

ONEIDA COUNTY DEPARTMENT OF WATER QUALITY & WATER POLLUTION CONTROL

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County Executive

Karl E. Schrantz, P.E.

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Anthony J. Picente, Jr.

January 30, 2023

Gary McCullouch, P.E. Regional Engineer NYS Department of Environmental Conservation 317 Washington Street Watertown, NY 13601

Carol Lamb-Lafay, P.E.
Director – Bureau of Water Permits
Division of Water
NYS Department of Environmental Conservation
625 Broadway, 4th Floor
Albany, NY 12233

Re: Oneida County Sewer District

Quarterly Progress Report – 4th Quarter 2022

Consent Order No. R6-20060823-67

Dear Mr. McCullouch and Ms. Lamb-Lafay:

On behalf of Oneida County, I am providing for your review and comment Oneida County's Quarterly Progress Report for the 4th Quarter – 2022 as required per Section XIII – Reporting Requirements of the Consent Order. This document summarizes the status and progress of work completed between October 1, 2022 and December 31, 2022 in support of Consent Order compliance requirements.

As Consent Order requirements have been fulfilled and the compliance date of December 31, 2022 has been reached, this report will be the last formal quarterly progress report issued to the NYSDEC.

Please feel free to contact me should you have any questions or need additional information.

Sincerely,

THE ONEIDA COUNTY DEPARTMENT OF WATER QUALITY & WATER POLLUTION CONTROL

Karl E. Schrantz, P.E.

Kal E. Schants

Commissioner

Enclosure: Quarterly Progress Report –4th Quarter 2022

ecc: Anthony J. Picente, Jr. - Oneida County Executive

Peter M. Rayhill, Esq. - Oneida County Attorney

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Colin Lautz, P.E. -Ramboll

SANITARY SEWER COLLECTION SYSTEM QUARTERLY PROGRESS REPORT 4TH QUARTER – 2022 ONEIDA COUNTY SEWER DISTRICT

NYSDEC Consent Order R620060823-67

Prepared for

Oneida County Department of Water Quality & Water Pollution Control

Karl E. Schrantz, P.E., Commissioner 51 Leland Avenue Utica, NY 13502

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January 30, 2023







Utica, NY

Sanitary Sewer Collection System Quarterly Progress Report 4th Quarter - 2022 Oneida County Sewer District NYSDEC Consent Order R620060823-67

Prepared for:

Oneida County Department of Water Quality & Water Pollution Control

Prepared by:

GHD Consulting Services Inc. 5788 Widewaters Pkwy Syracuse, NY 13214

January 30, 2023

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1.0 INTRODUCTION

1.1 HISTORICAL BACKGROUND

The Oneida County Sewer District (District) was formed in 1965 through an act by the former Oneida County Board of Supervisors. It is administered by Oneida County through the Oneida County Department of Water Quality and Water Pollution Control (WQ&WPC), which is responsible for the operation of the District's facilities and personnel. District facilities include 45-miles of interceptor sewers, the Sauquoit Creek Pumping Station (SCPS), the Barnes Avenue Pumping Station, and the Water Pollution Control Plant (WPCP). The District services 15 municipalities, nine of which are within the SCPS Basin. These municipalities own and operate their own collection systems.

1.2 PURPOSE

The New York State Department of Environmental Conservation (NYSDEC) and Oneida County (County) entered a Consent Order (No. R620060823-67) due to sanitary sewer overflows (SSO) at the SCPS. In addition to the required mitigation of those SSOs, the Consent Order, with an effective date of December 12, 2011, requires the submission of Quarterly Progress Reports. The intent of this Quarterly Progress Report is to summarize the work that has been undertaken by the County between October 1, 2022 and December 31, 2022 (4th Quarter of 2022) in support of the Consent Order compliance requirements.

In a letter dated June 16, 2021 to the NYSDEC, the County requested an extension of the SSO Mitigation Consent Order Compliance deadline to December 31, 2022. The basis for this request was to address project conditions beyond the control of the County, including program scheduling impacts due to the COVID-19 pandemic, numerous flooding events, and delays in completion of the new Sauquoit Creek Force Main construction due to unforeseen soil conditions. Through cooperative discussions with the NYSDEC, Modification No. 2 to the Consent Order was agreed upon, which included a one-year extension to December 31, 2022. The modification was executed by the NYSDEC on November 24, 2021.

As of December 31, 2022, the County has fully complied with all requirements of the Consent Order. Specifically, the requirements listed in "Schedule A" of the Consent Order have been met. The County will be submitting a formal request to NYSDEC that the Consent Order be suspended. While the work directly associated with the Consent Order is complete, the County remains committed to continuous system improvements. Initiatives that will continue into the future include coordination with the satellite communities regarding collection system rehabilitation; identification of private property inflow and infiltration sources and approaches toward mitigation; and capacity, management, operations and maintenance (CMOM) activities for the wastewater conveyance and treatment systems. Additionally, the County acknowledges the importance of properly maintaining their infrastructure with the use of the recently deployed computerized maintenance management system (CMMS).

It should be noted the WPCP upgrade and expansion includes work which is beyond the scope of the Consent Order. Construction Contract C-8, currently approximately 75 percent complete, includes the refurbishment of the secondary treatment system (i.e. final settling tanks and aeration basins). Although this project is important to replace equipment and structures that were approaching the end of their design life, the upgrades in Contract C-8 were not necessary to provide the peak capacity of 111 million gallons per day (mgd) and are therefore not directly related to the Consent Order.

As Consent Order requirements have been fulfilled and the compliance date of December 31, 2022 has been reached, this report will be the last formal quarterly progress report issued to the NYSDEC. The County will continue to collaborate with NYSDEC Region 6 Division of Water staff regarding future projects and initiatives.



2.0 ENGINEERING INVESTIGATIONS AND EVALUATIONS

During the 4th Quarter of 2022, the County completed the following tasks related to engineering investigations and evaluations.

2.1 COLLECTION SYSTEM

2.1.1 Manhole Inspections

The manhole inspection program was completed in 2012. There were no additional formal manhole inspections completed during the 4th Quarter of 2022.

2.1.2 Sanitary Sewer Televising

There are approximately 216-miles of sanitary sewer within the SCPS basin (30-miles of District interceptor sewer plus 186-miles of municipal sewer). In 2011, the County contracted with a firm (National Water Main Cleaning Co.) to perform closed circuit televising (CCTV) of these sanitary sewers. Televising data was collected electronically in the field using the nationally standardized Pipe Assessment and Certification Program (PACP) and incorporated into the County's data management software.

The 2011 initial televising contract resulted in approximately 79%, or 171-miles, of the 216-miles of sewers being televised. The remaining 21%, or 47-miles of sewers, were not inspected at that time due to: heavy debris in quantities beyond the scope of the contractual cleaning effort; small diameter pipe inhibiting effective CCTV inspections; lack of easement access to manholes and sewers; and buried manholes. These obstacles are primarily maintenance related and are being addressed through the District-wide Capacity, Management, Operations, and Maintenance (CMOM) program currently in various stages of implementation. Efforts are being made to CCTV and inspect additional sewers as a component of current and future sewer rehabilitation contracts. Including the original CCTV contract, and subsequent CMOM and rehabilitation related CCTV, a total of approximately 195-miles of sewer, or 90% of the total sewers in the SCPS basin, have been televised.

