

2017 Cambridge Watershed Site Monitoring Program Report

January, 2018

Introduction

The Cambridge Watershed Site Monitoring Program Report is a summary of the monitoring, outreach, and planning efforts of the Cambridge Water Department (CWD)'s Watershed Management Division. Through the Site Monitoring Program, CWD identifies possible sources of contamination in the water supply, seeks mitigation of impacts through the implementation of Best Management Practices (BMPs), and explores opportunities to realize improvements to watershed water quality. This report contains status updates, as well as locational maps, for the following sites of interest during 2017:

- Four (4) new construction and redevelopment projects completed since the previous Cambridge Watershed Site Monitoring Report issued December, 2016
- Fifteen (15) active construction or long term monitoring sites
- Ten (10) proposed projects for which CWD completed site plan review and submitted comments and recommendations

The following sections contain updates on the abovementioned watershed sites. The site locations are indicated on the report maps according to the numbers below.

Projects Completed from Previous Period

Waltham

- 1. 132 West Street –Construction of the expanded National Grid facility at the former Weston Racquet Club is complete. The site uses deep sump hooded catch basins and bioretention ponds to increase infiltration at the site.
- 2. 860 Winter Street Construction of a 100 car lot on an empty field is complete. The site drains to Hobbs Brook Reservoir. The stormwater from the new parking area is treated with deep sump hooded catchbasins, then routed through a proprietary water quality unit, before discharging to a detention basin. Stormwater at the outlet of the detention basin is discharged through a level spreader.

Lexington

3. 435 and 439 Lincoln St. Subdivision – Construction of a 14 unit subdivision on Lincoln St., across from the Hobbs Reservoir, was completed in fall of 2017. The

stormwater management system includes permeable driveway pavers and subsurface infiltration systems.

Weston

4. Meadowbrook School – A new learning center was constructed within the footprint of a preexisting building, although the project resulted in a slight loss of grass area to roof area. The proponent also constructed a 3,272 square foot parking lot in the Zone A and 100 foot wetland buffer zone. Runoff from the lot is pre-treated in a Stormceptor® prior to infiltration in a rain garden. Construction of the new facilities was completed in fall of 2017.

Active Construction and Site Monitoring

Cambridge

- **1. Kingsley Park Overlooks, Fresh Pond Reservation** Restoration of the Kingsley Park stone overlooks are in the early stages of construction. The majority of the restoration will occur in spring of 2018.
- 2. Drainage and Community Gardens Improvement Project, Fresh Pond Reservation This CWD project aims to improve drainage and stormwater management on and around a portion of the former rail corridor at Fresh Pond Reservation. The project includes the relocation of the community gardens, removal of defunct railway ties, invasive species removal and new restoration plantings, and a biofiltration stormwater basin. Installation of the stormwater basin, railway tie removal, perimeter road relocation and paving, and restoration plantings are largely complete. The project site is closed for the winter and the project is scheduled to finish in spring of 2018.
- 3. 343 Fresh Pond Parkway Mobile Station #1405 continues to monitor groundwater and soil contamination from petroleum. There is no active treatment, only monitored natural attenuation (MNA). Groundwater sampling performed 3/28/2017 from a monitoring well located between the site and the Fresh Pond bike path did not detect hydrocarbons. A Periodic Review Opinion issued in April 2017 determined that there was no viable Permanent Solution for the foreseeable future and that MNA should continue as the Temporary Solution at the site.

Waltham

- **4.** Care Dimensions Hospice 121-129 Winter St., Waltham/Lincoln Construction is nearly complete for a hospice facility located on Winter Street across from the Hobbs Brook Reservoir. The lot previously contained a single family home. No significant issues associated with construction were observed in 2017.
- **5. 830 Winter St** Construction of an expanded building and new parking garage, located adjacent to CWD property, is nearly complete. The applicant installed granite bounds to delineate the southern boundary of the site with CWD property. A washout following a heavy rainstorm was observed on 9/8/2017. Sediment was intercepted by a sediment basin on CWD property and did not reach the reservoir. It was determined that the

washout occurred due to a filled temporary sediment basin. The basin has since been excavated and street sweepers removed sediment from the street and driveway. The construction manager also inspected and cleaned the affected catch basins. No other issues were observed at the site.

