**STATE OF CONNECTICUT**

**DEPARTMENT OF TRANSPORTATION**

**ENVIRONMENTAL ASSESSMENT CHECKLIST**

**Date**: April 16, 2013

**Project Name:** Windham RegionalTransit District Bus Garage

**Municipality:** Mansfield

**Staff Contact:** Mark Alexander

**This assessment is being conducted in conformance to the Connecticut Department of Transportation’s Environmental Classification Document (ECD) to determine Connecticut Environmental Policy Act (CEPA) obligations.**

**Project Description:**

The proposed project involves the construction of new administration, repair, and storage buildings for use by the Windham Region Transit District on 4.5 acres of land along South Frontage Road adjacent to the commuter lot near Route 195 in Mansfield, CT. The project consists of the construction of two buildings. The first building will include 3,600 square feet for administrative offices and 4,330 square feet for vehicle repair bays. This building will be a single-story, steel framed building with masonry and metal siding. The second building will include 14,626 square feet for enclosed vehicle parking to accommodate 30 buses. This single-story pre-engineered building will be metal sided. Total floor space of the two buildings will be 22,556 square feet.

Site work associated with the project consists of excavation and grading work to accommodate the buildings and the access road, regrading of site for storm runoff, installation of drainage structures, installation of an underground oil-water separator, installation of building utilities, installation of pavement; the two building structures, curbing, fencing, turf establishment, employee parking, and exterior site lighting.

**Regulations of Connecticut State Agencies (RCSA) Section 22a-1a-3 Determination of Environmental Significance (Direct/Indirect)**

1. *Impact on air and water quality or on ambient noise levels*
   1. *Air Quality* – No negative impacts are anticipated. The project is located within the boundaries of the portion of the state which has been classified as attainment for carbon monoxide, PM2.5 and PM10 and non-attainment for Ozone. However, this project has been determined to be exempt from the requirement that an air quality conformity determination be made in accordance with the Final Rule on Conformity. In addition, the nature of this type of project is such that benefits to air quality can be anticipated. By promoting the use of mass transit, single occupancy vehicles will be removed from the roadway network in the project area, thus resulting in lower vehicle miles of travel, with associated reductions in pollutants generated from vehicular emissions.
   2. *Water Quality-* No negative impacts are anticipated. The Natchaug River is listed as impaired in the State of Connecticut Integrated Water Quality Report; the stretch from its confluence with the Willimantic River upstream to the Willimantic Reservoir dam does not meet the designated use of recreation due to bacteria, with potential sources being combined sewer overflows and stormwater. The Connecticut Department of Transportation (CTDOT) will employ best management practices, including the use of low impact development (LID) practices such as designing the site to reduce the number of catch basins and directed stormwater to flow overland (to allow more opportunity for infiltration) prior to connecting to the storm drainage system at the street. Also, the stormwater will be collected through drainage structures and discharged to a grass area to flow overland to allow more opportunity for infiltration of stormwater on-site, as flow reduction is the most effective approach to pathogen attenuation in stormwater, prior to out letting to the system street drainage system . Although LID techniques are not primarily designed to reduce pathogen pollution, their mitigation of hydrologic impacts is likely to reduce pathogen loading from stormwater by reducing the volume and rate of runoff from a given area.
   3. *Ambient Noise Levels-* No negative impacts are anticipated.
2. *Impact on a public water supply system or serious effects on groundwater, flooding, erosion, or sedimentation*
3. *Water Supply* – The project area is not within a public water supply source water area.
4. *Groundwater* - No negative impacts are anticipated. A General Permit for the Discharge of Vehicle Maintenance Wastewater (DEP-PERD-GP-010) for the discharge of up to 15,000 gallons/day will be obtained by CTDOT’s Environmental Compliance Office from the Department of Energy & Environmental Protection (DEEP) Permitting & Enforcement Division. The discharge of stormwater from certain industrial areas requires a permit pursuant to EPA regulations. DEEP’s Permitting & Enforcement Division issued a General Permit for the Discharge of Stormwater Associated with Industrial Activity (DEP-PERD-GP-014) that will cover these discharges. The industrial activities that require a permit are defined in the regulations by Standard Industrial Classifications and include transportation facilities that have maintenance or fueling operations. Registration describing the facility and the stormwater discharge will be submitted to DEEP at least 90 days prior to the initiation of the industrial activity by CTDOT’s Office of Public Transportation. A stormwater pollution prevention plan, including measures such as a monitoring program, controls for outside storage of materials, spill control plan, maintenance and inspection, employee training and recordkeeping, will also be prepared.
5. *Flooding* – No negative impacts are anticipated. During the construction of this project, 414 sf (0.01 acres) will be disturbed temporarily within the 100 year floodplain limits. Notes on plans will direct contractor to store all materials outside the floodplain during construction. This project qualifies for a General Flood Management Certification under the category “Roadway Repair, Repaving, Maintenance & Underground Utilities”. Floodplain involvement for this project is temporary and involves the installation of 42 feet of the waterline from the Windham Region Transit District office building along South Frontage Road to the intersection with Route 195. When construction is completed within the floodplain, there will be no change in grades or type of surface material from existing conditions, and there will be no change to the flood storage capacity.
6. *Erosion or Sedimentation*- No negative impacts are anticipated. Stormwater discharges from construction sites where one or more acres are to be disturbed require a permit pursuant to 40 CFR 122.26. The DEEP Permitting & Enforcement Division has issued a General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities (DEP-PERD-GP-015) that will cover these discharges. For projects disturbing five or more acres, registration describing the site and the construction activity must be submitted to the Department prior to the initiation of construction. The proposed project involves the construction of new administration, repair, and storage buildings for use by the Windham Region Transit District on 4.5 acres of land. For construction projects with a total disturbed area between one and five acres, no registration is required as long as the project is reviewed by the town and receives written approval of its erosion and sediment control measures and it adheres to the Connecticut Guidelines for Soil Erosion and Sediment Control. If no review is conducted by the town or written approval is not provided, the permittee must register with the Department. Because State projects do not require town review and approval, CTDOT has registered with DEEP in lieu of this requirement. Sedimentation and erosion control measures, in accordance with the 2002 CT E&S Control Guidelines and Section 1.10 of Form 816, will be installed and maintained during construction, until all disturbed areas are stabilized.
7. *Effect on natural land resources and formations, including coastal and inland wetlands, and the maintenance of in-stream flows* – No negative impacts are anticipated. There are no wetland impacts associated with this project.
8. *Disruption or alteration of an historic, archaeological, cultural, or recreational building, object, district, site or its surroundings* - The project’s Area of Potential Effects (APE) was determined to have moderate to high archaeological potential by field review and review of historic resources. The Office of Environmental Planning (OEP) recommended, and the State Historic Preservation Office (SHPO) agreed that an archaeological survey be conducted in the project APE. Archaeological and Historical Services, Inc. (AHS) conducted an archaeological reconnaissance survey and subsequent intensive survey to assess potential project effects to subsurface resources in accordance with SHPO’s *Environmental Review Primer for Connecticut’s Archaeological Resources*.

