# TOWN OF WILTON

# 2007 COMPREHENSIVE PLAN UPDATE FOR

# WATER & WASTEWATER MANAGEMENT

PREPARED FOR:

WILTON WATER AND SEWER AUTHORITY

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#### **EXECUTIVE SUMMARY**

The following document provides a summary of the central water supply and sanitary sewer service infrastructure within the Town of Wilton. Existing system demands and estimated future system demands are provided with recommendations for system improvements to support future demands.

Recent water system infrastructure improvements have included increased source and storage capacity at the Mulberry Estates Water Supply Facility, construction of the Jones Road Water Supply Facility, and a water main extension to service the commercial properties at Exit 15 currently served through an agreement to purchase water from the City of Saratoga Springs. In addition to the existing water system facilities, the Town of Wilton has agreed to purchase water from the Saratoga County water system at a rate of 0.3 mgd.

The Saratoga County Sewer District #1 expanded its service area boundary to include the entire Town of Wilton in 2005. Recent sanitary sewer system infrastructure improvements have included construction of a parallel force main crossing of Route 50, construction of a parallel force main from Route 50 to Carr Road, reconstruction of the gravity sewer from Route 50 to the Excelsior Avenue Pump Station, and upgrades to the Excelsior Avenue Pump Station.

The current water and sewer system demands were established based on actual water consumption data and corresponding estimates for sanitary sewer hydraulic loading. The existing system demands were compared with previous projections and were found to be reasonably consistent with the previous estimates. Future system demands have been estimated based on hydraulic loading projections upon full build-out of all currently approved projects and estimated future demands provided by the Wilton Water and Sewer Authority.

The water system production capacity currently required is approximately 1.687 mgd representing approximately 53% of the production capacity currently available (3.188 mgd). The future water system production capacity required through 2027 has been estimated to be on the order of 2.882 mgd representing approximately 83% of the anticipated available production capacity (3.488 mgd). The water system production capacity currently exceeds demand; it is anticipated that future production capacity requirements, beyond the projections of this study, will be available through the Saratoga County Water System, currently under construction.

Current sanitary sewer flows are on the order of 0.834 mgd with anticipated flows of approximately 1.3 mgd through the year 2027. The Wilton Water and Sewer Authority has been working toward completion of sanitary sewer improvements identified in the 1997 Sewer Improvement Plan necessary to accommodate the anticipated flow rate of 1.3 mgd. A majority of the improvements identified have been completed; remaining improvements include construction of a parallel force main on Carr Road and pump station upgrades at the Indian Springs and Ace Pump Stations. The WWSA will continue to monitor the performance of the system and implement upgrades as necessary.



#### POLICY STATEMENTS

Under no circumstances will the extension of water and sewer services be provided to serve a project with a density above the underlying density prescribed by Town Zoning.

#### Water

- Connection to Existing Systems New or existing development within the Town is permitted to connect to the existing water systems provided that it is geographically, environmentally, fiscally, and technically feasible. Neither the WWSA nor the Town will pay for connection and necessary appurtenances to provide water to development. Therefore, each project must meet the test of economic feasibility, which directly relates to the project sponsor's willingness and ability to make connection and/or create additional capacity to the water supply system. In addition, this will include all WWSA fees (Appendix B).
- Pursuant to the requirements of the New York State Building Code, new building construction shall be connected to existing public water supply if available.
- All newly constructed facilities become the property of the WWSA with no entitlement of any future compensation.
- The creation of new water systems that are not an integral part of the existing system will not be allowed. Nor will the creation of private transportation companies be permitted.

#### Sewer

- The Saratoga County Sewer District #1 (SCSD#1) expanded the District boundary to include the entire Town of Wilton in 2005.
- The WWSA continues to make infrastructure improvements within the Town as required to provide capacity for the 2027 flow projections adopted by the WWSA. To fund these improvements, the WWSA continues to collect Sewer Capital Improvement Fees (Appendix B) on all projects that are tributary to the lines that require improvements.
- All connections within the Town of Wilton are subject to the SCSD#1 Rules and Regulations and WWSA Policies and Fees.
- The SCSD#1 will consider dedication, through the standard dedication process, of facilities within the original SCSD#1 District boundary.
- The WWSA will consider dedication of facilities outside the original SCSD#1 District boundary.



#### 1.0 INTRODUCTION

The purpose of this document is to provide a summary of central water supply and sanitary sewer service infrastructure within the Town of Wilton, identify current and future system demands, document the Policy Statements of the Wilton Water and Sewer Authority (WWSA), and provide recommendations related to future planning and anticipated system improvements. A previous Comprehensive Plan for Water and Wastewater Management, prepared by Clough, Harbour & Associates (CHA), dated March 2000 was used as the foundation for the updated Comprehensive Plan.

Substantial improvements, to water and sewer infrastructure within the Town of Wilton, have been constructed recently or are currently under construction providing increased capacities necessary to accommodate current and future demands. Major water supply improvements include increased source and storage capacity at the Mulberry Estates Water Supply Facility, source development and construction of the Jones Road Water Supply Facility, water main extension from the new Jones Road Water Supply Facility to existing WWSA infrastructure near the intersection of Old Gick Road and Route 50, and an agreement to purchase water from the Saratoga County Water System.

Major sanitary sewer improvements within the WWSA and Saratoga County Sewer District #1 receiving sewer include the addition of new collection systems and pump stations, construction of a parallel force main along Jones Road from Route 50 to Carr Road, reconstruction of the gravity sewer from Route 50 to the Excelsior Avenue Pump Station, and upgrades to the Excelsior Avenue Pump Station. In addition, the Saratoga County Sewer District #1 has expanded the District boundary to include the entire Town of Wilton.

#### 2.0 STUDY INVENTORY

# 2.1 Engineering Studies

Several engineering studies of the WWSA water supply and sanitary sewer facilities have been completed by various engineering firms on behalf of the WWSA or private developers since the formation of the WWSA. The follow table summarizes relevant engineering studies as they relate to WWSA system use and capacity.



Table 1: Summary of Engineering Studies Prepared for WWSA

GENERAL STUDIES	PREPARED BY	DATE
Technical Assessment of Development Conditions – Town of Wilton Southeast	CHA	1988
Section		
WATER STUDIES	PREPARED BY	DATE
Feasibility Study for the Formation of a Public Water Supply System in the Town	CHA	1991
of Wilton		
Engineering Report for Furlong Hills, prepared for Tra-Tom Development Inc.	Sear Brown	1993
Application to Increase Source Capacity at Mulberry Water Plant – Third Water	EDP	1995
Supply Application		
SANITARY SEWER STUDIES	PREPARED BY	DATE
Feasibility Report for the Wilton Water and Sewer Authority's Acquisition of the	CHA	1993
Exit 15 Sanitary Sewer Facilities in the Town of Wilton		
Sewer Improvement Plan for the Town of Wilton Water and Sewer Authority	CHA	1995
(Draft Report)		
Engineer's Report, Wilton Sewer Improvements	EDP	1996
Hydraulic Analysis Narrative (Jones Road Sewer Force Main)	C.T. Male	2000
Hydraulic Study – WWSA Pressure Sewer System (North of Jones Road Gravity)	EDP	2001
Sanitary Sewer Service Narrative – Hudson Springs PDD	EDP	2006
Hydraulic Study – NYS Route 50 Crossing at Gick Road	EDP	2006

#### 2.2 Land Use Regulations

Land use within the Town of Wilton is guided by the Town's Comprehensive Plan (current plan adopted December 2, 2004) and current zoning (last revised January 2006). The Town's 2004 Comprehensive Plan provided broad Town Wide recommendations and recommendations for seven smaller Planning Areas within the Town defined based on common land uses and/or physical features. The Town of Wilton Land Use Map, from the Town's 2004 Comprehensive Plan, is presented as Figure 1; the seven Planning Areas and general descriptions of the suggested land uses are shown on this map. The current Zoning Map is presented as Figure 2 and generally reflects the recommendations of the 2004 Town of Wilton Comprehensive Plan.

#### 2.3 Development Trends

Development trends have been analyzed within several studies prepared for the WWSA beginning with the 1995 Sewer Improvement Plan prepared by Clough, Harbour & Associates (CHA). The sanitary sewer demand projections identified in the 1995 CHA report were revised in a 1996 report prepared by the Environmental Design Partnership (EDP) to more closely reflect actual hydraulic loading within the sanitary sewer system. The 1996 EDP projections were further updated and revised by CHA to reflect the current conditions at the time the previous Comprehensive Plan for Water and Wastewater Management was prepared in 2000. The 2000 projections have again been updated (Appendix A) to reflect current and proposed development as of June 2007 with the preparation of this Comprehensive Plan Update.



The 1996 sanitary sewer projections prepared by EDP, updated by CHA in 2000, and further updated within this report have been determined by the Town as the most reasonable estimate of future system demands. Based on these estimates, a projected sewer demand of 1.3 million gallons per day (mgd), to meet current and future development in the Route 9/Northway corridor, has been adopted by the Town for planning purposes through the year 2027. The WWSA has determined that the sewer system can accommodate the projected daily average demand of 1.3 mgd with system improvements funded through the Sewer Capital Improvement fees. To exceed this projected demand would require extraordinary capital costs necessary to fund improvements within the WWSA and Saratoga County Sewer District #1 sanitary sewer systems.

#### 3.0 LAND USE EVALUATION

The location and density of land uses within the Town of Wilton have been addressed through a town-wide comprehensive planning process as reflected in the 2004 Town of Wilton Comprehensive Plan. Town zoning is used as a growth management tool implemented by the Town and reflects the Town's Comprehensive Plan. The Comprehensive Plan, by its implementation through zoning, continues to call for the concentration of development within the Route 9 / Northway corridor from the southern municipal boundary to Ballard Road. This area is either currently provided with municipal sewer and water or these services occur within close proximity, such that improvement necessary to make connection will probably be economically feasible.

