating Noise Impacts" from the New York State Department of Environmental Conservation, last revised February 2, 2001, provides a method for calculating the additive effects of multiple sound sources. The total sound pressure level created by multiple sources does not create a mathematically additive effect. The below table is used to calculate the increase in SPL by comparing the difference between the two sound levels. This process is repeated in an iterative fashion until all the inverters are accounted for.

Table 1: Approximate Addition of Sound Levels

Difference Between Two Sound Levels	Add to the Higher of the Two Sound Levels
1 dB or less	3 dB
2 to 3 dB	2 dB
4 to 9 dB	1 dB
10 dB or more	0 dB

(USEPA, Protective Noise Levels, 1978)

For the first two inverters, they have a difference of 0 dB between them, and so 3 dB will be added to the sound level. This results in a difference of 3 dB between the first and third inverter, so 2 dB will be added to the SPL of the first inverter. Following this procedure for all 20 of the inverters will result in a total of 10 dB being added to the initial SPL, for a final total SPL of 83 dB.

Additionally, the two equipment pads located next to the inverter rack will each contain one transformer, one switchgear, and one grounding transformer. The loudest of these will have an SPL of 63 dB. Using the same additive procedure as above, there will be no additional increase to the total SPL due to this equipment.

The attenuation of sound over distance is typically predicted using the "Inverse Square Law", which is expressed using the following equation:



$$DSPL = 20 \log(D2/D1)$$

DSPL is the decrease in sound pressure level

D1 is the reference distance from the source (1 meter = 3.28 feet)

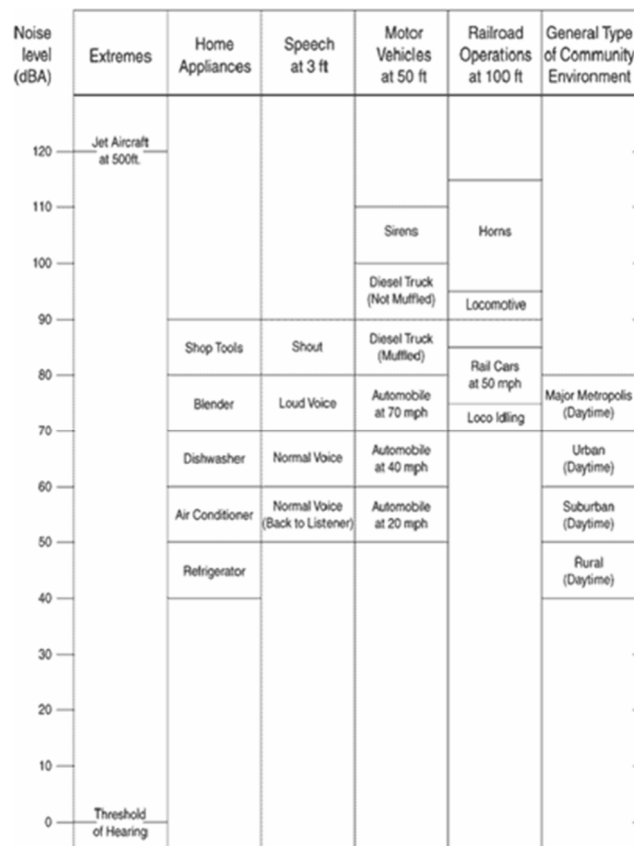
D2 is the receptor distance from the source (230 feet)

Placing the known values in the equation:

$$DSPL = 20 \log(230/3.28)$$

$$DSPL = 37 \text{ dB}$$

After subtracting the calculated decrease in sound pressure level from the combined source sound pressure level, the predicted SPL at the closest property line is 46 dB. Using the same equations, the predicted SPL at the residence 483 feet from the inverters is 40 dB. The figure below, from the United States Department of Transportation, shows that the general ambient noise level in rural areas is between 40 and 50 dB. Therefore, the predicted SPL from the proposed inverters should have no effect on ambient noise levels in the community.



