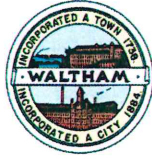


CITY OF WALTHAM
Engineering Department



*Robert Winn, P.E.
City Engineer*

June 30, 2023

Eric Worrall, Regional Director
Northeast Regional Office
Department of Environmental Protection
150 Presidential Way
Woburn, MA 01801

RE: Waltham Administrative Consent Order
Enforcement Document Number: 00002845
Compliance Status Report – June 30, 2023

Dear Mr. Worrall:

The City of Waltham is filing this Compliance Status Report in accordance with the Department of Environmental Protection Amended Consent Order dated November 4th, 2019.

This report serves as the semi-annual report to be filed on or before July 1st of each year. This report provides details on the City's compliance with the Modified Consent Order (ACO) within the past six months and all actions the City intends to take within the next compliance period.

City compliance items for this report:

1. Report on City's Compliance Actions, July, 2022 – December 2022
In accordance with Section III. 7E of the ACO, on December 30, 2022 the City submitted the required Semi-Annual Report.
2. ACO Projects Status: Implementation Schedule
City of Waltham – Updated Sewer System Facilities Plan Schedule
In accordance with the Capacity Assurance Program Review scope of work, it was determined that additional flow metering of the sewer system was required to better understand the systems reaction to wet weather events. This metering started during the first week in April and continued through mid-July, 2021. Conclusions have been made based on review of the updated flow meter data and updated modeling. These conclusions indicate that the City's I/I rehabilitation efforts have been effective in reducing I/I, and the City's collection system has adequate capacity to convey the 10-year 24-hour storm without overflows. In addition, data shows that I/I removal efforts should be re-prioritized to tributary areas 4 and 8 which measured the highest I/I.

TASK 1: - Sewer System Improvements (Project 1 & 2)-Combined Construction**Project 1** – Totten Pond Road - **Completed****Project 2** – Marlborough Road and Humboldt Street - **Completed****Project 3** – Lexington Street Sewer Replacement – **Completed****Project 4** – Lexington and School Streets – Sewer Improvements:

Work progressed to include replacement of a collapsed section of sewer on School Street between Common & Lexington Street. Nine sewer services were replaced, mainline to property line. 330 feet of sewer main was lined on School Street. **Completed**

Project 5 – Lexington Street & Trapelo Road Improvements and on Lexington St. at Town Line; 1105 Lexington Street at Entrance to Glen Meadow Condominiums-- An I/I Mitigation was performed/constructed by Pitt Pipeline of Billerica, MA for ARE-MA Region No. 46, (283 Bear Hill Road). – **Completed**

TASK 2: - Continuous Meter: On-going, utilize MWRA flow meters at two locations.**TASK 3:** - Area 15 (30,000 L.F. Total) – **Completed****Area 15** – Rangely Acres & Poet Section - **Completed****Phase 1 Assessment Report**

The Phase 1 Assessment was scoped out, prepared by Fay, Spofford, Thorndike (FST) of Burlington, MA. This report was submitted to the DEP on December 29, 2014 and a meeting was held to discuss the findings in February 2015 - **Completed**

TASK 4: Area 12A - (Approx. 40,000 L.F. total) – **Completed****Area 12** – Lakeview Section

- Area 12A-2-Subsection 3 – I/I mitigation work was completed with post flow measurements taken on Princeton Avenue.
- Area 12-2 - Pre-flow metering completed
- Sewer Rehabilitation on Princeton Ave. was performed by private developer estimated Approx. 308,000 GPD to be removed from Sewer System.

Request for Proposals for Phase 2 &3 SSES

Update: Based on the review of updated modeling results, Area 12 has lower I/I and therefore is being replaced with Area 4 or 8 which is showing higher I/I readings.

TASK 5: - Area 1314-A Cedarwood Neighborhood (Approx. 48,000 L.F.)

Area 1314A – Cedarwood SSO Mitigation Project. Post construction flow metering was conducted in the spring 2016. The data obtained during the post metering showed a 40% reduction in Infiltration and Inflow within the sewer shed and confirmed the completeness of work. See the consultant engineer's post metering report = 130,000 GPD I/I removed at 40% (Tighe and Bond). **Completed**

TASK 6: - Area 13/14-B West End and Bear Hill Valley (Approx. 45,000 feet of sewer pipe)

Status of Bear Hill Valley/West End Area 13/14-B consisting of 45,100 linear feet of sewer main and 270 sewer manholes is under investigation by Wright-Pierce consulting firm of Andover. This area was subdivided two to allow for completion in one construction season of each section. The first section, West End, was **Completed** with 1,315 feet of sewer service being replaced, 3,433 feet of sewer main being replaced, 670 feet of sewer main being relined, 22 sewer manholes being replaced and 8 sewer manholes being relined.

Area 13/14-B Phase 2 – Bear Hill Valley was completed in December 2021. This project included 2,630 linear feet of sewer main, 3,742 linear feet of sewer lining, 2,978 linear feet of sewer cleaning, 55 sewer services replaced, 16 sewer manholes replaced and 32 sewer manholes rehabilitated. **Completed**

TASK 6A: - Area 5A Beaver Street and Lyman St Relief Sewer - Completed

Work consisted of: 2,350 feet of sewer main replacement, including 500 feet of 10-inch sewer pipe, 20 brick manholes were replaced with new precast manholes, 3- new sewer manholes were installed, 14 sewer services were replaced, approx. 260 feet of pipe, 9 point repairs were made on existing sewer pipes, 240 feet of sewer was lined, and 400 feet of sewer received heavy cleaning.

