

March 17, 2022

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**NDDB DETERMINATION NUMBER:** 202201925

**Project:** Installation of ground mounted solar array; COLLINS AEROSPACE SOLAR, HAMILTON AVE., WINDSOR LOCKS, CT

**Expiration:** March 17, 2024

I have reviewed Natural Diversity Data Base (NDDB) maps and files regarding this project. According to our records, there are State-listed species (RCSA Sec. 26-306) documented nearby and should be considered when planning the proposed project.

**Watershed for:**

**Eastern pondmussel (*Ligumia nasuta*)- State Special Concern**

Freshwater mussels are aquatic animals that play an important role in our environment. These sedentary organisms live in sediments on the bottom of streams and rivers and provide a service to all by filtering water and removing bacteria and phytoplankton. It is because they are filter-feeding animals that they are very susceptible to sediments and pollutants in the water in which they live. The greatest diversity of freshwater mussels in the world is found in Eastern North America. Freshwater mussels are one of the most endangered groups of animals with almost three-quarters of the native mussels in North America imperiled. The disappearance of freshwater mussels is a reliable indicator of chronic water pollution. The following considerations will help protect and benefit these species.

- Adhere strictly to water quality standards at your project site.
- Pay special attention and address specific monitoring targets for sediment, water temperature, copper, and ammonia (TAN).
- No increase in impervious surface within 100ft buffer of waterways.
- Turf grass and impervious surface should be minimized in the surrounding watershed.
- Reconnect waterways that are disconnected by perched, undersized, or shallow stream culverts.
- Ensure precautions are taken to avoid direct kill of freshwater mussels during any instream construction or modification.
- Employ precautions to prevent the introduction and spread of invasive plants and bivalves.

**Construction protection measures:**

- Use best management practices available to control stormwater runoff from this site both during construction and after construction: Qualified Environmental Inspector(s) shall be on-site daily during the duration of construction, weekly during stabilization, and within 24 hours of storm events with 0.5 inches of precipitation or more to inspect sedimentation and erosion controls to ensure that they continue to

function as intended. Stock-piled soils should be situated at least 10 feet from the watercourse and within sedimentation and erosion control devices.

***Site Design and Management Recommendations:***

If planned properly, you can increase the value of the habitat for wildlife and state listed species with your development.

- **Create a site management plan to promote native vegetation growth in the area under the solar panels.** Restoring native vegetation will attract pollinators and avoid the need for constant mowing.
  - When considering native vegetation suitable for this site, you should consider the potential to augment nearby **Sand Barren Critical Habitat**. Sand barrens are areas of dry, sandy soil left by glacial outwash. They support sparse vegetation and bare ground. Sand barrens are important because they can support complex insect-dominated and rare plant communities. We recommend you evaluate the site for potential to serve as sand barren habitat, and consult with a plant ecologist to create a management plan to enhance habitat where opportunities exist. Please contact The Native Plant Trust to find a qualified botanist, familiar with this critical habitat.
- Provide habitat for wildlife and allow for connectivity for wildlife movement. Use wildlife-friendly fencing to allow movement through the solar development.

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Natural Diversity Data Base information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection's Bureau of Natural Resources and cooperating units of DEEP, independent conservation groups, and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the NDDDB should not be substituted for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated in the NDDDB as it becomes available.

Please contact me if you have any questions ([shannon.kearney@ct.gov](mailto:shannon.kearney@ct.gov)). Thank you for consulting with the Natural Diversity Data Base and continuing to work with us to protect State-listed species.

Sincerely,

/s/ Shannon B. Kearney  
Wildlife Biologist