

ONEIDA COUNTY DEPARTMENT OF WATER QUALITY & WATER POLLUTION CONTROL

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County Executive

Steven P. Devan P.F.

Anthony J. Picente, Jr.

Steven P. Devan, P.E. Commissioner

January 29, 2020

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

FedEx

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

Annual Work Plan - 2020

Consent Order No. R6-20060823-67

Dear Mr. Townsend and Ms. Lamb-Lafay:

On behalf of Oneida County, I am providing for your review Oneida County's Annual Work Plan -2020. This work plan outlines the proposed efforts that will be undertaken by the County during 2020 in support of the Consent Order compliance requirements. Additionally, this work plan summarizes the progress made by the County during 2019.

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

Steven P. Devan, P.E.

Commissioner

Enclosure: Annual Work Plan - 2020

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

Peter M. Rayhill, Esq. – Oneida County Attorney Karl E. Schrantz, P.E. – OBG, Part of Ramboll

 $Howard\ LeFever,\ P.E.-GHD\ Consulting\ Services,\ Inc.$

John Story, P.E. – GHD Consulting Services, Inc.

Randall Young, – NYSDEC David Rarick, P.E. – NYSDEC Richard Coriale, P.E. – NYSDEC Michael O'Neil, P.E. – NYSEFC

ANNUAL WORK PLAN 2020

ONEIDA COUNTY SEWER DISTRICT

NYSDEC CONSENT ORDER R620060823-67

Prepared for

Oneida County Department of Water Quality & Water Pollution Control

Steven P. Devan, P.E., Commissioner
51 Leland Avenue
Utica, NY 13502

OBG Project No. 21031\50620

January 29, 2020









ANNUAL WORK PLAN 2020

ONEIDA COUNTY SEWER DISTRICT

NYSDEC CONSENT ORDER R620060823-67

Prepared for

Oneida County Department of Water Quality & Water Pollution Control

OBG Project No. 21031\50620

January 29, 2020

Prepared by

OBG, Part of Ramboll

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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 and the Barnes Avenue pumping stations, and the Water Pollution Control Plant (WPCP). The District services 15 municipalities, 9 of which are within the Sauquoit Creek Pumping Station (SCPS) Basin. These municipalities own and operate their own collection systems.

1.2 CONSENT ORDER

The New York State Department of Environmental Conservation (NYSDEC) and Oneida County (County) entered into a Consent Order No. R620060823-67 due to sanitary sewer overflows (SSO) at the Sauquoit Creek Pumping Station. In addition to the required mitigation of those SSOs, the Consent Order, with an effective date of December 12, 2011, requires the submission of an Annual Work Plan (Work Plan). The intent of this Work Plan is to outline the proposed efforts that will be undertaken by the County during 2020 in support of the Consent Order compliance requirements. Additionally, this Work Plan summarizes the progress made by the County during 2019.

2.0 SUMMARY OF 2019 PROGRESS

The County submitted an Annual Work Plan for 2019 (dated January 30, 2019) to the NYSDEC. That document outlined the County's proposed approach toward achieving interim Consent Order milestones during 2019. The following items summarize the major efforts initiated and/or completed through December 31, 2019:

2.1 INVESTIGATIONS

2.1.1 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.

As a result of that initial televising contract, approximately 171-miles of the 216-miles of sewers were 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's Capacity, Management, Operation, and Maintenance (CMOM) program. At the conclusion of the initial CCTV inspections, it was anticipated that another 10-15% of the sewers would be inspected as a component of future sewer rehabilitation contracts. CCTV inspections were incorporated into all sewer rehabilitation contracts through 2019.

In 2019, no additional televising was performed. 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.

2.2 MANAGEMENT PROGRAMS

2.2.1 Steering Committee

The project Steering Committee consists of representatives from each District municipality. Over the past 12 years, this group has provided valuable system insight, data and project feedback to advance the Oneida County Sanitary Sewer Overflow Mitigation Project.

The Steering Committee serves an essential role in decisions affecting systems operations, management and costs. In addition, working groups have helped guide two critical community-based initiatives: Capacity, Management, Operation and Maintenance (CMOM) and Private Property Inflow and Infiltration (PPII).