The reconnaissance (“Phase I”) survey resulted in the identification of a small pre-Contact period Native American site (Site 78-189) within the APE. The site yielded a small number of quartz and quartzite flakes associated with the manufacture and maintenance of stone tools. Subsequent testing of the site area during the intensive (“Phase II”) survey failed to produce any additional artifacts or other evidence of a significant archaeological resource. As stated by AHS, “The area may be associated with a small kill and/or butchery site, but too little cultural material is present to clearly interpret its use. In AHS’s opinion this small site does not meet the minimum requirements for listing in the National Register of Historic Places, thus no further work is recommended within the APE.” SHPO concurs with AHS’ professional assessment.

Based on the summary of excavations, it is SHPO’s opinion that no historic properties will be affected by the proposed construction of the WRTD facilities. This opinion is conditional upon submittal of a full technical report of the archaeological investigations to their office before October 1st, 2013.

1. *Effect on natural communities and upon critical species of animal or plant and their habitats; interference with the movement of any resident or migratory fish or wildlife species* - The Natural Diversity Data Base contains records for the State Special Concern Species Glyptemys insculpta (wood turtle) from the vicinity of this property. Wood turtles require riparian habitats bordered by floodplain, woodland or meadows. They hibernate in submerged tree roots along the banks of rivers and streams. Their summer habitat includes pastures, old fields, woodlands, power-line cuts and railroad beds adjacent to streams and rivers. This species has been negatively impacted by the loss of suitable habitat. Wood Turtles are most active between April and October. Continued co-ordination between CTDOT and DEEP will occur during construction to ensure that these concerns are addressed. The following guidelines will be implemented through a Notice to Contractor to conserve this turtle and its habitat in this area:

* Exclusionary practices will be required where wetlands are present in order to prevent any wood turtle access to construction areas. These measures will need to be installed at the limits of disturbance as shown on the contract plans.
* All Staging and storage areas, outside of previously paved locations, regardless of the duration of time they will be utilized, must be reviewed by and receive written approval from OEP.
* All construction personnel working within wood turtle habitat must be apprised of the species description and the possible presence of a listed species.
* The work area must be searched each morning prior to any work being done.
* In areas where silt fence is used for exclusion, it shall be removed as soon as the area is stable to allow for reptile and amphibian passage to resume.
* Any turtles encountered within the immediate work area shall be carefully moved to an adjacent area outside of the excluded area and OEP must be contacted with location.
* No heavy machinery or vehicles may be parked in any turtle habitat.
* Special precautions must be taken to avoid degradation of wetland habitats including any wet meadows and seasonal pools.