- 6. **155 Bear Hill Road** Minor drainage and site work is underway. This project proposes to redevelop the former Uno's restaurant and parking lot into a storage facility. The project proposes to improve stormwater quality by converting open parking area to roof area, which will be treated for phosphorus with a Jellyfish filter prior to discharge into a detention basin. Stormwater from the remaining parking area will be treated with a sediment forebay and lined bioretention area prior to routing into an existing detention basin. CWD submitted a comment letter to the Waltham Conservation Commission on 6/7/2017 before the start of construction.
- 7. 256 Second Ave Construction of a Marriot Hotel and associated parking lot is underway. The finalized project will provide treatment of parking lot runoff and be sized to infiltrate 100 percent of storwmater from the 100 year design storm. The project also proposes to make significant improvements to a Massachusetts Department of Transportation (MassDOT) drainage swale that abuts the site. Stormwater currently sheetflows without treatment to Second Ave. No significant construction issues were observed in 2017.
- **8. 135 Second Avenue** Construction is nearly complete for a 138+ room hotel. The new stormwater management system, which will include water quality treatment units and two subsurface infiltration systems, will be an improvement over existing conditions; stormwater currently flows untreated into wetlands feeding Hobbs Brook.
- 9. 81 Wyman St Construction of a driveway connecting 81 and 175 Wyman St is almost complete. Construction of an upgraded building and parking facility at 81 Wyman St is underway. Site improvements include new stormwater infrastructure and the addition of solar canopies over currently exposed parking areas. A site visit on 9/28/2017 did not reveal any significant construction issues.
- **10. 175 Wyman Street** Hewlett Packard/GZA remediation of a TCE/PCE groundwater plume is ongoing. Surface water samples collected from the Hobbs Brook Reservoir during June 2017 and analyzed for volatile organic compounds (VOCs) were below the detection level.
- **11. 200 Smith Street** Construction is nearly complete on the redevelopment of the former US Postal Service site. Monthly stormwater pollution prevention plan (SWPPP) reports provided to CWD from the site inspector show no significant construction impacts.

Lexington

12. Lexington Rest Stop, I-95 North – AECOM performs bi-monthly site inspections to identify potential water quality risks, assign required actions, and document compliance with the site's SWPPP. SWPPP inspection reports from 2017 revealed that the following chronic problems must be addressed:

- More frequent removal of sediment and Speedi-Dri at fuel dispensers (Gulf)
- Replace curbing and fix asphalt at northern rest stop entrance (McDonald's)
- Site maintenance activities that should be performed by MassDOT on a three year basis have not been performed in over seven years. This maintenance work should include:
 - o litter, sediment, and woody vegetation removal from catch basins, detention basins, swales, and headwalls
 - o repair of vacuum system road boxes
 - o repair of damaged asphalt and curbing
- 13. Minuteman Vocational Technical High School, 758 Marrett Rd –CWD provided in person and written comments to the Lexington and Lincoln Conservation Commissions during the permitting phase of this project. CWD comments were focused on ensuring that the project complied with Massachusetts Stormwater Standards related to Outstanding Resource Waters (ORWs). CWD also worked to confirm the Zone A and ORW area designations with the Massachusetts Department of Environmental Protection (MassDEP) and the applicant. Construction on the Lincoln portion of the project began in spring of 2017 (see Lincoln section below).

Lincoln

13. Minuteman Vocational Technical High School – Construction on the Lincoln portion of the project began in spring of 2017. A CWD site visit on 10/30/2017 after heavy rain revealed a breach in the perimeter erosion control adjacent to a stream segment. This breach resulted in turbid, muddy water discharging through a wetland adjacent to the site and ultimately flowing into a tributary of Hobbs Brook. CWD worked with Gilbane, Inc. to immediately remedy the situation. No other issues were observed from the site.

Care Dimensions Hospice 121-129 Winter St., Waltham/Lincoln – See #4 description in Waltham section.

Weston

- **14. Eversource Access Road/ DCR Bike Path** Construction of an Eversource access road / Massachusetts Department of Conservation and Recreation (DCR) bicycle path along the abandoned railway Right-of-Way (ROW) 8-2 began in December 2017. The current construction focuses on the ROW segment between the Wayland/Weston town line and Concord Road. The ROW from Concord Rd to the Weston/Waltham town line is expected to commence in spring or summer of 2018.
- 15. Sibley Road Mobil Station, 84 Boston Post Road Groundwater & Environmental Services (GES), Inc. monitors levels of MTBE and other petroleum-associated groundwater contamination near Stony Brook. Active, on-site groundwater treatment has ceased, but groundwater and surface water are monitored to detect potential rebound. The latest groundwater results performed in January and July 2017 show no evidence of increasing concentrations, so the treatment system remains off. Volatile petroleum hydrocarbons (VPH) and target compound results from surface water samples collected from Stony Brook during January and July 2017 were below the detection limit.

