



To: Airport RD1 VT Solar, LLC Project File

Date: April 15, 2026

Memorandum

Project #: R059030.000

From: Will Durkin, Carla Fenner, PWS, CWS, and Adam Crary, SPWS, PWD
Re: Section 248 Natural Resources Assessment

At the request of Airport RD1 VT Solar, LLC ("Client" or "Petitioner"), VHB conducted natural resources assessments on approximately 48 acres ("Study Area") in support of a planned 4.975-megawatt ("MW") alternating current ("AC") ground-mounted solar project ("Project"). The Project is sited within two fenced array pods totaling 19.1-acres that will involve approximately 23.02 acres of land for construction within a parcel (SPAN 216-070-11165) located east of Airport Road and north of US Route 4 ("US-4") in Fair Haven, Vermont (see Natural Resources Map, **Attachment 1**). This technical memorandum presents the results of database and field assessments of natural resources and addresses potential impacts from proposed Project activity to certain natural resources criteria, as defined in 30 V.S.A. Section 248(b)(5).

The natural resources assessments for the Project were designed to include an evaluation for the presence/absence of each natural resource type, and potential impacts under the following Act 250 Criteria, given due consideration by the Vermont Public Utility Commission ("PUC") under 30 V.S.A. Section 248 review for a Certificate of Public Good ("CPG"):

- Outstanding Resource Waters (10 V.S.A. § 1424a(d) and 30 V.S.A. § 248(b)(8));
- Headwaters (10 V.S.A. § 6086(a)(1)(A));
- Floodways (10 V.S.A. § 6086(a)(1)(D));
- Streams (10 V.S.A. § 6086(a)(1)(E));
- Shorelines (10 V.S.A. § 6086(a)(1)(F));
- Wetlands (10 V.S.A. § 6086(a)(1)(G));
- Rare and Irreplaceable Natural Areas ("RINA") (10 V.S.A. § 6086(a)(8)); and
- Necessary Wildlife Habitat and Endangered Species (10 V.S.A. § 6086 (a)(8)(A)).

In preparing this memorandum, VHB relied upon Project information provided by the Petitioner and engineering plans by the Project's civil engineer to assist in determining the areal extent of the assessment and evaluating potential Project impacts to natural resources. The following sections of this memorandum contain a description of the Project, a description of existing conditions, and an overall summary of the resource assessments and an analysis of potential Project impacts. Supporting technical information is contained in the attachments to this memorandum.

Project Description

The Project is a 4.975 MW ground-mounted solar electric generation facility comprised of two arrays, each with multiple rows of solar panels mounted on fixed-tilt ground-mounted racks. The limit of disturbance of the Project is approximately 23.02 acres while the area within the perimeter fences for each of the two array pods will comprise approximately 19 acres: 16.2 acres for the northern array and 2.8 acres for the southern array. The array rows in each section will vary in length and will generally run east to west with the fixed-tilt panels facing south. An eight-foot-high

agricultural style perimeter fence may enclose each array section,¹ which will be accessible via an existing gravel farm access off Airport Road that will be upgraded with gravel and widened to twelve feet to accommodate construction deliveries and equipment and operational maintenance. The array racking and fence posts will be installed by driving or screwing the posts into the ground without the need for excavation.

The Project will interconnect with Green Mountain Power's ("GMP") existing electric distribution line which extends along the eastern side of Airport Road via at a new in-line pole proposed to be located on the north side of the Project's proposed gravel access. New utility poles will be installed along the gravel access to extend from the existing GMP utility to the Project's northernmost transformer equipment. From this transformer, the overhead line would extend along the west side of the Project's proposed gravel access drive for two pole spans and then extend to remaining portions of the arrays via the installation of underground line, as depicted on the site plan. All wiring connecting the solar panels within the array sections will be installed in underground conduit.

Approximately 4.3 acres of tree and woody vegetation clearing is proposed for the Project to accommodate the array configuration and the gravel access road. Clearing is concentrated on the southwestern portion of the northern array, with some fringes along the northeastern edge of the field, and a fringe at the southern edge of the southern array. An additional 2.32 acres of vegetation management is proposed outside of the array, for both the northern and southern arrays, which could consist of cutting of woody vegetation but would not remove stumps or grub the soil surface. Areas of clearing (stumping, grubbing) and management (no stumping or grubbing) are located entirely outside of Class II wetland buffers, riparian buffers, and river corridor buffers, except a small amount of clearing in a Class II wetland and its buffer associated with the proposed access road from the northern to southern array pod, and associated with an existing road widening and overhead line extension off Airport Road.

For a more detailed description of the Project and its components, please refer to the pre-filed testimony of the Project's lead witness, Geoff Martin.

Existing Conditions

The Study Area associated with the Project is located in the Taconic Mountains biophysical region of Vermont which is characterized by variable elevations, slates, phyllites and schists, and postglacial deposits of kame gravel, lake and alluvial sediments (Thompson et al. 2019). The Study Area is located within the Mud Brook-Poultney River watershed (HUC12 043001010305) and is generally low lying and mostly flat, with elevations ranging from approximately 336 to 379 feet above mean sea level ("amsl"). Small, localized areas of steeper terrain are present adjacent to mapped streams and riparian wetlands within defined drainageways. Based on Natural Resources Conservation Service ("NRCS") soil mapping, on-site soils within the Study area consist of Deerfield loamy fine sand, 0 to 3 percent slopes (59A); Kingsbury silty clay loam, 0 to 3 percent slopes (80A); Vergennes clay, 15 to 25 percent slopes (82D); Windsor loamy sand, 15 to 25 percent slopes (18D); and a small amount of Limerick silt loam (110). One Vermont Hydrologic Dataset ("VHD")-mapped stream is located on-site along the northern Study Area boundary, that includes a Vermont Significant Wetlands Inventory ("VSWI")-mapped wetland. One additional VSWI is mapped adjacent and east of Airport Road, along the western Study Area boundary.

Conditions within the proposed arrays consist of open (non-forested) row-crop agricultural fields of corn and soybean and lesser amounts of early successional forested uplands, more mature forested corridors along streams and riparian

¹ In the event a fence is not used, energized equipment rated for outdoor use will be secured by locked enclosure covers.

wetlands and other open, non-agricultural fallow or naturalized areas. Forested upland areas are often characterized by eastern hemlock (*Tsuga canadensis*), red oak (*Quercus rubra*), bracken fern (*Pteridium aquilinum*) and eastern hay-scented fern (*Dennstaedtia punctilobula*), and early successional forest in and around the southern portion of the proposed southern array contains characteristic pioneering woody species such as birches (*Betula* spp.), and quaking aspen (*Populus tremuloides*). Non-forested open areas are characterized by goldenrod species (*Solidago* spp.), asters (*Symphyotrichum* spp.), and areas of paper birch (*Betula papyrifera*) stands. Outside of the proposed arrays, the Study Area includes large and linear forested riparian wetland complexes characterized by red maple (*Acer rubrum*), green ash (*Fraxinus pennsylvanica*), speckled alder (*Alnus incana*), and marsh fern (*Thelypteris palustris*). There are also several non-native invasive (plant) species ("NNIS") observed within the Study Area including bishop's goutweed (*Aegopodium podagraria*), garlic mustard (*Alliaria petiolata*), common and Japanese barberry (*Berberis vulgaris*, *B. thunbergii*), glossy buckthorn (*Frangula alnus*), common buckthorn (*Rhamnus cathartica*), Morrow's honeysuckle (*Lonicera morrowii*), purple loosestrife (*Lythrum salicaria*), and Japanese knotweed (*Fallopia japonica*). Adjacent lands surrounding the Study Area include forested and open field areas, stream and wetland complexes, rural residential areas, and other development types such as US-4 and the Fair Haven Municipal Airport. Additionally, a new substation is under construction on adjacent land to the west, and a 20-MW solar array and substation has been permitted on lands west and northwest of the Project. For depictions of on-site mapped natural resources and representative site photographs, refer to **Attachments 1 and 2**, respectively.

SECTION 248 NATURAL RESOURCES CRITERIA

VHB Ecologists (C. Fenner, M. Jackman, K. Maines, B. Galligan, W. Durkin) conducted detailed natural resources field assessments for the Project in August 2022, September and October 2023, and July 2024. These surveys followed reconnaissance level field review by VHB's ecologists in 2018 for another purpose. In its evaluation of the Project design for potential impacts to natural resources, VHB relied on its own assessments and data, on agency-provided comments and information, on Project information provided by the Petitioner, and on Project site plans prepared by Krebs & Lansing Consulting Engineers and filed as Exhibit PET-SDG-2 with the Project's CPG petition.

OUTSTANDING RESOURCE WATERS (10 V.S.A. § 1424a (d))

The Vermont Water Quality Standards ("VWQS", ANR 2022b), under section 29A-105(d), state that the Secretary of the Vermont Agency of Natural Resources ("ANR") may, under 10 V.S.A. Section 1424(a), designate Outstanding Resource Waters ("ORW"). The following waterways have been designated ORWs:

1. Batten Kill River, Towns of Dorset and Arlington;
2. Pike's Falls/Ball Mountain, Town of Jamaica;
3. Poultney River, Towns of Poultney and Fair Haven; and,
4. Great Falls, Ompompanoosuc River, Town of Thetford.

The Study Area was reviewed against this list to determine if it is located within the vicinity of any listed ORW. The Project site is situated adjacent to and has stream features that drain to the Mud Brook, a tributary to the Poultney River, which is designated as an ORW. However, the Project Site is remote (greater than one mile) from the Poultney River and does not intersect the Study Area, and therefore, the Project would not involve any ORWs.

HEADWATERS (10 V.S.A. § 6086(a)(1)(A))

The Headwaters criterion under Act 250, given due consideration under Section 248 review, requires that a project — if

located in a headwater — meet any applicable health and Vermont Department of Environmental Conservation (“DEC”) regulations regarding reduction of the quality of the ground or surface waters flowing through or upon lands that are not devoted to intensive development. The sub-categories for headwaters are:

- i. Headwaters of watersheds characterized by steep slopes and shallow soils; or
- ii. Drainage areas of 20 square miles or less; or
- iii. Above 1,500 feet elevation; or
- iv. Watersheds of public water supplies designated by ANR; or
- v. Areas supplying significant amounts of recharge waters to aquifers.

VHB analyzed available geospatial information, including soils data, topographic maps, and state-mapped public water supply source protection areas, in addition to the field assessment, to determine if the Study Area is located on any lands that meet the Headwaters criterion.

Subcategory (i)

Portions of the Study Area where Project work will occur include mapped soils that NRCS has characterized as not having steep slopes (generally less than 15 percent), including Kingsbury silty clay loam (0 to 3 percent slopes) and Deerfield loamy fine sand (0 to 3 percent slopes). Remaining portions of the Study Area and surrounding area include soils with steeper slopes, such as Windsor loamy sand (15 to 25 percent slopes) and Vergennes clay (15 to 25 percent slopes). However, all soils present within the Study Area, regardless of slope, are not characterized as shallow soils and have a depth to restrictive feature more than 80 inches. As such, Project-relevant portions of the Study Area are not considered to meet subcategory (i).

Subcategory (ii)

The Project Area is located in the Mud Brook-Poultney River watershed (HUC12 043001010305). The drainage area of the on-site waters, as measured from the point at which surface discharge from the Study Area would enter receiving waters of the watershed (Mud Brook at the western edge of the Project site) is less than 20 square miles at the Project site and does meet subcategory (ii).

Subcategory (iii)

The Project area is below 1,500 feet in elevation; therefore, the Project does not meet subcategory (iii).

Subcategory (iv)

There are no watersheds of public water supplies designated by ANR within the Study Area, therefore the Project does not meet subcategory (iv).

Subcategory (v)

The Study Area does not supply a significant amount of recharge waters to aquifers, based on the absence of State-mapped groundwater source protection areas on or adjacent to the Study Area. Therefore, the Project does not meet subcategory (v).

The Study Area meets headwaters sub-category (ii) as the drainage area of the site is less than 20 square miles. It is VHB’s position that the Study Area would not be considered to be Headwaters, as it is positioned in the lower portion of the Mud Brook watershed (itself with a watershed size of roughly 7 square miles) which confluences to the Poultney River below its confluence with the Castleton River, with a drainage area of more than roughly 260 square miles. This

watershed position is not consistent with the intent of the Headwaters criterion consideration in terms of the ground and surface water resources that are intended to be protected and/or conserved.

Even though VHB determines it not to be within a headwater area, the Project will not adversely affect groundwater or surface water because the Project will meet applicable health and DEC regulations regarding the quality of groundwater and surface waters, which will require that Erosion Prevention and Sediment Control ("EPSC") measures are implemented to protect against soil erosion and prevent downgradient water quality impacts during construction. EPSC plan details are contained in the Project site plans referenced above which VHB reviewed in its assessment.

FLOODWAYS (10 V.S.A. § 6086(a)(1)(D))

The Floodways criterion under Act 250, as incorporated into the PUC's Section 248 review, takes into consideration a project's effect on both floodways and floodway fringes. The term "floodway" is defined to mean "the channel of a watercourse which is expected to flood on an average of at least once every 100 years and the adjacent land areas which are required to carry and discharge the flood of the watercourse" (10 V.S.A. § 6001(6)). The term "floodway fringe" is defined as "an area which is outside of a floodway and is flooded with an average frequency of once or more in each 100 years" (Id. § 6001(7)). A project's impacts are also considered with respect to both flood inundation and fluvial erosion hazards pursuant to *Flood Hazard Area and River Corridor Protection* ("FHARC") *Procedure* (ANR 2017b). These Procedures address both inundation risks as represented by Federal Emergency Management Agency ("FEMA")-mapped flood information and potential fluvial erosion risks associated with the geomorphic principles necessary to achieve stable fluvial processes.

For purposes of the FHARC Procedure, perennial streams are afforded a river corridor, typically consisting of the meander belt or fluvial erosion hazard area, which is defined as the lateral width of a stream corridor that may be subject to fluvial erosion from stream channel lateral migration as well as a 50-foot riparian buffer outside of this meander belt (ANR 2017b). The meander belt is typically determined by geomorphic assessments of channel bankfull width, meander centerline, confining lateral topography, channel type, and current channel adjustments, which is then translated into the channel-width-to-belt-width ratio, depending on stream sensitivity type and adjacent landform.

VHB conducted a desktop review of the available FEMA data for the Town of Fair Haven to determine if the Study Area is in a FEMA-mapped floodway or floodway fringe area (FEMA Community Panels 50021C0332D, effective on 8/28/2008) (FEMA 2008). VHB also reviewed the State of Vermont River Corridor Mapping. A small portion of the FEMA Special Flood Hazard Area associated with Mud Brook is mapped within the Study Area. There are no state-mapped River Corridors within the Study Area, however field assessments by VHB found one field-determined perennial stream with multiple segments that would be subject to the FHARC procedure. FEMA Floodplain areas, DEC-mapped river corridors, and VHB-assigned river corridors pursuant to the FHARC procedure are depicted on the Natural Resources Map in **Attachment 1**. River corridor information per individual stream segment within the Study Area is provided in the Stream Summary Table in **Attachment 3**.

The Project plans to avoid impacts to the proposed river corridor mapped onsite and thus it will not restrict or divert the flow of flood waters, endanger the health, welfare or safety of public or riparian owners during flooding, or increase the peak discharge of waters during flooding. As such, VHB finds that the Project is not anticipated to cause undue adverse effects to floodway areas.

STREAMS (10 V.S.A. § 6086(a)(1)(E))

The Streams criterion under Act 250, as incorporated into the PUC's Section 248 review, requires that projects will, when feasible, maintain natural stream channel condition, and will not endanger the health, safety, or welfare of the public or

adjoining landowners. VHB conducted detailed stream delineation and assessment work in the Study Area in and August 31, 2022, and October 10 and 19, 2023.

When applicable, stream delineations are conducted pursuant to ANR's *Guidance for Agency Act 250 and Section 248 Comments regarding Riparian Buffers* ("ANR Riparian Buffer Guidance") (ANR 2005). Stream determinations and Ordinary High Water ("OHW") width determinations follow guidance provided in the United States Army Corps of Engineers ("USACE") *Regulatory Guidance Letter: Subject- Ordinary High-Water Identification* (USACE 2005). Stream Top of Bank ("TOB") and Top of Slope ("TOS") are flagged in the field per the ANR Riparian Buffer Guidance. Stream TOB and TOS are flagged on larger channels, while the stream centerline is flagged for smaller channels. OHW limits are flagged when applicable. VHB's delineation flags are labeled with the stream ID and flag number. Stream flow regimes are preliminarily classified as ephemeral, intermittent, or perennial based on qualitative observations of instream hydrology indicators at the time of observation, as well as geomorphic characteristics, subject to professional judgment. Stream features were located in the field using GPS equipment capable of sub-meter accuracy. Riparian buffers adjacent to streams and rivers, consistent with the ANR Riparian Buffer Guidance, are designated for natural perennial and intermittent stream channels when applicable. VHB also delineates any man-made ditches that may be USACE-jurisdictional as water conveyances/wetland connections (and therefore pose design constraints), even if such ditches would not be considered streams under Act 250 criterion 1(E).

The Study Area has a total of six delineated stream segments, indicated on the Natural Resource Map in **Attachment 1**. There is one perennial stream feature, 2023-SC-1, which is an unnamed tributary to the Mud Brook (located outside of the Study Area) and previously unmapped by VHD. 2023-SC-1 is impounded for portions of the reach by beaver activity and positioned within an extensive wetland complex. The upper-most reach of 2023-SC-1 (depicted as 2023-SC-1A in Attachment 1) was field delineated in 2023 and subsequently refined in 2026 through digitization using LiDAR data and most recently available aerial imagery to account for ongoing beaver activity creating a dynamic riparian system changing stream to wetland condition since field delineations. Four intermittent streams and one ephemeral stream were also delineated by VHB, all of which eventually drain to the Mud Brook beyond the limits of the Study Area via wetlands or perennial stream 2023-SC-1. Streambed substrate across all streams is silt or clay mixed with silt, and the OHW between approximately one foot wide in the ephemeral channels to approximately two feet wide in perennial stream 2023-SC-1. Further data characterizing the stream features are provided in Summary of Delineated Streams table in **Attachment 3**. Photographs of representative conditions of on-site streams are included in **Attachment 2**.

