

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

Date: June 18, 2019

Project Name: Intersection Improvements on Route 34 at SR 490 (Wasserman Way) and Toddy Hill Road and SR 490 at I-84 Interchange 11 ramps

Municipality: Newtown

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:

The proposed project will reduce delay and congestion, and improve traffic operations at the three (3) subject intersections. In addition, these improvements will provide safe pedestrian and bicycle access in the vicinity of Newtown High School.

Currently, these intersections (SR 490 at the Interchange 11 ramp termini, Route 34 at SR 490 and Route 34 at Toddy Hill Road) suffer from long traffic queues and severe congestion that affect traffic operations at adjacent signal-controlled intersections. In addition, the shoulder width on Route 34 varies from 0 to 7 feet within the project limits, with no sidewalks or crosswalks, resulting in pedestrians and cyclists sharing the roadway shoulder area or the travel lane.

To address severe congestion, poor traffic operations and safety concerns, the project includes major intersection improvements at the three subject intersections along with the construction of a new slip ramp, which will provide direct access for westbound Route 34 vehicles to the Interchange 11 entrance ramp. The new connection, which is located just to the west of Toddy Hill Road, is a critical design feature since it significantly reduces the volume of westbound left-turning vehicles on Route 34 at SR 490 and southbound left-turning vehicles on SR 490 at the Interchange 11 entrance ramp. To accommodate this new ramp, a section of the existing entrance ramp will require reconstruction to provide adequate weave distance and decision sight distance.

Intersection improvements on SR 490 at the Interchange 11 ramp termini include realignment of the exit ramp to provide improved intersection capacity and safety. The exit ramp will be widened to provide a three-lane approach (2 left-turn lanes and 1 right-turn lane) to the intersection.

Improvements at the intersection of Route 34 and SR 490 include modifications to the SR 490 approach angle and widening SR 490 to provide a 3-lane approach (2 right-turn lanes and a left-turn lane) to the intersection. The realignment of the SR 490 approach provides improved geometry for the double right-turn movement. The length of the westbound left-turn lane on Route 34 will be extended to improve storage. To accommodate the proposed four-lane section on Route 34 east of the SR 490 intersection, retaining walls are required on both sides of Route 34 to avoid undermining the abutment footings supporting Bridge Nos. 02984 and 02985. Just to the west of this intersection, Route 34 will be widened in the vicinity of Newtown High School to provide a westbound left-turn lane into the high school to address congestion during the morning peak period.

Improvements at the intersection of Route 34 and Toddy Hill Road include widening Route 34 to allow two approach and two receiving lanes in each direction and provide for an exclusive eastbound right-turn lane and an exclusive westbound left-turn lane. The vertical alignment on Route 34 just to the east of this intersection will be modified by lowering the crest curve to provide a Design Speed, Stopping Sight Distance and Intersection Sight Distance for 45 MPH. The horizontal alignment of Route 34 in the vicinity of Toddy Hill Road will be improved while minimizing impacts to homes eligible for inclusion in the National Register of Historic Places.

Travel and turn lanes on Route 34 and SR 490 will have a uniform width of 11 feet. To improve bicycle and pedestrian access, the project includes 5-foot wide right shoulders and 5-foot wide concrete sidewalks along Route 34, from the high school driveway to Pole Bridge Road, respectively. In addition, concrete sidewalks will also be constructed along SR 490 from Route 34 to Oakview Road.

To accommodate the widened roadways, most of the existing storm drainage will be replaced. In addition, the traffic signal equipment at the three signalized intersections will be completely replaced.

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. An Air Quality Assessment was performed by CTDOT in January 2018 for the project and the analysis determined that the project is in conformity with the Clean Air Act, as amended, pursuant to all Environmental Protection Agency regulations. The project is located within the boundaries of the portion of the state which has been classified as attainment maintenance for carbon monoxide (CO) and PM2.5. The analysis performed indicate that the project will not result in exacerbating any existing violation or create a new local CO violation and is therefore in conformity. Regarding PM2.5, this project is not a type listed as an air quality concern in the Federal Regulations, therefore, the Clean Air Act requirements are met without an explicit PM2.5 hotspot analysis. The project will not result in

increased Mobile Source Air Toxic emissions. In addition, the project has been demonstrated to be consistent with the motor vehicle emissions budgets in the Statewide Transportation Improvement Program (STIP) as evidenced by the CTDOT's Ozone Air Quality Conformity Determination. Potential temporary impacts during construction can be avoided or limited by proper operation of construction equipment and adherence to regulations limiting idling of engines.

