# 1798 *LEWYORK*

### ONEIDA COUNTY DEPARTMENT OF WATER QUALITY & WATER POLLUTION CONTROL

Anthony J. Picente, Jr. County Executive

51 Leland Ave, PO Box 442, Utica, NY 13503-0442

(315) 798-5656

wpc@ocgov.net

FAX 724-9812

Karl E. Schrantz, P.E. Commissioner

July 28, 2022

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, 4<sup>th</sup> Floor Albany, NY 12233

Re: Oneida County Sewer District Quarterly Progress Report – 2<sup>nd</sup> 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 2<sup>nd</sup> Quarter – 2022 as required per Section XIII – Reporting Requirements of the Consent Order. This document summarizes the status and progress of work completed between April 1, 2022 and June 30, 2022 in support of Consent Order compliance requirements.

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

Kal E. Scho

Karl E. Schrantz, P.E. Commissioner

Enclosure: Quarterly Progress Report -2nd Quarter 2022

ecc: Anthony J. Picente, Jr. – Oneida County Executive Peter M. Rayhill, Esq. – Oneida County Attorney Randall Young – NYSDEC Matthew Duffany, P.E. – NYSDEC Daniel Hayes - NYSDEC Elizabeth Ricci, P.E. – NYSEFC Karen Rusin – NYSEFC Dorian Di Cocco, P.E. - NYSEFC Howard LeFever, P.E. – GHD Consulting Services Inc. John Story, P.E. – GHD Consulting Services Inc. Colin Lautz, P.E. – Ramboll FedEx

# SANITARY SEWER COLLECTION SYSTEM QUARTERLY PROGRESS REPORT 2<sup>ND</sup> QUARTER – 2022 ONEIDA COUNTY SEWER DISTRICT

NYSDEC Consent Order R620060823-67



Oneida County Department of Water Quality & Water Pollution Control Karl E. Schrantz, P.E., Commissioner 51 Leland Avenue Utica, NY 13502

July 28, 2022







Utica, NY

Sanitary Sewer Collection System Quarterly Progress Report 2<sup>nd</sup> 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

July 28, 2022



## TABLE OF CONTENTS

1.0 Introduction	3
1.1 Historical Background	3
1.2 Purpose	3
2.0 Engineering Investigations and Evaluations	4
2.1 Collection System	4
2.1.1 Manhole Inspections	4
2.1.2 Sanitary Sewer Televising	4
2.1.3 Dye Testing	4
2.1.4 Contract 17 Sewer Rehabilitation	4
2.1.5 Additional Flow Metering to Assist with Sewer Rehabilitation	4
2.1.6 Villages of Yorkville and New Hartford Engineering Planning Grant Sewer Investigation	5
2.1.7 Additional Sewer Investigations Outside the SCPS Basin	5
2.1.8 Collection System Rehabilitation Funding Opportunities	5
2.2 Treatment Facilities	5
2.2.1 October 31, 2019 Flood Event	6
3.0 Management Programs	7
3.1 Computerized Maintenance Management System	7
3.1.1 Asset Management	7
3.2 Flow Monitoring Program and Hydraulic Model	8
3.3 Private Property Inflow and Infiltration Reduction Program	9
3.4 Capacity, Management, Operations and Maintenance Program	9
4.0 Schedule/Milestone Dates	11
4.1 Approved Schedule	11
4.2 Milestones	12
4.3 TEMPORARY (CONSTRUCTION PHASE) SPDES PERMIT LIMITS	12
5.0 Sewer Rehabilitation	13
6.0 Assessment of Rehabilitation Effectiveness	14
7.0 Completed Capital Projects/Facility Upgrades	15
8.0 I/I Offset Projects/New Flows	16
9.0 Key Personnel Changes	17
9.1 County Staff	17
9.2 Satellite Community Staff	
9.3 Consultant Team Staff	17
9.4 COVID-19 Impact	17
10.0 Administrative Items	
10.1 Work Authorizations	18
10.2 Project Financing	18



Tables:

Table 2.1 Summary of Contracts 2Q 2022 (WPCP and SCPS/Force Main)

Table 2.2 FEMA Damage Project Summary

Table 5.1 Summary of Contracts 2Q 2022 (Sewer Rehabilitation)

Table 10.1 Project Phasing



#### **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 April 1, 2022 and June 30, 2022 (2<sup>nd</sup> 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.

