STAFF REPORT

To: Conservation Commission/Inland Wetlands and Watercourses Agency

Date: January 5, 2024

Re: Town of Glastonbury, Department of Physical Services;

Application for General Permit

Attachments:

Town Engineer Memo, Dated December 19, 2023
Attachment A: Maintenance Activities with Suggested Best Management Practices

Proposal

The Department of Physical Services is seeking a permit to conduct maintenance and emergency repair to town infrastructure located within wetlands, watercourses and upland review areas. This permit would be a 'general permit', authorizing activities to remedy conditions such as sedimentation and erosion in various locations throughout town.

The general permit is similar in structure to the General Stormwater Management Permit the State issues to towns, and is a mechanism used by inland wetlands and watercourses agencies in Connecticut to allow for efficient and expedited prevention and response to sedimentation and erosion, most often created through storm events.

Since July 2023 town infrastructure has been negatively impacted by high yield rain events generating three and four inches of rain in short periods of time. In the current permitting structure, Agency staff has the authority to issue permits for the conduct of repair work within upland review areas. This permitting process requires that the applicant adhere to the State required 15-day appeal period, resulting in a lag time of several weeks between identification of a problem and the ability to remedy the problem. Additionally, for maintenance repairs located within wetlands and watercourses an application to the Agency is required, with the mandatory 15-day wait time between receiving the application and issuing a permit, causing the same delay as the staff issued permit. The issuance of a general permit will allow the Department of Physical Services to conduct the needed repairs more quickly, with site conditions and weather forecast as a determining factor for when the work is conducted, and not contending with the 15-day waiting period for each activity.

The Community Development and Physical Services departments worked together to identify the maintenance and restoration categories and appropriate best management practices, which are listed in Appendix A.

State-Listed Species

Activities may require review and response from the CT DEEP Natural Diversity Database, dependent upon project location and scope of work. The requirements of the CT DEEP NDDB and best management practices will be adhered to.

Quarterly Reports

The Community Development and Physical Services departments will coordinate in reviewing proposed projects and developing action plans.

The Agency will receive quarterly reports identifying the location and scope of work. This information may prove meaningful in revealing patterns and identifying areas within watersheds that are experiencing higher rates of maintenance and emergency repairs.

Water Quality and Soils and Erosion Control

The repair and restoration of town infrastructure is expected to improve conditions to the original design standards, reducing the potential for further sedimentation and erosion. The Town is also requesting latitude to make improvements to infrastructure features in order to comply with the 2023 CT Stormwater Quality manual and the CT Stormwater Management General Permit. An example of such an improvement may include creating a forebay in an existing detention basin, containing sediment from entering the basin and providing a smaller footprint for regular maintenance.

The best management practices will be employed depending on the type of activity and site conditions. The 2002 CT Guidelines for Soil Erosion and Sediment Control manual and the 2004 CT Stormwater Quality manual will be guidance documents for best management practices, the revised versions of these manuals will go into effect in March 2024, and will be incorporated as staff learns the updated manuals.

The Date of Receipt on this application is January 11, 2024. The earliest the Agency may consider issuance of a permit is at the January 25, 2024 meeting.

December 19, 2023

MEMORANDUM

To: Suzanne Simone, Environmental Planner

Conservation Commission

From: Daniel A. Pennington, Town Engineer / Director of Physical Services 🗸

Re: Wetlands Permit Application

Request for a General Permit Associated with Maintenance and Repair of Town Infrastructure

Attached please find application materials related to the Town's request for a general wetlands permit associated with the maintenance and repair of existing Town infrastructure located within areas regulated by the Commission. The intent of this general permit is to allow the Department of Physical Services to efficiently perform routine maintenance and spot repairs to existing Town infrastructure located within or abutting wetlands and watercourses and associated upland review areas as required to restore function, replace deteriorated components, and address sedimentation and erosion. Recent storms of 2023 have created a significant back log of drainage maintenance projects that need attention. We believe that this general permit would help greatly for the Town to be able address these items in a timely and responsive manner.

Specific maintenance and repair tasks to be covered by this general permit are outlined in Attachment A along with associated Best Management Practices (BMPs). BMPs shall be as per the Connecticut Guidelines for Soil Erosion and Sediment Control (as amended), Connecticut Stormwater Quality Manual (as amended), and University of Connecticut Guidelines for Disposal of Invasive Terrestrial Plants (as amended).

We also request that as part of the permit, the Commission allow some staff discretion to implement minor changes to existing infrastructure for consistency with current BMPs to improve function, and/or to reduce potential for future sedimentation and erosion as approved by the Environmental Planner.

