

**NEW HAVEN CITY PLAN COMMISSION INLAND WETLANDS REVIEW  
NEW HAVEN CITY PLAN COMMISSION SITE PLAN REVIEW**

**RE:** **WILMOT ROAD OVER WINTERGREEN BROOK.** Inland Wetlands Review and Site Plan Review for new bridge connecting Wilmot Road over Wintergreen Brook. (Owner/Applicant: City of New Haven; Agent Chad Perkoski of BL Companies).

**REPORT:** 1502-02

**INLAND WETLANDS FINDING:** Approval with Conditions

**SITE PLAN ACTION:** Approval with Conditions

**CONDITIONS OF APPROVAL**

1. Pursuant to State Statute, this Inland Wetland and Site Plan approval is valid for a period of five (5) years after the date of decision, to March 18, 2020. Upon petition of the applicant, the Commission may, at its discretion, grant extensions totaling no more than an additional five (5) years to complete all work connected to the original approval.
2. The applicant shall record on the City land records an original copy of this Site Plan Review report (to be provided by the City Plan Department) and shall furnish written evidence to the City Plan Department that the document has been so recorded (showing volume and page number), prior to City Plan signoff on final plans.
3. Comments under **Site Plan Review** shall be reviewed with the City Plan Department and resolution reflected on final plans, prior to their circulation for signoff.
4. Signoff on final plans by the Greater New Haven Water Pollution Control Authority, Fire Marshall, City Engineer, Department of Transportation, Traffic and Parking and City Plan Department in that order shall be obtained prior to initiation of site work or issuance of building permit.
5. Construction Operations Plan/Site Logistics Plan, including any traffic lane/sidewalk closures, temporary walkways, detours, signage, haul routes to & from site, and construction worker parking plan shall be submitted to the Department of Transportation, Traffic and Parking for review and approval to prior to City Plan signoff on final plans for building permit.
6. The name of an individual responsible for monitoring the soil erosion and sediment control plan on a daily basis during the construction period shall be provided to the City Plan Department, prior to City Plan signoff on final Plans.
7. Any proposed work within City right-of-way will require separate permits.
8. Any sidewalks or curbs on the perimeter of the project deemed to be in damaged condition shall be replaced or repaired in accord with City of New Haven standard details.
9. Final determination of traffic markings, V-loc locations, signs and traffic controls on site and on the perimeter of the site will be subject to the approval of the Department of Transportation, Traffic and Parking.
10. Implementation of a Storm Drainage Maintenance Plan and Inspection Schedule is required.
11. Following completion of construction, any City catch basins in the public right-of-way impacted by the project shall be cleaned, prior to issuance of Certificate of Occupancy.
12. As-built site plan shall be filed with City Plan Department, with a copy to the City Engineer, prior to issuance of Certificate of Occupancy. Site Plan shall be submitted in both mylar and digital format [.pdf file].

**Submission: SPR Application Packet including DATA, WORKSHEET, SITE, IW, and SESC forms. NARRATIVE attached. Received December 18, 2014.**

- Ecological & Wetland Assessment Report dated November 17, 2014. Received December 18, 2014.
- DEEP Statewide Inland Wetlands & Watercourses Activity Reporting Form. Received December 18, 2014.
- US Army Corps of Engineers Appendix 1A: Category 1 Certification Form. Received December 18, 2014.
- Abutting property owners to bridge number 04892. Received December 18, 2014.
- Application drawings. 11 sheets received February 24, 2015.
  - Title Sheet. Drawing date February 24, 2015.
  - EX-1: Topographic Survey. Drawing date February 24, 2015.
  - EC-1: Erosion & Sedimentation Control Details. Drawing date February 24, 2015.
  - MDS-1: Miscellaneous Details. Drawing date February 24, 2015.
  - MDS-2: Miscellaneous Details. Drawing date February 24, 2015.
  - HWY-1: Roadway Construction Plan. Drawing date February 24, 2015.
  - GDU-1: Grading, Drainage, & Utility Plan. Drawing date February 24, 2015.
  - LDS-1: Landscaping Plan. Drawing date February 24, 2015.
  - TP-1: Traffic Plan. Drawing date February 24, 2015.
  - S-1: General Plan. Drawing date February 24, 2015.
  - S-5: Water Handling Plan. Drawing date February 24, 2015.