During 2021, CCTV inspections were completed in the Town of New Hartford, Village of New Hartford, and Village of Yorkville as part of the Contract 17 Sewer Rehabilitation. No additional televising was performed in 2022.

2.1.3 Dye Testing

The dye testing program was completed in 2012. There was no additional dye testing performed during the 4^{th} Ouarter of 2022.

2.1.4 Contract 17 Sewer Rehabilitation

The televising, along with limited smoke testing, conducted in the 2^{nd} Quarter of 2021 in the Town of New Hartford, Village of New Hartford and Village of Yorkville continued into the 3^{rd} Quarter of 2021. Additionally, during the 3^{rd} and 4^{th} Quarters of 2021 the County's engineering consultants used the results of these sewer investigations to identify areas for potential rehabilitation (Contract 17) in the Village of Yorkville. In the 4^{th} Quarter 2021, the County's engineering consultants prepared maps for sewer rehabilitation work in the Village of Yorkville, met with staff from Yorkville, and identified the general scope of work for the rehabilitation work. The sewer rehabilitation design has been completed and is currently under review, with bidding anticipated for mid-2023.

2.1.5 Additional Flow Metering to Assist with Sewer Rehabilitation

To further assist in refining potential sewer rehabilitation project locations/scopes of work, the County purchased five level sensor devices (ADS ECHO™) that are easily installed in the manhole without the need for confined space entry. These level sensors were installed in basin NHD-23 in the Town of New Hartford during the second half of 2021 to collect I/I data on a sub-sewer basin scale. Eight of the 10 sub-basins showed signs of high I/I. Discussions with the Town are planned for early 2023 to further investigate the eight sub-basins. The County is planning for a future phase of SSES work and NHD-23 will be included in this investigation.



2.1.6 Villages of Yorkville and New Hartford Engineering Planning Grant Sewer Investigation

In July 2021, the County assisted communities in applying for Engineering Planning Grant (EPG) funding through New York State Environmental Facilities Corporation (NYSEFC) for a study to identify and evaluate infrastructure improvements to reduce I/I in the above areas. The Villages of New Hartford and Yorkville received notice in December 2021 that they were awarded an EPG in the amount \$100,000 each to conduct additional sewer investigations to further refine rehabilitation projects. The EPG funding is independent from Oneida County sponsored work. The EPG work began in March 2022, when Duke's installed over 100 depth sensors in manholes in the Villages of Yorkville and New Hartford to collect depth of flow data. The sensors collected depth of flow data for the past three months, and the monitoring data is being reviewed and used to analyze the micro-basins and prioritize areas for more detailed investigations in the future. Additional SSES work will be focused in the micro-basins with high I/I based on the monitoring results. GHD was retained by both communities to provide engineering/technical services in support of the EPG, including preparation of a report that will be completed in the 1st quarter of 2023 and will summarize the data and recommend further SSES work. In both Villages, this work is being funded through the EPGs awarded in December 2021. Other additional flow metering and/or SSES investigations may also be considered in other areas based upon review of the flow metering data and mapping.

2.1.7 Additional Sewer Investigations Outside the SCPS Basin

With assistance from the County's Planning Department, the County examined the sewer mapping for the City of Utica to identify suspect cross-connections between the sanitary and storm sewers tributary to the Starch Factory Creek Interceptor Sewer. The County provided the City of its findings in the 4th Quarter of 2021 and asked the City to further investigate these suspect cross-connections and develop a plan for mitigation. During the 2nd Quarter 2022, the City installed three temporary flow meters within their suspect sewer basins tributary to the Starch Factory Creek basin to assist in this investigation. The collected data is being reviewed, and potential mitigation projects will be identified in the 1st Quarter of 2023. Additionally, the City undertook a small project to remove four catch basins at the eastern end of Rutger Street that were found to be connected to the sanitary sewer.

2.1.8 Collection System Rehabilitation Funding Opportunities

Recognizing the need for additional sewer rehabilitation work in the system and that funding will be necessary to support this work, the County applied for financing through the NYSEFC's Clean Water State Revolving Fund (CWSRF), which is being funded by the Bipartisan Infrastructure Law (BIL). The County submitted an application and engineering report in June 2022 for a collection system rehabilitation project to be listed on the Intended Use Plan (IUP). The collection system rehabilitation project recommends \$26 million in rehabilitation work to help further reduce wet weather flows received at the SCPS and the WPCP. The Final CWSRF 2023 IUP was issued in October 2022 and this project was included on the Annual List for BIL Subsidized Financing eligibility.

2.2 TREATMENT FACILITIES

Investigations, evaluations, and designs have been completed. Upgrades and new construction associated with the WPCP, SCPS, and New Force Main are in various stages of construction and/or new operation. Table 2.1 summarizes how the work has been segregated, and the status of each of the various planned construction contracts. Note: Contract numbers identified for the work at the WPCP and the SCPS/Force Main (C-1 through C-8), do not correlate to the sanitary sewer rehabilitation contracts (Contracts 2-17 as listed on Table 5.1).

The County also submitted several treatment facilities projects for inclusion in the CWSRF 2023 Intended Use Plan for funding from NYSEFC. This includes:

• Sludge dewatering improvements, which recommends replacing two standby belt filter presses with two new centrifuges, for an estimated probable project cost of \$7 million.



- UV disinfection improvements, which recommends replacing the existing chemical disinfection system with a UV system to reliably meet the extremely low total residual chlorine effluent limit. The estimated probable project cost is \$8.4 million.
- SCPS screening facility resiliency enhancements, which recommends adding a third channel and screen to increase facility resiliency in response to more severe weather and more intense storm events that are occurring more often than in the past. The estimated probable project cost is \$11 million.

The three projects listed above are listed on the CWSRF 2023 Intended Use Plan; however, none were allocated BIL grant funding.

2.2.1 October 31, 2019 Flood Event

As reported previously, on October 31, 2019, an intense rainfall event caused widespread flooding in the Mohawk Valley. The rain gauge at the WPCP recorded 3.75 inches of rain, with a peak intensity of over 3 inches per hour. This event caused damages to the Influent Building, sections of the Sauquoit Creek Interceptor Sewer and Force Main along Sauquoit Creek, and the SCPS. Corrective actions and repairs to the Influent Building and SCPS are complete. Table 2.2 (below) provides a summary status of the various ongoing repair projects.