#### 2.0 ENGINEERING INVESTIGATIONS AND EVALUATIONS

During the 2<sup>nd</sup> 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 2<sup>nd</sup> 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 completed during the 2<sup>nd</sup> Quarter of 2022.

#### 2.1.3 Dye Testing

The dye testing program was completed in 2012. There was no additional dye testing performed during the  $2^{nd}$  Quarter of 2022.

#### 2.1.4 Contract 17 Sewer Rehabilitation

The televising, along with limited smoke testing, conducted in the 2<sup>nd</sup> Quarter of 2021 in the Town of New Hartford, Village of New Hartford and Village of Yorkville continued into the 3<sup>rd</sup> Quarter of 2021. Additionally, during the 3<sup>rd</sup> and 4<sup>th</sup> 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<sup>th</sup> 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 late 2022/early-2023.

#### 2.1.5 Additional Flow Metering to Assist with Sewer Rehabilitation

To further assist in refining sewer rehabilitation project scopes, the County purchased five level sensor devices (ADS ECHO<sup>™</sup>) 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 2022 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 have been collecting depth of flow data for the past three months, and receipt of the monitoring data is anticipated in the early 3<sup>rd</sup> quarter 2022, which will then be 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. The County's Engineering team will prepare a report in the summer of 2022 summarizing 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 with the storm sewers tributary to the Starch Factory Creek Interceptor Sewer. The County provided the City of its findings in the 4<sup>th</sup> Quarter of 2021 and asked the City to further investigate these suspect cross-connections and develop a plan for mitigation. During the 2<sup>nd</sup> Quarter 2022, the City installed three temporary flow meters in the Starch Factory Creek tributary basin to assist in this investigation. The collected data will be reviewed, and potential mitigation projects will be identified in the 3<sup>rd</sup> Quarter of 2022.

#### 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.

#### **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 to be included on the IUP for potential 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.



#### 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.

Project Number	FEMA Damage Number	Title	Cost	Status
133024	366892	Sewer exposure repair (New Hartford Park, Washington Mills)	\$96,054	Work Completed 11/01/2021
	366893	Sewer exposure repair (Oneida St., Washington Mills - behind Salvatore's bakery)	\$51,000	Pending FEMA review/approval
	366894	Sewer exposure (Victoria Drive, Utica)	\$149,100	Pending FEMA review/approval
	366895	Manhole Exposure (New Hartford Street, New York Mills)	\$37,680	Pending FEMA review/approval
135064	374275	Sewer Line Encasement Undermining (Mud Creek)	\$53,287	Pending FEMA 406 HMP Completion
133005	n/a	Sewer line repair with stream bed restoration and bank armament	\$392,312	Work Completed 12/01/2021
133021	n/a	Pump Station/Access Road Repairs	\$199,720	Work Completed 06/20/2021
158181	n/a	Pump Station - Emergency Work	\$140,134	Work Completed 06/20/2021
145808	n/a	Oneida County DWQ Management Costs		Pending Formulation Completion
135067	n/a	Nail Creek Force Main	\$23,000	Work completed May 2022
135066	374278	Creek Stabilization and Associated Damages (near Pietryka Park)	\$130,225	Pending Final FEMA Review/approval
135061	n/a	App-Cert Pump Station - Damaged Electrical Equipment	\$29,400	Work Completed 12/30/2022

#### Table 2.2 FEMA Damage Project Summary



#### **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 4<sup>th</sup> 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.

During the 2<sup>nd</sup> Quarter of 2022, Barton & Loguidice and GHD performed the following:

• A full review of the equipment list, functional hierarchy structure, and request updates. It was identified that some of the Equipment Systems needed to be separated out so that preventive maintenance tasks would trigger for the correct group of assets. Some of the Equipment Systems contained too many assets.



Next quarter, B&L will perform a complete data refresh for Equipment, Equipment Systems (hierarchy), and Requests (PM Tasks) with a calendar interval. B&L will coordinate a meeting between Sprocket, B&L, and Oneida County IT staff that will be involved in the integration to plan and execute the integration. The SCADA integration is necessary to complete the setup of run-time-based Requests in Sprocket.

The County, working with its consultant team, prepared a Draft Asset Management Plan for compliance with the Consent Order and submitted the draft to the NYSDEC on Dec 22, 2021. It should be noted that the deadline extension of the Consent Order to December 31, 2022 includes delivery of the final Asset Management Plan. The Draft 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.

