Connecticut River Coastal Conservation District, Inc.
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To: Marek Kozikowski, City Planner
City of Middletown
245 deKoven Drive
Middletown, CT 06457

From: Kelly Starr, Natural Resource Specialist

Date: April 20, 2021

Re: FedEx – Proposed parking lot expansion, 49 FedEx Drive (Map/Lot 05/047), Middletown, CT

The following are initial comments and recommendations regarding the proposed FedEx parking lot expansion. They are based on a review on the following:

- Site Plans (45 sheets), prepared by BL Companies, Inc., issue date, February 19, 2021;
- City of Middletown Inland/Wetlands and Watercourses Agency Application for Inland and Wetlands Watercourses Activity, dated February 22, 2021.
- Wetland Identification and Delineation Report, FedEx Ground – Hartford CT II CY18 New Hub, prepared by BL Companies, Inc., dated February 23, 2015;
- Stormwater Management Report, Existing FedEx Ground Hub Parking Expansion – 49 FedEx Drive, Middletown, CT, Prepared by BL Companies, Inc., dated February 19, 202;
- Limited Geotechnical Investigation, Proposed Parking Lot Expansion, FedEx Ground Distribution Hub, Prepared by Whitestone Associates, Inc., dated November 16, 2020;
- Compensatory Storage Plan shown on Existing FedEx Ground Hub, Hub Parking Expansion, sheet (GD-2 Grading and Drainage Plan), prepared by BL Companies, Inc., dated, February 19, 2021;
- A site visit conducted on 4/6/2021 with City Planner Marek Kozikowski, Applicant Representative, and members of the Planning & Zoning Commission, Inland Wetlands Commission, and the Commission on Conservation and Agriculture.

The proposed activities at the site include expanding the existing employee lot and expanding/creating a remote trailer parking area, 7.4 acres in size. This review will focus on the proposed remote trailer parking area.

In this application, there are no activities proposed within the wetlands/watercourses, but clearing, filling/grading and stormwater management systems are proposed in the upland review area, impacting approximately 10,018 square feet (0.23 acres). Although there are no direct impacts to onsite wetlands/watercourses, there is the potential for indirect impacts caused by construction activities (soil erosion and sedimentation) and land development that alters the hydrology of the site. Construction impacts can be minimized through the design, installation, and maintenance of soil erosion and sedimentation controls; and project phasing/sequencing and scheduling construction activities to avoid disruption to wildlife during mating/nesting and migration seasons. Changes to site hydrology can be minimized by installing appropriate stormwater management practices, including Low Impact Development (LID) practices, and maintaining upland buffers.

CURRENT CONDITIONS

The parcel is 204.85 acres and is developed with a truck terminal building and associated paved parking and access roads. There is a second parking area located to the east of the main hub. The northern and eastern portion of the parcel is vegetated, with minimal development. The Mattabesset River is located along the northern property boundary and flows in an easterly direction to the Connecticut River. Sawmill Brook is located in the eastern portion of the parcel and flows to the north and converges with the Mattabesset River. The proposed remote trailer parking area is located in the northeast of the parcel in the forested area. The land use surrounding the parcel is varied and is developed with residential housing, business and industry and there are also fragmented vegetated/forested areas.

The soils in the area of the remote trailer parking area are mapped as Branford silt loam, Pootatuck fine sandy loam, and Wilbraham and Menlo soils. The existing paved parking area is elevated and there is a steep slope (vegetated with grasses) down to the floodplain of Sawmill Brook. The floodplain and wetland area are vegetated with shrubs and trees, and some invasive species were observed.

The Mattabesset River is on the state's list of impaired waters and does not meet the water quality standards for recreation and aquatic life. In more urbanized watersheds, such as the Mattabesset Watershed, nonpoint source pollution associated with changes in site hydrology and increases in stormwater run-off from development have been identified to have water quality impacts.