The Saratoga County Sewer District #1 (SCSD#1) recently expanded its service area boundary to include the entire Town of Wilton. With this service area boundary expansion, the previously defined WWSA Benefit Area has been eliminated; the extension of services to specific projects will be permitted provided that they are geographically, environmentally, fiscally and technically feasible. Under no circumstances will the extension of water and sewer services be provided to serve a project with a density above the underlying density prescribed by Town Zoning. The project sponsor will be responsible for construction of additional capacity and/or infrastructure improvements necessary to allow connection within the WWSA systems. All connections within the Town of Wilton are subject to the SCSD#1 Rules and Regulations and WWSA Policies and Fees.

The Comprehensive Plan Update for Water and Wastewater Management has been structured to reflect the same division of Planning Areas, identified in the Town's 2004 Comprehensive Plan, for use in reporting the existing and future estimates of water and sewer demands. Existing water and sewer demands have been compared with the 1996 EDP and 2000 CHA projections and found to be reasonably consistent with the previous projections. The current sanitary sewer flows (daily average) are estimated to be on the order of 0.835 mgd compared with a projected flow rate for 2007 of approximately 0.74 mgd in the 1996 EDP report. Water and sewer demands have been estimated through 2027 and have been provided in Appendix A with the previous 1996 EDP and 2000 CHA estimates. The future estimates of water and sewer demands have been provided strictly for planning purposes and are not meant to encourage or discourage development.



# 4.0 ASSET ASSESSMENT

#### 4.1 Water System

The WWSA water supply system consists of three interconnected source and treatment facilities (referred to as the Fairways Water Supply Facility, the Mulberry Estates Water Supply Facility, and the Jones Road Water Supply Facility), a storage tank (180,000 gallon) and booster pump station near I-87 Exit 16, and a connection to the City of Saratoga Springs system near I-87 Exit 15, as shown on Figure 3. In addition to these existing facilities, the Town of Wilton has agreed to purchase water from the Saratoga County water system, when it becomes available, at a rate of 300,000 gpd. A summary of the water supply and storage capacities for the WWSA system is presented as Table 2.

In addition to the WWSA system, described in the following sections, individual wells or private water systems serve the residential and commercial properties located in the southern portion of the Town. The areas of the town east of the Northway, west of Route 9 and north of Ballard Road are served by individual wells with the exception of the C-1 and C-3 zones in the vicinity of Exit 15.

Facility	Production Capacity		Storage
	(gpm)	(gpd)	Capacity (gal)
Fairways	455	655,200	260,000
Mulberry Estates	700	1,008,000	830,000
Jones Road	885	1,274,400	755,000
City of Saratoga Springs Connection	174	250,000	
Ballard Road Storage Tank			180,000
County Water System (future)	208	300,000	
Total (Existing):	2,214	3,187,600	2,025,000
Total (with County Water System):	2,422	3,487,600	2,025,000

**Table 2:** Summary of Water Supply and Storage Capacity

## 4.1.1 <u>Fairways Water Supply Facility</u>

The Fairways Water Supply Facility is located at the McGregor Links County Club; this system was previously permitted with two supply sources near the first and seventeenth fairways. Prior to 2003, the water supply facility located at the seventeenth fairway was operated on a stand-by basis; in 2003 this facility was taken off-line.

The remaining Fairways Water Supply source is located along the first fairway and consists of two concrete storage tanks (160,000 gallon and 100,000 gallon), ten drilled wells, distribution pumps, and chlorinating equipment. The drilled well system has an approved capacity of 655,200 gpd (455 gpm).



# 4.1.2 <u>Mulberry Estates Water Supply Facility</u>

The Mulberry Estates water supply system was originally installed in 1992 to serve the Mulberry Estates, Furlong Hills, and Indian Springs developments. The Mulberry Estates facility consists of eleven drilled wells, a 330,000 gallon concrete water storage tank and a 500,000 gallon bolted steel water storage tank, a booster pump station, and chlorination equipment. The Mulberry Estates Water Supply Facility has an approved pumping capacity of 1,008,000 gpd (700 gpm).

## 4.1.3 Jones Road Water Supply Facility

The Jones Road Water Supply Facility includes five production wells (with expansion available for 3 additional wells), a 755,000 gallon bolted steel water storage tank, chlorination equipment, and a booster pump station with a 250 kW emergency generator. Construction and testing of the five production wells was completed in 2006 with the storage tank and pump station construction scheduled for completion during the 2007 construction season. The facility connects to the existing WWSA distribution system on Jodi Lane to the north with a connection scheduled for construction in 2007 to Old Gick Road on the east side of Interstate 87. The Jones Road Water Supply Facility has an approved pumping capacity of 1,274,400 gpd (885 gpm).

#### 4.1.4 City of Saratoga Springs Agreement

The Town of Wilton has a 99-year agreement, effective November 5, 1997 and revised March 9, 2001, with the City of Saratoga Springs whereby the City agrees to sell potable water to the Town amounting to a daily maximum of 250,000 gpd at an average daily usage of 125,000 gpd. The connection and associated metering equipment between the City of Saratoga Springs and the Town of Wilton systems is located on Weibel Avenue approximately 500 ft south of the intersection with NYS Route 50.

#### 4.1.5 County Water System

The WWSA has agreed to purchase a minimum of 300,000 gpd (208 gpm) from the proposed County Water System. If the WWSA provides water service to the Mt. McGregor Correctional Facility, the daily usage of this facility will be in addition to the 300,000 gallon per day minimum purchased from the County Water System. Connection to the County Water System will be made when potable water can be delivered to the previously identified point of delivery near the intersection of Route 9 and Northern Pines Road.

## 4.2 Sanitary Sewer System

The Saratoga County Sewer District #1 (SCSD#1) was established in 1971 providing sanitary sewer service to a 186 square mile service area within Saratoga County. Prior to 2005 the SCSD#1 boundary included a limited area within the southwestern portion of the Town of Wilton. The SCSD#1 expanded the District boundary to include the entire Town of Wilton in 2005.

The original SCSD#1 system included a trunk sewer extending from the City of Saratoga Springs through the Town of Wilton to the Mt. McGregor Correctional Facility and the Wilton



Developmental Center. Prior to 2005, the SCSD#1 had allowed users outside the District boundary, within the Town of Wilton, to connect to SCSD#1 facilities on a case-by-case basis through the Wilton Water and Sewer Authority (WWSA).

Ownership and maintenance of the sanitary sewer infrastructure within the Town of Wilton has historically been provided through a collaborative effort between the SCSD#1 and the WWSA. The SCSD#1 has taken ownership of all trunk sewers and the collectors and pump stations located within the original SCSD#1 service area; while the WWSA accepts ownership of the collectors and pump stations within the Town located outside the original SCSD#1 service area.

Figure 4 shows the major sanitary sewer facilities (interceptors, collectors, and pump stations) located within the Town; developed properties that are not served by the sanitary sewer collection system have on-site wastewater disposal systems. The following sections describe the major sanitary sewer facilities within the Town of Wilton.

#### 4.2.1 <u>SCSD#1 Trunk Sewer</u>

The SCSD#1 trunk sewer extends from the City of Saratoga Springs to the Mt. McGregor Correctional Facility near the northern boundary of the Town of Wilton. The original trunk sewer includes 6 inch force mains extending from the Mt. McGregor Correctional Facility and the Wilton Developmental Center that intersect on Northern Pines Road where the force main size increases to 8 inch diameter. The original 8 inch diameter force main extends south along Northern Pines Road, Carr Road, and Jones Road to a gravity manhole located near the Forest development on Jones Road. The original gravity sewer section begins at this manhole and extends south through the City of Saratoga Springs to the Excelsior Avenue Pump Station. The original design capacity of the gravity trunk main was estimated as 0.65 to 1.15 mgd.

Recent improvements have been made to the SCSD#1 Trunk Sewer within the Town of Wilton and the City of Saratoga Springs as described below.

- A parallel 12 inch force main has been constructed, in two phases, from the north side of the NYS Route 50 crossing in the City of Saratoga Springs to the intersection of Jones Road and Carr Road within the Town of Wilton. Capacity of the parallel 12 inch force main is on the order of 3.3 mgd.
- The gravity sewer main on the south side of NYS Route 50 has been reconstructed from the Loughberry Road cul-de-sac to the Excelsior Avenue Pump Station. The capacity of this line ranges from 4.8 to 10 mgd.
- The Excelsior Avenue Pump Station was upgraded by the SCSD#1 using a \$750,000 economic development grant obtained by the Town of Wilton.
- A parallel crossing of NYS Route 50 between Loughberry Lake Road and the cul-de-sac at the end of Loughberry Road was constructed in 2007. The improvement provided a direct extension of the 12 inch force main with a capacity of 3.3 mgd. The original 12 inch gravity crossing (capacity of 1.73 mgd) remains in service providing a total capacity for the NYS Route 50 crossing of approximately 5.0 mgd.



Construction of the parallel force main improvements, described above, has divided flow from the Town of Wilton into two categories; collection systems that discharge into the SCSD#1 Gravity Trunk Main on Jones Road and collection systems discharging to the SCSD#1 Pressure Trunk Main extending from NYS Route 50 to the Mt. McGregor Correctional Facility. The following sections are organized based on this division of flow to facilitate evaluation of current and future system capacities.