GHD received comments from the County on the Draft Asset Management Plan and has met with County Staff to clarify and address these comments. Also, GHD has completed the addition of linear assets (interceptors) to the Asset Management Plan, including the development of a linear asset model to calculate asset condition based on age, consequence of failure, and overall risk for these assets. The revised Asset Management Plan now includes short-term needs and a longer-term investment profile for the interceptors based on risk. The final draft of the Asset Management Plan is currently under internal review and is expected to be delivered by the end of July 2022.

#### 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. In 2022 the County and their consultants plan to review and discuss the current flow meter locations and make considerations to redeploying some flow meters to more strategic locations.

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 1<sup>st</sup> Quarter report provides a summary of the previous years' flow monitoring data. The 1<sup>st</sup> Quarter 2022 report presented the data review and summary for 2021.

Overall, the results of the evaluations presented in the 1<sup>st</sup> 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. Although the overflow volumes at the Sauquoit Creek Pump Station have been significantly reduced and this trend continues, 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 1<sup>st</sup> Quarter 2022 indicate 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.

#### 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.

An amendment to the Work Order for continuation of the PPII program was approved by the County in the 1<sup>st</sup> Quarter of 2022. 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 meets monthly to discuss recent efforts and updates. These efforts, specifically related to direct coordination/meetings with the Steering Committee, were on hold in 2020 due to the COVID-19 crisis, but have since resumed with virtual meetings and electronic correspondence.

#### 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 February 2022 through June 2022, 45 inspections of Food Service Establishments (FSEs) were performed. To date, a total of 270 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 plans to disseminate educational materials to the local municipalities for their distribution to the FSEs in their municipality.



#### 4.0 SCHEDULE/MILESTONE DATES

#### 4.1 APPROVED SCHEDULE

The following table represents the approved schedule as defined by the Consent Order (note that there were no changes to this schedule during the 2<sup>nd</sup> Quarter of 2022). 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.

Description	Consent Order, Schedule "A" Date	Status
	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 <sup>th</sup> Quarter 2012
CMOM Implementation	May 31, 2013	Began implementation in 4 <sup>th</sup> Quarter 2012
Asset Management Plan	December 31, 2022*	Draft submitted Dec. 22, 2021
Remedial Measures	· · ·	
Semi-Permanent Alternative-Construction	<del>December 31, 2016</del>	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*	In progress
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 2<sup>nd</sup> Quarter of 2022, the following milestone dates were met:

• Continuing to make progress toward compliance milestones.

#### 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 sewer rehabilitation in the Village of Yorkville, as discussed in Section 2.1.4. Construction is anticipated to begin in 2022-23.



#### 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 2<sup>nd</sup> 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	1,812,764	0	215 Jacks Way Applewood (328.000-2-1) NH Permit #6091	320	1,809,476
			213 Jacks Way Applewood (328.000-2-1) NH Permit #6092	240	
			220 Jacks Way Applewood (328.000-2-1) NH Permit #6093	240	
		0	416 Phil Circle Applewood (328.000-2-1) NH Permit #6094	320	
			421 Phil Circle Applewood (328.000-2-1) NH Permit #6095	320	
			315 Gracie Place Applewood (328.000-2-1) NH Permit #6096	320	
			123 Edge Drive Cherrywood (328.000-2-26) NH Permit #6097	240	
Town of Paris	253,064	0		0	253,064
Town of Whitestown	1,053,254	0	113 Trails Crossing (316.008-2- 54)	320	1,051,754
			212 Benson Court (316.08-1- 38)	380	
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	5,033,617	0		2,700	5,030,917



#### 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 2<sup>nd</sup> Quarter of 2022, there were no changes of key personnel.

#### 9.2 SATELLITE COMMUNITY STAFF

During the 2<sup>nd</sup> Quarter of 2022, there were no changes of key personnel to report.

#### 9.3 CONSULTANT TEAM STAFF

During the 2<sup>nd</sup> Quarter of 2022, there was one notable change in key consultant team personnel. Mr. William Powers, PE, Project Officer with Brown and Caldwell retired in June 2022; his replacement is Mr. Lauren Fahnestock, PE.

#### 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 a number of 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 2<sup>nd</sup> 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.

