

FACT SHEET

APPLICATION: WQC-201005238
CTDOT
New Britain to Hartford Busway
Piper Brook, Unnamed tributaries to Piper Brook, Bass Brook, Kane Brook, Trout Brook, South and North Branch of the Park River, Park River

REGULATORY PROGRAM: Water Quality Certification
REVIEWED BY: Danielle Missell September 10, 2010, Updated February 17, 2011, Updated April 18, 2011, Updated May 13, 2011

PROJECT:

The Connecticut Department of Transportation (CTDOT) is proposing to construct the New Britain – Hartford Busway (Busway), State Project No. 171-305, consisting of a Bus Rapid Transit (BRT) facility along a 9.4-mile long corridor between downtown New Britain and downtown Hartford. The project is located within the towns of New Britain, Newington, West Hartford and Hartford. From downtown New Britain to approximately Newington Junction in Newington, the Busway will be located within the abandoned Conrail right-of-way (ROW). From Newington Junction north, the Busway will be located within the active Amtrak railroad ROW. In the abandoned rail section, a multi-use trail for bicycle and pedestrian use will be constructed parallel to the Busway. Eleven (11) stations will be constructed to serve Busway passengers. In addition, a new Amtrak Access Road (AAR) will be constructed along the east side of Amtrak's active rail line.

REGULATED ACTIVITY:

Construction of the Busway, the stations, the multi-use trail, and the AAR will result in impacts to wetlands, watercourses, 100-year floodplains, stream channel encroachment lines (SCELs), and a floodway. The project will change stormwater runoff and drainage. The total Busway project will result in approximately 2.11 acres of permanent impacts to federal/state wetlands and 7,108 linear feet (lf) of permanent impacts to intermittent watercourses. There are an additional 0.459 acres of temporary impacts to federal/state wetlands.

The total Busway project will result in a net fill within 100-year floodplains of 2,060 cubic yards, spread over an area of 1.32 acres. The 5 cubic yards of net fill in Kane Brook is not anticipated to increase flooding or flooding risks.

The project has one activity (outfall installation) within the mapped floodway of the Trout Brook but it will be installed flush with existing terrain for a net result of zero (0) cubic yards of fill.

The total Busway project will result in a net fill of approximately 4,086 cubic yards within SCEL.

ENVIRONMENTAL SETTING:

The project is located within the towns of New Britain, Newington, West Hartford and Hartford. From downtown New Britain to approximately Newington Junction in Newington, the Busway will be located within the abandoned Conrail right-of-way (ROW). From Newington Junction north, the Busway will be located within the active Amtrak railroad ROW.

Most of the watercourses within the corridor have been modified during urbanization and/or construction of the rail line, which is over 100 years old. The rail ROW crosses over culverted sections of Piper Brook, Bass Brook, tributaries to Piper Brook, and Kane Brook. A rail bridge spans Trout Brook, in a concrete channel section of the brook which was constructed as a flood control structure.

There are a few isolated areas, particularly in the southern end of the corridor, which contain vegetated wetland pockets. The largest and most notable of these is north of Cedar Street in Newington, which is

the forested area along Piper Brook. This is the largest undisturbed wetland within the corridor. Most of the larger wetlands are located east of the busway, but wetlands span both sides of the rail ROW throughout the corridor. The vegetation and adjacent wetland systems thin out north of the Piper Brook floodplain. From there north are primarily linear ditch-type wetlands and intermittent watercourses running parallel to the existing rail corridor.

ALTERNATIVES CONSIDERED:

Alternatives were evaluated in a Draft EIS and Section 4(f) Evaluation completed in March 2001. Alternatives considered are described below. These alternatives were evaluated against the project purposes of reducing congestion levels on I-84 and parallel roadways and providing alternative modes of transportation.

No Build Alternative: The No Build Alternative assumed that no transportation improvements would be made in the corridor other than projects that are currently programmed or routine maintenance of the current transportation system. Under the No Build Alternative, congestion levels on I-84 and parallel roadways would continue to worsen, and no opportunities would be provided for expanded interregional transit service or alternative modes of transportation. Overall, the No Build Alternative would not address any of the needs of the project.

TSM/TDM Alternative: The TSM/TDM Alternative included a broad range of low cost, localized improvements to improve traffic flow, increase safety, and reduce travel demand without major capital investment or construction. While these measures could be easily implemented, they would only have a minimal effect on addressing the purpose and need for this project.