The Project has avoided direct impacts to streams. The Project has also largely avoided indirect impacts through avoidance of on-site riparian buffers; however, the Project requires up to approximately 4,397 square feet (0.10 acre) of impact to a riparian buffer to install an access road wetland crossing between the solar array pods and a portion of existing access road widening and the overhead line extension based on a riparian buffer being recognized 50 feet beyond the upland edge of a riparian fringe wetland (Wetland 2023-1) in accordance with the ANR Riparian Buffer Guidance. The wetlands section below includes a more complete description of the access road crossing, which will require collateral federal and state wetland permit authorizations. In consideration of the avoidance and minimization measures taken as described below and with the best management practices and protective measures that will be conditions of the Project's collateral permit authorizations, VHB finds that the Project would not result in adverse impacts stream resources considered under this Act 250 criterion.

SHORELINES (10 V.S.A. § 6086(a)(1)(F))

Shorelines are defined under Act 250, and incorporated into the PUC's Section 248 review, as the land adjacent to the waters of lakes, ponds, reservoirs, and rivers. Shorelines shall include the land between the mean high-water mark and

the mean low water mark of such surface waters (10 V.S.A. § 6001(17); Argentine 2008). The Study Area was reviewed against these criteria to determine if it is located on or adjacent to any shoreline areas.

The one perennial stream, a tributary of the Mud Brook, flowing through the Study Area is not a named river and does not have an associated shoreline. Additionally, there are no lakes or ponds in the Study Area or adjacent to the Study Area. The closest waterbody that would have a shoreline under the Section 248 criterion definition is Old Marsh Pond, which is located over 1 mile north of the Study Area and is remote from Project activities.

As there are no Shorelines present, the Project will have no impact on any shoreline areas.

WETLANDS (10 V.S.A. § 6086(a)(1)(G))

The Wetlands criterion under Act 250, as incorporated into the PUC's Section 248 review, requires that a proposed project comply with the Vermont Wetland Rules ("VWR") (ANR 2023). The VWR apply to significant wetlands (Class I and Class II wetlands) and their buffers. Impacts to Class III wetlands are therefore not considered under Act 250 Criterion 1(G) but are generally reviewed under Section 248(b)(5) through the PUC's consideration of the potential for undue adverse impacts on the natural environment. Further, depending upon the specific circumstances, any jurisdictional wetland regardless of state classification may be regulated by the USACE under Section 404 of the Clean Water Act ("CWA") permit program, as well as the related DEC CWA Section 401 Water Quality Certification ("WQC") review process.

VHB's wetland delineations were made pursuant to applicable methodologies outlined in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: *Northcentral and Northeast Region Routine Determination Method* (USACE 2011). When applicable, wetlands were identified in the field with pink flagging and flags were labeled with the wetland ID and sequential flag number. Field notes were taken to record information such as potential wetland classifications, general characteristics, wetland functions and values, and unique qualities observed during the site assessment, along with other considerations relevant to support site findings. Each wetland was classified in accordance with the Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al. 1979). According to the VWR, the presence and significance of wetland functions and values are evaluated based on field notes and observations. VHB-delineated wetland features were mapped in the field using GPS equipment capable of sub-meter accuracy and are depicted on the Natural Resources Map in **Attachment 1**.

A Class II wetland is afforded a 50-foot upland buffer zone, with non-exempt impacts to either the wetland or its buffer subject to VWR jurisdiction. Class II wetlands include those presumed to be significant under categorical conditions in Section 4 of the VWR, as well as those determined to provide one or more functions at a significant level. Activities within the wetland or buffer that are not Allowed Uses or exempt under the VWR would be subject to Vermont Wetland Permit requirements, including demonstrated avoidance, minimization, and in certain cases mitigation and permit authorization by ANR. The USACE also regulates activities in jurisdictional wetlands, including dredge and fill impacts and activities within vernal pool envelopes as applicable.

VHB completed growing season wetland delineations on August 31, 2022, and October 10 and 19, 2023 and delineated two wetland complexes in the Study Area, both as Class II wetlands. Some areas of VHB's delineated wetlands intersect with mapped VSWI polygons, and other delineated wetland areas are not mapped in the VSWI. Delineated wetlands in the Study Area are predominantly emergent and forested features characterized by herbaceous (grasses, grass-like plants, and broadleaf forbs) and tree vegetative cover. The wetlands areas present on-site also contain standing and/or slow-moving open water resulting from ongoing beaver activity which has created a dynamic interaction of stream, wetland, and upland buffer and riparian areas. The landscape position of these riparian fringe wetland features is bounded largely by topographical breaks in slope up to the surrounding flatter upland topography present in the agricultural fields, and wetland hydrological connection to the Mud Brook (beyond the Study Area) and its associated

wetland complexes. VHB's field wetland delineations did not identify any potential vernal pools present within the Study Area.

Further data characterizing on-site wetlands are presented in the Summary of Delineated Wetlands table in **Attachment 3** and the USACE Wetland Determination data sheets in **Attachment 4**. Photographs of representative conditions in on-site wetlands are included in **Attachment 2**. The results of VHB's wetland delineations and classifications were reviewed and confirmed by DEC District Wetland Ecologist Zapata Courage in the field on multiple site visits between 2022 and 2025. Project communications via email with Ms. Courage confirmed this on February 19, 2026.

The Project has been designed to first avoid and then minimize activity within wetlands and associated Class II wetland buffers to the extent practicable. The arrays and its perimeter fences entirely avoid wetlands and their buffers. However, to access the southern array from the northern array, the Project proposes the construction of a wetland crossing within Class II wetland 2023-1, resulting in permanent impacts to both the wetland and its buffer. The crossing will permanently impact approximately 2,527 square feet (0.06 acre) of wetland and 2,762 square feet (0.06 acre) of wetland buffer. Anticipated Class II wetland impacts will consist of tree clearing and grubbing and earthwork for the grading and installation of the gravel access road and installation of underground electric line within the fill prism on the eastern side of the access. The wetland crossing will include the installation of a 36" high-density poly-ethylene culvert embedded to the depth of 6 inches under the access road to allow for continued hydrologic connectivity between the upgradient and downgradient portions of the wetland complex. An additional 1,635 square feet (0.04 acre) of wetland buffer impacts are proposed that would not constitute VWR Allowed Uses, including tree clearing for the installation of a portion of the overhead line extension in addition to clearing and grading for the widening of a section of the existing farm access road, that is partly within wetland buffer in close proximity to Airport Road.

The Project has incorporated multiple avoidance, minimization, and mitigation measures to address the Project's wetland and buffer impacts:

- › Considered alternative access road location to access the southern array pod through the abutting land to the west of the Project, which was not practicable as the Project lacks land control;
- › Located Project arrays and associated perimeter fence outside of wetlands and buffers, maximizing use of on-site upland areas to the extent feasible;
- › Design underwent multiple iterations to locate the wetland crossing to be in a narrow portion of the wetland complex, and in an higher drainage area position within the wetland complex to avoid the higher functioning, longer hydroperiod, and more stable portions of the complex;
- › Crossing design avoids direct stream impacts;
- › Crossing design and the use of underground electric line (instead of overhead) minimizes tree clearing within wetland and buffer;
- › The new access road designed to be only as wide as necessary for operational and emergency vehicle access utilizes an embedded and properly sized culvert design and with side slopes narrowed and steepened to minimize footprint of impact as much as feasible while still meeting engineering specifications;
- › Used an existing farm road for Project access from Airport Road, which can largely be upgraded in its existing footprint and the area of expansion limited to only the area necessary to accommodate construction use minimizes wetland buffer impact; and
- › Utilized the existing access road corridor as practicable for the overhead line extension through wetland buffer to minimize impacts from tree clearing for a separate corridor.

Furthermore, the Project proposes implementing mitigation measures for the proposed wetland impacts. Measures include buffer enhancement shrub plantings in the southern array on approximately 14,000 square feet, which is a 2:1 mitigation to impact area ratio. These enhancements include planting of upland buffer species to improve the function of the buffer as it currently consists of open agricultural land.

The Project will require a Vermont Wetland Permit for the proposed impacts. The Project will also require a federal Clean Water Act Section 404 Nationwide General Permit ("GP"), presumably to be covered via a pre-construction notification for GP #14 for linear transportation projects and stream/wetland crossings as there will be activities within delineated wetlands to construct the access road. All necessary wetland permits will be obtained before construction.

In addition to the avoidance and minimization measures described above, the Project proposes certain Best Management Practices (BMPs) to protect resources and reduce the potential for accidental or inadvertent impacts. These measures include, but are not limited to:

- › Pre-construction demarcation of resources and associated buffer areas;
- › Scheduling work during dry or frozen ground conditions whenever practicable;
- › Using low ground-pressure tracked equipment to minimize ground disturbance and soil compaction;
- › Thoroughly pressure-washing equipment, including wheels and tracks, before it enters the Project site to remove organic matter, seeds, soil, and other potential propagules or carriers of NNIS;
- › Using a wetland seed mix comprised of Vermont native species to restore wetland and buffer areas following construction; and
- › Implement EPSC measures in accordance with forthcoming construction stormwater permit.

As such, the Project will comply with the VWR and will not result in undue adverse impacts to wetlands, significant or otherwise.

RARE AND IRREPLACEABLE NATURAL AREAS (RINA) (10 V.S.A. § 6086(a)(8))

To satisfy these criteria, a project must be shown to have no undue adverse effect on Rare and Irreplaceable Natural Areas ("RINA") (10 V.S.A. § 6086(a)(8)). Additionally, a project must not destroy or significantly imperil Necessary Wildlife Habitat ("NWH") or Endangered Species (10 V.S.A. § 6086(a)(8)(A)).

RINA

Per the Vermont Fish & Wildlife Department ("FWD"), significant natural communities can be deemed RINA as part of the four-part test required by Act 250 Criterion 8. Determinations of "significance" are made by applying a combination of community ranking, current condition (age, degree of disturbance), and landscape context (size, degree of fragmentation) to determine an "Element (or Community) Occurrence Ranking". Rare (S1 and S2) natural communities can be considered significant when quality-ranked A, B, or C. Uncommon (S3) and common (S4) types require a quality rank of A or B to be considered significant. Very common (S5) types require an A-rank to be considered significant (ANR 2016b). Additional considerations for RINA include the presence of rare, threatened, or endangered ("RTE") species in these communities, as well as overall natural community associations. Typically, significant natural communities that also may be considered RINA are those rare (S1 and S2) types.

To identify potential on-site occurrences of significant natural communities, VHB searched the Vermont Natural Heritage Inventory ("NHI") database for the presence of known Element Occurrences ("EOs") of significant natural community types within and adjacent to the Study Area. A one-mile radius was used during VHB's queries of the NHI database

before field surveys in 2023 and again most recently accessed on February 2, 2026 (see Vermont Potential Rare, Threatened, and Endangered Species and Natural Communities in the Project Region and On-site Habitats Summary table, included in **Attachment 7**). In addition to the database review, VHB conducted field surveys to assess on-site natural community and vegetative assemblage types, including notes on observed representative flora, condition, characteristics and existing impacts. The data collected was then analyzed to characterize on-site community types, where present, and make recommendations of on-site communities that might be considered RINA.

The results of VHB's natural community assessment were also used to define habitat characteristics and identify target habitats for rare or sensitive plant species, if appropriate and as discussed below. Photographs of representative conditions in the on-site natural communities assessed by VHB are presented in **Attachment 2**.

Based on VHB's review of the NHI database, no known significant natural community EOs were mapped within the Study Area. Within a one-mile radius of the Study Area there are two NHI-mapped significant natural communities including: Mesic Maple-Ash-Hickory-Oak Forest (S3) and Red Maple-Black Ash Seepage Swamp (S4).

During its natural community field surveys, VHB identified and mapped one natural community type within the northern fringe of the Study Area that VHB proposes as a state-significant example, the state-rare Wet Clayplain Forest/Mesic Clayplain Forest (S2). The natural community occurrence is mostly located to the north and outside of the Study Area, while a small amount extends into the northern edge of the Study Area as depicted in **Attachment 1**. The forested community fits the description, setting, and species assemblage for both the Wet Clayplain and Mesic Clayplain Forest community types, as outlined in Wetland, Woodland, Wildland: A Guide to the Natural Communities of Vermont (Thompson et al. 2019), a reference guide for Vermont's natural community types and ecology. Because the two communities have a somewhat diffuse boundary within and proximal to the Study Area, they are mapped with a single polygon. The **Attachment 1** Natural Resources Map has also depicted a 100-foot buffer to the proposed significant natural community. The community occurrence within the Study Area exhibits a gradient between Wet and Mesic Clayplain Forest vegetation assemblages, is generally flat or gently sloping and is abutting a scrubby successional field to the west. The potential extent of the community is beyond the limits of VHB's Study Area as relevant to the Project. Occurrences of NNIS within and along the edge of the identified natural community within the Study Area are present. The forest canopy consists of basswood (*Tilia americana*), black ash (*Fraxinus nigra*), American elm (*Ulmus americana*), green ash (*Fraxinus pennsylvanica*), shagbark hickory (*Carya ovata*), bitternut hickory (*Carya cordiformis*), sugar maple (*Acer saccharum*), red maple, bur oak (*Quercus macrocarpa*), swamp white oak (*Quercus bicolor*), white pine (*Pinus strobus*), eastern hemlock, and state-uncommon (S3) butternut (*Juglans cinerea*). Shrub stratum species include muscledwood (*Carpinus caroliniana*), black cherry (*Prunus serotina*), arrowwood (*Viburnum dentatum*), gray dogwood (*Cornus racemosa*), gooseberry (*Ribes cynosbati*), and NNIS common buckthorn. Herb stratum species include dwarf raspberry (*Rubus pubescens*), Virginia creeper (*Parthenocissus quinquefolia*), sensitive fern (*Onoclea sensibilis*), clearweed (*Pilea pumila*), common cleavers (*Galium aparine*), barren strawberry (*Geum fragarioides*), white snakeroot (*Ageratina altissima*), blue-stem goldenrod (*Solidago caesia*), bigleaf aster (*Eurybia macrophylla*), enchanter's nightshade (*Circaea canadensis*), and false nettle (*Boehmeria cylindrica*).

VHB's finding of potential state significance is based on an assessment of the current condition, size, and landscape context of the occurrence which was found to represent an occurrence ranking of B. Given the occurrence ranking of B and the state ranking of rare (S2) in Vermont, the VHB-mapped Wet Clayplain Forest and Mesic Clayplain Forest community may be considered as RINA by the PUC. The Project has been designed to avoid impacts within the Wet Clayplain Forest and Mesic Clayplain Forest including its 100-foot buffer, thereby also avoiding impacts to potential RINA. At its closest approach, the Project's limits of disturbance ("LOD") is more than 170 feet from an on-site location of this natural community and so in addition to not impacting the community itself, the Project also would not result in potential indirect impacts by avoiding the 100-foot buffer.

Photographs of representative conditions in on-site natural communities are included in **Attachment 2**.

NECESSARY WILDLIFE HABITAT AND ENDANGERED SPECIES (10 V.S.A. §6086(a)(8)(A))

In Vermont, VHB understands the following to be NWH under Section 248 review: deer wintering areas, vernal pools, black bear forage habitat (beech/oak mast or wetlands), black bear travel corridors, moose overwintering areas, and in certain cases grassland bird or high-elevation bird habitats (see discussion below). If NWH is present, a Project should not unduly destroy or imperil such habitat.

Necessary Wildlife Habitat (NWH)

During its desktop reviews, VHB researched available ANR mapping for deer wintering area ("DWA"), grassland bird habitat ("GBH"), vernal pool databases, bear mast stands, and bear wetland habitat to determine if the Study Area contains mapped NWH. There are no areas of NWH previously mapped by ANR within the Study Area.

Deer Wintering Areas

The closest ANR-mapped DWA occurs over 2 miles from the Project's LOD to the north. From VHB's work on the separate Fair Haven Solar Project ("Fair Haven Solar", PUC Docket No. 24-2945), there is DWA closer than this to the Project, but VHB's field investigations to delineate and assess natural resources between 2022 and 2023 confirmed the absence of forest conditions that would be considered suitable as DWA within the Study Area. Accordingly, the Project would not result in direct or indirect impacts to DWA.

Bear Feeding Areas

VHB did not observe any bear-scarred beech (*Fagus grandifolia*) trees or wetlands that are characteristic of bear spring wetland feeding habitat during on-site investigations of forested areas within the Study Area. Accordingly, the Project site does not contain, nor will it impact any necessary black bear mast habitat (ANR 2006).

Vernal Pools

VHB field delineations for wetlands and surface waters did not identify any potential vernal pools in the forested portion of the Study Area. Based on the absence of vernal pools within the Study Area, there would be no Project impacts to vernal pool NWH.

Grassland Bird Habitat

Habitat utilized by certain grassland bird species has been evaluated for the Project consistent with reviews done for other solar energy projects under consideration by the PUC.

The Study Area contains fields that do not meet the description of grassland bird habitat characteristics pursuant to the FWD *Guidance for the Review & Mitigation of Impacts to Grassland Bird Habitat in Connection with Regulated Projects in Vermont* ("Grassland Bird Review Guidance", FWD 2021). The two isolated open fields on-site proposed for Project work are approximately 11.9 and 3.8 acres in size, which is less than 20-acre threshold for grassland bird habitat, and are vegetated with row crops of corn and soybean rather than grasses or forbs. Based on the absence of grassland bird habitat conditions within the Study Area, there would be no Project impacts to grassland bird NWH.

Impact Findings

With regard to NWH and based on the above information and findings, the Project would not result in undue adverse effects and would avoid all impacts to NWH.

Endangered Species

Endangered Species include those that are defined as, “threatened” or “endangered” on the Vermont endangered and threatened species lists, and thus protected under the Vermont Endangered Species Law (10 V.S.A. Chapter 123). Species protected under the federal Endangered Species Act are included as well. Rare species that are not listed and protected are often included under this criterion as part of a project’s potential impact to the natural environment. Taken together, they are referred to as rare, threatened, or endangered (“RTE”) species. State uncommon (S3) species are not included in this review.