b) 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 817. Section 1.10.03, Environmental Compliance, specifically deals with water pollution control and Best Management Practices.

c) Ambient Noise Levels- No negative impacts are anticipated. In July 2018, a noise analysis was conducted according to Federal regulations, and concluded that no receptor analyzed approached or exceeded Noise Abatement Criteria. As no receptor group shows an impact between the existing, no build and build conditions, no noise barrier walls are recommended. Any noise impacts during construction will be temporary and be minimized to the best extent practicable by compliance with CTDOT Standard Specifications for Roads, Bridges, Facilities and Incidental Construction Form 817 regarding construction noise pollution:

"1.10.05 – Noise Pollution: The contractor shall take measures to control noise intensity caused by his construction operations and equipment, including but not limited to 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 nearest residence or occupied building shall be 90 decibels on the "A" weighted scale (dB(A)). Any operation that exceeds this standard will cease until a different construction methodology is developed to allow work to proceed within the 90-dB(A) limit."

2. Impact on a public water supply system or serious effects on groundwater, flooding, erosion, or sedimentation

a) Water Supply – No negative impacts are anticipated. The Department of Public Health (Drinking Water Section) indicated in their comments, dated May 20, 2016, that the proposed work area for the intersection of Route 34 and Toddy Hill Road falls within the source water area of the public drinking water supply for Curtis Packaging. CTDOT will ensure that no sources of contamination pursuant to Regulations of Connecticut State Agencies section 19-13-B51d are introduced into the sanitary radius of the public drinking water source of supply. The project also falls within an Aquifer Protection Area, as such, coordination with the Newtown Water Department is required. Additionally, the project is located within the Pootatuck Sole Source Aquifer, and as required coordination with the EPA has taken place and they have determined that no negative impacts are anticipated. CTDOT will adhere to Best Management Practices for construction within a public drinking water supply area and water pollution control.

b) Groundwater - No negative impacts are anticipated. All CTDOT projects conform to the CTDOT Standard Specifications for Roads, Bridges, Facilities and Incidental Construction Form 817. Section 1.10.03, Environmental Compliance, specifically deals with water pollution control and Best Management Practices. See Item 6 below for further information.

c) Flooding – No negative impacts are anticipated. The project is not located within the 100-year flood zone on the community’s Flood Insurance Rate Map.

d) Erosion or Sedimentation- No negative impacts are anticipated. Erosion and sedimentation control measures utilized during construction will comply with *The 2002 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. Any activity within federally regulated wetland areas or watercourses at the site will require a permit from the U.S. Army Corps of Engineers (USACOE) pursuant to Section 404 of the Clean Water Act. If a permit is required from the USACOE, a Water Quality Certificate will also be required from CTDEEP pursuant to Section 401 of the Clean Water Act. The project site will be evaluated for the presence of inland wetlands. Since the project is on a local road, consultation with the municipal inland wetlands agency will take place to determine if a permit is required. Registration under CTDEEP’s *General Permit for Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities* will be completed if required; and CTDOT will employ Best Management Practices regarding stormwater management. All CTDOT projects are designed in conformance with the 2004 CTDEEP Stormwater Quality Manual.

4. Disruption or alteration of an historic, archaeological, cultural, or recreational building, object, district, site or its surroundings – A Phase I Archaeological Survey was completed within the project area in the Summer of 2016. Two small archaeological sites were identified, however, neither was found to be eligible for the National Register of Historic Places. Qualified cultural resources professionals at CTDOT reviewed the project and recommended a finding of No Adverse Effect to the Connecticut State Historic Preservation Officer (CTSHPO). The CTSHPO reviewed the project under the Connecticut Environmental Policy Act and Section 106 of the National Historic Preservation Act and concurred with this finding on August 22 2017, resulting in a determination of No Adverse Effect to historic properties.

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 impacts are anticipated. Connecticut Department of Energy and Environmental Protection’s review of Natural Diversity Database Mapping indicates that there is a record of the state species of special concern, wood turtle, occurring along the Pootatuck River in the vicinity of the project. CTDOT has developed Best Management Practices for ensuring protection of the wood turtle. These practices

and protection strategies will be followed, ensuring that the project will not have an adverse impact on the wood turtle.

- 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. Land use in the vicinity of the project limits and the potential for excess soil created by the proposed construction activities were considered during the initial phases of project design. An assessment of soil and groundwater quality performed within the project area and adjacent right-of-way identified the presence of contamination incidental to normal paving and maintenance of roadways. Nevertheless, the project's design plans and specifications will require that excess contaminated soil be properly disposed at a licensed facility and that dewatering wastewater be properly treated as needed prior to discharge from the project. Soil management will be conducted in accordance with the CT DEEP's *General Permit for Contaminated Soil and/or Sediment Management (Staging & Transfer)*. Dewatering activities involving contaminated groundwater will be conducted in accordance with CT DEEP's *General Permit for the Discharge of Groundwater Remediation Wastewater*.