Table 2.2 FEMA Damage Project Summary

Project Number	FEMA Damage Number	Title	Cost	Status
701911	366892	Sewer exposure repair (New Hartford Park, Washington Mills)	\$96,054	Work Completed 11/01/2021 Funding/disbursement pending FEMA CRC project development.
133024	366893	Sewer exposure repair (Oneida St., Washington Mills - behind Salvatore's bakery)	\$51,000	Pending FEMA 406 HMP completion Tentative Summer 2023 construction.
	366894	Sewer exposure (Victoria Drive, Utica)	\$149,100	Pending FEMA 406 HMP completion Tentative Summer 2023 construction.
	366895 Manhole Exposure (New Hartford Street, New York Mills)		\$37,680	Pending FEMA 406 HMP completion Tentative Summer 2023 construction.
135064	374275	Sewer Line Encasement Undermining (Mud Creek)	\$53,287	Funding disbursed. Tentative Summer 2023 construction.
133005	n/a	Sewer line repair with stream bed restoration and bank armament (Paris and Chadwicks Sites)	\$392,312	Work Completed 12/01/2021 Funding disbursed.
133021	n/a	Pump Station/Access Road Repairs (Sauquoit Creek Pumping Station)	\$199,720	Work Completed 06/20/2021 Funding disbursed.
158181	n/a	Pump Station - Emergency Work (Sauquoit Creek Pumping Station)	\$140,134	Work Completed 06/20/2021 Funding obligated. Pending disbursement.



Project Number	FEMA Damage Number	Title	Cost	Status
145808	n/a	Oneida County DWQ Management Costs		Pending formulation completion by FEMA
135067	374288	Nail Creek Force Main	\$23,000	Work completed May 2022. Pending FEMA review/approval.
135066	374278	Creek Stabilization and Associated Damages (near Pietryka Park)	\$130,225	Funding disbursed. Tentative Summer 2023 construction.
135061	n/a	App-Cert Pump Station - Damaged Electrical Equipment	\$29,400	Work Completed 12/30/2022 Funding disbursed.

3.0 MANAGEMENT PROGRAMS

3.1 COMPUTERIZED MAINTENANCE MANAGEMENT SYSTEM

The County purchased a Computerized Maintenance Management System (CMMS) software system (Lucity – now a CentralSquare Technologies Company) in 2009. This software is used to manage the sewer system data (mapping, inspections, etc.) obtained to date by the County. At the same time that the software was acquired, the County invested in computer hardware upgrades to support the CMMS. The County's Geographic Information System (GIS) Coordinator manages the system.

The County continues to utilize the CMMS for tracking and documenting sewer rehabilitation work and uploading and managing new PACP data provided by the County's CCTV and sewer rehabilitation contractors on a regular basis.

The Consultant Team utilizes the CMMS in support of the sanitary sewer rehabilitation design efforts to identify defects and develop rehabilitation methodologies.

3.1.1 Asset Management

The County continues to maximize the use of its current CMMS software. At the same time, the County, with the assistance of the Consultant Team, continues to assess ways to optimize the CMMS with the long-term expanded asset management needs for the wastewater system. In accordance with Schedule C, Section B.4 of the Consent Order, the Consultant Team developed a proposed asset management program for the Department of Water Quality and Water Pollution Control. Under a previous authorization, the Engineering Team assisted the County with the process of receiving proposals for a new CMMS. Several candidate vendors provided demonstrations of their systems. Based on the proposals and demonstrations received, the "Sprocket" CMMS system by Dematic is the preferred software application for the WPCP. Barton and Loguidice, D.P.C was subcontracted by GHD (Consultant Team) and has started to customize the software for County use.

During the 4th Quarter of 2020, the engineering team confirmed the location for new servers to host the CMMS system with the County's Information Technology (IT) Department personnel; however, due to COVID restrictions, the servers were not installed during 2020. In 2021, the Consultant Team recommended a cloud-based server for the CMMS system, citing advantages such as maintenance/upgrades would be performed automatically by Dematic, performance issues would be resolved by Dematic, and the system could be accessed from anywhere with a trusted internet connection. The County's IT Department was consulted and agreed with the cloud-based server as long as they are kept informed as the work progresses. The CMMS system is now being hosted in the Cloud.

The Asset Register for equipment being installed in Contracts C-2, C-5, C-6, C-7, and C-8 was developed in 2020. The Asset Register includes preventative maintenance tasks and frequency and will eventually be used to automatically generate work orders once the CMMS system is online.

The new "Asset Management Building" that will be constructed south of the existing Maintenance Garage was included in the Contract C-8 Bid Package that was awarded in February 2021 and issued the Notice to Proceed in May 2021. The Asset Management Building features a racked storage system for spare parts, an inventory control system, and an office for parts clerk. A portion of the new building has been designed to house the County's new vactor truck used for interceptor maintenance.

The County, working with its consultant team, prepared an Asset Management Plan for compliance with the Consent Order. The Asset Management Plan provided the current condition of major assets (those valued at \$50,000 or more), and a risk analysis to document the consequence of failure. This plan is being used as a planning and budgeting tool for replacing major equipment over time. The CMMS system will be the day-to-day method for tracing preventative and reactive maintenance tasks and managing spare parts inventory. The final Asset Management Plan was submitted to the NYSDEC on December 19, 2022.

During the 4th Quarter of 2022, Barton & Loguidice and GHD performed the following:



- B&L provided a demo covering the Asset data and hierarchies, preventive maintenance schedules, processing of work orders, the use of follow-up work orders, and dashboards with reporting. Attendees included staff from B&L, GHD, and the County. The CMMS is ready to be used by the County and the preventive maintenance schedules will be activated by local staff as the County is prepared to perform the work activities.
- The GHD SCADA team continues to work with B&L and Dematic's technical support related to the integration of SCADA and Sprocket. All parties met during the 4th Quarter 2022 and have determined the best approach is for the SCADA system to generate a .CSV file with run-time data and the run-times will be matched to respective equipment based on asset tag numbers. The tag numbers were included with the equipment list that was imported by B&L previously. The file will be generated on a predefined weekly interval and then transferred to a secure directory where the file can be accessed by Sprocket. The integration is scheduled to be completed during the 1st Quarter 2023.

In 2023, GHD, B&L and Dematic's technical support will be working to complete the SCADA integration so runtimes will be automatically updated in Sprocket. This will allow for run-time based PM schedules to be activated by County staff.

3.2 FLOW MONITORING PROGRAM AND HYDRAULIC MODEL

The County worked closely with the Dormitory Authority of the State of New York (DASNY) to secure the \$950,000 Economic Development Assistance Program (EDAP) funding allocation to support the extensive flow monitoring program proposed by the County and approved by NYSDEC on August 24, 2012. The EDAP funds were ultimately made available by DASNY to the County in March 2014. Procurement of the flow monitoring equipment was advertised on June 9, 2014, and a contract was awarded on September 10, 2014 to ADS Environmental Services, LLC (ADS). ADS completed installation of 63 flow meters and five rain gauges in 2015. Forty-four meters were installed in the Sauquoit Creek Pump Station (SCPS) drainage basin, and 14 meters were installed in the North Utica drainage basin and other smaller basin. Two meters were installed to monitor flow to the County's Barnes Ave Pumping Station, and three are used to monitor flow in the City of Utica's combined sewers to aid in hydraulic model calibration and confirmation. Three new flowmeters were installed within the collection system tributary to the Starch Factory Interceptor (outside of the SCPS Basin) in December 2019. Currently, 66 flow meters are installed under the County's flow monitoring program.