To identify potential on-site occurrences of RTE species, particularly those that are federal or Vermont-listed threatened or endangered, and to assess available on-site habitat conditions relative to each, VHB searched the Vermont NHI database for the presence of known EOs of RTE species within and/or adjacent to the Study Area. A one-mile radius was used during VHB’s queries of the NHI database before field surveys in 2023 and again most recently accessed on February 2, 2026. Details for EOs identified in the database review, including species name, rarity rank and protection status, known habitat, and potential on-site habitat, are included in the Vermont Potential Rare, Threatened, and Endangered Species and Natural Communities in the Project Region and On-site Habitats Summary table (“EO Table”) in **Attachment 7**.

In this report, VHB has intentionally omitted information, reference, and description to a certain protected animal species. A complete acknowledgement of the omission and a description of the reason and circumstances of the omitted information is included in VHB’s February 2026 memorandum titled *Explanation of Omitted Natural Resource Information Memorandum* (“Omission Memo”, **Attachment 8**).

RTE Plants

Based on VHB’s review of the NHI database, there are no RTE plant EOs mapped within the Study Area. There are seven RTE plant EO records within the one-mile database query radius, as detailed in the EO Table. The results of the EO database review were used to inform target RTE species and potential RTE habitats for field survey efforts within the Study Area. VHB Botanist (C. Fenner) conducted a targeted RTE plant survey as well as a general floristic inventory for RTE plant species that may not have been previously observed and recorded in the EO database on September 27, 2023 within all portions of the Study Area not containing agricultural crop. VHB (M. Jackman, W. Durkin) conducted an additional RTE plant survey on July 9, 2024 on the northern portion of the Study Area, to support the development and advancement of Project design. VHB’s RTE plant surveys were conducted in accordance with ANR’s *Guidance for Conducting Rare, Threatened, and Endangered Plant Inventories in Connection with Section 248 Projects* (“RTE Plant Guidance” ANR 2016a) within the Study Area. Per the RTE Plant Guidance, during the surveys a list of identifiable vascular flora was collected, as were representative photographs and general observations about vegetative assemblages and/or cover types. Additionally, for each RTE population occurrence observed, documentation and data were collected for each RTE population including population size, health and vigor, reproductive status, phenology, associated flora, habitat type, and existing or ongoing disturbance or threats. The locations of RTE plants found on-site were recorded with GPS equipment capable of sub-meter accuracy and are depicted on the Natural Resources Map in **Attachment 1**. Representative photographs of RTE plants and habitats are included in **Attachment 2**.

A complete list of the identified on-site vascular plants observed during the 2023 and 2024 RTE plant surveys is included in **Attachment 4**. All plant species identified in VHB's field surveys inventory were checked against the current Rare and Uncommon Native Vascular Plants of Vermont list (ANR 2024a), as well as the Endangered and Threatened Plants of Vermont (ANR 2022a), to determine their rarity rank and any potential protections under Vermont's endangered species law and federal protections.

During its field surveys, VHB identified and mapped two RTE plant populations within the Study Area;

- › Harsh sunflower - *Helianthus strumosus* (S2S3, state-threatened); and
- › Black-seeded clearweed - *Pilea fontana* (S2S3).

The harsh sunflower ("HEST") population identified by VHB is located in the northern portion of the Study Area, in a flat and dry fallow field area, and was found to consist of over 100 individuals. The black-seeded clearweed ("PIFO") population contains an estimated thousands of stems and was observed along the fringe of a wetland complex where emergent herbaceous vegetation transitions to open water and aquatic vegetation. This area was south of the HEST population, also in the northern portion of the Study Area. The wetland complex (2023-2) where the black-seeded clearweed was observed contained evidence of beaver activity during the 2023 and 2024 growing seasons, and so it is anticipated that the habitat availability and population extent of this population may be dynamic in future years. Natural Heritage Inventory Program Reporting Forms can be provided to the FWD upon request.

The Project has been designed to avoid impacts to on-site RTE plant populations and 25-foot buffers applied to each occurrence. At the closest approach, the Project's LOD will extend to within approximately 55 feet of the PIFO population, while the HEST population is located over 200 feet away from Project activities. In addition to direct avoidance, the Project proposes BMP, previously discussed in the above Wetland criteria section, that are protective of RTE plants and minimize the chances of accidental or inadvertent potential impacts. In addition to the BMPs already stated, the Project proposes that demarcation of the Project limits before site preparation and construction will protect against inadvertent entry or impact beyond the designed and permitted limits. Demarcation measures are depicted on the Project's site plans.

Although HEST is listed as Threatened the Project has been designed to avoid impacts to it and thus is not anticipated to require authorization under a Vermont Threatened & Endangered Species Takings Permit ("Takings Permit").

The RTE plant populations that have been identified on site will be avoided by the Project's construction and operations, and so would not create an undue adverse effect as considered under Section 248.

RTE Animals

Bats

Based on VHB's query of the U.S. Fish and Wildlife Service's ("USFWS") Information for Planning and Consultation ("IPaC") project review database (**Attachment 6**) the Study Area is located within the summer range of the state and federally endangered northern long-eared bat (*Myotis septentrionalis*, or "MYSE"), the state and federally endangered Indiana bat (*Myotis sodalis*, or "MYSO"), and the state-endangered and proposed federally-endangered tricolored bat (*Perimyotis subflavus*, or "PESU"). The USFWS has designated critical habitat for MYSO, which the Study Area is not located within, while USFWS has not designated any critical habitat for MYSE or PESU. The Vermont FWD has designated Aeolus Cave, a hibernaculum located in East Dorset, Vermont, as critical habitat for MYSE (ANR 2017). Irrespective of the differences in critical habitat designations, no such critical habitat occurs for MYSE within or near the vicinity of the Study Area. Although not recognized as critical habitat by regulatory agencies, EO records of MYSE have been documented within

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a one-mile radius of the Study Area, including a mist-net capture of a pregnant female in 2007, per VHB's review of the ANR Atlas. Additionally, EO records of state-endangered little brown bat (*Myotis lucifugus*, or "MYLU") have been recorded within one-mile of the Study Area, while EO records of MYSO and PESU have not been recorded.

In publicly available materials filed with the PUC, as part of the separate Fair Haven Solar Project located adjacent to the Study Area, VHB conducted acoustic monitoring in 2022 followed by automated and qualitative analysis of calls. The 2022 surveys resulted in the detection of state-endangered MYLU, and state- and federally-endangered MYSO. These species can be acoustically ambiguous, and so species presence was conservatively assumed for both species in the evaluation of potential impacts for Fair Haven Solar and are also conservatively assumed as potentially present for the Project (based on the proximity). Methods for the passive survey for Fair Haven Solar followed the Range-wide Indiana Bat and Northern Long-eared Bat Survey Guidance (USFWS 2022), when the northern long-eared bat was still listed as federally threatened and state endangered (the northern long-eared bat was up-listed to federally endangered on March 31, 2023). The need for the acoustic survey itself was initiated using the FWD "Regulatory Review Guidance for Protecting Northern Long-eared Bats and Their Habitats" ("FWD MYSE Guidance" ANR 2017) and in coordination between Fair Haven Solar and the FWD. No new acoustic surveys were conducted for this Project.

Although there has been a record of a reproductive female MYSE, the observation was prior to 2010 and as such would not qualify as a Known, Occupied Summer Habitat per the FWD MYSE Guidance. The Project site would instead be considered as Potential Summer Habitat for this species. Accordingly, the Project would not be required to adhere to conservation measures for the proposed tree clearing. However, because there were MYLU and MYSO calls detected during the 2022 acoustic survey and to avoid impacts to RTE bats in general, the Project's tree clearing would be conducted during a time of year when bats are not actively roosting in trees and would be restricted to the timeframe between November 1 and March 31.

Based on Project design, there will be removal of approximately 4.3 acres of trees and vegetation clearing and an additional 2.32 acres of vegetation management in which trees may be cut during the Project's operational term (approximately 6.62 acres of tree cutting total). The proposed area of tree cutting represents approximately 0.5 percent of forest area within one-mile radius of the Project (total forested acreage within one mile of the Project is approximately 1,252 acres, according to ANR land cover mapping data).

The Project proposes to seasonally restrict all tree and woody vegetation clearing activities to occur between the period of November 1 and March 31 to avoid the identified bat summer roosting season as well as the active season for RTE snakes, as described below. Based on the above Project avoidance measures, the Project would have no undue adverse impacts to the potential on-site habitat for RTE bats and will also avoid the time of year during which bats could be utilizing on-site habitat.

Birds

VHB's desktop review of NHI EO records as described above identified known records of the Eastern whip-poor-will (*Antrostomus vociferus*, S2B, state-Threatened) within one-mile of the Study Area. The record includes multiple mapped polygons, the closest being approximately 975 feet and 1,200 feet to the northeast and northwest of the Study Area, respectively. The CPG for Fair Haven Solar found that there would not be impacts to Eastern whip-poor-will based on the proposed seasonal tree cutting restrictions which are also incorporated into the proposed avoidance measures for this Project.

The Eastern whip-poor-will is known to occupy dry pine-oak forests and woodlands with little to no underbrush or shrub-layer and avoid forests with dense and closed canopies (Cornell 2025). The forested area on-site where tree clearing is proposed is composed of closed and shaded canopies of eastern hemlock and red oak with understories of

common buckthorn and dense herbaceous layers of bracken fern and eastern hay-scented fern. Other more open areas where vegetative clearing is proposed is dominated by goldenrod species, American-asters, and areas of young paper birch stands. VHB does not anticipate the described habitats to be suitable for the Eastern-whip-poor-will and thus does not anticipate impacts to the species from Project activities. However, regardless of presence, the Project proposes to perform any tree or vegetative clearing outside of the breeding season (May 1 through August 31) for this species, a seasonal period that already is proposed to be avoided due to other on-site resource sensitivities. With this avoidance measure, the Project would not result in undue adverse effects to RTE bird species.

Snakes

VHB's desktop review of NHI EO records as described above identified two known records of the central ratsnake (*Pantherophis alleghaniensis*, S2 state-Threatened) and an additional protected reptile species within one-mile of the Study Area. The records include multiple mapped polygons of the central ratsnake (also known as the eastern ratsnake), the closest being approximately 500 feet and 1,600 feet to the northwest and northeast of the Study Area, respectively. No incidental observations of the central ratsnake were made within the Study Area during VHB's field investigations between 2022 and 2024.

During the natural resource investigations for Fair Haven Solar, VHB had multiple incidental observations of the central ratsnake within the Fair Haven Solar project area and, as a result, conducted consultation with FWD Biologists to discuss that project's potential impacts to RTE snakes and developed a suite of avoidance, minimization, and mitigation measures for impacts. Those measures are outlined in detail in the *Eastern Ratsnake Project Construction Mitigation Measures* memorandum for the Fair Haven Solar Project CPG (VHB; August 8, 2025). Although no central ratsnakes were observed within the Study Area for the Project, due to the proximity of the Fair Haven Solar project, and similar on-site habitat conditions between both sites, VHB proposes a similar suite of avoidance, minimization, and mitigation measures for potential impacts to RTE snakes. Those measures are as follows and include the Project obtaining authorization from FWD under a Takings Permit as well as designation of a Lead Biologist and Project Biologists for construction monitoring, which would both need approval from FWD based on qualifications. The following procedures and measures are adopted from the Fair Haven Solar CPG and associated Memorandum of Understanding ("MOU") between Fair Haven Solar and FWD:

Pre-Construction Phase:

- › Prior to commencement of site preparation and construction activities for the Project, a construction crew Foreman and/or Supervisors will meet with the Lead Biologist and/or Project Biologist(s) to review applicable endangered species protection regulations and the measures, protocols, and proper procedures to avoid, minimize, and mitigate for impacts during construction activities.
- › At the start of site preparation and construction activities and when a new contractor(s) commences work on the Project site, the Lead Biologist and/or Project Biologist(s) will provide on-site training to construction crews.
 - The training module will consist of at least the following:
 - Provide species identification, habitat, behavior, and life history information for each of the target species and then detailed information for the best management practices described above.
 - Give direction and step-by-step instructions to construction crews on the measures to take if/when a target snake species is encountered during the course of construction activities, as described below.
 - The training module will be developed by the Project's environmental consultant and will be provided to FWD for review and approval at least 30 days prior to commencement of construction.

Construction Phase:

- › The Project will not be able to limit all Construction related activities other than tree and vegetation clearing, to the known dormancy period between November 1 and April 14, and the Project understands that additional measures must be taken, as described below, and that Takings Permit authorization will be required
- › Erosion control matting used in all construction areas will meet the Vermont Agency of Transportation ("VTrans") EPSC specifications (i.e. be constructed of loosely woven, natural fibers or bonded fiber matrix) and will not contain plastic mesh or similar backing which poses trapping/entanglement hazards to snakes.
- › If construction occurs during the active season of April 15 through October 31, the Project proposes to:
 - Use on-site monitors or install exclusion fences (>40 inches high with outward lip) to prevent RTE reptiles from entering the construction area. See Exhibit PET-SDG-2, Sheet C-107 for exclusion fence details.
 - Weekly inspections of the entire snake exclusionary fence will occur, and prompt repair if any damage has occurred.
 - Install trench escape ramps (2x4 dimensional lumber and chain-link fencing) in all trenches left overnight and in trench sections not actively worked on. See Exhibit PET-SDG-2, Sheet C-107 for details on the escape ramp.
 - Leave vehicles and machinery idling for at least five minutes before moving or using them to allow RTE reptiles time to escape engine blocks.
 - Visual inspection by the construction crews of open trenches, equipment, areas of equipment access (including staging and stockpile areas and routes of travel) prior to start of construction each day.
 - Completion of a weekly monitoring reporting form following the weekly inspection as described below.
 - The Lead Biologist and/or Project Biologist(s) will develop a reporting data form template to be used weekly by a construction foreman or designated construction crew for routine monitoring. A draft of the form will be submitted for review and approval by the FWD Herpetologist at least 45 days prior to Project construction. If there are no encounters with target snake species in a given week, then monitoring forms will be stored with the Lead Biologist and included with a post-construction summary report to be submitted to FWD, described below.
 - At the end of each snake active season during which construction activities take place, a brief summary memorandum will be submitted to FWD with monitoring information, data sheets, summary tables, photographs, and a description of Project activities as applicable to CPG and/or Takings Permit conditions by the Lead Biologist and/or Project Biologist(s).

Snake Encounters, Management, and Reporting

- › If a central ratsnake (or other T&E snake) is encountered by the construction crew within the Project's construction area, then the following sequence will be implemented:
- › Person making the observation will inform the Foreman and halt work immediately within a minimum approximately 100-foot vicinity of the observed snake. Photographic documentation of the snake will be collected if feasible (if the snake is not in imminent danger).
- › The construction crew will photo-document the animal and provide observational information to the Lead Biologist including date, time, and nature of the observation (inside or outside the exclusionary fence, behavior of the snake, etc.).

- › As soon as possible after construction is halted, the Foreman will contact the Lead Biologist, and the Lead Biologist (or designated Project Biologist as contingency coverage for Lead Biologist) will either provide instruction remotely (via phone) and/or mobilize to the Project site to provide on-site support or conduct snake capture, handling, and release as needed.
 - The circumstances under which the Lead Biologist would mobilize to the Project site are varied and will be determined on an ad hoc basis and at best professional judgement. If the Lead Biologist anticipates the need for snake capture, handling, or extended human interaction, then construction will continue to be halted until instructed otherwise by the Lead Biologist after (after the snake has been safely captured and/or removed from the Project area).
- › If the snake is in motion and its direction of travel would not create a danger of injury, entrapment or death from Project activities, then the snake will be allowed to continue its natural path of travel beyond the Project work zone. If the snake is basking or inactive and is not in danger of being injured, entrapped or killed by Project activities then the Lead Biologist, Project Biologist, and/or Construction Biological Coordinator will physically position themselves between the basking snake and construction activities to allow the snake to rest and then move away on its own.
- › If the observed snake is either in danger of injury, entrapment, or death and/or does not move away in a safe direction on its own, then the Lead Biologist and/or Project Biologist(s) will be called on site (if not present already) and take the following actions:
 - Encourage the snake to move away from the Project site by spraying it with water (standard water bottle sprayer), followed by stomping feet/waving arms/making noise as additional encouragement to move away.
 - If the snake will not move, then the snake will be captured using [hands or a snake hook/ snake hook or tongs]. Snakes will be placed in a hard-sided container (e.g. a 5-gallon bucket or larger) with a secure lid and air holes. If a snake is held for longer than 10 minutes, the container will be kept in a cool, shaded location to prevent overheating.
 - If a snake is captured, the Lead Biologist will contact the FWD Herpetologist as soon as feasible, and before the release if possible. All snake handling is to be conducted by the Lead Biologist and/or as approved by the FWD Herpetologist.
 - Snakes will be released in a safe location at significant distance from the Project construction activities, and in the same direction of its natural/observed travel if possible.
 - If a snake has taken cover in the construction area and cannot be safely captured, then the work site will cease operations or the Lead Biologist or Project Biologist(s) will continuously monitor the snake as construction activities continue in a way such that the snake is not injured, entrapped, or killed or placed in imminent danger until the animal can be safely and humanely moved. If such conditions develop, then construction activities will cease until the danger is no longer present.
 - If conditions arise which are not clearly prescribed herein, the Lead Biologist or Project Biologist will contact the FWD Herpetologist for consultation

Operation Phase and Decommissioning:

- › The Project shall utilize a seed mix which is indicated on Project site plans as the "Permanent Seed Mix".
- › The seed mix will be spread in areas within the LOD that have been disturbed during Project construction, per details in the EPSC plan.