# 4.2.2 <u>Collection Systems Discharging to the SCSD#1 Gravity Trunk Main</u>

This portion of the SCSD#1 trunk main includes the original gravity trunk main extending from the City of Saratoga Springs to the Forest subdivision on Jones Road and the portion of the original force main, from the gravity trunk main to the end of the recently constructed parallel force main at the intersection of Carr Road. The SCSD#1 owns all collection systems that contribute to the original SCSD#1 gravity trunk main; the systems are summarized in the following Table and Sections.

Station Name	Pump Station Design Capacity
Dorothy Nolan School	95 gpm @ 45' TDH
Brookfields	100 gpm @ 48' TDH
Loughberry	200 gpm @ 35' TDH
Exit 15	220 gpm @ 30' TDH

**Table 3:** Summary of Pump Stations Discharging to SCSD#1 Gravity Trunk Sewer

## 4.2.2.1 Exit 15 Collection System and Pump Station

The Exit 15 sewer system generally consists of a collector sewer system, a pump station, and a forcemain located within the Interstate 87 – Exit 15 area of the Town. The Exit 15 sewer system is located within the original boundaries of the SCSD#1 and was constructed as part of the Wilton Mall's offsite sewer improvements.

The Exit 15 system includes several sections of gravity sewers; a main line extends along the western property line of the Wilton Mall to Louden Road, then west along Louden Road to Weibel Avenue, north along Weibel Avenue, and across NYS Route 50 to the Exit 15 pump station. The main line includes approximately 2,529 LF of 10 inch PVC gravity sewer with a reported design capacity of approximately 693,500 gpd. Weibel Plaza (containing Hannaford and the Tractor Supply Co. in the City of Saratoga Springs) installed a forcemain from a private onsite wastewater pump station to the gravity sewer near the intersection of Louden Road and Weibel Avenue.

A second section of gravity sewer is located in Christina Court, which connects the discharge force main from the Exit 15 Pump Station to the SCSD#1 gravity trunk sewer along Jones Road. This section is constructed of 10 inch PVC with a reported design capacity of approximately 707,800 gpd.



Additional gravity sewer sections include an 8 inch diameter line installed along New Country Way from the Hess Gas Station to the pump station, an 8 inch diameter line installed on the eastern side of Old Gick Road from Wal-Mart to the pump station, and an 8 inch diameter line constructed along Lowe's Drive to the pump station.

The Exit 15 Pump Station (also referred to as the Old Gick Road pump station) is located near the intersection of Old Gick Road and New Country Way. The station is a recessed wet well mounted lift station with duplex vertical-lift sewage pumps. The reported design capacity of the existing pump station is 316,800 gpd with one pump operating and 504,000 with two pumps operating.

The discharge force main (8 inch PVC) from the Exit 15 Pump Station extends along Old Gick Road and under Interstate 87 to the gravity sewer located on Christina Court.

### 4.2.2.2 Other Collection Systems and Pump Stations

- The Dorothy Nolan School discharges directly into the original SCSD#1 force main near the intersection of Carr Road and Jones Road.
- The Brookfields subdivision includes a gravity collection system and pump station that discharges directly into the original SCSD#1 force main adjacent to the pump station location on Jones Road.
- The Loughberry Pump Station discharges directly into the original SCSD#1 gravity trunk main near the intersection of Bradford Drive.

# 4.2.3 Collection Systems Discharging to the SCSD#1 Pressure Trunk Main

This portion of the SCSD#1 trunk main includes the recently constructed Jones Road parallel force main from the City of Saratoga Springs to the intersection of Carr Road and the original force main from Carr Road to the Mt. McGregor Correctional Facility. Collection systems discharging to the SCSD#1 pressure trunk main include pump stations owned by both the SCSD#1 and the WWSA as summarized in the following Table and Sections.



**Table 4:** Summary of Pump Stations Discharging to SCSD#1 Pressure Trunk Main

Station Name	Pump Station
	Design Capacity
Ace	75 gpm @ 86' TDH
Westbrook	100 gpm @ 112 TDH
Veterans Apartments	6 Grinder Pumps
Kings Mills	63 Grinder Pumps
Indian Springs	139 gpm @ 101' TDH
Olsen (under construction)	130 gpm @ 145' TDH
Furlong Hills	320 gpm @ 135' TDH
Kyer Farms	12 Grinder Pumps
Estates at Northern Pines	245 gpm @ 137' TDH
Jessica Trace	12 Grinder Pumps
Fairways / Hearthstone	240 gpm @ 90' TDH
Mulberry Estates	200 gpm @ 105' TDH
McGregor Village	100 gpm @ 60' TDH
Saratoga Heritage (Gessing)	180 gpm @ 108' TDH
McGregor Villas	8 Grinders
Greens at McGregor	25 Grinder Pumps
Hudson Springs (under construction)	260 gpm @ 45' TDH

#### 4.2.3.1 WWSA Collection Systems and Pump Stations

- The Burnham Hollow subdivision includes a gravity collection system and pump station that will discharge into the Westbrook subdivision. The project is currently under construction with completion of the pump station anticipated during the 2007 construction season.
- The Ace and Target facilities include gravity collection systems that flow into the Ace Pump Station; the Ace Pump Station discharges through a 6 inch diameter force main approximately 2,000 LF to the original SCSD#1 force main along Northern Pines Road.
- The Westbrook subdivision includes a gravity collection system and pump station that discharges directly into the original SCSD#1 force main adjacent to the subdivision on Northern Pines Road.
- The Veterans Apartments include 6 grinder pumps connected directly into the original SCSD#1 force main adjacent to the project on Northern Pines Road.
- The Indian Springs subdivision includes a gravity collection system and pump station that discharges through a 6 inch diameter force main approximately 1,500 LF to the original SCSD#1 force main on Northern Pines Road.
- The Olsen subdivision, currently under construction, includes a gravity collection system and pump station that discharges through a 6 inch force main to the original SCSD#1 force main on Northern Pines Road.



- The Kings Mills subdivision is served by 63 grinder pumps which discharge through three small diameter force mains (one 3 inch and two 4 inch) on the eastern side of Traver Road to the Furlong Hills Pump Station.
- The Furlong Hills subdivision includes a gravity collection system and pump station that discharges through two 4 inch force mains to the original SCSD#1 force main at the intersection of Traver Road and Northern Pines Road. This station previously discharged to the Fairways / Hearthstone Pump Station; however, this connection was re-constructed to the current configuration in 2002.
- The Kyer Farms project includes 12 grinder pumps that discharge through a small diameter force main to the original SCSD#1 force main at the intersection of Traver Road and Northern Pines Road.
- The Estates at Northern Pines subdivision includes a gravity collection system and pump station that discharges directly into the original SCSD#1 force main adjacent to the subdivision on Northern Pines Road.
- The Jessica Trace subdivision includes 6 grinder pumps connected directly into the original SCSD#1 force main adjacent to the project on Northern Pines Road.
- The Fairways subdivision includes a gravity collection system and pump station (also known as the Hearthstone Pump Station) that discharges directly into the original SCSD#1 force main adjacent to the project on Northern Pines Road.
- The Mulberry Estates subdivision includes a gravity collection system and pump station that discharges through a shared 6 inch diameter force main approximately 2 miles to the original SCSD#1 force main on Carr Road.
- The McGregor Village project includes a gravity collection system and pump station that discharges through the shared Mulberry Pump Station force main to the original SCSD#1 force main on Carr Road.
- The McGregor Villas includes 8 grinder pumps connected directly into the original SCSD#1 force main adjacent to the project on Carr Road.
- The Greens at McGregor subdivision uses private grinder pump stations to pump wastewater to the original SCSD#1 force main located on Carr Road.

## 4.2.3.2 SCSD#1 Collection Systems and Pump Stations

The Hudson Springs PDD (also known as the Paddocks of Saratoga) includes a privately owned gravity collection system and pump station proposed for dedication to the SCSD#1. The project is currently under construction with dedication anticipated during the 2007 construction season. The pump station will discharge through a 6 inch force main along Old Gick Road crossing Interstate 87 at Jones Court and connecting to the recently constructed SCSD#1 parallel pressure trunk main along Jones Road.

The Saratoga Heritage apartment project is located within the original Saratoga Sewer District Boundary. The Saratoga Heritage (Gessing) Pump Station was constructed to serve the Saratoga Heritage apartments and includes a privately owned gravity collection system with a pump station that discharges through the shared Mulberry Pump Station force main to the original SCSD#1 force main on Carr Road.



#### 5.0 SYSTEM DEMANDS AND ANTICIPATED SYSTEM IMPROVEMENTS

Future conditions to the year 2027 are expected to continue to reflect the recommendations of the Town's Comprehensive Plan (current plan adopted December 2, 2004) and current zoning (last revised January 2006). The future estimates of water and sewer demands provided herein are strictly for planning purposes and are not meant to encourage or discourage development within the Town.

## **5.1** Projected Water and Sewer Demands

The estimates of current and future system demands, presented within Appendix A, have been identified by Planning Area to reflect the Town's 2004 Comprehensive Plan. The current system demand has been established based on actual water consumption data and corresponding estimates for sanitary sewer hydraulic loading. The future system demands have been estimated based on hydraulic loading projections upon full build-out of all currently approved projects and estimated future demands within each of the Planning Areas provided by the WWSA.

#### **5.2** Water System

The current water system demand is approximately 0.767 mgd with an anticipated demand of approximately 1.31 mgd through the year 2027. The required production capacity is equal to twice the average daily demand; assuming a 10% loss within the system, the current production capacity requirement is approximately 1.687 mgd (0.767x1.1x2.0). The current production capacity requirement of 1.687 mgd represents approximately 53% of the available production capacity (3.188 mgd). The future required production capacity, through 2027, is estimated to be on the order of 2.882 mgd (1.31x1.1x2.0) which represents approximately 83% of the anticipated available production capacity (3.488 mgd). The anticipated available production capacity is equal to the current capacity (3.188 mgd) plus the addition capacity requested (0.3 mgd) from the Saratoga County Water System currently under construction.