1. *Use of pesticides, toxic or hazardous materials or any other substance in such quantities as to create extensive detrimental environmental impact* - No negative impacts are anticipated.
2. *Substantial aesthetic or visual effects* - No negative impacts are anticipated.
3. *Consistency with the written and/or mapped policies of the Statewide Plan of Conservation and Development and such other plans and policies developed or coordinated by the Office of Policy and Management or other agency* *–* The site is listed as a Growth Area in the *Conservation and Development Policies Plan for Connecticut***.**
4. *Disruption or division of an established community or inconsistency with adopted municipal and regional plans* - No negative impacts are anticipated.
5. *Displacement or addition of substantial numbers of people* - No negative impacts are anticipated.
6. *Substantial increase in congestion (traffic, recreational, other)* - No negative impacts are anticipated. The nature of this type of project is such that a decrease in traffic congestion along area roadways can be anticipated. By promoting the use of mass transit, single occupancy vehicles will be removed from the roadway network in the project area, thus resulting in lower vehicle miles of travel, along with associated reductions in traffic congestion.
7. *A substantial increase in the type or rate of energy use as a direct or indirect result of this action* - No negative impacts are anticipated. As previously stated, by promoting the use of mass transit, the rate of single occupancy vehicles usage would decline. It can be anticipated therefor that the rate of energy would also decrease as a result of adding public transportation options in the region.
8. *The creation of a hazard to human health or safety* - No negative impacts are anticipated.
9. *Any other substantial impact on natural, cultural, recreational or scenic resources* - No negative impacts are anticipated.

**The following are issues identified by various State agencies:**

The Natural Diversity Data Base contains records for the State Special Concern Species *Glyptemys insculpta* (wood turtle) from the vicinity of this property.

**Conclusion:**

CTDOT has concluded that the preparation of an Environmental Impact Evaluation will not be required for the Windham Regional Transit District Bus Garage.

**Recommendations received by various State agencies as a result of the Scoping Process:**

As a result of the Scoping Process, the following recommendations were received from DEEP:

Where building renovation and site improvements are proposed, the DEEP strongly recommends the use of low impact development (LID) practices for infiltration of stormwater on-site. Several studies examining the bacteria removal performance of stormwater best management practices suggest that flow reduction is the most effective approach to pathogen attenuation in stormwater. Although LID techniques are not primarily designed to reduce pathogen pollution, their mitigation of hydrologic impacts is likely to reduce pathogen loading from stormwater by reducing the volume and rate of runoff from a given area;

For large construction projects especially those with nearby residential areas, the DEEP typically encourages the use of newer off-road construction equipment that meets the latest EPA or California Air Resources Board (CARB) standards. If that newer equipment cannot be used, equipment with the best available controls on diesel emissions including retrofitting with diesel oxidation catalysts or particulate filters in addition to the use of ultra-low sulfur fuel would be the second choice that can be effective in reducing exhaust emissions. The use of newer equipment that meets EPA standards would obviate the need for retrofits;

The DEEP also encourages the use of newer on-road vehicles that meet either the latest EPA or CARB standards for construction projects. Vehicles older than for pre 2007-model year on-road vehicles typically should be retrofitted with diesel oxidation catalysts or diesel particulate filters for projects. These on-road vehicles include dump trucks, fuel delivery trucks and other vehicles typically found at construction sites. Again, the use of newer vehicles that meet EPA standards would eliminate the need for retrofits;

Additionally, Section 22a-174-18(b)(3)(C) of the Regulations of Connecticut State Agencies (RCSA) limits the idling of mobile sources to 3 minutes. This regulation applies to most vehicles such as trucks and other diesel engine-powered vehicles commonly used on construction sites. Adhering to the regulation will reduce unnecessary idling at truck staging zones, delivery or truck dumping areas and further reduce on-road and construction equipment emissions. Use of posted signs indicating the three-minute idling limit is recommended. It should be noted that only DEEP can enforce Section 22a-174-18(b)(3)(C) of the RCSA. Therefore, it is recommended that the project sponsor include language similar to the anti-idling regulations in the contract specifications for construction in order to allow them to enforce idling restrictions at the project site without the involvement of the Department.