In 2019, the Steering Committee and municipalities were provided the tools necessary to:

- Provide strategic oversight of the overall sewer rehabilitation program
- Deliver feedback on Consent Order requirements including strategies and programs to address private property inflow/infiltration issues
- Facilitate communication and information sharing among stakeholders, including their municipality, community members, the Committee and District officials

<u>Community Outreach and Education</u> – Oneida County is now in the final period leading up to the NYSDEC Consent Order deadline of December 31, 2021 to remove SSOs from occurring at the Sauquoit Creek Pump Station. In 2019, community outreach activities were focused on Steering Committee and Working Group facilitation, public education, and intercommunity

collaboration, all in support of the compliance with more stringent state and federal wastewater mandates. Progress in 2019 included:

- Managed project update and input meetings with Steering Committee and with member municipalities.
- Provided project progress report presentations to County and member municipality boards/councils on request.
- Produced bi-monthly Operation Ripple Effect (ORE) offering updates on technical
 aspects of the project as well as educational information. The ORE bulletin is distributed
 to all county, town and village elected representatives and posted on the OCSD ORE web
 site.
- Developed a Main Street Storm Sewer project outreach plan.
- Provided community relations consultation in relation to potential OCSD ordinance updates.
- Provided pilot program communications support for projects in the Towns of New Hartford and Whitesboro.
- Conducted ongoing media relations to keep local media and general public aware of SSO issues and remediation efforts.
- Produced educational flyers and displays for community events including Earth Day in April.
- Developed educational content for OCSD ORE web site.
- Conducted a survey of all 15 member municipal offices to determine needs for project educational brochures, displays and other materials.
- Developed Mohawk River Champions School Education Kit and engaged support of the Oneida-Herkimer BOCES to make available to teachers across the region.
- Produced and distribution Rain Barrel, Rain Garden and FOG brochures, videos and social media content.
- Produced postcard series to educate residents on their role in PPII mitigation.

2.2.2 Capacity, Management, Operations and Maintenance (CMOM) Program

The document titled "Preliminary Planning Document – Proposed CMOM Framework – Sauquoit Creek Pumping Station Basin Communities" was submitted to NYSDEC on June 29, 2012 as required by Schedule A – Section B.3 of the Consent Order. The following is a summary of notable CMOM related items undertaken in 2019:

- Fats, Oils, and Grease (FOG) OCSD and Oneida County Department of Health (OCDOH) are collaborating on the implementation of the Fats, Oils, and Grease (FOG) program. Inspections of Food Service Establishments (FSEs) began during the 3rd quarter of 2018 and continued in 2019. Inspectors 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 best management practices, tracking grease trap maintenance, and keeping grease hauling records. Information on each FSE will be entered in the County's Computerized Maintenance Management System (CMMS) so that it can be associated with the growing collection system database.
- Sauquoit Creek Interceptor Sewer Stabilization (Victoria Drive) Final restoration and punch list work was completed in July 2019. The construction contract has been finalized and closed out.

2.2.3 Private Property I/I Reduction Program

In accordance with the Consent Order, Schedule A, PPII program implementation began in May 2013. The County and Consultant Team accomplished the following during 2019:

• The full Steering Committee convened on June 6, 2019. The consultant team provided status of progress on the various construction projects at the WPCP, SCPS, and sanitary sewer rehabilitation, as well as 2019 community outreach efforts. They also delivered a presentation on private property I/I programs in other communities and discussed options for implementing such a program in OCSD.

- A pilot private property inspection program was conducted by TRM Environmental Consultants in summer 2019. The pilot areas was the Clinton View Drive subdivision in the Town of New Hartford. A total of 35 properties were visually inspected from the exterior of the home only (no interior inspection). This included interviews with homeowners. Note that nearly all homeowners were reluctant to allow entry for an inspection of the plumbing connections in their homes. The residential interviews and exterior inspections documented that no roof leaders were connected to the sanitary sewer, 14 sump pump discharge connections were unknown and of the four verified connections to sanitary, three were disconnected and one was unknown connection.
- A briefing meeting for County Executive Anthony Picente, Jr. was held on September 19, 2019. The consultant team provided updates on the flow metering program and effectiveness of the sewer rehabilitation work, private property program implementation challenges, the results of the Town of New pilot study, plans for a pilot inspection program in the Village of Whitesboro, and recent public outreach efforts.
- A briefing meeting was held on December 16, 2019 with County Executive Anthony Picente, Jr., his chief of staff, and the County Attorney in attendance. The consultant team presented a summary of the sewer rehabilitation program expenditures by municipality and further discussed options for implementing a community-based private property I/I (PPII) program.

