

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

Date: December 21, 2021

Project Name: Replacement of Bridge No. 04152, West Cedar Street over Five Mile River

State Project Number: 102-366

Municipality: Norwalk

Staff Contact: Kevin Fleming

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:

Bridge No. 04152 is a single span structure that was constructed in 1910 and is comprised of a stone masonry arch supported by stone masonry abutments. The total structure length and width measure 28 feet and 22 feet, respectively. The bridge roadway has a curb-to-curb width of 19 feet, and an approach width of 19 feet. The bridge and approach roadways provide for two narrow lanes (one in each direction) of vehicular traffic. There are no shoulders on either side, and there are no pavement markings spanning the bridge. A pedestrian walkway structure comprised of timber decking on steel beams supported by extensions of the bridge stone masonry substructure abuts the southerly bridge fascia.

The bridge is functionally obsolete due to its Deck Geometry Appraisal Rating and its Approach Roadway Alignment Appraisal Rating. Given the relatively high Average Daily Traffic of 4,728 (2016 data), a 28-foot clear bridge roadway width is required to satisfy minimum functional sufficiency criteria for Deck Geometry rating. The functionally obsolete Deck Geometry rating precipitates the functionally obsolete Approach Roadway Alignment rating because the narrow bridge creates a significant reduction in vehicle operating speed from that which is characteristic of West Cedar Street. The bridge is also vulnerable to scour, which is evidenced by the presence of localized scour holes that have exposed the abutment footings.

Based on the functional obsolescence and scour critical classification of the existing bridge, the project involves a full replacement of the structure. It is anticipated that the proposed replacement bridge will be a clear span structure of a curb-to-curb width that satisfies minimum functional sufficiency criteria and current geometric design standards. It is likely that the new bridge will also accommodate an inboard sidewalk along the south side as opposed to the present separate sidewalk structure configuration.

This project was scoped in the *Environmental Monitor* on May 18, 2021; and the public comment period remained open until the close of business on June 18, 2021. CTDOT received comments from one State agency – the Connecticut Department of Energy and Environmental Protection (CTDEEP). No comments were received from the public during the public scoping period. CEPA scoping is required for this project sine there is an Adverse Effect to a historic resource.

A CEPA scoping meeting was not held as no requests were received to hold one. A virtual Public Informational Meeting was held, however, on October 14, 2020.

- The proposed action is non-site specific, or encompasses multiple sites;
- Current site ownership: N/A, State; Municipal, Private,
 Other: Please Explain.
- Anticipated ownership upon project completion: N/A, State; Municipal, Private,
 Other: Please Explain.

Locational Guide Map Criteria:

<http://ctmaps.maps.arcgis.com/apps/webappviewer/index.html?id=ba47efccdb304e02893b7b8e8cff556a>

Priority Funding Area factors:

- Designated as a Priority Funding Area, including Balanced, or Village PFA;
- Urban Area or Urban Cluster, as designated by the most recent US Census Data;
- Public Transit, defined as being within a ½ mile buffer surrounding existing or planned mass transit;
- Existing or planned sewer service from an adopted Wastewater Facility Plan;
- Existing or planned water service from an adopted Public Drinking Water Supply Plan;
- Existing local bus service provided 7 days a week.

Conservation Area factors:

- Core Forest Area(s), defined as greater than 250 acres based on the 2006 Land Cover Dataset;
- Existing or potential drinking water supply watershed(s);
- Aquifer Protection Area(s);
- Wetland Soils greater than 25 acres;
- Undeveloped Prime, Statewide Important and/or locally important agricultural soils greater than 25 acres;
- Storm Surge Inundation Zone(s);
- 100 year Flood Zone(s);
- Critical Habitat;
- Locally Important Conservation Area(s),
- Protected Land (list type): Enter text.
- Local, State, or National Historic District(s).