Site Plan Review for New Projects

Waltham

- 1. 900 Winter Street, Waltham The project applicants met with CWD in December 2017 to discuss the proposed redevelopment of open parking lots into structured parking and office space. CWD submitted a comment letter to the Waltham Conservation on 12/21/2017 supporting a negative Determination of Applicability given the limited proximity to Wetlands Protection Act resource areas.
- 2. 71 Second Avenue (Costco), Waltham Costco is planning to construct a gas station in its parking area. While the proposed facility is within the Zone A, the underground storage tank (UST) is outside the Zone A. CWD confirmed with DEP that, although USTs are prohibited from the Zone A, fuel dispensers from gas stations are allowed within the Zone A. CWD provided comments on the proposed plans to the applicant during January March, 2017.
- **3. 1265 Main Street, Waltham** –VHB, Inc. met with CWD in February 2017 to discuss proposed off-site improvements associated with Phase II of the 1265 Main Street project. Phase II will include construction of a Green Street connector road and the widening of Route 117 in Waltham. CWD also met with R.J. O'Connell in March 2017 to discuss preliminary plans for on-site work associated with Phase II of the development.
- **4. 219 Bear Hill Road** Proposed redevelopment for a dog retreat and spa. The proposed outdoor K-9 play area runoff will be treated through infiltration.

Lexington

- **5.** Tracer Lane Lexington Solar Farm Proposal to install a solar farm at the Lexington/Waltham border adjacent to Cambridge watershed property. The site is currently a mix of forested land, grass, and shrubs. Survey work was completed in winter of 2017.
- **6. Maria Hastings Elementary School, 7 Crosby Rd** Proposed new school and associated parking areas at the site of the current elementary school. The proposal includes a permeable pavement parking lot and will comply with the MA Stormwater Standards and Lexington Stormwater Management Bylaw. CWD attended a Massachusetts Environmental Protection Act (MEPA) site walk on 7/25/2017 and submitted a comment letter on 12/11/2017 to the Lexington Conservation Commission.

Weston

- 7. 269 North Ave CWD submitted a comment letter on 1/23/2017 to the Weston Zoning Board of Appeals (ZBA) regarding this proposed 40B residential development. The project is designed to infiltrate stormwater through the 100 year storm event and complies with the Massachusetts Stormwater Standards. The ZBA issued a Comprehensive Permit for the project in May of 2017.
- **8.** Weston Golf Club CWD reviewed a proposal for a new maintenance facility building. CWD submitted comments to the Weston Conservation Commission on the

stormwater design and site deicing practices over email in January, July, and August of 2017.

- **9. 133 Boston Post Road** –The project proposal includes a 345 unit residential 40B affordable housing complex and new commercial and parking garage structures. CWD submitted comments to the Weston Conservation Commission on 3/28/2017. However, the Conservation Commission hearing is still open and has been continued to an unspecified date.
- 10. 104 Boston Post Road This project proposes to build 150+ unit 40B affordable housing apartment complex and evaporative wastewater treatment facility. The site is located adjacent to Cambridge property and the Stony Brook Reservoir and currently contains wooded area and a small office building. The project initially sited a significant portion of the building within the 200 foot Riverfront Area. In February 2017, the Weston Conservation Commission issued an Order of Resource Area Delineation (ORAD) which determined that a 200 foot Riverfront Area does exist on site and is applicable to the project. The applicant appealed the Weston Conservation Commission's decision, arguing that the site qualifies as a Historic Mill Complex and should be exempted. In October 2017, MassDEP issued a Superseding Order of Resource Area Delineation (SORAD) affirming the Weston Conservation Commission's decision. The applicant has appealed the SORAD and a MassDEP adjudicatory process is currently underway.

Despite the ongoing Riverfront Area appeals process, the project was redesigned to move the facility outside the 200 foot Riverfront Area. This modified design was used to apply for a Comprehensive Permit from the Weston Zoning Board of Appeals (ZBA). In October 2017, the ZBA voted to deny the requested Comprehensive Permit. The applicant appealed the ZBA decision, and an appeals process is currently underway with the State Housing Appeals Committee.

CWD staff and the Cambridge Law Department submitted written and verbal public comments on the project proposals. The Cambridge Law Department is leading on all matters related to the appeals processes.

Please direct any questions or comments about this report to

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