Flow metering data are available to the County and its Consultant Team by ADS to evaluate the impacts of sanitary sewer and manhole rehabilitation on the amount of I/I entering the sanitary sewer system. Raw flow monitoring data, consisting of 5-minute measurements of depth and velocity, are reviewed by ADS technicians who are able to assess the reliability of the data, and "scrub" out data that is deemed not accurate based on inconsistencies in the expected predictable relationship between depth, velocity, and rate of flow. After the data is verified and scrubbed, ADS technicians input the cleaned-up data into Sliicer, which is ADS' proprietary flow analyzing software. Sliicer enables the flow monitoring technician to automate identification of dry and wet weather days, define "typical" rain events for both summer and winter seasons, and analyze the rain event's effect on the flow in the sanitary sewer. This forms the basis of evaluating the quantity of RDII in large datasets. Each 1st Quarter report provides a summary of the previous years' flow monitoring data. The 1st Quarter 2022 report presented the data review and summary for 2021. The consultant team continues to review and evaluate flow monitoring data on regular basis.

Overall, the results of the evaluations presented in the 1st Quarter 2022 progress report indicated that the significant amount of sewer investigation and subsequent rehabilitation work completed to date has had a generally positive impact on I/I abatement and reducing sanitary sewer overflow volumes at the Sauquoit Creek Pump Station, although results may vary depending on the rainfall intensity and storm characteristics. The 2021 SCPS SSO data showed that the new 42-inch force main from the Sauquoit Creek Pump Station (put into service in April 2021) contributed to a significant reduction in SSO volumes in a relatively wet year. Furthermore, since Contact C-4 (Sauquoit Creek Force Main Upgrades) became substantially complete and operational in the 3rd Quarter 2022, there have been no overflows at the Sauquoit Creek Pump Station. Despite the work completed to



date, there still appears to be I/I entering the sewer system in a few select areas of the system. Rehabilitation work to date has consisted of cured-in-place-pipe (CIPP) lining, lateral joint grouting, pipe joint grouting, and manhole rehabilitation. These methods have the potential to eliminate infiltration and repair the structural integrity of the sewer main, but are limited to addressing mostly public side I/I sources. Further investigation is warranted to identify and address other sources of I/I, such as cross connections between storm and sanitary sewers and private side I/I (see Section 3.3). Based on the high I/I observed in certain areas of the collection system, a second phase of sewer investigations are ongoing in the areas of noted concern in Section 2.1.4, followed by sewer rehabilitation design. Continued sewer investigation and rehabilitation work is important to further I/I abatement, as well as help build excess capacity in the collection system for future growth. The combination of past and future sewer rehabilitation work and the new 42-inch force main from the Sauquoit Creek Pump Station are intended to mitigate the overflow at the SCPS according to the Consent Order.

Starch Factory Drainage Basin Flow Data Summary

The flow meters in the Starch Factory drainage basin have been consistently collecting flow data since their installation in 2019. The purpose of these meters is to isolate portions of the Starch Factory Interceptor basin so that areas of excess infiltration and inflow (I/I) can be identified. The data collected by these flowmeters continues to be reviewed and analyzed by GHD. Preliminary results reviewed during the 1st Quarter 2022 indicated that the sewershed tributary to meter "Oneida_205" located within Proctor Park, appears to be contributing proportionally the most Rain Derived I/I (RDII) in the Starch Factory Interceptor area. As noted in Section 2.1.7, the City installed three additional temporary flow meters in this drainage basin to further investigate suspect cross-connections and develop a plan for mitigation. This flow monitoring data has already been used to design and construct stormwater extensions to eliminate cross-connected catch basins.

3.3 PRIVATE PROPERTY INFLOW AND INFILTRATION REDUCTION PROGRAM

The document titled "Preliminary Planning Document – Private Property Inflow and Infiltration Reduction Program" was submitted to the NYSDEC on June 29, 2012, as required by Schedule A - Section B.2 of the Consent Order. The County, working through the Steering Committee, created a working group of appropriate private property inflow and infiltration (PPII)-oriented community representatives to map out a phased implementation plan (PPII and CMOM Working Group).

Planning among the Consultant Team regarding the 2022 program elements includes legal review of potential modifications to the County's Sewer Use Rules and Regulations and drafting policy documents relative to private property I/I. The Consultant Team continues to conduct public outreach and provide educational materials as needed. The team is exploring options for private property inspections with the goal of disconnecting illicit discharges. Three meetings were held in the 4th quarter, as follows:

- A funding workshop was held on October 11, 2022 with the Steering Committee and NYSEFC. The scope
 of this meeting was broad and not limited to funding for PPII. Other agencies also participated including
 Empire Station Development and Mohawk Valley Economic Development District.
- A PPII and CMOM Working Group meeting was held on October 26, 2022 to discuss ongoing efforts to mitigate PPII, public outreach and next steps.
- A PPII and CMOM Working Group meeting held on December 7, 2022 to discuss progress on private home inspection programs, PPII, CMOM, and updates to the Oneida County Sewer Use Law.

3.4 CAPACITY, MANAGEMENT, OPERATIONS AND MAINTENANCE PROGRAM

The document titled "Preliminary Planning Document – Proposed CMOM Framework – Sauquoit Creek Pumping Station Basin Communities" was submitted to the NYSDEC on June 29, 2012, as required by Schedule A – Section B.3 of the Consent Order. The County, working through the Steering Committee, created a working group of appropriate CMOM-oriented community representatives to map out a phased implementation plan.

<u>Fats, Oils, and Grease (FOG) Program</u>: The OCSD and Oneida County Department of Health (OCDOH) are collaborating on the implementation of the Fats, Oils, and Grease (FOG) program. The OCDOH recently hired



some staff and has assigned an individual to assist with FOG inspections. From October 2022 through December 2022, 45 inspections of Food Service Establishments (FSEs) were performed. To date, a total of 319 FSEs have been visited. Initial visits are primarily for educational purposes, informing owners of the FOG program and best management practices (BMP). Inspectors also verify that proper plumbing fixtures are in place, and that FSEs follow the local and County sewer use ordinance in not releasing fat-laden wash water or cooking oils to the sanitary sewer system. Inspectors look for evidence that FSEs are utilizing BMPs, tracking grease trap maintenance, and keeping grease hauling records. Inspectors have found varying levels of FOG compliance, but most have been reportedly receptive to learning about the program and willing to allow inspection of existing facilities. In some cases, follow-up visits are made to ensure action on non-compliance. Facility characteristics, inspection details, and compliance status on each FSE is collected and tracked. In the future, the data will be entered in the County CMMS (Lucity), so that it can be linked with the growing collection system database.

Related to FOG inspections, New York State has adopted a permanent rule (effective July 6, 2022) that adds specific provisions regarding the installation, modification, use and maintenance for grease traps/interceptors to the New York State Uniform Fire Prevention and Building Code ("Uniform Code"). The County disseminated educational materials to the local municipalities for their distribution to the FSEs in their municipality in the 3rd quarter of 2022.