**PROJECT SUMMARY:**

**Project:** Replacement of Bridge No. 04892  
**Address:** Wilmot Road over Wintergreen Brook  
**Site Size:** N/A  
**Building size:** N/A  
**Zone:** RM-1(Residential, Medium Density)  
**Parking:** N/A  
**Owner:** City of New Haven (Giovanni Zinn, City Engineer) **Phone:** 203-946-6417  
**Applicant:** City of New Haven (Giovanni Zinn, City Engineer) **Phone:** 203-946-6417  
**Agent:** Chad Perkoski (BL Companies) **Phone:** 203-630-1406  
**Site Engineer:** Chad Perkoski (BL Companies) **Phone:** 203-630-1406  
**City Lead:** City Plan Department **Phone:** 203-946-6379

**BACKGROUND**

**Previous CPC Actions:**

**CPC 1469-15: WILMOT ROAD at Wintergreen Brook.** Authorization for Mayor to sign agreements and any subsequent amendments with the Connecticut Department of Transportation utilizing federal funds from the Highway Bridge Program for the Design and Construction Phases of the Wilmot Road Bridge over Wintergreen Brook.

**Zoning:**

The Site Plan as submitted meets the requirements of the New Haven Zoning Ordinance for the RM-1 zone.

**Site Description/existing conditions:** A bridge inspection on July 24, 2013, found that the existing Wilmot Road Bridge was in poor condition. The underside of the roof slab exhibits significant spalls with moisture leakage. The floor slab of the southern cell has widespread scaling, while the floor slab of the northern cell is covered with channel material and debris. The headwalls are in poor conditions, with

cracking, efflorescence, and scaling throughout. The wingwalls are in fair condition, with light scaling, spalls, and cracks.

**Proposed Activity:** The existing structure will be completely removed and replaced with a cost-effective structure that improves the hydraulic capacity of the site, meets the current load/roadside safety standards, has low initial and life-cycle costs, minimizes the impacts to the local residents, and requires minimal maintenance from the City in the future. The proposed bridge will be a three-sided precast concrete box culvert with a clear span of 22 feet founded on cast-in-place concrete strip footings. The bridge will be skewed five degrees to better align with Wintergreen Brook. The new structure will utilize reinforced concrete wingwalls and endwalls at each corner of the bridge to support the roadway embankments and cast-in-place headwalls to which the metal bridge rail will be attached for pedestrian and vehicular safety at the vertical drop-off. The existing culvert will be removed and a natural streambed restored. Riprap will be required for scour protection along new abutments. Temporary impacts to the wetland are 0.08 acres and watercourse are 0.06 acres. Areas temporarily disturbed will be restored.

**Circulation/Parking/Traffic:** During construction the Wilmot Road Bridge will be closed and vehicular traffic will be diverted onto Brookside Avenue, Level Street, and Wayfarer Street. A temporary bituminous concrete sidewalk and pedestrian bridge will be installed for pedestrian traffic.

**Trash removal:** Not applicable.

**Signage:** Temporary signage used during construction is included on application drawing TP-1.

**Sec. 58 Soil Erosion and Sedimentation Control:**

- Class A (minimal impact)
- Class B (significant impact)
- Class C (significant public effect, hearing required)

**Cubic Yards (cy) of soil to be moved, removed or added:** 4,300

**Start Date:** May 2016

**Completion Date:** November 2016

**Responsible Party for Site Monitoring:** Giovanni Zinn, City Engineer

This individual is responsible for monitoring the site to assure there is no soil or runoff entering City catch basins or the storm sewer system. Other responsibilities include:

- monitoring soil erosion and sediment control measures on a daily basis;
- assuring there is no dust gravitation off site by controlling dust generated by vehicles and equipment and by soil stockpiles both during the demolition and construction phases;
- determining the appropriate response, should unforeseen erosion or sedimentation problems arise; and
- ensuring that SESC measures are properly installed, maintained and inspected according to the SESC Plan.

Should soil erosion problems develop (either by wind or water) following issuance of permits for site work, the named party is responsible for notifying the City Engineer within twenty-four hours of any such situation with a plan for immediate corrective action.

All SESC measures are required to be designed and constructed in accordance with the latest Standards and Specifications of the *Connecticut Guidelines for Soil Erosion and Sediment Control*.

