

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

Date: August 3, 2021

Project Name: Improvements at Interchange 17 of I-84, Construction of Chase Parkway Extension, and Operational Improvements on Route 63, Route 64, and State Route 845

Municipality: Middlebury and Waterbury

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 improvements, which address traffic operational issues, include modifying the I-84 WB off-ramp at Interchange 17; installing a new traffic signal at the intersection of SR 845 (Chase Parkway) and Route 64; constructing a new two-way connector (Chase Parkway Extension) between Route 63 and Route 64; and providing a new Park and Ride facility and multi-use trail.

The proposed improvements to Interchange 17 include widening the WB off-ramp to increase the ramp storage capacity by adding a second lane from the existing gore to the end of the exit. SR 845 at its intersection with Route 64 and Exit 17 off-ramp will be realigned, and a new traffic signal will be installed. The I-84 EB on-ramp will be milled and paved.

It is also proposed to construct the "Chase Parkway Extension", a new connector road from the new signalized intersection of Route 64/SR 845 and the I-84 WB Exit 17 off-ramp to the existing signalized intersection of Route 63 (Bradleyville Road) and Woodside Avenue. A multi-use trail will be constructed along the new connector road.

It is proposed to widen approximately 1,300 feet of Route 63 SB to two (2) lanes and modify the approaches at Route 64 to provide three (3) lanes for the SB approach (dedicated left-turn, through and combined through/right-turn) and three (3) lanes for the NB approach (dedicated left-turn, through lane, and dedicated right-turn). The existing traffic signal at the intersection will be modified/ upgraded.

It is proposed to widen approximately 1,900 feet of Route 64 to provide two (2) lanes westbound and one (1) lane eastbound beginning at the intersection of Route 63 to SR 845 (Chase Parkway). Additionally, the vertical profile along Route 64 will be lowered to improve sight distance.

Additional proposed improvements include revising pedestrian access at the intersection of Memorial Drive, the construction of a Park and Ride lot at the intersection of Route 63 and the proposed Chase

Parkway Extension, and drainage system upgrades throughout the project area including replacement of culverts conveying watercourses affected by the proposed improvements.

The proposed project limits on each roadway are as follows:

- I-84 WB Interchange 17 off-ramp begins in the vicinity of the existing gore area and extends to the intersection of SR 845 and Route 64 for a total length of 800 feet.
- I-84 EB on –ramp begins at the intersection of Route 64/SR 845 and extends approximately 375 feet along the ramp.
- Route 64 begins approximately 300 feet west of Memorial Drive and extends to the intersection of SR 845 (Chase Parkway) for approximately 3,200 feet.
- Route 63 begins at the intersection of Woodside Avenue and extends approximately 700 feet beyond the intersection of Route 64 for a total of approximately 2,300 feet.

SR 845 (Chase Parkway) begins approximately 600 feet north of the intersection of Route 64 and extends approximately 1,300 feet to the intersection of Route 63/Woodside Avenue with the construction of a new roadway (Chase Parkway Extension).

This project was scoped in the Environmental Monitor on May 17, 2016. The public comment period remained open until the close of business on June 17, 2016. A summary of comments are included at the end of this document. A public scoping meeting was not held as there were no such requests from the public.

Purpose and Need:

The purpose of this project is to address safety and operational concerns associated with traffic delays and crashes within the project limits encompassing the I-84 Interchange 17 westbound off-ramp terminus, Route 63, and Route 64. According to the CT Crash Data Repository, there were a total of 66 crashes with no fatalities within the project limits from May 2015 to May 2019. The majority of crashes were rear-end type (36), followed by intersecting-turn crashes (18). A total of 18 crashes resulted in injuries.

The proposed action is non-site specific, or encompasses multiple sites;	<input type="checkbox"/>
Current site ownership:	<input type="checkbox"/> N/A, <input checked="" type="checkbox"/> State; <input type="checkbox"/> Municipal, <input type="checkbox"/> Private, <input type="checkbox"/> Other: Please Explain.
Anticipated ownership upon project completion:	<input type="checkbox"/> N/A, <input checked="" type="checkbox"/> State; <input type="checkbox"/> Municipal, <input type="checkbox"/> Private, <input checked="" type="checkbox"/> Other: <u>A maintenance agreement will be included with both Middlebury and Waterbury for the multi-use trail.</u>

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). CTDOT will also be required to obtain water quality certification from the Environmental Protection Agency (EPA) under Section 401 of the Clean Water Act.

Surface Water – The project requires the replacement of Bridge No. 02006 and Bridge No. 06812 with twin 10' diameter pipes that will require the relocation of approximately 1,100 linear feet of Wooster Brook downstream of the structures. Watercourse relocation will be done under the direction of CTDEEP Fisheries. For water handling, existing culverts will be maintained during the construction of downstream culverts and channels to route stream flows around work areas.