4.0 SCHEDULE/MILESTONE DATES

4.1 APPROVED SCHEDULE

The following table represents the approved schedule as defined by the Consent Order. In a letter dated June 16, 2021 to the NYSDEC, the County requested an extension of the SSO Mitigation Consent Order Compliance deadline to December 31, 2022. Through cooperative discussions with the NYSDEC, Modification No. 2 to the Consent Order was agreed upon, which included a one-year extension, and the modification was executed by the NYSDEC on November 24, 2021. As of December 31, 2022, all Consent Order requirements have been completed.

Description	Consent Order, Schedule "A" Date	Status
Engineering Investigations and Evaluations		
Dye Testing and Storm Sewer Report	June 30, 2012	Complete, Submitted June 29, 2012
Manhole Evaluation Report – Phase II	June 30, 2012	Complete, Submitted June 29, 2012
SCPS Evaluation Report	August 31, 2012	Complete, Approved November 28, 2012
WPCP Evaluation Report	August 31, 2012	Complete, Approved November 28, 2012
Treatment System Supplement (Report)	60 days after approval of WPCP Evaluation Report	Complete, Submitted January 25, 2013
Sewer CCTV Inspection Report – Phase II	April 30, 2013	Complete, Submitted April 25, 2013
Sewer CCTV Inspection Report – Phase III	April 30, 2014	Complete, Submitted April 29, 2014
Collection System Supplement (Report)	May 31, 2014 (extension granted to July 1, 2014)	Complete, Submitted June 30, 2014 Approved December 18, 2014
Management Programs		
Flow Monitoring Program	March 31, 2012	Complete, Approved August 24, 2012
Private Property I/I Reduction Program	June 30, 2012	Complete, Submitted June 29, 2012
CMOM Program	June 30, 2012	Complete, Submitted June 29, 2012
PPII Reduction Program Implementation	May 31, 2013	Began implementation in 4 th Quarter 2012
CMOM Implementation	May 31, 2013	Began implementation in 4 th Quarter 2012
Asset Management Plan	December 31, 2022*	Final submitted Dec. 19, 2022
Remedial Measures		
Semi-Permanent Alternative-Construction	December 31, 2016	Modified Consent Order effective 6/28/18 removed the requirement for construction of the semi-permanent alternative
SSO Mitigation-Consent Order Compliance	December 31, 2022*	Completed
Reporting		
Annual Work Plan	January 31, Annually	Submitted annually
Quarterly Progress Report	Quarterly	Submitted quarterly

Notes: I/I - Inflow and Infiltration

^{*} Consent Order modification executed by NYSDEC to extend deadline to December 31, 2022, including Asset Management Plan.



4.2 MILESTONES

During the 4th Quarter of 2022, the following milestone dates were met:

Final Asset Management Plan was submitted to the NYSDEC on December 19, 2022

4.3 TEMPORARY (CONSTRUCTION PHASE) SPDES PERMIT LIMITS

During construction, the WPCP is operating under the provisions set forth in "SPDES Permit No. NY0025780, Interim Effluent Limits and Monitoring, R6-20060823-67-M1," as issued by the NYSDEC. These construction phase permit limits require a wet weather flow of 48 mgd through the WPCP prior to a combined sewer overflow upstream of the plant. The temporary limits were set to expire on December 31, 2021, concurrent with the original Consent Order deadline. In a letter dated December 22, 2020 to the NYSDEC, the County requested extension of the temporary construction phase permit limits through the completion of Contract C-8. The County requested and received a Consent Order modification to extend the deadline to December 31, 2022, and the construction phase interim limits also were extended concurrent with the modified Consent Order (Modification No. 2 to the Consent Order, executed November 24, 2021).

Contract C-8 was awarded in February 2021 and the Notice to Proceed was issued in May 2021. Under this contract, the secondary treatment system is being upgraded with new blowers and diffusers at the three aeration basins, and new sludge/scum collection equipment in the eight final settling tanks. The project also includes new return activated sludge pumps and other associated enhancements. The upgrades associated with Contract C-8 are not required in order to achieve the peak flow capacity of 111 mgd and are therefore not part of the Consent Order. Contract C-8 is more focused on replacement of equipment that has reached the end of its useful service life. However, this contract will necessitate taking process tanks offline periodically. Specifically, the Contractor will be required to take one aeration basin out of service at a time to replace diffusers, air piping and valves, gates, etc. As the aeration basins will be out of service for periods of time, treatment may be impacted during construction. There is no feasible or practicable way to complete the aeration basin improvements without periods of limited capacity.



5.0 SEWER REHABILITATION

Active sewer rehabilitation work financed under CWSRF Project No. C6-6070-08-00, C6-6070-08-10, and C6-6071-02-00 are being administratively closed out. All projects have been tracked by contract number. The rehabilitation contracts were undertaken to reduce the amount of inflow and infiltration entering the system due to defects in interceptor sewers, mainline sewers, lateral connections, and manhole structures. Work under these sewer rehabilitation contracts typically included: a mix of cured-in-place-pipe (CIPP) lining; pipe joint and lateral grouting; open cut repairs; spot repairs; manhole repairs/replacement; and supplemental CCTV inspections. Information related to these sewer rehabilitation contracts is presented in Table 5.1. Required work per the Consent Order is essentially complete, and any remaining open contracts are going through the administrative closeout process. The Engineering Team continues to review available data and looks for additional sewer rehabilitation opportunities. A new contract, Contract 17 is being developed to address supplemental sewer rehabilitation in the Village of Yorkville, as discussed in Section 2.1.4. Construction is anticipated to begin in 2023.



6.0 ASSESSMENT OF REHABILITATION EFFECTIVENESS

See Section 3.2 for a discussion of the status of flow monitoring and hydraulic model update. Based on the completed work and using estimated values of inflow and infiltration (I/I) removals provided in the Offset Plan and/or the approved Basis of Design engineering reports for the respective projects, the estimated reductions in I/I for each rehabilitation contract are shown in Table 5.1.



7.0 COMPLETED CAPITAL PROJECTS/FACILITY UPGRADES

Status of all capital projects and facility upgrades is provided in Table 2.1 and Table 5.1.



8.0 I/I OFFSET PROJECTS/NEW FLOWS

During the 4^{th} Quarter of 2022, new additions and subtractions to the I/I Offset Credit Bank were recorded by the County. All amounts are reported in gallons per day (gpd) after the application of the 5:1 offset ratio.