**Sec. 60 Stormwater Management Plan:** Not applicable.

**Sec. 60.1 Exterior Lighting:** Not applicable.

**Sec. 60.2 Reflective Heat Impact:** Not applicable.

**Project Timetable:** Construction will take place during low flow conditions during the summer of 2016. The anticipated construction duration is six months of heavy construction with another month for site restoration work.

## **SITE PLAN REVIEW**

Plans have been reviewed by the Site Plan Review team with representatives from the Departments of City Plan, City Engineer, Building, Disabilities Services and Transportation, Traffic and Parking and have been found to meet the requirements of City ordinances, regulations and standard details except for the following issues, which must be addressed prior to sign-off for permits:

- Provide final grading, drainage and utility plans with all stationing and elevations shown for review and comment; (GDU-1 lacks all elevational information); and
- Provide more robust planting plan including complete coverage of all disturbed areas with woody/upland shrub layer and related wetland/upland seed mix. Include specification of seed mix and complete plant schedule on planting plan, as well as delineation of disturbance (grading) in the background. Include erosion control blankets, mats, or coir logs for erosion control prior to complete vegetation establishment. Provide all related plant notes on drawing for conformance with regulations;

## **INLAND WETLANDS REVIEW**

### **CLASSIFICATION**

- Class N: Non-Regulated Uses
- Class A: Uses Permitted by Right
- Class S: CTDEP Regulated Operations and Uses
- Class B: Inland Wetlands Commission Regulated Operations and Uses Having a Minor Impact
- Class C: Inland Wetlands Commission Regulated Operations and Uses Having a Major Impact

**Definition of Regulated activity** - any operation within or use of a wetland or watercourse involving removal or deposition of material, or any obstruction, construction, alteration, or pollution of such wetlands or watercourses, and any earth moving, filling, construction, or clear-cutting of trees, or any such operation within fifty (50) feet of wetlands or watercourses.

### **Determination of Classification:**

Staff recommendation is for Class B categorization due to the limited nature of disturbance and material handling limited to 4300 CY.

### **Proposed Regulated Activity:**

Proposed activities include construction access, placement of dewatering receptacles, installation of coffer dams and temporary piping, bridge removal and replacement, installation of new sewer and water lines, removal of coffer dams, and site restoration, including planting. All activities listed are necessary for the complete replacement of the existing bridge structure.

**Soil Science Report:**

The "Ecological & Wetland Assessment Report" as included in the application includes information pertaining to the identification of the wetland and upland areas and local soil typologies. Refer to actual report for additional information.

**Vegetation and Planting Plan:**

Existing vegetation consists of wetland-facultive species such as black willow and dogwood. Upland species include Ash trees, Willow, and multiflora rose, as well as poison ivy. Planting plans include woody vegetation in the wetland and upland areas; staff recommends enhancement of the proposed planting plans as listed under SITE PLAN REVIEW comments section.

**Application Evaluation Criteria:** In reviewing a Class B or C Application, the Commission must consider the following environmental impact criteria in its evaluation, as stated in Sections 7.2 and 7.3 of the City's Inland Wetlands and Watercourses Regulations:

- The ability of the regulated area to continue to absorb, store or purify water or to prevent flooding.
- Increased erosion problems resulting from changes in grades, ground cover, or drainage features.
- The extent of additional siltation or leaching and its effect on water quality and aquatic life.
- Changes in the volume, temperature, or course of a waterway and their resulting effects on plant, animal and aquatic life.
- Natural, historic, or economic features that might be destroyed, rendered inaccessible or otherwise affected by the proposed activity.
- Changes in suitability of the area for recreational and aesthetic enjoyment.
- Existing encroachment lines, flood plain and stream belt zoning and requirements for dam construction.
- Any change in the water effecting aquatic organisms or other wildlife, water supply and quality, or recreational and aesthetic enjoyment.
- The existing and desired quality and use of the water in and near the affected area.
- Reports from other City agencies and commissions not limited to the Environmental Advisory Council, Building Official, and City Engineer.
- The importance of the regulated area as a potential surface or ground water supply, a recharge area or purifier or surface or ground waters, a part of the natural drainage system for the watershed, a natural wildlife feeding or breeding area, its existing and potential use for recreational purposes, existence of rare or unusual concentrations of botanical species, availability of other open spaces in the surrounding area, or its value for flood control.