2.2.4 Flow Monitoring

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 that is supporting 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. Contract was awarded on September 10, 2014 to ADS Environmental Services, LLC (ADS). ADS completed the installation of 63 flow meters and five rain gauges in 2015. Two of the 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. There are 44 meters located in the Sauquoit Creek Pump Station (SCPS) drainage basin, and 14 meters located outside the SCPS basin. Additionally, three new flow meters were installed in the Starch Factory interceptor basin in late December 2019. The flow meters and rain gauges have been consistently collecting flow data since their installation.

In 2017, to further support the Consent Order flow data documentation and assessment requirements, the County's engineering consultants completed the calibration of an update to the original 2010 hydraulic model utilizing 2015-2016 flow meter and rain gauge data. Typical year simulations were run. The results of the simulations were statistically compared and used to evaluate the effectiveness of the I/I removal projects upstream of the SCPS completed through the end of 2016.

A Technical Memorandum (TM), summarizing the evaluation and findings of the hydraulic model calibrations to date, was prepared and submitted in the 2018 first quarter report. Flow monitoring data continued to be collected in 2019. A status update was provided in the 2019 first quarter report, which presented an update on the flow monitoring data and rainfall-derived I/I (RDII) analysis for summer 2018 and winter 2019 events. Additional flow monitoring and RDII analyses were conducted during the remainder of 2019 to evaluate sewer rehabilitation effectiveness and analyze select areas as requested.

2.3 SEWER SYSTEM REHABILITATION CONTRACTS

Sewer rehabilitation work financed under CWSRF Project No. C6-6070-08-00, C6-6070-08-10, and C6-6071-02-00 continued to progress. The rehabilitation contracts are being undertaken in order 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 includes: a mix of CIPP lining; pipe joint and lateral grouting; open cut repairs; spot repairs; manhole repairs/replacement; and supplemental CCTV inspections. Projects are being tracked by contract number. The status and details of the rehabilitation contracts to date are presented in Table 2.1.

2.4 WATER POLLUTION CONTROL PLANT AND SAUQUOIT CREEK PUMPING STATION/FORCE MAIN UPGRADES

The WPCP, SCPS and new Force Main are in various stages of design, review, bidding, and construction. Table 2.2 summarizes how the work has been segregated and the status of each of the various 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 2-14).

2.5 PROJECT FINANCING

2.5.1 STP UP [Phase 6a] (CWSRF No. C6-6070-08-05 and C6-6070-08-15) – (Originally \$130 Million, Increased to \$160 Million)

Bond authorization for increase in financing amount to \$160 million was approved by the Oneida County Board of Legislators on November 22, 2017. An application for financing was submitted to NYSEFC on July 9, 2018. Closing on partial financing of \$80 million occurred in the 3rd quarter of 2019.

Oneida County Sewer District

SUMMARY OF CONTRACTS

Sewer Rehabilitation Contracts

				CWCI IICI	Chatter of		Fatimated 1/1			
Contract			CWSRF Project	Status of	Status of DEC/EFC/COUNTY	Miles of	Estimated I/I Reduction	Current Contract		
No.*	Title of Contract	Project Location/Description	No.	Design	Review	Rehabilitation ⁽²⁾	(gal/day)	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	Project Complete; Closed Out
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	Project Complete; Closed Out
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	Project Complete; Closed Out
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	Project Complete; Closed Out
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	Project Complete; Closed out
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	Project Complete; Closed out
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.	Project Complete: Closed Out
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	Project Complete; Closed Out

Oneida County Sewer District SUMMARY OF CONTRACTS

Sewer Rehabilitation Contracts

Contract No.*	Title of Contract	Project Location/Description	CWSRF Project No.	Status of Design	Status of DEC/EFC/COUNTY Review		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 T. of New Hartford (NHD-20).	C6-6070-08-10	Final	Approved	7	260,640	\$ 632,029.26	National Water Main Cleaning Co.	Project Complete; Closed Out
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	\$ 3,552,280.00	National Water Main Cleaning Co.	Construction complete. Closeout documentation pending.
13	Sanitary Sewer Mainline Rehabilitation - Phase 8	Town of New Hartford: <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.	Project Complete; Closed Out
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.	Construction complete. Closeout documentation pending.
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.	Construction complete. Closeout documentation pending.