- 7. *Substantial aesthetic or visual effects*** - No negative impacts are anticipated.

- 8. *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*** – In a memo from CTDOT to OPM dated March 2015, CTDOT has adopted a programmatic approach for meeting the requirements of CGS Chapter 297 Section 16a-31(a) and Chapter 297a Section 16a-35(c) and 16a-35(d) for determining consistency of proposed actions with the Statewide Plan of Conservation and Development. As stated in the memo, this type of product is categorized as “Renovations with Capacity Improvement”. It is CTDOT's interpretation that this category of activities is consistent with the Plan through Growth Management Principle (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”.

CTDOT's interpretation is that this category of activities falls under the intended definition of a Growth Related Project (GRP). Changes to an existing facility that increase the capacity of the corridor or facility are intended, at least in part, to facilitate growth in areas served by that corridor or facility and therefore meet the definition of a GRP. CTDOT is prohibited from providing funding, without the approval of the Secretary of OPM, for growth related projects unless the project is located entirely in a priority funding area. Based upon a review of OPM's Locational Guide Map, this project has been determined to be entirely within a priority funding area. Portions of the project, however, are located in a Balanced Priority Funding Area.

Balanced Priority Funding Areas meet the criteria of both Priority Funding Areas and Conservation Areas. Conservation Areas are delineated based on the presence of factors that reflect environmental or natural resource values. State agencies that propose actions in these areas must provide balanced consideration of all factors in determining the extent to which it is consistent with the policies of the State C&D Plan. This particular area is characterized as an Aquifer Protection Area and the projects effects upon the Aquifer Protection Area must be considered. No negative impacts are anticipated, see Section 2 above regarding impact on a public water supply system.

9. ***Disruption or division of an established community or inconsistency with adopted municipal and regional plans*** - No negative impacts are anticipated. The project is consistent with the Town of Newtown's Plan of Conservation and Development (updated 2014). The Plan lists improving the safety of Newtown roads as a goal. The Plan also lists the Route 34/ Toddy Hill Road intersection and I-84 Exit 11 on ramps as a top priority for the Newtown Traffic Unit.
10. ***Displacement or addition of substantial numbers of people*** – The project requires the acquisition of five (5) residential properties. As required, CTDOT, conducted a Rights of Way Preliminary Stage Survey, and CTDOT does not anticipate any major problems with the relocation of the residential occupants. CTDOT personnel have concluded that there are sufficient replacement properties available in the Newtown area to satisfy the requirements of the displace, as necessary to proceed with the proposed transportation project. CTDOT must comply with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, and the current published Federal Regulations.
11. ***Substantial increase in congestion (traffic, recreational, other)*** - No negative impacts are anticipated. The project, once complete, will reduce delay and congestion and improve traffic operations. Impacts are limited to temporary impact during construction, however no detours are proposed at this time. Traffic shifts will be utilized so the widening of Route 34 can be completed, and one lane of traffic in each direction will be maintained at all times.
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. The project will be reviewed for the potential of having lead, asbestos, or other hazardous material constituents in the dwelling and buildings to be acquired through the project's rights-of-way process. 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 impacts to human health or safety. Therefore, significant impacts associated with hazardous materials or waste sites are not anticipated.

14. Any other substantial impact on natural, cultural, recreational or scenic resources - No other negative impacts are 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 this project.

Recommendations/ Comments from State Agencies

Connecticut Department of Energy and Environmental Protection (CTDEEP)

The western end of the improvements to Wasserman Way is within the final adopted mapped Level A Aquifer Protection Area for the Fairfield Well operated by the Newtown Water Department. Best management practices should be required for construction within this area. Catch basins and curbs should be installed in this area and designed to control runoff and direct it away from the wellhead. Wellhead protection signs should also be posted to alert motorists entering the aquifer protection area.

The majority of the project area is within the Pootatuck River drainage basin. The opportunity to introduce treatment measures to the stormwater collection system as part of the project should be explored.

It is recommended that a certified soil scientist perform a reconnaissance of the project site in order to confirm that there are not any areas which would be regulated as wetlands or watercourses as defined by Section 22a-38(15) and (16) of the CGS, respectively.

There is a record of the state species of special concern, wood turtle, occurring along the Pootatuck River in the vicinity of the project. The protection strategies and protocols that CTDOT has developed for the turtles should be employed, particularly where Wasserman Way approaches the river.

