

**STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL ASSESSMENT CHECKLIST**

Date: April 21, 2015

Project Name: Rehabilitation of Pucker Street Bridge over the Hop River

Municipality: Coventry / Columbia

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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 Office of Policy and Management (OPM) was originally requested by the Town of Columbia to administer this project as a Small Town Economic Assistance Program (STEAP) grant and therefore began the scoping process by scoping the project in the June 19, 2012 edition of the *Environmental Monitor*. However, this is now being administered by the Connecticut Department of Transportation (CTDOT) under the Federal/Local Bridge Program. All CEPA compliance and responsibility for a post scoping notice transferred to CTDOT, however, the municipalities will be responsible for any permitting, etc.

Pucker Street is a two-lane rural local road within a lightly developed farm land and rural residential area; however Bridge No. 04621 is only one lane. Alternating one-way traffic, controlled by stop signs at both bridge approaches, crosses the existing structure. The existing bridge, located approximately 0.2 miles north of U.S. Route 6, was built in 1900 and reconstructed in 1980 as it collapsed in the late 1970's. It is a single span structure comprised of cast-in-place reinforced concrete deck and steel through girder superstructure, which is supported on stone masonry abutments with stone masonry wingwalls. The structure has no skew angle, a span length of 84 feet and a curb-to-curb width of 12 feet. There are no sidewalks or bridge railing on the bridge. Precast concrete barrier curb placed against the girders serve as a parapet system. The structure is located on a horizontal tangent segment of roadway immediately following a horizontal curve in the southerly approach roadway, and the bridge is located at the high point of a crest vertical curve. The narrow bridge width, coupled with poor approach roadway geometry presents a significant safety hazard.

Overall, the structure is in generally fair condition, however the steel is unpainted, no membrane appears to have been installed between the bituminous wearing surface and concrete deck, the bridge rail system is substandard and the bridge width of 12 feet makes this bridge functionally obsolete. The structure shall be rehabilitated by rehabilitating and widening the stone masonry abutments and

wingwalls, installing semi-integral stub abutments behind the existing masonry abutments, replacing the superstructure with a 24 foot wide 93.5 foot long steel truss bridge, installation of approved guide railing system on the approaches, and the reconstruction of the approach roadways.

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
 - a) Air Quality – No negative impacts are anticipated. This 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 addition, the nature of this type of project is such that benefits to air quality can be anticipated. By eliminating idling at this location, any air pollutants emitted due to idling emissions are removed.
 - b) Water Quality –No negative impacts are anticipated. Registration under CTDEEP’s *General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities* is not required since the proposed area of disturbance is less than 5 acres. The municipalities shall use Best Management Practices, and comply with any local regulations as well as *The Connecticut Guidelines for Soil Erosion and Sediment Control*.
 - c) 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
 - a) Water Supply – This project is not within a public water supply source water area, therefore no negative impacts are anticipated.
 - b) Groundwater – No negative impacts are anticipated. See 1(b) above.
 - c) Flooding – The project is within the 100-year flood zone on the community’s Flood Insurance Rate Map. Pursuant to a 2009 Memorandum of Understanding (MOU) between CTDEEP and CTDOT, various municipal projects, including those funded under the Local Bridge Program, and deemed to be approved under the Flood Management Act provided that the project complies with the requirements of the MOU.
 - d) Erosion or Sedimentation – No negative impacts are anticipated. In order to protect any wetlands or watercourses adjacent to the site, erosion and sediment controls should be employed during construction. All silt fencing should be removed after soils are stable. Construction period erosion and sedimentation control measures must comply with *The Connecticut Guidelines for Soil Erosion and Sediment Control*.

3. Effect on natural land resources and formations, including coastal and inland wetlands, and the maintenance of in-stream flows –No negative impacts are anticipated. The inland wetlands and

watercourse at the site are regulated by the Coventry Inland Wetlands Agency and the Columbia Inland Wetlands & Watercourses Commission, pursuant to Section 22a-42 of the CGS. Any required permitting will be the responsibility of the municipalities.

4. Disruption or alteration of an historic, archaeological, cultural, or recreational building, object, district, site or its surroundings – No negative impacts are anticipated. A Phase IA Reconnaissance Survey was conducted and the report submitted to the CT State Historic Preservation Officer (CT SHPO) in 2014. During the archaeological reconnaissance survey, a total of 12 shovel test were excavated systematically within the project area and each revealed significantly disturbed soils and contained modern debris; no historic or prehistoric artifacts were found. No further archaeological testing was recommended. In a letter dated October 31, 2014, the CTSHPO concurred with the findings in the report and has recommended that no historic properties will be affected by this project. Additionally, the CTSHPO reaffirmed that the bridge is not eligible for listing in the National Register of Historic Places.
5. 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 – No negative impact is anticipated. There does not appear to be any threatened or endangered species in the project area. There are records of extant populations of two species (wood turtle and Eastern hognose snake) listed by the State as species of special concern, pursuant to section 26-306 of the CGS, within the project area. The CTDEEP suggested the following guidelines be followed for the entire duration of construction:
 - Silt fencing shall be installed around the work area prior to construction
 - After fencing is installed and prior to construction, a sweep of the work area shall be conducted to look for turtles
 - Workers shall be apprised of the possible presence of turtles and be provided a description of the species
 - Any turtles discovered, shall be moved, unharmed, to an area immediately outside of the fenced area and positioned in the same direction that it was walking
 - No vehicles or heavy machinery shall be parked in any turtle habitat
 - Work conducted during early morning and evening hours shall occur with special care not to harm basking or foraging individuals; and
 - All silt fencing shall be removed after work is completed and soils are stable so that reptile and amphibian movement between uplands and wetlands is not restricted.