- › Provided that snake exclusion fencing is implemented around seeding areas, the initial seeding of the Project site may utilize mechanical equipment such as seed drills. Any subsequent re-seeding conducted between April 15 and October 31 that may be necessary during the operational life of the Project is proposed to be done via manual broadcast methods (such as hand broadcasting or handheld hydroseeding application) and not using mechanized equipment. Any re-seeding conducted between November 1 and April 14 is proposed to be conducted using either mechanized equipment or manual broadcast methods.
- › Unless a livestock grazing alternative is used, within the arrays, operational phase mowing shall be limited to the period of November 1 through April 14, except in the following limited circumstances:
 - If unanticipated shading of the solar array by the hayfield mix requires management during the growing season, then the Project proposes limited cutting during the period of April 15 through October 31 provided that the cutting is performed with hand-held equipment and is limited to the impacted areas, such as trimming along the front edges of the solar panels.
 - If unanticipated shading of the solar array becomes persistent so that the limited trimming described above is ineffective, and more extensive mowing between April 15 and October 31 is necessary, then the Project proposes to apply for, and obtain, Takings Permits and all vegetation management shall be performed in accordance with the Takings Permits and any renewals of the Takings Permits.
- › If at the end of the Project lifetime, the central ratsnake or the other protected reptile species is a rare or listed species in Vermont, then no later than 90 days prior to Project decommissioning, the Project proposes to provide the Agency with a detailed decommissioning plan that identifies and describes all activities that have the potential to harm the rare or listed species (e.g., use of heavy equipment and vehicles, excavation activities, etc.).
 - The decommissioning plan shall describe all measures that the Project will take to avoid, minimize, and mitigate impacts to these two species. The Project will not commence any decommissioning activities until the Agency has approved the decommissioning plan, either with or without changes, and until a Taking Permit (or Taking Permits) has been obtained if deemed necessary by the Agency. All decommissioning activities shall be performed in accordance with the approved decommissioning plan and all required Taking Permits.

The Project proposes implementing the above-described avoidance, minimization, and mitigation measures to address potential impacts to RTE snakes during construction, operation, and decommissioning. With the proposed mitigation as well as compliance with anticipated CPG and/or MOU conditions as well as anticipated conditions of the Takings Permit authorizations required for the Project, VHB finds that the Project would not result in undue adverse effects to RTE snake species.

Other Animals

VHB's desktop review of NHI EO records as described above identified one record of the state-rare bridge shiner (*Notropis bifrenatus*) mapped on-site in the western corner of the Study Area, likely associated with the waters of the Mud Brook. This animal is a fish species that occupies small creeks and ponds to large lakes and rivers with muddy substrates.

Although current Project site plan includes crossing the wetland (2023-1) associated with the riparian wetland system that the bridge shiner occurrence is mapped within, the Project anticipates no impact to this species and its habitat due to the area of wetland impact not providing suitable habitat for the species. As discussed above, the wetland area is within a dynamic, beaver-influenced system and the crossing was chosen in an area that avoids impacts to a stream channel. Additionally, the proposed minimization and mitigation measures described above and anticipated permit conditions of forthcoming VWP and Section 404 GP authorizations, including the proposed wetland buffer enhancement

plantings and the implementation of an ESPC plan will further minimize impacts to the wetland-stream system that the bridge shiner occurrence is associated with.

Conclusion

Based on VHB's assessment of the Project, with respect to the natural resources criteria listed above, VHB concludes that the Project will not have any undue adverse effects to the natural environment.

Attachments

1. Natural Resources Map
2. Representative Site Photographs
3. Summary of Delineated Wetlands and Streams
4. Partial Floristic Inventory
5. Wetland Determination Data Sheets
6. USFWS IPaC Official Species List
7. Potential Rare, Threatened, and Endangered Species and Significant Natural Communities Summary in the Project Region and On-site Habitats
8. Explanation of Omitted Natural Resource Information Memorandum

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Ref: R059030.000
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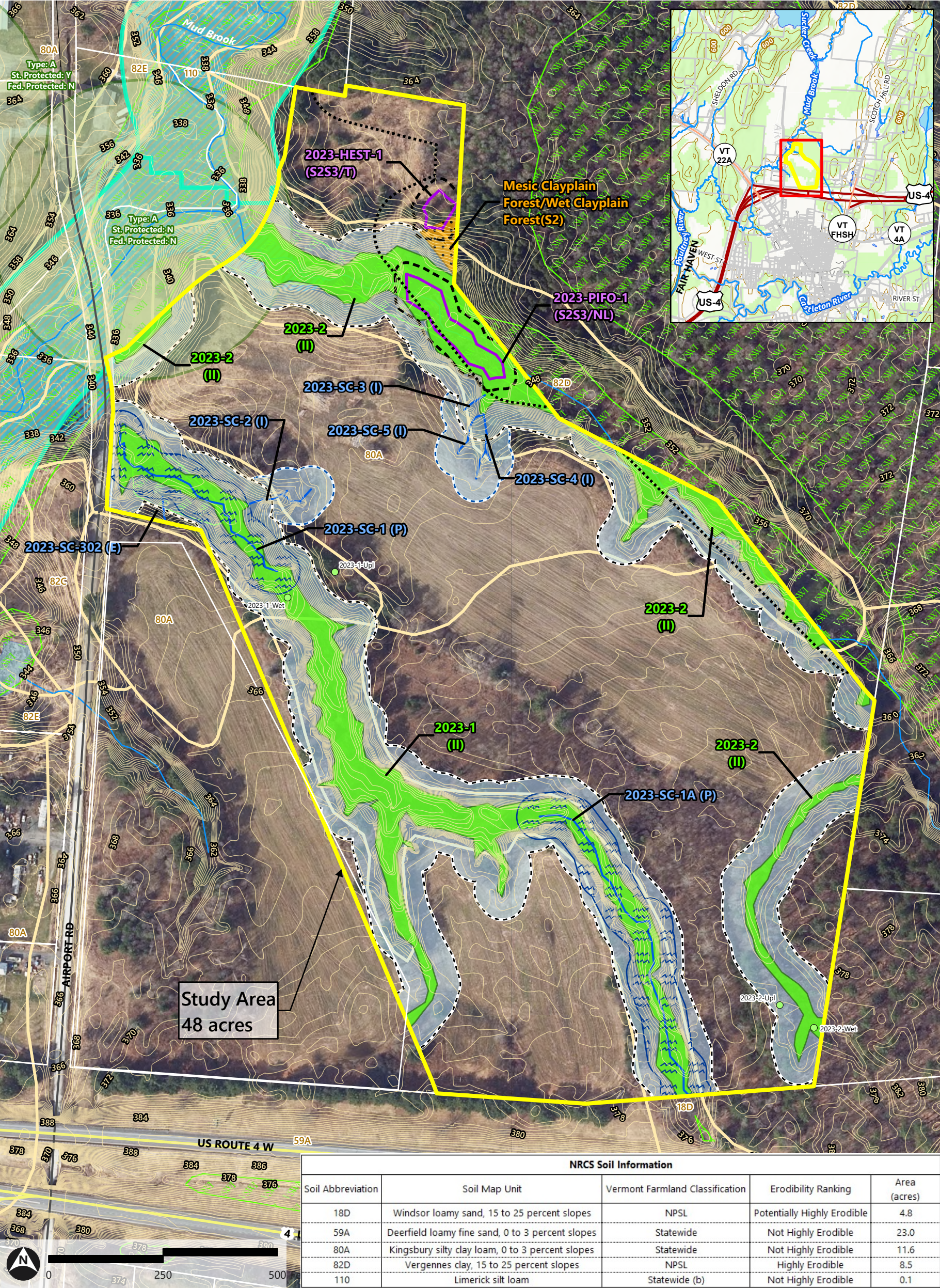
Attachment 1



Natural Resources Map

Airport RD1 VT Solar, LLC | Fair Haven, Vermont

April 08, 2026



NRCS Soil Information				
Soil Abbreviation	Soil Map Unit	Vermont Farmland Classification	Erodibility Ranking	Area (acres)
18D	Windsor loamy sand, 15 to 25 percent slopes	NPSL	Potentially Highly Erodible	4.8
59A	Deerfield loamy fine sand, 0 to 3 percent slopes	Statewide	Not Highly Erodible	23.0
80A	Kingsbury silty clay loam, 0 to 3 percent slopes	Statewide	Not Highly Erodible	11.6
82D	Vergennes clay, 15 to 25 percent slopes	NPSL	Highly Erodible	8.5
110	Limerick silt loam	Statewide (b)	Not Highly Erodible	0.1

- Study Area (Case Group/VHB) (1)

Wetland Determination Data Point (VHB) (4)

Delineated Wetlands (Class) (VHB) (5)

Class II Wetland Buffer - 50 ft (VHB) (1)

Delineated Streams (Flow Regime) (VHB) (9)

River Corridor - 50 ft (VHB) (1)

Riparian Buffer - 50 ft (VHB) (1)

RTE Plant Species (VHB) (2)

RTE Plant Species Buffer - 25 ft. (VHB) (1)

Significant Natural Communities (VHB) (1)

Significant Natural Community Buffer - 100 ft. (VHB) (2)

AE/VCE Confirmed Vernal Pools (0)

Deer Wintering Areas (ANR) (0)

NHI Significant Natural Community (ANR) (0)

Rare, Threatened, & Endangered Species (ANR) (2)

VHD Waterbody (VCGI) (2)

VHD Stream (VCGI) (6)

River Corridor (ANR) (2)

Surface Water SPA (ANR) (0)

Ground Water SPA (ANR) (0)

River Corridor (ANR) (2)

VSWI (ANR) (6)

100 Year - Flood Hazard Areas (FEMA) (1)

NRCS Soil Boundary (VCGI) (14)

Public Water Source (ANR) (0)

Private Well (ANR) (0)

Parcel Boundary (VCGI) (25)

State Boundary (VCGI) (1)

County Boundary (VCGI) (1)

Town Boundary (VCGI) (1)

Interstate Highway

US Highway

State Highway

Local Road

Other Road

Private Road

1 ft. Contour (VCGI)
- *Stream segment 2023-SC-1A was field-delineated in 2023 and subsequently refined in 2026 through digitization using LIDAR data and the most recently available aerial imagery to account for beaver activity and the dynamic nature of the stream.

NOTES:

 - Natural resources field investigations performed by VHB (C. Fenner, M. Jackman, K. Maines, B. Galligan) on and August 31, 2022; and September 27 and October 10, 19, 2023
 - Additional RTE Survey performed by M. Jackman and W. Durkin on portion of Study Area on July 9, 2024.
 - Prior studies performed by VHB on neighboring areas were completed in November 2021, March, June, July, August, September, October 2022 and June 2023.
 - Wetland boundaries and classifications were reviewed and confirmed by DEC District Wetland Ecologist Zapata Courage in the field on multiple site visits between 2022 and 2025. Communications via email with DEC (Courage) confirmed this on February 19, 2026.
- Source: Color Imagery from VCGI (2022); VCGI (Various dates), ANR (Agency of Natural Resources - Various dates); FWD (VT Fish and Wildlife Department - Various dates); VTrans (Vermont Agency of Transportation - Various dates); Case Group (2023); VHB (Vanasse Hangen Brustlin - 2022-2026).
- Path: \\vhb.com\gis\proj\Burlington\903030.00 Airport Road Solar\Airport Road Solar\Airport Road Solar.aprx (User: wdurkin, Date: 4/8/2026)

Attachment 2



© VHB

Airport RD1 VT Solar, LLC – Representative Natural Resources Photographs

PROJECT NUMBER

R059030.000

CLIENT

Airport RD1 VT Solar, LLC
76 Sugarbush Village Drive
Warren, VT 05674

LOCATION

Airport Road
Fair Haven, VT 05743



NO. 1 / 07.22.2022

DESCRIPTION

Representative view of onsite conditions of Palustrine Forested ("PFO") Categorical Class II wetland 2023-1.



NO. 2 / 07.22.2022

DESCRIPTION

Representative view of unnamed perennial stream 2023-SC-1 located within wetland 2023-1.



NO. 3 / 10.20.2023

DESCRIPTION

Representative view of intermittent stream 2023-SC-2, which drains into wetland 2023-1 and connects to stream 2023-SC-1.



NO. 4 / 10.10.2023

DESCRIPTION

Representative view of ephemeral stream 2023-SC-302 which was dry at the time of survey.



NO. 5 / 10.10.2023

DESCRIPTION

Representative view of onsite conditions of PFO Categorical Class II wetland 2023-2.



NO. 6 / 10.10.2023

DESCRIPTION

Representative view of intermittent stream 2023-SC-3, which drains into wetland 2023-2 and connects to stream 2023-SC-4.



NO. 7 / 10.10.2023

DESCRIPTION

Representative view of onsite conditions in areas of upland forest edge and agricultural use for row crops.



NO. 8 / 10.10.2023

DESCRIPTION

Representative view of onsite conditions in areas of upland open field in use at the time of survey for agriculture.



NO. 9 / 10.10.2023

DESCRIPTION

Representative view of onsite conditions in areas of upland forest dominated by evergreen tree species adjacent to wetland 2023-1 in the central-western portions of the Study Area.



NO. 10 / 07.22.2022

DESCRIPTION

Representative view of onsite conditions in areas of upland forest dominated by hardwood tree species adjacent to wetland 2023-2 in the south-eastern portions of the Study Area.



NO. 11 / 11.03.2021

DESCRIPTION

Representative view of an area of state-rare significant natural community Mesic Clayplain Forest/Wet Clayplain Forest (S2). This community was found on- and off-site and exhibited a gradient between Wet and Mesic Clayplain Forest vegetation assemblages.



NO. 12 / 09.27.2023

DESCRIPTION

Representative view of an individual state-rare/uncommon and state-threatened (S2S3, T) plant species *Helianthus strumosus* was observed onsite.



NO. 13 / 09.27.2023

DESCRIPTION

Representative view of onsite conditions and habitat where *Helianthus strumosus* was documented



NO. 14 / 09.27.2023

DESCRIPTION

Representative view of an individual state-rare/uncommon (S2S3) plant species *Pilea fontana* observed onsite.



NO. 15 / 09.27.2023

DESCRIPTION

Representative view of onsite conditions and habitat where *Pilea fontana* was documented.

Attachment 3

Summary of Delineated Wetlands

Project: Airport RD1 VT Solar, LLC

Client: Airport RD1 VT Solar, LLC

Location: Fair Haven, VT

Prepared By: VHB (W. Durkin) March 25, 2026

Delineation Date(s): August 31, 2022 (K. Maines & B. Galligan); October 10 & 19, 2023 (M. Jackman)

VHB Delineated Wetlands												
Wetland ID	Delineated Area (Square Feet) ¹	Cowardin Classification ²	Hydrology Indicator	Hydric Soil Indicator	Vermont Wetland Rules Classification						Typical Vegetation	Comments
					Contiguous to a VSWI- mapped Wetland?	Riparian Wetland Contiguous to Stream Channel? (Flow Regime) ³	VWR Section 4.6 Presumptions ⁴	VWR Section 5 Functional Criteria Presence / Significance		VHB-Proposed VWR Classification ⁶		
								Type ⁵	VHB-Proposed Significant?			
2023-1	142,803	PEM/ PFO	Surface Water (A1), Saturation (A3)	Histosol (A1)	Yes	Yes (P)	5.1 (H), 5.2 (H), 5.4 (H), 5.10 (H)	a, b	Yes	II	<i>Acer rubrum, Ilex mucronata, Onoclea sensibilis, Thelypteris palustris</i>	Linear riparian wetland topographically limited by locally steep slopes. Wetland and stream system dynamic as a result of ongoing beaver activity
2023-2	116,439	PEM/ PFO	Surface Water (A1), Saturation (A3)	Histic Epipedon (A2), Depleted Below Dark Surface (A11), Depleted Matrix (F3)	Yes	Yes (P)	5.1 (H), 5.2 (H), 5.4 (H), 5.6 (H), 5.10 (H)	a, b, e	Yes	II	<i>Acer rubrum, Fraxinus pennsylvanica, Alnus incana, Impatiens capensis</i>	Linear riparian wetland extending into upgradient "fingers". Feature is topgraphically limited by locally steep slopes. Habitat for state-rare/uncommon plant species present. Assumed riparian wetland via connection outside Study Area to Mud Brook and dynamic nature of stream due to ongoing beaver activity.

¹All wetlands field delineated per the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northeast and North Central Region. U.S. Army Corps of Engineers. 2011; Delineated Wetlands that extend outside the Study Area are denoted with **bold** text.

²Classification follows Cowardin, L.M., Carter, V., Golet, F.C. and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitat of the United States. U.S. Fish and Wildlife Service. FWS/OBD-79/31. 103pp.

³Wetland contiguity to streams as defined in the Vermont ANR (2005) *Guidance for Agency Act 250 and Section 248 Comments Regarding Riparian Buffers* and confirmed if a delineated perennial or intermittent stream channel inflows, through flows, and outflows from a delineated wetland (ephemeral channels not typically being subject to ANR Riparian Buffer Guidance). The vegetative assemblage or natural community type is used when determining riparian vegetation function. Flow regime determined based on qualitative observations of instream hydrology indicators and geomorphic characteristic and are subject to professional judgment (P=perennial, I=intermittent, E=ephemeral).

⁴VWR Section 5: Functional Criteria for Evaluating a Wetland's Significance: 5.1=Water Storage for Flood Water and Storm Runoff, 5.2=Surface and Groundwater Protection, 5.3=Fish Habitat, 5.4=Wildlife Habitat, 5.5=Exemplary Wetland Natural Community, 5.6=Rare, Threatened or Endangered Species Habitat, 5.7=Education and Research in Natural Sciences, 5.8=Recreational Value and Economic Benefits, 5.9=Open Space and Aesthetics, 5.10=Erosion Control Through Binding and Stabilizing the Soil. (P)= Present, (H)=High, (L)=Low; Correspond to observed level of functionality.

⁵Alpha-numeric codes correspond with Section 4.6 Presumptions of the 2023 Vermont Wetland Rules.

⁶VHB-Proposed VWR Classification is based on review and application of the VWR. Wetland boundaries and classifications were reviewed and confirmed by DEC District Wetland Ecologist Zapata Courage in the field on multiple site visits between 2022 and 2025. Communications via email with DEC (Courage) confirmed this on February 19, 2026.