^{* -} Contract 9 - Flow Monitoring Contract

BOLD - Value represents the Engineers estimate

^{(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.

Oneida County Sewer District SUMMARY OF CONTRACTS

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 DEC 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 occurred	during 1Q 2016; how	ever, due to the outcome of bids, the demolition was added addendum on May 25, 2016.	to Contract 2 by
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. The Contractor, Owner, and Engineer are addressing some minor operational/startup issues.	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 has been installed and tested. Training has been provided to the Owner.	n/a
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	Approximately 18,500 ft of new force main installed (including 9,000 ft +/- on piles); SECA Underground completed caissson shaft, microtunnelling to advance in Q1 2020; CSX jack/bore redesign (due to encountered obstruction) completed, jack/bore installation to occur in Jan 2020, continuation of 36-inch pipe testing; duct bank relocation completed to allow 36-inch connection to Grit building (connection in Jan 2020); clean up after 10/31/2019 flood.	March 2021
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; fiber optic duct bank installed (SCADA/communication with WPCP fully functional); continued de-bugging of the Huber WAP system; paving completed; punch list items pending. Existing Pumping Station Building: Electrical, HVAC, and plumbing renovations complete minus punch list items. interior pipe, wall, and floor painting completed; Pump 2 rotating assembly replaced; continued de-bugging of the pump VFD system SCADA is fully functional.	November 2019 (final completion is behind schedule due to damage/delays from flooding events and construction related items)

Oneida County Sewer District SUMMARY OF CONTRACTS

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 DEC Review	Status of other Agency Reviews	Estimated	Estimated ⁽¹⁾ Construction Start	Construction Progress	Estimated Construction Complete
5.1	Barnes Avenue Pumping Station Upgrades	Relocation of pumping station to south side of CSX Railroad right-of-way; new, smaller, sustainable pumping station sized to accommodate actual flow rates	0%	n/a	n/a	September 2020	December 2020	Draft "Long Term Right of Entry" permit application has been prepared for site access via service road under NYS Route 8/12 bridge. Under review for Q1 submission. Late Q2 2020 design start anticipated.	December 2021
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	Pending National Grid approval, Stage A submitted in February 2016	March 2017	September 2017	Influent Building: Building is nearly complete. New pumps and 2 bar screens are set in place. Installation of new interior piping, HVAC systems, plumbing, and electrical is nearly complete. Pump and screen startup anticipated in January 2020. Repairs ongoing to mitigate flooding damage that occured on October 31, 2019. Combined Influent Building: Refurbishment of building and equipment is in progress. Two new bar screens have been set in place and startup has been completed. Installation of new interior piping, HVAC systems, plumbing, and electrical is ongoing. Additinoal work on gates and pumps is pending. Grit Removal: Grit buildings No. 2 and 3 are nearly complete. Grit pumps and vortex grit removal trays are set in place and some clean water testing has been conducted. Interior piping, HVAC, plumbing, and electrical work ongoing. Refurbishment of Grit Building No. 1 is nearly complete. Functional testing of grit washing equipment has been completed for 1 of 2 units. Administration Building: Significant rehabilitation of the building is complete, and the building has been officially reoccupied. Electrical: New receiving structure/tower for 46kV equipment installed and energized by the utility. New prefabricated Switchgear Building and Generator Buildings are installed and functional testing has been completed. Grounding grid complete. New generator fuel system and controls are installed.	May 2020