This information was gathered during a preliminary review and not a final determination. This information will be forwarded to the towns of Columbia and Coventry. A more detailed review may be conducted as part of any subsequent environmental permit applications submitted to CTDEEP and the local wetland commissions.

6. Use of pesticides, toxic or hazardous materials or any other substance in such quantities as to create extensive detrimental environmental impact – No negative impact is anticipated.
7. Substantial aesthetic or visual effects – No negative impacts are anticipated.
8. Inconsistency 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 – It is CTDOT’s interpretation that this type of project is consistent with the Plan of Conservation and Development through GMP #1 (Redevelop and Revitalize Regional Centers and Areas with Existing or Currently Planned Physical Infrastructure), specifically the state policy “Ensure the safety and integrity of existing infrastructure over its useful life through the timely budgeting for maintenance, repairs and necessary upgrades”. This project takes place in a Conservation Area, not in a Priority Funding Area; however, this project type is not considered a Growth Related Project. This project constitutes an exception to the definition of a Growth Related Project as defined in Sec. 16a-35c, Item (2), Subsection (D), Sub-Subsection (i), “Projects for maintenance, repair or renovations to existing facilities”.
9. Disruption or division of an established community or inconsistency with adopted municipal and regional plans – No negative impacts are anticipated, project is consistent with both Coventry’s and Columbia’s plans of conservation and development.
10. Displacement or addition of substantial numbers of people – This project does not involve the displacement of people.
11. Substantial increase in congestion (traffic, recreational, other) – No negative impacts are anticipated. This project will reduce congestion on the bridge by widening and allowing traffic to travel across the bridge in each direction simultaneously.
12. A substantial increase in the type or rate of energy use as a direct or indirect result of this action – No negative impact is anticipated.
13. The creation of a hazard to human health or safety – No negative impact is anticipated. This project will improve safety.
14. Any other substantial impact on natural, cultural, recreational or scenic resources – No negative impact is anticipated.

Conclusion:

After examining any potential environmental impacts and reviewing all comments received, CTDOT has concluded that the preparation of an Environmental Impact Evaluation (EIE) will not be required for the Rehabilitation of Pucker Street Bridge over the Hop River in the towns of Coventry and Columbia.

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 CTDEEP:

The inland wetlands and watercourse at the site are regulated by the Coventry Inland Wetlands Agency and the Columbia Inland Wetlands & Watercourses Commission, pursuant to section 22a-42 of the CGS. The local agencies should be contacted regarding permit requirements.

In order to protect any wetlands and watercourses adjacent to the site, strict erosion and sediment controls should be employed during construction. Additionally, all silt fencing should be removed after soils are stable so that reptile and amphibian movement between uplands and wetlands is not restricted. The *Connecticut Guidelines for Soil Erosion and Sediment Control* prepared by the Connecticut Council on Soil and Water Conservation in cooperation with DEP is a recommended source of technical assistance in the selection and design of appropriate control measures.

The Natural Diversity Data Base (NDDDB) has records of extant populations of two species listed by the State as species of special concern, pursuant to section 26-306 of the CGS, within the project area. These are the wood turtle (*Glyptemys insculpta*) and the Eastern hognose snake (*Heterodon platirhinos*).

Wood turtles require riparian habitats bordered by floodplain, woodland or meadows. They hibernate in the banks of the river in submerged tree roots. Their summer habitat includes pastures, old fields, woodlands, powerline cuts and railroad beds bordering or adjacent to streams and rivers. This species has been negatively impacted by the loss of suitable habitat. In an effort to protect wood turtles, the following guidelines shall be followed for the entire duration of the project:

- Silt fencing shall be installed around the work area prior to construction;
- After silt fencing is installed and prior to construction, a sweep of the work area shall be conducted to look for turtles;
- Workers shall be apprised of the possible presence of turtles and provided a description of the species (See fact sheet at: [Wood Turtle](#))
- Any turtles that are discovered shall be moved, unharmed, to an area immediately outside of the fenced area and positioned in the same direction that it was walking;
- No vehicles or heavy machinery shall be parked in any turtle habitat;
- Work conducted during early morning and evening hours shall occur with special care not to harm basking or foraging individuals; and
- All silt fencing shall be removed after work is completed and soils are stable so that reptile and amphibian movement between uplands and wetlands is not restricted.

Eastern hognose snakes are a species that has been declining due to loss of suitable habitat. They favor sandy areas with well-drained gravelly soils. The active period for these snakes is April through November. Therefore, they will be more visible at this time and, in most cases, move out of harm's way.

Stormwater discharges from construction sites where one or more acres are to be disturbed require a permit pursuant to 40 CFR 122.26. The 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. A stormwater pollution control plan, including measures such as erosion and sediment controls and post construction stormwater management, must be prepared. For sites where more than 10 acres will be disturbed, the plan must be submitted to the Department. A goal of 80 percent removal of total suspended solids from the stormwater discharge shall be used in designing and installing stormwater management measures. 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.