The available storage capacity within the system is currently 2.025 million gallons; the storage requirement is equal to the average production of one day. Assuming a 10% loss within the system, the current storage capacity requirement is approximately 0.844 million gallons (0.767x1.1) which represents approximately 42% of the available storage capacity. The future required storage capacity, through 2027, is estimated to be on the order of 1.441 million gallons (1.31x1.1) representing approximately 71% of the storage capacity currently available.

#### **5.3** Recommended Water System Improvements

The anticipated available production capacity of 3.488 mgd and available storage capacity of 2.025 million gallons exceed the projected demand of 2.882 mgd and 1.441 million gallons respectively through the year 2027. It is anticipated that future production capacity requirements, beyond the projection of this study, will be available through the Saratoga County Water System, currently under construction.



#### 5.4 Sewer System

Current sanitary sewer flows are on the order of 0.834 mgd with an anticipated flow of approximately 1.3 mgd through the year 2027. The WWSA previously adopted the projected sewer demand of 1.3 mgd for planning purposes and determined that to exceed this demand would require extraordinary capital costs. The WWSA developed a Sewer Improvement Plan (March 26, 1997) identifying improvements, within the WWSA system and SCSD#1 receiving sewer, necessary to accommodate anticipated flows of approximately 1.3 mgd.

The 1997 Sewer Improvement Plan was updated based on a report entitled "Hydraulic Study of the Existing Sewer Collection System North of the Jones Road Gravity Main", dated July 2001 (EDP 2001). The 1997 Sewer Improvement Plan and EDP 2001 report identified system improvements to be constructed in phases as the system is expanded (Table 5). The WWSA has completed several phases of system improvements; the remaining system improvements include extension of a parallel force main north along Carr Road to the northerly entrance of Meditation way (approximately 2000 lf) and upgrades at the Indian Springs and Ace Pump Stations.

Type of Improvement	Location	Timing
Gravity line	Excelsior Avenue PS to Loughberry	Completed 2000
replacement	Lake Road	
Pump Station Upgrade	<b>Excelsior Avenue Pump Station</b>	Completed 2000
Parallel Force Main	Jones Road from NYS Route 50 to	Completed 2001
	Bradford Drive	
Parallel Force Main	Jones Road from Bradford Drive to	Completed 2002
	Carr Road	
Pump Station Upgrade	Hearthstone / Fairways	Completed 2002
NYS Route 50 Crossing	NYS Route 50 at Gick Road	Completed 2007
Parallel Force Main	Carr Road from Jones Road to the	As required based on monitoring
	northern entrance of Meditation Way	of system performance
Pump Station Upgrade	Indian Springs & Ace Pump Stations	As required to meet 2027 flow
		projections

 Table 5: Summary of Sanitary Sewer System Improvements

The proposed parallel force main construction along Carr Road from Jones Road to the northern entrance of Meditation Way was identified in the EDP 2001 hydraulic study as a recommended improvement when the number of EDU's connected within the system, north of Jones Road, reached 1,600. The target EDU count of 1,600 was established based on various assumptions regarding anticipated hydraulic loading and dynamics related to pump station operation within the system. The number of EDU's currently connected within the WWSA system, north of Jones Road, is approximately 1,500. As the target EDU count of 1,600 is approached, some judgment will be required, based on actual system performance, regarding the practical timing associated with construction of the Carr Road parallel force main.

The Indian Springs and Ace Pump Stations are located upstream of the proposed Carr Road parallel force main and operate along a theoretical hydraulic grade line that is lower than the



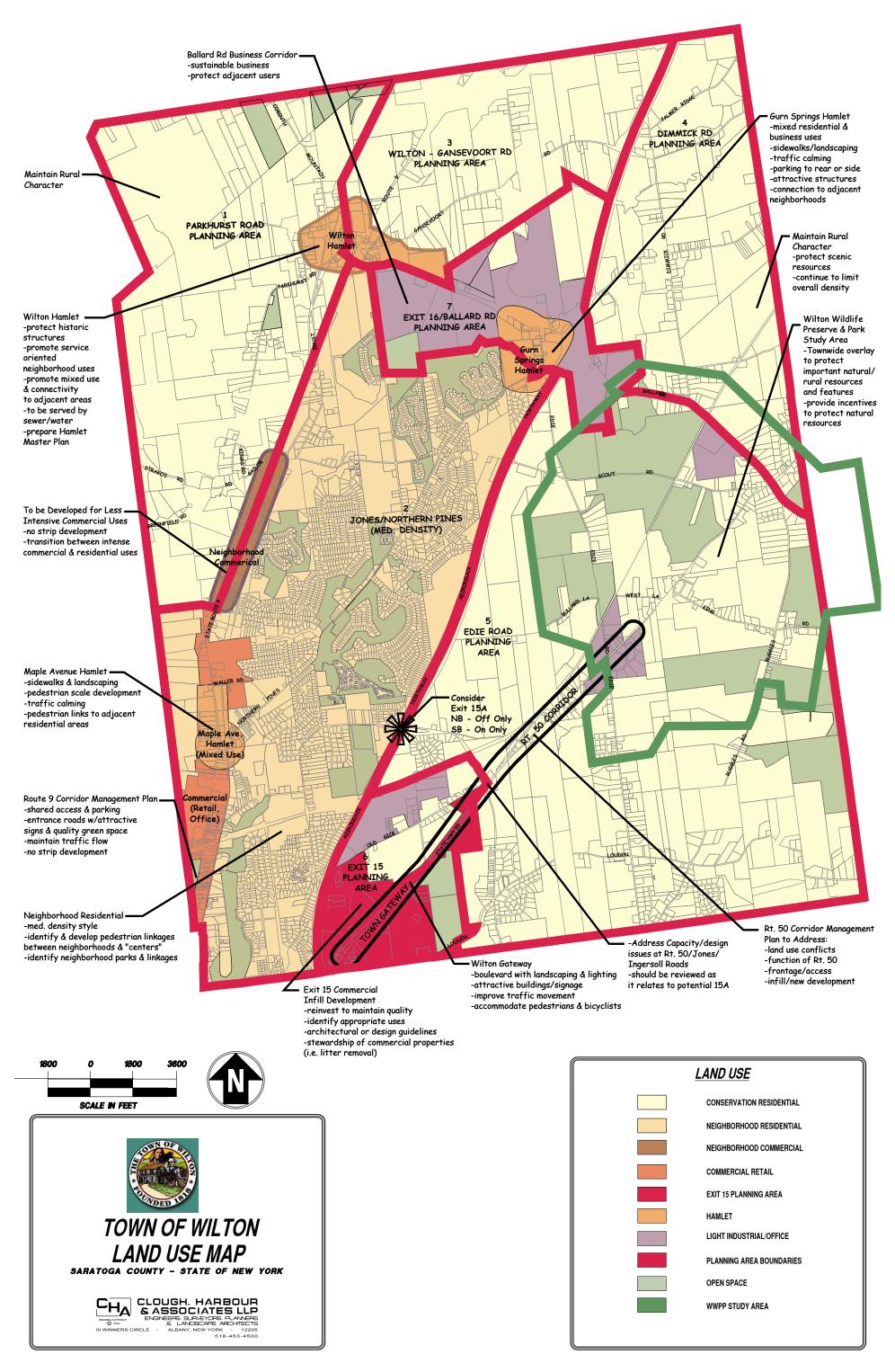
remaining pump stations within the WWSA system. The practical timing related to construction of the Carr Road parallel force main can be established based on the performance of the Indian Springs and Ace Pump Stations. These pump stations are currently performing adequately without excessive run times. The WWSA will monitor the run times at these pump stations and implement the Carr Road parallel force main improvement as necessary to prevent excessive run times (greater than 8-10 hours per day).

