Town of Canandaigua

5440 Route 5&20 West
Canandaigua, NY, 14424

SEWER MASTER PLAN

for the

TOWN OF CANANDAIGUA

February 2016

(Last updated 11/16/16)

MRB Group Project No. 0300.15001.00

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3. Kevin Olvany, Canandaigua Watershed Manager
4. George Barden, Canandaigua Watershed Inspector

LIST OF ACRONYMS

ADF	Average Daily Flow
CIC	Citizen's Implementation Committee
EDU	Equivalent Dwelling Unit
GPM	Gallons per Minute
I/I	Infiltration and Inflow
IMA	Inter-Municipal Agreement
IUP	Intended Use Plan
MGD	Million Gallons per Day
OCIDA	Ontario County Industrial Development Agency
O&M	Operation and Maintenance
OWTS	Onsite Wastewater Treatment System
PDR	Purchase of Development Rights
PPL	Project Priority List
SMPPT	Sewer Master Plan Project Team
SPDES	State Pollutant Discharge Elimination System
STEP	Septic Tank Effluent Pumping
TDH	Total Dynamic Head
WWTP	Wastewater Treatment Plant
WTP	Water Treatment Plant (drinking water)

Foreword

Created by Town Board resolution in April 2014, the Citizen's Implementation Committee (CIC) was tasked to revisit every goal and action step identified in the Town of Canandaigua's adopted 2011 Comprehensive Plan Update.

Local experts on the topic at hand joined the CIC to revisit and revise goals and action steps to make them quantifiable and more in keeping with current trends in the Town of Canandaigua (herein "Town"). In December 2014, the Town Board adopted the revised Comprehensive Plan goals and action steps; this revision consisted of twenty main goals, with a total of approximately eighty action steps.

To begin implementation, the CIC held a strategic planning session in January 2015, to review each goal and action step, ranking each action step into short term, intermediate, and long term action items. From the strategic planning session, the CIC recommended to the Town Board those top five action items to accomplish in the 2015 / 2016 calendar years. In March 2015, the Town Board passed a resolution accepting the CIC's top five action steps for 2015/2016:

1. Develop and implement a Town of Canandaigua Farmland Enhancement Program;
2. Determine if the Natural Resource Inventory, which replaced the Limited Development Overlay, is successful in preservation of significant environmental features; revise, if necessary;
3. Research Conservation Programs for tax abatements or incentives available to landowners;
4. Develop a Town of Canandaigua Sewer Master Plan;
5. Review and consider code updates to the Mixed Use Overlay districts to maximize opportunities for commercial development.

The CIC then put out a call for volunteers interested in serving on one of five project teams, each focused on one of the top five action steps. Approximately forty-five interested residents answered this call. Throughout 2015, each project team met and worked on their assigned projects resulting in substantial progress, including the creation of this document by Town Engineer, MRB, with the assistance of the Sewer Master Plan Project Team (SMPPT).

I. INTRODUCTION

A Joint Sewer Master Plan (by MRB group, PC and Labella & Associates, PC) that includes the Village of Victor and the Towns of Victor, Farmington and Canandaigua was authorized and funded by the participating municipalities. The Joint Sewer Master Plan, currently in development at the time of this report, considers the potential sanitary sewer area that could be serviced by the Farmington Wastewater Treatment Plant (WWTP). For the Town of Canandaigua, this Joint Sewer Master Plan would only consider the areas north of Padelford Brook.

Because the Joint Sewer Master Plan would only address the needs of the Town of Canandaigua (Town) in the far north of the Town, the Town Board authorized MRB Group, PC to develop a Sewer Master Plan for the balance of the Town. Later in 2014, the Town Board assigned the CIC to support MRB Group to provide citizen participation and input regarding this document and its compliment to the Town's adopted Comprehensive Plan.

As described in the Foreword, this ultimately led to the CIC's formation of the Sewer Master Plan Project Team (SMPPT), who worked closely with MRB Group from April 2015 to the present. Collaboratively, the SMPPT and MRB Group considered the goals of the CIC to determine locations in the Town most appropriate for sanitary sewers, in conformance with the Town's Comprehensive Plan including protection for farmland and environmentally sensitive areas of the Town.

The purpose of this Sewer Master Plan is to provide the Town with a comprehensive planning tool that would provide factual data and other information relative to the sewer system serving the Town. This Sewer Master Plan evaluates the collection system as a whole and provides information back to the Town to assist in their decisions. The Sewer Master Plan will be utilized and shared amongst the Town's Boards, as they consider new development in the Town and the potential impact to the sanitary sewer system.

The SMPPT charge from the CIC was to evaluate the Town and consider where future growth in the Town is most appropriate in conformance with the Town's Comprehensive Plan. This document evaluates the potential for sewer extensions and analyzes the existing infrastructure based on available information for flow conveyance limitations.

II. EXISTING CONDITIONS

The County owns, administers and maintains the sanitary sewer infrastructure and appurtenances in the Town of Canandaigua for all areas south of Padelford Brook. North of Padelford Brook, the Town of Canandaigua owns the sanitary sewer infrastructure and the administration, operation and maintenance are provided by the Town of Farmington (Canandaigua-Farmington Sewer District) via an Inter-Municipal Agreement (IMA). The sewage that is collected via a public sanitary sewer system is conveyed through the County sewer system and discharged to the City sewer system for ultimate treatment at the City/County WWTP. The WWTP discharges to the Canandaigua Outlet, under a State Pollutant Discharge Elimination System (SPDES) permit regulating the effluent standards.

A. STUDY AREA

The study area for this Sewer Master Plan is generally defined as the land mass of the Town of Canandaigua surrounding the City of Canandaigua south of Padelford Brook. The study area does not consider the City of Canandaigua or other adjoining municipalities. As stated previously, the area of the Town north of Padelford Brook is included in the JSMP of Victor/Farmington/Canandaigua. A map of the study area is included in Appendix A.

1. Topography

The topography of the Town of Canandaigua can be described as undulating. The Town of Canandaigua is divided into three watersheds: Canandaigua Outlet, Canandaigua Lake, and Hathaway Brook. The north and east portions of the Town drain towards the Canandaigua Outlet. The very western edge of the Town drains towards Hathaway Brook and the remaining lands drain towards Canandaigua Lake. A watershed map is included in Appendix B. The area draining to Canandaigua Lake can be described as somewhat steep to steep in areas. This area of the Town is also bisected by significant drainage gullies. A topography map of the Town is included in Appendix C.

2. Climate/Precipitation

The Town of Canandaigua receives approximately 34 inches of rainfall and 52 inches of snowfall each year, with the average number of days with measurable precipitation totaling 146 days.

On average, the Town of Canandaigua has 165 sunny days per year, with a summer high of 81 degrees Fahrenheit and winter low of 18 degrees Fahrenheit. Climate/Precipitation information is sourced from NOAA's National Climate Data Center website and The Weather Channel.

3. Land Use

Land use in the Town is predominantly agricultural. This is consistent with the Town's Comprehensive Plan goals to maintain its rural character and protect farmland. According to the Town's Comprehensive Plan 2011 Update (EDR), agricultural land represents approximately 42% of the land mass of the Town, followed by approximately 30% as residential and 19% vacant. A copy of the Town's Zoning Map is included in Appendix D.

4. Population

The Genesee/Finger Lakes Regional Planning Council prepared a report in May 2013 entitled "Regional Population Forecasts" which includes population projections to the year 2050 for all counties, cities, towns, and villages located within the Genesee – Finger Lakes Region.

The population of the Genesee – Finger Lakes Region has increased since 1960. The population has increased by about 30% (about 285,000 people) within the last 50 years. The future population is projected to continue to increase, but at a slower rate. The region is projected to grow 3.6% from year 2010 to year 2050 and increase population by 44,394 people. Ontario County is projected to have the highest percent increase at 9.5%, growing from a population of 107,931 people in year 2010 to a population of 118,234 people in year 2050. The Town of Canandaigua is

projected to increase by about 3.0% per 10 year period and grow from a population of 10,020 people in year 2010 to a population of 11,875 people in year 2050. Therefore, a significant increase in population of the Town is expected over the next four (4) decade period amounting to about 18.5%.

B. WASTEWATER COLLECTION SYSTEM

The Town does not operate and maintain the sewer collection system within the Town of Canandaigua. The sanitary sewer system south of Padelford Brook is operated and maintained through the Ontario County sewer districts, which is managed by the Ontario County Department of Public Works. A copy of the County Sewer Districts Map is included in Appendix F. As stated previously, the sanitary sewer system located north of Padelford Book is operated and maintained by the Town of Farmington sewer district(s).

Both the City of Canandaigua and Ontario County have formed a partnership governed by an Inter-Municipal Agreement (IMA) which establishes the capacity for the County sewer districts that convey flows to the City of Canandaigua's sewer system and WWTP. A copy of the IMA is included in Appendix E. A map of the County/City sewer system is included in Appendix R.

1. Flow Meters

The County system discharges to the City sewer system via eight (8) points of connection. Those points of connection are monitored by flow meters that discharge to the City interceptors, mains, and collector sewers. The flow metering locations at or near the City limits are generally known as:

- West Lake Road
- East Lake Road
- Fallbrook
- North Street
- North Road
- Route 21 South (West Street)
- Amber Meadows
- Villas at Canandaigua

2. Interceptors Sewers

The interceptor sewers are identified in the City/County IMA and have an associated reserved County excess capacity shown in Average Daily Flow (ADF). The interceptors are:

i. West Lake Road –

The West Lake Road interceptor is a 20-inch diameter sanitary sewer. The County's excess reserve capacity is 1.10 Million Gallons per Day (MGD). Using an average daily flow of 300 Gallons Per Day (gpd) per Equivalent Dwelling Unit (EDU), this reserve capacity is estimated to convey sanitary sewage from an additional 3,667 EDUs.

ii. West Street –

The West Street interceptor is an 8-inch diameter sanitary sewer. The County's excess reserve capacity is 0.065 MGD. Using an average daily flow of 300 gpd per EDU, this reserve capacity is estimated to convey sanitary sewage from an additional 217 EDUs.

iii. North Street –

The North Street interceptor is a 18-inch diameter sanitary sewer. The County's excess reserve capacity is 0.468 MGD. Using an average daily flow of 300 gpd per EDU, this reserve capacity is estimated to convey sanitary sewage from an additional 1,560 EDUs.

iv. East Lake Road –

The East Lake Road interceptor is a 18-inch diameter sanitary sewer. The County's excess reserve capacity is 0.965 MGD. Using an average daily flow of 300 gpd per EDU, this reserve capacity is estimated to convey sanitary sewage from an additional 3,217 EDUs.

3. Sanitary Sewers

The sanitary sewers that serve as connection points between the City/County systems are identified in the City/County IMA and have an associated reserved County excess capacity shown in average daily flow. The sanitary sewer are:

i. Ontario Street –

The Ontario Street sewer is a 10-inch diameter sanitary sewer. The County's excess reserve capacity is 0.176 MGD. Using an average daily flow of 300 gpd per EDU, this reserve capacity is estimated to convey sanitary sewage from an additional 587 EDUs.

ii. Parrish Street –

The Parrish Street sewer is an 8-inch diameter sanitary sewer. The County's excess reserve capacity is 0.020 MGD. Using an average daily flow of 300 gpd per EDU, this reserve capacity is estimated to convey sanitary sewage from an additional 67 EDUs.

iii. Amber Meadows (Hammocks) –

The Amber Meadows sewer is an 8-inch diameter sanitary sewer. The County's excess reserve capacity is 0.012 MGD. Using an average daily flow of 300 gpd per EDU, this reserve capacity is estimated to convey sanitary sewage from an additional 40 EDUs. This analysis included the City development project at this location.

iv. North Road –

The North Road sewer is a 12-inch diameter sanitary sewer. The County's excess reserve capacity is 0.044 MGD. Using an average daily flow of 300 gpd per EDU, this reserve capacity is estimated to convey sanitary sewage from an additional 147 EDUs.

4. Pump Stations

Ontario County owns and operates all of the sanitary pump stations located within the Town of Canandaigua. The following is a summary of the "main" pump stations included as part of the sewer system. There are a few additional and smaller pump stations within the system that are beyond the scope of study of this document and it is assumed that their impact on the overall system is relatively insignificant.

There are six (6) "main" sewage pump stations located within the Town of Canandaigua that are addressed below:

1. Fire Hall Rd. Pump Station (1N)
2. Outhouse Park Pump Station
3. Lakeshore Lift Station
4. Pump Station 1W
5. Pump Station 4W
6. Pump Station 5W

The characteristics and capacity of each of these sewage pump stations is summarized below.

a. Fire Hall Rd. Pump Station (1N)

This duplex submersible pump station was recently upgraded with 850 Gallons Per Minute (gpm) pumps.

The station is currently operating at a design point of 550 gpm @ 80' TDH. A project that will replace the 6-inch diameter force-main with a 10-inch diameter force-main and install new pump impellers is currently in design. With the improvements to the pumps and force-main it is anticipated that the new design point will be 900 gpm @ 58' TDH.

The pumping capacity of 900 gpm is equivalent to a peak hourly flow rate of 1,296,000. Using a peak hourly flow to average daily flow ratio of 4.0, gives us an average daily flow of 324,000 gpd. Using an average daily flow of 300 gpd per EDU, this pump station is estimated to have adequate

capacity to convey sanitary sewage from 1,080 EDUs.

Level	Elevation Present (Feet)
Bottom of Wetwell	743.00
Pumps off	745.50
Lead Pump on	746.50
Lag Pump on	747.50
High Water Alarm	748.50
Invert of Incoming Gravity Sewers	749.50
Finished Grade	773.00

b. Outhouse Pump Station

This duplex pump station includes two submersible raw sewage pumps, wetwell, bypass piping connections, operating controls and alarms, emergency generator, and maintenance vehicle parking. Excess capacity was included in this pump station to allow for future growth. The wetwell is an 8-foot diameter manhole. The station is level controlled, according to the following sewage levels provided in the report entitled " Engineering Report for the Ontario County Outhouse Park Sewer Project Pump Station", prepared by MRB Group (dated April 20, 2006):

Level	Elevation Present (Feet)	Elevation Future (Feet)
Bottom of Wetwell	758.78	758.78
Pumps off	760.50	760.50
Lead Pump on	763.00	764.13
Lag Pump on	763.75	764.88
High Water Alarm	764.50	765.63
Invert of Incoming Gravity Sewers	766.83	766.83
Finished Grade	784.50	784.50

The proposed pumps were Hydromatic Submersible Sewage Ejectors, 10

horsepower, Model S4L1000M3-6. The design point for this pump station is 450 gpm at 40 feet of total dynamic head (TDH).

The pumping capacity of 450 gpm is equivalent to a peak hourly flow rate of 648,000 gpd. Using a peak hourly flow to average daily flow ratio of 4.0, gives us an average daily flow of 162,000 gpd. Using an average daily flow of 300 gpd per EDU, this pump station is estimated to have adequate capacity to convey sanitary sewage from 540 EDUs.

c. Lakeshore Lift Station

According to the Intermunicipal Agreement for the conveyance and treatment of sewage and wastewater between the City of Canandaigua and Ontario County, the Lakeshore Lift Station is to be enlarged (at the joint expense of both parties) if the total flows are in excess of or anticipated to be in excess of 3.71 MGD and both parties have or anticipate flows exceeding their respective reserved capacities. The County's share of any capital costs incurred for improvements at the Lakeshore Lift Station is based on having 54.5% reserve capacity in the Lakeshore Lift Station, according to the following flow information provided in the IMA:

Flow Characteristics	City Total	County Total	Total Flow
Average Flow (1990 design year)	0.59 MGD	0.706 MGD	1.296 MGD
Max Flow (1990 design year)	1.24 MGD	2.47 MGD	3.71 MGD
Max Flow (2008 actual capacity)	0.99 MGD	1.17 MGD	2.16 MGD

The Lakeshore Lift Station is operated by the City. Using the pumping capacity of 3.71 MGD and a peak hourly flow to average daily flow ratio of 3.0, gives us an average daily flow of 1,236,700 gpd. Using an average daily flow of 300 gpd per EDU, this lift station is estimated to have adequate

capacity to convey sanitary sewage from 4,122 EDUs.

d. Pump Station 1W

The design point for this pump station is reportedly 1,000 gpm at 125 feet of TDH.

This pumping rate of 1,000 gpm is equivalent to a peak hourly flow rate of 1,440,000 gpd. Using a peak hourly flow to average daily flow ratio of 3.5, gives us an average daily flow of about 411,400 gpd. Using an average daily flow of 300 gpd per EDU, this pump station is estimated to have adequate capacity to convey sanitary sewage from 1,371 EDUs.

Level	Elevation Present (Feet)
Bottom of Wetwell	680.55
Pumps off	685.45
Lead Pump on	687.45
Lag Pump on	687.95
High Water Alarm	689.05
Invert of Incoming Gravity Sewers	686.36
Finished Grade	702.00

e. Pump Station 4W

This pump station has a triplex pump configuration, originally installed in 1978 with three (3), 3 horsepower, Hydromatic Model SH300M3-4 pumps.

The original pump station experienced chronic “ragging” problems within the submersible pump volutes. Ragging is most commonly associated with non-biodegradables found in the waste stream (such as baby wipes, etc.). They required daily visits by County maintenance staff due to the frequency and uncertainty of the pump clogging. County staff were required to work within the confines of the Class 1 Division 1 confined space above the

wetwell to remove the clogged pump and manually clear the impeller when required.

Improvements to this pump station were needed to improve station reliability, restore station service life, eliminate the chronic clogging problem, and improve operator safety and equipment access.

Barton & Loguidice, P.C. (B&L) was retained by the County to provide design and bidding phase services for upgrading this pump station in 2013. According to their Final Basis of Design Report Amendment at the 90% Submittal (dated November 14, 2013), Vaughan chopper pumps were recommended to be installed, which include a cutter impeller to shed the fibrous material and prevent ragging. Vaughan chopper pumps Model SE4L, 7.5 horsepower, with design point of 575 gpm at 18.5 feet TDH were specified.

In addition to the standard Vaughan pumps, pump No. 2 was to be provided with a Vaughan recirculator to enable the pump station operator to mix the wetwell contents. The recirculator was to aid the County to better maintain the pump station and prevent future clogging and grease buildup. The pump station improvements have been completed, as outlined above per the County.

The pumping capacity of 575 gpm is equivalent to a peak hourly flow rate of 828,000 gpd. Using a peak hourly flow to average daily flow ratio of 4.0, gives us an average daily flow of 207,000 gpd. Using an average daily flow of 300 gpd per EDU, this pump station is estimated to have adequate capacity to convey sanitary sewage from 690 EDUs.

Level	Elevation Present (Feet)
Bottom of Wetwell	678.59
Pumps off	680.59
Lead Pump on	683.09
Lag Pump on	684.09
High Water Alarm	684.84
Invert of Incoming Gravity Sewers	684.98
Finished Grade	698.05

f. Pump Station 5W

This pump station has a triplex pump configuration, originally installed in 1978 with three (3), 5 horsepower, Hydromatic Model SH500M3-4 pumps.

The original pump station also experienced chronic "ragging" problems within the submersible volutes. This required the County maintenance staff to make daily visits to the pump station to unclog the pumps and work within the Class 1 Division 1 confined space above the wetwell.

B&L was retained by the County in 2013 to provide design and bidding phase services for upgrading this pump station. According to their Final Basis of Design Report Addendum at the 90% Submittal (dated November 14, 2013), Vaughan chopper pumps were recommended to replace the original submersible pumps. Vaughan chopper pumps Model SE4L, 7.5 horsepower, with design point of 500 gpm at 23 feet TDH were specified. Identical Vaughan model chopper pumps and impellers were recommended for both pump station 4W and 5W at each station, to provide the added benefit of enabling the County to interchange pumps and spare parts, as necessary. In addition to the standard Vaughan chopper pumps, pump No. 2 was provided with a Vaughan recirculator to enable the pump station operator to mix the wetwell contents and assist in preventing future clogging and grease buildup problems. The pump station improvements have been completed, as outlined above per the County.

The pumping capacity of 500 gpm is equivalent to a peak hourly flow rate of 720,000 gpd. Using a peak hourly flow to average daily flow ratio of 4.0, gives us an average daily flow of 180,000 gpd. Using an average daily flow of 300 gpd per EDU, this pump station is estimated to have adequate capacity to convey sanitary sewage from 600 EDUs.

Level	Elevation Present (Feet)
Bottom of Wetwell	679.35
Pumps off	681.35
Lead Pump on	682.6
Lag Pump on	683.35
High Water Alarm	683.56
Invert of Incoming Gravity Sewers	683.56
Finished Grade	696.23

5. Treatment Plant

The City/County own and operate a Rotating Biological Contactor (RBC) treatment facility located at 183 Saltonstall Street, Canandaigua, NY. Treatment generally includes screening for removal of inorganics, RBCs for biological treatment followed by clarification, and anaerobic digestion for treatment of the biosolids. The WWTP discharges to the Canandaigua Outlet and has a rated capacity for up to 6.5 MGD. The facility capacity is shared between the City/County as follows:

City capacity – 4.0 MGD
County capacity – 2.5 MGD
Total capacity – 6.5 MGD

In 2015, the average daily flow recorded at the WWTP was 3.10 MGD. Based on the average daily flow, the WWTP is operating at approximately 48% of capacity, leaving 3.4 MGD in excess flow capacity. Using an average daily flow of 300 gpd per Equivalent Dwelling Unit (EDU), this WWTP is estimated to have adequate capacity to treat an additional 11,333 EDUs. A map of the County sewer system with the reserve capacities of each connection point identified is included in Appendix S.

III. OPERATION AND MAINTENANCE

A. COUNTY SEWER DISTRICTS

Ontario County operates and maintains the sanitary sewer infrastructure and appurtenances associated with the County Sewer Districts. Treatment of the wastewater is provided by the County/City WWTP. Operation, maintenance, and treatment charges are combined into the County's annual sewer charge per EDU. The sewer charge for 2016 is $385.00/EDU.

B. TOWN SEWER DISTRICTS

Operation and maintenance of the Canandaigua – Farmington sewer District is provided by the Town of Farmington per the IMA between the Town of Canandaigua and the Town of Farmington. Treatment of the wastewater is provided by the Farmington WWTP. Operation, maintenance, and treatment charges are combined into the Town's annual sewer charge per EDU. The sewer charge for 2016 is $325.00/EDU.

IV. SEWER MASTER PLAN PROJECT TEAM ANALYSIS

A. EVALUATION OF EXISTING CONDITIONS

The SMPPT over the course of a year has performed several evaluations to determine where in the Town that sanitary sewer service would be most appropriate to promote growth and development. Those evaluations included:

1. Reviewing the Town Code and Comprehensive Plan to determine where public sewers and potential development are or are not envisioned according to those documents.
2. Reviewing key indicators to identify locations in the Town where there may be a need for potential future sewers.
3. Reviewing potential sanitary sewer locations for their likelihood to produce unwanted Development Pressure to the Farmland Protection objectives of the Comprehensive Plan. Of particular concern is the preservation of the newly-established Padelford Greenway on the north side of the Town. The Padelford Greenway as outlined by the Padelford Greenway Plan prepared by the Canandaigua Development Office, is identified on a number of the maps referenced in this section.

A Summary of these evaluations is presented below:

1. <u>Town Code/Town Comprehensive Plan Review</u>

   The SMPPT reviewed the Comprehensive Plan and Town Code and determined where future sanitary sewers are envisioned by those documents. By reviewing the descriptions of each of the zoning districts in Town Code, the SMPPT was able to determine that there are areas of the Town where sewers are expressively envisioned, undetermined because of omission, and areas expressively not envisioning sanitary sewer service.

   Based on the zoning definitions, in the following zoning districts, sanitary sewers are not envisioned in the following districts:

   - RR-3 (Rural Residential – 3 Acre)
   - AR-2 (Agricultural Residential – 2 Acre)
   - AR-1(Agricultural Residential – 1 Acre)

Based on the zoning definitions, in the following zoning districts, the expectation for sanitary sewer service is not expressed and therefore is undefined:

- R-1-30 (Residential - 30,000 SF)
- RLD (Residential Lake District)
- NC (Neighborhood Commercial)
- CC (Community Commercial)
- MH (Manufactured Housing)
- LI (Light Industrial)

It is reasonable to assume that a mix of public sewer and private onsite treatment systems existed in these districts at the time the descriptions were developed.

Based on the zoning definitions, sanitary sewer is envisioned in the following districts:

- R-1-20 (Residential – 20,000 SF)
- MR (Multiple Residential)
- PUD (Planned Unit Development)
- RB-1 (Residential Business)
- SCR-1 (Southern Corridor Residential)
- I (Industrial)

In addition to the zoning districts outlined above, the Town also has a Mixed Use Overlay (MUO) District that is designed to allow for more flexibility in the ultimate development of the three growth nodes of the Town. The MUO allows a more intensified development than allowed by the underlying zoning, provided the infrastructure is present to support the development.

A map that summarizes the above analysis of the Town Zoning Code including an overlay of the sanitary sewer system is included in Appendix G. A Zoning District Map with an overlay of the sanitary sewer system was also prepared to see the relation of the sanitary sewer system to the specific zoning districts referenced above. This map can be found in Appendix H.

2. Key Indicators that may Show a Need for Sewers in Developed Areas of the Town

The SMPPT followed the Comprehensive Plan and Town Code review with studying the key indicators that may forecast an environmental need for public sewer extension based on the following:

- Soil Type: Hydrologic C & D soils are characterized as poorly draining and can be a factor in limiting what type of Onsite Wastewater Treatment System (OWTS) can be utilized on a site.
- Dwelling Unit Age: Onsite wastewater treatment systems have a life cycle and typically after 25 years (design life typically 20-30 years based on EPA's *Onsite Wastewater Treatment Manual*) can require modification or replacement. The age of the primary structure can indicate an older OWTS near the end of its useful life.
- Lot Size: The smaller lots may have limited opportunity for replacement of an OWTS.
- Density: Clusters of parcels along a road that share the above characteristics can be an indicator that public sewer could potentially be a cost effective and viable alternative to OWTS's.

The map included in Appendix I is an overlay of the existing sewer districts, areas of poorly draining soils as characterized by the Natural Resource Conservation Service (NRCS), with the centroids of the primary structure color coded to differentiate those structures older than 25 years from those of age 25 years or less.

3. Review of Farmland Protection Areas Versus Areas Perceived to be Experiencing Development Pressure

The SMPPT, as part of their process, developed an overlay showing the properties that have previously expressed interest in the Purchase of Development Rights (PDR) to protect the farmland and all of the properties that have had expressed recent interest in development to the Town Development Office. The perceived development pressure and PDR interest shown are "snap shots" of the current development pressure and protection climate in the Town of Canandaigua.

A map showing the existing sewers, existing PDRs, PDR interest, and perceived development pressure is included in Appendix J. This map provides a visual tool showing where agricultural protection and development pressure are located with respect to the existing sewer system.

B. FINDINGS OF EXISTING CONDITIONS

After review of the above mapping and materials and meetings with the Canandaigua Lake Watershed Manager, Canandaigua Lake Watershed Inspector, and Ontario County Deputy Commissioner of Public Works, the SMPPT identified a number of areas for additional study for potential future sanitary sewer service. Those areas include:

- Hamlet of Cheshire
- Grandview Park/Ontario Street Ext. (CR 4) Area
- CR 28/Emerson/Risser Rd. Area
- CR 16, south of Foster Road
- The Town's industrially zoned areas between CR 46 and Ontario Street Ext.; also the area along Brickyard Road between the city line and Thomas Road.
- Unsewered locations on Middle Cheshire Rd and Acorn Hill Drive.