Summary of Delineated Streams

Project: Airport RD1 VT Solar, LLC

Client: Airport RD1 VT Solar, LLC

Location: Fair Haven, VT

Prepared By: VHB (W. Durkin) March 25, 2026

Delineation Date(s): August 31, 2022 (K. Maines & B. Galligan); October 10 & 19, 2023 (M. Jackman)

VHB Delineated Streams													
Stream ID	Stream Name	Associated Wetlands	Average Ordinary High Water (OHW) Width (Feet) ¹	Dominant Substrate	Water Depth (Inches)	Bank Height (Feet)	Flow Regime (Ephemeral, Intermittent, or Perennial) ²	Watershed Size (Square Miles) ³	VWQS Classification (2022) ⁴	VHD-Mapped Stream/River (Yes/No)	ANR-Mapped River Corridor? (Yes/No) ⁵	VHB-Proposed Riparian Buffer? (Yes/No) ⁶	Comments
2023-SC-1, 2023-SC-1A	Unnamed Tributary to the Mud Brook	2023-1	2	Clay, Silt	4	2.0	Perennial	<0.5	b	No	No	Yes	Dynamic stream with segments impounded by beaver activity and converted to wetlands
2023-SC-2	Unnamed Tributary to the Mud Brook	2023-1	1	Silt	<1	1.5	Intermittent	<0.5	b	No	No	Yes	Incised channel draining from agricultural field to wetland 2023-1
2023-SC-3	Unnamed Tributary to the Mud Brook	2023-2	1	Silt	<1	2.0	Intermittent	<0.5	b	No	No	Yes	Incised channel draining from agricultural field to wetland 2023-2
2023-SC-4	Unnamed Tributary to the Mud Brook	2023-2	1	Silt	<1	2.0	Intermittent	<0.5	b	No	No	Yes	Incised channel draining from agricultural field to wetland 2023-2
2023-SC-5	Unnamed Tributary to the Mud Brook	2023-1	1	Silt	1	2.0	Intermittent	<0.5	b	No	No	Yes	Incised channel draining from agricultural field to wetland 2023-2
2023-SC-302	Unnamed Tributary to the Mud Brook	2023-1	1	Clay, Silt	-	0.5	Ephemeral	<0.5	b	No	No	No	Small channel, dry at time of survey

¹ U.S. Army Corps of Engineers. 2005. *Regulatory Guidance Letter. Subject: Ordinary High Water Mark Identification. No. 05-05.*

² Stream flow regime determined based on qualitative observations of in stream hydrology indicators and geomorphic characteristic and are subject to professional judgment.

³ Watershed size determined from Vermont Agency of Natural Resources ("ANR") Stream Alteration Regulatory Program mapping or USGS Stream Stats

⁴ From ANR. 2022. *Vermont Water Quality Standards. 303(d) Assessment of the Condition of Vermont Waters. Priority Listing of Vermont Waters. Vermont Department of Environmental Conservation.*

⁵ List of River Corridors from the ANR Atlas.

⁶ Determined through guidance from Vermont ANR (2005) *Guidance for Agency Act 250 and Section 248 Comments Regarding Riparian Buffers.*

Attachment 4



Partial Floristic Inventory

Project: Airport RD1 VT Solar, LLC

Client: Airport RD1 VT Solar, LLC

Survey Date(s): September 27, 2023 (C. Fenner) and July 9, 2024 (M. Jackman, W. Durkin)

Prepared by: VHB (W. Durkin) February 2, 2026

Scientific Name ¹	Common Name	Family	Observed Habitat		VT Rarity Rank ^{2,3}	Non-Native Invasive Species ⁴
			Upland	Wetland		
<i>Acer negundo</i> L.	boxelder	Aceraceae	X	X	-	-
<i>Acer rubrum</i> L.	red maple	Aceraceae	X	X	-	-
<i>Acer saccharum</i> Marshall	sugar maple	Aceraceae	X		-	-
<i>Achillea millefolium</i> L.	common yarrow	Asteraceae	X		-	-
<i>Aegopodium podagraria</i> L.	bishop's goutweed	Apiaceae	X		-	B
<i>Agrimonia striata</i> Michx.	roadside agrimony	Rosaceae	X		-	-
<i>Agrostis gigantea</i> Roth	redtop	Poaceae	X		-	-
<i>Ajuga reptans</i> L.	common bugle	Lamiaceae	X		-	-
<i>Alisma triviale</i> Pursh	northern water plantain	Alismataceae		X	-	-
<i>Alliaria petiolata</i> (M. Bieb.) Cavara & Grande	garlic mustard	Brassicaceae	X		-	B
<i>Alnus incana</i> (L.) Moench	gray alder	Betulaceae		X	-	-
<i>Ambrosia artemisiifolia</i> L.	annual ragweed	Asteraceae	X		-	-
<i>Amphicarpaea bracteata</i> (L.) Fernald	American hogpeanut	Fabaceae	X	X	-	-
<i>Anthriscus sylvestris</i> (L.) Hoffm.	wild chervil	Apiaceae	X		-	WL
<i>Apocynum androsaemifolium</i> L.	spreading dogbane	Apocynaceae	X		-	-
<i>Aralia nudicaulis</i> L.	wild sarsaparilla	Araliaceae	X		-	-
<i>Arisaema triphyllum</i> (L.) Schott	Jack in the pulpit	Araceae	X		-	-
<i>Asclepias incarnata</i> L.	swamp milkweed	Asclepiadaceae		X	-	-
<i>Asclepias syriaca</i> L.	common milkweed	Asclepiadaceae	X		-	-
<i>Athyrium filix-femina</i> (L.) Roth	common ladyfern	Dryopteridaceae	X		-	-
<i>Berberis thunbergii</i> DC.	Japanese barberry	Berberidaceae	X		-	B
<i>Berberis vulgaris</i> L.	common barberry	Berberidaceae	X		-	B
<i>Betula alleghaniensis</i> Britton	yellow birch	Betulaceae	X	X	-	-
<i>Betula populifolia</i> Marshall	gray birch	Betulaceae	X	X	-	-
<i>Bidens frondosa</i> L.	devil's beggartick	Asteraceae		X	-	-
<i>Boehmeria cylindrica</i> (L.) Sw.	smallspike false nettle	Urticaceae	X		-	-
<i>Calystegia sepium</i> (L.) R. Br.	hedge false bindweed	Convolvulaceae	X		-	-
<i>Carex annectens</i> (E.P. Bicknell) E.P. Bicknell	yellowfruit sedge	Cyperaceae		X	-	-
<i>Carex arctata</i> Boott ex Hook.	drooping woodland sedge	Cyperaceae	X		-	-
<i>Carex argyrantha</i> Tuck.	hay sedge	Cyperaceae	X		S3	-
<i>Carex communis</i> L.H. Bailey	fibrousroot sedge	Cyperaceae	X		-	-
<i>Carex cristatella</i> Britton	crested sedge	Cyperaceae		X	-	-
<i>Carex gracillima</i> Schwein.	graceful sedge	Cyperaceae	X		-	-
<i>Carex gynandra</i> Schwein.	nodding sedge	Cyperaceae		X	-	-
<i>Carex intumescens</i> Rudge	greater bladder sedge	Cyperaceae	X	X	-	-
<i>Carex lupulina</i> Muhl. ex Willd.	hop sedge	Cyperaceae		X	-	-
<i>Carex lurida</i> Wahlenb.	shallow sedge	Cyperaceae		X	-	-
<i>Carex pensylvanica</i> Lam.	Pennsylvania sedge	Cyperaceae	X		-	-
<i>Carex plantaginea</i> Lam.	plantainleaf sedge	Cyperaceae	X		-	-
<i>Carex retrorsa</i> Schwein.	knotsheath sedge	Cyperaceae		X	-	-
<i>Carex scoparia</i> Schkuhr ex Willd.	broom sedge	Cyperaceae		X	-	-
<i>Carex stipata</i> Muhl. ex Willd.	awlfruit sedge	Cyperaceae		X	-	-
<i>Carex tribuloides</i> Wahlenb.	blunt broom sedge	Cyperaceae		X	-	-
<i>Carpinus caroliniana</i> Walter	American hornbeam	Betulaceae	X	X	-	-
<i>Carya cordiformis</i> (Wangenh.) K. Koch	bitternut hickory	Juglandaceae	X		-	-
<i>Centaurea jacea</i> L.	brownray knapweed	Asteraceae	X		-	-
<i>Chelone glabra</i> L.	white turtlehead	Scrophulariaceae		X	-	-
<i>Cicuta bulbifera</i> L.	bulblet-bearing water hemlock	Apiaceae		X	-	-
<i>Cicuta maculata</i> L.	spotted water hemlock	Apiaceae		X	-	-
<i>Cinna latifolia</i> (Trevis. ex Goepp.) Griseb.	drooping woodreed	Poaceae		X	-	-
<i>Circaea ×intermedia</i> Ehrh. (pro sp.) [alpina × lutetiana]	enchanter's nightshade	Onagraceae	X		-	-
<i>Cirsium vulgare</i> (Savi) Ten.	bull thistle	Asteraceae	X		-	-
<i>Clematis virginiana</i> L.	devil's darning needles	Ranunculaceae	X		-	-
<i>Comptonia peregrina</i> (L.) J.M. Coult.	sweet fern	Myricaceae	X		-	-
<i>Conyza canadensis</i> (L.) Cronquist var. canadensis	Canadian horseweed	Asteraceae	X		-	-
<i>Coptis trifolia</i> (L.) Salisb.	threeleaf goldthread	Ranunculaceae		X	-	-
<i>Cornus canadensis</i> L.	bunchberry dogwood	Cornaceae	X		-	-
<i>Cornus racemosa</i> Lam.	gray dogwood	Cornaceae	X		-	-
<i>Cornus sericea</i> L.	redosier dogwood	Cornaceae		X	-	-
<i>Corylus cornuta</i> Marshall	beaked hazelnut	Betulaceae	X		-	-
<i>Cyperus strigosus</i> L.	strawcolored flatsedge	Cyperaceae	X	X	-	-
<i>Dactylis glomerata</i> L.	orchardgrass	Poaceae	X		-	-



Partial Floristic Inventory

Project: Airport RD1 VT Solar, LLC

Client: Airport RD1 VT Solar, LLC

Survey Date(s): September 27, 2023 (C. Fenner) and July 9, 2024 (M. Jackman, W. Durkin)

Prepared by: VHB (W. Durkin) February 2, 2026

Scientific Name ¹	Common Name	Family	Observed Habitat		VT Rarity Rank ^{2,3}	Non-Native Invasive Species ⁴
			Upland	Wetland		
<i>Daucus carota</i> L.	Queen Anne's lace	Apiaceae	X		-	-
<i>Dennstaedtia punctilobula</i> (Michx.) T. Moore	eastern hayscented fern	Dennstaedtiaceae	X		-	-
<i>Deparia acrostichoides</i> (Sw.) M. Kato	silver false spleenwort	Dryopteridaceae	X		-	-
<i>Dichanthelium acuminatum</i> (Sw.) Gould & C.A. Clark	tapered rosette grass	Poaceae	X		-	-
<i>Doellingeria umbellata</i> (Mill.) Nees	parasol whitetop	Asteraceae	X	X	-	-
<i>Dryopteris campyloptera</i> Clarkson	mountain woodfern	Dryopteridaceae	X		-	-
<i>Dryopteris intermedia</i> (Muhl. ex Willd.) A. Gray	intermediate woodfern	Dryopteridaceae	X		-	-
<i>Dryopteris marginalis</i> (L.) A. Gray	marginal woodfern	Dryopteridaceae	X		-	-
<i>Eleocharis obtusa</i> (Willd.) Schult.	blunt spikerush	Cyperaceae		X	-	-
<i>Epilobium ciliatum</i> Raf.	fringed willowherb	Onagraceae		X	-	-
<i>Equisetum arvense</i> L.	field horsetail	Equisetaceae	X	X	-	-
<i>Equisetum sylvaticum</i> L.	woodland horsetail	Equisetaceae		X	-	-
<i>Erechtites hieraciifolia</i> (L.) Raf. ex DC.	American burnweed	Asteraceae	X		-	-
<i>Erigeron annuus</i> (L.) Pers.	eastern daisy fleabane	Asteraceae	X		-	-
<i>Erigeron pulchellus</i> Michx.	robin's plantain	Asteraceae	X		-	-
<i>Eupatorium perfoliatum</i> L.	common boneset	Asteraceae		X	-	-
<i>Eurybia divaricata</i> (L.) G.L. Nesom	white wood aster	Asteraceae	X		-	-
<i>Euthamia graminifolia</i> (L.) Nutt.	flat-top goldentop	Asteraceae	X	X	-	-
<i>Eutrochium maculatum</i> (L.) E.E. Lamont	spotted joe pye weed	Asteraceae		X	-	-
<i>Fagus grandifolia</i> Ehrh.	American beech	Fagaceae	X		-	-
<i>Fragaria virginiana</i> Duchesne	Virginia strawberry	Rosaceae	X		-	-
<i>Frangula alnus</i> Mill.	glossy buckthorn	Rhamnaceae	X		-	B
<i>Fraxinus americana</i> L.	white ash	Oleaceae	X		-	-
<i>Fraxinus pennsylvanica</i> Marshall	green ash	Oleaceae	X	X	-	-
<i>Galium aparine</i> L.	stickywilly	Rubiaceae	X		-	-
<i>Galium palustre</i> L.	common marsh bedstraw	Rubiaceae		X	-	-
<i>Galium trifidum</i> L.	threepetal bedstraw	Rubiaceae	X		-	-
<i>Geranium bicknellii</i> Britton	Bicknell's cranesbill	Geraniaceae	X		S3	-
<i>Geum aleppicum</i> Jacq.	yellow avens	Rosaceae	X		-	-
<i>Geum canadense</i> Jacq.	white avens	Rosaceae	X	X	-	-
<i>Glyceria canadensis</i> (Michx.) Trin.	rattlesnake mannagrass	Poaceae		X	-	-
<i>Glyceria grandis</i> S. Watson	American mannagrass	Poaceae		X	-	-
<i>Glyceria melicaria</i> (Michx.) F.T. Hubbard	melic mannagrass	Poaceae		X	-	-
<i>Glycine max</i> (L.) Merr.	soybean	Fabaceae	X			
<i>Gymnocarpium dryopteris</i> (L.) Newman	western oakfern	Dryopteridaceae	X		-	-
<i>Helianthus strumosus</i> L.	paleleaf woodland sunflower	Asteraceae	X		S2S3 (T)	-
<i>Hepatica nobilis</i> Schreb. var. <i>acuta</i> (Pursh) Steyerem.	sharplobe hepatica	Ranunculaceae	X		-	-
<i>Hieracium aurantiacum</i> L.	orange hawkweed	Asteraceae	X		-	-
<i>Hypericum perforatum</i> L.	common St. Johnswort	Clusiaceae	X		-	-
<i>Hypericum punctatum</i> Lam.	spotted St. Johnswort	Clusiaceae	X		-	-
<i>Impatiens capensis</i> Meerb.	jewelweed	Balsaminaceae		X	-	-
<i>Inula helenium</i> L.	elecampane inula	Asteraceae	X		-	-
<i>Juncus effusus</i> L.	common rush	Juncaceae		X	-	-
<i>Juncus tenuis</i> Willd.	poverty rush	Juncaceae	X		-	-
<i>Lactuca biennis</i> (Moench) Fernald	tall blue lettuce	Asteraceae	X		-	-
<i>Leersia oryzoides</i> (L.) Sw.	rice cutgrass	Poaceae		X	-	-
<i>Leersia virginica</i> Willd.	whitegrass	Poaceae		X	-	-
<i>Lemna minor</i> L.	common duckweed	Lemnaceae		X	-	-
<i>Leucanthemum vulgare</i> Lam.	oxeye daisy	Asteraceae	X		-	-
<i>Lobelia inflata</i> L.	Indian-tobacco	Campanulaceae	X		-	-
<i>Lonicera morrowii</i> A. Gray	Morrow's honeysuckle	Caprifoliaceae	X		-	B
<i>Lotus corniculatus</i> L.	bird's-foot trefoil	Fabaceae	X		-	-
<i>Lycopus americanus</i> Muhl. ex W.P.C. Barton	American water horehound	Lamiaceae		X	-	-
<i>Lysimachia ciliata</i> L.	fringed loosestrife	Primulaceae		X	-	-
<i>Lysimachia quadrifolia</i> L.	whorled yellow loosestrife	Primulaceae	X		-	-
<i>Lythrum salicaria</i> L.	purple loosestrife	Lythraceae		X	-	B
<i>Maianthemum canadense</i> Desf.	Canada mayflower	Liliaceae	X		-	-
<i>Maianthemum racemosum</i> (L.) Link	feathery false lily of the valley	Liliaceae	X		-	-
<i>Mimulus ringens</i> L.	Allegheny monkeyflower	Scrophulariaceae		X	-	-
<i>Mitchella repens</i> L.	partridgeberry	Rubiaceae	X		-	-
<i>Muhlenbergia frondosa</i> (Poir.) Fernald	wirestem muhly	Poaceae		X	-	-
<i>Myosotis scorpioides</i> L.	true forget-me-not	Boraginaceae		X	-	-
<i>Oclemena acuminata</i> (Michx.) Greene	whorled wood aster	Asteraceae	X		-	-
<i>Oenothera biennis</i> L.	common evening primrose	Onagraceae	X		-	-
<i>Oenothera parviflora</i> L.	northern evening primrose	Onagraceae	X		-	-



Partial Floristic Inventory

Project: Airport RD1 VT Solar, LLC

Client: Airport RD1 VT Solar, LLC

Survey Date(s): September 27, 2023 (C. Fenner) and July 9, 2024 (M. Jackman, W. Durkin)