Community	Starting Balance	Credits Added	Location	Credits Used	Ending Balance
Town of New Hartford	1,793,999	0	10 Roberts Way (Cherrywood) 328.000-2-26 NH Permit #6107	320	1,793,039
			116 Woods Edge Drive (Cherrywood) 328.000-2-26 NH Permit #6108	320	
			118 Woods Edge Drive (Cherrywood) 328.000-2-26 NH Permit #6109	320	
Town of Paris	253,064	0		0	253,064
Town of Whitestown	1,051,434	0		0	1,051,434
Village of Clayville	59,069	0		0	59,069
Village of New Hartford	277,147	0		0	277,147
Village of New York Mills	166,523	0		0	166,523
Village of Oriskany	103,466	0		0	103,466
Village of Whitesboro	1,083,599	0		0	1,083,599
Village of Yorkville	159,082	0		0	159,082
Oneida County Business Park	43,027	0		0	43,027
Oneida County Sewer District	24,710	0		0	24,710
Totals	5,015,120	0		960	5,014,160



9.0 KEY PERSONNEL CHANGES

Key personnel changes, as they relate to the SSO Mitigation/Consent Order compliance project, are interpreted to be those staff members whose addition to or deletion from the project would be viewed by the County to either add resources or be a detriment to progress. Project staff includes County, satellite community, and Consultant Team personnel. The following is a summary of changes.

9.1 COUNTY STAFF

During the 4th Quarter of 2022, there were no changes of key personnel.

9.2 SATELLITE COMMUNITY STAFF

During the 4th Quarter of 2022, there were no changes of key personnel to report.

9.3 CONSULTANT TEAM STAFF

During the 4th Quarter of 2022, there were no changes of key personnel to report.

9.4 COVID-19 IMPACT

In March 2020, the COVID-19 crisis began affecting daily work routines for the County, Consultant Team and contractors and resulted in various restrictions because of New York State and Oneida County Executive Orders. While COVID restrictions have since been lifted, the County, Consultant Team and contractors continue to abide by CDC regulations and their own company guidance with respect to COVID-19. The pandemic created several challenges early on for the various projects, and the County continues to deal with industry-wide challenges such as supply chain disruption and scheduling issues.



10.0 ADMINISTRATIVE ITEMS

10.1 WORK AUTHORIZATIONS

There were no new work authorizations issued during the 4th Quarter of 2022.

10.2 PROJECT FINANCING

Table 10.1 below is from the Preliminary Engineering Report in Support of Project Financing, Amended March 11, 2020. The overall Consent Order compliance program is large in scope and magnitude. Phasing is required in order to implement the work in a reasonable and cost-effective manner. The following represents the project's current overall phasing plan and estimated budgets, including information in the 2021 CWSRF Intended Use Plan.

The financing agreement for CWSRF Project No. C6-6070-08-15 was amended in Q1-2022 to incorporate the upgrades to the Barnes Avenue Pumping Station, although the NYSEFC recently set up a new project number for (C6-6070-08-18) for the \$40M. \$79,000,000 was converted to CWSRF Long Term Financing in 2022.

Table 10.1: Project Phasing(1)

CWSRF PROJECT NO.	PHASE	CURRENT DESCRIPTION	CWSRF FINANCED AMOUNT
			\$10,078,434
C6-6070-08-00	1	Sanitary Sewer Collection System – Sewer Rehabilitation/Replacement	Long Term Debt 2015
		, <u>,</u>	\$4,000,000 Principal Forgiveness
C6-6070-08-01	2B & 3	Sanitary Sewer Collection System – Sewer	\$15,000,000
C0-0070-00-01	2D & 3	Rehabilitation/Replacement	2020 Multi-Year List
C6-6070-08-02		Sauquoit Creek Pumping Station and Force Main – Design	\$2,524,017
C0-0070-00-02		and Permitting	Long Term Debt 2019
C6-6070-08-03	4	Inflow/Infiltration Mitigation in Support of Private	\$7,664,000
C0-0070-00-03	T	Property I/I Reduction	Multi-Year List
	5B & 6C		\$97,656,145.00
C6-6070-08-04(2)		Sauquoit Creek Pumping Station and Force Main Upgrades & Water Pollution Control Plant Upgrades	Long Term Debt 2019
00 0070 00 010		(Construction of Solids Handling Upgrades not covered in	\$5,000,000 WIIA Grant
		Phase 6B, Construction of portions of the "Physical Condition" Upgrades)	\$1,000,000 ESD Grant
			\$2,000,000 NYSERDA Grant
		Construction of the remainder of the Water Pollution	\$55,000,000
C6-6070-08-05	6A	Control Plant Upgrades not covered in Phases 5B, 6B, and 6C.	Long term financing 2020, <u>pending</u>
CO 0070 00 03	0/1	oc.	\$5,000,000 Interest Free loan
			\$20,000,000 WIIA Grant
24 42 22 22 24	4.5	Water Pollution Control Plant Upgrades – Design Phase	\$34,707,000
C6-6070-08-06	6B	Services, Construction of Select Solids Handling Upgrades Phases)	Long Term Debt 2017
C6-6070-08-10	1 & 2A	Sanitary Sewer Collection System (I/I) Correction	\$11,586,562
CO-OU/U-U8-10	1 & 2A	(Balance from C6-6070-08-00)	Long Term Debt 2017



CWSRF PROJECT NO.	PHASE	CURRENT DESCRIPTION	CWSRF FINANCED AMOUNT
C6-6070-08-11	2B & 3	Sanitary Sewer Collection System – Sewer Rehabilitation/Replacement (Balance from C6-6070-08-01)	\$13,923,000 Multi-Year List
C6-6070-08-14	5B &6C	Balance from C6-6070-08-04.	\$15,000,000 - Interest Free loan Long Term Debt 2019
C6-6070-08-15 C6-6070-08-18	6A	Construction of remainder of the Water Pollution Control Plant, Sauquoit Creek Pumping Station and Force Main upgrades not financed in Phases 5B, 6B, and 6C. (Balance from C6-6070-08-05). Financing Agreement Amendment (Q1- 2022) – addition of Barnes Avenue Pumping Station Upgrades to financing agreement.	\$79,000,000 (2023 Annual List) \$0.00 BIL Grant \$0.00 BIL Hardship Financing \$41,000,000 BIL Subsidized Financing
C6-6070-08-17	6A	Help finance the two additional microturbines being installed under Contract C-8 (GIGP No. 1882).	\$1,250,000 GIGP Grant

⁽¹⁾ Includes all project related financings, including those not related to this Bond Authorization (including its amendments).



⁽²⁾ C6-6070-08-04 received an additional \$5 million Water Infrastructure Grant.