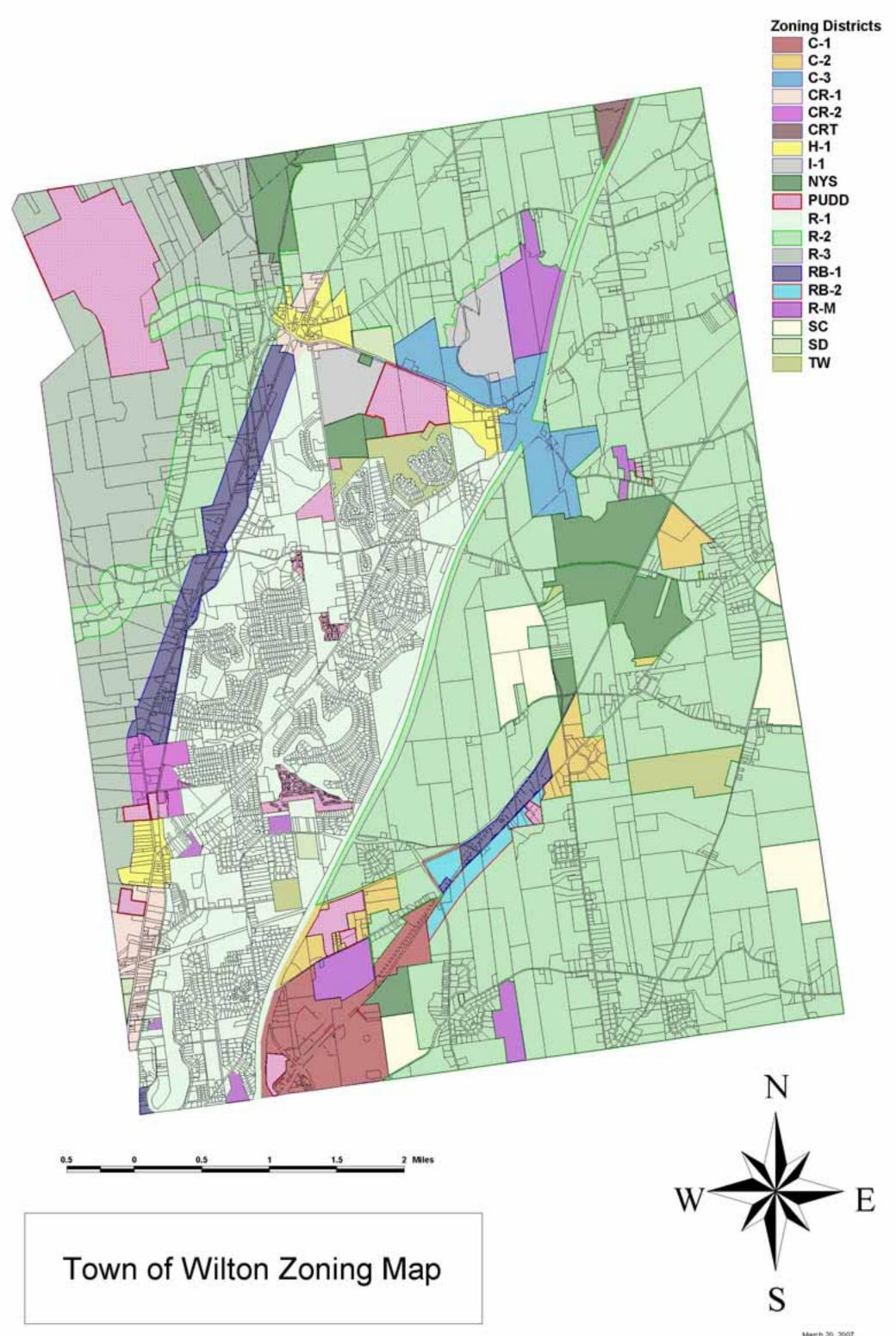
The Indian Springs and Ace Pump Stations are performing adequately; however, these pump stations operate along a theoretical hydraulic grade line that is lower than the remaining pump stations within the WWSA system. As growth continuous within the Town, upgrades will be required at these pump stations to meet the 2027 flow projections. The exact timing and extent of these upgrades will depend on actual growth rates and geographic location of growth within the Town. The WWSA will monitor the performance of these stations with respect to the remaining system and implement upgrades as necessary.

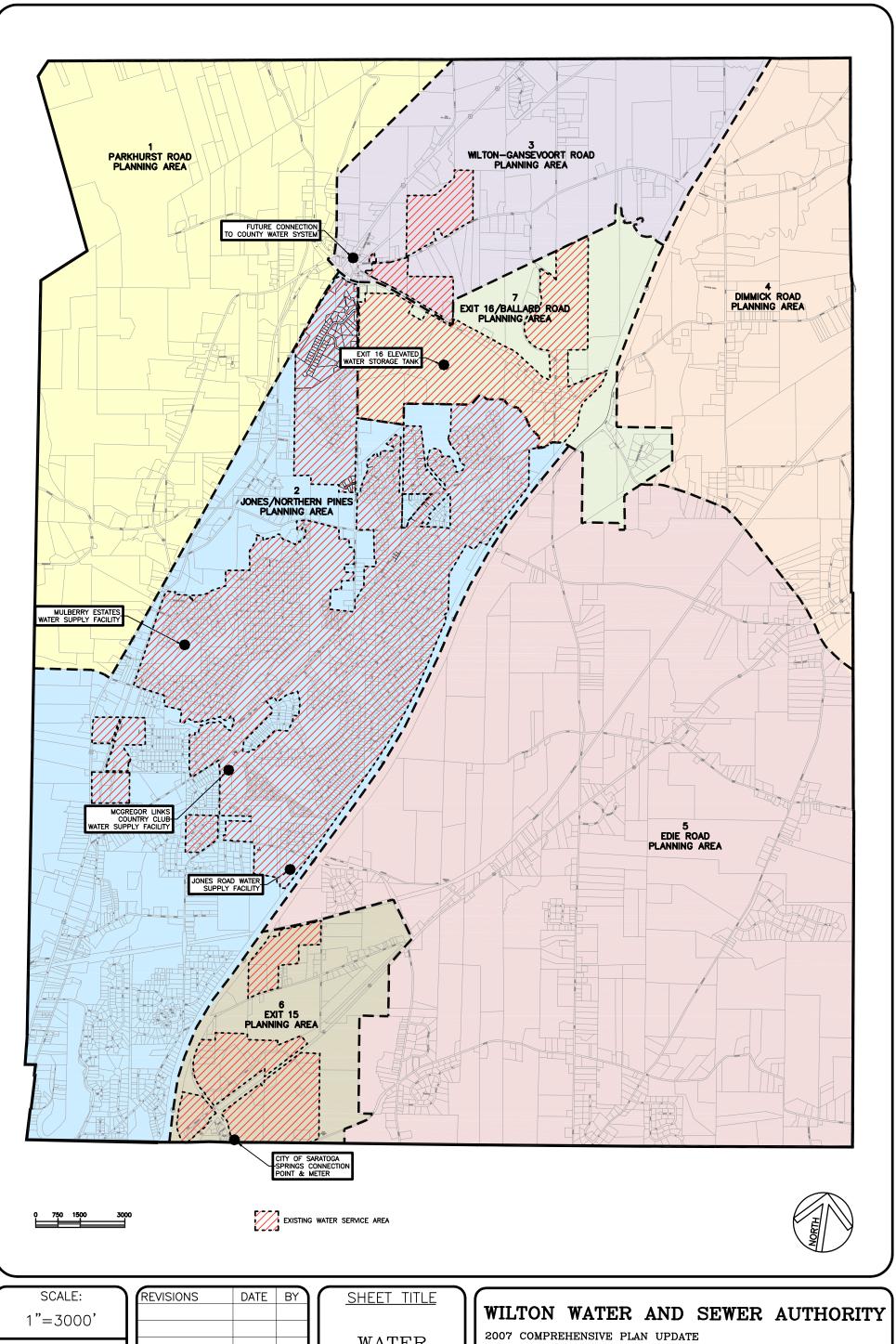
In general, the residential development surrounding Exit 16 has progressed at a faster rate than the commercial activity anticipated in the flow projections established approximately 10 years ago. As development continues in the Town of Wilton we recommend periodically updating the hydraulic model, developed for the WWSA system, to reflect current flow projections and monitor required system improvements.

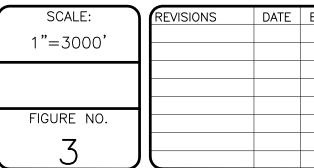
### 5.5 Recommended Sewer System Improvements

As discussed in the previous section, future sanitary sewer system improvements, including a parallel force main along Carr Road to Meditation Way and pump station upgrades at the Indian Springs and Ace Pump Stations, will be required to accommodate future flow projections. Based on the current number of connections within the system, previous hydraulic modeling suggested that the parallel force main improvements along Carr Road would be necessary in the near future. However, the system is currently performing adequately indicating that the improvements are not necessary at this time. The WWSA will continue to monitor the performance of the system and implement improvements as necessary to accommodate future flows.