1. Hamlet of Cheshire

The Hamlet of Cheshire underlying zoning classification is a combination of NC and R-1-30, both are indeterminate with relation to sanitary sewers. However, this area does show a confluence of the key indicators (poorly draining soils, small lots, older homes and density) that make this a location for potential sewer service. In fact, the need for sanitary sewer service was first noted in the Hamlet of Cheshire Master Plan (2004). In addition, recent development plans for the Hamlet of Cheshire as well as a community survey (conducted by the Town) have indicated a desire for sanitary sewers. For these reasons, the SMPPT recommends this location for future sanitary sewer service.

2. Grandview Park/Ontario Street Ext. Area

The neighborhood area underlying zoning classification is a combination of R-1-30 and R-1-20. While R-1-30 is indeterminate with relation to sanitary sewers, R-

1-20 implies sewers are required. Once again, this area does show a confluence of the key indicators (poorly draining soils (in this case shallow bedrock), small lots, older homes and density) that make this a location for potential sanitary sewer service. The need for sewers in this area was identified in the Feasibility Study for the Installation of Sanitary Sewers in the NYS Rte. 21/Grandview Park/CR 4 & 22 area of the Town of Canandaigua (2006). Again, this area is in close proximity to active agricultural lands. For this reason it is recommended that this future sewer service area be limited to just the Grandview Park Area (the R-1-20 area).

3. CR 28/Emerson/Risser Rd Area

The neighborhood area underlying zoning classification is nearly all R-1-30 with one parcel zoned MR. As stated previously R-1-30 is indeterminate with relation to sanitary sewers, but MR suggests sewers are envisioned. Once again, this area does show a confluence of the key indicators (poorly draining soils, small lots, older homes and density) that make this a location for potential sewer service. Due to the proximity of the Padelford Greenway, the surrounding agricultural lands and the need to protect these lands, it is recommended that sewer be considered for only the CR 28 Area.

4. CR 16, South of Foster Rd. Area

This area of the Town is unique with respect to potential sanitary sewer service, because it represents a significant risk for nutrient loading to Canandaigua Lake. It also represents the greatest potential for creating development pressure on the upland agricultural and environmentally sensitive areas of the watershed. At the time of this report, the Town is considering a draft of the Watershed Council's Model Local Law that will require intensified OWTS inspections in the Canandaigua Lake watershed. A draft of the Model Local Law is included in Appendix K. As a result, this area is not recommended for immediate sanitary sewer service to protect the upland areas.

5. Town's Industrially Zoned Areas

The Town has two separate areas currently zoned Industrial. The first area is north of the City line along Brickyard Road extending north to Thomas Road. The other area is on the east side of the town between CR 46 and Ontario Street Ext. These areas require sanitary sewer service for development according to the zoning.

At the time of this report, the Ontario County Industrial Development Agency (OCIDA) intends to construct a new gravity sanitary sewer along Brickyard Road from North Street to the Canandaigua Airport, as outlined in the Preliminary Engineer's Report prepared by McFarland Johnson (2016). This sewer shown on the Sewer Alignment Map prepared by McFarland Johnson is included in Appendix L.

6. Unsewered Locations on Middle Cheshire Rd and Acorn Hill

These unsewered locations were identified by the Canandaigua Lake Watershed Inspector and recommended for potential future sanitary sewer service. These locations are in immediate proximity of existing sewers. These locations are:

- Acorn Hill Drive
- Middle Cheshire Road, between West Ridge Run and Clark Meadows Way
- Middle Cheshire Road, between Laura Lane and Timberline Drive

There is no immediate identified need for sanitary sewer service expansion to these areas, but due to the close proximity, it is likely sewer extension will occur when needed by residents.

C. RECOMMENDATIONS

1. Potential Future Sanitary Service Areas

After review of the above mapping and materials, the SMPPT recommended the following areas for potential future sanitary sewer service:

- Hamlet of Cheshire
- Grandview Park Area

- CR 28 Area, south of the intersection of Risser.
- Unsewered locations on Middle Cheshire Rd and Acorn Hill

These locations have been identified on the Potential Future Sanitary Service Areas map included in Appendix M. This map shows the existing sanitary sewer system, potential future sanitary service areas and the topography of the Town.

2. Farmland and Environmental Protection

In recognition of the need for future sanitary sewer expansion, the SMPPT and CIC also noted a strong need to balance Farmland/Environmental Protection in keeping with the recommendations of the Town's Comprehensive Plan. The SMPPT outlined actions to mitigate the potential negative impacts as a result of sanitary sewer expansion in close proximity to farmland and environmentally sensitive areas of the Town. Those actions include:

- Continuing to support the PDR program to protect significant and functional farmland in the Town.
- Adopting service lateral restrictions for districts that may have negative impacts to agricultural lands. An example of a typical service lateral restriction resolution is included in Appendix N.
- Designing future sanitary sewer expansions utilizing technologies that limit the future expansion of the system beyond the intended service area. Those technologies include package wastewater treatment systems and low pressure sewers. Future expansion from these technologies is limited by treatment and/or conveyance capacity.

V. RECENT DEVELOPMENT PATTERNS

In general, development in the Town of Canandaigua since 2009 occurred north of the City and generally between Brickyard Road, CR 28, and south of the Padelford Greenway. This development is in accordance with the Town's Comprehensive Plan, since this area is identified as one of the three growth nodes. Additionally, the development has occurred in the immediate vicinity of Outhouse Park, as a result of the Happiness House project. The more significant developments have been comprised of apartments and townhomes, reputedly appealing to the aging population of the County.

The following analysis will review the recent development patterns in the Town of Canandaigua and compare it with the stated reserve capacities identified in the most recent IMA between the City/County (dated June 11, 2009). Results of this analysis will provide a benchmark to the remaining capacities at the connection points to the City sewer system, with reference to the IMA stated capacities. This analysis assumes that Canandaigua developments approved prior to 2009 are already accounted for and not part of the stated reserve capacities. The following table lists the major developments in the Town of Canandaigua since 2009 that contribute to the County sewer system:

Table V.1: Recent Major Developments (post 2009)

Development Name	Approved Units (EDUs)	Pump Station Impact	Connection Point Impact
Candlewood Apts.	32	N/A	North Street Interceptor
Veterans Housing	48	N/A	North Street Interceptor
DePaul Apts.	48	N/A	North Street Interceptor
S.T.C	317	Fire Hall PS (1N)	North Street Interceptor
Happiness House	144	Outhouse PS	North Street Interceptor
Goodman Apartments	24	N/A	North Street Interceptor
Hammocks	200	N/A	Amber Meadows
Holiday Inn Express	75	Lake Shore PS	Super 8 sewer (city)

A. IMPACTS TO THE NORTH STREET INTERCEPTOR

In addition to the above major subdivisions, the Ontario County Industrial Development Agency (OCIDA) is in the preliminary phase of extending a gravity sewer along Brickyard Road from North Street to the Canandaigua airport. This project is estimated to ultimately contribute an additional 33,000 GPD of flow to the North Street Interceptor or based on 300 GPD/EDU, approximately 110 EDUs. Since 2009, development in the Town of Canandaigua has approved a total 723 EDUs (including OCIDA) contributing to the North Street Interceptor. The remaining reserve capacity is 1,560 EDUs (stated reserve capacity circa 2009) less 723 EDUs = 837 EDUs.

Table V.2: North Street EDU Summary (post 2009)

Flow Source	EDUs	Notes
Candlewood Apts.	32	
Veterans Housing	48	
DePaul Apts.	48	
Happiness House	144	
Goodman Apartments	24	
S.T.C.	317	
OCIDA Airport Sewer	110	Proposed
Total	723	Excludes I/I Impacts

B. IMPACTS TO THE OUTHOUSE PUMP STATION (PS)

The Happiness House project contributes flow to the Outhouse PS. This pump station has a total capacity of 540 EDUs. Already contributing to this pump station is the Old Brookside PUD that includes 419 EDUs at full build out and the Town of Canandaigua facilities that is estimated to be approximately 7 EDUs. Adding the Happiness House project to the existing PS yields 540 EDUs. Therefore, on an EDU basis, this pump station is near or at capacity. The following table summarizes the EDUs contributing flow to this pump station:

Table V.3: Outhouse PS EDU Summary

Flow Source	EDUs	Notes
Old Brookside PUD	419	
Happiness House	144	
Town Highway/Hall	7	
Total	540	Excludes I/I Impacts

C. IMPACTS TO THE FIRE HALL RD PS (1N)

The Smart Systems Technology Center (S.T.C.) project contributes flow to the Fire Hall Rd PS. The County is in the process of upgrading the Fire Hall Rd pump station. This pump station will have an estimated total capacity of 1,020 EDUs upon completion. At the time of the sewer capacity analysis performed by Bergmann & Associates, the dry weather flow contributing to the Fire Hall Rd PS was 95,000 GPD or approximately 317 EDUs using 300 GPD/EDU. S.T.C will contribute an estimated additional 317 EDUs as full build out based on the estimated projected flows.

Since the time of the sewer capacity analysis, the Town of Canandaigua has approved the CenterPoint Town Home project totaling 109 EDUs. This is part of the CenterPoint PUD, with an overall approved density of 461 EDUs (approved prior to 2009). Phase 3 of the CenterPoint apartments remains undeveloped at the time of this report. Phase 3 represents a total of 115 units.

The table below summarizes the EDUs contributing to this pump station. According to flow data collected as part of the Sewer Capacity Analysis (Bergmann & Associates), the contributing sewer shed area to the Fire Hall Rd. Pump Station experiences significant Inflow and Infiltration (I/I). It would appear that after the pump station is upgraded, there will be some capacity remaining for future development.

Table V.4: Fire Hall Rd PS EDU Summary

Flow Source	EDUs	Notes
Existing (Dry Weather) Flow	317	
S.T.C	317	
CenterPoint Town Homes.	109	Approved after 2014
CenterPoint Apartment (Phase 3)	115	Pending
Total	858	Excludes I/I Impacts

VI. PROJECTED DEVELOPMENT PATTERNS

The Genesee – Finger Lakes Regional Planning Council (GFLRPC) indicates that the Town of Canandaigua is still considered as an area for future population growth. It is therefore anticipated that continued development pressure will be present over the same planning period. In addition to continued commercial and industrial development, the Town will also continue to develop its housing based on the needs of the population (including apartments, townhomes, single family homes, etc.). It is beyond the scope of this document to determine which form of residential housing is required or more likely to occur to meet the future growth needs of the Town.

The Town's population is projected to increase by 1,855 over the planning period. Using the 2010 census data, there are 2.65 persons per dwelling. The population increase can then be estimated to need roughly an additional 700 equivalent dwellings units over the planning period based on the GFLRPC projections. Considering recent development patterns including the number if housing permits issued in 2015/2016 by the Town as well as the US Census estimating the Town's population at 10,532, the GFLRPC projections may be an underestimate of the potential growth of the Town.

The 2010 to 2013 population growth represents approximately a 5% growth rate over that time (3 years). If the present development and growth pattern continues, the Town's population could conservatively increase 35% over the planning period (2010 to 2050). Based on this assumption, the population would be estimated to increase to 13,527 or an additional 3,507 people. The population increase can then be estimated to need roughly an additional 1,323 equivalent dwelling units. Once updated information from the GFLRPC regarding population projections and/or the next Census (2020) update is available, this document should also be updated.

It is anticipated that future residential development will occur in the immediate areas proximity of public sewers with available capacity, in locations where the zoning is favorable to this type of development, and where the topography will allow for entrance to the public

sewer. Sanitary sewer extension will most likely be driven by the development pressure based on perceived market needs.

A. POSSIBLE FUTURE GROWTH AREAS

1. SCR-1:

The area of the Town that is in agreement with these above conditions is the lands currently zoned SCR-1. This area of the Town is likely to experience residential development pressure. A probable maximum build out analysis of vacant/undeveloped land in this zoning district was performed to develop a conservative number of potential future EDUs. The probable maximum build out analysis did not consider the conservation subdivision approach as the intent is to develop a conservative number.

The probable maximum build out analysis considered vacant parcels in the SCR-1 with property class codes 311, 314 and 322 as well as agriculturally vacant parcels with property class codes 105 and large rural residences with property class code of 240. The analysis excluded the large parcel already associated with a larger common development and the lands owned by the City. The results of this analysis show these lands could conservatively yield an additional 1,032 EDUs. A summary of the analysis is included in Appendix O.

Development of this area would ultimately discharge to either the West Lake Road interceptor or the Villas sewer. The Villas sewer reserve capacity is unknown at the time of this report. The West Lake Road interceptor appears to have adequate capacity for full build out. Additionally, a portion of these future EDUs likely discharge to the three pump station on West Lake Road. Based on the current capacities, pump station 5W appears to have adequate capacity. Pump station 4W would require increased capacity in the event that pump station 5W reaches capacity, under full build out conditions. Pump station 1W appears to have adequate capacity.

2. Outhouse Park Area

Another area of the Town that may experience residential growth pressure is the lands immediately to the West of Outhouse Park, between CR 30 and Buffalo Street Extension. The area is currently zoned AR-2 and one of the large parcels is owned by the Town of Canandaigua as open space. The Town owned parcel is not included in the build out analysis. It also excludes the parcel owned by Genesee Media Corporation. The build out analysis considered parcels with a property class code of 311, 120, 240 and 210. The results of this analysis show these lands could conservatively yield an additional 318 EDUs. A summary of the analysis is included in Appendix O.

Development of this area would ultimately discharge to the North Street interceptor sewer. It would appear that this connection point has adequate reserve capacity to handle flows from this area of the Town. Additionally, flows generated from this area will discharge to the Outhouse Pump Station. As stated previously in this report, the Outhouse Pump Station is near or at capacity with the number of EDUs currently allocated to the station. Improvements to this pump station would be required to handle the additional flows as a result of development in this area.

3. Uptown Area

Another area of the Town that is likely to experience residential growth pressure is the lands immediately north of the City between Brickyard and CR 28 and generally south of Thomas Road. The area has various zoning designations and a large area is part of the Town's Mixed Use Overlay (MUO). Based on the MUO regulations, the permitted development of vacant lands in the MUO that would result in the greatest density is in accordance with the MR zoning with 8 units/acre. The build out analysis considered parcels with a property class code of 210, 240, 311, 314, 322, and 330. The results of this analysis show these lands could conservatively yield an additional 2,312 EDUs. A summary of the analysis is included in Appendix O.

Development of this area would ultimately discharge to the North Street interceptor sewer. This connection point does not have adequate reserve capacity to handle all the flows from this area of the Town. Additionally, some of the additional flows generated from this area will discharge to the Fire Hall Rd. Pump Station. This pump station once upgraded should have limited capacity for the contributing areas. The Town should coordinate all proposed developments in this area with the County to avoid overloading the pump station in the future.

4. MUO-2 Area

This area is in the most northern portion of the Town, in the immediate vicinity of NYS Rte. 332. This area is considered in the Joint Sewer Master Plan. The sewer, a 12" gravity sewer installed as part of the Purdy/Mobile Road Sewer Project, has adequate capacity to serve the future development of this area.

5. NYS Rte. 364 Corridor Area

The NYS Rte. 364 area is on the eastern side of the Town, just south of 5 & 20 West. This area is zoned CC, R-1-20, MH and MR. This area is noted per the map in Appendix J as experiencing development pressure. This area currently has public water and sewer. Development of this area would ultimately discharge to the East Lake Road Interceptor sewer. This connection point does have adequate reserve capacity to handle all the flows from this area of the Town.

VII. CAPITAL IMPROVEMENTS

The following capital improvements outline potential sewer projects to three of the areas identified by the SMPPT. Each capital improvement considered alternatives including gravity sewer, pump station and forcemain, regional package treatment systems, grey water sewers, and low pressure sewers. The preferred method for sanitary service is based on the alternative having the lowest present worth and therefore the lowest financial impact to the potential service areas.

A. CHESHIRE SEWER SERVICE AREA

The first potential sanitary sewer service area evaluated is located along NYS Route 21, immediately north of the intersection with Wells Curtice Road. It includes 69 parcels of land, the majority of which are residential (53 parcels are single family homes, two family homes, and three family homes). Five parcels are vacant residential parcels. The remaining 11 parcels are commercial, office building, one story multiuse, social organization, religious, government, and a fire station.

Using an estimated 3 people per single family home, 6 people per two family home, and 9 people per three family home and flow of 100 gallons per day (gpd) per person, gives us an estimated average daily flow of 19,800 gpd for the 58 occupied and vacant residential parcels. Water usage records for the remaining 11 parcels of land were requested and obtained from the Town, which showed that the 2013 and 2014 water usage from each of these parcels was less than the 300 gpd estimate used for each single family home. The total estimated average daily flow from this potential service area is approximately 20,500 gpd and consists of a total of 74 Equivalent Dwelling Units (EDUs).

1. Cheshire Sewer Alternatives:

The following three (3) alternatives were considered for providing sanitary sewer service to this area:

a. Gravity collector sewer along NYS Route 21 through the potential sewer area; pump station at the lowest ground surface location near NYS Route 21 intersection with Wells Curtice Road; force main from pump station

along Wells Curtice Road, Johnson Road, and Middle Cheshire Road; with tie-in to existing gravity sewer system along Foster Road.

b. Septic Tank Effluent Pumping (STEP) collection system located in the back yards (utilizing the space currently occupied by the watermain that will be abandoned once replaced) of the homes along NYS Route 21 through the potential sewer area; transmission force main from the NYS Route 21 intersection with Wells Curtice Road along Wells Curtice Road, Johnson Road, and Middle Cheshire Road; with tie-in to existing gravity sewer system along Foster Road.

c. STEP collection system located in the backyards (utilizing the space currently occupied by the watermain that will be abandoned once replaced) of the homes along NYS Route 21 through the potential sewer area to an on-site wastewater treatment facility located near the NYS Route 21 intersection with Wells Curtice Road; with discharge to stream down Menteth Gully.

A map of the forcemain alternatives considered for the Cheshire Sewer Area is included in Appendix P. The selected forcemain alternative is shown as Alternative 2 on the map. The estimated capital and O&M costs for each of these alternatives are described in detail below.

2. Alternative #1: Gravity collector sewer along NYS Route 21; pump station near NYS Route 21 intersection with Wells Curtice Road; force main from pump station along Wells Curtice Road, Johnson Road, and Middle Cheshire Road; with tie-in to existing gravity sewer system along Foster Road.

a. Construction Cost:

8” Diameter Gravity Collector Sewer -	
4,480 feet ($110/foot) =	$492,800
Manholes - 4,480 feet / 150 feet = 30 manholes	
30 manholes ($4,500 each) =	$135,000

Lateral Connections within ROW	
69 connections (30 feet) ($55/foot) =	$113,900
NYS Highway Jack and Bore	
100 feet ($400/foot) =	$40,000
Main Pump Station	
(with emergency power generator) =	$220,000
Force Main	
9,200 feet ($80/foot) =	$736,000
Connection to Existing Sewer Manhole =	$2,500
Subtotal	$1,740,200
10% Construction Contingencies	$174,000
Total Construction Cost	$1,914,200
25% Engineering, Legal & Admin Allowance	$478,600
Total Project Cost	$2,392,800

b. O&M Annual Cost:

74 EDUs ($385 per EDU)* =	$28,490
Pump Station Electricity and Maintenance =	$2,400
Total Annual O&M Cost	$30,890

*Note: The County's annual O&M charge has been revised from $325 per EDU to $385 per EDU based on the July 12, 2016 review comment letter received from Mr. John Berry, P.E. (Ontario County Public Works Deputy Commissioner of Public Works).

c. Total Project Present Worth

Total Project Cost	$2,392,800
Present Worth of O&M Cost (20 years @ 3%)	$459,600
Total Project Present Worth	$2,852,400

d. Total Annual Cost per EDU
(loan at 2.5% over 30 years)

New Debt Service ($2,392,800) (0.04778) / 74 EDUs =	$1,545
O&M Annual Cost = ($30,890) / 74 EDUs =	$417
Total Annual Cost per EDU	$1,962

3. Alternative #2: Septic Tank Effluent Pumping collection system of the back yards (utilizing the space currently occupied by the watermain that will be abandoned once replaced) of the homes along NYS Route 21; transmission force main from NYS Route 21 intersection with Wells Curtice Road along Wells Curtice Road, Johnson Road, and Middle Cheshire Road; with tie-in to existing gravity sewer system along Foster Road.

   a. Construction Cost

1,000 gallon Septic Tank Effluent Pumping System	
74 EDUs ($7,020 each) =	$519,500
Collection Forcemain (2” diameter)	
4,500 feet (2) ($45/foot) =	$405,000
Transmission Forcemain (3” diameter)	
9,200 feet ($50/foot) =	$460,000
Connection to Existing Sewer Manhole =	$2,500
Subtotal	$1,387,000
10% Construction Contingencies	$138,700
Total Construction Cost	$1,525,700
25% Engineering, Legal & Admin Allowance	$381,400
Total Project Cost	$1,907,100

   b. O&M Annual Cost

74 EDUs ($325 per EDU) =	$28,490
STEP System	$7,200
Total Annual O&M Cost	$35,690

   c. Total Project Present Worth

Total Project Cost	$1,907,100
Present Worth of O&M Cost (20 years @ 3%)	$531,000
Total Project Present Worth	$2,438,100

d. Annual Cost per EDU (loan at 2.5% over 30 years)

New Debt Service ($1,907,100) (0.04778) / 74 EDUs =	$1,231
O&M Annual Cost ($35,690) / 74 EDUs =	$482
Total Annual Cost per EDU	$1,713

4. Alternative #3: Septic Tank Effluent Pumping collection system in the back yards (utilizing the space currently occupied by the watermain that will be abandoned once replaced) of the homes along NYS Route 21 to an on-site wastewater treatment facility located near the NYS Route 21 intersection with Wells Curtice Road; with discharge to stream down Menteth Gully.

a. Construction Cost:

1,000 gallon Septic Tank Effluent Pumping System	
74 EDUs ($7,020 each) =	$519,500
Collection Forcemain (2” diameter)	
4,500 feet (2) ($45/foot) =	$405,000
Transmission Forcemain (3” diameter)	
1,000 feet ($50/foot) =	$50,000
On-site WWTP (per Orenco proposal)	
25,000 gallon Flow EQ / Pre-anoxic Tank =	$51,900
2-stage Advan Tex Treatment System =	$692,100
Discharge Equipment =	$3,600
Ancillary Equipment =	$78,700
Shipping, Commissioning & Training =	$68,500
Control Building =	$40,000
Flow Meter =	$10,000
Ultraviolet Disinfection =	$55,000
Reaeration Tank & Equipment =	$25,000

Sitework =	$100,000
Utilities Service =	$50,000
Emergency Power Generator =	$75,000
MEP Work =	$140,000
Effluent Discharge Pipe	
1,000 feet ($110/foot) =	$110,000
Subtotal	$2,474,300
10% Construction Contingencies	$247,400
Total Construction Cost	$2,721,700
25% Engineering, Legal & Admin Allowance	$680,400
Total Project Cost	$3,402,100

b. O&M Annual Cost

STEP System	$7,200
Package Treatment Facility =	$14,946
Permits, sampling, etc. =	$2,400
Total O&M Annual Cost	$24,546

c. Total Project Present Worth

Total Project Cost	$3,402,100
Present Worth of O&M Cost (20 years @ 3%)	$365,200
Total Project Present Worth	$3,767,300

d. Annual Cost per EDU (loan at 2.5% over 30 years)

New Debt Service	
($3,402,100) (0.04778) / 74 EDUs =	$2,197
O&M Annual Cost ($24,546) / 74 EDUs =	$332
Total Annual Cost per EDU	$2,529

Summary of Cost Estimates for Alternatives:

	Project Cost	Annual O&M	Total Project Present Worth	Annual Cost per EDU
Alternative #1	$2,392,800	$30,890	$2,852,400	$1,962
Alternative #2	$1,907,100	$35,690	$2,438,100	$1,713
Alternative #3	$3,402,100	$24,546	$3,767,300	$2,529

While Alternative #2 has the lowest overall total cost, it is worth noting that lack of public buy-in of the STEP System may in fact result in Alternative #1 being the preferred alternative. As part of the district formation process, both alternatives should be presented in a public informational meeting and selected based on the potential district's preference.

During the public comment period, the Canandaigua Lake Watershed Commission submitted a review letter dated June 29, 2016 which suggested that the last 1,500 linear feet of force main included under Alternative #1 along Middle Cheshire Road and Foster Road (before connection to the existing gravity sewer along Foster Road) should be changed to gravity sewer. This change would actually increase the Total Project Cost of Alternative #1 by an estimated $123,700 but would offer the opportunity for existing residences along this 1,500 foot stretch of Middle Cheshire Road and Foster Road with septic systems to connect to the gravity sewer (if or when their existing septic system was to fail). Therefore, the annual cost per EDU may actually decrease depending upon the number of additional services provided.

Alternative #4: This alternative was added at the suggestion of the Canandaigua Lake Watershed Commission via their June 29, 2016 letter submitted during the public comment period.

Description: Gravity collector sewer along NYS Route 21 through the potential service area; pump station at the lowest ground surface location near NYS Route 21 intersection with Wells Curtice Road; force main from pump station going north along NYS Route 21 to

Keister Road, across Keister Road heading east (across easements) to Cramer Road; gravity sewer along Cramer Road to Middle Cheshire Road; with tie-in to existing gravity sewer along Middle Cheshire Road.

a. Construction Cost:

8" Diameter Gravity Collector Sewer	
4,480 feet ($110/foot) =	$492,800
Manholes – 4,480 feet / 150 feet = 30 manholes	
30 manholes ($4,500 each) =	$135,000
Lateral Connections within ROW	
69 connections (30 feet) ($55/foot) =	$113,900
NYS Highway Jack and Bore	
100 feet ($400/foot) =	$40,000
Main Pump Station (pumping to higher elev @ 1070')	
(with emergency power generator) =	$240,000
Force Main (step construction, in same trench as collector sewer)	
2,000 feet ($60/foot) =	$120,000
Force Main (in new, separate trench)	
4,500 feet ($80/foot) =	$360,000
8" Diameter Gravity Sewer	
2,300 feet ($110/foot) =	$253,000
Manholes – 2,300 feet / 150 feet = 16 manholes	
16 manholes ($4,500 each) =	$72,000
Connection to Existing Sewer Manhole =	$2,500
Procurement of Easements (4,000 feet long) =	$10,000
Subtotal	$1,839,200
10% Construction Contingencies	$183,900
Total Construction Cost	$2,023,100
25% Engineering, Legal & Admin Allowance	$505,800
Total Project Cost	$2,528,900

b. O&M Annual Cost:

74 EDUs ($385 per EDU) =	$28,490
Pump Station Electricity and Maintenance =	$3,300
Total Annual O&M Cost	$31,790

c. Total Project Present Worth:

Total Project Cost	$2,528,900
Present Worth of O&M Cost (20 years @ 3%)	$472,900
Total Project Present Worth	$3,001,800

d. Total Annual Cost per EDU

New Debt Service ($2,528,900)(0.04778) / 74 EDUs =	$1,633
O&M Annual Cost = $31,790 / 74 EDUs =	$430
Total Annual Cost per EDU	$2,063

B. GRANDVIEW PARK SEWER SERVICE AREA

The second potential sanitary sewer service area is located in the Grandview Park area and is bounded by Gorham Street, East Street and the Conrail Railroad. This area is located in the northeast section of the Town (immediately adjacent to the east boundary line of the City of Canandaigua). This area was studied for potential sanitary sewer extension by the Town in 2006 (*Feasibility Study for the Installation of Sanitary Sewers in the RTE 21/Grandview Park/CR 4 area of the Town of Canandaigua,* October 2006). At that time, this area was stated to have a high priority for sanitary sewer service based on the deteriorating conditions of the existing septic systems. Poor performance of the existing septic systems is most likely attributed to age and less than adequate soil conditions. This area also contains a large population density and is in close proximity to existing sewers within the City of Canandaigua.