While this project is absolutely necessary to ensure the safe crossing of vehicles over Wintergreen Brook, the City must not overlook the importance of wetland health of the land and waterway below the bridge. It must be noted, that in terms of functionality at present, fish habitat and spawning areas are hampered by the fact that the existing outfall at the down-slope edge of the existing bridge structure is perched; in other words, migratory fish cannot move forward upstream to spawn because there is a grade differential between the stream bed and the bed of the bridge structure. (The bridge in its current formation impedes all fish migration.) Functionally, the proposed structure will eliminate this problem and will allow fish migration patterns to be re-established.

The project as proposed does not hamper the ability of the regulated area to continue to absorb, store or purify water or to prevent flooding. Staff is confident that erosion control measures will be effective in mediating erosion problems. Per comments under SITE PLAN REVIEW, staff has requested additional changes to planting plans and erosion control to stabilize the site at the end of construction.

No additional siltation or leaching is anticipated in the project; in effect, the perched outfall of the existing structure may contribute currently to siltation, leaching, and/or scour. Changes in the volume,

temperature, or course of a waterway will be positive in that the perched outfall will be eliminated, and temperature will be mediated by additional shade plantings.

Natural, historic, or economic features will not be destroyed, rendered inaccessible or otherwise affected by the proposed activity. There will be no changes in suitability of the area for recreational and aesthetic enjoyment.

There are no proposed changes to existing encroachment lines, flood plain and stream belt zoning and requirements for dam construction.

Changes in the water effecting aquatic organisms or other wildlife, water supply and quality, or recreational and aesthetic enjoyment are limited to the removal of the perched outfall as discussed above. The existing and desired quality and use of the water in and near the affected area is improved as fish habitat and related ecologies are restored. The importance of the regulated area as a potential surface or ground water supply, as a recharge area or purifier or surface or ground waters, and as a part of the natural drainage system for the watershed is retained and improved. The area's function as a natural wildlife feeding or breeding area, especially fish, is also improved. Its existing and potential use for recreational purposes, existence of rare or unusual concentrations of botanical species, availability of other open spaces in the surrounding area, or its value for flood control remains unchanged by the project.

The Commission must consider the following **additional** criteria:

- Alternatives that might enhance environmental quality or have a less detrimental effect, without increasing basic project costs.
- Short- versus long-term impacts.
- Potential loss of irrevocable resources or property impairment.
- Suitability of action for area.
- Mitigation measures which may be imposed as conditions.

As mentioned previously, improvements to planting and erosion control have been requested (see SITE PLAN REVIEW comments). Short-term changes to the watercourse are offset by the positive effects created by the bridge replacement. There are no resources to be lost that are permanent. The bridge replacement is necessary due to the serious nature of its structural-integrity problems as detailed in the application. Lastly, mitigation in terms of plantings has been requested of the applicant.

#### **Required Findings for a Class B Application:**

The Commission must make the following findings for a Class B Application:

1. There is no preferable location on the subject parcel or no other available location could reasonably be required;
2. No further technical improvements in the plan or safeguards for its implementation are possible, or taking into account the resources of the applicant, could reasonably be required; and
3. The activity and its conduct will result in little if any reduction of the natural capacity of the wetlands or watercourses to support desirable biological life, prevent flooding, supply water, facilitate drainage, and provide recreation and open space.

#### **INLAND WETLAND FINDING**

1. There is no preferable location on the subject parcel or no other available location could reasonably be required.
2. No further technical improvements in the plan (except those already mentioned above) or safeguards for its implementation are possible, or taking into account the resources of the applicant, could reasonably be required.

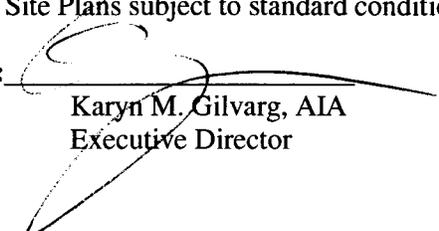
3. The activity and its conduct will result in little if any reduction of the natural capacity of the wetlands or watercourses to support desirable biological life, prevent flooding, supply water, facilitate drainage, and provide recreation and open space.

The Commission believes that the required findings for a Class B application have been satisfied. The Inland Wetland application is hereby approved, in accord with the submitted plans and the Conditions as stated on page 1.

**SITE PLAN ACTION**

The City Plan Commission approves the submitted Site Plans subject to standard conditions on Page 1.

**ADOPTED:** March 18, 2015  
Edward Mattison  
Chair

**ATTEST:**   
Karyn M. Gilvarg, AIA  
Executive Director