Stormwater – No negative impacts are anticipated. Registration under *CTDEEP's General Permit for Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities* will be completed; and CTDOT will employ Best Management Practices regarding stormwater management. All CTDOT projects are designed in conformance with the 2004 CTDEEP Stormwater Quality Manual and requirements for the General Permit for the Discharge of Stormwater from Department of Transportation Separate Storm Sewer Systems.

Groundwater – No negative impacts are anticipated. All CTDOT projects conform to the CTDOT Standards 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.

- 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. Additionally, the project does not take place within an Aquifer Protection Area or Sole Source Aquifer.

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

Flooding – Portions of the project are located within FEMA Flood Zones AE, therefore, CTDOT will be required to obtain CTDEEP Flood Management Certification. A Conditional Letter of Map Revision (CLOMR) from FEMA will also be required due to the affect on the existing floodway.

In-stream flows – The project requires the replacement of Bridge No. 02006 and Bridge No. 06812 with twin 10' diameter pipes that will require the relocation of approximately 1,100 linear feet of Wooster Brook downstream of the structures. Watercourse relocation will be done under the direction of CTDEEP Fisheries. For water handling, existing culverts will be maintained during the construction of downstream culverts and channels to route stream flows around work areas.

Erosion or Sedimentation – No negative impacts are anticipated. All work will be consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control.

- 4. Disruption or alteration of an historic, archaeological, cultural, or recreational building, object, district, site or its surroundings** – No negative impacts are anticipated. CTDOT, FHWA, and the Connecticut State Historic Preservation Office (CTSHPO) have determined that the project will result in No Historic Properties Affected.

- 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** – No negative impacts are anticipated. The project does not occur within a Natural Diversity Database (NDDDB) area. Additionally, watercourse relocation will be done under the direction of CTDEEP Fisheries.

- 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. A screening for contaminants took place and the project area is

considered low level for concern. A temporary waste stockpile area (WSA) and project WSA will be used to handle any potentially contaminated soils. 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.
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, CTDOT has determined that this category of action is consistent with Growth Management Principle #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.” The project is considered a “Growth Related Project” and is located within a Priority Funding Area. The project is not inconsistent with any additional State Agency Plans or Regional/Municipal 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. This project is not in conflict with any municipal or regional plans.
10. **Displacement or addition of substantial numbers of people** – This project involves the displacement of individuals from one property. Property acquisition will be performed in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. Property owners with impacted properties will be provided uniform, fair and equitable treatment, relocation assistance to lessen emotional and financial impact, and insured decent, safe, and sanitary housing, as necessary.
11. **Substantial increase in congestion (traffic, recreational, other)** – No negative impacts are anticipated. The purpose of the project is to address safety and operational concerns associated with traffic delays and crashes. Once constructed the project will improve traffic congestion. minimize crashes. All traffic impacts during construction will be minimized as much as possible.
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 safety related and is not anticipated 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. Additionally, the project will have beneficial effects on human health and safety once complete, as the project is being proposed to address existing safety concerns and to reduce the number of crashes in the project area.

14. Effect on air quality - No negative impacts are anticipated. An Air Quality Assessment was performed by qualified staff at CTDOT. The proposed project is included in the Central Naugatuck Valley MPO Planning Organization's current Long Range Transportation Plan (Plan) and current Transportation Improvement Program (TIP).

The applicable criteria and procedures for determining the conformity of a project which is from a conforming Plan and TIP have been satisfied as follows:

- Currently Conforming Plan and TIP – The MPO's current Plan and the FY 2018-2021 Statewide Transportation Improvement Program (STIP), which incorporates the MPO's current TIP, were determined to be in conformity by FHWA.
- Project from a Conforming Plan and TIP - This project is identified in the MPO's current Plan and is included in the MPO's current TIP. The scope of this project is consistent with the scope identified in the current Plan and TIP.
- CO, PM10, and PM2.5 Hot Spots – The project will not cause or contribute to any new violations or increase the frequency or severity of any existing CO or PM2.5 violations in CO and PM2.5 maintenance areas. This project is located within the boundaries of the portion of the State, which has been classified as attainment for CO and PM2.5. A project level conformity determination is not required for CO and PM2.5.
- PM10 and PM2.5 Control Measures - This project must comply with PM10 and PM2.5 control measures in the SIP. However, there are no control measures in the current SIP, so this criterion is met.
- Emissions Budget and/or Interim Emissions – This project has been demonstrated to be consistent with the motor vehicles emissions budgets in the SIP as evidenced by CTDOT's Ozone Air Quality Conformity Determination for the 2018-2021 Transportation Improvement Program.

Additionally, it was determined that this project would not require a qualitative analysis of Mobile Source Air Toxics effects.