Table 2.1

Summary of Contracts 4Q 2022

Water Pollution Control Plant and Sauquoit Creek Pumping Station/Force Main

Contract No.	Title of Contract	Components of System Addressed	Status of Design	Status of NYSDEC Review	Status of Other Agency Reviews	Estimated Advertisement	Estimated ⁽¹⁾ Construction Start	Construction Progress	Estimated Construction Complete
1	Incinerator No. 2 Demolition	Demolition of Incinerator No. 2	Final	Approved	n/a	Bidding c	occurred during 1Q 2	2016; however, due to the outcome of bids, the demolition was added to Contract 2 by on May 25, 2016.	addendum
2	WPCP Solids Handling Upgrades	2 new egg-shaped digesters, 1 secondary digester w/gas holding cover, new waste activated sludge pumps, refurbish 4 gravity thickeners, new stand-by lime stabilization system, 2 new belt filter presses.	Final	Approved	n/a	Advertised April 4, 2016	Notice to Proceed September 27, 2016	Construction is substantially complete and all equipment is on-line.	April 2019
3A	Electrical Equipment Pre-Purchase (Digester 15kV)	Pre-purchase of major electrical components such as switch gears, transformers, and supporting power distribution equipment.	Final	n/a	n/a	April 2017	Equipment delivery October 2017	Equipment installation is complete and operational.	March 2018
4	Sauquoit Creek Force Main Upgrades	New 48-inch force main and rehabilitation of the existing force main, new flow metering and flow control vaults.	Final	Approved	Approved	Advertised December 15, 2017	July 2018	The 42-inch force main is in service and conveying peak flows up to 38 mgd. Rehabilitation of the existing 30-inch force main is substantially complete and was put into service June 2022.	June 30, 2022
5	Sauquoit Creek Pumping Station Upgrades	Replacement of existing pump station mechanical screen contained in a new screen building, 2 screenings washer/compactors and conveyor; replacement of existing standby generator capable of operating the station to pump peak flow during a power outage; electrical/HVAC upgrades; flow distribution structure at the WPCP.	Final	Approved	n/a	November 2016	July 2017	Note - Site and buildings impacted by 7/1/2017, 1/24/2019, and 10/31/2019 ice jam/flooding events. New Screenings Building: Facility is generally operational (building access/security pending); new emergency generator fully operational; Huber replaced the WAP equipment with a new, modified system intended to improve drainage. Operational results of WAP are being monitored, although still not properly functioning per project specifications. General Contractor to install hot water system (for WAP) for improved performance. Engineer and County are reviewing contractual remedies if the non-performance of the washer/compactor is not resolved. Most punch list items completed. Existing Pumping Station Building: Electrical, HVAC, and plumbing renovations complete.	HVAC, Electrical, and Plumbing Contracts completed June 2022. With exception of Huber screen equipment, anticipated completion of General Contract September 2022 (pending inspection by NYS Code Enforcement officials).

Summary of Contracts 4Q 2022

Water Pollution Control Plant and Sauquoit Creek Pumping Station/Force Main

Contrac No.	Title of Contract	Components of System Addressed	Status of Design	Status of NYSDEC Review	Status of Other Agency Reviews	Estimated Advertisement	Estimated ⁽¹⁾ Construction Start	Construction Progress	Estimated Construction Complete
5.1	Barnes Avenue Pumping Station Upgrades	Upgrading existing 1.5 mgd pump station to replace equipment that has reached the end of its useful service life. Installation of a new backup generator. Electrical, mechanical, and architectural upgrades to existing building. Service road improvements for better access to the station. New discharge piping configuration and interconnection to new and rehabilitated SCPS forcemains.	30%	n/a	n/a	July 2022	December 2022	The Basis of Design Report was approved by the EFC in the 3rd quarter 2021; EFC financing was approved in 1st Quarter 2022 and GHD has commenced the final design. Bidding is on hold until resolution with CSX Rail Road regarding access is resolved.	Tentatively December 2023 (pending access agreement with CSX is resolved)
6	WPCP Headworks Upgrades	New screening facility and pump station dedicated to sanitary flows from North Utica & Starch Factory Creek Interceptors; repurpose existing raw waste building for combined flow from City of Utica; new grit removal facilities; remodeling of the administrative building including new laboratory, control room, offices, training room, etc.	Final	Approved	Approved	March 2017	September 2017	Influent Building: 4 new influent pumps and 3 mechanically cleaned bar screens are complete. Combined Influent Building: Refurbishment of building and equipment (4 pumps, 3 screens) is complete. Grit Removal: Grit buildings No. 2 and 3 are complete. Grit Building No. 3 was impacted by a flooding event on June 1, 2020; damaged equipment repairs/replacement are now complete, although the insurance claim is ongoing. Administration Building: Rehabilitation of the building is complete. Electrical: New receiving structure/tower for 46kV equipment is installed and energized by National Grid. New pre-fabricated Switchgear Building and Generator Buildings are complete. Grounding grid complete. New generator fuel system and controls are complete. Generator system is fully operational. All 4 prime contractors (General, HVAC, Electrical, and Plumbing) are working on addressing final punch list items and/or final close out documentation.	November 2022

Summary of Contracts 4Q 2022

Water Pollution Control Plant and Sauquoit Creek Pumping Station/Force Main

Contract No.	Title of Contract	Components of System Addressed	Status of Design	Status of NYSDEC Review	Status of Other Agency Reviews	Estimated Advertisement	Estimated ⁽¹⁾ Construction Start	Construction Progress	Estimated Construction Complete
7	WPCP Primary Treatment Upgrade/Disinfection	New rectangular primary settling tanks to replace existing circular tanks; new high rate disinfection system for wet weather combined sewer flows; new HRD outfall.	Final	Submitted December 9, 2016	n/a	Advertised November 28, 2017	May 2018	Primary Settling Tanks No. 1 and 2: PSTs No. 1 and 2 are complete and operational and troubleshooting of primary sludge pumps operation is ongoing. Primary Settling Tanks No. 3 and 4: PSTs No. 3 and 4 are complete and operational and troubleshooting of primary sludge pumps operation is ongoing. Disinfection Building: Disinfection Building is substantially complete and operational. Administration and Operations Building: Admin and Ops Building is complete and operational. Aeration Tank Distribution Structure: Aeration Tank Distribution Structure is complete and operational. HRD Outfall Structure and Outfalls: HRD Outfall Structure and Outfalls are complete and operational. All 4 prime contractors (General, HVAC, Electrical, and Plumbing) are working on addressing final punch list items and/or final close out documentation.	December 2021 (substantially complete)
8	WPCP Secondary Treatment Process Upgrades	Replacement of existing blowers with more efficient units; refurbishment of the existing Blower Building including upgrades to electrical, HVAC, plumbing and structural systems; refurbishment of existing Aeration Tanks including replacement of existing diffusers and structural upgrades, refurbishment of existing Final Settling Tanks including replacement of existing clarifier mechanisms and structural upgrades; new Asset Management Building; upgrades to site wide civil infrastructure including stormwater, fencing and gates; revisions to site electrical system including demolition of existing substation.	Final	Approved	Approved	Advertised November 17, 2020	Notice to Proceed May 13, 2021	Blower Building: Installation of RAS pump Nos. 5 -7 is complete. New blower installation and startup is complete. Delivery of the Blower Building unit substation is delayed due to supply chain issues; delivery is expected in March 2023. Installation of electrical duct bank and conduit is ongoing. Aeration Tanks: At Aeration Tank Nos. 1, 2 and 3, installation of diffusers, aeration piping, concrete repairs and railing installation are complete. Aeration Tank Nos. 1 and 3 have been started up (Aeration Tank No. 2 startup is pending). Final Settling Tanks: Installation of equipment, railings and electrical conduit is ongoing. Concrete repairs are ongoing. FST Nos. 1, 5, 6, 7 and 8 startups are complete. Administration and Operations Building: Concrete floor infill at the former Incinerator 1 and 3 locations is complete. Electrical feeder installation to the new Switch Bank Room is complete. Asset Management Structure: Installation of pile foundations, concrete slab, and inslab utilities is complete. Pre-engineered metal building has been errected and wall/roof panels are under construction.	Estimated October 2023