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

1. Impact on water quality, including surface water and groundwater

Water Quality – No negative impacts are anticipated. All CTDOT projects must conform to the CTDOT Standard Specifications for Roads, Bridges, Facilities, and Incidental Construction Form 818. Section 1.10.03, Environmental Compliance, specifically deals with water pollution control and Best Management Practices (BMP).

Surface Water – No negative impacts are anticipated.

Stormwater – No negative impacts are anticipated as Best Management Practices will be employed regarding stormwater management. Registration under *CTDEEP's General Permit for Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities* will be completed if required. Any CTDOT project that changes impervious area, stormwater drainage patterns pre to post construction shall meet the requirements of the CTDEEP's General Permit for the Discharge of Stormwater from Department of Transportation Separate Storm Sewer Systems (DOT MS4 Permit) and submit a CTDOT MS4 Designer Worksheet.

Groundwater – No negative impacts are anticipated. As design progresses, a testing plan will be developed to assess groundwater in any areas within which intrusive construction activities are proposed. Remediation measures will be put in place to mitigate potential impacts if contaminated soils or groundwater is confirmed by the testing.

2. Effect on a public water supply system - No negative impacts are anticipated. The project is not located within a source of public drinking water.

3. Effect on flooding, in-stream flows, erosion or sedimentation:

Flooding – No negative impacts are anticipated. The project is located within a FEMA-mapped flood zone, therefore, CTDEEP Flood Management Certification will be obtained.

In-stream flows – No negative impacts are anticipated. Coordination with CTDEEP will continue.

Erosion or Sedimentation – No negative impacts are anticipated. Proper erosion and sedimentation controls will be installed and maintained throughout the project. The contractor will comply with Best Management Practices for sedimentation and erosion control as outlined in CTDOT Standards Specifications for Roads, Bridges, Facilities and Incidental Construction Form 818 (Section 1.10.03).

4. Disruption or alteration of an historic, archaeological, cultural, or recreational building, object, district, site or its surroundings – Qualified cultural resources staff from CTDOT's Office of Environmental Planning (OEP) conducted background research and reviewed the project scope; and is of the opinion that Bridge No. 04152 is eligible for listing on the National Register of Historic Places. CTDOT has been coordinating with the CT State Historic Preservation Office (CTSHPO), and on April 15, 2021, CTSHPO concurred with CTDOT's recommendation that the project will result in an Adverse Effect to Historic Properties due to the proposed replacement of the bridge.

Coordination among CTDOT, CTSHPD and the Federal Highway Administration will continue; and a Memorandum of Agreement will be executed to outline the various stipulations required to mitigate for the Adverse Effect to the bridge. CTDOT has been in contact with the City of Norwalk as well and will continue to coordinate with the City as project design develops.

- 5. Effect on natural communities and upon critical species of animal or plant and their habitat; interference with the movement of any resident or migratory fish or wildlife species** – CTDEEP confirmed that the project is not located within a Natural Diversity Database Area or near any Wildlife Management Areas. Sampling by CTDEEP's Fisheries Division near the project site has documented the presence of typical Connecticut warmwater fish species. Additionally, there is an impassable barrier downstream, the Chasmer Dam, that blocks the passage of all migratory fish species except the American Eel. That barrier is under consideration for removal or fish ladder installation but will be intact when the project is being done. CTDEEP's Fisheries Division recommends the following:

- The existing channel underneath the bridge is passable to all fish species and is composed of natural substrate. Any work done at the site should maintain these conditions, including stream width and the position of the thalweg.
- To protect downstream fisheries habitat, all best management practices for erosion and sedimentation control should be observed throughout the construction period. Upon completion, all disturbed areas should be stabilized and planted with native vegetation.

Coordination with CTDEEP Fisheries will continue as the project progresses.