In order to keep the Commission apprised of the regulated activities, Town staff will maintain a list of all locations where maintenance activities are conducted in the area of wetlands and watercourses and would provide the following information for each activity as part of a quarterly report to be generated and distributed to the Commission:

- Date
- Location
- Wetland / Watercourse Description / Name
- Maintenance Issue
- Method of Resolution
- Approximate Area of Disturbance.

While most maintenance work will be performed by Town forces, there may be occasions where the Town needs to retain a contractor to perform this work on our behalf. In these situations, the contracted work would be performed under the direct supervision of a construction inspector from the Engineering Division.

We look forward to discussing this proposal with the commission at the next meeting. Please let me know if you have any questions or need any additional information.

ATTACHMENT A MAINTENANCE ACTIVITIES WITH SUGGESTED BEST MANAGEMENT PRACTICES (BMPS):

1. **Erosion Repair:** Spot repair of erosion at drainage system inlets and outlets, culverts, road embankments, bridges, channels, and swales, including installation of riprap, gabions, erosion control matting, or other appropriate measures as deemed necessary.

Applicable BMPs:

- Dewatering of excavation with dirt bag for treatment of discharge (when required)
- Installation of appropriate erosion repair material
- · No stockpiling of excavated material within wetland areas
- Minimize footprint of disturbance, work during dry or frozen conditions when possible
- Restoration of disturbed areas with topsoil and mulch or appropriate seed mix.

Example Projects: Crescent Road, Lakewood Rd culvert inlet

 Sediment, Debris, and Vegetation Removal: Scope: Removal of accumulated sediment, debris, and vegetation from channels, swales, ditches, drainage pipes, cross culverts, bridges, dry hydrants, or other similar town infrastructure as required to restore normal operations.

Applicable BMPs:

- Dewatering of excavation with dirt bag for treatment of discharge (when required)
- No stockpiling of excavated material within wetland areas
- Installation of stable lining for excavated channels (when required)
- Protection of downstream areas with haybales, check dams or other appropriate measures
- Minimize footprint of disturbance, work during dry or frozen conditions when possible
- Restoration of disturbed areas with topsoil and mulch or appropriate seed mix.

Example Project: Green Briar, Fairway Xing, Lakewood Road culvert

3. Drainage Pipe Repair or Replacement: Spot repair or replacement of existing storm drainage system pipes where pipes have failed. Pipe material may vary however replacement shall be with a pipe of similar conveyance capacity. Work may require limited bypass pumping if system is carrying groundwater, and may include replacement of riprap inlet or outlet protection when appropriate.

Applicable BMPs:

- Bypass pumping (if system is carrying groundwater)
- · Dewatering of excavation with dirt bag for treatment of discharge
- No stockpiling of excavated material within wetland areas
- Minimize footprint of disturbance, work during dry or frozen conditions when possible
- Restoration of disturbed areas with topsoil and mulch or appropriate seed mix.

Example Project: Shoddy Mill Road Metal Pipe Replacement

ATTACHMENT A MAINTENANCE ACTIVITIES WITH SUGGESTED BEST MANAGEMENT PRACTICES (BMPS):

4. Culvert Repair or Rehabilitation: Spot repairs to culverts carrying watercourses to address pipe failures. Work will require bypass pumping of watercourse base flow with appropriate BMPs and may include replacement of riprap inlet or outlet protection when necessary.

Applicable BMPs:

- Any BMPS associated with any State listed protected species
- Bypass pumping for watercourse base flow
- Installation of sand bag cofferdam for pump intake
- Dewatering of excavation with dirt bag for treatment of discharge
- No stockpiling of excavated material within wetland areas
- Minimize footprint of disturbance, work during dry or frozen conditions when possible
- Restoration of disturbed areas with topsoil and mulch or appropriate seed mix.

Example Projects: Keeney Street culvert repair, Woodhaven, Wickham Road

5. Detention Pond Maintenance: Removal of trees, vegetation, and accumulated sediment as required to restore pond capacity and function and to protect berm and emergency spillway. May include modifications to create forebay to reduce future maintenance, regrading of pond bottom for positive drainage toward outlet, and/or underdrain installation to reduce standing water and mosquito complaints.

Applicable BMPs:

- Any BMPS associated with any State listed protected species
- Dewatering of excavation area with dirt bag for treatment of discharge
- Protection of outlet structure with haybales, silt fence, or other appropriate measures
- No stockpiling of excavated material within wetland areas
- Allow excavated material to dry or use sealed trucks for hauling
- Wetland topsoil to be removed and replaced when wetland plants are evident (as directed by Environmental Planner)
- Work during dry or frozen conditions when possible
- Restoration of disturbed areas with topsoil and mulch or appropriate seed mix.

Example Project: Chase Hollow Detention Pond