Respectfully submitted,

LaBella Associates

Christian Rohrmeier, EIT
Civil Engineer

SOLECTRIA® XGI 1500-250 SERIES TECHNICAL DATA

SPECIFICATIONS

PRODUCT SPECIFICATION		XGI 1500 INVERTER MODEL			
		XGI 1500 250/250-600	XGI 1500 225-600	XGI 1500 200/200-480	XGI 1500 175-480
DC Input	Absolute Maximum Input Voltage	1500 VDC			
	Maximum Power Voltage Range (MPPT)	860-1250 VDC		750-1250 VDC	
	Operating Voltage Range (MPPT)	860-1450 VDC		750-1450 VDC	
	Number of MPP Trackers	1 MPPT			
	Maximum Operating Input Current	296.7 A	267 A	237.3 A	207.6 A
	Maximum Operating PV Power	255 kW	230 kW	204 kW	179 kW
	Maximum DC/AC Ratio Max Rated PV Power	2.0 500 kW	2.22 500 kW	2.5 500 kW	2.86 500 kW
	Max Rated PV Short-Circuit Current (Isc x 1.25)	800 A			
AC Output	Nominal Output Voltage	600 VAC, 3-Phase		480 VAC, 3-Phase	
	AC Voltage Range	-12% to +10%			
	Continuous Real Output Power	250 kW	225 kW	200 kW	175 kW
	Continuous Apparent Output Power (kVA)	250	250 225	200	200 175
	Maximum Output Current (I _{max})	240.6	XGI 1500- 225/225: 216.5 225/250: 240.6	240.6	XGI 1500- 175/175: 210.5 175/200: 240.6
	Fault Current Contribution (1 cycle RMS)	390 A	390 A 351 A	312 A	312 A 273 A
	Conductor Compatibility	600 kcmil max, Cu or Alum, 1 or 2 conductors with lugs			
	Nominal Output Frequency	60 Hz			
	Power Factor (Unity default)	+/- 0.80 Adjustable			
	Efficiency	Total Harmonic Distortion (THD) @ Rated Load	< 3%		
Grid Connection Type		3-Ph + N/GND			
Peak Efficiency		99.0%			
CEC Average Efficiency		98.5%			
Tare Loss		<1 W			
Temperature	Ambient Temperature Range	-40°F to 140°F (-40°C to 60°C)			
	De-Rating Temperature	113°F (45°C)	127°F (53°C)	113°F (45°C)	131°F (55°C)
	Storage Temperature Range	-40°F to 167°F (-40°C to 75°C)			
Communications	Relative Humidity (non-condensing)	0 - 95%			
	Operating Altitude	9,840 ft (3 km)			
	Advanced Graphical User Interface	WiFi			
	Communication Interface	Ethernet			
	Third-Party Monitoring Protocol	SunSpec Modbus TCP/IP			
	Web-Based Monitoring	Optional			
Testing & Certifications	Firmware Updates	Remote and Local			
	Safety Listings & Certifications	UL 1741, IEEE 1547, UL 1699b Photovoltaic Arc-Fault Circuit Protection Certified			
	Advanced Grid Support Functionality	Rule 21, UL 1741SB			
	Testing Agency	ETL			
Warranty	FCC Compliance	FCC Part 15 (Subpart B, Class A)			
	Standard and Options	5 Years Standard; Option for 10 Years			
Enclosure	Acoustic Noise Rating	75 dBA @ 1 m; 67dBA @ 3 m			
	DC Disconnect	Integrated 2-Pole 400 A DC Disconnect			
	Mounting Angle	Vertical only			
	Dimensions	Height: 29.5 in. (750 mm) Width: 44.3 in. (1125 mm) Depth: 15.4 in. (390 mm)			
	Weight	290 lbs (131.5 kg)			
	Enclosure Rating and Finish	Listed Type 3R, Self-Certified NEMA 4X and IEC IP66, Polyester Powder-Coated Aluminum			



YASKAWA
SOLECTRIA SOLAR

Yaskawa Sollectria Solar 1-978-683-9700 | Email: sales@sollectria.com | sollectria.com
Document No. FLXGI1500-04 | 05/07/2024 | © 2021 Yaskawa America, Inc.

Table 4. Audible sound levels

Self-cooled, two-winding kVA rating	NEMA TR-1 average Decibels (dB)
45–500	56
501–700	57
701–1000	58
1001–1500	60
1501–2000	61
2001–2500	62
2501–3000	63
3001–4000	64
4001–5000	65
5001–6000	66
6001–7500	67
7501–10,000	68