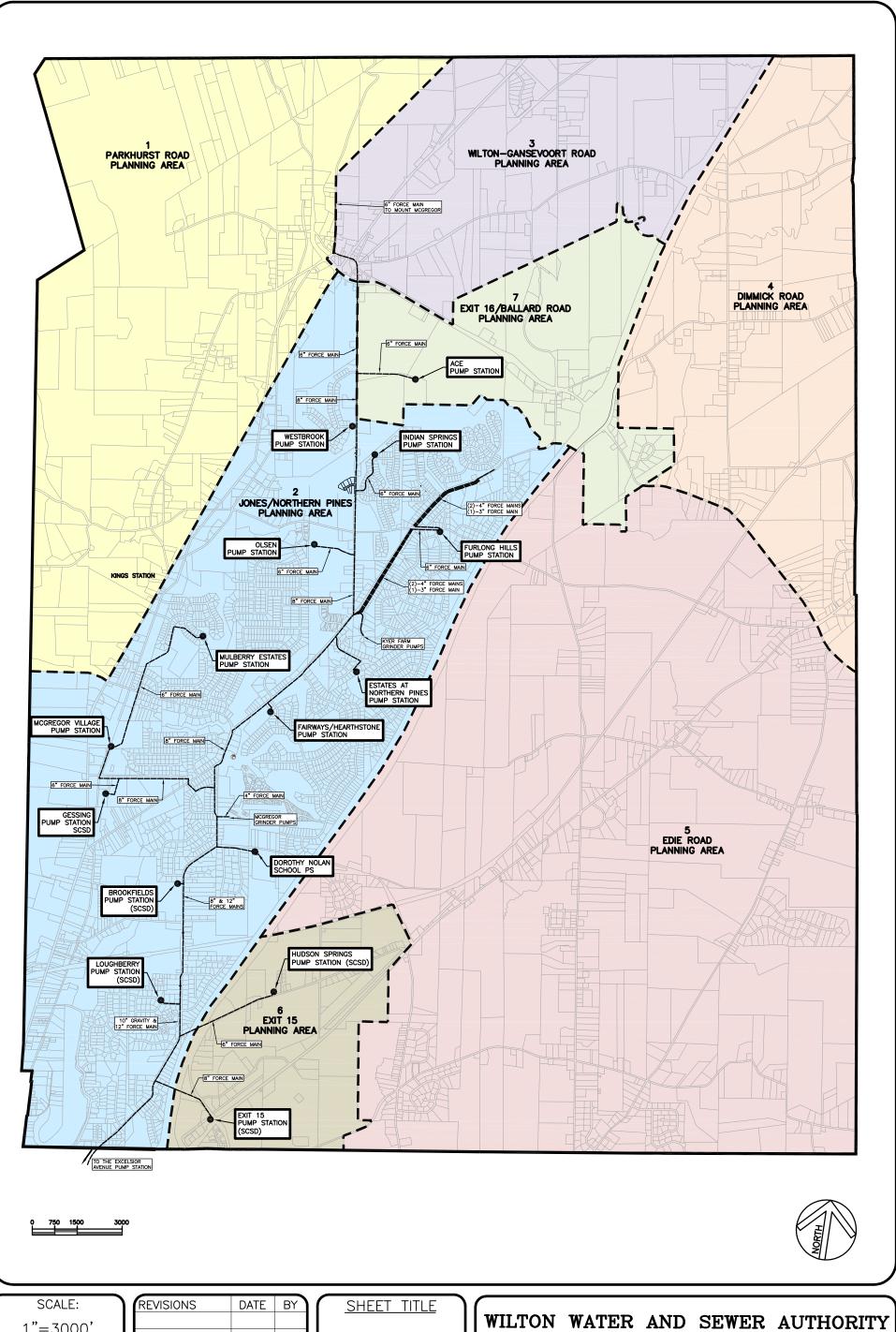
WATER SYSTEM **SCHEMATIC** 

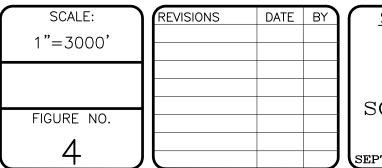
SEPTEMBER 12, 2007

TOWN OF WILTON SARATOGA COUNTY, NEW YORK

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP ROUTE 146 CLIFTON PARK, NY 12065 (518) 371-7621 ENGINEERING + LANDSCAPE ARCHITECTURE + LAND SURVEYING







SEWER SYSTEM SCHEMATIC

SEPTEMBER 12, 2007

2007 COMPREHENSIVE PLAN UPDATE

TOWN OF WILTON

SARATOGA COUNTY, NEW YORK

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP ROUTE 146 CLIFTON PARK, NY 12065 (518) 371-7621 ENGINEERING + LANDSCAPE ARCHITECTURE + LAND SURVEYING



# APPENDIX A ESTIMATED WATER AND SEWER DEMANDS

SUMMARY OF ESTIMATED SEWER DEMANDS							
	2007	2027	Flow	Existing	Estimated		
User Name	Number of	Number of	Rate per	Flow	2027 Flow		
	EDU's	EDU's	EDU	(gpd)	(gpd)		
Mt. McGregor Correctional Facility			N.A.	256,542	256,542		
	PLANNING A	REA #1 -PARK	HURST ROAI	D			
FUTURE CONNECTIONS		150	250	0	37,500		
PL	ANNING AREA	#2 - JONES / I	NORTHERN F	PINES			
Westbrook	101	101	250	25,250	25,250		
Veterans Apartments	6	6	250	1,500	1,500		
N. Pines Senior Apartments	18	18	250	4,500	4,500		
Preston Court	1	8	250	250	2,000		
Burnham Hollow	0	61	250	0	15,250		
Indian Springs	105	125	250	26,250	31,250		
Olson Farm	0	53	250	0	13,250		
Gailor Road	0	10	250	0	2,500		
Little Mills	6	7	250	1,500	1,750		
Kings Mills	131	131	250	32,750	32,750		
Craw Farm	0	48	250	0	12,000		
Huck Finn	0	42	250	0	10,500		
Canyon Run	11	61	250	2,750	15,250		
Furlong Hills	182	182	250	45,500	45,500		
Kyer Farm	12	12	250	3,000	3,000		
Estates at Northern Pines	185	185	250	46,250	46,250		
Lonesome Pine Trail	22	22	250	5,500	5,500		
Jessica Trace	12	12	250	3,000	3,000		
Fairways I, II & III	245	245	250	61,250	61,250		
O'Brien Fairways	28	28	250	7,000	7,000		
Links	18	21	250	4,500	5,250		
Mulberry Estates	110	110	250	27,500	27,500		
McGregor Village Office	15	17	250	3,750	4,250		
McGregor Village Apartments	108	108	250	27,000	27,000		
Wilton Commons Senior Apt	18	18	250	4,500	4,500		
Home of Good Shepard	0	12	250	0	3,000		
Saratoga Heritage Phase 1	72	72	250	18,000	18,000		
Saratoga Heritage Phase 2	0	40	250	0	10,000		
Saratoga Hertiage Phase 3	0	32	250	0	8,000		
McGregor Villas	16	16	250	4,000	4,000		
Stewart Court	0	5	250	0	1,250		
Greens at McGregor	115	115	250	28,750	28,750		
McGregor Country Club	5	5	250	1,250	1,250		
Dorothy Nolan School	32	32	250	8,000	8,000		
Brookfields	100	100	250	25,000	25,000		
The Forest	16	16	250	4,000	4,000		
Loughberry Estates	80	80	250	20,000	20,000		
FUTURE CONNECTIONS		277	250	0	69,250		

SUMMA	ARY OF ESTIMA	TED SEWER D	EMANDS		
	2007	2027	Flow	Existing	Estimated
User Name	Number of	Number of	Rate per	Flow	2027 Flow
	EDU's	EDU's	EDU	(gpd)	(gpd)
PLAN	NING AREA #3	- WILTON / G	SANSEVOOR	T ROAD	
Ridgeview	0	38	250	0	9,500
Ballard Road School	5	5	**	1,400	14,000
FUTURE CONNECTIONS		100	250	0	25,000
	PLANNING A	AREA #4 - DIN	IMICK ROAD		
FUTURE CONNECTIONS		150	250	0	37,500
	PLANNIN	G AREA #5 - E	DIE ROAD		
FUTURE CONNECTIONS		200	250	0	50,000
	PLANNI	NG AREA #6 -	EXIT 15		
Hudson Springs PDD	0	168	250	0	42,000
Paddocks PDD	0	42	250	0	10,500
Exit 15 Pump Station Area	500	500	**	125,000	125,000
FUTURE CONNECTIONS		108	250	0	27,000
PI	LANNING AREA	#7 - EXIT 16 /	BALLARD R	OAD	
Wilton Travel Plaza	5	5	250	1,250	1,250
Wilton Town Hall	1	1	250	250	250
Stewart	2	2	250	500	500
Target	13	13	**	5,000	5,000
Ace Hardware	8	8	**	2,000	2,000
Police Barracks	1	1	250	250	250
Wilton Developmental Cen/Exit 16	3	30	250	750	7,500
Wilton Funeral Home	1	1	250	250	250
FUTURE CONNECTIONS		165	250	0	41,250
**Actual Flow Data					
TOTALS:		4120		835,692	1,301,042

Note: The Sanitary Sewer Demand Table has been color coordinated with the Sewer System Schematic (Figure 4) to identify individual Planning Areas as defined by the Town of Wilton Comprehensive Plan.

	SUMMARY	OF ESTIMATED	WATER DEM	IANDS						
	WWSA					Estimated				
	Billing	2007	2027	Flow	Existing	Demand at				
User Name	Route	Number of	Number of	Rate per	Demand	2027				
	Number	EDU's	EDU's	EDU	(gpd)	(gpd)				
PLANNING AREA #1 -PARKHURST ROAD										
FUTURE CONNECTIONS			150	300	0	45,000				
	PLA	NNING AREA	#2 - JONES / I	NORTHERN F	PINES					
Westbrook	23	101	101	300	30,300	30,300				
Veterans Apartments	10	6	6	300	1,800	1,800				
N. Pines Senior Apartments	10	18	18	300	5,400	5,400				
Preston Court	23	1	8	300	300	2,400				
Burnham Hollow	25	0	61	300	0	18,300				
Indian Springs	21	105	125	300	31,500	37,500				
Olson Farm	27	0	53	300	0	15,900				
Gailor Road	24	0	10	300	0	3,000				
Little Mills	10	6	7	300	1,800	2,100				
Kings Mills	16	131	131	300	39,300	39,300				
Craw Farm		0	48	300	0	14,400				
Huck Finn	28	0	42	300	0	12,600				
Canyon Run	24	11	61	300	3,300	18,300				
Furlong Hills	17, 20	182	182	300	54,600	54,600				
Kyer Farm	10	12	12	300	3,600	3,600				
Estates at Northern Pines	17, 20	185	185	300	55,500	55,500				
Lonesome Pine Trail	17, 20	22	22	300	6,600	6,600				
Jessica Trace	17, 20	12	12	300	3,600	3,600				
Fairways I, II & III	1, 2, 3	245	245	300	73,500	73,500				
O'Brien Fairways	1, 2, 3	28	28	300	8,400	8,400				
Links	1, 2, 3	18	21	300	5,400	6,300				
Misc. along Routes 1,2 & 3	1, 2, 3	36	36	300	10,800	10,800				
Lake Elizabeth Area	4-7 & 11-15	526	526	300	157,800	157,800				
Mulberry Estates	18	110	110	300	33,000	33,000				
McGregor Village Office	10	15	17	300	4,500	5,100				
McGregor Village Apartments	10	108	108	300	32,400	32,400				
Wilton Commons Senior Apt	10	18	18	300	5,400	5,400				
Home of Good Shepard	10	0	12	300	0	3,600				
Saratoga Heritage Phase 1	10	72	72	300	21,600	21,600				
Saratoga Heritage Phase 2	10	0	40	300	0	12,000				
Saratoga Hertiage Phase 3	10	0	32	300	0	9,600				
McGregor Villas	10	16	16	300	4,800	4,800				
Stewart Court	10	0	5	300	0	1,500				
Greens at McGregor	9	109	109	300	32,700	32,700				
McGregor Country Club	10	5	5	300	1,500	1,500				
Dorothy Nolan School	8	32	32	300	9,600	9,600				
Brookfields	8	44	44	300	13,200	13,200				
FUTURE CONNECTIONS			277	300	0	83,100				