Prepared by: VHB (W. Durkin) February 2, 2026

Scientific Name ¹	Common Name	Family	Observed Habitat		VT Rarity Rank ^{2,3}	Non-Native Invasive Species ⁴
			Upland	Wetland		
<i>Onoclea sensibilis</i> L.	sensitive fern	Dryopteridaceae	X	X	-	-
<i>Osmunda claytoniana</i> L.	interrupted fern	Osmundaceae	X	X	-	-
<i>Ostrya virginiana</i> (Mill.) K. Koch	hophornbeam	Betulaceae	X		-	-
<i>Oxalis stricta</i> L.	common yellow oxalis	Oxalidaceae	X		-	-
<i>Packera paupercula</i> (Michx.) Á. Löve & D. Löve	balsam groundsel	Asteraceae	X		-	-
<i>Panicum capillare</i> L.	witchgrass	Poaceae	X		-	-
<i>Parthenocissus quinquefolia</i> (L.) Planch.	Virginia creeper	Vitaceae	X		-	-
<i>Pastinaca sativa</i> L.	wild parsnip	Apiaceae	X		-	WL
<i>Patis racemosa</i> (Sm.) Romasch., P.M. Peterson & R. J. Soreng	blackseed ricegrass	Poaceae	X		-	-
<i>Penstemon digitalis</i> Nutt. ex Sims	foxglove beardtongue	Scrophulariaceae	X		-	-
<i>Phalaris arundinacea</i> L.	reed canarygrass	Poaceae		X	-	WL
<i>Phleum pratense</i> L.	timothy	Poaceae	X		-	-
<i>Pilea fontana</i> (Lunell) Rydb.	black-seeded clearweed	Urticaceae		X	S2S3	-
<i>Pinus strobus</i> L.	eastern white pine	Pinaceae	X		-	-
<i>Plantago lanceolata</i> L.	narrowleaf plantain	Plantaginaceae	X		-	-
<i>Plantago major</i> L.	common plantain	Plantaginaceae	X		-	-
<i>Poa alsodes</i> A. Gray	grove bluegrass	Poaceae	X		-	-
<i>Poa palustris</i> L.	fowl bluegrass	Poaceae		X	-	-
<i>Poa pratensis</i> L.	Kentucky bluegrass	Poaceae	X		-	-
<i>Polygonum cuspidatum</i> Siebold & Zucc.	Japanese knotweed	Polygonaceae	X	X	-	B
<i>Polygonum hydropiper</i> L.	marshpepper knotweed	Polygonaceae		X	-	-
<i>Polygonum persicaria</i> L.	spotted ladysthumb	Polygonaceae		X	-	-
<i>Polygonum sagittatum</i> L.	arrowleaf tearthumb	Polygonaceae		X	-	-
<i>Polypodium virginianum</i> L.	rock polypody	Polypodiaceae	X		-	-
<i>Polystichum acrostichoides</i> (Michx.) Schott	Christmas fern	Dryopteridaceae	X		-	-
<i>Pontederia cordata</i> L.	pickerelweed	Pontederiaceae		X	-	-
<i>Populus deltoides</i> W. Bartram ex Marshall	eastern cottonwood	Salicaceae	X		-	-
<i>Populus grandidentata</i> Michx.	bigtooth aspen	Salicaceae	X		-	-
<i>Populus tremuloides</i> Michx.	quaking aspen	Salicaceae	X		-	-
<i>Potentilla simplex</i> Michx.	common cinquefoil	Rosaceae	X		-	-
<i>Prunella vulgaris</i> L.	common selfheal	Lamiaceae	X		-	-
<i>Prunus pensylvanica</i> L. f.	pin cherry	Rosaceae	X		-	-
<i>Prunus serotina</i> Ehrh.	black cherry	Rosaceae	X		-	-
<i>Pteridium aquilinum</i> (L.) Kuhn	western brackenfern	Dennstaedtiaceae	X		-	-
<i>Pyrola americana</i> Sweet	American wintergreen	Pyrolaceae	X		-	-
<i>Quercus alba</i> L.	white oak	Fagaceae	X		-	-
<i>Quercus bicolor</i> Willd.	swamp white oak	Fagaceae		X	-	-
<i>Quercus macrocarpa</i> Michx.	bur oak	Fagaceae	X		-	-
<i>Quercus rubra</i> L.	northern red oak	Fagaceae	X		-	-
<i>Ranunculus acris</i> L.	tall buttercup	Ranunculaceae	X		-	-
<i>Ranunculus pensylvanicus</i> L. f.	Pennsylvania buttercup	Ranunculaceae		X	S3	-
<i>Rhamnus cathartica</i> L.	common buckthorn	Rhamnaceae	X		-	B
<i>Rhus typhina</i> L.	staghorn sumac	Anacardiaceae	X		-	-
<i>Ribes cynosbati</i> L.	eastern prickly gooseberry	Grossulariaceae	X		-	-
<i>Rosa multiflora</i> Thunb.	multiflora rose	Rosaceae	X		-	WL
<i>Rubus allegheniensis</i> Porter	Allegheny blackberry	Rosaceae	X		-	-
<i>Rubus canadensis</i> L.	smooth blackberry	Rosaceae	X		-	-
<i>Rubus flagellaris</i> Willd.	northern dewberry	Rosaceae	X		-	-
<i>Rubus occidentalis</i> L.	black raspberry	Rosaceae	X		-	-
<i>Rubus pubescens</i> Raf.	dwarf red blackberry	Rosaceae		X	-	-
<i>Rudbeckia hirta</i> L.	blackeyed Susan	Asteraceae	X		-	-
<i>Rumex crispus</i> L.	curly dock	Polygonaceae	X		-	-
<i>Rumex obtusifolius</i> L.	bitter dock	Polygonaceae	X		-	-
<i>Salix bebbiana</i> Sarg.	Bebb willow	Salicaceae		X	-	-
<i>Sambucus nigra</i> L.	black elderberry	Caprifoliaceae	X		-	-
<i>Scirpus atrovirens</i> Willd.	green bulrush	Cyperaceae		X	-	-
<i>Scirpus cyperinus</i> (L.) Kunth	woolgrass	Cyperaceae		X	-	-
<i>Scutellaria lateriflora</i> L.	blue skullcap	Lamiaceae		X	-	-
<i>Setaria faberi</i> Herm.	Japanese bristleglass	Poaceae	X		-	-
<i>Solanum dulcamara</i> L.	climbing nightshade	Solanaceae	X		-	-
<i>Solidago bicolor</i> L.	white goldenrod	Asteraceae	X		-	-
<i>Solidago caesia</i> L.	wreath goldenrod	Asteraceae	X		-	-
<i>Solidago canadensis</i> L.	Canada goldenrod	Asteraceae	X		-	-
<i>Solidago gigantea</i> Aiton	giant goldenrod	Asteraceae	X	X	-	-
<i>Solidago rugosa</i> Mill.	wrinkleleaf goldenrod	Asteraceae	X		-	-
<i>Sparganium americanum</i> Nutt.	American bur-reed	Sparganiaceae		X	-	-
<i>Sparganium emersum</i> Rehmann	European bur-reed	Sparganiaceae		X	-	-
<i>Spiraea alba</i> Du Roi	white meadowsweet	Rosaceae	X	X	-	-
<i>Spiraea tomentosa</i> L.	steeplebush	Rosaceae		X	-	-
<i>Stellaria graminea</i> L.	grass-like starwort	Caryophyllaceae	X		-	-
<i>Streptopus amplexifolius</i> (L.) DC.	claspleaf twistedstalk	Liliaceae	X		-	-
<i>Symphyotrichum cordifolium</i> (L.) G.L. Nesom	common blue wood aster	Asteraceae	X		-	-

Partial Floristic Inventory
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Prepared by: VHB (W. Durkin) February 2, 2026

Scientific Name ¹	Common Name	Family	Observed Habitat		VT Rarity Rank ^{2,3}	Non-Native Invasive Species ⁴
			Upland	Wetland		
<i>Symphyotrichum lanceolatum</i> (Willd.) G.L. Nesom	white panicle aster	Asteraceae	X		-	-
<i>Symphyotrichum lateriflorum</i> (L.) Á. Löve & D. Löve	calico aster	Asteraceae	X		-	-
<i>Symphyotrichum novae-angliae</i> (L.) G.L. Nesom	New England aster	Asteraceae	X	X	-	-
<i>Symphyotrichum novi-belgii</i> (L.) G.L. Nesom	New York aster	Asteraceae	X	X	-	-
<i>Symphyotrichum pilosum</i> (Willd.) G.L. Nesom	hairy white oldfield aster	Asteraceae	X		-	-
<i>Symphyotrichum puniceum</i> (L.) Á. Löve & D. Löve	purplestem aster	Asteraceae		X	-	-
<i>Tanacetum vulgare</i> L.	common tansy	Asteraceae	X		-	-
<i>Taraxacum officinale</i> F.H. Wigg.	common dandelion	Asteraceae	X		-	-
<i>Thalictrum pubescens</i> Pursh	king of the meadow	Ranunculaceae		X	-	-
<i>Thelypteris noveboracensis</i> (L.) Nieuwl.	New York fern	Thelypteridaceae	X		-	-
<i>Tiarella cordifolia</i> L.	heartleaf foamflower	Saxifragaceae	X	X	-	-
<i>Tilia americana</i> L.	American basswood	Tiliaceae	X		-	-
<i>Toxicodendron rydbergii</i> (Small ex Rydb.) Greene	western poison ivy	Anacardiaceae	X		-	-
<i>Tradescantia virginiana</i> L.	Virginia spiderwort	Commelinaceae	X		-	-
<i>Trientalis borealis</i> Raf.	starflower	Primulaceae	X		-	-
<i>Trifolium aureum</i> Pollich	golden clover	Fabaceae	X		-	-
<i>Trifolium pratense</i> L.	red clover	Fabaceae	X		-	-
<i>Trifolium repens</i> L.	white clover	Fabaceae	X		-	-
<i>Tsuga canadensis</i> (L.) Carrière	eastern hemlock	Pinaceae	X		-	-
<i>Typha latifolia</i> L.	broadleaf cattail	Typhaceae		X	-	-
<i>Ulmus americana</i> L.	American elm	Ulmaceae	X	X	-	-
<i>Urtica dioica</i> L.	stinging nettle	Urticaceae	X		-	-
<i>Vaccinium angustifolium</i> Aiton	lowbush blueberry	Ericaceae	X		-	-
<i>Veratrum viride</i> Aiton	green false hellebore	Liliaceae		X	-	-
<i>Verbena hastata</i> L.	swamp verbena	Verbenaceae		X	-	-
<i>Verbena urticifolia</i> L.	white vervain	Verbenaceae	X		-	-
<i>Veronica officinalis</i> L.	common gypsyweed	Scrophulariaceae	X		-	-
<i>Viburnum acerifolium</i> L.	mapleleaf viburnum	Caprifoliaceae	X		-	-
<i>Viburnum dentatum</i> L.	Arrowwood	Caprifoliaceae		X	-	-
<i>Viburnum lentago</i> L.	nannyberry	Caprifoliaceae		X	-	-
<i>Viburnum opulus</i> L.	European cranberrybush	Caprifoliaceae	X	X	-	-
<i>Vicia cracca</i> L.	bird vetch	Fabaceae	X		-	-
<i>Viola macloskeyi</i> Lloyd ssp. <i>pallens</i> (Banks ex Ging) M.S. Baker	smooth white violet	Violaceae	X		-	-
<i>Vitis riparia</i> Michx.	riverbank grape	Vitaceae	X		-	-
<i>Waldsteinia fragarioides</i> (Michx.) Tratt.	Appalachian barren strawberry	Rosaceae	X		-	-
<i>Zizia aurea</i> (L.) W.D.J. Koch	golden zizia	Apiaceae	X		-	-

X - Plant species was found in this community type.

¹ Nomenclature follows USDA-NRCS PLANTS database (plants.usda.gov/) (2025).

² The Vermont Rarity Rank from the "Rare and Uncommon Native Vascular Plants of Vermont - Vermont Natural Heritage Inventory - Vermont Fish & Wildlife Department", version dated June 10, 2024.

³ The Vermont Rarity Rank from the "Endangered and Threatened Plants of Vermont - Vermont Natural Heritage Inventory - Vermont Fish & Wildlife Department", version dated February 10, 2022.

⁴ **Class B Noxious Weeds Species (B)** from: Quarantine #3- Noxious Weeds (2012).
Watch List Species (WL) from: Vermont Invasive Exotic Plant Committee. 2017. Quarantine and Watch List Update.

Attachment 5



Project Site:	Airport RD1 VT Solar, LLC	City/County:	Rutland	Sampl. Date:	10/19/2023
Applicant/Owner:	Airport RD1 VT Solar, LLC	State:	VT	Sampling Point:	2023-1-Upl
Investigator(s):	VHB (M. Jackman)	Section, Township, Range:	Fair Haven		
Landform (hillslope, terrace, etc.):	Riser	Local relief (concave, convex, none):	Concave	Slope (%):	0-5
Subregion (LRR or MLRA):	LRR R	Lat:	43.6096975	Long:	-73.2707163
Soil Map Unit:	Vergennes clay, 15 to 25 percent slopes (82D)			Datum:	NAD 83
				NWI Class:	-
Are climatic/hydrologic conditions on the site typical for this time of year?		No	(If no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrology significantly disturbed?		No	Normal Circumstances? Yes		
Are Vegetation, Soil, or Hydrology naturally problematic?		No	(If needed, explain any answers in Remarks.)		

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	<u>NO</u>	Is This Sample Area Within a Wetland? <u>NO</u>
Hydric Soil Present?	<u>NO</u>	
Wetland Hydrology Present?	<u>NO</u>	
Remarks: Upland forest		

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☐ Saturation (A3)	☐ Marl Deposits (B13)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Saturation Visible on Aerial (C9)	
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Stunted or Stressed Plants (D1)	
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Geomorphic Position (D2)	
☐ Inundation Visible on Aerial (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave Surface (B8)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present? ☐	Depth (inches):	Wetland Hydrology Present? ☐	NO
Water Table Present? ☐	Depth (inches):		
Saturation Present? ☐	Depth (inches):		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
0.07" of rain in 5 days prior in Rutland, VT (NWS 2026); PDSI 3.31 (Very Moist Spell) for week ending 10/21/2023			
Remarks:			
Atypical climatic conditions and elevated moisture levels were present during the field surveys and were considered during wetland delineation. However the wetland was strongly controlled by topography, resulting in low variability in delineation outcomes.			

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (in)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 2/3	100%	-	-	-	-	SILT LOAM	
4-7	10YR 4/6	100%	-	-	-	-	SILT LOAM	
7-15	2.5Y 5/2	95%	10YR 5/6	5%	C	M	SILT LOAM	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:			Indicators for Problematic Hydric Soils ³ :		
☐ Histosol (A1)	☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)			
☐ Histic Epipedon (A2)	☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)	☐ Coast Prairie Redox (A16) (LRR K, L, R)			
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1) (LRR K, L)	☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)			
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)	☐ Dark Surface (S9) (LRR K, L, M)			
☐ Stratified Layers (A5)	☐ Depleted Matrix (F3)	☐ Polyvalue Below Surface (S8) (LRR K, L)			
☐ Depleted Below Dark Surface (A11)	☐ Redox Dark Surface (F6)	☐ Thin Dark Surface (S9) (LRR K, L)			
☐ Thick Dark Surface (A12)	☐ Depleted Dark Surface (F7)	☐ Iron-Manganese Masses (F12) (LRR K, L, R)			
☐ Sandy Mucky Mineral (S1)	☐ Redox Depressions (F8)	☐ Piedmont Floodplain Soils (F19) (MLRA 149B)			
☐ Sandy Gleyed Matrix (S4)		☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)			
☐ Sandy Redox (S5)		☐ Red Parent Material (F21)			
☐ Stripped Matrix (S6)		☐ Very Shallow Dark Surface (TF12)			
☐ Dark Surface (S7) (LRR R, MLRA 149B)		☐ Other (Explain in Remarks)			

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: NA Depth (inches):	Hydric Soil Present? NO
Remarks:	

VEGETATION - Use scientific names of plants.

Sampling Point: 2023-1-Upl

Tree Stratum	(Plot size: <u>30' RAD</u>)	Absolute % Cover	Dom. Sp?	Indicator Status
1.	<u>Pinus strobus</u>	<u>32</u>	<u>X</u>	<u>FACU</u>
2.	<u>Tsuga canadensis</u>	<u>15</u>	<u>X</u>	<u>FACU</u>
3.	<u>Fagus grandifolia</u>	<u>3</u>		<u>FACU</u>
4.	<u>Abies balsamea</u>	<u>3</u>		<u>FAC</u>
5.	<u>Populus tremula</u>	<u>3</u>		<u>FAC</u>
6.	<u>Acer rubrum</u>	<u>3</u>		<u>FAC</u>
7.				
		<u>59</u>	= Total Cover	
Sapling Stratum	(Plot size: <u>15' RAD</u>)			
1.	<u>Fagus grandifolia</u>	<u>32</u>	<u>X</u>	<u>FACU</u>
2.	<u>Ostrya virginiana</u>	<u>15</u>	<u>X</u>	<u>FACU</u>
3.	<u>Pinus strobus</u>	<u>15</u>	<u>X</u>	<u>FACU</u>
4.	<u>Acer rubrum</u>	<u>15</u>	<u>X</u>	<u>FAC</u>
5.	<u>Betula alleghaniensis</u>	<u>3</u>		<u>FAC</u>
6.				
7.				
		<u>80</u>	= Total Cover	
Shrub Stratum	(Plot size: <u>15' RAD</u>)			
1.	<u>Cornus racemosa</u>	<u>32</u>	<u>X</u>	<u>FAC</u>
2.	<u>Viburnum acerifolium</u>	<u>32</u>	<u>X</u>	<u>UPL</u>
3.	<u>Lonicera morrowii</u>	<u>15</u>		<u>FACU</u>
4.	<u>Prunus serotina</u>	<u>3</u>		<u>FACU</u>
5.				
6.				
7.				
		<u>82</u>	= Total Cover	
Herb Stratum	(Plot size: <u>5' RAD</u>)			
1.	<u>Dennstaedtia punctilobula</u>	<u>32</u>	<u>X</u>	<u>UPL</u>
2.	<u>Pteridium aquilinum</u>	<u>32</u>	<u>X</u>	<u>FACU</u>
3.	<u>Rubus idaeus</u>	<u>15</u>		<u>FACU</u>
4.	<u>Solidago canadensis</u>	<u>3</u>		<u>FACU</u>
5.	<u>Potentilla simplex</u>	<u>3</u>		<u>FACU</u>
6.				
7.				
8.				
9.				
10.				
11.				
12.				
		<u>85</u>	= Total Cover	
Woody Vines	(Plot size: <u>15' RAD</u>)			
1.				
2.				
3.				
4.				
5.				
			= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: 2 (A)

Dominants across all strata: 10 (B)

% Dominants OBL, FACW, FAC: 20% (A/B)

Prevalence Index Worksheet:

Total % Cover of:	Multiply By:
OBL <u> </u>	x 1 = <u> </u>
FACW <u> </u>	x 2 = <u> </u>
FAC <u>59</u>	x 3 = <u>177</u>
FACU <u>183</u>	x 4 = <u>732</u>
UPL <u>64</u>	x 5 = <u>320</u>
Sum: <u>306</u> (A)	<u>1229</u> (B)

Prevalence Index = B/A = 4.02

Hydrophytic Vegetation Indicators:

 Dominance Test is > 50%

 Prevalence Index is <= 3.0

 Problematic Hydrophytic Vegetation¹ (explain)

 Rapid Test for Hydrophytic Vegetation

 Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? NO

Remarks: (If observed, list morphological adaptations below).