Sanitary sewer service in this particular area would contribute to solving the long-term environmental problem of pollution of the area's water bodies caused by raw sewage

discharges from failing on-site septic systems. Of particular concern is the Canandaigua Lake Outlet, which is a Class C stream that receives surface runoff and groundwater from this area. The Class C stream designation means that the best use for this stream is fishing and fish propagation.

Using an estimated 3 people per single family home and flow of 100 gallons per day (GPD) per person gives an estimated average daily flow of 6,000 GPD for the 20 parcels and Equivalent Dwelling Units (EDUs) located in this Grandview Park area.

A low pressure sewer system is proposed to serve this area with small diameter sewer force mains installed along Grandview Park, East Street and Gorham Street. The point of discharge to the City of Canandaigua sanitary sewer system is located at the intersection of East Street and Gorham Street.

a.) Construction Cost

1 ¼" HDPE Sanitary Sewer Lateral	
1,000 feet ($11/foot) =	$11,000
2" HDPE Sanitary Sewer Force Main	
350 feet ($15/foot) =	$5,250
3" HDPE Sanitary Sewer Force Main	
1,600 feet ($20/foot) =	$32,000
4" HDPE Sanitary Sewer Force Main	
75 feet ($25/foot) =	$1,875
20 Simplex Individual Grinder Pumps =	$94,000
20 Check Valves / Curb Box Assemblies =	$6,000
20 Flushing Connection Handholes =	$5,000
Asphalt Roadway Repair =	$5,000
Driveway Pavement Repair =	$8,400
Lawn and Turf Repair =	$4,515
Maintenance and Protection of Traffic =	$1,000
Mobilization =	$1,000

	Subtotal	$175,000
	10% Construction Contingencies	$17,500
	Total Construction Cost	$192,500
	25% Engineering, Legal and Admin Allowance	$48,100
	Total Project Cost	$240,600
b.)	O&M Annual Cost	
	20 EDUs ($385 per EDU) =	$7,700
	Low Pressure Sewer System =	$2,000
	Total Annual O&M	$9,700
c.)	Total Project Present Worth	
	Total Project Cost	$240,600
	Present Worth of O&M Cost (20 years @3%)	$144,300
	Total Project Present Worth	$384,900
d.)	Annual Cost per EDU (loan at 2.5% over 30 years)	
	New Debt Service ($240,600) (0.04778) / 20 EDUs =	$575
	O&M Annual Cost ($9,700) / 20 EDUs =	$485
	Total Annual Cost per EDU	$1,060

C. COUNTY ROAD 28

The third potential sanitary sewer service area evaluated is located along County Road 28, immediately south of Risser Road. It includes a total of 48 parcels of land, the majority of which are residential (38 parcels are single family homes, two family homes, three family homes, and rural residential units). Eight parcels are vacant residential parcels. The remaining two parcels are a mini storage facility and a special school.

Using an estimated 3 people per single family home, 6 people per two family home, and 9 people per three family home and flow of 100 gallons per day (gpd) per person, gives an estimated average daily flow of 15,000 GPD for the 46 occupied and vacant residential parcels. Water usage records for the remaining two parcels of land were requested and obtained from the Town which showed that the mini storage facility was shut-off and the

special school used just under 400 gpd. The total estimated average daily flow from this potential service area is about 15,700 gpd and consists of a total of 52 Equivalent Dwelling Units (EDUs).

Using the results obtained from the evaluation of the alternatives for the NYS Route 21 sewer area as a guide, the two lowest total cost alternatives were considered for this County Road 28 service area:

- Gravity collector sewer along County Road 28; pump station located at the lowest ground surface elevation near the County Road 28 intersection with Risser Road; force main from the pump station south along County Road 28; with tie-in to the existing gravity sewer system along Parkside Drive.

- STEP collection system installed behind the buildings; transmission force main from the County Road 28 intersection with Risser Road south along County Road 28; with tie-in to the existing gravity sewer system along Parkside Drive.

A map of the alternatives considered for the CR 28 Sewer Area is included in Appendix Q. The capital construction and O&M costs for both of these alternatives are described in detail below.

1. Alternative #1: Gravity collector sewer along County Road 28; pump station at the lowest ground surface elevation near the County Road 28 intersection with Risser Road, force main from the pump station south along County Road 28; with tie-in to the existing gravity sewer system along Parkside Drive.

a. Construction Cost

8" Diameter Gravity Collector Sewer

5,200 feet ($110/foot) = $572,000

Manholes

5,200 feet / 150 feet per manhole = 35 manholes

35 manholes ($4,500 each) = $157,500

Lateral Connections within ROW	
48 connections (30 feet) ($55/foot) =	$79,200
Main Pump Station (with emergency power generator) =	$220,000
Force Main	
3,700 feet ($80/foot) =	$296,000
Connection to Existing Sewer Manhole =	$2,500
Subtotal	$1,327,200
10% Construction Contingencies	$132,700
Total Construction Cost	$1,459,900
25% Engineering, Legal & Admin Allowance	$365,000
Total Project Cost	$1,824,900

b. O&M Annual Cost

52 EDUs ($385 per EDU) =	$20,000
Pump Station Electricity & Maintenance =	$2,400
Total Annual O&M Cost	$22,400

c. Total Project Present Worth

Total Project Cost	$1,824,900
Present worth of O&M Cost (20 years @ 3%)	$333,200
Total Project Present Worth	$2,158,100

d. Annual Cost per EDU (loan at 2.5% over 30 years)

New Debt Service ($1,824,900) (0.04778) / 52 EDUs =	$1,677
O&M Annual Cost ($22,400) / 52 EDUs =	$431
Total Annual Cost per EDU	$2,108

2. Alternative #2: Septic Tank Effluent Pumping collection system installed behind the buildings; transmission force main from the County Road 28 intersection with Risser Road south along County Road 28; with tie-in to the existing gravity sewer

system along Parkside Drive.

a. Construction Cost

1,000 gallon STEP System (per Orenco proposal)	
52 EDUs ($7,020 each) =	$365,000
Collection Forcemain (2"diameter)	
5,200 feet (2) ($45/foot) =	$468,000
Transmission Forcemain (3" diameter)	
3,700 feet ($50/foot) =	$185,000
Connection to Existing Sewer Manhole =	$2,500
Subtotal	$1,020,500
10% Construction Contingencies	$102,100
Total Construction Cost	$1,122,600
25% Engineering, Legal and Admin Allowance	$280,700
Total Project Cost	$1,403,300

b. O&M Annual Cost

52 EDUs ($385 per EDU) =	$20,000
STEP System	$9,600
Total Annual O&M Cost	$29,600

c. Total Project Present Worth

Total Project Cost	$1,403,300
Present Worth of O&M Cost (20 years @ 3%)	$440,400
Total Project Present Worth	$1,843,700

d. Annual Cost per EDU (loan at 2.5% over 30 years)

New Debt service ($1,403,300) (0.04778) / 52 EDUs =	$1,289
O&M Annual Cost ($29,600) / 52 EDUs =	$569
Total Annual Cost per EDU	$1,858

Summary of Cost Estimates for Alternatives:

	Project Cost	Annual O&M	Total Project Present Worth	Annual Cost per EDU
Alternative #1	$1,824,900	$22,400	$2,158,100	$2,108
Alternative #2	$1,403,300	$29,600	$1,843,700	$1,858

While Alternative #2 has the lowest overall total cost, the difference is not significant and the public may be more receptive to a conventional system. Alternative #1 is therefore recommended for this area.

VIII. POTENTIAL FUNDING SOURCES

There are several funding assistance programs that can be considered by the Town to provide low interest loans and potential grants for implementation of these proposed improvement projects.

A. CLEAN WATER STATE REVOLVING FUND

The New York State Environmental Facilities Corporation (NYSEFC) administers the Clean Water State Revolving Fund (CWSRF) on behalf of the NYS Department of Environmental Conservation. The CWSRF provides financing to municipalities for planning, design, and construction of eligible water quality projects (including sanitary sewer system extensions and wastewater treatment plants). Low cost financing, in the form of low interest loans and grants, are available.

Short-term financing is available at 0% interest for up to 5-years in order to design and construct eligible sanitary facilities, with long-term financing being offered for up to 30 years. Reduced interest rate long-term financing is available as low as 0% interest for up to 30 years for municipalities meeting the financial hardship criteria.

The first step in obtaining financing through the CWSRF is to get the project listed. Based on information provided by the municipality on the CWSRF Project Listing Form, the NYSEFC will score the project and list it on the Project Priority List (PPL).

To be included on the Annual PPL of the Intended Use Plan (IUP), the municipality must submit an approvable engineering report, project schedule, and Smart Growth Assessment Form. The Grandview Park Sewer Area is currently listed on the Multi-Year list with the CWSRF program.

B. COMMUNITY DEVELOPMENT BLOCK GRANTS

The Community Development Block Grant (CDBG) program gives grants directly to states, which then allocate them to small cities and non-urban counties. Grants may be used for public infrastructure projects (e.g., wastewater and drinking water facilities). Seventy (70) percent of grant funds must be used for activities that benefit low and moderate income people.

HUD administers the Small Cities program in New York. Water, sewer and other public facility projects are eligible, especially those that protect public health and reduce environmental risk. Villages, small towns, and cities with population of 50,000 or less are eligible.

C. USDA – RURAL DEVELOPMENT

The U.S. Department of Agriculture – Rural Development offers a similar funding assistance program to municipalities for water and wastewater projects. Both low interest loans (covering a period of 38 years) and grants (up to 75%) are available through this program. Loan interest rates are based on the Median Household Income (MHI) of the service area. To qualify, population of the municipality must be less than 10,000 people which, unfortunately, the Town of Canandaigua does not meet.

IX. CONCLUSIONS

The Town should continue to encourage growth and development within its identified growth nodes. It would appear that MUO-1 and MUO-2 are adequately served in the near future by the existing connection points to the City and Town of Farmington, respectively. The long term build out of the MUO-2 area of the Town may require increased facilities to accommodate the ultimate flows generated at full build out. The Town should monitor growth in this node respective to the identified capacities. Development of the MUO areas of the Town would appear to fill the need for townhouse, condominium, and apartments style dwellings, but single family residential homes may be more likely to develop in other areas of the Town.

The MUO-3, while identified as a growth node, does not appear ready for the intended growth. The Town should revisit designation of this area as a growth node and potentially revise the MUO status. As part of this endeavor, the Town should consider the NYS Rte. 364 area, since it already has sanitary sewer service and public water.

The MUO-3 area is currently under review for the purposes of a concept Transfer of Development Rights (TDR) Program being considered by the Ag Team, BFJ Planning through a grant from NYSERDA. The MUO-3 future expansion as it relates to the TDR Program should be considered once concept evaluation has been completed pending Town Board review

The priority areas for future sanitary sewer service identified by the SMPPT analysis should be considered in order:

1. Hamlet of Cheshire
2. Grandview Park
3. CR 28 Area

The Town should consider submitting funding applications to both the CDBG/CWSRF programs for these areas. The Town should also consider performing income surveys in these

areas to determine if financial hardship exists in these areas relative to sewer district creation. It is reasonable to assume that implementation of the above sewer extensions will be as a result of both financial aid and public interest and may not necessarily occur in the order of priority listing.

The Town of Canandaigua is a growing community with clear objectives (throughout its planning documents) to maintain its agrarian character, protect Canandaigua Lake and the environmentally sensitive areas of the Town. The Town must balance its growth with these objectives. A key factor in managing the growth of the Town will be limiting the expansion of sanitary sewers into areas not envisioned for future development. The Town should continue to pursue Purchase of Development Rights and conservation easements in key locations to limit future expansion of sanitary sewers. These locations are generally lands zoned AR-2 adjacent to lands zoned for more intensified development such as the SCR-1 and R-1-30 zoned areas.

X. IMPLEMENTATION PLAN

As part of adoption of this document, the Town should consider the following implementation plan:

Action		Short Term (0-5 years)	Long Term (>5 years)	Responsible Agency	Project Manager
Update Zoning Purpose section of Town Code to be reviewed for sewer preference (pg 16-17)		X (TBC in 2018)		Town Board	Planning Board
CWSRF Applications for all Priority Areas		X		Town Board	Dir. of Development / Town Engineer
CDBG Application for the Hamlet of Cheshire		X		Town Board	Dir. of Development / Town Engineer
CDBG Application for the Grandview Park Area			X	Town Board	Dir. of Development / Town Engineer
CDBG Application for the CR 28 Area			X	Town Board	Dir. of Development / Town Engineer
Income Survey		X		Town Board	Dir. of Development / Town Engineer
District Formation			X	Town Board/Ontario County	To be Assigned by Town Board
Sewer Master Plan Annual Review		X (Yearly)		Town Board	Citizens Implementation Committee
Onsite wastewater Treatment Local Law		X (TBC in 2016)		Town Board	Dir. of Development

XI. REFERENCES

1. BME & Associates. *Engineer's Report for the Sanitary Sewer District Extension to the Wyffels Road / Laura Lane Sanitary Sewer District For Section 1 & Section 3 of the Lakewood Meadows Subdivision*. Rep. September 2004. Print

2. Clark Patterson Associates. *Engineering Report for the Laura Lane / Wyffels Road Sewer Extension - Canandaigua Lake County Sewer District*. Tech. 1999. Print.

3. MRB Group. *Engineering Report For The North Street Relief Sewer Project In The Town Of Canandaigua, Ontario County, Ny*. Rep. August 2005. Print.

4. MRB Group. *Engineering Report for the Ontario County Outhouse Park Sewer Project Pump Station*. Rep. April 20, 2006. Print.

5. MRB Group. *Engineer's Report For The NYS Route 332, Brickyard Rd, And County Rd 30 Sanitary Sewer Study In The Town And City Of Canandaigua, County Of Ontario*. Rep. December 2003. Print.

6. MRB Group. *Feasibility Study for the Installation of Sanitary Sewers in the NYS RTE. 21/Grandview Park/CR 4 & 22 area of the Town of Canandaigua.* Rep. October 2006. Print.

7. McFarland Johnson. *Canandaigua Airport Sanitary Sewer Extension Project - Along Brickyard Road from North Street to Airport at Canandaigua Airport*. Rep. Canandaigua: January 2016. Print.

8. BME Associates. *Addendum #2 to Sanitary Sewer Capacity Analysis - Engineer's Report for Hammocks at Canandaigua*. Rep. N.p.: n.p., October 2012. Print.

9. Canandaigua Development Office. *Padelford Greenway Plan*. Rep. December 2015. Print.

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11. Saratoga Associates. *Hamlet of Cheshire Master Plan*. Rep. May 2004. Print.

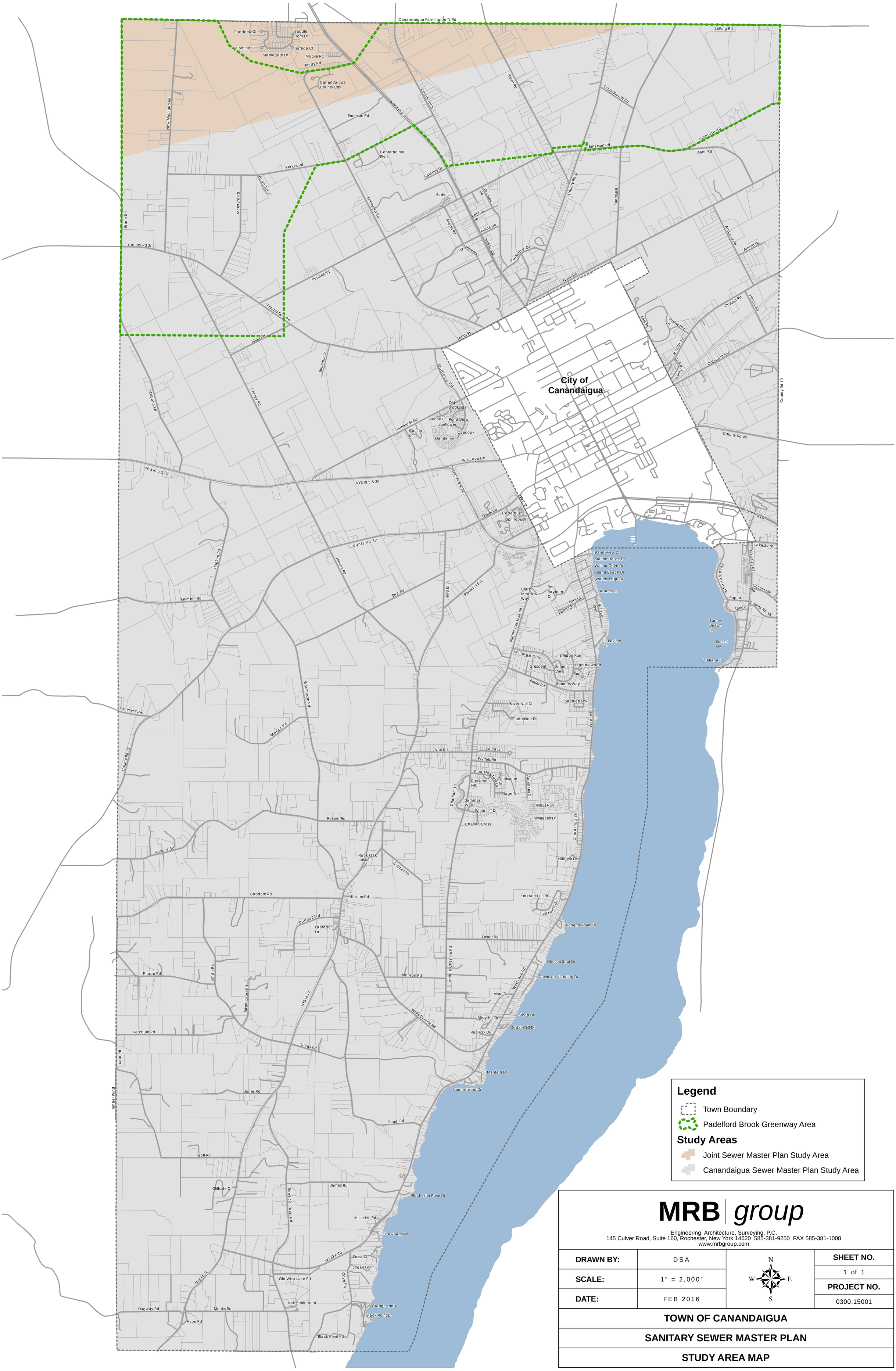
12. Environmental Protection Agency. *Onsite Wastewater Treatment Systems Manual*. Rep. February 2002. Print.

13. Bergmann Associates. *Smart Systems Technology Center Engineer's Report,* Rep. October 2014. Print

14. Barton & Loguidice, D.P.C.. *Pump Stations 4W and 5W Improvements, Final Basis of Design Report Amendment,* Rep. November 2013. Print

APPENDIX A

STUDY AREA



MRB | group

Engineering, Architecture, Surveying, P.C.
145 Culver Road, Suite 160, Rochester, New York 14620 585-381-9250 FAX 585-381-1008
www.mrbgroup.com

DRAWN BY:	DSA	N W E S	**SHEET NO.**
SCALE:	1" = 2,000'		1 of 1
DATE:	FEB 2016		**PROJECT NO.**
			0300.15001

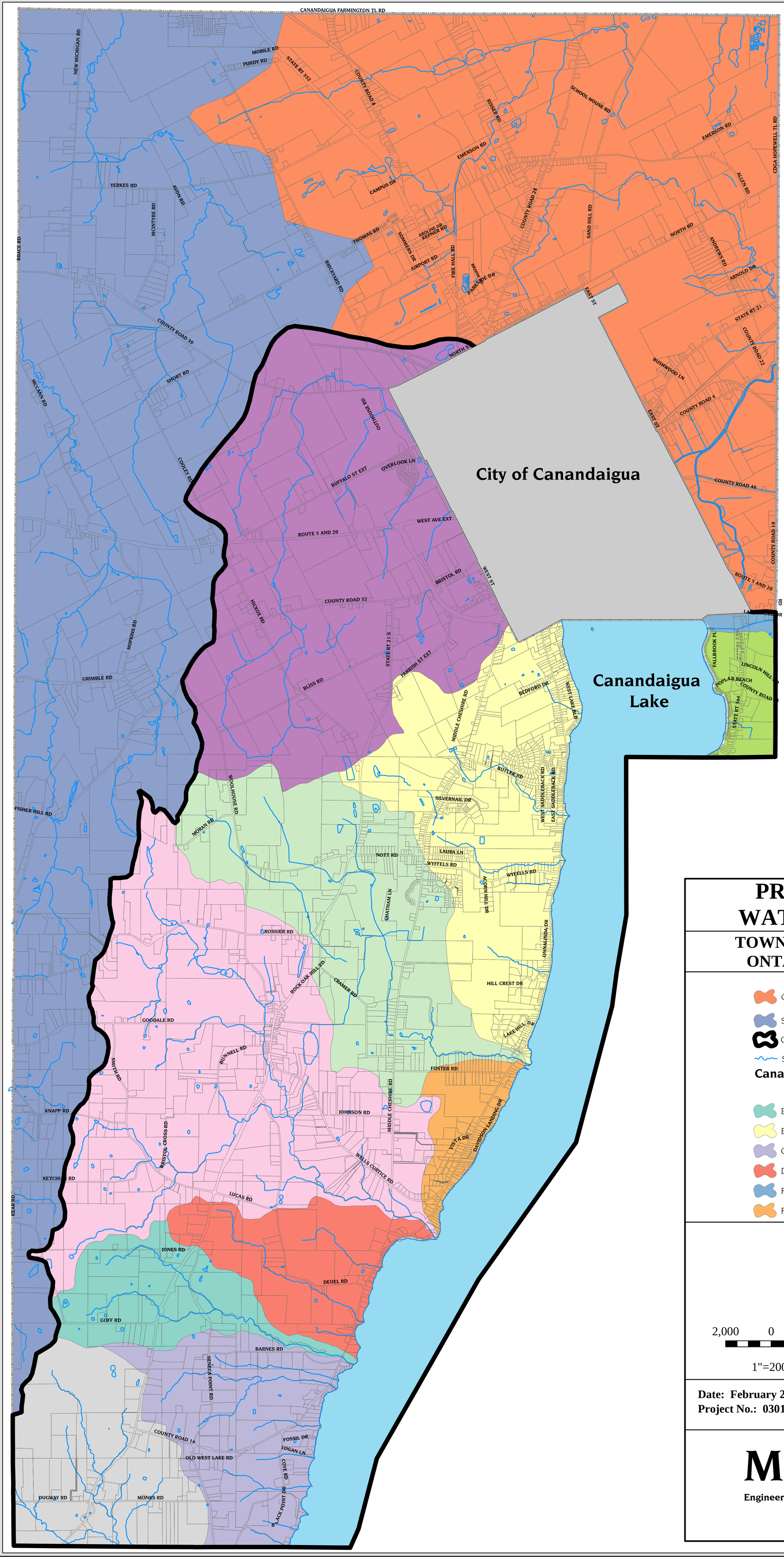
TOWN OF CANANDAIGUA

SANITARY SEWER MASTER PLAN

STUDY AREA MAP

APPENDIX B

WATERSHED MAP



PRELIMINARY WATERSHED MAP

TOWN OF CANANDAIGUA
ONTARIO COUNTY, NY

Watersheds

- Canandaigua Outlet
- S. Blk-W/S Divide to Hathaway Brook
- Canandaigua Lake
- Streams

Canandaigua Lake Watershed (Subwatersheds)

- Barnes Gully
- Butler Road
- Coy Road
- Deuel Road
- Fall Brook
- Foster Road
- Lincoln Hill
- Menteth Gully
- Seneca Point Gully
- Sucker Brook
- Tichenor Gully

1"=2000' When Printed @ 24" x 36"

Date: February 2007
Project No.: 030180

Drawn By: JML
Checked By: GJH

Mapping Prepared By:

MRBgroup

Engineering, Architecture, Surveying, P.C.