- 6. 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. Land use in the vicinity of the project limits and the potential for excess soil as a result of construction will be considered during project design. Should there be any sites with known contamination issues in the vicinity of the project, additional study will be performed within the project area and/or adjacent right-of-way. As design progresses, a testing plan will be developed to assess soil and groundwater in any high-risk areas within which intrusive construction activities are proposed. Remediation measures will be put in place to mitigate potential impacts if contaminated soils or groundwater is confirmed by the testing. If needed, registration under CTDEEP's *General Permit for Contaminated Soil and/or Sediment Management* (Staging & Transfer) will be obtained, and soil management will be conducted in accordance with the General Permit.
- 7. Substantial aesthetic or visual effects** – No negative impacts are anticipated. The project involves the replacement of a historic bridge, however, coordination with CTSHPD and FHWA will take place during the Section 106 (of the National Historic Preservation Act) process. This coordination will identify measures to mitigate impacts to the bridge, including any potential design elements regarding the aesthetic of the replacement bridge.

- 8. Inconsistency with (a) the policies of the State Plan of Conservation and Development developed in accordance with Section 16a-30 of the CT General Statutes, (b) other relevant state agency plans, and (c) applicable regional or municipal land use plans** – This project is consistent with the Statewide Plan of Conservation and Development. CTDOT has adopted a programmatic approach for meeting the requirements of CGS Chapter 297 Section 16a-31(a) and Chapter 297 Section 16a-35(c) and 16a-35(d) for determining consistency of proposed actions with the Statewide Plan of Conservation and Development, as indicated in a memo from CTDOT to OPM. In accordance with that memo, this type of project has been determined to be exempt from the consistency requirements of CGS Section 16a-31(a) since the proposed action is for replacing a component of the transportation system after it has reached the end of its useful life. Additionally, the project is not inconsistent with any other land use plans.
- 9. Disruption or division of an established community or inconsistency with adopted municipal and regional plans, including impacts on existing housing where sections 22a-1b(c) and 8-37t of the CGS require additional analysis** – No negative impacts are anticipated. The project is not in conflict with any adopted municipal or regional plans.
- 10. Displacement or addition of substantial numbers of people** – No negative impacts are anticipated. This project does not involve the displacement or addition of people.
- 11. Substantial increase in congestion (traffic, recreational, other)** – No negative impacts are anticipated. A temporary traffic detour will be established during construction.
- 12. 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. No new construction of any buildings is proposed. The project is not the type to result in any change to land use or traffic conditions that would impact energy use.
- 13. The creation of a hazard to human health or safety** – No negative impacts are anticipated. The project will be reviewed for the potential of having hazardous material constituents in existing infrastructure components. Testing will be performed on any suspect materials. Should the presence of hazardous materials be confirmed through the testing, specifications to properly handle and dispose the hazardous materials will be incorporated into the design to mitigate potential health or safety. Therefore, significant impacts associated with hazardous materials or waste sites are not anticipated.
- 14. Effect on air quality** - No negative impacts are anticipated. The project is located within the boundaries of the portion of the state that has been classified as attainment maintenance for carbon monoxide (CO), attainment maintenance for PM 2.5, non-attainment for Ozone, and attainment for PM 10. A project level Air Quality Conformity Determination is not required, nor is an analysis or discussion of Mobile Source Air Toxics since this type of project is exempt under the Clean Air Act. Any potential temporary impacts during construction can be avoided or limited by proper operation of construction equipment and adherence to regulations limiting idling of engines.
- 15. Effect on ambient noise levels** - No negative impacts are anticipated. The project was reviewed by CTDOT's Office of Environmental Planning and it was determined that no noise study would be required. Any noise impacts during construction will be temporary and will be minimized to the

best extent practicable by compliance with CTDOT Standard Specifications for Roads, Bridges, Facilities and Incidental Construction Form 818 regarding construction noise pollution:

“1.10.05 – Construction Noise Pollution: The contractor shall take measures to minimize the noise caused by its construction operations, including but not limited to noise generated by equipment used for drilling, pile driving, blasting, and excavating or hauling. All methods and devices employed to minimize noise shall be subject to continuing approval of the Engineer. The maximum allowable level of noise at the residence or occupied building nearest to the Site shall be 90 decibels on the “A” weighted scale (dB(A)). The contractor shall halt any project operation that violates this standard at any time until the Contractor develops and implements a methodology that enables it to keep the noise from its project operations below the 90-dB(A) limit.”