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

2023-1-Wet

Project Site:	<u>Airport RD1 VT Solar, LLC</u>	City/County:	<u>Rutland</u>	Samp. Date:	<u>10/19/2023</u>
Applicant/Owner:	<u>Airport RD1 VT Solar, LLC</u>	State:	<u>VT</u>	Sampling Point:	<u>2023-1-Wet</u>
Investigator(s):	<u>VHB (M. Jackman)</u>	Section, Township, Range:	<u>Fair Haven</u>		
Landform (hillslope, terrace, etc.):	<u>Floodplain</u>	Local relief (concave, convex, none):	<u>Concave</u>	Slope (%):	<u>0-5</u>
Subregion (LRR or MLRA):	<u>LRR R</u>	Lat:	<u>43.6095421</u>	Long:	<u>-73.2711064</u>
Soil Map Unit:	<u>Vergennes clay, 15 to 25 percent slopes (82D)</u>	Datum:	<u>NAD 83</u>	NWI Class:	<u>PEM/PFO</u>
Are climatic/hydrologic conditions on the site typical for this time of year? <u>No</u> (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology significantly disturbed? <u>No</u> Normal Circumstances? <u>Yes</u>					
Are Vegetation, Soil, or Hydrology naturally problematic? <u>No</u> (If needed, explain any answers in Remarks.)					

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	<u>YES</u>	Is This Sample Area Within a Wetland? <u>YES</u>
Hydric Soil Present?	<u>YES</u>	
Wetland Hydrology Present?	<u>YES</u>	
Remarks: Linear riparian wetland topographically limited by locally steep slopes		

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	☒ Water-Stained Leaves (B9)	☒ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☐ Saturation (A3)	☐ Marl Deposits (B13)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Saturation Visible on Aerial (C9)	
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Stunted or Stressed Plants (D1)	
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☒ Geomorphic Position (D2)	
☐ Inundation Visible on Aerial (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave Surface (B8)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present?	<u>X</u>	Depth (inches):	<u>3</u>
Water Table Present?	<u></u>	Depth (inches):	<u></u>
Saturation Present?	<u></u>	Depth (inches):	<u></u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: 0.07" of rain in 5 days prior in Rutland, VT (NWS 2026); PDSI 3.31 (Very Moist Spell) for week ending 10/21/2023			
Remarks: Atypical climatic conditions and elevated moisture levels were present during the field surveys and were considered during wetland delineation. However the wetland was strongly controlled by topography, resulting in low variability in delineation outcomes.			

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-15+	NA	100.00%	-	-	-	-	MUCK	Organic muck layer
-								
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.							² Location: PL=Pore Lining, M=Matrix.	
Hydric Soil Indicators:			Indicators for Problematic Hydric Soils ³ :					
☒ Histosol (A1)			☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)			☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)		
☐ Histic Epipedon (A2)			☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)			☐ Coast Prairie Redox (A16) (LRR K, L, R)		
☐ Black Histic (A3)			☐ Loamy Mucky Mineral (F1) (LRR K, L)			☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
☐ Hydrogen Sulfide (A4)			☐ Loamy Gleyed Matrix (F2)			☐ Dark Surface (S9) (LRR K, L, M)		
☐ Stratified Layers (A5)			☐ Depleted Matrix (F3)			☐ Polyvalue Below Surface (S8) (LRR K, L)		
☐ Depleted Below Dark Surface (A11)			☐ Redox Dark Surface (F6)			☐ Thin Dark Surface (S9) (LRR K, L)		
☐ Thick Dark Surface (A12)			☐ Depleted Dark Surface (F7)			☐ Iron-Manganese Masses (F12) (LRR K, L, R)		
☐ Sandy Mucky Mineral (S1)			☐ Redox Depressions (F8)			☐ Piedmont Floodplain Soils (F19) (MLRA 149B)		
☐ Sandy Gleyed Matrix (S4)						☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
☐ Sandy Redox (S5)						☐ Red Parent Material (F21)		
☐ Stripped Matrix (S6)						☐ Very Shallow Dark Surface (TF12)		
☐ Dark Surface (S7) (LRR R, MLRA 149B)						☐ Other (Explain in Remarks)		
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.								
Restrictive Layer (if observed):								
Type: <u>NA</u>								
Depth (inches): <u></u>							Hydric Soil Present? <u>YES</u>	
Remarks:								

VEGETATION - Use scientific names of plants.



Sampling Point: 2023-1-Wet

Tree Stratum	(Plot size: <u>30' RAD</u>)	Absolute % Cover	Dom. Sp?	Indicator Status
1.	<u>Acer rubrum</u>	<u>15</u>	<u>X</u>	<u>FAC</u>
2.	<u>Betula alleghaniensis</u>	<u>15</u>	<u>X</u>	<u>FAC</u>
3.	<u>Acer negundo</u>	<u>15</u>	<u>X</u>	<u>FAC</u>
4.				
5.				
6.				
7.				
		<u>45</u>	= Total Cover	
Sapling Stratum	(Plot size: <u>15' RAD</u>)			
1.				
2.				
3.				
4.				
5.				
6.				
7.				
			= Total Cover	
Shrub Stratum	(Plot size: <u>15' RAD</u>)			
1.	<u>Alnus incana</u>	<u>13</u>	<u>X</u>	<u>FACW</u>
2.	<u>Cornus amomum</u>	<u>3</u>		<u>FACW</u>
3.				
4.				
5.				
6.				
7.				
		<u>16</u>	= Total Cover	
Herb Stratum	(Plot size: <u>5' RAD</u>)			
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
			= Total Cover	
Woody Vines	(Plot size: <u>15' RAD</u>)			
1.				
2.				
3.				
4.				
5.				
			= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: 4 (A)

Dominants across all strata: 4 (B)

% Dominants OBL, FACW, FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:	
OBL	<u> </u>	x 1 =	<u> </u>
FACW	<u>16</u>	x 2 =	<u>32</u>
FAC	<u>45</u>	x 3 =	<u>135</u>
FACU	<u> </u>	x 4 =	<u> </u>
UPL	<u> </u>	x 5 =	<u> </u>
Sum:	<u>61</u> (A)		<u>167</u> (B)
Prevalence Index = B/A =		<u>2.74</u>	

Hydrophytic Vegetation Indicators:

X Dominance Test is > 50%

X Prevalence Index is <= 3.0

 Problematic Hydrophytic Vegetation¹ (explain)

 Rapid Test for Hydrophytic Vegetation

 Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? YES

Remarks: (If observed, list morphological adaptations below).



Project Site:	Airport RD1 VT Solar, LLC	City/County:	Rutland	Samp. Date:	10/10/2023
Applicant/Owner:	Airport RD1 VT Solar, LLC	State:	VT	Sampling Point:	2023-2-Upl
Investigator(s):	VHB (M. Jackman)	Section, Township, Range:	Fair Haven		
Landform (hillslope, terrace, etc.):	Riser	Local relief (concave, convex, none):	Concave	Slope (%):	0-5
Subregion (LRR or MLRA):	LRR R	Lat:	43.607129	Long:	-73.267011
Soil Map Unit:	Deerfield loamy fine sand, 0 to 3 percent slopes (59A)			Datum:	NAD 83
				NWI Class:	-
Are climatic/hydrologic conditions on the site typical for this time of year?		No	(If no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrology significantly disturbed?		No	Normal Circumstances?		Yes
Are Vegetation, Soil, or Hydrology naturally problematic?		No	(If needed, explain any answers in Remarks.)		

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	<u>NO</u>	Is This Sample Area Within a Wetland? <u>NO</u>
Hydric Soil Present?	<u>NO</u>	
Wetland Hydrology Present?	<u>NO</u>	
Remarks: Upland forest		

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☐ Saturation (A3)	☐ Marl Deposits (B13)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Saturation Visible on Aerial (C9)	
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Stunted or Stressed Plants (D1)	
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Geomorphic Position (D2)	
☐ Inundation Visible on Aerial (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave Surface (B8)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present? ☐	Depth (inches):	Wetland Hydrology Present? ☒ NO	
Water Table Present? ☐	Depth (inches):		
Saturation Present? ☐	Depth (inches):		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
1.15" of rain in 5 days prior in Rutland, VT (NWS 2026); PDSI 3.35 (Very Moist Spell) for week ending 10/14/2023			
Remarks:			
Atypical climatic conditions and elevated moisture levels were present during the field surveys and were considered during wetland delineation. However the wetland was strongly controlled by topography, resulting in low variability in delineation outcomes.			

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth	Matrix		Redox Features				
(in)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture
0-3	5Y 2.5/1	100.00%	-	-	-	-	LOAMY FINE SAND
3-8	2.5Y 5/3	95.00%	2.5Y 5/6	5.00%	C	M	LOAMY FINE SAND
8-16	2.5Y 5/6	100.00%	-	-	-	-	LOAMY FINE SAND

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:			Indicators for Problematic Hydric Soils ³ :		
☐ Histosol (A1)	☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)			
☐ Histic Epipedon (A2)	☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)	☐ Coast Prairie Redox (A16) (LRR K, L, R)			
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1) (LRR K, L)	☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)			
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)	☐ Dark Surface (S9) (LRR K, L, M)			
☐ Stratified Layers (A5)	☐ Depleted Matrix (F3)	☐ Polyvalue Below Surface (S8) (LRR K, L)			
☐ Depleted Below Dark Surface (A11)	☐ Redox Dark Surface (F6)	☐ Thin Dark Surface (S9) (LRR K, L)			
☐ Thick Dark Surface (A12)	☐ Depleted Dark Surface (F7)	☐ Iron-Manganese Masses (F12) (LRR K, L, R)			
☐ Sandy Mucky Mineral (S1)	☐ Redox Depressions (F8)	☐ Piedmont Floodplain Soils (F19) (MLRA 149B)			
☐ Sandy Gleyed Matrix (S4)		☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)			
☐ Sandy Redox (S5)		☐ Red Parent Material (F21)			
☐ Stripped Matrix (S6)		☐ Very Shallow Dark Surface (TF12)			
☐ Dark Surface (S7) (LRR R, MLRA 149B)		☐ Other (Explain in Remarks)			

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: <u>NA</u> Depth (inches): _____	Hydric Soil Present? <u>NO</u>
--	--------------------------------

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: 2023-2-Upl

Tree Stratum	(Plot size: <u>30' RAD</u>)	Absolute % Cover	Dom. Sp?	Indicator Status
1.	<u>Pinus strobus</u>	<u>32</u>	<u>X</u>	<u>FACU</u>
2.	<u>Acer rubrum</u>	<u>32</u>	<u>X</u>	<u>FAC</u>
3.	<u>Populus tremuloides</u>	<u>15</u>		<u>FACU</u>
4.	<u>Fagus grandifolia</u>	<u>3</u>		<u>FACU</u>
5.	<u>Prunus serotina</u>	<u>3</u>		<u>FACU</u>
6.				
7.				
		<u>85</u>	= Total Cover	
Sapling Stratum	(Plot size: <u>15' RAD</u>)	Absolute % Cover	Dom. Sp?	Indicator Status
1.	<u>Acer rubrum</u>	<u>32</u>	<u>X</u>	<u>FAC</u>
2.	<u>Fagus grandifolia</u>	<u>3</u>		<u>FACU</u>
3.	<u>Pinus strobus</u>	<u>3</u>		<u>FACU</u>
4.				
5.				
6.				
7.				
		<u>38</u>	= Total Cover	
Shrub Stratum	(Plot size: <u>15' RAD</u>)	Absolute % Cover	Dom. Sp?	Indicator Status
1.	<u>Corylus cornuta</u>	<u>32</u>	<u>X</u>	<u>FACU</u>
2.				
3.				
4.				
5.				
6.				
7.				
		<u>32</u>	= Total Cover	
Herb Stratum	(Plot size: <u>5' RAD</u>)	Absolute % Cover	Dom. Sp?	Indicator Status
1.	<u>Osmunda claytoniana</u>	<u>32</u>	<u>X</u>	<u>FAC</u>
2.	<u>Pteridium aquilinum</u>	<u>15</u>	<u>X</u>	<u>FACU</u>
3.	<u>Chamaesyce maculata</u>	<u>15</u>	<u>X</u>	<u>FACU</u>
4.	<u>Vaccinium angustifolium</u>	<u>3</u>		<u>FACU</u>
5.	<u>Trientalis borealis</u>	<u>3</u>		<u>FAC</u>
6.				
7.				
8.				
9.				
10.				
11.				
12.				
		<u>68</u>	= Total Cover	
Woody Vines	(Plot size: <u>15' RAD</u>)	Absolute % Cover	Dom. Sp?	Indicator Status
1.				
2.				
3.				
4.				
5.				
			= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: 3 (A)

Dominants across all strata: 7 (B)

% Dominants OBL, FACW, FAC: 43% (A/B)

Prevalence Index Worksheet:

Total % Cover of:	Multiply By:
OBL <u> </u>	x 1 = <u> </u>
FACW <u> </u>	x 2 = <u> </u>
FAC <u>99</u>	x 3 = <u>297</u>
FACU <u>124</u>	x 4 = <u>496</u>
UPL <u> </u>	x 5 = <u> </u>
Sum: <u>223</u> (A)	<u>793</u> (B)

Prevalence Index = B/A = 3.56

Hydrophytic Vegetation Indicators:

 Dominance Test is > 50%

 Prevalence Index is <= 3.0

 Problematic Hydrophytic Vegetation¹ (explain)

 Rapid Test for Hydrophytic Vegetation

 Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? NO

Remarks: (If observed, list morphological adaptations below).



Project Site:	Airport RD1 VT Solar, LLC	City/County:	Rutland	Samp. Date:	10/10/2023
Applicant/Owner:	Airport RD1 VT Solar, LLC	State:	VT	Sampling Point:	2023-2-Wet
Investigator(s):	VHB (M. Jackman)	Section, Township, Range:	Fair Haven		
Landform (hillslope, terrace, etc.):	Floodplain	Local relief (concave, convex, none):	Concave	Slope (%):	0-5
Subregion (LRR or MLRA):	LRR R	Lat:	43.606995	Long:	-73.266728
Soil Map Unit:	Deerfield loamy fine sand, 0 to 3 percent slopes (59A)			Datum:	NAD 83
				NWI Class:	PEM/PFO
Are climatic/hydrologic conditions on the site typical for this time of year?		No		(If no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology significantly disturbed?		No		Normal Circumstances? Yes	
Are Vegetation, Soil, or Hydrology naturally problematic?		No		(If needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	<u>YES</u>	Is This Sample Area Within a Wetland? <u>YES</u>
Hydric Soil Present?	<u>YES</u>	
Wetland Hydrology Present?	<u>YES</u>	
Remarks: Linear riparian wetland topographically limited by locally steep slopes		

HYDROLOGY

Wetland Hydrology Indicators:				Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)				Surface Soil Cracks (B6)	
☒	Surface Water (A1)	☒	Water-Stained Leaves (B9)	☒	Drainage Patterns (B10)
☐	High Water Table (A2)	☐	Aquatic Fauna (B13)	☐	Moss Trim Lines (B16)
☐	Saturation (A3)	☐	Marl Deposits (B13)	☐	Dry-Season Water Table (C2)
☐	Water Marks (B1)	☐	Hydrogen Sulfide Odor (C1)	☐	Crayfish Burrows (C8)
☐	Sediment Deposits (B2)	☐	Oxidized Rhizospheres on Living Roots (C3)	☒	Saturation Visible on Aerial (C9)
☐	Drift Deposits (B3)	☐	Presence of Reduced Iron (C4)	☐	Stunted or Stressed Plants (D1)
☐	Algal Mat or Crust (B4)	☐	Recent Iron Reduction in Tilled Soils (C6)	☒	Geomorphic Position (D2)
☐	Iron Deposits (B5)	☐	Thin Muck Surface (C7)	☐	Shallow Aquitard (D3)
☐	Inundation Visible on Aerial (B7)	☐	Other (Explain in Remarks)	☐	Microtopographic Relief (D4)
☐	Sparsely Vegetated Concave Surface (B8)	☐		☐	FAC-Neutral Test (D5)
Field Observations:					
Surface Water Present? <u> X </u>		Depth (inches): <u> 3 </u>		Wetland Hydrology Present? <u> YES </u>	
Water Table Present? <u> </u>		Depth (inches): <u> </u>			
Saturation Present? <u> </u>		Depth (inches): <u> </u>			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
1.15" of rain in 5 days prior in Rutland, VT (NWS 2026); PDSI 3.35 (Very Moist Spell) for week ending 10/14/2023					
Remarks:					
Atypical climatic conditions and elevated moisture levels were present during the field surveys and were considered during wetland delineation. However the wetland was strongly controlled by topography, resulting in low variability in delineation outcomes.					