2480 Browncroft Boulevard
Rochester, NY 14625
585.381.9250
www.mrbgroup.com

APPENDIX C

TOPOGRAPHY MAP

MRB | group

Engineering, Architecture, Surveying, P.C.
145 Culver Road, Suite 160, Rochester, New York 14620 585-381-9250 FAX 585-381-1008
www.mrbgroup.com

DRAWN BY:	DSA	N W E S	**SHEET NO.**
SCALE:	1" = 2,000'		1 of 1
DATE:	FEB 2016		**PROJECT NO.**
			0300.15001

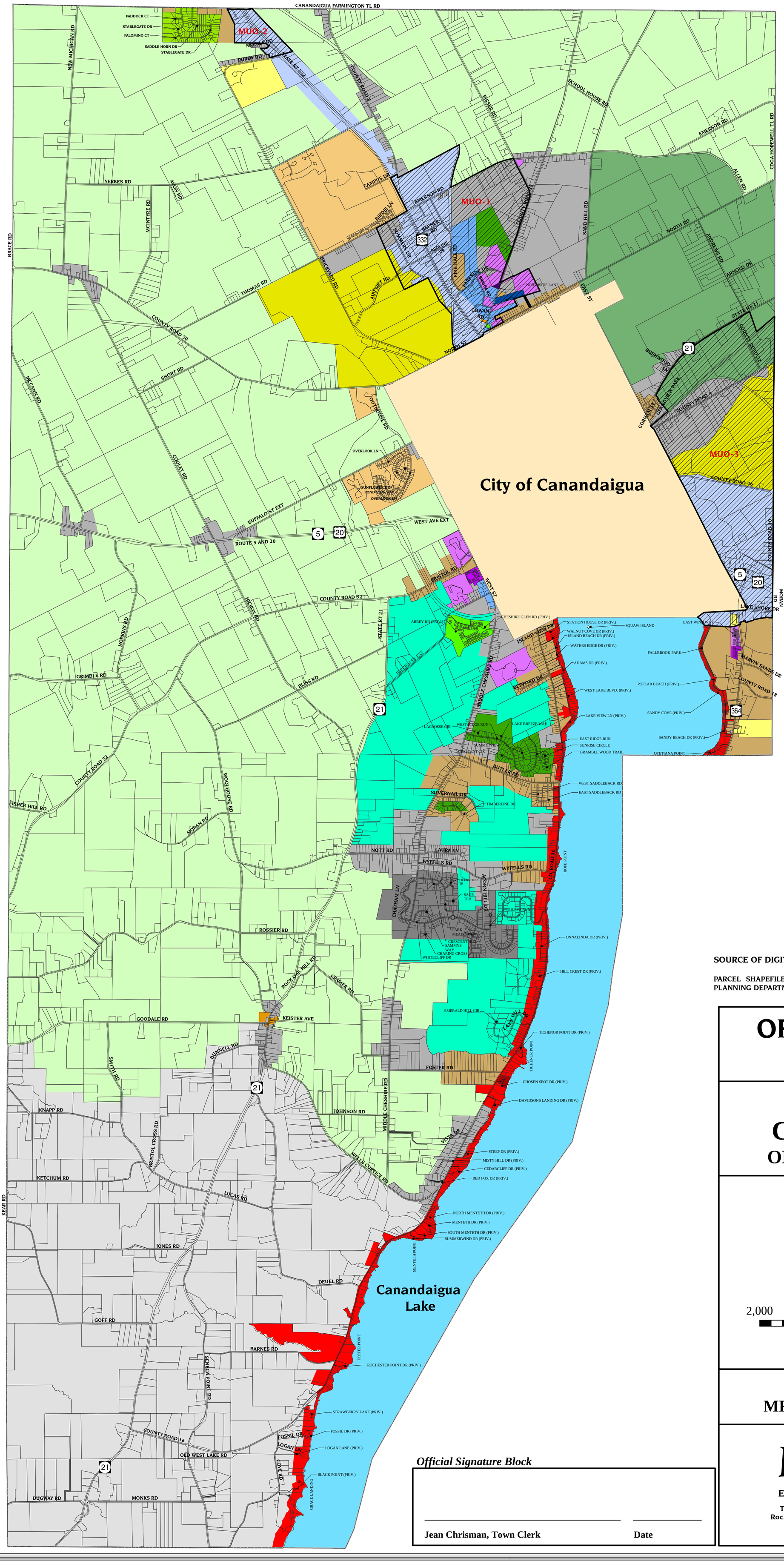
TOWN OF CANANDAIGUA

SANITARY SEWER MASTER PLAN

USGS MAP

APPENDIX D

ZONING MAP



Legend

- AR-1 - Agricultural Rural Residential - 1 Acre Lot
- AR-2 - Agricultural Rural Residential - 2 Acre Lot
- CC - Community Commercial
- I - Industrial
- IZ - Incentive Zoning
- MH - Manufactured Home
- MR - Multiple Residential
- MR-281 - Multiple Residential - 281
- Mixed Use Overlay District
- MUO-1-1 - Mixed Use Overlay District 1-1
- NC - Neighborhood Commercial
- PUD - Planned Unit Development
- R-1-20 - Residential 20,000 Sq. Ft.
- R-1-20/278 - Residential 20,000 Sq. Ft. - 278
- R-1-20/281 - Residential 20,000 Sq. Ft. - 281
- R-1-30 - Residential 30,000 Sq. Ft.
- R-1-30/278 - Residential 30,000 Sq. Ft. - 278
- RB-1 - Restricted Business
- RLD - Residential Lakeshore District
- RLD-281 - Residential Lakeshore District - 281
- RR-3 - Rural Residential
- SCR-1 - Southern Corridor Residential - 1 Acre Lot

Overlay Districts

- Mixed Use Overlay District Sub Areas (1-3)

SOURCE OF DIGITAL DATA:

PARCEL SHAPEFILE AND DIGITAL PARCEL DATA PROVIDED BY ONTARIO COUNTY PLANNING DEPARTMENT, 20 ONTARIO STREET, CANANDAIGUA, NEW YORK 14424 (2015).

OFFICIAL ZONING MAP

TOWN OF CANANDAIGUA

ONTARIO COUNTY, NY

2,000 0 2,000 4,000 6,000 8,000

1"=2000' When Printed @ 24" x 36"

Date: September 2015
MRB Project # 0300.12003.000

Official Signature Block

Jean Chrisman, Town Clerk

Date

Mapping Prepared By:

MRBgroup
Engineering, Architecture, Surveying, P.C.
The Culver Road Armory, 145 Culver Road, Suite 160
Rochester, NY 14625 PH 585.381.9250 FX 585.381.1008
www.mrbgroup.com

APPENDIX E

CITY/COUNTY INTER-MUNICIPAL AGREEMENT (2009)

Res #268-2009
4/23/09

Table of Contents

MUNICIPAL COOPERATION AGREEMENT

THIS MUNICIPAL COOPERATION AGREEMENT IS MADE AS OF THIS _____, by and between the CITY OF CANANDAIGUA, a municipality of the State of New York, having its principal office at City Hall, 2 North Main Street, Canandaigua, New York 14424 (hereinafter referred to as the "City"), and the COUNTY OF ONTARIO, a County of the State of New York, having its principal office at, 20 Ontario Street, Canandaigua, New York 14424 (hereinafter referred to as the "County"), acting on its own behalf and on behalf of the duly established sewer districts of the County, any extensions thereof and any additional County districts within the "Ultimate Service Area Limit" set forth in the Definitions.

WHEREAS, the parties have previously contracted with each other for the provision of sewage treatment and other sanitary sewer services by the City to the County, described in an agreement dated December 1, 1973, which expired on December 31, 2003 and the parties now wish to update such previous agreement by this Municipal Cooperation Agreement for the treatment and conveyance of sewage and wastewater, and

WHEREAS, the City owns and operates a Wastewater Treatment Facility and the County has reserve capacity in the Wastewater Treatment Facility, as set forth in Attachment F, and

WHEREAS, the City has interceptor sewers in which the County has a reserve capacity in as set forth in Attachment G, and

WHEREAS, the City has other sewers which are or could be used by the County, and

WHEREAS, the parties hereto desire to enter into this Agreement on behalf of the City and the County for the conveyance and treatment of sewage and wastewater for the sewer districts pursuant to Article 5(d) of the New York General Municipal Law and other applicable statutes regarding authorization for performance by municipalities or districts of their functions, powers or duties on a cooperative or contract basis, including but not limited to, the treatment of sewage and wastewater, subject to the terms and conditions hereinafter specified, and

WHEREAS, the City Council of the City has or shall duly enact, prior to execution, a resolution (Attachment B), passed by a majority vote of its members, authorizing its City Manager to enter into this contract with the County, and

WHEREAS, the County Board of Supervisors of the County has or shall duly enact, prior to execution, a resolution (Attachment A), passed by a majority vote of its members, authorizing its County Administrator to enter into this contract with the City.

NOW, THEREFORE, in consideration of the mutual promises and covenants of the parties hereto and pursuant to the County Law and the General Municipal Law of the State of New York, it is mutually agreed by and between the parties hereto, as follows:

1. **DEFINITIONS**

For the purpose of this Agreement, the following terms shall have the meaning set forth below:

A. **Costs for the purpose of this agreement shall mean the cost of**:

a. *Wastewater Treatment Facility* – Costs of operation and maintenance of the wastewater treatment facility, including all personnel costs, supplies, equipment under $10,000 adjusted by 2.5% annually beginning in 2010,

utilities, contractual services, repairs, professional services, insurance, and other items needed to operate and maintain the Wastewater Treatment Facility located at 183 Saltonstall Street, Canandaigua, NY.

b. *Lakeshore Lift Station* - Costs of operation and maintenance of the lift station, including all personnel costs, supplies, equipment under $10,000 adjusted by 2.5% annually beginning in 2010, utilities, contractual services, repairs, professional services, insurance, and other items needed to operate and maintain the Lakeshore Lift Station.

c. *Collection System* – the cost for the operation and maintenance of the interceptor and collector system, within the City, including all personnel costs, supplies, equipment under $10,000 adjusted by 2.5% annually beginning in 2010, utilities, contractual services, repairs, professional services, insurance, and other items needed to operate and maintain the system.

d. *Meter Maintenance* – the cost for the operations and maintenance of the flow meters and meter pits. This cost is included in plant O&M costs.

e. *Insurance* – Cost of insurance including but not limited to the plant, lift station, and a portion of collection system. This cost is included in plant O&M costs.

f. *Professional Services* – Including but not limited to; planning, engineering, legal and permitting costs related to construction, operation and maintenance of the plant, lift station, or collection system. This cost is included in plant O&M and/ or capital costs.

g. *Capital Expense* – shall mean all capital costs including planning, engineering, legal, land acquisition, construction, rolling stock and equipment, incurred in capital projects to support the Wastewater Treatment Facility, Lakeshore Lift Station, and the Collection System. Items must be over $10,000 adjusted by 2.5% annually beginning in 2010 in value to be considered capital. Listed below are capital cost categories.

i. Capital Reserve Fund - A Capital Reserve Fund will be established with contributions from the City and County in proportion to the capital obligations currently as established or as modified under Sections 7, 8 and 9 of this agreement. It is the responsibility of the City, annually by May 15, with input from the County, to create, amend and monitor a long-term capital improvement plan for the Wastewater Treatment Plant, Lakeshore Lift Station and Sewage Collection System. Project implementation schedules and cost estimates for future anticipated projects will provide guidelines for yearly contributions both the City and County must make to meet the capital plan objectives.

The City and County are obligated to include an expense line in their respective Sewer Fund budgets to cover the capital plan contribution. It is anticipated that most capital projects will be funded from the Capital Reserve Fund.

All interest earned on this fund shall remain in the fund. This fund shall be the first source of funds for all capital projects, except

there shall be a minimum of $100,000 to be reserved and available to cover any unanticipated capital expense. However, if after three years from the date of this contract, a capital project would require this fund balance to be reduced below $100,000, then the City may use borrowed funds for the amount of the project necessary to maintain the $100,000 balance. [Example: in 2010 there is $300,000 in the reserve fund, and a capital project of $600,000 is needed, then $200,000 of the reserve funds must be used and the City could borrow $400,000. The City, at its choice, could use up to $300,000 of the reserve fund and reduce the borrowing by another 100,000.]

ii. Debt Service - Debt service costs for plant, lift station or collection system capital projects. This could also include repayment to other funds from which the City borrowed to pay for the project, including interest at the rate of the City's most recent borrowing.

iii. Cash Capital – Capital items paid for with current revenues.

h. *Administrative Overhead* - An amount for administrative overhead equal to 9 % of the total of Section 1.A.a-b-c for City costs not directly charged to the operation and maintenance. A sample calculation is shown in **Exhibit A.** The City and County reserve the right to adjust the overhead percentage every five years in accordance with the actual figures used to calculate the Administrative Overhead in the report.

i. *Operation & Maintenance (O&M)* – shall mean all costs associated with owning, running and repairing of facilities not including capital expense.

B. **City System** – shall mean:

a. Wastewater Treatment Facility and related facilities at 183 Saltonstall Street, Canandaigua, New York

b. Lakeshore Lift Station

c. Sewage collector and interceptor facilities within the City limits referred to as collection system.

C. **Collection System** – shall mean the interceptors, mains, collector sewers and related items to the sewer collection system.

D. **County System** – shall mean:

a. Districts – shall mean sewer districts created by the County and located in the municipal boundaries of the Town of Canandaigua, Town of Gorham and the Town of Hopewell.

b. Facilities – shall mean any lift stations, structures and other real and personal property within the municipal boundaries the Town of Canandaigua, Town of Gorham, and Town of Hopewell owned by or under the control of the County and/or the County Sewer Districts and used for the purposes of collecting, conveying, pumping, storing and disposing of sewage and wastewater, including but not limited to sewer and wastewater lines, pump stations, storage tanks, manholes and other appurtenances.

E. **Fiscal Year** – The fiscal year is from January 1st to December 31st.

F. **Flow Measurement**

a. Plant flow shall be measured at the effluent meter at the Wastewater Treatment Facility.

b. County flow shall be measured at points of connection or as otherwise described for direct connection.

G. **Point(s) of Connection** – shall mean the point(s) at which the City System and County System connect to each other. The term shall include both points where the connection has a master flow meter (see Attachment C) and points where County retail, commercial or residential units are connected directly to the City System (see Attachment D).

H. **Ultimate Service Area Limit** – shall mean the area to be served under this agreement and shall be the area within the municipal boundaries of the City of Canandaigua, Town of Canandaigua, Town of Gorham, and Town of Hopewell.

I. **$10,000 plus Annual Adjustment** – shall mean the sum of $10,000 in the base year of 2009 increased 2.5% annually by the change in the construction price index.

2. SEWAGE AND WASTEWATER TREATMENT

2.1 Provide Service

On and after the effective date of this Agreement, the City will continue to furnish sewage and wastewater treatment to the County and its Districts in accordance with the laws, rules and regulations of the United States, the State of New York and the City of Canandaigua as they presently exist and as they may from time to time be amended.

2.2 Term

The initial term of this Agreement shall be for a period of forty *(40)* years from January 1, 2004 through and including December 31, 2044. After the initial term, this

Agreement shall continue for one (1) additional renewal term of ten (10) years, unless and until either party shall have duly served on or before December 31, 2043 written notice upon the Chief Executive of the other party of intent not to extend this Agreement beyond December 31, 2044. Both parties agree that any financial responsibilities that may have accumulated after the expiration of the prior agreement and prior to the date of signing of this agreement that are not specifically provided for under the prior agreement, have been satisfied in full. The effective date of this agreement, for enforcement purposes, shall be the last date of execution. For financial responsibilities, payment basis shall be retroactive to January 1, 2009, if this contract document is executed by both parties by May 1, 2009.

2.3 Points of Connection

Such sewage and wastewater treatment shall be supplied by the City to the County and its Districts in accordance with the terms of this Agreement. Connections by the County and its Districts with the City System shall continue to exist at the following Points of Connection (also shown in Attachment C):

A. (1.)West Lake Road;

(2.)East Lake Road

(3.)Fallbrook

(4.)North Street

(5.)North Road

(6.)Route 21 South (West Street)

(7.)Amber Meadows

(8.)Villas at Canandaigua

B. The points at which the County customers are connected directly to the City System, as set forth on Attachment D; and

C. Such other and future Points of Connection as the City and the County may from time to time agree upon in writing.

2.4 Flow Measurement

The County will continue to own and maintain all flow meters and the City will be allowed to connect to the County's monitoring system so that the City can monitor connections flows at the plant. The flow metering system shall be professionally certified twice annually by the County.

In the event that any flow meter has failed to record accurate data for a period greater than 24 hours, the County shall prepare an estimated flow with review by the City, based upon the use of accurate historical data collected for a similar period of time under similar hydrologic conditions or the flow may be estimated from actual metered water usage from all of the parcels whose sewage flows through the flow meter, whichever method is judged to be most accurate by the City.

2.5 Non Metered Users

The parties acknowledge and agree that County customers listed on Attachment D are connected directly to the City System (e.g., along common borders between the County and City) and are not and will not be covered by flow meters. In addition, if the County extends sewer services in the County through a new Point of Connection to the City System and less than twenty (20) residential or equivalent units are connected to

the extension, then the County shall not be obligated to provide a flow meter for such extension. For purposes of this Agreement, the amount of flow generated by such users not covered by a flow meter shall be deemed to be equal to their retail water usage during the applicable period, unless inflow is detected in which case a flow meter shall be installed by the City at the expense of the County or a mutually agreed upon method of measurement shall be used.

3. COUNTY COSTS

3.1 O & M Costs

A. Wastewater Treatment Facility

The County will pay a percentage of the O&M and capital cost to provide sewage and wastewater treatment services as described below and illustrated in Attachment E of this agreement. The County's percentage of costs will be based on the total flow treated at the Canandaigua Wastewater Treatment Facility, as set forth in section 3.4 of this agreement, and the total of the flows through the metered Points of Connection and the flows received directly from County users where the measure of the flow is retail water usage, as set forth in Attachment C and D of this agreement and processed per Section 4.

B. Lakeshore Lift Station

The County share of costs for the Lakeshore Lift Station shall be the percentage that County flow is to the total flow through the Lift Station and processed per Section 4.

C. **Collection System**

The County share of the City's collection system cost shall be proportional to the length of sewers used for County sewage to the total length of the City sewers. This is currently determined to be 22.5% of the City System. The County shall pay 50% of this cost or 11.25% of the Collection System cost. There are a total of 45.19 miles of City-owned sewers. A total of 10.18 miles of City-owned sewers are utilized for transmission of County sewage. If any new connection is made to the City sewer system at a point other than one listed in Attachment G that results in a greater proportion of the City sewer system being utilized for County sewage, then the proportion of the length of sewers used for County sewage to the total length of the City sewers shall be recalculated and processed per Section 4.

3.2 Capital Costs

A. **Wastewater Treatment Facility**

County cost is based on having 41% reserve capacity in the treatment plant (see Attachment F) and processed according to Section 4.

B. **Lakeshore Lift Station**

County cost is based on having 54.5% reserve capacity in the Lakeshore Lift Station as defined in this agreement (see Attachment F) and processed according to Section 4.

C. **Collection System**

County shall pay 50% of the capital cost of collection system sewers through which County sewerage flows unless otherwise described in this agreement. This percentage is a mutually accepted figure, as the effort needed to determine the percentage of flow throughout the City's sewer system would be impractical and, most likely, inaccurate and processed according to Section 4.

3.3 Other Costs

The County pays a percentage of undistributed costs for personnel services and other expenses as set forth in Attachment E and processed according to Section 4.

3.4 Measurement of Flows

All flow meter readings used for such sewage and wastewater treatment made at such Points of Connection shall be combined monthly and together with the flows from the Canandaigua Wastewater Treatment Facility, a monthly flow report shall be prepared and signed by both parties. The third month of each quarter, the County will add in all flows received directly from County users where the measure of the flow is retail water usage.

4. BILLING

4.1 Frequency

The City will bill the County quarterly for O&M, capital costs and administrative overhead associated with operating and maintaining the Wastewater Treatment Facility, Lakeshore Lift Station and Collection System. The final bill for the fiscal year will adjust the total O & M and administrative overhead charges for the year based on the final year-end cost (January 1 – December 31) and the total annual flows. The County shall pay the invoice in full within thirty (30) calendar days following date of such invoices are sent to the County. In the event that the invoices are not paid in full within thirty (30) days following delivery of such invoices, the County will pay the City a 1.5% surcharge per month or part of a month until such date that the invoices are paid.

4.2 Audit

The County may, at its expense, audit the City's budget and accounting records as they relate to this agreement.

5. OPERATION AND MAINTENANCE AND CONSTRUCTION OF CITY AND COUNTY SYSTEMS

5.1 City Responsibility

A. **O&M** - The City shall be responsible for operating and maintaining the City System for the benefit of the City and County. The City shall maintain the City System in good condition and shall operate and maintain the City System in accordance with all applicable Federal, State and local laws, rules and regulations.

B. **Construction** – Replacements, additions, betterments and/or improvements to the City System may be made by the City under the terms of Section 7, 8 and 9 or at the City's sole discretion and at the City's sole cost and expense.

C. **Flow Meters** - The County will continue to own and maintain all flow meters and the City will be allowed to connect to the County's monitoring system so that the City can monitor connections flows at the plant. The City's flow metering system shall be professionally certified twice annually by the City.

In the event that any flow meter has failed to record accurate data for a period greater than 24 hours, the City shall prepare an estimated flow with review by the County, based upon the use of accurate historical data collected for a similar period of time under similar hydrologic conditions.

5.2 County Responsibilities

A. O&M - The County agrees to operate and maintain the County System and any extension thereof, during the term of this Agreement. The County shall maintain the County System in good condition and shall operate and maintain the County System in accordance with all applicable Federal, State and local laws, rules and regulations. The County System shall remain the property of the County and/or the Districts, and the County shall remain solely responsible for any unpaid indebtedness now or in the future due or owing thereon, and for any required maintenance or upgrading required to comply with any Federal, State or County law, rule or regulation.

B. Construction - Replacements, additions, betterments and/or improvements to the County System in the County Sewer District portion of the Ultimate Service Area Limit may be made by the County and/or the Districts at their sole discretion and at their own cost and expense. However, all county improvements are subject to the following conditions.

(a) Such improvements shall be installed without any cost to the City and any sewer system installed in any such extension shall comply with all applicable laws, rules and regulations of the United States, the State of New York, Ontario County and local municipalities. The City, at its own expense, may inspect the work during construction.

(b) Since such additional improvements may result in an additional burden on the portion of the City's system used to handle the sewage and wastewater of the County, the County shall submit to the City sections of the engineering report and/or a letter of report from the Commissioner of Public Works, outlining the

flow rates at full build out and to compare those flow rates against reserve capacity.

(c) Upon completion of any such improvement, the improvement shall become subject to the terms of this Agreement, and the County shall be responsible for the proper operation and maintenance thereof.

(d) Since such additional improvements may result in an additional portion of the City System being used to handle the sewage and wastewater of the County, it is understood and agreed that the total linear footage utilized by the County will be increased accordingly. (See attachment E)

6. PERMITTABLE DISCHARGES

6.1 County Responsibilities

This Agreement constitutes a City permit to the County to discharge sewage and wastewater into the City System. The County discharge shall comply with all applicable laws, rules and regulations of the United States and the State of New York. The County shall be solely responsible for the quality of the County's discharge of sewage and wastewater into the City System and shall comply with all applicable Federal and State laws, rules and regulations regarding sewage and wastewater discharges, and the County shall comply with the rules and requirements of the City, as furnished to the County pursuant to Section 6.2. The County shall be solely responsible for any loss, penalties and/or fines occurring as a result of any failure by the County, or the Districts, to comply with any such laws, rules and regulations; and the County will indemnify and save the City harmless from any such laws.

6.2 City Responsibilities

The City shall furnish to the County in writing all regulations and requirements regarding the quality of sewer and wastewater discharge that the City is willing to receive in the City System. The City shall not make any rules and regulations applicable to the quality of sewer and wastewater discharge from the County unless such rules and regulations are applicable to all users of the City System.

6.3 Prohibited Discharges

The County may not contract for or accept sewage or wastewater of any customer beyond the Ultimate Service Area Limit of the County without prior written consent of the City and the approval of all appropriate Federal and State agencies, which may at the time have jurisdiction thereof. The County may not accept scavenger waste or trucked waste. Scavenger waste is defined as "waste materials removed from septic tanks and cesspools, including both wastewater and suspended solids and similar wastes".

6.4 Pretreatment Agreement

The County and the City will continue to abide by the September 3, 1985 Interjurisdictional Pretreatment Agreement as may be amended from time to time. [Attachment I] If the City administers the Industrial Pretreatment Program for the County then the County shall reimburse the City for the full cost.

6.5 Outside Wastes

The City agrees that it will have a reserve capacity in the City's WWTF during the term of this Agreement as set forth on Attachment F. Nothing herein shall preclude the City from accepting sewer and wastewater discharge from the County in excess of the amount

reserved for the County. Furthermore, nothing shall preclude the City from entering into agreements with other municipalities, industries and entities to accept trucked sewage, wastewater, sludge, leachate or contaminated water for treatment, so long as the County's capacity is reserved. Both parties agree that the City has the right to utilize revenues from outside wastes, up to $250,000 annually. This amount increases by 2.5% annually beginning in 2010 to offset rate adjustments. Both parties further agree that revenues received from outside wastes over and above the aforesaid amount shall be directed to the Capital Reserve Fund.

6.6 Canandaigua Water Treatment Plant Discharges

The Canandaigua Water Treatment Plant discharges backwash water and continuous sample sink water to the County sewer system. The City reports water discharges to the County. In the monthly City-County flow report, the discharge volume is subtracted from the County total flow. Neither the City nor the County shall bill the other for this discharge water.

7. CAPACITY OF WASTEWATER TREATMENT FACILITY

7.1 One Party Exceeding Reserve Capacity, But Total Capacity Not Exceeded

The City and County have reserve capacity in the WWTF as outlined in attachment F. Either party may encroach upon the reserved capacity of the other party, but shall not compensate the party whose capacity is encroached upon as long as the overall capacity is not exceeded.

7.2 City Flows Exceed City Capacity And Total Capacity Is Exceeded

In the event the City's flows are in excess of its reserved capacity, as set forth in Attachment F, and the County's flows are at or below its reserved capacity, but the total flow is above the combined reserve capacity, then:

1. The City must enlarge the Wastewater Treatment Facility or reduce its flows at no expense to the County, and shall restore to the County the reserved capacities as set forth in Attachment F, if so requested by the County in writing. Said request by the County shall be made within sixty days of the City providing notification to the County, in writing, of its intent to enlarge the Wastewater Treatment Facility. If, at this time, the County requires more capacity than that which is provided for in Attachment F, then the Wastewater Treatment Facility shall be enlarged at the joint expense of both parties. The local costs of the project shall be borne in proportion to the Million Gallons per Day (MGD) additional capacity to be reserved to each party in the enlargement to eliminate its existing encroachment and to provide for future demand in its service area.

2. The County may obtain an injunction from the New York State Supreme Court prohibiting any new sewer connections by the City until the City has complied with provisions of Paragraph 1 above.

7.3 County Flows Exceed County Capacity And Total Capacity Is Exceeded

In the event the County's flows are in excess of its reserved capacity, as set forth in Attachment F, and the City's flows are at or below its reserved capacity, but the total flow is above the combined reserve capacity, then:

1. The County must reduce its flows or pay the City the local costs of enlarging the plant to meet the County flows, and if required by the City, pay for the cost of restoring the City's reserved capacity as set forth in Attachment F. The County may choose to increase its reserved capacity at this time but must pay the City the local costs of enlarging the plant to meet said increased reserve capacity. If, at this time, the City chooses to increase its reserved capacity then the local costs of the project shall be apportioned to each party as provided for in Section 7.2.1.

2. The City may obtain an injunction from the New York State Supreme Court prohibiting any new sewer connections by the County.

3. It shall then become the responsibility of the City to select and make available to the County, for future capacity determinations, the consulting engineer whom the City wishes to retain for the expansion work. Within 180 days the engineer's report shall be delivered to the City and County, and shall set forth the scope and estimated costs of the project.

7.4 Both City and County Flows Exceed Capacity

If the total Wastewater Treatment Facility flows are in excess or anticipated to be in excess of 6.5 MGD and both parties have flows exceeding their respective reserved capacities, the Wastewater Treatment Facility shall be enlarged at the joint expense of both parties. The local costs of the project shall be borne in proportion to the MGD additional capacity to be reserved to each party in the enlargement to eliminate its existing encroachment and to provide for future demand in its service area.

8. CAPACITY OF COLLECTION SYSTEM

8.1 One Party Exceeding Reserve Capacity, But Total Capacity Not Exceeded

The City and County have reserve capacity in the interceptor sewers and existing sewers as outlined in Attachment G. Either party may encroach upon the reserved capacity of the other party as long as the overall capacity is not exceeded.

8.2 City Flows Exceed City Capacity And Total Capacity Is Exceeded

In the event the City's flows are in excess of its reserved capacity, as set forth in Attachment G, and the County's flows are at or below its reserved capacity, but the total flow is above the combined reserve capacity, then:

1. The City must enlarge the sewer or reduce its flows at no expense to the County, and shall restore to the County the reserved capacities as set forth in Attachment G, if so requested by the County in writing. Said request by the County shall be made within sixty days of the City providing notification to the County, in writing, of its intent to enlarge the sewer. If, at this time, the County requires more capacity than that which is provided for in Attachment G, then the sewer shall be enlarged at the joint expense of both parties. The local costs of the project shall be borne in proportion to the MGD additional capacity to be reserved to each party in the enlargement to eliminate its existing encroachment and to provide for future demand in its service area.

2. The County may obtain an injunction from the New York State Supreme Court prohibiting any new sewer connections by the City until the City had complied with provisions of paragraph 1 above.