	SUMMARY	OF ESTIMATED	WATER DEM	1ANDS		
	WWSA					Estimated
	Billing	2007	2027	Flow	Existing	Demand at
User Name	Route	Number of	Number of	Rate per	Demand	2027
	Number	EDU's	EDU's	EDU	(gpd)	(gpd)
	PLAN	NING AREA #3	- WILTON / G	SANSEVOOR	T ROAD	
Ridgeview	26	0	38	300	0	11,400
Ballard Road School	19	5	5	**	14,000	14,000
FUTURE CONNETIONS			100	300	0	30,000
		PLANNING A	AREA #4 - DIN	IMICK ROAD		
FUTURE CONNECTIONS			150	300	0	45,000
		PLANNIN	G AREA #5 - E	DIE ROAD		
FUTURE CONNECTIONS			200	300	0	60,000
		PLANNI	NG AREA #6 -	EXIT 15		
Hudson Springs PDD	22	0	168	300	0	50,400
Paddocks PDD	22	0	42	300	0	12,600
Exit 15 Pump Station Area	22	300	300	300	90,000	90,000
FUTURE CONNECTIONS			108	300	0	32,400
	PL	ANNING AREA	#7 - EXIT 16 /	BALLARD R	OAD	
Wilton Travel Plaza	10	5	5	300	1,500	1,500
Wilton Town Hall	10	1	1	300	300	300
Stewarts	19	2	2	300	600	600
Target	19	13	13	**	5,000	5,000
Ace Hardware	19	8	8	**	2,000	2,000
Police Barracks	19	1	1	300	300	250
Wilton Developmental Cen.	19	3	30	300	900	9,000
Wilton Funeral Home	19	1	1	300	300	300
FUTURE CONNECTIONS			165	300	0	49,500
**Actual Flow Data						
TOTALS:		2513	4174		767,100	1,310,350

Note: The Water System Demand Table has been color coordinated with the Water System Schematic (Figure 3) to identify individual Planning Areas as defined by the Town of Wilton Comprehensive Plan.

# From: Clough, Harbour & Associates LLP Comprehensive Plan for Water & Wastewater Management, March 2000

User Name	Status	Location	Number of Units	Wastewater Flows at 2020 Units		Total Flow Rate a
Oser Name	(see note	(see note 2)	at 2020	0,,,,0	Rate Per Unit	Build-Out (gpd)
Mt. McGregor Correctional Facility	i	Out	1	Facility	256,542	256,54
Ballard road -Target		Out	1,528,000	Square Feet		11,00
- Ace Hardware		Out	1,641,000	Square Feet		6,00
- Ballard Road School	<u> </u>	Out	1	Facility		900
- Police Barracks	<u> </u>	Out	1	Facility		300
Wilton Developmental Cen/Exit 16	<u> </u>	Out	1	Facility	250	15,00 25
Wilton Funeral Home		Out	300	Facility Apartments	125	37,50
Veterans Center	C I/A	Out Out	127	Single Family Homes	250	31,75
Indian Springs	1/A	Out	276	Single Family Homes	250	69,00
Fairways I, II & III Kings Mills	1//	Out	132	Single Family Homes	250	33,00
McGregor Village - Phase I	<del> </del>	Out	62,500	Square Feet		32,00
- Phase II		Out	24,000	Square Feet		11,20
- Phase III		Out	212	Apartments	125	26,50
Furlong Hills	I/A	Out	181	Single Family Homes	250	45,25
Mulberry Estates	I/A	Out	110	Single Family Homes	250	27,50
Lonesome Pines Trail	1/A	Out	30	Single Family Homes	250	7,50
Estates at Northern Pines	I/A	Out	185	Single Family Homes	250	46,25
Conceptual - Route 9	C	Out	50,000	Square Feet	0.1	5,00
Conceptual - Route 9	C	Out	100,000	Square Feet	0.1	10,00 32,81
The Greens at McGregor	I/A	Out	172	Townhouses	187.5 125	
Gessing Apartments	A	In Out	128 150	Apartments Single Family Homes	250	37,50
Residents Along Sewer	<del>                                     </del>	In	790	Students	15	
Dorothy Nolan School	I/A	Out	34	Single Family Homes	250	
O'Brein's Fairway The Links	177	Out	21	Single Family Homes	250	
Brookfields	<del>                                     </del>	In	49	Single Family Homes	250	
Brookfields at Wilton Sec IV	I/A	In	41	Single Family Homes	250	
Meghan Court		In	9	Single Family Homes	250	2,25
Existing/Conceptual - Residential	С	In	300	Single Family Homes	250	
Existing/Conceptual - Residential	С	ln	300	Townhouses	187.5	
The Forest	I/A	in	37	Single Family Homes	250	
Loughberry Lake	1/A	<u>In</u>	137	Single Family Homes	250	
Little Mill Development	I/A	Out	8	Single Family Homes	250 250	
Lands of Speciale Senior Apt	1/A	Out	101	Single Family Homes	250	
Westbrook Subdivision V	A	Out In	67,300	Single Family Homes Square Feet	230	6,73
Route 9 Plaza - Store	}	ln	100	Seats	35	
* - Restaurant Maple Avenue School	<del> </del>	In	1,100	Students	15	
Exit 15 Pump Station	<del> </del>		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
BJ's Wholesale Club	1	In	115,660	Square Feet		3,00
New Country Way Auto		In	36,000	Square Feet	0.1	3,60
Wilton Square		ln	389,270	Square Feet		21,00
Wal-Mart		ln .	121,267	Square Feet	ļ	8,40
Wal-Mart (expansion)	A	ln .	72,245	Square Feet		5,00
* Weibel Plaza - Hannaford	1	ln	64,220	Square Feet		2,30
- Kmart	1	ln -	107,806	Square Feet		5,75
- Retail		ln In	25,600	Square Feet	0.1	1
- Office		In In	92,000 130	Square Feet Rooms	120	
- Hotel	<del> </del>	In In	575,258	Square Feet	120	34,24
Wilton Mall McDonalds	<del> </del>	In In	106	Seats	35	
Burger King	<b></b>	ln In	80	Seats	35	
Mobil		ln In	2	Toilets	400	80
Hess		In	2	Toilets	400	
Ponderosa		ln	180	Seats	35	
Bank of Scotia		In	4,000	Square Feet	0.1	<u></u>
Adirondak Trust		ln	4,000	Square Feet	0.1	
Taco Bell / KFC	In	ln	98	Seats	35	
Conceptual - Gick Road	С	In	50,000	Square Feet	0.1	
Conceptual - Route 50 Office	C	<u>In</u>	100,000	Square Feet	0.1	
Conceptual - Route 50 Retail	С	<u>in</u>	100,000		0.1	
Wilton Industrial Plaza		<u>In</u>	147,325	Square Feet	0.1	
Other Connections	LOADATO	In NA COUNTY	300 SEWER DISTRIC		250	75,00 452,27
TOTAL OUTSIDE	OTAMAC P	A COUNTY	SEWER DISTRIC	T BOUNDARY	· · · · · · · · · · · · · · · · · · ·	828,73
		TINUUU AE	SEWEN DISTRIC	GRAND TOTAL:		1,281,00