Oneida County Sewer District SUMMARY OF CONTRACTS

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

Contract			Status of	Status of DEC	Status of other	Estimated	Estimated ⁽¹⁾		Estimated Construction
No. 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	Design	Submitted December 9, 2016	n/a	Advertised November 28, 2017	May 2018	HRD: Excavation, pile driving, and concrete tank and backfill complete for HRD tank. Slide gate, flushing gates, and baffle wall installation complete. Majority of electrical conduit work and lighting complete. Primary Settling Tanks No. 1 and 2: Demolition of existing tanks complete. Excavation and pile driving for new tanks complete. Concrete slab, deck, stairwell, and wall work complete for equipment gallery area and tanks. Electrical conduit work for Electrical and Control Rooms ongoing. Process mechanical chain and flight work, fiberglass launders, primary sludge pumps, pirmary channel blowers installation complete for Tank 1 and ongoing for Tank 2. Slide gate installation complete. HVAC curbs complete and ductwork complete. Disinfection Building: Fire alarm replaced. Building roof replaced. Electrical conduit work ongoing. Yard piping from building to HRD tank complete. Administration and Operations Building: Demolition of one existing primary sludge degritting unit complete. Installation of new primary sludge and primay scum piping, grit classifer, and scum concentrator ongoing. Aeration Tank Distribution Structure: Relocation of yard piping complete. Concrete filled steel piles have been completed, Concrete base slab is installed, and several concrete wall installation is ongoing.	December 2021
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 (Pending Additional Scope)	Submitted February 2019	n/a	Estimated September 2020 (Pending additional program funding)	Estimated January 2021	n/a	March 2023

^{* -} Estimated construction start = Notice to Proceed

3.0 PLANNED WORK 2020

The items discussed in this section summarize the planned Consent Order compliance work for 2020.

3.1 ENGINEERING INVESTIGATIONS

3.1.1 Close Circuit Televising

Closed Circuit Televising (CCTV) planned for 2020 will be done in conjunction with sewer rehabilitation contracts. CCTV data will be reviewed by the Engineer and rehabilitation techniques will be prescribed for incorporation into the various construction contracts.

3.2 MANAGEMENT PROGRAMS

3.2.1 Steering Committee

The Steering Committee will continue to provide regular system insights, data, and project feedback to advance the Oneida County Sanitary Sewer Overflow Mitigation Project. In 2020, the Steering Committee and its working groups will:

- Continue to provide strategic oversight of the overall sewer rehabilitation program and fulfillment of Consent Order requirements, including meeting defined goals and deliverables in a cost-effective manner;
- Specifically, be tasked with the advancement of the PPII program in accordance with
 Oneida County Sewer Use Rules and Regulations, with a focus on developing a Districtwide program that accounts for the unique composition and infrastructure status of each
 community.

Community Outreach – This complicated but critical infrastructure project requires a significant investment of public monies. As such, transparency to ratepayers and the general community is of

the utmost importance. This includes communications and reporting to all key stakeholders, such as the Oneida County Board of Legislators, the County Executive, and leadership of the member towns and villages. The County and its consultants will continue to support this effort, including:

- Coordination and facilitation of Steering Committee meetings, Working Group meetings, and additional outreach meetings with officials and stakeholders, as required. Tasks will include development of meeting agendas; meeting facilitation, coordination of meeting logistics; and serving as the liaison among the Steering Committee members, project team, and Oneida County.
- Community education, including consultation and development of public information materials such as instructional flyers, videos, and displays;
- Producing and distributing the Operation Ripple Effect Project News Bulletin containing
 the latest information on project milestones; public outreach activities in towns/villages;
 upcoming project deadlines; and news related to NYSDEC requirements, project funding
 and more;
- Media relations, such as facilitating news stories, coordinating interviews and fulfilling information requests;
- Drafting and editing media releases, editorials and other forms of submitted articles;
- and, Presenting project education materials and delivering educational presentations at community events.

3.2.2 Capacity, Management, Operations, and Maintenance (CMOM) Program

The CMOM working group will provide continued guidance to the County and consultant team as the CMOM Framework is further refined, including implementation efforts for 2020. This includes:

 Design Standards and Standard Operating Guidelines (SOGs) – Several Design and Construction Standards as well as Standard Operating Guidelines have been created over the past couple of years. The project team will coordinate with the municipalities and the District in 2020 to identify and prepare potential updates/revisions to the current documents, if necessary. New documents are not anticipated at this time.

- <u>Fat, Oil, and Grease (FOG) Program</u> The Consultant team will continue to work with the County to progress the implementation of the FOG inspection program and provide technical guidance as needed. The OCSD and Oneida County Department of Health (DOH) began implementing the inspection program in 2018. The consultant team will continue to support the FOG program as necessary in 2020.
- Municipal Collection System Coordination The Consultant team will provide engineering/technical support on an as-needed basis to assist the County and/or municipalities with the investigation of sanitary sewer system issues. Services may include the following:
 - Condition assessment of existing easements
 - Site visits
 - Desk top review of available mapping and related sewer system data
 - Coordination with and technical support for local officials, sewer system operators,
 and contractors regarding immediate system repairs
 - Attendance at sewer system issue-specific community meetings, if requested

3.2.3 Private Property I/I Reduction Program

The Private Property I/I (PPII) Reduction Program's goal is to address the private property contribution of I/I. The following includes the key programmatic elements that will be focused on in 2020:

• <u>PPII Working Group</u> – Continue to collaborate with the Town/Village representatives who will be responsible for helping implement a community-based PPII reduction program.