8.3 County Flows Exceed County Capacity And Total Capacity Is Exceeded

In the event the County's flows are in excess of its reserved capacity, as set forth in Attachment G, and the City's flows are at or below its reserved capacity, but the total flow is above the combined reserve capacity, then:

1. The County must reduce its flows or pay the City the local costs of enlarging the sewer to meet the County flows, and if required by the City, pay for the cost of restoring the City's reserved capacity as set forth in Attachment G. The County may choose to increase its reserved capacity at this time but must pay the City the local costs of enlarging the sewer to meet said increased reserve capacity. If, at this time, the City chooses to increase its reserved capacity then the local costs of the project shall be borne in proportion to the MGD additional capacity to be reserved to each party in the enlargement to eliminate its existing encroachment and to provide for future demand in its service area.
2. The City may obtain an injunction from the New York State Supreme Court prohibiting any new sewer connections by the County.
3. It shall then become the responsibility of the City to select and make available to the County, for future capacity determinations, the consulting engineer whom the City wishes to retain for the expansion work. Within 180 days the engineer's report shall be delivered to the City and County, and shall set forth the scope and estimated costs of the project.

8.4 Both City and County Flows Exceed Capacity

If the total flows are in excess or anticipated to be in excess of its reserved capacity, as set forth in Attachment G, and both parties have flows exceeding their respective reserved capacities, the sewer shall be enlarged at the joint expense of both parties. The local costs of the project shall be borne in proportion to the MGD additional capacity to be reserved to each party in the enlargement to eliminate its existing encroachment and to provide for future demand in its service area.

8.5 Interceptors

If any interceptor line within the City listed in Attachment G operates in excess of its capacity, it shall be enlarged by the City in accordance with the provisions of Section 8.2, Section 8.3 and Section 8.4.

8.6 Existing Sewer Lines

If any existing sewer line not listed in Attachment G operates at or in excess of its actual capacity and the County requires increased capacity of the existing sewer lines, such request shall be made in writing. It shall then become the responsibility of the City to select and make available to the County the consulting engineer whom the City will retain for the expansion work. An engineer's report shall be delivered within 180 days to the City and County, and shall set forth the scope and estimated costs of the project. In the event that the City does not require additional capacity at the same time, the total cost of the project, including engineering reports, shall be borne by the County. In the event the City also requires additional capacity concurrently, the local cost of the project, including engineering reports, shall be based upon the proportionate additional capacity reserved for each party.

8.7 Sewer Line Replacement

If any existing sewer line that the County utilizes not listed in Attachment G is to be replaced by the City, regardless of the replacement or rehabilitation technique used, the City will notify the County in writing prior to design. The County will have the option to increase the capacity of the sewer line. The County share of the project shall be 50 % plus the proportion of increased capacity reserved for the County.

8.8 New Connection Points

Throughout the term of this agreement, the County may seek authorization from the City to connect to the City sewer system at points other than those listed in Attachment G. The County shall prepare an engineering report that defines the total and available capacity of the downstream sewer(s) from the connection to the wastewater treatment plant (or interceptor sewer) and amount of flow to be added to the connection point from the proposed County sewer. If reserve capacity exists, such reserve capacity will be divided equally between the City and County. Either party may encroach the others reserve capacity as long as the overall capacity is not exceeded. However, if sufficient capacity is not available (or not in the amount needed by the County), the County shall either 1) reduce its reserve capacity at another appropriate upstream connection point in order to increase available capacity in this section of sewer to be connected to, or 2) upgrade the sewer to provide the additional capacity needed by the County and, if required, restore the City's original reserve capacity.

9. CAPACITY LAKESHORE LIFT STATION

9.1 Exceeding Reserve Capacity

The City and County have reserve capacity in the Lakeshore Lift Station as outlined in Attachment F. Either party may encroach upon the reserved capacity of the other party, as long as the overall capacity is not exceeded.

9.2 City Flows Exceed City Capacity And Total Capacity Is Exceeded

In the event the City's flows are in excess of its reserved capacity, as set forth in Attachment F, and the County's flows are at or below its reserved capacity, and the volume of sewage and wastewater exceeds capacity, then:

1. The City must enlarge the Lakeshore Lift Station or reduce its flows at no expense to the County, and shall restore to the County the reserved capacities as set forth in Attachment F, if so requested by the County in writing. Said request by the County shall be made within sixty days of the City providing notification to the County, in writing, of its intent to enlarge the lift station. If, at this time, the County requires more capacity than that which is provided for in Attachment F, then the lift station shall be enlarged at the joint expense of both parties. The local costs of the project shall be borne in proportion to the MGD additional capacity to be reserved to each party in the enlargement to eliminate its existing encroachment and to provide for future demand in its service area.
2. The County may obtain an injunction from the New York State Supreme Court prohibiting any new sewer connections that flow to the lift station

by the City until the City has complied with provisions of paragraph 1 above.

9.3 County Flows Exceed County Capacity And Total Capacity Is Exceeded

In the event the County's flows are in excess of its reserved capacity, as set forth in Attachment F, and the City's flows are at or below its reserved capacity, and the volume of sewage and wastewater exceeds capacity, then:

1. The County must reduce its flows or pay the City the local costs of enlarging the lift station to meet the County flows, and shall pay the cost of restoring the City's reserved capacities as set forth in Attachment F, if so requested by the City in writing. Said request by the City shall be made within sixty days of the City providing notification to the County, in writing, of the requirement to enlarge the lift station. The County may choose to increase its reserved capacity at this time but must pay the City the local costs of enlarging the lift station to meet said increased reserve capacity. If, at this time, the City chooses to increase its reserved capacity then the local costs of the project shall be apportioned to each party as provided for in Section 9.2.1.
2. The City may obtain an injunction from the New York State Supreme Court prohibiting any new sewer connections that flow to the lift station by the County until the County has complied with provisions of paragraph 1 above.

9.4 Both City and County Exceed Capacity

If the total Lakeshore Lift Station flows are in excess or anticipated to be in excess of 3.71 MGD and both parties have or anticipate flows exceeding their respective reserved capacities, the Lakeshore Lift Station shall be enlarged at the joint expense of both parties. The local costs of the project shall be borne in proportion to the MGD additional capacity to be reserved to the party in the enlargement to eliminate existing encroachment and to provide for future development.

10. GENERAL PROVISIONS

10.1 Sewer Rents

The County agrees, represents, and warrants that it shall properly and lawfully collect appropriate sewer use charges each year during the term of this Agreement so that the sums to be paid hereunder to the City shall be duly provided for and paid when due. Due to differences in their respective budget cycles, the City and County agree to meet by May 15th of each year to review the City's projected sewer fund operating and capital budgets, 10-year capital plan and any new service areas outside the City. The City and County further agree that any unanticipated capital expenses incurred (expenses not anticipated by May 15th) for the Wastewater Treatment Plant, Lakeshore Lift Station or Sewage Collection System shall be funded from the Capital Reserve Fund, if available or shall be billed to the County the following year. Such unanticipated expenses may necessitate revisions to the long-term capital improvement plan, which could include adjusting project costs, implementation schedules or yearly contributions from each party in future years.

10.2 Compliance

The County on behalf of itself and the Districts, agrees, represents, and warrants that the County System substantially complies with all applicable Federal and State laws, rules and regulations, that the County System is adequately protected from any prohibited contaminate.

10.3 Liability

It is understood that the City shall not be held liable by the County for any loss or damage from any deficiency or failure in the acceptance of any sewage or wastewater and/or in the supply of any sewage service whether caused by shutting off such acceptance or service in case of accident; for alterations, extensions, connections or repairs, or for any other cause whatsoever, including acts of nature. The County will cooperate with the City at all times in the enactment and enforcement of any necessary environmental, health or other emergency laws, rules and regulations, that may be considered by the City and County as necessary to ensure the safe and effective operation of both the County sewer system and the City sewer system.

It is understood that the City will provide the County with at least seven (7) days advance notice, if possible, of any non-emergency restrictions to the discharge of sewage or wastewater into the City System. The City further agrees to make all reasonable efforts to assist the County in providing alternate connection points or disposal methods in case of interruptions of sewer service due to alterations, extensions, connections or non-emergency repairs in the City System.

10.4 Obligation to Pay/Stranded Cost

In the event this Agreement is not continued or not renewed, the County agrees that such termination shall not effect the County's obligation to pay for services received including obligated debt service incurred during the term of this Agreement pursuant to the provisions of this Agreement.

10.5 Transferability

This Agreement shall not be construed as creating any rights to any parties other than the City and the County for itself and the Districts. This Agreement shall not be assigned or transferred by either party without the written consent of the other party.

10.6 Notice

Any notice under this Agreement shall be in writing and either hand delivered or mailed via certified mail return receipt requested. Notice shall be deemed to have been duly given when mailed to the parties at the address set forth below, or at such other address as either party may designate from time to time by notice hereunder, or adequately delivered.

PARTY	ADDRESS
City of Canandaigua	City Manager City Hall 2 North Main Street Canandaigua, NY 14424
County of Ontario	County Administrator 20 Ontario Street Canandaigua, NY 14424

10.7 Dispute Resolution

Disputes as to the interpretation of this agreement shall be resolved in the following manner:

A. **Meeting** - The County Administrator and City Manager shall meet to attempt to resolve the issue.

10.8 Disputes

Any dispute arising under the terms of this Agreement shall be subject to review by a Court of competent jurisdiction, with the exception as specified in Section 10.7.

10.9. Execution of Agreement

This agreement shall be binding and inure to the benefit of the successors and assigns of the parties hereto. This agreement contains the entire agreement of the parties except as the same may be amended, modified, changed or extended from time to time by supplemental agreement in writing, authorized and executed by the parties in the same manner as this agreement. This agreement shall not be effective unless signed by all the parties listed below.

10.10. Defense and Indemnification

A. Indemnity:

In addition to, and not in limitation of the insurance requirements referred to below, the Parties agree to the fullest extent of the law:

(1) that except for the amount, if any, of damage contributed to, caused by or resulting from the negligence of the County, the City shall indemnify and hold harmless the County, its officers, employees and agents from and against any and all liability, damage, claims, demands, costs, judgments, fees, attorneys' fees or loss arising directly or indirectly out of the negligent acts or omissions hereunder by the City or third parties under the direction or control of the City; and

(2) to provide defense for and defend, at the City's sole expense, any and all claims, demands or causes of action directly or indirectly arising out of the acts or omissions referred to in paragraph (1) and to bear all other costs and expenses related thereto; and

(3) that except for the amount, if any, of damage contributed to, caused by or resulting from the negligence of the City, the County shall indemnify and hold harmless the City, its officers, employees and agents from and against any and all liability, damage, claims, demands, costs, judgments, fees, attorneys' fees or loss arising directly or indirectly out of the negligent acts or omissions hereunder by the County or third parties under the direction or control of the County; and

(4) to provide defense for and defend, at the County's sole expense, any and all claims, demands or causes of action directly or indirectly arising out of the acts or omissions referred to in paragraph (3) and to bear all other costs and expenses related thereto;

B. Insurance Requirements:

(1) The City will continue in full force and effect its general liability coverage of $1,000,000 and $10,000,000 of excess liability insurance. The County shall be named as an additional insured on the City's policy; and

(2) The County is self insured to an equivalent limit of liability of $10,000,000 and, in addition, maintains excess liability insurance.

IN WITNESS WHEREOF, the parties hereunto have set their hands and seal the day and year first above written.

I. CITY OF CANANDAIGUA

by: Kay W. James
Kay W. James, City Manager

II. COUNTY OF ONTARIO FOR ITSELF AND ACTING ON BEHALF OF THE CANANDAIGUA LAKE COUNTY SEWER DISTRICT

by: Geoffrey C. Astles
Geoffrey C. Astles, County Administrator

Approved as to form and manner of execution:
Andrea J. Schoeneman
Assistant County Attorney

MUNICIPAL ACKNOWLEDGMENT

STATE OF NEW YORK)
:ss.:
COUNTY OF ONTARIO)

On the 24th day of June, in the year 2009 before me personally appeared KAY W. JAMES, known to me to be the person who executed the within instrument, who being duly sworn by me did depose and say that she resides at 2530 State Rt. 21 in the Town of Canandaigua, County of Ontario, State of New York; that she is City Manager of the City of Canandaigua, the Municipality described in said instrument; that, by authority of the Legislative Body of said Municipality, she is authorized to execute the foregoing instrument on behalf of the Municipality for the purposes set forth therein; and that, pursuant to that authority, she executed the foregoing instrument in the name of and on behalf of said Municipality, as the act and deed of said Municipality.

Carol A. Jensen
Notary Public

CAROL A. JENSEN
Notary Public, State of New York
Ontario County #35-4524183
Commission Expires Aug 31, 2010

Notary Public

MUNICIPAL ACKNOWLEDGMENT

STATE OF NEW YORK)
:ss.:
COUNTY OF ONTARIO)

On the 29th day of June, in the year 2009 before me personally appeared Geoffrey C. Astles, known to me to be the person who executed the within instrument, who being duly sworn by me did depose and say that he resides at Birchwood Dr in the Town of Farmington, County of Ontario, State of New York; that he is the County Administrator of Ontario County, the Municipality described in said instrument; that, by authority of the Legislative Body of said Municipality, he is authorized to execute the foregoing instrument on behalf of the Municipality for the purposes set forth therein; and that, pursuant to that authority, he executed the foregoing instrument in the name of and on behalf of said Municipality, as the act and deed of said Municipality.

Lisa C Phillips
Notary Public

LISA C PHILLIPS
Notary Public, State of New York
Ontario County No. 4776479
Commission Expires July 31 2010

ATTACHMENT A

COUNTY OF ONTARIO RESOLUTION

ATTACHMENT B

CITY OF CANANDAIGUA RESOLUTION

ATTACHMENT C

COUNTY OF ONTARIO
METERED CONNECTIONS TO CITY SYSTEM

ADDRESS

West Lake Road

East Lake Road

Fallbrook

North Street

North Road

Route 21 South (West Street)

Amber Meadows

Villas at Canandaigua

ATTACHMENT D
COUNTY OF ONTARIO CUSTOMERS
CONNECTED DIRECTLY TO CITY SYSTEM

	ADDRESS	TAX MAP #
1.	Newark Day Care 3220 Middle Cheshire Road Canandaigua, NY 14424	97.02-2-1.000
2.	Country Club 3280 Fallbrook Park Canandaigua, NY 14424	98.00-1-39.111
3.	Super 8 Motel 4450 Eastern Boulevard Canandaigua, NY 14424	84.00-1-41.210

ATTACHMENT E

SEWER RATE COST BASIS
BILLED QUARTERLY BY THE CITY

Wastewater Treatment Facility Costs (County Cost is determined based on percentage of County flow to total of City and County flow)

Description	Adjustments
Personnel Services	100%
Equipment and Supplies	100%
Contractual Services	100%
Fringe Benefits (NYS Retirement, unemployment insurance, medical and dental insurance, benefits administration, unused sick leave)	% of payroll*
Undistributed Costs - Other Expenses (insurance, audit, miscellaneous expenses)	% of budget**

* % of pay roll = WWTF payroll / sewer fund payroll
** % of budget = WWTF budget / sewer fund operating budget

Collection System Costs (County cost is determined to be 11.25% of costs listed below)

Description	Adjustments
Personnel Services	100%
Equipment and Supplies (less parts for lift station)	100%
Contractual Services (less gas and electric, for lift stations)	100%
Fringe Benefits (NYS Retirement, unemployment insurance, medical and dental insurance, benefits administration, unused sick leave)	% of payroll*

Description	Adjustments
Undistributed Costs - Other Expenses (insurance, audit, miscellaneous expenses)	% of budget**

* % of payroll = sewer collection / sewer fund payroll
** % of budget = sewer collection / sewer fund operating budget

The portion of the Sewer Maintenance Cost as described above to be included in County Cost is the portion of the total linear footage of sewers maintained by the City Canandaigua that consists of interceptor sewers used by the County Sewer District. In the initial rate calculation this portion is 22.5%. Unless either the County or the City requests a recalculation of this percentage, the 22.5% will be used in future rate calculations. Since the County pays 50% of this proportion, the County shall pay 11.25% of the collection O&M.

Lakeshore Lift Station

The proportion that County flow into the LSLS is to total flow from the LSLS is the County proportion of LSLS O&M costs.

Description	Adjustments
Personnel Services	100%
Equipment and Supplies	100%
Contractual Services	100%
Fringe Benefits (NYS Retirement, unemployment insurance, medical and dental insurance, benefits administration, unused sick leave)	% of payroll*
Undistributed Costs - Other Expenses (insurance, audit, miscellaneous expenses)	% of budget**

* % of pay roll = WWTF or LLS payroll / sewer fund payroll

** % of budget = WWTF or LLS budget / sewer fund operating budget

Capital Expense

1. Debt Portion of County Cost is based on the annual payment (principal & interest) shown in the Amortization Table for each debt issue.
2. Cash Capital portion of County Cost.
3. Contribution to reserve portion of County Cost.

Total Flow

The plant flow used in the calculation will be the total flow discharged from the City of Canandaigua Waste Water Treatment Plant for the period. The flow will be as measured by the City effluent flow meter, calibrated in accordance with the Agreement.

RATE CALCULATION

1. Treatment Plant:	Total of expenses X County flow/Plant flow
2. Collection System:	Total of expenses X 11.25 %
3. Lakeshore Lift Station	Total of expenses X 66.7% or meter read (if available).
4. Capital Expense:	Allowable Plant Capital Expense X 41% of project costs or as provided in Section 7 Allowable Lift Station Capital Expense X 54.5 % of project costs or as provided in Section 9 Allowable Collection Capital Expense X 50% of project costs or as provided in Section 8
5. Administrative Overhead:	0.09 X [(1. Treatment Plant) + (2. Collection System) + (3. Lakeshore Lift Station)]
COUNTY BILL =	[(1. Treatment Plant) + (2. Collection System) + (3. Lakeshore Lift Station) + (4. Capital Expense) + (5. Administrative Overhead)]

ATTACHMENT F

CITY OF CANANDAIGUA AND ONTARIO COUNTY
WASTEWATER TREATMENT FACILITY CAPACITY

Characteristics	City Total	County Total	City & County Total
Flow – MGD	4.0	2.5	6.5
BOD5 – lbs/day	4,000	4,300	8,300
Suspended Solids Lbs/day	7,130	5,000	12,130
Ammonia Nitrogen-Lbs/day (NH3-N)	700	510	1,210
Phosphates – lbs/day (PO4-P)	160	110	270

CITY OF CANANDAIGUA AND ONTARIO COUNTY
LAKE SHORE LIFT STATION CAPACITY

Characteristics	City Total	County Total	City & County Total
Average Flow (1990 design year)	0.59 MGD	0.706 MGD [1]	1.296 MGD
Max Flow (1990 design year)	1.24 MGD	2.47 MGD[2]	3.71 MGD
Max Flow (2008 Actual Capacity)	0.99 MGD	1.17 MGD	2.16 MGD[3]

A. 1973 City-County Sewerage Agreement, treatment plant reserved 2.3 MGD for City, 1.6 MGD for County

B. Per Amendment B (1979) 4.0 MGD reserved for City, 2.5 MGD Reserved for County

C. Per Amendment B, during 1979 and beyond County shall pay City 41% of treatment plant debt service and 54% of the interceptor sewer and pump station debt service

---

[1] Amendment B, pump station capacity reserved for County (Design Year 1990) Avg. Daily Flow 0.706 MGD, Peak Flow 2.47 MGD

[2] Average Daily Flow x 3.5

[3] Estimated Pumping Capacity of Lakeshore Lift Station

ATTACHMENT G

CITY OF CANANDAIGUA INTERCEPTOR CAPACITY

Interceptors
Reserve Capacity for Ontario County

Point A – West Lake Road		
Average Daily Flow	1.10 MGD	(Design Year 2020) [4]
Peak Flow	3.30 MGD	(Avg. x 3.0)
Point C – West Street		
Average Daily Flow	0.065 MGD*	
Peak Flow	0.260 MGD*	(Avg. x 4.0)
Point F – North Street		
Average Daily Flow	0.468 MGD	(Design Year 2020)
Peak Flow	1.87 MGD	(Avg. x 4.0)
Point J – East Lake Road		
Average Daily Flow	0.965 MGD	(Design Year 2020)
Peak Flow	3.38 MGD	(Avg. x 3.5)

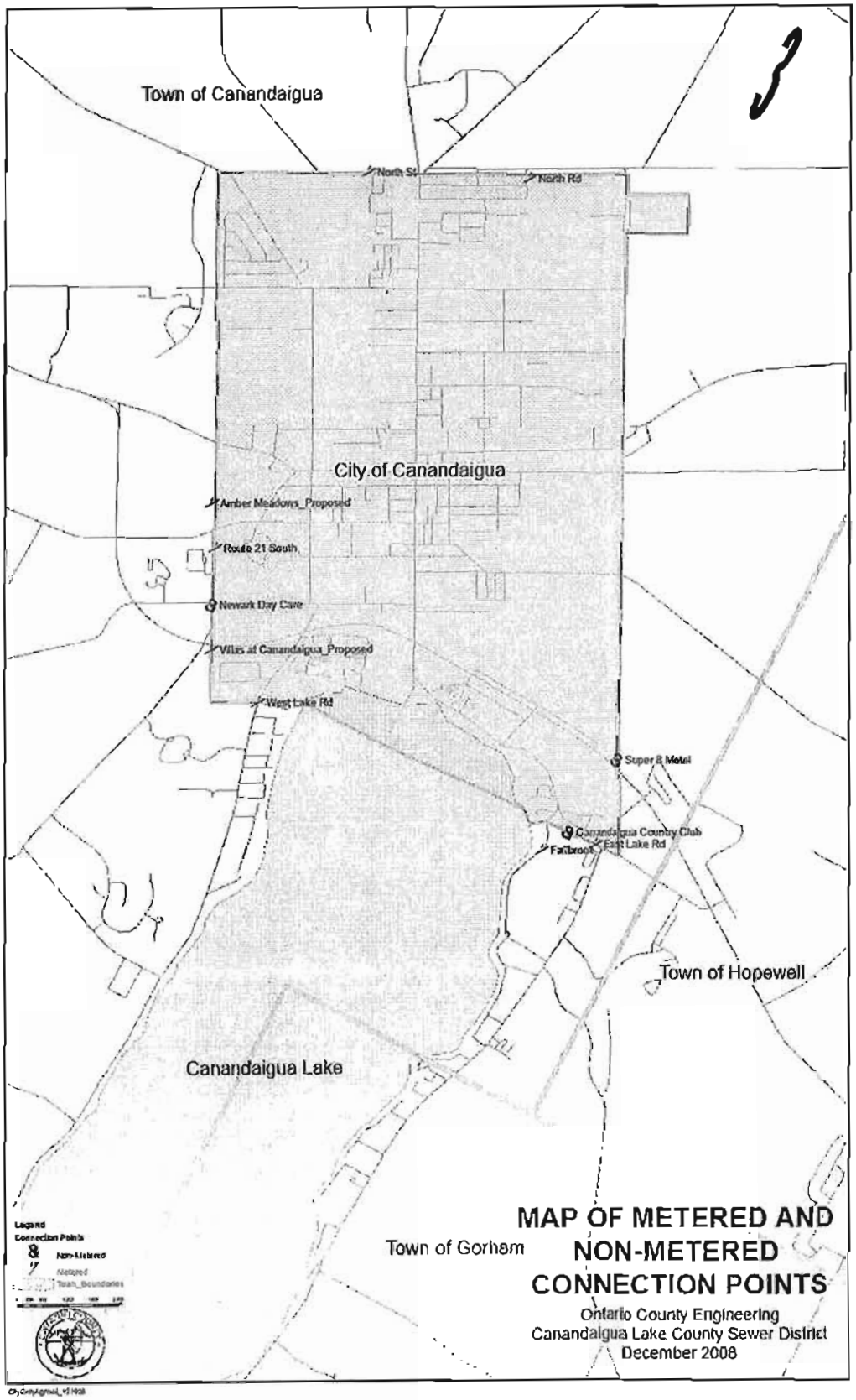
Existing Sewers
Reserve Capacity for Ontario County

Ontario Street		
Average Daily Flow	0.176 MGD†	
Peak Flow	0.704 MGD†	(Avg. x 4.0)
Parrish Street		
Average Daily Flow	0.020 MGD*	
Peak Flow	0.080 MGD*	(Avg. x 4.0)
Amber Meadows		
Average Daily Flow	0.012 MGD‡	
Peak Flow	0.048 MGD‡	(Avg. x 4.0)
North Road		
Average Daily Flow	0.044 MGD*	
Peak Flow	0.176 MGD*	(Avg. x 4.0)

[4] Amendment B to City-County Sewage Agreement, Schedule B-1, February 1979
* Ontario County Sewer Study - North Road/ West Street/ Parrish Street Extension, February 2008
† Feasibility Study for NYS Rte. 21/Grandview Park/County Rds. 4 & 22 Sewer Extension, MRB Group, Oct. 2006
‡ Extrapolated from Subdivision Plan for Amber Meadows, 35 county units @ 265 avg. GPD/unit

ATTACHMENT H

MAP OF METERED CONNECTION POINTS


Town of Canandaigua
North St
North Rd
City of Canandaigua
Amber Meadows_Proposed
Route 21 South
Newark Day Care
Villas at Canandaigua_Proposed
West Lake Rd
Super 8 Motel
Canandaigua Country Club
East Lake Rd
Fairbrook
Town of Hopewell
Canandaigua Lake
Town of Gorham
Legend
Connection Points
Non-Metered
Metered
Town_Boundaries
MAP OF METERED AND NON-METERED CONNECTION POINTS
Ontario County Engineering
Canandaigua Lake County Sewer District
December 2008

ATTACHMENT I

INTERJURISDICTIONAL PRETREATMENT AGREEMENT
Between
City OF CANANDAIGUA
And
County OF ONTARIO
September 3, 1985

INTER JURISDICTION AL PRETREATMENT AGREEMENT

Between CITY OF

CANANDAIGUA

and COUNTY OF

ONTARIO

THIS AGREEMENT is entered into this 3rd day of September 1985,

between the CITY OF CANANDAIGUA (hereinafter referred to as "CITY"), a municipal corporation with its principal place of business at City Hall, 2 North Main Street, Canandaigua, New York 14424 and the COUNTY OF ONTARIO (hereinafter referred to as "COUNTY"), a municipal corporation under the laws of the State of New York and which owns and operates the Canandaigua Lake County Sewer District, with its principal offices located at the Ontario County Court House, Canandaigua, New York 14424.

RECITALS

WHEREAS, the CITY owns and operates a wastewater treatment system; and,

WHEREAS, the COUNTY currently utilizes this wastewater treatment system pursuant to an Agreement between the CITY and the COUNTY, dated the 1st day of December, 1973, as amended by Amendments A through F; and,

WHEREAS, the objective of this agreement is to protect the wastewater system and the wastewater treatment plant from prohibited or unmanageable industrial waste[1], to agree on procedures for identifying potential industrial wastewater streams, to agree

1. Industrial waste means any discarded matter, including liquid, gaseous or solid substance or a combination thereof, resulting from any process of industry, manufacturing, trade or business, or from the development or recovery of any natural resources, except garbage.

on a procedure for review of proposed new industrial wastewater connections, and to refuse to accept prohibited or unmanageable industrial wastes; and

WHEREAS, the CITY must develop and implement an industrial pretreatment program pursuant to conditions contained in its discharge permit (Permit. #NY0025963) issued by the New York State Department of Environmental Conservation; and,

WHEREAS, the COUNTY desires to continue to utilize the wastewater treatment system and recognizes its industrial waste control obligations under 40 CFR 403;

NOW, in consideration of the mutual terms and conditions contained herein, the CITY and the COUNTY hereby agree that:

1. INDUSTRIAL USERS: The COUNTY shall certify and document the existence of industrial users, if any, as defined by Sections 307(b), (c), or (d) of the Federal Water Pollution Control Act, as amended, connected to the COUNTY'S sewer system. The COUNTY shall certify that there are no significant industrial users (as defined by applicable law) connected to the COUNTY'S sewer system. This certification and documentation shall be based upon an industrial waste survey performed according to procedures established by the CITY and the COUNTY.