Build Alternative - New Britain-Hartford Busway: The proposed Build Alternative would be a dedicated, 9.4-mile BRT facility between downtown New Britain and downtown Hartford. The proposed corridor follows an abandoned rail line south of Newington Junction, while north of Newington Junction the corridor would run within active Amtrak rights-of-way. Up to 12 passenger stations (including Union Station in downtown Hartford) were considered to serve the users of the Busway. A multi-use pathway for bicyclists and pedestrians would be constructed parallel to the Busway. The Build Alternative evaluated several alignment options, summarized briefly below.

- *Alignment Option 1:* After exiting Route 72 onto an exclusive bus-only off-ramp to a Downtown New Britain Station, buses would follow a dedicated busway along an abandoned rail line (owned by CTDOT) north to Newington Junction. The dedicated busway would then follow an unused portion of active Amtrak right-of way from Newington Junction, north to Union Station in downtown Hartford.
- *Alignment Option 2:* Regional express buses would not exit Route 72, but would continue onto Route 9 north in mixed traffic. An exclusive bus-only off-ramp would be provided between East Street in New Britain and Cedar Street in Newington for buses continuing onto the dedicated busway along the abandoned rail line. An exclusive bus-only on-ramp would be provided on southbound Route 9 for buses traveling southbound. Continuing north, this alignment option would follow the path of Alignment Option 1.
- *Alignment Option 3:* Similar to Alignment Option 1, the Busway would use a bus only off-ramp from Route 72 to a Downtown New Britain Station then would continue northward following the abandoned rail line. The Busway would then continue over Route 9 using an existing railroad bridge and then continue northward in the median of Route 9. The Busway would continue for approximately one (1) mile in the dedicated median until St. Mary's Cemetery, where it would cross under the southbound lanes of Route 9 onto the abandoned rail corridor. From this point, the Busway would continue northward towards Hartford following an unused portion of Amtrak right-of-way, similar to Alignment Option 1.

Station locations were selected to minimize the acquisition of private properties and to maximize proximity to residential, employment, shopping centers and various community resources compatible with transit oriented development (TOD) within one-half mile of the stations. All stations were envisioned to have, at a minimum, two covered platforms for loading and unloading passengers, bicycle

racks, and kiss-and-ride drop-off areas. All stations would be designed and constructed to be in compliance with the Americans with Disabilities Act (ADA) and would include new sidewalks, where appropriate, to improve pedestrian accessibility and/or connectivity. Those stations that are expected to have high ridership would have full amenities such as park and ride lots, climate-controlled station buildings/waiting areas, restrooms, payphones, and some private retail services such as a newsstand and coffee shop/café. All but three of the proposed stations would include pick-up/drop-off areas for local feeder buses.

The Final EIS and Section 4(f) Statement, which was completed in December 2001, identified the Build Alternative on Alignment Option 1 as CTDOT's Recommended Action.

ENVIRONMENTAL AND NATURAL RESOURCE ISSUES:

Project impacts result from three main factors: 1) the existing railroad ROW crosses perennial and intermittent watercourses; 2) wetlands have formed in linear ditches along the existing ROW due to the lack of positive drainage; and 3) the rail alignment was originally located through large wetland systems which still persist at the toe of slope in some area along the corridor.

In order to avoid and minimize as much impact as possible the project was designed to minimize the change in grade between the existing ROW elevation and the proposed Busway. Designing the Busway to rest at or near existing grades minimized the amount of excavation or fill required to construct the new roadway. Impact sites are minimized also by the use of steeper 1.5:1 slopes, retaining walls, and by designing construction access and methodology so as to avoid the need for construction equipment and disturbance in regulated area. Best Management Practices will be in place throughout the project.

The project will be registered under the DEP's General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities, which regulates stormwater and wastewater management during and after construction. Impacts to water quality are minimized through the use of grass lined swells, deep sumps on catch basins, hydrodynamic separators, and water quality basins. By implementing best management practices and erosion and sedimentation controls during construction and by installing new or upgraded drainage systems, the project will minimize construction impacts over the short term and over the long term protect nearby natural resources.

There are no listed state or federal species of concern in the project area.