- Long-term Program Development and Implementation Advancement of the PPII program
 in accordance with Oneida County Sewer Use Rules and Regulations, with a focus on
 developing a District-wide program that accounts for the unique composition and
 infrastructure status of each community.
- <u>Community Education</u> Provide an understanding of the necessity of PPII reduction to member municipalities and residents; through direct resident communications, community education information/materials development, continuing the PPII School Program targeted at 5th graders, and mass media.

3.2.4 Flow Monitoring Program and Hydraulic Model Update

In 2010, a hydrologic (HSPF) and hydraulic (SWMM) model of the sewer collection system tributary to Sauquoit Creek Pumping Station (SCPS) was developed in order to evaluate control methods for reducing sanitary sewer overflow (SSO) at SCPS. This effort included the analysis of data from 30+ flow meters collected over a period of 9 months during 2008. The model was calibrated to the flow meter data and then used to simulate flow conditions for a typical year. The results from the simulations were used to evaluate engineering alternatives. Since then, I/I removal projects have been completed in the collection system.

In 2015, flow meters were re-installed by Oneida County at the same approximate locations within the collection system and have been in operation since. The Consent Order between the New York State Department of Environmental Conservation (NYSDEC) and Oneida County (County) requires that flow monitoring results and assessments be documented annually in the first Quarterly Progress Report (see Schedule A – Section B.2 of the Consent Order).

To comply with the Consent Order flow data documentation and assessment requirement, the County updated the hydrologic model in 2017 with 2015-2016 flow data, and evaluated the effectiveness of the I/I removal projects completed through the end of 2016. A Technical

Memorandum (TM), documenting the evaluation and findings of the hydraulic model calibrations, was submitted as an Appendix to the 1st Quarter 2018 Progress Report. The 1st Quarter 2019 Progress Report provided additional updates on the flow monitoring data and rainfall-derived I/I (RDII) analysis for summer 2018 and winter 2019 events. In 2020, efforts will continue to use the flow monitoring data to evaluate sewer rehabilitation effectiveness and analyze select areas as needed. An update on these efforts will be presented in the 1st Quarter 2020 Progress Report.

3.3 SEWER REHABILITATION CONTRACTS

Sanitary sewer rehabilitation will continue to be an important element of the overall SSO mitigation program. The additional and supplemental work within existing Sewer Rehabilitation projects to be completed are detailed in Table 2.1. Approximately \$6 million in funding is available for additional sewer rehabilitation contracts, and additional work will be identified for design as part of continued system evaluations.

3.4 WPCP/SCPS/FM UPGRADE CONTRACTS

As referenced in Section 2.4, Table 2.2 summarizes all of the contracts currently under construction or in various stages of design and/or bid to be performed at the WPCP and the SCPS/FM. Continued progress with either design or construction will occur in 2020.

4.0 REPORTING

In accordance with Article XIII – Reporting Requirements of the Consent Order, the following documents will be prepared.

4.1 QUARTERLY REPORTS

Quarterly reports will be prepared that will generally include the status and progress of the following:

- Engineering investigations and evaluations.
- Management programs.
- Schedules and completed milestones.
- Completed sewer rehabilitation.
- Assessment of effectiveness of rehabilitation.
- Completed capital projects and facility upgrades.

Additionally, each Quarterly Report will include:

- Changes in key personnel.
- Summary of new flows added within the SCPS basin and corresponding I/I removed per the approved I/I Offset Plan including the locations of the removals/additions.

Reporting Schedule:

Ending Quarter	Report Due
March 31, 2020	April 30, 2020
June 30, 2020	July 30, 2020
September 30, 2020	October 30, 2020
December 31, 2020	January 30, 2021

5.0 FUNDING

The following funding activities are anticipated in 2020.

5.1 CONSOLIDATED FUNDING APPLICATIONS (CFA)

The County will continue to identify potential project funding opportunities through the annual CFA process.