2. PROSPECTIVE INDUSTRIAL USERS: The COUNTY shall designate an appropriate official or employee to review, on a quarterly basis, all pertinent records (e.g., connection permits, business licenses, water use records, etc.), to determine whether an industrial user will be locating within the COUNTY'S service area. If a prospective industrial user is identified, the COUNTY shall report this fact to the CITY, along with information concerning the requested wastewater connection and details on contents of the proposed wastewater stream from the industrial user. The COUNTY shall provide the CITY with access to all reasonable records for independent

verification of both COUNTY review procedures and records including, but not limited to, industrial monitoring reports, records of violations, and other relevant information.

3. ENTRY AND INSPECTION: Any authorized officer or employee of the CITY designated by the CITY, together with a representative from the COUNTY, may enter and inspect, sample, and monitor any part of the sewer system of the COUNTY, or any of its districts which are served by the CITY. The right of entry and inspection, sampling, and monitoring shall extend to public streets, easements, and property within which the system is located. The CITY agrees to provide COUNTY with a detailed accounting of sampling expenses prior to their assessment against the COUNTY. Any reasonable expenses incurred by the CITY in performing any of these functions may be assessed upon the COUNTY.

4. INDEMNIFICATION: The COUNTY shall hold harmless and indemnify the CITY against any and all damages, fines and costs incurred by the CITY as a result of industrial waste discharges originated in COUNTY, outside of the CITY. The CITY shall promptly notify the COUNTY of any potential damages, fines, or costs, and allow the COUNTY to participate with and assist the CITY in any proceeding relative to any such costs, to the extent that the CITY legally can do so. If only the CITY or the COUNTY can be a party in any such proceeding, CITY shall be the party.

5. COUNTY ORDINANCE: The COUNTY shall adopt and enforce a sewer use ordinance which is equivalent to the sewer use ordinance adopted by the CITY and which contains the prohibited discharge standards and the National Categorical Standards contained in the Federal Pretreatment Regulations; in the event of any conflict between the ordinance or other standards hereinabove referred to, the more stringent standard shall apply and be enforced.

6. MONITORING EQUIPMENT: The COUNTY shall install, at COUNTY expense, appropriate metering and monitoring equipment at all points where COUNTY connects to the CITY system. All expenses incurred by COUNTY, which shall maintain and operate this equipment, shall be the responsibility of the COUNTY.

7. AUTHORIZATION PROCEDURES: For all industries within the COUNTY and outside the CITY, the COUNTY shall not authorize any new industrial user to connect to, nor allow any new or additional industrial waste discharge from existing industrial users into any sewer line, pipe or other conveyance which carries wastewater to the CITY treatment plant, without obtaining CITY's prior written approval. The COUNTY shall review with the CITY the contents of the proposed new connection or new or additional discharge. The CITY shall, within 30 days of receipt of a written approval request from the COUNTY for a proposed new connection or new or additional discharge provide written approval of the request, or provide a written explanation for withholding or refusing approval. The CITY shall not unreasonably withhold or refuse approval. This time limit may be extended by mutual consent. Failure to obtain CITY's approval prior to connection may result in disconnection of the industrial user at the sole discretion of the CITY. This paragraph shall not apply to existing discharges from existing industrial users, which shall be dealt with pursuant to paragraph 9.

8. ADMINISTRATIVE RESPONSIBILITIES: After the CITY has given its approval for any industrial user within the COUNTY'S jurisdiction to connect, the . COUNTY shall not authorize the industrial user to commence discharges until provision has been, made between the CITY and the COUNTY to oversee the industrial user's compliance with all applicable Federal, state and local pretreatment requirements. This shall be accomplished by renegotiation of this Agreement to establish and designate administrative responsibilities between the COUNTY and CITY for all pretreatment

legal and programmatic functions required by 40 CFR 403. The CITY and COUNTY may develop a schedule of activities to be undertaken by the COUNTY to develop its own pretreatment program.

9. . NEW AND EXISTING USERS: The COUNTY shall have primary responsibility for the enforcement of its ordinance and the standards incorporated therein, provided, however, that the CITY shall be entitled to seek injunctive relief against any industrial user of the COUNTY'S sewer system if such user's discharge reasonably appears to present an imminent danger to the health or welfare of persons, or the environment, or if a discharge threatens to interfere with the operations of the wastewater treatment system, violates Federal or State Law, or violates the CITY's SPDES permit.

10. To the extent that any of the terms of this agreement violate any State or Federal statutes, rules, or regulations, or jeopardize state or federal funding, the parties agree to immediately renegotiate any such terms.

THE CITY OF CANANDAIGUA

Date:

By: _____
Carl F. Luft, City Manager

ATTEST:

THE COUNTY OF ONTARIO

Date:

By: _____
/John T. Hicks,
County Administrator

ATTEST

: <n
8/21/85

RESOLUTION 2009-037

A RESOLUTION AUTHORIZING THE CITY MANAGER TO EXECUTE AN INTER-MUNICIPAL COOPERATION AGREEMENT WITH ONTARIO COUNTY FOR THE CONVEYANCE AND TREATMENT OF SEWAGE AND WASTEWATER FOR THE COUNTY SEWER DISTRICTS

WHEREAS, the City of Canandaigua and Ontario County have previously contracted with each other for the provision of sewage treatment and other sanitary sewer services by the City to the County, which contract expired on December 31, 2003; and

WHEREAS, and the City and the County now wish to enter into a new agreement for the treatment and conveyance of sewage and wastewater; and

WHEREAS, the City owns and operates a Wastewater Treatment Facility and the County has reserve capacity in the Wastewater Treatment Facility; and

WHEREAS, the City has interceptor sewers in which the County has a reserve capacity; and

WHEREAS, the City has other sewers which are or could be used by the County; and

WHEREAS, the parties desire to enter into an Agreement for the conveyance and treatment of sewage and wastewater for the County sewer districts pursuant to Article 5(d) of the New York General Municipal Law and other applicable statutes regarding authorization for performance by municipalities or districts of their functions, powers or duties on a cooperative or contract basis, including but not limited to, the treatment of sewage and wastewater; and

WHEREAS, the County Board of Supervisors has or shall duly enact, prior to execution of the Agreement, a resolution passed by a majority vote of its members. authorizing its County Administrator to enter into this contract with the City.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Canandaigua that the Manager is authorized to execute an Inter-municipal Cooperation Agreement with Ontario County for a term of forty years, expiring on December 31, 2044 with an option for a 10-year renewal. All fees to the City from the County, including those for administration, operation and maintenance, and capital improvements shall be according to formulas set forth in the agreement based on percent of usage.

AND, BE IT FURTHER RESOLVED that the City shall create and manage a Shared Capital Reserve Fund for the City and the County to be used for improvements at the Treatment Facility, Lakeshore Drive Lift Station, and on the Sewer Collection System.

Adopted this 2nd day of April, 2009.

ATTEST:

Carol A. Jensen, Deputy
Nancy C. Abdallah
City Clerk/Treasurer

State of New York, County of Ontario, City of Canandaigua ss.

I Do Hereby Certify that I have compared the preceding with the original thereof, on file and on record in my office, and that the same is a correct copy and transcript therefrom and of the whole said original.

JUN 24 2009

Given under my hand and the official seal of said City, at Canandaigua, N.Y. in said County, this day.

Nancy C. Abdallah
City Clerk

APPENDIX F

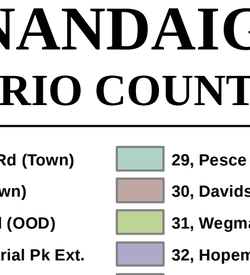
COUNTY SEWER DISTRICT MAP

UNOFFICIAL SANITARY SEWER DISTRICTS MAP

TOWN OF CANANDAIGUA

ONTARIO COUNTY, NY

- Purdy-Mobile Rd (Town)
- Stablegate (Town)
- 5, Candlewood (OOD)
- 6, N. St. Industrial Pk Ext.
- 7, G4 Dist (part of)
- 8, G1 Area 3
- 9, K&F/West St. Ext.
- 10, Quail Ridge Ext.
- 11, G1 Area 2
- 12, MCR/Johnson Ext.
- 13, Ferris Hills Ext.
- 14, G4 Dist.
- 15, North St - Purdy Ext.
- 16, Parkside Dr. (OOD)
- 17, G1 Area 4
- 18, Tenneco/Pactiv Ext.
- 19, Parkside Park Ext.
- 20, Centerpointe Ext.
- 23, Oakcrest Sect 1 Ext.
- 24, Sagamore Hills(OOD)
- 25, Oakcrest Sect 2 (OOD)
- 26, Timberline Ext.
- 27, Waterford Estates Ext.
- 28, Laura Ln Wyffels Rd Ext.
- 29, Pesce (OOD)
- 30, Davidson Landing (OOD)
- 31, Wegmans (OOD)
- 32, Hopeman (OOD)
- 33, Fostoria Ext.
- 34, Calderone Ext.
- 35, Foster Rd. - Higgins Ext.
- 36, Tichenor - Lakeside Ext.
- 37, West Lake Hills (OOD)
- 38, Landings Ext.
- 39, G1 Area 1
- 40, Fox Ridge Ext.
- 43, G1 Area 5
- 45, Lakewood Meadows W Ext.
- 46, Lakewood Meadows E Ext.
- 47, Airport Rd.Ext.
- 48, Amber Meadows Ext.
- 49, W Lake Marina Ext (Prop)
- 50, Lakewood Meadows S Ext(P)
- 52, Le Subdivision Ext.
- 53, Lakeside Estates Ext.
- 54, Villas @ Can. Ext.
- 55, Canandaigua Hotel Ext.
- 56, Super 8 Hotel Ext.



2,000 0 2,000 4,000 6,000 8,000

1"=2000' When Printed @ 24" x 36"

Date: February 2014
Project No.: 030180

Drawn By: DSA
Checked By: GJH

Mapping Prepared By:

MRBgroup

Engineering, Architecture, Surveying, P.C.

CANANDAIGUA LAKE COUNTY SEWER DISTRICT INFORMATION PROVIDED BY ONTARIO COUNTY PLANNING DEPARTMENT

APPENDIX G

TOWN CODE SEWER "ENVISIONMENT" MAP

Future Sewer

City of Canandaigua

Legend

- Town Boundary
- 4 to 8 Inch Sewer
- 10 Inch or Larger Sewer
- Forcemain
- Wastewater Treatment Plant
- Pump Station
- Padelford Brook Greenway Area

Zoning - Envisionment For Sanitary Sewers

- No Sewers Envisioned - (AR-1, AR-2, RR-3)
- Sewer Envisionment Undefined - (CC, LI, MH, NC, R-1-30, RLD)
- Sewers Envisioned - (I, IZ, MR, MR-281, MUD, MUD-1-1, PUD, R-1-20, R-1-20_278, R-1-20_281, R-1-30_278, RB-1, RLD-1, SCR-1)

MRB | group

Engineering, Architecture, Surveying, P.C.
145 Culver Road, Suite 160, Rochester, New York 14620 585-381-9250 FAX 585-381-1008
www.mrbgroup.com

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SCALE:	1" = 2,000'		6 of 6
DATE:	FEB 2016		**PROJECT NO.**
			0300.15001

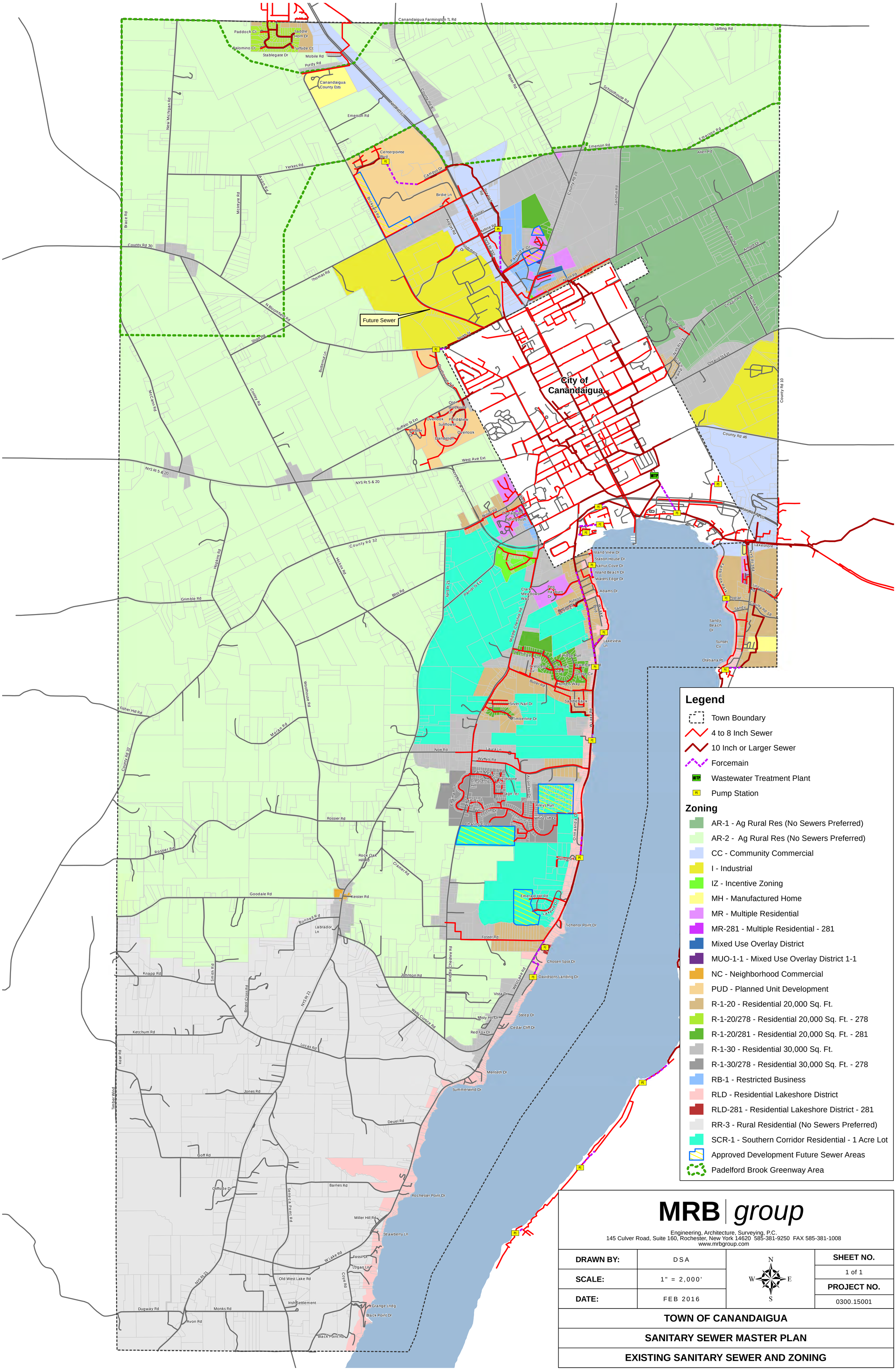
TOWN OF CANANDAIGUA

SANITARY SEWER MASTER PLAN

SANITARY SEWERS ENVISIONED BY ZONING

APPENDIX H

SEWER SYSTEM/ZONING OVERLAY MAP



Legend

- Town Boundary
- 4 to 8 Inch Sewer
- 10 Inch or Larger Sewer
- Forcemain
- Wastewater Treatment Plant
- Pump Station

Zoning

- AR-1 - Ag Rural Res (No Sewers Preferred)
- AR-2 - Ag Rural Res (No Sewers Preferred)
- CC - Community Commercial
- I - Industrial
- IZ - Incentive Zoning
- MH - Manufactured Home
- MR - Multiple Residential
- MR-281 - Multiple Residential - 281
- Mixed Use Overlay District
- MUO-1-1 - Mixed Use Overlay District 1-1
- NC - Neighborhood Commercial
- PUD - Planned Unit Development
- R-1-20 - Residential 20,000 Sq. Ft.
- R-1-20/278 - Residential 20,000 Sq. Ft. - 278
- R-1-20/281 - Residential 20,000 Sq. Ft. - 281
- R-1-30 - Residential 30,000 Sq. Ft.
- R-1-30/278 - Residential 30,000 Sq. Ft. - 278
- RB-1 - Restricted Business
- RLD - Residential Lakeshore District
- RLD-281 - Residential Lakeshore District - 281
- RR-3 - Rural Residential (No Sewers Preferred)
- SCR-1 - Southern Corridor Residential - 1 Acre Lot
- Approved Development Future Sewer Areas
- Padelford Brook Greenway Area

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			1 of 1
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DATE:	FEB 2016		0300.15001

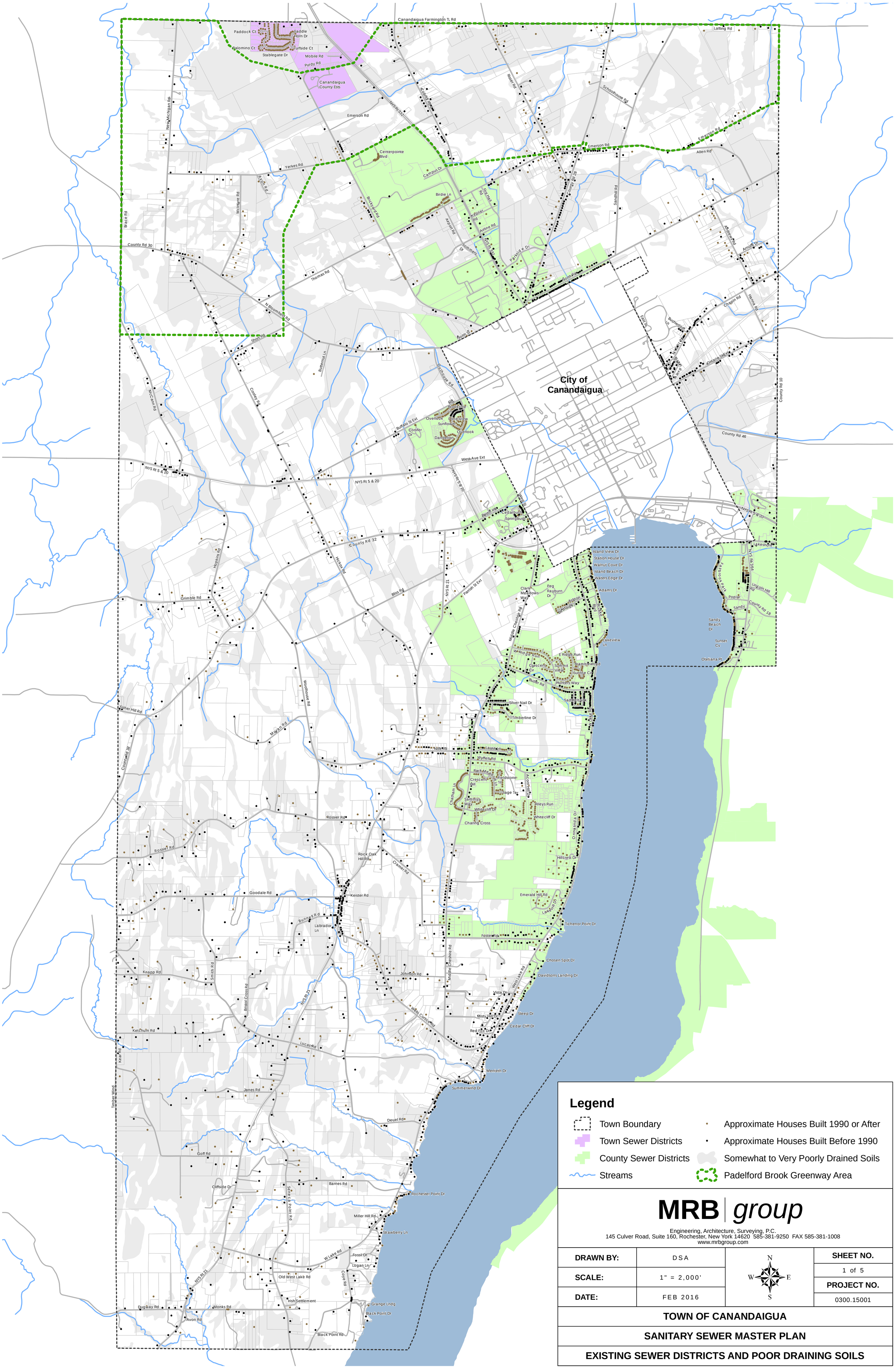
TOWN OF CANANDAIGUA

SANITARY SEWER MASTER PLAN

EXISTING SANITARY SEWER AND ZONING

APPENDIX I

SEWER NEED INDICATORS OVERLAY MAP



Legend

- Town Boundary
- Town Sewer Districts
- County Sewer Districts
- Streams
- Approximate Houses Built 1990 or After
- Approximate Houses Built Before 1990
- Somewhat to Very Poorly Drained Soils
- Padelford Brook Greenway Area

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DATE:	FEB 2016		0300.15001

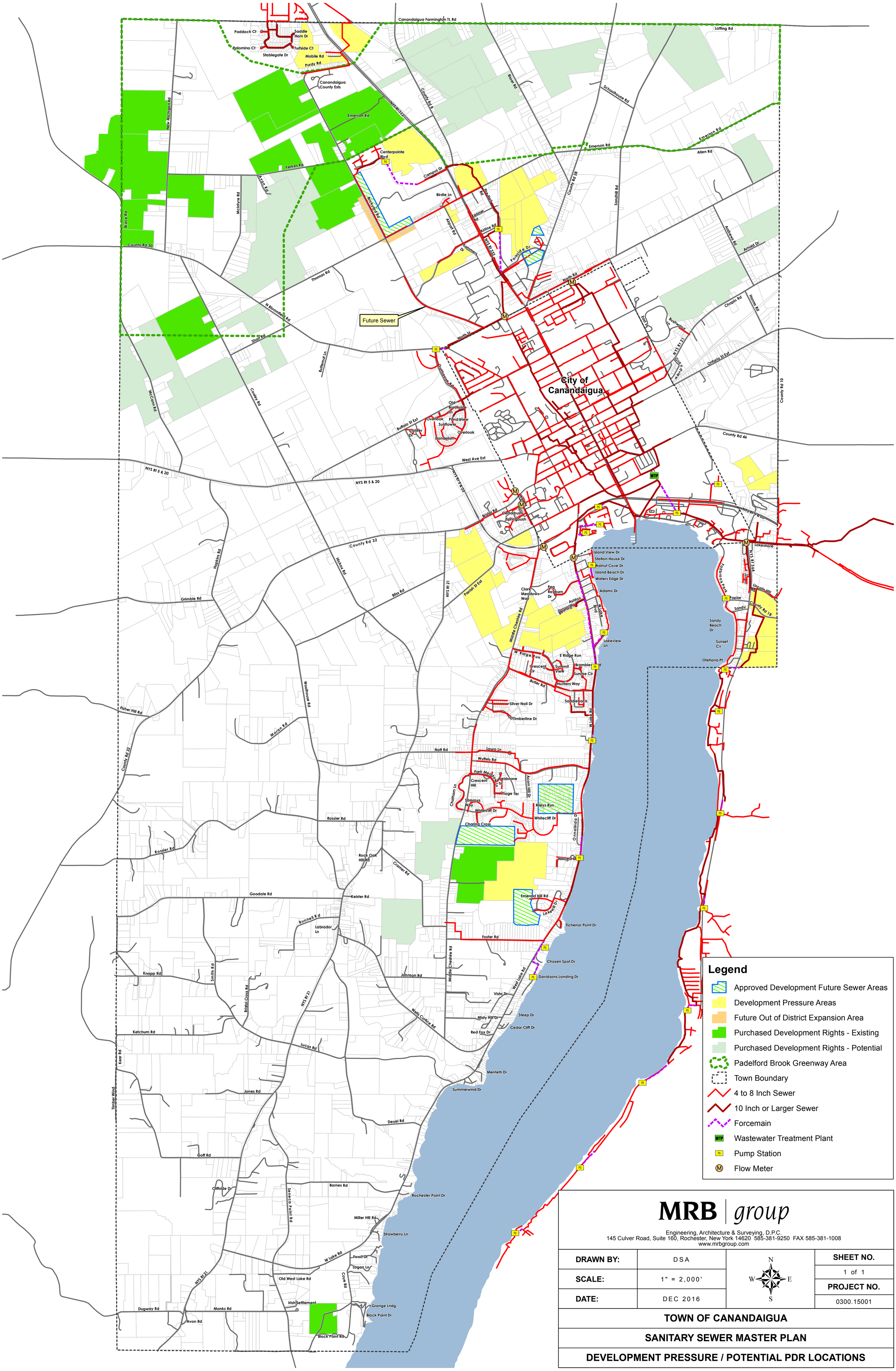
TOWN OF CANANDAIGUA

SANITARY SEWER MASTER PLAN

EXISTING SEWER DISTRICTS AND POOR DRAINING SOILS

APPENDIX J

PDR INTEREST vs. DEVELOPMENT PRESSURE OVERLAY MAP



Legend

- Approved Development Future Sewer Areas
- Development Pressure Areas
- Future Out of District Expansion Area
- Purchased Development Rights - Existing
- Purchased Development Rights - Potential
- Padelford Brook Greenway Area
- Town Boundary
- 4 to 8 Inch Sewer
- 10 Inch or Larger Sewer
- Forcemain
- WTP — Wastewater Treatment Plant
- PS — Pump Station
- M — Flow Meter

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			1 of 1
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DATE:	DEC 2016		0300.15001

TOWN OF CANANDAIGUA

SANITARY SEWER MASTER PLAN

DEVELOPMENT PRESSURE / POTENTIAL PDR LOCATIONS

APPENDIX K

DRAFT ONSITE WASTEWATER TREATMENT LOCAL LAW

January 27, 2016 Version

DRAFT MODEL ON-SITE WASTEWATER TREATMENT LAW

CHAPTER ___

TOWN OF _____

ARTICLE 1 – INTRODUCTORY PROVISIONS

ARTICLE 2 – DEFINITIONS

ARTICLE 3 – GENERAL REGULATIONS AND REQUIREMENTS

ARTICLE 4 – REQUIREMENTS FOR NEW AND EXISTING ON-SITE WASTEWATER TREATMENT SYSTEM INSPECTIONS

ARTICLE 5 – ON-SITE WASTEWATER TREATEMENT SYSTEM PERMITTING PROCEDURES

ARTICLE 6 – COMPLIANCE AND REPORTING

ARTICLE 7 – COMPLAINTS

ARTICLE 1 – INTRODUCTORY PROVISIONS

1.1 Title

1. This local law shall be known as the "On-Site Individual Wastewater Treatment System Law of the Town of_____".

1.2 Applicability

1. This local law shall govern the treatment of sewage by regulating all on-site individual wastewater treatment systems (hereinafter referred to as an on-site wastewater treatment system).