RECOMMENDATIONS

Wetlands, Watercourses, and Floodplain

1) The Wetland Identification and Delineation report is dated February 15, 2015. Have any investigations been completed to document/verify the existing/current wetland conditions, specifically addressing the wetland located adjacent to remote trailer lot expansion? There will be considerable changes to the site, which include installation of a 20+ foot retaining wall and removal of vegetation. Although there are no direct impacts to the wetlands associated with this project, the potential of indirect impacts from loss of buffer, change in site hydrology due to an increase in impervious surfaces and construction activities to the wetland and Sawmill Brook should be assessed. The assessments/reports were completed six years ago and in that time the wetland conditions may have changed. Also, the report doesn't specifically address the current proposal (7.4-acre remote trailer parking area).
2) The wetland application references two alternative designs, and a sketch was included with the application. Additional details (wetland and upland review impacts) should be provided as well as why the alternatives weren't chosen, especially for alternative SK-1.3. This alternative (SK-1.3), would allow the vegetated area that is buffering Sawmill Brook and the Mattabesset River to remain and continue to provide water quality benefits to the watercourses in this heavily developed area. This alternative has less impervious surface, reducing stormwater impacts and site disturbance, and is not located in the 100-year floodplain. Based on the information provided, it seems like this alternative should be discussed further to determine if it is an option.
3) The rip-rap apron and scour hole are located in the floodplain. Information should be provided that include details about how this water quality structure will be inspected and maintained following a flood event.
4) As shown on the site plan, the majority of the proposed development is located in the floodplain. I would recommend requesting a flood contingency plan for the construction period.

5) The site plan should specify that dust control chemicals (other than water) will not be used in the 100-foot upland review buffer.

Stormwater Management

1) The site plans (sheet GD-2) reference Subsurface System #2 and Subsurface System #3 and the design and the Site Details sheet (DN-5) references Underground Detention System #1 and Underground Detention System #2. The numbering of the systems should be revised for consistency.
2) The site-specific design includes concrete structures for flood compensatory storage and fill material to build-up the site to the elevation of the proposed parking lot. The 2004 Stormwater Manual defines Low Impact Development (LID) as "a site design strategy intended to maintain or replicate predevelopment hydrology through the use of small-scale controls integrated throughout the site to manage run-off as close to the site as possible." The manual further states, "impervious surfaces that are not connected directly to the drainage collection system contribute less run-off and smaller pollutant loads." I recommend requesting that LID alternatives (such as raised structures with plantings) be evaluated/incorporated into the proposed design of the remote parking lot to reduce run-off and potential pollutant loads.
3) To reduce stormwater impacts, the size of the remote trailer parking lot could be reduced, as shown in the alternatives.

Erosion Prevent and Sedimentation Control

1) All soil and erosion control measures should be installed and maintained per the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control (2002 Guidelines).
2) According to the application, the estimated timeframe for the parking area to be completed is approximately six months. The site design requires an excessive amount of fill material to be brought to the site to raise the elevation. Details about construction phasing and management of the fill material (including how the fill will be stabilized when being placed, and how much fill will be stockpiled at the site at a time) should be included. The site plans currently show one location for a soil stockpile; if additional locations will be needed, those should also be shown along with stabilization measures.
3) A winter stabilization plan should be provided in case there are disturbed areas or exposed soil if/when construction halts in the late fall/early winter.
4) Prior to the start of any site activities, the contact information for the party responsible for maintaining and installing the erosion and sedimentation controls should be provided.

General Comments

1) The application indicated that the site is located in the Department of Energy and Environmental Protection (DEEP) National Diversity Database (NDDB) Areas Map as an area with "State and Federally Listed Species and Significant Natural Communities." According to the application, an NDDB request was submitted to DEEP and the applicant is waiting for comments. Upon receipt of this information, all comments and best management practices should be included in the site design to address any concerns that DEEP has identified.
2) Although not required, enhancing the buffer of Sawmill Brook with native wetland shrubs/trees and plants would help to improve water quality in general (and impacts from the site). Also, removal/control of invasive species will help to improve the habitat.