



Project Memo - Level I Site Alteration Application

Portland Public Works – Water Resources

To: Barbara Barhydt, Development Review Services Manager

From: Justin Pellerin, P.E. Project Engineer

Date: January 6, 2017

Re: Rowe Avenue Storm drain outfall and sewer R.O.W. access road

Project Need / Description

The City of Portland Water Resources Division Engineering department continues to look at projects which will mitigate CSO activity. The city has a long term control plan with the EPA and Maine DEP which mainly focuses on CSO reduction into back cove. The division also looks to reduce CSO activity in areas that are not necessarily tied to the permit requirements.

DPW has identified that CSO #39, which is located along the City's Fore River Sewer interceptor right of way approximately 500' east of Rowe Avenue, is a moderately active CSO. DPW has identified two sewer separation projects that with the goal to mitigate the CSO activity in this location. The first project is the separation of two catch basins along Rowe Avenue, and the separation of a residential wetland stormwater system that currently ties directly into the combined sewer system in Rowe Avenue and routes down the Fore River Sewer towards CSO # 39. The separation will include the installation of a new storm drain in Rowe Avenue that will route down the sewer R.O.W. and outfall next to CSO #39. The location of the new storm drain outfall will be in the same location as an existing culvert that currently drains a wetland to the North of the Fore River Sewer R.O.W. The second project is the separation of a sizeable watershed in Brighton Avenue, which will also drain a wetland area to the north of Brighton Avenue that currently drains to the combined sewer tributary to CSO #39. This site alteration permit only applies to the installation of the new storm drain outfall, and construction of a maintenance access road along the R.O.W, to aid future maintenance of the systems. A level one site alteration permit is required due to the hauling of over 15 cubic yards of fill to the site, and due to the outfall's proximity to a resource protected zone and flood plain.

The Department of Public works is currently designing the Rowe Avenue sewer separation project in-house. The department is looking to get the project out to bid by mid-February, for a mid-April Construction start.

As part of the project DPW was required to submit a National Resource Protection Act (NRPA) permit by rule application to the Maine DEP for the construction of the storm drain outfall. The permit is attached with this submission. The outfall location has been identified as a tidal wadding zone for birds. The Department of Public Works was required to notify

the department of Marine Resources and receive timing approval associated with installation of the outfall. The DMR timing approval is attached with this submission. DPW was also required to submit a Category 2 Army Corp of Engineers permit for work to be done in tidal and inland wetland areas. DPW had Boyle Associates out to the site to delineate the wetland areas in December of 2016 in conjunction with the environmental permits. Due to the nature of clearing required along the sewer R.O.W. to build the access road, the city is waiting to hear back if there are any time restrictions on tree clearing due to the potential disturbance of the endangered species, northern long-eared bat. DPW will adhere to any environmental timing restrictions required for the project.

The project involves the construction of a 24” storm drain outfall with a rip rap outfall, the installation approximately 800 lf of storm drain and manholes associated with the system. The project will also build approximately 500 lf of access road down the sewer R.O.W. from Rowe Avenue to the proposed storm drain outfall location. The access road will be carriage style with two gravel wheel well lanes and grass between the tire track areas. The road will be 13’ wide. In order to construct the access road approximately 900 cubic yards of fill will be required to be brought to the site.

Construction Traffic Impacts:

Traffic impacts during construction should be minor. The work will take place on a low volume residential street and a sewer R.O.W. During the construction of the access road, trucks will be bringing fill to the site fairly regularly for 2-3 weeks. Rowe Avenue will remain open to local traffic only during the storm drain installation that is required in the street.

General Written Submissions Checklist

Please see the attached items

1. Evidence of right, title and interest – being developed by City or Portland Corporation Counsel- Easement being drafted for storm drain outfall crossing on Portland Trails Property. Will submit info from corporation council once complete.
2. Evidence of state and/or federal approvals – see attached for following:
 - a. Army Corp of Engineer Maine General permit application and permit-submitted, not yet heard back (application attached)
 - b. Maine Natural Resource Protection Act Permit by Rule Application- 14 day window has passed, meaning permit is now considered active. (signed approval attached)
 - c. Maine Department of Marine Resources timing approval- submitted with this application
 - d. City of Portland General Building Permit, Site work only- submitted with this application
3. Written assessment of proposed project’s compliance with applicable zoning requirements – The project falls within a city R.O.W in an R3 residential zone. The storm drain project will stay within the R.O.W. in the R3 zone. The storm-drain outfall is located near and discharges to an RPZ zone at the head waters of the Fore River Estuary. Any work done in and around the protected zone will utilize environmental best management practices such as matting across tidal wet areas and using proper erosion and sediment controls such as silt fences and erosion control berms to mitigate the pollution potential during construction. The long term goal of

- the project is to separate stormwater flows out of the combined sewer to eliminate combined sewage that currently is discharged at this point during heavy rain events. The department of public works sees this project as a long term benefit to the ecosystem.
4. Flood Plain: The proposed storm drain with discharge into a FEMA Flood plain AE zone. The AE zone elevation is 10.00. The storm-drain outfall will be set at this elevation. A flood plain map is attached with this submission.
 5. Summary of existing or proposed easements, covenants, public or private rights-of-ways, or other burdens on the site:
 - a. DPW is process of working out an easement with Portland Trails for the outfall area on the storm drain. Land Bank Commission due to being a state mandated project.
 - b. Portland Historical Preservation –Applicant does not see any historical preservation impacts.
 6. There are no requests for waivers.
 7. Evidence of financial and technical capacity: CIP funds approved for FY 17. Additional Funds requested for FY 18.
 8. Boundary survey – see attached Plan Sheet C-1 and C-2.
 9. Preliminary Site Plan – see attached Plan Sheet C-1 and C-2.