1.3 Purpose

1. The purpose of these regulations is to preserve and protect public health and the quality of surface and groundwater in the Town of _____ by mandating the adequate performance of on-site wastewater treatment systems to prevent health hazards and adverse impacts to the environment. Specifically, this law will ensure wastes disposed of by on-site wastewater treatment systems:
    a. Do not pollute or contaminate any surface or groundwater source utilized for domestic drinking water supply or recreational purposes
    b. Are not accessible to any carriers of disease
    c. Do not give rise to a nuisance due to odor or unsightly appearance
    d. Are not a source of nutrient pollution and do not contribute to excessive aquatic weed growth or harmful algal blooms

1.4 Authority

1. Enactment of this local law is pursuant to *Article 2 of Municipal Home Rule Law, and Article 3 of the Public Health Law.*

ARTICLE 2 – DEFINITIONS

2.1 Words and Terms

1. In addition to the definitions contained in the *New York State Public Health Law and Uniform Fire Prevention and Building Code*, which are incorporated herein by reference, the following words and terms shall be defined as follows:

ADEQUATELY FUNCTIONING - shall mean an on-site wastewater treatment system that meets the design criteria specified in Article 3 of this local law and shows no evidence of failure.

AUTHORITY HAVING JURISDICTION - shall be the Code Enforcement Officer, Health Officer, or other official(s) designated by the Town of _____or other regulatory agency, having the responsibility to implement the provisions of this local law. Within the Canandaigua Lake Watershed, the authority having jurisdiction shall also include the Canandaigua Lake Watershed Inspector, who is designated by the Canandaigua Lake Watershed Commission and who shall have the joint responsibility to implement the provisions of this local law. The Canandaigua Lake Watershed Inspector will work in partnership with the Town of _____. Final determinations and enforcement authority of this law shall reside with the Town of _____.

BEDROOM– For the purpose of determining the size of an individual on-site wastewater treatment system, "bedroom" shall mean a room with certain features characteristic of bedrooms, generally which include, but not limited to the following:

1. Reasonable access to a full bathroom on the same floor (or within a half floor if the house is a split level); or,

2. Adequate means to close off the room for privacy; and / or,
3. A minimum of seventy (70)-square feet in size.

CANANDAIGUA LAKE – shall mean the location where the mean high water level of Canandaigua Lake of 689.40 feet above sea level intersects the adjoining parcel.

CERTIFIED INSPECTOR – shall include a certified OTN Inspector, or licensed Professional Engineer.

CHANGE OF USE - shall mean a use of land with an associated building and on-site wastewater treatment system that is modified so as to likely cause an increase in hydraulic loading (e.g. – change from an existing commercial use to residential use; change of an existing residential use to commercial use; change of a commercial use to a different type of commercial use).

CONVEYANCE OF REAL PROPERTY - shall mean the transfer of the title of real estate from one to another, in the form of a deed or other legal instrument, filed in the Office of the Ontario County Clerk.

DESIGN PROFESSIONAL - shall mean a person licensed or registered in the State of New York and authorized by *New York State Education Law to design the systems described in 10NYCRR Appendix 75*-A per NYSDOH Fact Sheet "Need for Licensed Design Professionals – Residential Onsite Wastewater Treatment Systems" dated January 2004.

ENHANCED TREATMENT - the biological and physical treatment of wastewater to reduce the amount of biochemical oxygen demand (BOD) and total suspended solids (TSS) of wastewater effluent prior to distribution to an absorption area.

ENHANCED TREATMENT UNIT - pre-manufactured structures that provide enhanced treatment of wastewater prior to discharge to a subsurface soil absorption area.

FAILURE – A condition existing within an on-site wastewater treatment system which prohibits the system from functioning in a sanitary manner and which results in the discharge of untreated or partially treated wastewater onto ground surface, into surface water, into the groundwater, or which results in failure of building plumbing to discharge properly. Meeting any of the following criteria shall be defined as a failure:

1. Lack of a watertight pre-treatment vessel (i.e. septic or holding tank, aerobic treatment unit etc.) prior to any subsurface treatment / absorption system.
2. There is a discharge of effluent directly or indirectly to the ground surface and ponding, surface outbreaks and saturated soils are frequently or seasonally observed over the absorption area.
3. "Cheater" or direct pipe surface discharge (over an embankment, into a roadside ditch, or stream etc.) to include surface discharge of greywater.
4. A dye test results in the presence of dye on the ground surface.
5. There is a back-up of sewage into the home, building or facility as a result of an overloaded or clogged absorption area.
6. The septic tank requires pumping more than four times per year and/or sewage is observed running back into the septic tank from the absorption area during pumping.

GREY WATER - all wastewater from a house except from flush toilets and urinals.

HOLDING TANK –A water-tight tank that holds raw sewage and untreated effluent without an outflow

LOCAL GOVERNING BODY - shall mean the municipal corporation charged with authority to act as the Local Board of Health as defined by *New York State Public Health Law.*

MINOR ALTERATIONS - shall mean routine maintenance and repairs to the on-site wastewater treatment system, including but not limited to the following: replacement of septic tank covers or baffles, replacement of distribution box covers, replacement of cracked pipes, pumping of the septic tank, and replacement of mechanical pumps and devices. "Minor alterations" shall not include replacement of a septic tank, distribution box, or any addition, alteration or rearrangement of water distribution or drainage piping.

NEW CONSTRUCTION - shall mean any building constructed or placed on an undeveloped site requiring the installation of an on-site wastewater treatment system and currently not utilizing the same, and/or substantial tear down and rebuild of an existing residence such that the work area exceeds 50 percent of the aggregate area of the existing building (level 3 alterations).

ON-SITE WASTEWATER TREATMENT SYSTEM PERMIT - shall mean a written permit issued by the authority having jurisdiction.

ON-SITE WASTEWATER TREATMENT SYSTEM shall mean a complete system of piping, watertight vessels or other facilities for the on-site collection, transport and treatment of sewage.

OTN INSPECTOR – Industry professional who has been trained and has successfully completed the 7.50 hour course for inspecting existing residential on-site wastewater treatment systems and has received a Registration Number from the New York State Onsite Training Network (OTN) indicating such. In the event that the OTN stops registering inspectors, the authority having jurisdiction will work with the Watershed Inspector to administer a training program and publish a list of approved inspectors for the public.

SEWAGE shall mean the combination of human and household waste with water which is discharged to the plumbing system, including the waste from a flush toilet, bath, shower, sink, lavatory, dishwashing or laundry machine, or the water-carried waste from any fixture, equipment or machine.

SUBSTANDARD SYSTEM – On-site wastewater treatment system that does not meet the design criteria specified in Article 3 of this local law but shows no evidence of failure.

ARTICLE 3 – GENERAL REGULATIONS AND REQUIREMENTS

3.1 Prohibitions

1. It shall be unlawful to install, construct, alter, replace, enlarge, extend, or otherwise modify any on-site wastewater treatment system unless an on-site wastewater treatment system permit is issued by the authority having jurisdiction, except as specifically exempted in Section 3.3 of this local law.

2. It shall be unlawful to change the use of real property, convey real property, expand a building or dwelling by one bedroom, or increase the building or dwelling square footage by greater than twenty-five (25) percent of the square footage, or alter a building or dwelling such that the work area exceeds 50 percent of the aggregate area of the existing building without an inspection of the existing on-site wastewater treatment system by a Certified Inspector, pursuant to Article 4 of this local law.

3. On parcels within 200 feet of Canandaigua Lake, it shall be unlawful to use or maintain any on-site wastewater treatment system that is not adequately functioning. For all other systems, it shall be unlawful to use or maintain any on-site wastewater treatment system that is in failure. There shall be no activities or conditions permitted which would interfere with the proper operation of on-site wastewater treatment systems. It is specifically prohibited to construct or place buildings, to install paving, to plant trees or shrubs, or regrade or place fill, to allow crossing by vehicles, to install above ground pools, or to install driveways or parking areas over absorption areas.

4. It shall be unlawful to discharge anything but sewage into an on-site wastewater treatment system. Surface and subsurface water including roof, cellar, foundation and storm drainage shall not be discharged into the on-site wastewater treatment system and shall be disposed of so as to in no way affect the proper functioning of the system.

3.2 Design Standards for New and Existing On-site Wastewater Treatment Systems

1. All on-site wastewater treatment systems shall be designed by a Design Professional. The Design Professional shall have the right to contract with the Ontario County Soil and Water Conservation District through its Uniform Inspection Procedures Program for site and soil appraisals.

2. Individual Household Systems With Design Loads Less Than 1000 Gallons Per Day

    a. Any installation, construction, alteration, replacement, enlargement, extension, repair, or other modifications of an on-site individual household wastewater treatment system with a design load of less than 1000 gallons per day shall be designed and built according to the requirements of this local law and the requirements, as they may from time to time be amended, of the NYSDOH standards for sewage disposal for individual household systems. Those design requirements are found in *Appendix 75-A of Part 75 of Title 10 of the New York Code of Rules and Regulations (10NYCRR)*

3. Intermediate-sized Sewerage Systems

    a. Any installation, construction, alteration, replacement, enlargement, extension, repair or other modification of an intermediate sized sewerage system with design loads equal to or greater than 1000 gallons per day, shall be designed and built according to the requirements of this local law and the requirements, as may be from time to time amended, of the NYSDEC standards for sewage disposal for intermediate-sized sewerage facilities. Those design requirements are found in *NYSDEC manual "New York State Design Standards for Intermediate Sized Wastewater Treatment Systems- March 5, 2014"*

4. Supplemental Design Standards for New and Existing On-site Wastewater Treatment Systems

    a. The minimum design basis allowed is 130 gallons/day/bedroom for all parcels greater than 200 feet from Canandaigua Lake, and 150 gallons/day/bedroom for all parcels located within 200 feet of Canandaigua Lake. The size of the house shall be considered along with the number of bedrooms for design loading purposes, as follows:
        - Minimum design: 2 bedrooms (Appendix 75-A)
        - 2 bedrooms or up to 1200 square feet of heated living space shall be designed as a 2 bedroom design load
        - 3 bedrooms or 1201-2250 square feet of heated living space shall be designed as a 3 bedroom design load
        - 4 bedrooms or 2251-3300 square feet of heated living space shall be designed as a 4 bedroom design load
        - 5 bedrooms or 3301-4050 square feet of heated living space shall be designed as a 5 bedroom design load
        - More than 5 bedrooms or greater than 4050 square feet of heated living space – 110 gpd per additional bedrooms shall be added to the design load
        - Final determination of design loading shall be by the authority having jurisdiction.

3.3 Exemptions

1. Minor alterations to on-site wastewater treatment systems shall not require an on-site wastewater treatment system permit provided such repairs are made to replace existing conditions in need of repair, and are done in a safe and sanitary manner.

2. Replacement of septic tanks and distribution boxes shall require an on-site wastewater treatment system permit but do not need to be designed by a Design Professional provided such repairs are made to replace existing conditions. All alterations to the absorption field shall require an on-site wastewater treatment system permit and a design completed by a Design Professional.

3.4 Substandard Systems

1. Substandard systems on parcels located within 200 feet of Canandaigua Lake.

    a. Substandard systems located on parcels located within 200 feet of Canandaigua Lake shall be brought into compliance with Article 3 of this local law and shall follow the procedures in Article 5.

    b. On parcels with existing substandard onsite wastewater treatment systems that have topographic, physiographic, lot size or other limitations that do not allow for meeting the design standards of Article 3, the authority having jurisdiction shall require the property owner to meet the design standards of Article 3 to the greatest extent possible.

        i. The property owner shall follow the procedures in Article 5 to bring their onsite wastewater treatment system into compliance to the greatest extent possible. The authority having jurisdiction shall take the following into consideration when determining if the onsite wastewater treatment system meets the design standards of Article 3 to the greatest extent possible:
            1. Previous approvals and/or specific waivers granted by NYS-DOH, or the Watershed Inspector
            2. Distance separations to surface water and groundwater wells in order to minimize pathogen, nutrient and/or other pollutant loading;
            3. The ability to utilize the latest technology and the ability to maintain that technology
            4. Existing lot line setbacks and area requirements as related to individual properties; and
            5. The extent to which the limitations are self-created.

        ii. On previously developed sites with a substandard system, holding tanks may be utilized if the authority having jurisdiction deems it is the best available technology for the existing site conditions and limitations.

        iii. Once the authority having jurisdiction has determined that the substandard system meets the standards of Article 3 to the greatest extent possible, the authority having jurisdiction shall provide the property owner with an onsite wastewater treatment system permit and a letter of acknowledgement stating that the property owner is meeting the standards of Article 3 to the greatest extent possible.

2. Substandard systems on parcels greater than 200 feet from Canandaigua Lake

    a. Based on the system inspection, the authority having jurisdiction shall notify property owners in a written letter that their system is substandard. The letter will list all components of the system that are substandard.

3.5 Maintenance of Enhanced Treatment Units and Holding Tanks

1. All Enhanced Treatment Units (ETUs) are required to have a service contract with a certified manufacturer's representative, which provides for annual inspections or inspections at intervals specified by the manufacturer, whichever is stricter and subsequent necessary adjustments by a certified manufacturer's representative for the life of the system. Within 10 days of an inspection, a written report shall be sent to the authority having jurisdiction which documents the results of the inspection and provides a written certification from the certified manufacturer's representative that the system is fully functional and operating properly and is under a service contract. Failure to hold a service contract, complete the required inspections, send the inspection reports to the authority having jurisdiction, and/or complete the certified manufacturer's representative's maintenance schedule is a violation of this local law and is punishable according to Article 9 of this local law.

2. Holding Tanks – All holding tanks shall be equipped with a float switch and high level alarm (audible and visual) located in a conspicuous place to indicate when pump out is necessary, which will be maintained in good working order at all times. The owner shall have a contract for service with a NYSDEC permitted septage waste transporter to pump the holding tank as needed. A copy of all pump-out records shall be submitted to the authority having jurisdiction. At no time will sewage discharge from the tank be allowed.

ARTICLE 4 – REQUIREMENTS FOR NEW AND EXISTING ON-SITE WASTEWATER TREATMENT SYSTEM INSPECTIONS

4.1 Inspections of New On-Site Wastewater Treatment Systems

1. Installation of the on-site wastewater treatment system shall be under the direct supervision of a Design Professional. The authority having jurisdiction shall have the right to observe any portion of the installation of the system.

2. The applicant shall be prohibited from covering any component of the system without proper authorization. Any change of construction approved by the authority having jurisdiction shall be noted on the original drawings before the system is back filled. An additional review and approval shall not be required for any minor alterations to the designs already approved by the authority having jurisdiction. Major alterations to the designs approved by the authority having jurisdiction shall require review and approval by the authority having jurisdiction. Major changes shall include any changes to the absorption field and/or changes to the size or type of pretreatment tank.

3. As built plans and construction certification by a Design Professional shall be provided to the authority having jurisdiction after installation is completed.

4.2 Inspections of Existing On-Site Wastewater Treatment Systems within 200 Feet of Canandaigua Lake

1. All parcels located within 200 feet of Canandaigua Lake shall receive an on-site wastewater treatment system inspection within five years of the adoption of this law and every five years thereafter by a Certified Inspector.

2. The Town and the Watershed Inspector shall determine a schedule for the 5-year inspection cycle, with inspections due on or before December 31 of each inspection cycle year. The Watershed Inspector shall be responsible for notifying property owners of the upcoming required inspection by January 15th of the inspection cycle year. The Watershed Inspector shall send a list of properties requiring inspection to the Town for each inspection cycle year and will copy them on correspondence to the residents.

3. For those parcels located within 200 feet of Canandaigua Lake that have not been inspected by the Watershed Inspector or Code Enforcement Officer since 1990 and/or the Watershed Inspector and Code Enforcement Officer do not have written records to document the length, type and location of absorption areas; the size, type, location and structural integrity of the pretreatment tank; and the tie dimensions; then the system shall be inspected by the Watershed Inspector during the first 5-year inspection cycle. Property owners whose systems have not been inspected or lack the required written records shall receive written notification by the Watershed Inspector regarding this requirement.

4.3 Conditions Requiring Inspection of Existing On-Site Wastewater Treatment Systems Throughout the Town

1. The authority having jurisdiction shall require an on-site inspection of an existing on-site wastewater treatment system as follows:

(a) Prior to a change of use – The owner of the property shall arrange for an on-site wastewater treatment system inspection before any change of use is undertaken. The authority having jurisdiction shall determine whether the change represents an increased hydraulic loading to the system. In instances where a site plan approval, special use permit, or variance is required, the authority having jurisdiction shall incorporate the on-site wastewater treatment system inspection report into the review process of the appropriate Planning Board of Zoning Board of Appeals.

(b) Prior to a conveyance of real property – The owner of the property shall arrange for an on-site wastewater treatment system inspection prior to the conveyance of real property. In addition, property owners may request a wastewater treatment inspection for real estate transactions or other certifications to lending institutions, purchase offer conditions of buyers or real property, or other requests, or investigations. For conveyance of real property, the inspection must be completed at least 10 days prior to the transfer of property. The inspection report must be filed with the authority having jurisdiction, the current owner, and the proposed new owner prior to the transfer of property. It shall be a violation of this law to not have the property inspected prior to the deed transfer. If the required inspection does not occur prior to the conveyance of real property, then the authority having jurisdiction will inspect the system.

(c) Prior to the expansion of a building or dwelling by one bedroom, or increase the building or dwelling square footage by greater than twenty-five (25) percent of the square footage, or alter a building or dwelling such that the work area exceeds 50 percent of the aggregate area of the existing building.

(d) Prior to any alterations made to the absorption field or any change in the treatment system type.

4.4 Inspection Procedure

1. All existing on-site wastewater treatment systems requiring an inspection pursuant to this local law shall be performed by a Certified Inspector in accordance with and utilizing the OTN System Inspection Findings Worksheet (Rev 01/13 or as updated).

2. The authority having jurisdiction reserves the right to observe any on-site wastewater treatment system inspection completed by a Certified Inspector. The authority having jurisdiction will review all inspection reports. If the authority having jurisdiction deems the inspection or the associated report to be inadequate or incomplete, the authority having jurisdiction will notify the property owner by a written letter. The system shall be re-inspected and an inspection report shall be sent to the authority having jurisdiction. The system shall be considered uninspected until an adequate inspection report is sent to the authority having jurisdiction.

4.5 Report of Findings

1. Upon completion of the inspection, the Certified Inspector shall document all procedures and furnish the owner with a report of findings. The report of findings must be the OTN System Inspection Findings Worksheet (Rev. 01/13 or as updated) at a minimum.

2. All inspection reports must be filed with the authority having jurisdiction within 30 days of the inspection's completion. Failure to submit the report to the authority having jurisdiction is considered a violation of this local law and is punishable according to Article 9 of this local law. The system shall be considered uninspected until an adequate inspection report is sent to the authority having jurisdiction.

ARTICLE 5 – ON-SITE WASTEWATER TREATEMENT SYSTEM PERMITTING PROCEDURES

5.1 Application Material

1. Applications for on-site wastewater treatment system permits shall be by the property owner or a duly authorized agent, accompanied by the appropriate fee, to the authority having jurisdiction, which shall include the following information:

    a. The name, address and telephone number of the applicant;
    b. Specific location of the property on which the on-site wastewater treatment system is located or proposed, including the tax map number for said property;

    c. All plans shall be designed by a Design Professional showing the location of the proposed on-site wastewater treatment system and all wells, springs, other water supplies, buildings and watercourses within 200 feet of the proposed on-site wastewater treatment system, even if located on adjacent properties.

    d. Evidence to demonstrate that there is no public sewer available into which the sewage can be discharged or that it is impractical to discharge sewage into a community sewerage system;

    e. Evidence to demonstrate compliance with Article 3 of this local law

    f. Documentation of substantiating date relating to site conditions, percolation tests, deep hole data, and topography of land; and

    g. The authority having jurisdiction may conduct such investigations, examinations, tests and site evaluations to verify information contained in the application.

5.2 Administrative Review

1. The authority having jurisdiction shall not issue an on-site wastewater treatment system permit unless:

    (a) A plan is submitted by a Design Professional as required by this local law; all permit fees have been paid; that the on-site wastewater treatment system complies with all specifications of state and local laws; and within the Canandaigua Lake Watershed, a letter of approval has been obtained from the Watershed Inspector.

2. When the authority having jurisdiction shall deny the application for an on-site wastewater treatment system permit, within seven (7) working days after taking such action, the authority having jurisdiction shall furnish the applicant with a written notice of denial setting forth in detail the reason for such action.

5.3 Fees

1. The fees for any permit or inspection performed pursuant to this local law shall be determined from time to time by the authority having jurisdiction.

5.4 State or Other Agency Approvals

1. In addition to approvals required herein, a review and approval by the New York State Department of Health (NYSDOH) or the New York State Department of Environmental Conservation (NYSDEC) and the Canandaigua Lake Watershed Inspector may be required.

ARTICLE 6 - COMPLIANCE AND REPORTING

6.1 Access – Need to check on wording of this section for proper legal procedure

1. The authority having jurisdiction shall be permitted by the property owner to make a physical inspection of the lands and premises for which an on-site wastewater treatment system permit or inspection has been requested, in order to determine that all of the requirements of this local law have been complied with.

2. The authority having jurisdiction upon complaint or show of cause, shall be permitted by the property owner to make a physical inspection of the lands and premises for which an on-site wastewater treatment system.

6.2 Deficiencies and Corrections

1. Upon discovery of an on-site wastewater treatment system which is not in compliance with this local law, the authority having jurisdiction shall immediately notify the property owner in writing of the failure or substandard system through a Notice of Violation. It shall be the responsibility of the property owner to forward the Notice of Violation to other involved or interested property owners/renters. The Notice of Violation shall include the specific section of the law being violated, the components of the system that are not in compliance with the requirements of this law, the action that is necessary to correct the noncompliance, the date the permit must be obtained by, the timeframe in which corrective actions must be completed.

2. The authority having jurisdiction shall, by written notice and/or posting, order all work stopped on any on-site wastewater treatment system, which is in violation of this local law.

3. Upon receipt of a Notice of Violation, the property owner shall be given thirty (30) days to obtain an on-site wastewater treatment system permit. A system in failure will have 6 months to correct the violation, and substandard systems on parcels within 200 feet of Canandaigua Lake will have up to 1 year to correct the violation.

4. To correct a violation, the system shall be brought into compliance with the standards identified in Article 3 of this local law.

6.3 Failure to Complete Required Inspections

1. Failure to complete required inspections and/or send the inspection reports to the authority having jurisdiction is a violation of this local law and is punishable according to Article 9 of this local law. The authority having jurisdiction shall notify the property owner through a Notice of Violation.

2. Upon receipt of a Notice of Violation, the property owner shall be given thirty (30) days to complete and submit the inspection report to the authority having jurisdiction.

ARTICLE 7 – COMPLAINTS

7.1 Notification

1. Complaints shall be made to the authority having jurisdiction with supporting information that an on-site wastewater treatment system may be deficient (i.e. – observed failure to ground water, surface water, or above ground seepage, odor, or otherwise creating a public nuisance).

2. If after further investigation, the authority having jurisdiction has due cause, the authority having jurisdiction shall notify the property owner and the inhabitants of said property in writing, within seven (7) business days of receipt of the complaint or personal observation, that an inspection pursuant to Article 4 of this law is required. A copy of such notice shall be sent to the Clerk of the local governing body.

ARTICLE 8 – VARIANCES

8.1 Variances

1. Where practical difficulties, unnecessary hardships, and results inconsistent with the general purpose of this chapter or certain provisions thereof are encountered, the property owner may request a variance from the requirements of this law.

2. The Zoning Board of Appeals may grant a variance from the requirements of this law if the Zoning Board of Appeals finds the essential purpose of these regulations, namely the protection of public health and water quality, will be accomplished even if the variance is created. The Zoning Board of Appeals shall consider the following factors and make applicable findings regarding:
    a. Whether the use or activity to be authorized by the waiver or variance is in harmony with the purpose and intent of this law.
    b. Whether a substantial change will be produced in the general condition of the water quality or a substantial risk to groundwater quality or quantity will be created because of the variance.
    c. Whether the hardship or difficulty can be alleviated by some other method that is feasible for the applicant to pursue.
    d. Whether the variance requested is the minimum variance necessary to afford relief. To this end, the Variance Committee may recommend a lesser variance than applied for.
    e. Whether the hardship or difficulty has been created by the applicant.

ARTICLE 9 – ENFORCEMENT

9.1 Violations

1. In any instance where this local law is violated, the Town of _____ may maintain an action or proceeding in the Town of _____ Court to compel compliance with the terms of this local law or to restrain by injunction, the violation of this local law.

2. An application for an onsite wastewater treatment system permit shall be deemed a consent by the owners of the property to permit the authority having jurisdiction to enter upon the premises without a search warrant to inspect the work which is the subject matter of the permit application.

3. If a property owner fails to complete an inspection required by this local law, or to allow access to the property for the required inspection, the authority having jurisdiction shall obtain an administrative search warrant, which may be issued by the Town of _____ Justice Court, to complete the required inspection. The costs of this search warrant and inspection shall be the responsibility of the property owner.

4. The Town Board (acting as the Town Board of Health) may schedule a hearing on an onsite wastewater treatment system that the authority having jurisdiction has determined to be in failure and has not been rectified by the property owner. In instances where the violation is deemed by the authority having jurisdiction to pose an imminent threat to public health, the Town Board may direct that the Town take corrective action and assess all costs and expenses incurred by the Town in connection with the proceedings and correction of the violation upon the property.

9.2 Penalties

1. Any person who violates any provision of this local law shall be subject to a fine not to exceed the sum of $1,000 or by imprisonment of not more than seven (7) days, or both. Each week such violation continues after notification to the person in violation shall constitute a separate violation. Such violation notice shall be served by certified mail, return receipt requested, or by personal service.

ARTICLE 10 – MISCELLANEOUS PROVISIONS

10.1 Conflict of Law

1. In any case where a provision of this local law is found to be in conflict with a provision of any ordinance or local law, or with a provision of any statute, rule, regulation, or order of the State of New York, the provision which established the higher standard for the promotion of the health, welfare and safety of the citizens of the municipality shall prevail. In any case where a provision of this local law is found to be in conflict with a provision of any other ordinance or local law existing on the effective date of this local law, which established a lower standard for the promotion of the health, welfare and safety of the citizens of the municipality, the provisions of this local law shall be deemed to prevail.