#### Table 10.1: Project Phasing<sup>(1)</sup>

CWSRF PROJECT NO.	PHASE	CURRENT DESCRIPTION	CWSRF FINANCED AMOUNT
		Sanitary Sewer Collection System – Sewer	\$10,078,434
C6-6070-08-00	1	Rehabilitation/Replacement	Long Term Debt 2015
			\$4,000,000 Principal Forgiveness
C6-6070-08-01	2B & 3	Sanitary Sewer Collection System – Sewer	\$15,000,000
		Rehabilitation/Replacement	2020 Multi-Year List
C6-6070-08-02		Sauquoit Creek Pumping Station and Force Main – Design	\$2,524,017
		and Permitting	Long Term Debt 2019
C6-6070-08-03	4	Inflow/Infiltration Mitigation in Support of Private	\$7,664,000
0-0070-00-03	Ŧ	Property I/I Reduction	Multi-Year List
			\$97,656,145.00
C6-6070-08-04 <sup>(2)</sup>	5B & 6C	Sauquoit Creek Pumping Station and Force Main Upgrades & Water Pollution Control Plant Upgrades	Long Term Debt 2019
C0-0070-06-04 <sup>(2)</sup>		(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>
0-0070-00-03	UA	00.	\$5,000,000 Interest Free loan
			\$20,000,000 WIIA Grant
C6-6070-08-06	6B	Water Pollution Control Plant Upgrades – Design Phase Services, Construction of Select Solids Handling Upgrades	\$34,707,000
0-0070-08-08	00	Phases)	Long Term Debt 2017
66 6070 00 10	10.24	Sanitary Sewer Collection System (I/I) Correction	\$11,586,562
C6-6070-08-10	1 & 2A	(Balance from C6-6070-08-00)	Long Term Debt 2017
		Sanitary Sewer Collection System – Sewer Rehabilitation/Replacement	\$13,923,000
C6-6070-08-11	2B & 3	(Balance from C6-6070-08-01)	Multi-Year List



CWSRF PROJECT NO.	PHASE	CURRENT DESCRIPTION	CWSRF FINANCED AMOUNT
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.	\$80,000,000 (2019 Annual List) \$40,000,000 (Additional Bond Authorization Request – Amendment 3 – March 2020)
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												
	Oneida County Sewer District Summary of Contracts 2Q 2022												
	Water Pollution Control Plant and Sauquoit Creek Pumping Station/Force Main												
Contract No.	ontract Status of Status of NYSDEC Status of Other Estimated Construction												
1	1       Incinerator No. 2 Demolition       Demolition of Incinerator No. 2       Final       Approved       n/a       Bidding occurred during 1Q 2016; however, due to the outcome of bids, the demolition was added to Contract 2 by addendum on May 25, 2016.												
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. Potential hot water system (for WAP) is being considered, design was completed for HW system. Owner is 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 minus minor punch list items.	Anticipated completion of HVAC, Electrical, and Plumbing Contracts June 2022. With exception of Huber screen equipment, anticipated completion of General Contract September 2022 (pending inspection by NYS Code Enforcement officials).				

	Table 2.1 Oneida County Sewer District											
	Summary of Contracts 2Q 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 <sup>(1)</sup> 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.	December 2023			
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	<ul> <li>Influent Building: 4 new influent pumps and 3 mechanically cleaned bar screens are substantially complete.</li> <li><u>Combined Influent Building:</u> Refurbishment of building and equipment (4 pumps, 3 screens) is complete.</li> <li><u>Grit Removal:</u> 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.</li> <li><u>Administration Building:</u> Rehabilitation of the building is complete, and the building has been officially re-occupied.</li> <li><u>Electrical:</u> New receiving structure/tower for 46kV equipment is installed and energized by National Grid. New pre-fabricated Switchgear Building and Generator Buildings are installed and functional testing has been completed. Grounding grid complete. New generator fuel system and controls are installed. Generator system is fully operational.</li> <li>All 4 prime contractors (General, HVAC, Electrical, and Plumbing) are working on addressing final punch list items.</li> </ul>	September 2022			