Sent to Inland Fisheries on October 27, 2010, fisheries response received on February 7, 2011 – they state that the proposal on our program interests is negligible and that no further review is warranted.

DEP IWRD Engineering in a memo dated May 5, 2011 states: There are no adverse flooding impacts caused by the proposed activity. Therefore, I have no objections to the issuance of this permit. This finding relies on the signed and sealed plans and calculations as being true and accurate and is also based on additional analysis and our engineering judgment.

A Request for Information with comments on the Mitigation was sent on March 14, 2011. The DOT response dated April 14, 2011, contains finalized mitigation plans and a mitigation monitoring plan. A Request for Information with comments from the DEP IWRD Engineering Section was sent on March 31, 2011. The DOT response dated April 14, 2001 contained the calculations, signatures, and data required by the DEP Engineers.

MITIGATION:

CTDOT has developed a Compensatory Mitigation Plan to compensate for the acreage and functions and values of wetlands impacted by the project. The compensatory mitigation plan provides for the creation and enhancement of 4.98 acres and 3.67 acres, respectively, of wetlands. This provides a total of 8.65 acres of mitigation for 2.11 acres of wetland impact, giving approximately a 4:1 mitigation ratio.

Mitigation for impacted IWCs will be achieved by the use of grass-lined swales and treatment of the *Phragmites*-infested linear swale adjacent to the wetland mitigation site. Approximately 11,132 linear feet of new grass-lined swales/ditches are proposed throughout the project area, which are expected to perform at a higher level than the existing IWCs to provide improved sediment/toxicant retention, and promote groundwater recharge and stormwater retention.

RECOMMENDATIONS:

Special Conditions:

1. All work must be done in accordance with ConnDOT's Standard Specifications for Roads, Bridges and Incidental Construction Form 816. All Erosion and Sedimentation Controls must be consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control.
2. Materials which could be injurious to human, animal or plant life are prohibited below the 500-year flood elevation. No materials or equipment shall be stored and no staging areas shall be placed below the 100-year flood elevation unless the contractor receives approval from the DEP for such activity.
3. Prior to the start of construction the applicant must provide a copy of the MDC and City of Hartford approval for all connections into the existing drainage systems as well as approval and/or acknowledgement of all storm drainage surcharge areas. Under Contract No. 63-H137, concerning the Park River Conduit, MDC prohibits connecting to the combined system and if connecting to their separated system they would like no net increase in flow. This system requires approval from both the MDC and the City of Hartford.
4. This project will require registration under the CTDEP "*General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities*". The contractor must demonstrate a construction methodology, including sequence of construction that ensures erosion and sedimentation are minimized. In compliance with this general permit, a Stormwater Pollution Control Plan will be developed which will address both stormwater pollution control during construction and after construction of the site including the roadway, parking lots, grassed areas. The permittee shall install post-construction stormwater measures designed to remove suspended solids and floatables with a goal of 80% removal of total sediment load from the discharge shall be used in the design.
5. The permittee shall employ an independent environmental coordinator with experience in transportation construction projects to monitor the project, including all mitigation activities and report daily on the condition and effectiveness of sedimentation and erosion controls being implemented for protection of water quality, wetlands and aquatic resources. The independent environmental coordinator shall work under the authority of the Commissioner of Environmental Protection. The permittee shall take all steps necessary to provide the independent coordinator with the authority to direct project contractors and the permittee to implement modifications or additional measures deemed necessary to prevent, remediate or correct erosion, sedimentation and all other adverse water quality and aquatic resource impacts emanating from project construction.
6. The permittee shall implement all provisions of the mitigation plan entitled "U.S. Army Corps of Engineers Mitigation Checklist for NEW BRITAIN – HARTFORD BUSWAY Hartford, West Hartford, Newington, New Britain State Project No. 171-305" prepared by Michael Baker Engineering, Inc. and Fitzgerald & Halliday, Inc., dated April 2011; and also with plans entitled "CONNECTICUT DEPARTMENT OF TRANSPORTATION PLAN FOR CONSTRUCTION OF NEW BRITAIN – HARTFORD BUSWAY WETLAND MITIGATION CONTRACT "SITE 13" IN THE TOWN(S) OF HARTFORD" STA 358+50 TO STA 386+00, prepared by Michael Baker Engineering, Inc., and dated April 13, 2010.