Update: The City received a flow meter Memorandum from Wright – Pierce Engineers indicating more data is needed to complete their analysis. They have determined that there were mitigating factors with the current data, including a drought and the detection of a private inflow connection. Wright – Pierce has identified the source of the private inflow as coming from the north campus of Bentley University. The City Engineering office has reviewed updated flow meter data and smartcover measurement data and will follow up with Bentley University on identifying and eliminating the private inflow source.

TASK 7: - Area 12B – Piety Corner and Lanes (Approx. 40,000 L.F.)

Update: Based on the review of updated modeling results, Area 12 has lower I/I and therefore should be replaced with Area 4 or 8 which is showing higher I/I readings.

TASK 8: - Area 7 - Met State/Glen Meadows East/Doty Estates Area (Approx. 100,000 L.F.)

Update: Based on the review of updated modeling results, Area 7 has lower I/I and therefore is being replaced with Area 4 or 8 which is showing higher I/I readings.

3. **AREA 4**

Based on internal review and knowledge, we have identified several sewer locations for I/I projects, see Attachment 9. We are in the process of developing agreements with developers to repair and install sewer liners these areas. We have developed an RFP to hire a consultant to perform additional I/I investigations in this area.

4. **AREA 8**

Based on internal review and knowledge, we have identified several sewer locations for I/I projects, see Attachment 9. We are in the process of developing agreements with developers to repair and install sewer liners these areas. We have developed an RFP to hire a consultant to perform additional I/I investigations in this area.

5. **IDDE Program Update – Attachment No. 1**

IDDE Program is continuing as described in July 2022 Status Memo, a draft scope of work for continued services is included in Attachment No. 1

6. **SSO Reports - Attachment No. 2**

The city is addressing the SSO's on a case-by-case basis. Attachment 2 SSO summary sheet also shows SSO locations for 2022. SSO locations are monitored for a few weeks after the SSO blockage is cleared to prevent a reoccurrence. If the location requires additional cleaning, it is put onto the Sewer Crew Check list, this is the list of sewer areas that are cleaned on periodic basis.

7. **Hobbs Brook Management Sewer Pipe Under Route I-95/128**

HBM completed their sewer and pump station improvements and have abandoned the sewer line under Route 128/ I-95. A final report was submitted with the January Report – **Completed**

8. **CMOM Plan**

CMOM is being implemented, Attachment No. 10 provides a summary of activities to date.

9. **Other**

During this period the following repairs and improvements were made to the City's sewer collection system:

- a) FOG Inspections of active grease traps were performed by our FOG inspector. During this period the city inspected 295 grease traps - Attachment No. 3
- b) Monthly City Pumping Stations inspections by contract operator Weston & Sampson - Attachment No. 4

- c) Sewer Bank – January 2023 – June 30, 2023 - Attachment No. 5
 - d) Building Occupancy Permits: January 2023 – June 30, 2023 - Attachment No. 6
 - e) Sewer Permits – January 2023 – June 30, 2023 - Attachment No. 7
 - f) 31 sewer laterals were repaired/replaced: main line to property line by the City of Waltham crews. We have conservatively estimated that relaying the old sewer laterals has removed 214 GPD, this is based upon the length of the sewer laterals for a total of 884 feet. - Attachment No. 8
 - g) I/I Ordinance has been changed to allow for developer I/I project in lieu of paying I/I fee for larger development with more than 2,000 gpd. We have started the developer I/I project removal program.
2. Compliance Actions – Next Six Months – January 2023 to June 2023
- a) Continue to implement CMOM recommendations.
 - b) Coordinate with Bentley University to remove private inflow source from their north campus.
 - c) Continue to implement sump pump removals from Sump Pump Amnesty Program.
 - d) Continue to administer the City’s FOG (Fats, Oil, and Grease) program
 - e) Continue to enforce the City’s sewer bank, I/I Mitigation fee requiring 4 to 1 removal of all new sewer flow.
 - f) Based on sewer modeling, implement I/I removal projects in sewer subbasin Areas 4 and 8.
 - g) Monitor subbasins 4 and 8 using smartcover system..

O & M Work

During this reporting period the Water & Sewer Division performed daily activity on the maintenance of the sewer collection system including jetting sewer mains, inspecting grease traps, repairing broken sewer services and main breaks.

Highlights of O & M activity were:

1. Pumping out and cleaning siphons and sumps on 6/3/2023.
 - Farwell Street
 - School Street
 - River Street
 - Pond End Road

- Calvary Street
 - Grove Street
 - Lyman Street
 - Woerd Avenue
2. A redesign of the Wimbledon Circle Sewer Pumping Station has been bid and is under construction.
 3. Using new vector truck for more dedicated service for sewer system cleaning and emergency response.
 4. Continued use of new root cutting equipment where problems arise on small 6" & 8" lines.
 5. Purchased 8 additional smart cover and will be installing in the next few months to help with sewer monitoring and proactive maintenance. Units providing level information and estimated flow.
 6. Purchased a new sewer camera to help with sewer system investigations.

Should you have any questions, please do not hesitate to contact me.

Sincerely,



Robert S. Winn, P.E.
City Engineer

Attachments

cc: Susannah King, MASSDEP
Areeg Abd-Alla, MASSDEPDEP
Mayor Jeannette A. McCarthy, w/o Attachments
Patricia Azadi, Law Department, w/o Attachments
Ian McKenzie, P.E., Assistant City Engineer, w/o Attachments