User Name	Number of Units at Build-Out	Units	Estimated Flow Rate Per Unit	Total Flow Rate at Build-Out (gpd)
Mr. McGregor Correctional Facility		Facility	256,542	
Ballard Road - Conceptual	200,000	Square Feet	.075	0256,54
Wilton Developmental Cen/Exit 16	1	Facility	.077	5,00
Wilton Funeral Home	2,800	Square Feet	.025	240,00
Veterans Center		Apartments	175	
Campula Property	1297	Single Family Homes	250	3,00
Fairways I, II & III	276	Single Family Homes		30,00
Kings Mills	132	Single Family Homes	250	69,00
McGregor Village - Phase I	62,500	Square Feet		3),00
- Phase II	24,000	Square Feet	.025	I,Sc
- Phase III	100 EDU	* Townhomes	.025 250	60
Furlang Hills	181	Single Family Homes	250	25,00
Mulberry Estates	110	Single Family Homes	250	45,2
Lonesome Pines Trail	30	Single Family Homes	250	27,50
Estates at Northern Pines	185	Single Family Homes	250	7,50
Conceptual - Route 9	50,000	Square Feet	.025	46,25
Conceptual - Route 9	100,000	Supare Feet	.025	1,2
The Greens at McGregor	120 EDU	Townhomes	250	2,50
Gessing Property	360,000	Square Feet	.025	
Residents Along Sewer	150	Single Family Homes	250	9,00
Durothy Notan School	790	Students	10	37,50
O'Ariens Fairway	28	Single Family Homes	250	8,00
The Links	SO EDU	Townhomes	250	7,10
Brookfields .	49	Single Family Homes	250	11,0
Meghan Court	9	Single Family Homes	250	12,2
Conceptual + Residential	300	Single Family Homes	250	75,0
Conceptual - Residential	200 EDU	300 Townhomes	250	
The Forest Pump Station	37	Single Family Homes	250	9,2
Loughberry Lake	137	Single Family Flomes	250	
Route 9 Plaza - Store	30,030	Square Feet	.025	34,2
• - Retail	9,459	Square Feet	.025	7.
• - Retail	17,770	Square Feet	.025	4
- Restaurant Naple Avenue School	100	Seals	35	3,5
Exit 15 Pump Station	1,100	Students	10	11,0
BJ's Wholesale Club	115.660	Carran Frank		
New Country Way Auto	115,660	Square Feet Square Feet	.025	2,8
Saratoga Moll - Retail	389,270	Square Feet	.025	9
• - Restaurant	150	Seats	.025	9,7
• Theater	1,200	Seals	2	5,2
Wal-Mart::	121,267	Square Feet	.025	2,4
Weibel Plaza - Supermarket	64,220	Square Feet	.025	3.0
<ul> <li>Dept. Store</li> </ul>	107,806	Square Feet		1,6
- Retail	25,600	Square Feet		2,7
• - Office	92,000	Square Feet	025	2,3
• - Hotel	139	Ruoms	120	13,0
Wilton Mall - Retail	575.258	Square Feet	.025	14,3
- Restaurant	200	Scats	35	7,0
• - Theater	1,400	Scats	2	2,6
• - Bank	331	Square Feet	ļ	
McDonalds	106	Seats	35	3,7
Burger King	CS	Seats	35	2,1
Mobil	2	Toilets	400	
Hess	2	Toilets	400	
Punderosa	187	Scats	35	6.
Bank of Scotia	4,600	Square Feet		
National Savings Bank	4,000	Square Feet		
Pizza Hut	53	Seats	35	3,4
Wilton Square - Rotail	30 19/	Square Feet	025	
- Restaurant	<u> </u>	Seats	35	3,
Forest Grove	450 EDU	Single Family Homes	250	75.0
		Townbomes	150	/3,0 33,0
Conceptual - Gick Road	50,000	Square Fect	.025	
Conceptual - Route 50 Office	100,000	Square Feet	.025	*1,
Conceptual - Route 50 Retail	189, gen	Square Feet	.025	2,
Witton Industrial Plaza	147,325	Square Feet	T	2
Connections Along Trunk Sewer	30:	Single Family Homes	.025	3.
			150	75 /
	TOTAL WIT	HIN SARATOGA COUNTY	SEWER DISTRICT DOLLARS	75, ARY. 300,000

# From: Clough, Harbour & Associates LLP Comprehensive Plan for Water & Wastewater Management, March 2000

# Town of Wilton Summary of Estimated Water Demands

User Name	Number of Units	Units	Estimated Flow	Total Water
	at 2020		Rate Per Unit	Demand (gpd)
Ace Hardware	1.641.000	Square Feet		6,000
Target		Square Feet		11,000
Police Barracks		Employees		300
Ballard Rd. School		Students		900
Wilton Development Center/ Exit 16	1	Facility		15,000
Fairways I, II & III	l	Single Family Homes	300	82,800
Kings Mills	ľ	Single Family Homes	300	39,600
McGregor Village - Phase I	l .	Square Feet	0.1	6,250
Phase II	1	Square Feet	0.1	2,400
Phase III	· ·	Apartments	125	26,500
Furlong Hills	181	Single Family Homes	300	54,300
Mulberry Estates	1	Single Family Homes	300	33,000
Lonesome Pines Trail		Single Family Homes	300	9,000
Estates at Northen Pines		Single Family Homes	300	55,500
Conceptual Rt 9		Square Feet	0.1	5,000
Conceptual Rt 9		Square Feet	0.1	10,000
The Greens at McGregor		Townhomes	187.5	32,250
Residents along Water line	150	Single Family Homes	300	45,000
Dorothy Nolan School	1	Students	15	11,850
O'Briens Fairway	34	Single Family Homes	300	10,200
The Links	28	Single Family Homes	300	8,400
Lake Elizabeth Estates		EDUs	300	131,400
Indian Springs	125	Single Family Homes	300	37,500
Lakewood Estates	62	Single Family Homes	300	18,600
Westbrook (AMARATI)	101	Single Family Homes	300	30,300
Gessing Apartments	128	Apartments	125	16,000
Lands of Speciale	7	Single Family Homes	300	2,100
McGregor Links CC	5	EDUs	300	1,500
Pines at McGregor	24	Townhomes	187.5	4,500
McGregor Villas	32	Apartments	125	4,000
Echo Valley	11	Townhomes	187.5	2,100
Birch Meadows	22	EDUs	300	6,600
Kyer Farms	11	Single Family Homes	300	3,300
Little Mills	7	EDUs	300	2,100
Brookfield	41	Single Family Homes	300	12,300
·			Total	737,550



# APPENDIX B WATER AND SEWER FEE PACKAGE

# **TOWN of WILTON**

# WATER and SEWER AUTHORITY 20 TRAVER ROAD GANSEVOORT, NEW YORK 12831 (518)581-8626

Http://water.townofwilton.com

# **WATER AND SEWER FACILITIES - FEE PACKAGE**

	(Number) (Street)	(City)	(State) (Zip)
	(Hambor) (Oncot)	(Oily)	(Otato) (2.p)
	(Tax map #)	(Total p	roject acreage)
	licants ne:		
	licants ress:		
	(Nur	mber)	(Street)
	(City)	(State)	(Zip)
∖ppl	licant's Phone Number: work	home	<b>;</b>
<u>GEN</u>	IERAL INFORMATION		
	IERAL INFORMATION  Is the property to be used for re	esidential or commercial	purposes?
۹.	<u> </u>		purposes?GPD
۹.	Is the property to be used for re		GPD
A. 3.	Is the property to be used for re	age? Water = Sewer =	GPD GPD
<b>∖</b> . 3.	Is the property to be used for reward with the work of	age? Water = Sewer =	GPD GPD
A. 3.	Is the property to be used for reward what is the estimated daily used If residential, what are the # of	age? Water = Sewer = units and type of unit (e.	GPD GPD GPD g. 49-single-family)
<b>GEN</b> A. B.	Is the property to be used for reward what is the estimated daily used If residential, what are the # of the second (#)  What is the number of equiv	age? Water = Sewer = units and type of unit (e.	GPD GPD GPD g. 49-single-family)

# III. FEE CALCULATION

## A. Fees Due Immediately:

WATER		SEWER	
REVIEW FEE**			
Water: equivalent		Sewer: equivalent	
domestic units x \$50.00/EDU =		domestic units x \$50.00/EDU =	
(if less than \$650, enter \$650)	\$	(if less than \$650, enter \$650)	\$
APPLICATION FEE			
Water: equivalent		Sewer: equivalent	
domestic units x \$20.00/EDU =		domestic units x \$20.00/EDU =	
(if less than \$200, enter \$200)	\$	(if less than \$200, enter \$200)	\$
DEC Water Supply Application	\$ 1,850.0	0	
Total Water Fees Due		Total Sewer Fees Due	
Immediately*	\$	Immediately*	\$

# B. BUY-IN FEE PART I Fees Due Prior to Town Subdivision Approval:

WATER		SEWER	
Water Buy-In Fee \$2,200 per EDU		Sewer Capital Improvement Fee \$500 per EDU	
Water: equivalent		Sewer: equivalent	
domestic units x \$2,200/EDU =	\$	domestic units x \$500/EDU =	\$
Total Water Fees Due Prior to		<b>Total Sewer Fees Due Prior to</b>	
Town Subdivision Approval*	\$	Town Subdivision Approval*	\$

# C. BUY-IN FEE PART II Fees Due Prior to Issuance of Certificate of Occupancy:

WATER		SEWER	SEWER		
Water Buy-in fee \$1,000 per EDU		Sewer Capital Improvement Fee \$1,200 per EDU			
Water:equivalent		Sewer:equivalent			
domestic units x \$1,000/EDU =	\$	domestic units x \$1,200/EDU =	\$		
Water Meter & Inspection					
Fee \$350 per connection =	\$				
Total Water Fees Due Prior to		<b>Total Sewer Fees Due Prior to</b>			
Issuance of Certificate of		Issuance of Certificate of			
Occupancy*	\$	Occupancy*	\$		

#### \* WATER AND SEWER FEES MUST BE SUMBITTED ON SEPARATE CHECKS

This application and fee should be returned directly to the Town of Wilton Water and Sewer Authority to begin the review process.

<sup>\*\*</sup>NOTE: Per the code of the Town of Wilton, New York, if monies paid by the developer prove insufficient for the review process, the developer shall be responsible for the difference.

# EQUIVALENT DOMESTIC UNITS (EDUs)

Building	Typical No. of EDUs
Single Family Home	1
Town Home Unit	2/3
Apartment	1/2
Mobile Home	1/2
Two Family Home	2

One EDU is equal to 300 gallons per day.

NOTE: These are typical EDU assessment values. Actual EDU assessments will be determined by the Town of Wilton Water & Sewer Authority on a case by case basis.



## LIST OF ABBREVIATIONS AND ACRONYMS

CHA	.Clough, Harbour & Associates
EDP	.Environmental Design Partnership, LLP
EDU	equivalent domestic unit (defined as 300 gallons per day)
ft	.feet
gal	.gallons
gpd	gallons per day
gpm	gallons per minute
kW	.kilowatt
LF	.linear feet
mgd	.million gallons per day
PS	.Pump Station
PVC	polyvinyl chloride.
SCSD#1	.Saratoga County Sewer District #1
TDH	total dynamic head
WWSA	.Wilton Water and Sewer Authority