^{(1) -} Estimated construction start = Notice to Proceed

Oneida County Sewer District Summary of Contracts 4Q 2022

Sewer Rehabilitation Contracts

Contract No.*	Title of Contract	Project Location/Description	CWSRF Project No.	Status of Design	Status of DEC/EFC/COUNTY Review	Miles of Rehabilitation ⁽²⁾	Estimated I/I Reduction (gal/day)	Current Contract Amount (1)	Contractor	Contract Status
2	Sanitary Sewer Manhole Rehabilitation - Phase 2	<u>District-wide</u> : Rehabilitation of approximately 1,278 sanitary sewer manholes.	C6-6070-08-00	Final	Approved	47	5,411,910	\$ 1,529,131.73	Green Mountain Pipeline Services	Complete
3	Sanitary Sewer Mainline Rehabilitation - Phase 1	Villages of New York Mills, Oriskany, New Hartford, Whitesboro, and Yorkville; Towns of New Hartford and Whitestown	C6-6070-08-00	Final	Approved	13	1,503,360	\$ 1,916,428.54	Insituform	Complete
4	Sewer Separation - Clinton/Henderson Street, NY Mills	NY Mills: Storm/Sanitary sewer separation.	C6-6070-08-00	Final	Approved	2	264,000	\$ 155,007.51	JJ Lane Construction	Complete
5	Sewer Repairs and Rehabilitation	Villages of Whitesboro, New Hartford, Yorkville, New York Mills: Storm/Sanitary sewer repairs and rehabilitation; manhole replacement and UV-CIPP lining.	C6-6070-08-00	Final	Approved	1	120,000	\$ 411,841.66	Central Paving	Complete
6	Sanitary Sewer Mainline Rehabilitation - Phase 2	Villages of New Hartford and Clayville; Towns of New Hartford and Paris; City of Utica	C6-6070-08-00	Final	Approved	15	1,130,000	\$ 2,086,525.00	Green Mountain Pipeline Services	Complete
7	Sanitary Sewer Mainline Rehabilitation - Phase 3	Towns of New Hartford and Whitestown: Glenhaven area (HHI-1 and WHN-31), the area west of the Whitesboro Parkway School and south of Clinton Street area (WHN-33), and Kellogg Road area (NHD-18)	C6-6070-08-00	Final	Approved	13	630,000	\$ 2,060,644.00	Green Mountain Pipeline Services	Complete
8	Sanitary Sewer Mainline Rehabilitation - Phase 4	<u>Town of New Hartford:</u> Paris Road area (NHD-23)	C6-6070-08-00	Final	Approved	14	249,000	\$ 1,143,410.78	National Water Main Cleaning Co.	Complete
10	Sanitary Sewer Mainline Rehabilitation - Phase 5	Town of Whitestown and Village of Whitesboro: Area west of Henderson St., north of Mud Creek, south of Clinton St. and east of Clinton Rd; and areas of V. of Whitesboro that have not been previously rehabbed.	C6-6070-08-10	Final	Approved	17	1,120,000	\$ 3,429,370.00	Green Mountain Pipeline Services	Complete

Summary of Contracts 4Q 2022

Sewer Rehabilitation Contracts

Contract No.*	Title of Contract	Project Location/Description	CWSRF Project No.	Status of Design	Status of DEC/EFC/COUNTY Review	Miles of Rehabilitation ⁽²⁾	Estimated I/I Reduction (gal/day)	Current Contract Amount (1)	Contractor	Contract Status
11	Sanitary Sewer Mainline Rehabilitation - Phase 6	Town of New Hartford/Hamlet of Washington Mills: Chapman Rd, Higby Rd., and Mohawk St. as well as side streets in Town of New Hartford (NHD-20).	C6-6070-08-10	Final	Approved	7	260,640	\$ 632,029.26	National Water Main Cleaning Co.	Complete
12 ⁽³⁾	Sewer Rehabilitation Project	Village of Yorkville: Areas of the Village not previously rehabbed (YKV-1).	C6-6071-02-00	Final	Approved	11	824,832	\$ 3,420,966.19	National Water Main Cleaning Co.	Base Project Complete
13	Sanitary Sewer Mainline Rehabilitation - Phase 8	<u>Town of New Hartford:</u> <u>R</u> esidential subdivisions along Routes 12B and Merritt Place, situated south of Route 5B and Seneca Turnpike, and north of Sherrill Brook Park (NHD-6).	C6-6070-08-10	Final	Approved	5	280,000	\$ 802,838.50	National Water Main Cleaning Co.	Complete
14	Sanitary Sewer Mainline Rehabilitation - Phase 9	Town of New Hartford: Commercial district along Seneca Turnpike surrounding Sangertown Square Shopping Mall, south to a residential area situated between Seneca Turnpike and Clinton Rd., and a small residential area south of Clinton Rd. along Merritt Place (NHD-9).	C6-6070-08-10	Final	Approved	7	360,000	\$ 995,407.25	National Water Main Cleaning Co.	Complete
16	Sanitary Sewer Mainline Rehabilitation - Phase 10	Town of Whitestown: Residential area along Westmoreland Rd. and West St., south of the NYS Thruway, and north of Clinton Rd. (WHN-34, WHN-35, WHN-12 & WHN-36).	C6-6070-08-10	Final	Approved	3	270,000	\$ 386,042.00	National Water Main Cleaning Co.	Complete
17	Sewer Rehabilitation Project - Phase 11	Village of Yorkville The planned sewer rehabilitation area is generally along Whitesboro Street, Edwards Street, Meyers Avenue, Campbell Avenue, and Dudley Avenue. Both sanitary and storm sewers will be lined. House laterals may be lined as needed.	C6-6070-08-10	Preliminary	Approved by County Submit to DEC/EFC early 2023	<1	To be determined from the assessment	\$ 600,000.00	TBD	Bid documents are nearly complete. Tentative Bid Date - early 2023

^{* -} Contract 9 - Flow Monitoring Contract

^{(1) -} Values are subject to change upon submission of final contractor close-out documentation. Some entries are contract bid amounts and will be updated when project closes out.

⁽²⁾⁻ In order to estimate the manhole repairs in equivalent miles, the following calculation was used:

In the April 2012, Engineering Report, Sauquoit Creek Pumping Station Basin – Phase I-Mainline Pipe Rehabilitation – Contract No. 3, the length of line to be rehabilitated was 13-miles, and the corresponding flow to be removed is 1,503,360 gal/day, which calculates to 116,000 gpd/mile. Using the same 116,000 gpd/mile figure for Contract No. 2, an estimated 5,411,910 gal/day divided by 116,000 gpd/mile, is equivalent to 47-miles of rehabilitated sewers.

^{(3) -} Formerly Contract 12 - Sanitary Sewer Mainline Rehabilitation - Phase 7. Financed by the Village of Yorkville.