10.2 Savings Clause

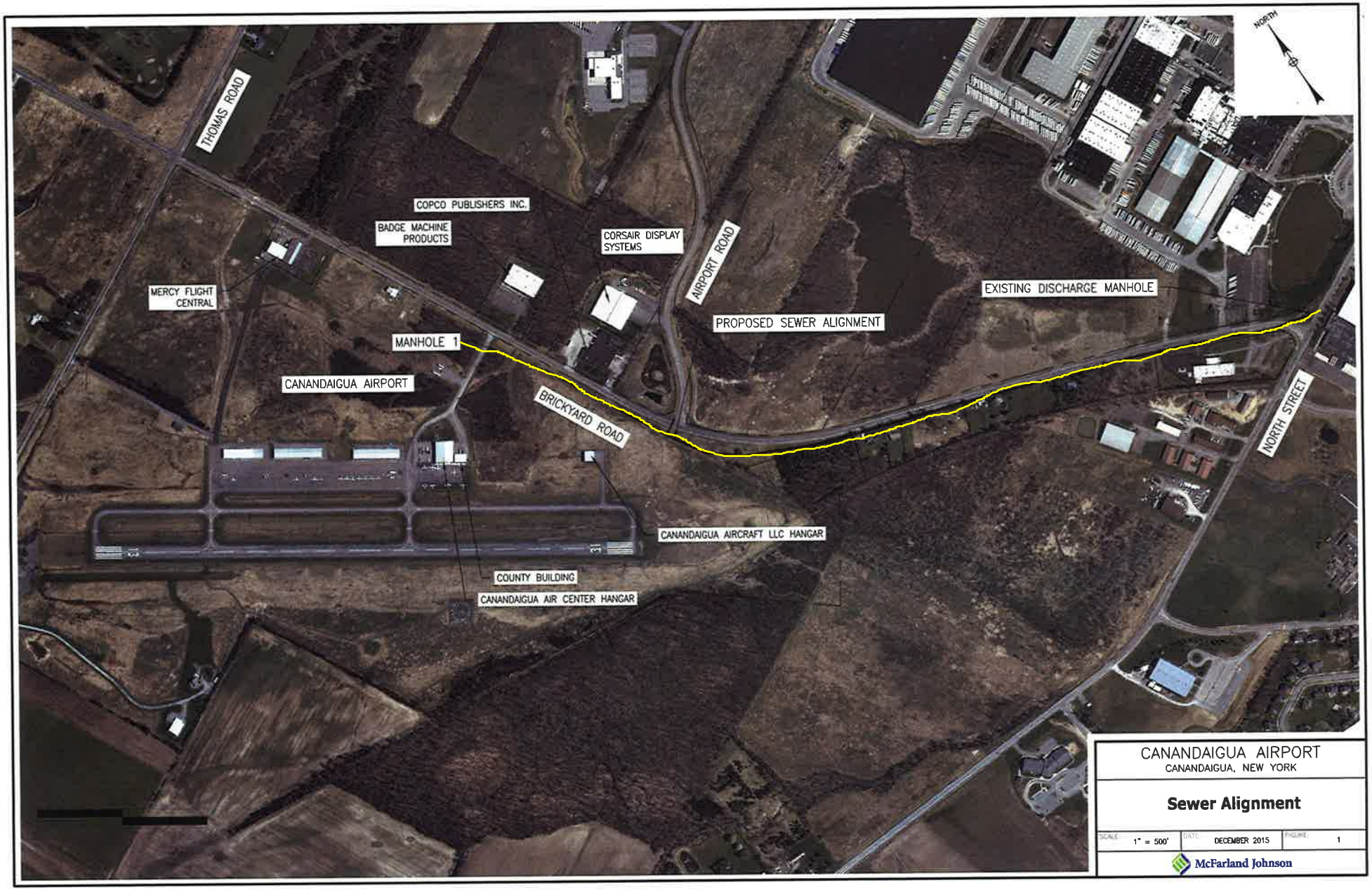
1. The adoption of this local law shall not affect or impair any act done, offense committed or right accrued or acquired or liability, penalty, forfeiture or punishment incurred prior to the time this local law takes effect.

2. The provisions of this local law shall be several, and if any clause, sentence, paragraph, subdivision, section or part of this local law shall be judged by competent jurisdiction as being invalid, such judgment shall not affect, impair, or invalidate the remainder thereof, but shall be confined to the part thereof directly involved in the controversy in which such judgment shall have been rendered.

3. This local law shall take effect immediately upon filing with the New York State Secretary of State pursuant to *Article 3 of Municipal Home Rule Law.*

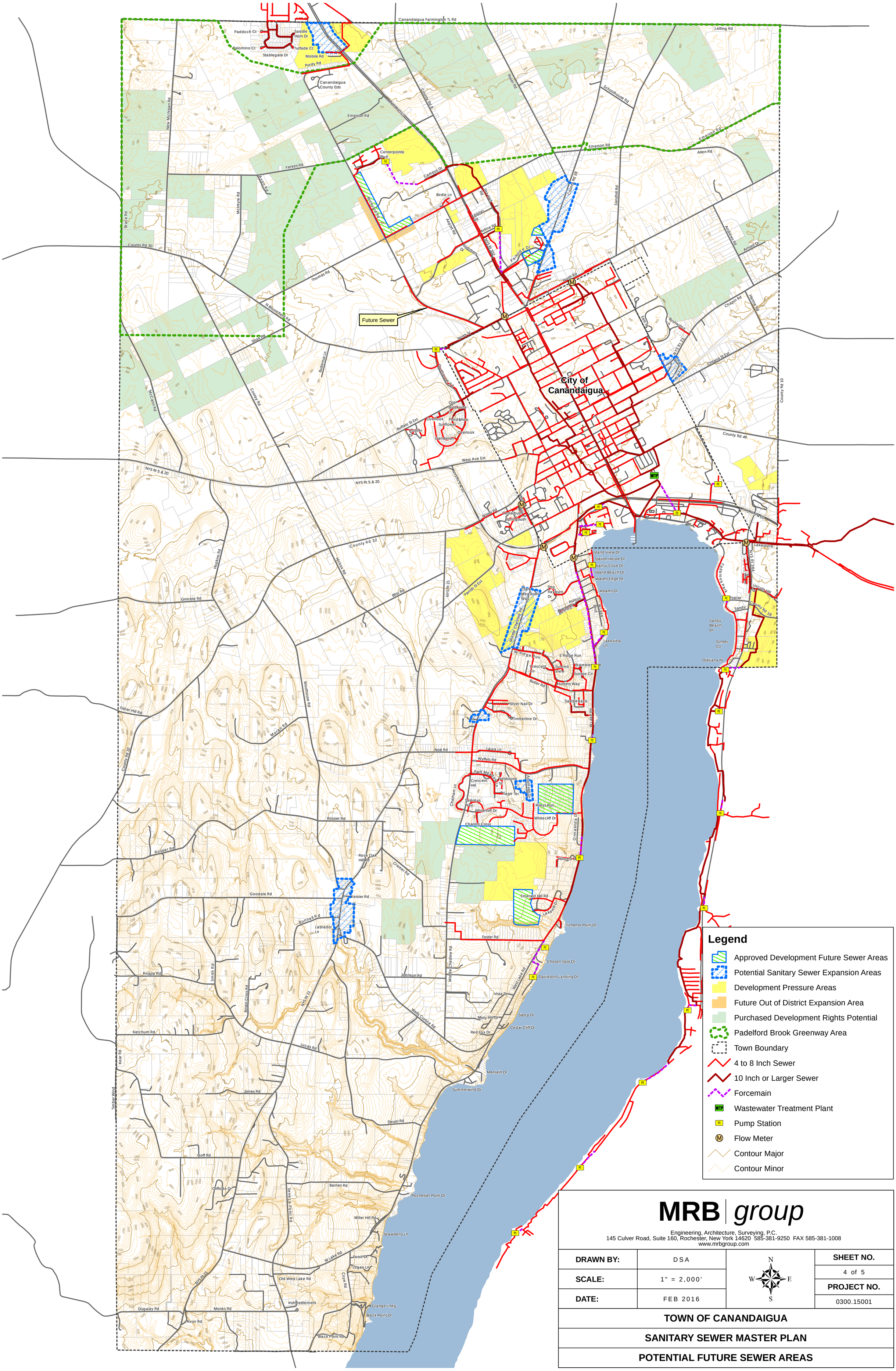
APPENDIX L

CANANDAIGUA AIRPORT PROPOSED SEWER MAP


THOMAS ROAD
COPCO PUBLISHERS INC.
BADGE MACHINE PRODUCTS
CORSAIR DISPLAY SYSTEMS
AIRPORT ROAD
MERCY FLIGHT CENTRAL
EXISTING DISCHARGE MANHOLE
PROPOSED SEWER ALIGNMENT
MANHOLE 1
CANANDAIGUA AIRPORT
BRICKYARD ROAD
NORTH STREET
CANANDAIGUA AIRCRAFT LLC HANGAR
COUNTY BUILDING
CANANDAIGUA AIR CENTER HANGAR
NORTH
CANANDAIGUA AIRPORT
CANANDAIGUA, NEW YORK
Sewer Alignment
SCALE: 1" = 500'
DATE: DECEMBER 2015
FIGURE: 1
McFarland Johnson

APPENDIX M

POTENTIAL FUTURE SANITARY SEWER SERVICE AREAS MAP



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DRAWN BY:	DSA	N W E S	**SHEET NO.**
			4 of 5
SCALE:	1" = 2,000'		**PROJECT NO.**
DATE:	FEB 2016		0300.15001

TOWN OF CANANDAIGUA

SANITARY SEWER MASTER PLAN

POTENTIAL FUTURE SEWER AREAS

APPENDIX N

TYPICAL LATERAL RESTRICTION RESOLUTION

LATERAL RESTRICTIONS RESOLUTION

WHEREAS, the [governing body of municipality] has created the [name of water district] pursuant to Town Law for the express purpose of providing public water supply to residents along [geographic extent of water district]; and WHEREAS, part of the land area within [name of water district] is also within [name of Agricultural District] and

WHEREAS, the Town Board has filed a Notice of Intent to Undertake an Action Within an Agricultural District to evaluate the impact of providing a source of public water supply within this area on lands within [name of Agricultural District]; and

WHEREAS, the New York State Department of Agriculture and Markets ("Department") has expressed concern about the potential adverse impact that said public water supply is likely to have on agriculture within the Agricultural District,

NOW THEREFORE BE IT RESOLVED, that the Town Board, in recognition of the concerns that have been raised, hereby resolves to adopt the "Lateral Restriction - Conditions on Future Service" specified by the New York State Department of Agriculture and Markets as follows:

Lateral Restriction - Conditions on Future Service

The [municipality] imposes the following conditions, as warranted or recommended on the management of water/sewer lines located along [location] within an agricultural district:

(1) The only land and/or structures which will be allowed to connect to the proposed waterline or sewer within an agricultural district will be existing structures at the time of construction, further agricultural structures, and land and structures that have already been approved for development by the local governing body prior to the filing of the Final Notice of Intent by the municipality. Land and structures that have been approved for development refer to those properties/structures that have been brought before a local governing body where approval (e.g., subdivision, site plan, and special permit) is needed to move forward with project plans and the governing body has approved the action. If no local approval is required for the subdivision of land and/or the construction of structures, the municipality accepts the limitation under Public Health Law §1115 that defines a "subdivision," in part, as "any tract of land which is divided into five or more parcels." Water and/or sewer service will not be extended to the fifth and subsequent parcels where no local approval is required and the land is located within a county adopted, State certified agricultural district.

(2) If a significant hardship can be shown by an existing resident, the lateral restriction to the resident's property may be removed by the municipality upon approval by the Department. It is the responsibility of the resident landowner to demonstrate that a hardship exists relative to his or her existing water supply or septic system and clearly demonstrate the need for public water or sewer service. The municipality shall develop a hardship application to be filed with the municipality, approved by the Department of Health, and agreed to by the Department of Agriculture and Markets.

(3) If it can be demonstrated to the Department's satisfaction that the landowner requested the county to remove his or her land from an agricultural district at the time of district review and the county legislative body refused to do so, lateral restrictions may be removed by the municipality if the

Department determines that the removal of the restriction for the subject parcel(s) would not have an unreasonably adverse effect on the agricultural district.

(4) If land is removed from a county adopted, State certified agricultural district and the district has been reviewed by the county legislative body and certified by the Commissioner for modification, lateral restrictions imposed by the municipality are no longer in effect for the parcels of land that have been removed from the agricultural district.

(5) Hydrants and valve boxes must not be placed directly in agricultural fields.

The restriction on hookups would apply to non-agricultural structures for as long as the property is located within an Agricultural District.

APPENDIX O

PROBABLE MAXIMUM BUILD OUT ANALYSIS

SCR-1 Probable Maximum Build-Out Analysis (PMBOA)

Table 1 – Vacant/Developable Parcels[1]

Number of Parcels	Land Use Code	Description	Zoning	Total Acreage	Parcel Average
76	**311**	Residential Vacant Land	SCR-1	186.59	2.45
1	**314**	Rural Vacant <10 Acres	SCR-1	17.40	17.40
7	**322**	Rural Vacant >10 Acres	SCR-1	367.48	52.49
85	**--**	**--**	**--**	**571.47**	**--**

Zoning District	Minimum Lot Size (sq. ft.)	Acreage	Estimated Developable Lots
SCR-1	43,560	571	571

The above estimated potential number of housing/building lots does not factor in development constraints, such as infrastructure (e.g. water, sewer, roads, etc.), environmental factors (e.g. wetlands, floodplains, buffers, etc.), or zoning regulations (e.g. dimensional regulations, sidewalks, landscaping, etc.).

Table 2 – Potentially Developable

Number of Parcels	Land Use Code	Description	Zoning	Total Acreage	Parcel Average
4	**105**	Vacant Agricultural Farmland[2]	SCR-1	256.60	64.15
10	**240**	Rural Residence w/ Acreage[3]	SCR-1	204.20	20.42
15	**--**	**--**	**--**	**460.80**	**--**

Zoning District	Minimum Lot Size (sq. ft.)	Acreage	Estimated Developable Lots
SCR-1	43,560	461	461

Table 2 represents potentially developable land, which could be subdivided into buildable lots. The above estimated potential number of housing/building lots does not factor in development constraints listed above.

Notes:

1. It should be noted that the SCR-1 splits several large parcels that are in two different zoning classifications. So the attribute data that lists acreage is for the whole parcels, not just the portion that is in the SCR-1.
2. Land uses as part of an operating farm, which could be classified as potentially developable.
3. A rural residence with acreage is defined as a year-round residence with 10 or more acres of land; it may have up to three-year round dwelling units. Larger parcels could be subdivided into buildable lots.

AR-2 Probable Maximum Build-Out Analysis (PMBOA)

Table 1 – Vacant and Potentially Developable Parcels

Tax Map ID	Land Use Code	Description	Zoning	Total Acreage
83.00-1-27.210	**311**	Residential Vacant Land	AR-2	5.59
83.00-1-29.110	**311**	Residential Vacant Land	AR-2	3.94
83.00-1-32.210	**120**	Field Crops	AR-2	62.67
83.00-1-35.100	**120**	Field Crops	AR-2	317.89
83.00-1-32.112	**240**[3]	Rural Residence w/ Acreage	AR-2	10.59
83.00-1-33.110	**240**	Rural Residence w/ Acreage	AR-2	107.03
83.00-1-25.112	**240**	Rural Residence w/ Acreage	AR-2	38.98
83.00-1-32.220	**590**	Park[1]	AR-2	74.99
83.00-1-27.220	**210**	1 Family Residential	AR-2	4.09
83.00-1-29.120	**833**	Radio[2]	AR-2	10.06
10 Parcels	**--**	**--**	**--**	**635.83**

Table 2

Zoning District	Minimum Lot Size (sq. ft.)	Min. Lot Width	Acreage	Estimated Developable Lots
AR-2	2 Acres	200 Ft	636	318

The above estimated potential number of housing/building lots does not factor in development constraints, such as infrastructure (e.g. water, sewer, roads, etc.), environmental factors (e.g. wetlands, floodplains, buffers, etc.), or zoning regulations (e.g. dimensional regulations, sidewalks, landscaping, etc.). In accordance with Section 220-15(B)(1) of the Zoning Ordinance, permitted principal uses within the AR-2 zoning district are the same as are allowed in the AR-1 zoning district.

Notes:

1. Parcel is owned by the town of Canandaigua with a Park land use classification (590)
2. Parcel is owned by Genesee Media Corporation with a Radio land use classification (833)
3. A rural residence with acreage is defined as a year-round residence with 10 or more acres of land; it may have up to three-year round dwelling units. Larger parcels could be subdivided into buildable lots.

MUO 1 Probable Maximum Build-Out Analysis (PMBOA)

Table 1 – Vacant and Potentially Developable Parcels

Tax Map ID	Land Use Code	Description	Zoning	Total Acreage
56.00-2-20.00	**322**	Rural Vacant>10	R130	36.59
56.00-2-11.200	**240**	Rural Residential	R130	19.60
70.00-1-21.110	**311**	Residential Vacant Land	R130	13.60
70.00-1-18.114	**330**	Vacant Commercial	R130[M]	50.29
70.02-1-22.110	**210**	1 Family Residential	R130	11.90
70.00-1-21.121	**210**	1 Family Residential	R130	14.30
56.04-2-12.100	**314**	Rural Vacant<10	R130	9.40
70.00-1-18.117	**330**	Vacant Commercial	RB1	10.00
70.00-1-65.100	**330**	Vacant Commercial	RB1	19.40
70.00-1-18.115	**330**	Vacant Commercial	RB1	20.20
70.11-1-30.000	**330**	Vacant Commercial	R130	1.59
70.11-1-33.000	**330**	Vacant Commercial	RB1	5.40
56.00-2-25.120	**330**	Vacant Commercial	CC	4.00
56.00-2-52.110	**330**	Vacant Commercial	CC	14.40
56.00-2-52.200	**311**	Residential Vacant Land	CC	2.40
70.00-1-63.111	**330**	Vacant Commercial	CC	20.90
70.00-1-66.110	**330**	Vacant Commercial	I[M]	35.90
17 Parcels	**--**	**--**	**--**	**289.87**

M – Mixed Zoning

Table 2

Zoning District	Minimum Lot Size (sq. ft.)	Acreage	Estimated Developable Lots
MUO	8 Lots Per Acre	289	2,312 Lots

The above estimated potential number of housing/building lots does not factor in development constraints, such as infrastructure (e.g. water, sewer, roads, etc.), environmental factors (e.g. wetlands, floodplains, buffers, etc.), or zoning regulations (e.g. dimensional regulations, sidewalks, landscaping, etc.).

APPENDIX P

CHESHIRE AREA SEWER ALTERNATIVES

Woolhouse Rd
Butler Rd
Hunters Way
Saddleback
Silver Nail Dr
Timberline Dr
W Lake Rd
Nott Rd
Laura Ln
Wyffels Rd
Park Meadow Ln
Fieldstone Trl
Crescent Hill
Sage Ter
Acorn Hill Dr
Chatham Ln
Sammys Way
Whitecliff Dr
Charing Cross
Rileys Run
Whitecliff Dr
Onnalinda Dr
Hillcrest Dr
Connect to Exist.
8" PVC Sewer
MH Inv: 976.6'
Alternate 3:
+/- 12,500 Ft.
Forcemain
Rossier Rd
Rock Oak Hill Rd
Cramer Rd
Keister Rd
Emerald Hill Rd
LakeHill Dr
Tichenor Point Dr
Bunnell Rd
Labrador Ln
Alternate 1:
+/- 8,800 Ft.
Forcemain
Connect to Exist.
8" PVC Sewer
MH Inv: 955.1'
Foster Rd
Alternate 2:
+/- 9,200 Ft.
Forcemain
Middle Cheshire Rd
Connect to Exist.
8" PVC Sewer
MH Inv: 946.27'
Chosen Spot Dr
Davidsons Landing Dr
West Lake Rd
Johnson Rd
NYS Rt 21
Vista Dr
Steep Dr
Misty Hill Dr
Cedar Cliff Dr
Red Fox Dr
Wells Curtice Rd
Menteth Dr
Summerwind Dr
Lucas Rd
Deuel Rd

Legend

- Potential Sanitary Sewer Expansion Areas
- Town Boundary
- 4 to 8 Inch Sewer
- 10 Inch or Larger Sewer
- Forcemain
- Forcemain Alternate 1
- Forcemain Alternate 2
- Forcemain Alternate 3
- Potential Pump Station Location
- Wastewater Treatment Plant
- Pump Station
- Flow Meter
- Approximate Houses Built 1990 or After
- Approximate Houses Built Before 1990
- Streams
- Contour Major
- Contour Minor

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DATE:	FEB 2016		0300.15001

TOWN OF CANANDAIGUA

SANITARY SEWER MASTER PLAN

MIDDLE CHESHIRE SANITARY SEWER SERVICE ALTERNATIVES

APPENDIX Q

CR 28 AREA SEWER ALTERNATIVES

Potential Pump Station

Potential Forcemain:
+/- 3,700 Ft.

Existing MH
Invert: 784.1

Existing MH
Invert: 791.7

Risser Rd

Emerson Rd

County Road 28

Sandhill Rd

Kepner Rd

Airline Rd

Parkside Dr

NYS RT 332

North Rd

Cayuga Rd

Mohawk Ln

Seneca Dr

Canandaigua Ave

Moore St

Stewart Pl

Kennedy St

Spencer St

Hamlin Dr

Deseyn Dr

Cribb St

N Main St

North St

Midlakes Dr

PS

WTP

M

Legend

- Potential Sanitary Sewer Expansion Areas
- Town Boundary
- 4 to 8 Inch Sewer
- 10 Inch or Larger Sewer
- Forcemain
- Forcemain Alternate 1
- Potential Pump Station Location
- Wastewater Treatment Plant
- Pump Station
- Flow Meter
- Approximate Houses Built 1990 or After
- Approximate Houses Built Before 1990
- Streams
- Contour Major
- Contour Minor

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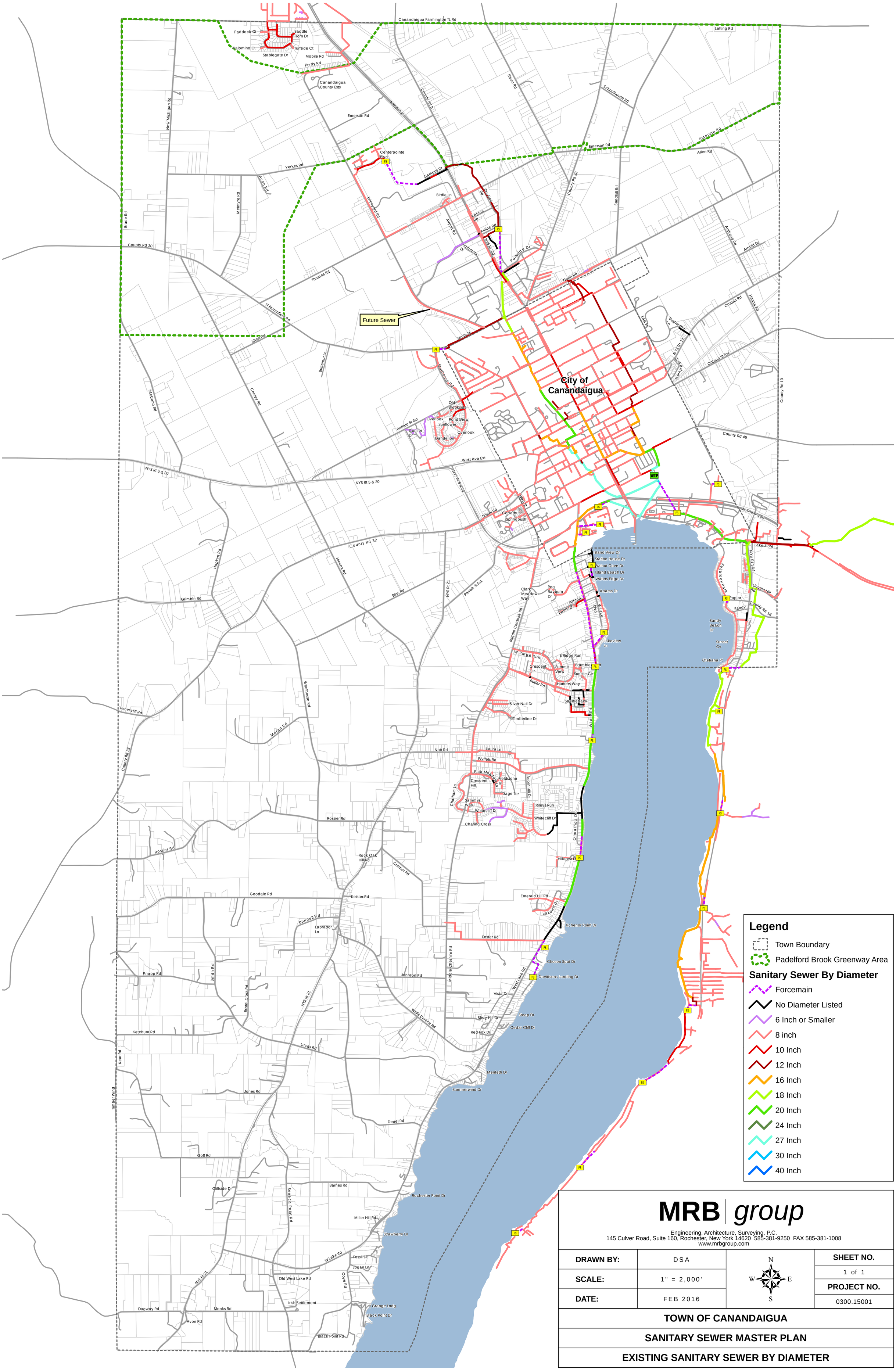
TOWN OF CANANDAIGUA

SANITARY SEWER MASTER PLAN

COUNTY ROAD 28 SANITARY SEWER SERVICE ALTERNATIVES

APPENDIX R

COUNTY / CITY SEWER SYSTEM



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TOWN OF CANANDAIGUA

SANITARY SEWER MASTER PLAN

EXISTING SANITARY SEWER BY DIAMETER

APPENDIX S

COUNTY SEWERSHED W/ CAPACITIES

PUMP STATION - 02N

FIRE HALL PUMP STATION - 1N
TOTAL CAPACITY = 1,080 EDUs

NORTH RD SEWER
RESERVE CAPACITY
0.044 MGD = 145 EDUs

BRUSHWOOD LN SEWER
SERVED BY THE V.A.

Future Sewer

INTERCEPTOR - F
NORTH ST
RESERVE CAPACITY
0.468 MGD = 1,560 EDUs

OUTHOUSE PUMP STATION
TOTAL CAPACITY = 540 EDUs

City of
Canandaigua

ONTARIO ST SEWER
RESERVE CAPACITY
0.176 MGD = 587 EDUs

AMBER MEADOWS SEWER
RESERVE CAPACITY
0.012 MGD = 40 EDUs

HAMMOCKS SEWER
WEST ST
REMAINING CAPACITY
0.019 MGD = 54 EDUs

PARRISH ST SEWER
RESERVE CAPACITY
0.020 MGD = 67 EDUs

INTERCEPTOR - C
WEST ST
RESERVE CAPACITY
0.065 MGD = 212 EDUs

LAKESHORE
PUMP STATION

INTERCEPTOR - J
EAST LAKE RD
RESERVE CAPACITY
0.965 MGD = 3,217 EDUs

VILLAS SEWER
RESERVE CAPACITY
UNKNOWN

PUMP STATION - 03W

INTERCEPTOR - A
WEST LAKE RD
RESERVE CAPACITY
1.1 MGD = 3,666 EDUs

PUMP STATION - 07W

PUMP STATION - 01W
TOTAL CAPACITY
1.44 MGD = 1371 EDUs

PUMP STATION - 04W
TOTAL CAPACITY = 690 EDUs

PUMP STATION - 05W
TOTAL CAPACITY = 600 EDUs

PUMP STATION - 08W

PUMP STATION - 09W

Legend

- Future Out of District Expansion Area
- Padelford Brook Greenway Area
- Town Boundary
- 4 to 8 Inch Sewer
- 10 Inch or Larger Sewer
- Forcemain
- Wastewater Treatment Plant
- Pump Station
- Flow Meter
- Sewershed A
- Sub-sewershed A.1
- Sub-sewershed A.2
- Sub-sewershed A.3
- Sewershed B
- Sewershed C
- Sewershed D
- Sewershed E
- Sub-sewershed E.1
- Sub-sewershed E.2
- Sub-sewershed E.3
- Sewershed F

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TOWN OF CANANDAIGUA

SANITARY SEWER MASTER PLAN

EXISTING SEWERSHEDS