In summary, the Proposed Action has been determined to be in conformity with the Clean Air Act, as amended, pursuant to all applicable Environmental Protection Agency regulations. Any potential temporary air quality 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. In December 2019, a noise study was conducted in accordance with 23 Code of Federal Regulations Part 772 – Procedures for Abatement of Highway Traffic and Construction Noise, and CTDOT’s Highway Traffic Noise Abatement Policy for projects funded by the Federal Highway Administration, dated May 2017. The noise assessment included analysis of existing conditions for 2016, as well as the Design Year 2036 No Build Alternative and the Design Year 2036 Build Alternative. To assess the degree of impact of highway traffic and noise on human activity, the Federal Highway Administration (FHWA) established Noise Abatement Criteria (NAC) for different categories of land use activity. In this study, residential areas, recreational areas, and one commercial property were evaluated for noise impact. The study involved monitoring of existing noise conditions and modeling of existing and future noise conditions with the FHWA-approved computerized Traffic Noise Model. Traffic noise impact was assessed for all categories of noise-sensitive land use located within the study area for the Build alternative. Noise abatement was evaluated to determine if it is warranted, feasible, and reasonable. Noise abatement, by means of a noise barrier, was considered for all impacted properties in the study area; however the study determined that noise barriers would not be a feasible or reasonable means of abatement.

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 – 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.”

16. Effect on existing land resources and landscapes, including coastal and inland wetlands – As currently proposed the project will have approximately 0.8 acres of permanent impacts to wetlands or watercourses:

- Approximately 23,000 SF permanent wetland impact
- Approximately 10,250 SF permanent perennial watercourse impact
- Approximately 2,350 SF permanent intermittent watercourse impact
- Approximately 51,600 SF permanent floodplain impact

Due to these impacts a CTDEEP Inland Wetlands Individual Permit and a United State Army Corps of Engineers (USACE) Individual 404 Permit will be required. As mentioned previously, the project will also require CTDEEP Flood Management Certification and a CLOMR from FEMA.

17. Effect on agricultural resources – No negative impacts are anticipated.

- 18. Adequacy of existing or proposed utilities and infrastructure** – No negative impacts are anticipated. Coordination with utility companies will take place, as needed, as the project progresses.
- 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. Once constructed, the project will have a beneficial impact on traffic congestion and therefore on greenhouse gas emissions.
- 20. Effect of a changing climate on the action, including any resiliency measures incorporated into the action** – No negative impact is anticipated. The project is located outside of the coastal boundary and will not be exposed to associated climate change hazards.
- 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 this project: Improvements at Interchange 17 of I-84, Construction of Chase Parkway Extension, and Operational Improvements on Route 63, Route 64, and State Route 845 project. Additionally, since this project involves Federal funding from the Federal Highway Administration (FHWA), it must comply with the National Environmental Policy Act (NEPA). Under NEPA, on February 25, 2020, FHWA determined that the project does not involve significant environmental impacts and qualified for a Categorical Exclusion. Publication of this Environmental Assessment Checklist to the *Environmental Monitor* shall satisfy CTDOT's responsibilities under Section 22a-1a-7 of the RCSA.

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.

Comments from CTDEEP

Comment 1: The project will require an inland wetland and watercourses permit from the Inland Water Resources Division (IWRD). It may also require certification as being in compliance with flood and stormwater management standards specified in the Connecticut General Statutes and the Regulations of Connecticut State Agencies and receive approval from CTDEEP. However, based on a rough calculation of the drainage area, it appears that the watershed of Wooster Brook upstream of the project area is less than 600 acres. If it is confirmed that the watershed is less than one square mile, the project would be exempt from certification.

Comment 2: Hop Brook Lake, downstream of the project site is listed in the 2014 State of Connecticut Integrated Water Quality Report as not supporting the designated use for recreation due to bacteria. In addition, a *Total Maximum Daily Load (TMDL) Analysis for Recreational Uses of the Naugatuck River Regional Basin*, based on indicator bacteria (E.coli), was developed in 2008. Potential sources include both point and non-point sources, including stormwater.

The design of the stormwater treatment system for the new roadway and parking lot should consider measures to reduce potential additional bacteria loading to the watershed. Water quality treatment and volume reduction measures designed to encourage stormwater to infiltrate into the ground should be employed.

Comment 3: The project will require registration under the General Permit for the *Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities*. Stormwater treatment systems must be designed to comply with the post-construction stormwater performance management requirements of this permit. These include post-construction performance standards requiring retention of the water quality volume and incorporating control measures for runoff reduction and low impact development practices.

Comment 4: CTDEEP 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.

CTDEEP also encourages 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 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 CTDEEP.

Comment 5: The Natural Diversity Database (NDDDB), maintained by CTDEEP, contains no records of extant populations of Federally listed endangered or threatened species or species listed by the State of Connecticut.

Comment 6: As construction commences, the discovery of hazardous materials, hazardous waste and/or contaminated soils would be a potential throughout the project corridor. 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.

Development plans in urban areas that entail soil excavation should include a protocol for sampling and analysis of potentially contaminated soil. 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. The regulations also 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)*. Temporary storage of less than 1000 cubic yards of contaminated soils at the excavation site does not require registration, provided the activities are conducted in accordance with the applicable conditions of the general permit. Registration is required for on-site storage of more than 1000 cubic yards for more than 45 days or transfer of more than 10 cubic yards off-site.