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix		Redox Features					
(in)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
8-0	NA	100.00%	-	-	-	-	MUCK	Organic muck layer
0-7+	2.5Y 4/1	90.00%	10YR 4/4	10.00%	C	M	SILT LOAM	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.							² Location: PL=Pore Lining, M=Matrix.	
Hydric Soil Indicators:							Indicators for Problematic Hydric Soils ³ :	
	Histosol (A1)		Polyvalue Below Surface (S8) (LRR R,				2 cm Muck (A10) (LRR K, L, MLRA 149B)	
X	Histic Epipedon (A2)		MLRA 149B)				Coast Prairie Redox (A16) (LRR K, L, R)	
	Black Histic (A3)		Thin Dark Surface (S9) (LRR R, MLRA 149B)				5 cm Mucky Peat or Peat (S3) (LRR K, L, R)	
	Hydrogen Sulfide (A4)		Loamy Mucky Mineral (F1) (LRR K, L)				Dark Surface (S9) (LRR K, L, M)	
	Stratified Layers (A5)		Loamy Gleyed Matrix (F2)				Polyvalue Below Surface (S8) (LRR K, L)	
	Depleted Below Dark Surface (A11)	X	Depleted Matrix (F3)				Thin Dark Surface (S9) (LRR K, L)	
	Thick Dark Surface (A12)		Redox Dark Surface (F6)				Iron-Manganese Masses (F12) (LRR K, L, R)	
	Sandy Mucky Mineral (S1)	X	Depleted Dark Surface (F7)				Piedmont Floodplain Soils (F19) (MLRA 149B)	
	Sandy Gleyed Matrix (S4)		Redox Depressions (F8)				Mesic Spodic (TA6) (MLRA 144A, 145, 149B)	
	Sandy Redox (S5)						Red Parent Material (F21)	
	Stripped Matrix (S6)						Very Shallow Dark Surface (TF12)	
	Dark Surface (S7) (LRR R, MLRA 149B)						Other (Explain in Remarks)	
							³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	
Restrictive Layer (if observed):								
Type: NA							Hydric Soil Present? YES	
Depth (inches):								
Remarks:								

VEGETATION - Use scientific names of plants.

Sampling Point: 2023-2-Wet

Tree Stratum	(Plot size: <u>30' RAD</u>)	Absolute % Cover	Dom. Sp?	Indicator Status
1.	Acer rubrum	15	X	FAC
2.				
3.				
4.				
5.				
6.				
7.				
		15	= Total Cover	
Sapling Stratum	(Plot size: <u>15' RAD</u>)	Absolute % Cover	Dom. Sp?	Indicator Status
1.	Carpinus caroliniana	3	X	FAC
2.				
3.				
4.				
5.				
6.				
7.				
		3	= Total Cover	
Shrub Stratum	(Plot size: <u>15' RAD</u>)	Absolute % Cover	Dom. Sp?	Indicator Status
1.	Nemopanthus mucronatus	15	X	OBL
2.				
3.				
4.				
5.				
6.				
7.				
		15	= Total Cover	
Herb Stratum	(Plot size: <u>5' RAD</u>)	Absolute % Cover	Dom. Sp?	Indicator Status
1.	Typha latifolia	32	X	OBL
2.	Galium palustre	15	X	OBL
3.	Onoclea sensibilis	15	X	FACW
4.	Lycopus americanus	15	X	OBL
5.	Thelypteris palustris	3		FACW
6.	Bidens frondosa	3		FACW
7.				
8.				
9.				
10.				
11.				
12.				
		83	= Total Cover	
Woody Vines	(Plot size: <u>15' RAD</u>)	Absolute % Cover	Dom. Sp?	Indicator Status
1.				
2.				
3.				
4.				
5.				
			= Total Cover	

Dominance Test Worksheet:

Dominants OBL, FACW, FAC: 7 (A)

Dominants across all strata: 7 (B)

% Dominants OBL, FACW, FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply By:	
OBL	<u>77</u>	x 1 =	<u>77</u>
FACW	<u>21</u>	x 2 =	<u>42</u>
FAC	<u>18</u>	x 3 =	<u>54</u>
FACU		x 4 =	
UPL		x 5 =	
Sum:	<u>116</u> (A)		<u>173</u> (B)

Prevalence Index = B/A = 1.49

Hydrophytic Vegetation Indicators:

☒ Dominance Test is > 50%

☒ Prevalence Index is <= 3.0

☐ Problematic Hydrophytic Vegetation¹ (explain)

☐ Rapid Test for Hydrophytic Vegetation

☐ Morphological Adaptations

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

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? YES

Remarks: (If observed, list morphological adaptations below).

Attachment 6

	Species	Common Name	Type	State Rank	Global Rank	Vermont Status	Federal Status	EO last Observed	Habitat Description ¹	Occurrence Description ²	Optimal Survey Time ³	EO Mapped within Study Area?	Potential for Habitat to Occur Onsite?	Targeted Survey Recommended?	
														(yes/no)	Comments
Element Occurrences- 1 Mile Radius	<i>Antrostomus vociferus</i>	Eastern Whip-poor-will	Animal	S2B	G5	T	-	2020	Dry deciduous or mixed-wood forests with little or no herbaceous layer, often in close proximity to open non-forested areas	Large field tract and adjacent dry open forest	N/A	No	Yes	No	Species is state listed. Project will likely use time of year tree clearing for avoidance of potential habitat impact
	<i>Carya glabra</i>	Pignut Hickory	Plant	S2	G5	-	-	8/7/1990	Forests, ridges or ledges, woodlands	Dry woods dominated by chestnut, red and white oak, white pine	April-August	No	Yes	No	Not a listed species; EO not mapped within Study Area
	<i>Crataegus dodgei</i>	Dodge's Hawthorn	Plant	S1	G4	-	-	8/6/2024	Thickets, edges of forests and swamps, fields, roadsides, fencerows	Ledgy knoll, and under adjacent powerlines	March-April	No	Yes	No	Not a listed species; EO not mapped within Study Area
	<i>Galium pilosum</i> var. <i>pilosum</i>	Hairy Bedstraw	Plant	S1	G5T5	-	-	8/6/2024	Woodlands, ridges, fields, clearings	Plants in xeric loam/gravel over ledge	May-September	No	Yes	No	Not a listed species; EO not mapped within Study Area
	<i>Houstonia longifolia</i>	Longleaf Bluet	Plant	S2	G5	-	-	7/25/2014	Open, sandy or rocky places; heath balds; deciduous forests	Dry oak woods along ridgetop	June	No	Yes	No	Not a listed species; EO not mapped within Study Area
	<i>Hypericum ascyron</i>	Great St. John's-wort	Plant	S2	G4	T	-	10/10/2025	Moist habitats: stream banks, thickets, rich woods	Large varied swamp in the floodplain of a river	June-October	No	Yes	Yes	Species is state listed and has potential for habitat on site
	<i>Myotis lucifugus</i>	Little Brown Bat	Animal	S1	G3	E	-	5/9/2007	Roosts in buildings, caves, trees, rocks, and wood piles	Mist-netted along road	N/A	No	Yes	No	Species is state listed and has potential for habitat on site. Project will use time of year tree clearing for avoidance
	<i>Myotis septentrionalis</i>	Northern Long-eared Bat	Animal	S1	G1G2	E	E	5/9/2007	Roosts in buildings, caves, and trees	Mist-netted along road	N/A	No	Yes	No	Species is state listed and has potential for habitat on site. Project will use time of year tree clearing for avoidance
	<i>Notropis bifrenatus</i>	Bridle Shiner	Animal	S1	G3	-	-	6/26/1989	Small creeks and ponds to large lakes and rivers, tidal and slightly brackish water, with muddy substrate.	Slow stream with muddy, silty substrate	N/A	Yes	Yes	No	No work will take place within the species' obligate habitat
	<i>Pantherophis alleghaniensis</i>	Central Ratsnake	Animal	S2	G4G5	T	-	2023	Farmlands, hardwood forests, forested wetlands, thickets and fields adjacent to forests,	At edge of mowed field and on road	N/A	No	Yes	No	Species is state listed and has potential for habitat on site. Project will use time of year tree clearing and implement other avoidance and minimization measures

	Species	Common Name	Type	State Rank	Global Rank	Vermont Status	Federal Status	EO last Observed	Habitat Description ¹	Occurrence Description ²	Optimal Survey Time ³	EO Mapped within Study Area?	Potential for Habitat to Occur Onsite?	Targeted Survey Recommended?	
														(yes/no)	Comments
Element Occurrences- 1 Mile Radius	<i>Symphyotrichum laeve</i> var. <i>laeve</i>	Smooth Blue Aster	Plant	S2S3	G5T5	-	-	8/6/2024	Dry open areas such as forest edges and woodlands	Dry field margins and ledge outcrops, apple orchards, rich mesic forests	August-October	No	Yes	No	Not a listed species; EO not mapped within Study Area
	<i>Viola palmata</i> var. <i>triloba</i>	Early Blue Violet	Plant	S2	G5T5	-	-	8/8/1990	Man-made or disturbed habitats, forests, meadows and fields, talus and rocky slopes, woodlands	Dry oak woods ridgetops	July-August	No	Yes	No	Not a listed species; EO not mapped within Study Area
	Mesic Maple-Ash-Hickory-Oak Forest		Natural Community	S3	GNR	-	-	2012	Hardwood forest with sugar maple, white ash, and red maple	Green Dump Hills	N/A	No	Yes	No	EO not mapped within Study Area
	Red Maple-Black Ash Seepage Swamp		Natural Community	S4	GNR	-	-	1990	Lower elevations and warmer climates throughout the state; characterized by multiple groundwater discharge points as source of hydrology	Playground Swamp	N/A	No	Yes	No	EO not mapped within Study Area

¹**Potential sources for habitat description listed below**
Ahles, Harry E. and Magee, Dennis W. 2007. *Flora of the Northeast* . A Manual of the Vascular Flora of New England and Adjacent New York
Animal Diversity Web. Retrieved from: <https://animaldiversity.org/accounts>
Cornell Lab of Ornithology Bird Guide. Retrieved from: <https://www.allaboutbirds.org/guide/>
Gilman, Arthur V. 2015. *New Flora of Vermont* . The New York Botanical Garden.
Gleason, Henry A. and Cronquist, Arthur. 1991. *Manual of Vascular Plants of Northeast United States and Adjacent Canada*. The New York Botanical Garden.
Haines, Arthur. 2011. *Flora Novae Angliae* . New England Wildflower Society/Yale University Press, New Haven, CT . 973 Pp.
Langdon, Richard W., Ferguson, Mark T. and Cox, Kenneth M. 2006. *Fishes of Vermont* . Vermont Department of Fish and Wildlife.
Newcomb, Lawrence. 1977. *Newcomb's Wildflower Guide* . Little, Brown, and Company, Boston
Northern Prairie Wildlife Research Center. <http://www.npwrc.usgs.gov/resource/distr/insects/tigb/usa/49.htm>
Seymour, Frank Conkling. 1982. *The Flora of New England* . 2d ed. Phytologia Memoirs 5. Plainfield, NJ: Harold N. Moldenke and Alma L. Moldenke. 611 p. [7604]
Thompson, Elizabeth H., Sorenson, Eric R. and Zaino, Robert J. 2019. *Wetland, Woodland, Wildland: A Guide to the Natural Communities of Vermont* . Vermont Department of Fish and Wildlife and The Nature Conservancy.
Vermont Natural Resources Atlas, Accessed February 3, 2026. Element Occurrence Reports

²**Sources for occurrence description listed below:**
Vermont Natural Heritage Inventory - Vermont Fish & Wildlife Department - Element Occurrence Reports. Database reviewed on February 3, 2026.

³**Flowering Time:** Spring (April-May), Summer (June-July), Late Summer (August-September), Fall (October-November)

Attachment 7



United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 3301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104



In Reply Refer To:
Project Code: 2026-0044480
Project Name: Airport RD1 VT Solar, LLC

04/08/2026 12:38:26 UTC

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:

Updated 4/12/2023 - Please review this letter each time you request an Official Species List, we will continue to update it with additional information and links to websites may change.

About Official Species Lists

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. Federal and non-Federal project proponents have responsibilities under the Act to consider effects on listed species.

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 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. 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 by returning to an existing project's page in IPaC.

Endangered Species Act Project Review

Please visit the “**New England Field Office Endangered Species Project Review and Consultation**” website for step-by-step instructions on how to consider effects on listed

species and prepare and submit a project review package if necessary:

<https://www.fws.gov/office/new-england-ecological-services/endangered-species-project-review>

NOTE Please do not use the **Consultation Package Builder** tool in IPaC except in specific situations following coordination with our office. Please follow the project review guidance on our website instead and reference your **Project Code** in all correspondence.

Northern Long-eared Bat - (Updated 4/12/2023) The Service published a final rule to reclassify the northern long-eared bat (NLEB) as endangered on November 30, 2022. The final rule went into effect on March 31, 2023. You may utilize the **Northern Long-eared Bat Rangewide Determination Key** available in IPaC. More information about this Determination Key and the Interim Consultation Framework are available on the northern long-eared bat species page:

<https://www.fws.gov/species/northern-long-eared-bat-myotis-septentrionalis>

For projects that previously utilized the 4(d) Determination Key, the change in the species' status may trigger the need to re-initiate consultation for any actions that are not completed and for which the Federal action agency retains discretion once the new listing determination becomes effective. If your project was not completed by March 31, 2023, and may result in incidental take of NLEB, please reach out to our office at newengland@fws.gov to see if reinitiation is necessary.

Additional Info About Section 7 of the Act

Under section 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to determine whether projects may affect threatened and endangered species and/or designated critical habitat. If a Federal agency, or its non-Federal representative, determines 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 Federal agency also may need to consider proposed species and proposed critical habitat in the consultation. 50 CFR 402.14(c)(1) specifies the information required for consultation under the Act regardless of the format of the evaluation. 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/service/section-7-consultations>

In addition to consultation requirements under Section 7(a)(2) of the ESA, please note that under sections 7(a)(1) 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. Please contact NEFO if you would like more information.

Candidate species that appear on the enclosed species list have no current protections under the ESA. The species' occurrence on an official species list does not convey a requirement to

consider impacts to this species as you would a proposed, threatened, or endangered species. The ESA does not provide for interagency consultations on candidate species under section 7, however, the Service recommends that all project proponents incorporate measures into projects to benefit candidate species and their habitats wherever possible.

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 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/program/migratory-bird-permit>

<https://www.fws.gov/library/collections/bald-and-golden-eagle-management>

Please feel free to contact us at **newengland@fws.gov** with your **Project Code** in the subject line if you need more information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat.

Attachment(s): Official Species List

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 England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 3301-5094
(603) 223-2541

PROJECT SUMMARY

Project Code: 2026-0044480

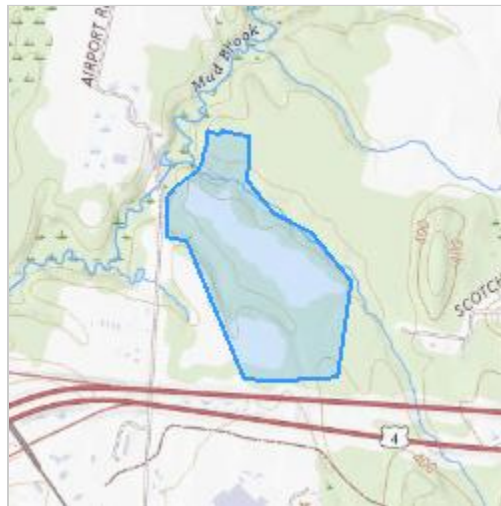
Project Name: Airport RD1 VT Solar, LLC

Project Type: Power Gen - Solar

Project Description: The Project is a 4.975 MW ground-mounted solar electric generation facility comprised of two arrays, each with multiple rows of solar panels mounted on fixed-tilt ground-mounted racks within a tract of land in the Town of Fair Haven, Vermont

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@43.6094759,-73.2691937819319,14z>



Counties: Rutland County, Vermont

ENDANGERED SPECIES ACT SPECIES

There is a total of 4 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
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

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: Private Entity
Name: Will Durkin
Address: 20 Winnoski Falls Way
Address Line 2: Suite 400B
City: Winooski
State: VT
Zip: 05404
Email: wdurkin@vhb.com
Phone: 8023915579

LEAD AGENCY CONTACT INFORMATION

Lead Agency: State of Vermont

Attachment 8



Memorandum

To: Airport RD1 VT Solar, LLC
Project File

Date: April 6, 2026

Project #: R059030.000

From: Carla Fenner, PWS CWS,
Team Lead – Ecological Services

Re: Explanation of Omitted Natural Resource Information Memorandum

Description of Omitted Natural Resource Data

VHB has conducted work on behalf of Airport RD1 VT Solar, LLC in support of the planned Airport RD1 VT Solar, LLC Project ("Project") including natural resource assessment, delineation, agency consultation, data collection/analysis and reporting.

During the Fair Haven Solar Project (CPG #24-2945-PET), a similar solar project in close proximity to the Airport RD1 VT Solar, LLC Project, FWD provided comment via electronic mail to VHB regarding the need to protect species- and location-specific information pertaining to a state-endangered animal species. VHB was instructed by the Department of Fish and Wildlife ("FWD") to omit all data, descriptions, mapping, and other information or reference to the species and its potential presence at or in the vicinity of the Fair Haven Solar Project.

To meet FWD's request, information associated with the endangered animal has been omitted from all of VHB's pre-filed testimony and exhibits (including the natural resources reporting, technical data, mapping, etc.) that will be filed in a forthcoming petition to the Public Utility Commission ("PUC") for a Certificate of Public Good ("CPG") for the Airport RD1 VT Solar, LLC Project.

It is VHB's understanding that the ANR and FWD staff who will be responsible for reviewing the CPG petition materials are informed of the omitted information, and accordingly would not consider the omission in the Project's CPG petition materials to be an incomplete assessment of natural resources, including consideration of Project impacts under Criterion 8(A) (§ 6086 (a)(8)(A) for the Airport RD1 VT Solar, LCC Project.