

Winchendon Conservation Commission

109 Front Street



WINCHENDON Wetland Protection Regulations

By-Law Waiver Request Requirement Information

Date: 1/17/2024

Applicant/Owner: ZP Battery DevCo, LLC

Map/Lot: 2D2/11 Project Address: 256 Murdock Avenue, Winchendon

In order request a waiver, the following provides a guidance for required information (attach additional text, plans, photos, or graphics if needed):

Project purpose and need: The purpose of the project is to construct a standalone solar energy storage system (ESS) along the rear portion of the property. These systems are intended to work in conjunction with other renewable energy sources to store excess energy when energy generation outweighs energy consumption. This system stores the excess energy and when necessary, releases the energy when electrical demand is high. This allows for a more efficient application and allocation of renewable energy sources within the electrical grid.

What specific action(s) is the Waiver being asked for? A waiver is requested to perform work within the 50-foot Undisturbed Natural Vegetation Zone (50-foot Zone). Pre-existing activities do not meet the current setbacks and are nonconforming. Work will include the clearing of a portion of an isolated wooded area that is bifurcated from the bordering vegetated wetland by an existing 20-foot-wide gravel access road utilized to access the rear of the existing building. The area of work will be part of the ESS System. The existing contiguous upland forest will be maintained, and the northern portion expanded as part of the buffer zone restoration proposed to compensate for the portion of the project area within the 50-foot Zone.

How is the action(s) in the public interest, necessary to avoid a taking, necessary to prevent a safety hazard or water dependent? _____

This project is to the benefit of the public interest by providing improved accessibility of renewable energy to the residents of Winchendon by providing the ability to store excess energy and provide it back to the electrical grid when necessary. In addition, the project area is surrounded by existing developments (i.e., building and gravel parking and access areas) and does not directly abut the bordering vegetated wetland. To compensate for the taking, a Buffer Zone Restoration Area is proposed within a previously disturbed portion of the site. This restoration will expand the contiguous forested buffer zone to bordering vegetated wetland. By permitting this work the additional contiguous forested area would provide greater benefit to the surrounding bordering vegetated wetland, including the off-site potential vernal pool.

How is the action(s) consistent with the intent and purpose of the Bylaw? _____

This action is consistent with the intent and purpose of the Bylaw by providing an improved 50-foot vegetated buffer zone. Based on the reading of the bylaw it is the intent to preserve a vegetated natural buffer zone to maintain the integrity of the resource area. As the proposed area of taking is heavily disturbed and the vegetation to be cleared is currently bifurcated by a roadway system, the vegetation does not provide significant protection to the bordering vegetated wetland. By providing the restoration area in excess of the alteration area and locating it in a previously degraded area, a larger contiguous vegetated natural buffer zone is being created. As such in portions of the property that lack a vegetated buffer a greater buffer is being created to better serve the intent of the Bylaw.

Existing and proposed site conditions (ie, impervious, lawn & disturbed areas) (square feet; show on plan): _____

The area of the proposed taking within the 50-foot buffer zone is 3,880± square feet (s.f.) and comprised of trees, brush, and grass. The area of restoration is currently being utilized as a wood processing area and is void of vegetation. The ground surface is comprised of asphalt grindings and other surfacing materials.

Under proposed conditions a 1,648±sf portion of the taking will be converted to gravel and concrete with the remaining area (i.e., 2,232 sf) established as a vegetated surface (i.e., lawn). The proposed buffer zone restoration area is 3,725± s.f. and will be restored with loam and planted with a mix of native shrubs and trees as prepared by LEC Environmental Consultants, Inc.

Existing and proposed distances of land uses from wetland resource areas (show on plan):

The existing setback near the edge of existing gravel road is 4-feet and the far side of gravel drive is 24-feet. Proposed Setback from Taking area is 24-feet. Existing gravel road to remain intact.

Analysis of less environmentally damaging practicable alternative: _____

Due to the space constraints on the property including the existing building access as well as emergency vehicle access, the ability to relocate the ESS further from the wetland is not practicable. It is important to note that the I property is predominantly surrounded by wetland areas and the existing development is located entirely within the buffer zone. The proposed project has been designed in order to mitigate the overall scope within the 50-foot buffer zone by locating the work in the bifurcated vegetated area. In addition, the restoration area provides

a significant improvement to the overall function of the buffer zone and thereby protection of the wetland by expanding the contiguous forested buffer zone.

Proposed short term and long-term protection of wetland resource areas: _____

Short Term protections include straw wattle and silt fence along limit of disturbance. Long term protections include landscaped areas with stormwater management features.

Is the site in a Zone I, II or III (groundwater) area: No Applicable

Are there critical, unique or sensitive resource areas in the area (ie, NHESP mapped habitat, vernal pools, unusual wetland types, cold water fisheries, outstanding resource waters, Core Habitat, ACEC , etc); show on plan: _____

There are no other critical, unique or sensitive resource areas located within the project scope. According to MassGIS, no DFW Coldwater fisheries resources, NHESP mapped habitats, or certified vernal pools are mapped at or adjacent to the site. In addition, according to the 2021 Biomap, there are no Core Habitats or Critical Natural Landscape features on or proximate to the site (refer to NOI Application, Appendix A). A potential vernal pool is located within the open water feature northeast of the site. To the extent the water feature functions as a vernal pool, the buffer zone restoration area located within the northern portion of the site will improve upland wildlife habitat.

Other factors for consideration: _____

Signature: Tom [Signature] **Project:** _____