					Oneida Coun	<sup>ble 2.1</sup> ty Sewer Distric			
		W/ata	r Polluti		-	ontracts 2Q		ion/Force Main	
Contract No.	Title of Contract	Components of System Addressed		Status of NYSDEC Review		Estimated	Estimated <sup>(1)</sup> 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	<ul> <li><u>HRD:</u> HRD tank work is substantially complete and operational and all 4 prime contractors are addressing punch list items.</li> <li><u>Primary Settling Tanks No. 1 and 2:</u> PSTs No. 1 and 2 are substantially complete and operational and all 4 prime contractors are addressing punch list items.</li> <li><u>Primary Settling Tanks No. 3 and 4:</u> PSTs No. 3 and 4 are substantially complete and operational and all 4 prime contractors are addressing punch list items. Troubleshooting primary sludge pumps operation is ongoing.</li> <li><u>Disinfection Building:</u> Disinfection Building is substantially complete and operational and all 4 prime contractors are addressing punch list items.</li> <li><u>Administration and Operations Building:</u> Admin and Ops Building is substantially complete and operational and all 4 prime contractors are addressing punch list items.</li> <li><u>Administration and Operations Building:</u> Admin and Ops Building is substantially complete and operational and all 4 prime contractors are addressing punch list items.</li> <li><u>Administration and Operations Building:</u> Admin and Ops Building is substantially complete and operational and all 4 prime contractors are addressing punch list items.</li> <li><u>Administration Tank Distribution Structure:</u> Aeration Tank Distribution Structure is substantially complete and operational.</li> <li><u>HRD Outfall Structure and Outfalls:</u> HRD Outfall Structure and Outfalls is substantially complete and operational.</li> </ul>	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:       Demolition of existing blowers and existing RAS pump Nos. 5 -7 are 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 December 2022. Installation of associated electrical duct bank and conduit is ongoing.         Aeration Tanks:       At Aeration Tank No. 3, installation of diffusers, aeration piping, concrete repairs and railing installation are complete and the aeration system has been started up. At Aeration Tank No. 1, demolition of existing equipment is ongoing.         Final Settling Tanks:       Installation of equipment, railings and electrical conduit is ongoing.         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 ongoing.         Asset Management Structure:       Installation of pile foundations is complete.       Subgrade	Estimated June 2023

(1) - Estimated construction start = Notice to Proceed

	Table 5.1												
	Oneida County Sewer District Summary of Contracts 2Q 2022												
	Sewer Rehabilitation Contracts												
Contract No.*	ontract CWSRF Project Status of DEC/EFC/COUNTY Miles of Reduction Current Contract												
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	<u>Villages of New York Mills, Oriskany, New Hartford,</u> Whitesboro, and Yorkville; Towns of New Hartford and <u>Whitestown</u>	C6-6070-08-00	Final	Approved	13	1,503,360	\$ 1,916,428.54	Insituform	Complete			
4	Sewer Separation - Clinton/Henderson Street, NY Mills	<u>NY Mills</u> : 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	<u>Villages of Whitesboro, New Hartford, Yorkville, New York</u> <u>Mills</u> : 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	<u>Villages of New Hartford and Clayville; Towns of New</u> <u>Hartford and Paris; City of Utica</u>	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	<u>Towns of New Hartford and Whitestown:</u> <u>Glenhaven area (HHI-1 and WHN-31), the area west of the</u> <u>Whitesboro Parkway School and south of Clinton Street</u> <u>area (WHN-33), and Kellogg Road area (NHD-18)</u>	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	<u>Town of Whitestown and Village of Whitesboro:</u> <u>A</u> rea 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			

	Table 5.1											
	Oneida County Sewer District Summary of Contracts 2Q 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 <sup>(2)</sup>	Estimated I/I Reduction (gal/day)	Current Contract Amount <sup>(1)</sup>	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 <sup>(3)</sup>	Sewer Rehabilitation Project	<u>Village of Yorkville:</u> 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	<u>Town of New Hartford:</u> 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	<u>Town of Whitestown:</u> 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 Flow data, mapping, and SSES (smoke testing/CCTV) results were assessed to determine location(s) most appropriate for continued sewer system rehabilitation. Both sanitary and storm sewers will be lined. House laterals will be lined. Bid documents are nearly complete and anticipate project to be bid in 3rd Quarter 2022.	C6-6070-08-10	Preliminary	Tentative Submission Date - 2022	<1	To be determined from the assessment	\$ 600,000.00	TBD	Tentative Bid Date - 3rd Quarter 2022		

\* - 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.

**BOLD** - Value represents the Engineers estimate