- 16. Effect on existing land resources and landscapes, including coastal and inland wetlands** – Minor wetlands impacts are anticipated. At this time, it is anticipated that an Army Corps Programmatic General Permit and a Norwalk Inland Wetlands Permit will be required.
- 17. Effect on agricultural resources** – No negative impacts are anticipated.
- 18. Adequacy of existing or proposed utilities and infrastructure** – No negative impacts are anticipated.
- 19. Effect on greenhouse gas emissions as a direct or indirect result of the action** – No negative impacts are anticipated. Construction phase impacts on greenhouse gas emissions will be limited. Any potential temporary impacts during construction can be avoided or limited by adherence to regulations limiting idling of engines.
- 20. Effect of a changing climate on the action, including any resiliency measures incorporated into the action** – No negative impact is anticipated.
- 21. Any other substantial effect on natural, cultural, recreational, or scenic resources-** No other substantial effects are anticipated.
- 22. Cumulative effects** – This project does not involve any cumulative effects that have the potential for significant effects on the environment.

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 Replacement of Bridge No. 04152, West Cedar Street over Five Mile River. Publication of this document to the Environmental Monitor shall satisfy the agency’s responsibilities under Section 22a-1a-7 of the RCSA. Coordination with CTDEEP will continue, to address comments received, as appropriate.

During the comment period, CTDOT received comments from one State agency (CTDEEP). No comments were received from the public during the scoping period. Below is a synopsis of the comments received; comments are addressed in the appropriate sections above where needed.

Fisheries Division:

Sampling by the Fisheries Division near the site has documented the presence of typical Connecticut warmwater fish species including American Eel, Blacknose Dace, Largemouth Bass, Pumpkin Seed, and White Sucker. There is an impassible barrier downstream, the Chasmer Dam, that blocks passage of all migratory fish species except the American Eel. That barrier is under consideration for removal or fish ladder installation but will be intact when the Cedar Street work is being done. The Fisheries Division recommends the following:

- The existing channel under the bridge is passable to all fish species and is composed of natural substrate. Any work done at the site should maintain these conditions, including stream width and the position of the thalweg;
- To protect downstream fisheries habitat, all best management practices for erosion and sedimentation control should be observed throughout the construction period. Upon completion, all disturbed areas should be stabilized and planted with native vegetation.

Coordination with CTDEEP Fisheries will continue through design and build.

Land and Water Resources Division

If the reconnaissance of the site by a certified soil scientist identifies regulated areas, they should be clearly delineated. Any activity within federally regulated wetland areas or watercourses at the site may require a permit from the U.S. Army Corps of Engineers pursuant to section 404 of the Clean Water Act. Staff from the Land and Water Resources Division will be able to clarify if this project would qualify for Self-Verification or a Preconstruction Notification during the DOT's Project Management Meetings. Please note that the Army Corps of Engineering General Permit expires August 2022 and requirements for each level of permitting is subject to change.

Wildlife Division

The site is not located within a Natural Diversity Database Area or near any Wildlife Management Areas.

Air Management:

CTDEEP typically recommends 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.

CTDEEP also recommends the use of newer on-road vehicles that meet either the latest EPA or CARB standards for construction projects. These on-road vehicles include dump trucks, fuel delivery trucks and other vehicles typically found at construction sites. On-road vehicles older than the 2007-model year typically should be retrofitted with diesel oxidation catalysts or diesel particulate filters for projects. 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 RCSA limits the idling of mobile sources to three (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 CTDEEP 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 CTDEEP.