CTDEEP encourages the use of newer off-road construction equipment and newer on-road vehicles that meet the latest EPA or California Air Resources Board standards.

Idling of mobile sources should be limited to 3 minutes. Use of posted signs indicating the 3-minute idling limit is recommended. It is recommended that CTDOT include language similar to the anti-idling regulations in the contract specifications for construction.

A site-specific hazardous materials management plan should be developed prior to commencement of construction and a health and safety plan for construction workers should also be prepared.

The Development plans in urban areas that entail soil excavation should include a protocol for sampling and analysis of potentially contaminated soil. Soil with contaminant levels that exceed the applicable criteria of the Remediation Standard Regulations, that is not hazardous waste, is considered to be special waste. The disposal of special wastes requires written authorization from the Waste Engineering and Enforcement Division prior to delivery to any solid waste disposal facility in Connecticut. If clean fill is to be segregated from waste material, there must be strict adherence to the definition of clean fill. In addition, the regulations prohibit the disposal of more than 10 cubic yards of stumps, brush or woodchips on the site, either buried or on the surface.

The Waste Engineering and Enforcement Division has issued a *General Permit for Contaminated Soil and/or Sediment Management (Staging & Transfer)*. It establishes a uniform set of environmentally protective management measures for stockpiling soils when they are generated during construction or utility installation projects where contaminated soils are typically managed.

Connecticut Department of Public Health

The proposed work area falls within the source water area of the public drinking water supply for Curtis Packaging. Curtis Packaging should be consulted to verify the location of the source of the public water supply. CTDOT must ensure that no sources of contamination pursuant to the Regulations of the CT State Agencies section 19-13-B51d are introduced into the sanitary radius of the public drinking water source of supply. Construction should adhere to the *General Construction Best Management Practices for Sites within a Public Drinking Water Supply Area*.

Connecticut Office of Policy and Management

In 2000, CTDOT completed an I-84 Corridor Deficiencies/ Needs Study that included the Exit 11 area covered by this scoping notice. The study evaluated six alternatives for the area and recommended Alternate 5 as the long-term preferred alternate. According to local news articles, however, it appears CTDOT was implementing a very different design concept within a few years, apparently intended to improve travel safety and enhance traffic flow in the area by simplifying and downsizing the interchange. Those articles seem to suggest that this option was supported by state and local officials, and had reached an advanced design stage by mid-2008. The design concept highlighted in the current scoping notice has some similarity to the preferred alternative identified in 2000, with some significant changes. However, this design appears to be completely different from the approach described in those news articles.

How did CTDOT evaluate and prioritize the factors considered in the undertaking this project and how have those factors changed over time? Specifically, what factors caused CTDOT to begin and then

abandon the approach described in the 2005-2008 news articles in favor of the concept highlighted in this scoping notice?

The 2000 I-84 Corridor Study emphasizes traffic projections and intersection level-of-service (LOS) as two of the primary considerations when identifying existing issues and evaluating proposed alternatives. The screening analysis for alternatives includes traffic projections out to 2025. How do actual traffic measurements compare to those projections? Has CTDOT reevaluated LOS at these intersections since the original study in 2000? How has the design evolved to reflect our greater interest in providing for pedestrians, bicyclists and other transportation modes?

CTDOT's Response to OPM Comments

The earlier project originated from the 2000 Corridor Study but design work was halted in 2008 due to fiscal constraints. In 2014, the Town, the Metropolitan Planning Organization (Western CT COG), and CTDOT determined to re-evaluate the feasibility of addressing the concerns at this location and the effectiveness of the original scope. CTDOT evaluated new concepts that addressed the concerns at this location in more cost effective methods. The proposed concept plan as shown in the CEPA scoping notice depicts a plan that was presented to the Town and public in 2015. The proposed improvements are supported by the Town. No negative comments were received from the public during the scoping phase.

CTDOT prepared new traffic projections to 2018 and 2035. A preliminary capacity analysis for the proposed concept plan was performed with the updated data and will continue to be refined as the design progresses.

Improvements to bicycle, pedestrian, and commuter accommodations will be incorporated where possible. Four foot minimum shoulders will be included and five foot shoulders may be included where possible. Sidewalks are proposed along the south side of Route 34 from Newtown High School to Toddy Hill Road, and along Wasserman Way from the Route 34 intersection south to Oakview Road. Sidewalk is also proposed on Wasserman Way to the commuter lot. Discussions with the Town indicate a need to address the pedestrian and bicycle demand in this vicinity and those discussions will continue as the design progresses.