## WATER STORAGE TANK TRANSMISSION LINE REPLACEMENT PROJECT

### **ENGINEERING REPORT**

PREPARED FOR

#### **Town of Warrensburg**

Warren County New York



Project Number: 18-031 Date: September 6, 2018



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Appendix B - Smart Growth Assessment Form

#### **1.0 Executive Summary**

The Town of Warrensburg, NY owns and operates a water system for the benefit of the Warrensburg Water District. The system provides potable water and fire flow for the District. The water system is generally in good condition; however, a dedicated 3,700 foot 12" cast iron transmission line that connects the storage tank to the distribution system is in very poor condition and has to be repaired on an increasingly frequent basis. When this line needs to be repaired it causes significant disruptions to the homeowners and the commercial businesses that rely on a continuous flow of water. Additionally, the associated tank isolation valve is not functional making it difficult to make repairs to transmission line. The water storage tank transmission line is over 80 years old and should be replaced with a new transmission line and isolation valve and valve vault that can assure uninterrupted service. The estimated total cost of replacement is \$1,241,750.

This Engineering Report was developed in accordance with the following standards;

- Recommended Standards for Water Works, Latest Edition- Policies for the Review and Approval of Plans and Specifications for Public Water Supplies.
- New York Codes, Rules and Regulations, Title 10, Part 5, Subpart 5-1
- American Water Works Association Applicable Standards

#### 2.0 Project Background and History

#### 2.1 Site Information

The existing water system is supplied by four groundwater wells. A 500,000-gallon storage tank provides the necessary pressure for the distribution system and adequate fire flows. The water system serves approximately 3,600 people through 1,300 service connections and is disinfected with sodium hypochlorite prior to distribution. Proper contact time (CT) is provided by the length of pipe prior to the first user. Phosphate is added as a corrosion inhibitor which helps to maintain levels of lead and copper below the respective action levels. The total water produced per year is approximately 50 million gallons.

The project involves 7 tax parcels as shown on the attached tax map. The Town of Warrensburg has a maintenance easement with each property owner for access to the transmission line. The project site is about 1.60 acres. The replacement pipe will be a 12" diameter pipe made of either ductile iron or HDPE with the proper pressure rating.

According to Natural Resources Conservation Service (NRCS) data, the site is composed of fine sandy loam with small boulders, is well drained and averages 60" to greater than 96" to bedrock. The site includes some wooded area and a small ephemeral channel crossing. Part of the site has slopes greater than 15%. The site elevation is about 1000' ASL.

#### 2.2 Ownership & Service Area

The Town of Warrensburg, NY owns and operates a water system for the benefit of the Warrensburg Water District. The system provides potable water and fire flow for the District. The system is currently operated by Tracy Benoit who holds a "Class IIA" and a "Class D" operator's certification. The existing water distribution system serves approximately 3,600 people through 1,300 service connections. The Water District is shown on the attached water distribution system map.

#### 2.3 Existing Facilities

#### 2.3.1 Supply Wells

The existing water supply for the District comes from four (4) over burden wells, Well #3, Well #5, Well #6 and Well #7, that are located on property owned by Warren County on Schroon River Road. Each of the 4 active wells is equipped with a variable speed, submersible well pump. The well network can meet both the systems average daily demand (ADD) and the maximum daily demand (MDD).

#### 2.3.2 Pump House and Treatment System

The pump controls and treatment system are housed within two single story structures. One structure is for Well#3 and Well#5 and the other structure is for Well#6 and Well#7. All well pump motors have Variable Frequency Drives (VFDs) and are controlled by a pressure transducer located at the storage tank.

Treatment consists of chlorination with sodium hypochlorite solution and orthophosphate treatment for lead and copper.

#### 2.3.3 Water Storage Tank

A 500,000-gallon glass/steel clad tank provides adequate capacity for system demands including fire flows. The tank is in good condition.

#### 2.3.4 Water Transmission and Distribution System

The existing distribution system consists of 6, 8,10 and 12-inch cast and ductile iron water mains that were installed at different points in time. The transmission line connecting the water

storage tank to the distribution system is a 12" cast iron line. All service line connections are metered by a remote read metering system.

#### 2.4 Need for Project

The transmission line connecting the 500,000-gallon storage tank to the distribution system is the only connection between the storage tank and the distribution system. The 12" diameter cast iron line is approximately 3,700 feet long. The cast iron transmission line is in poor condition and is highly susceptible to damage due to insufficient burial depth. Additionally, the associated tank isolation valve is not functional making it difficult to make repairs to the transmission line. When this line leaks or is damaged by a storm event and is out of service for repairs, system demands and fire flow cannot be adequately met. Fire flows and system demands cannot be provided by the well pumps alone.

#### 2.5 Capacity Development

The Town of Warrensburg has completed the Capacity Development Program Evaluation Form. This form is required to ensure that water systems have adequate technical, managerial, and financial capabilities to provide safe drinking water. For the complete form, please refer to Appendix A.

#### 2.6 Projected Growth

Table 1, shows the estimated population growth from 2010 to 2035. The table indicates that by the year 2035 there should be a net increase of 115 residents. In considering these factors, it is presumed that the number of newly created households will increase, further adding to the demand for water and sewer services.

The projected population growth was determined using the following formula. The rate was determined using the population data from the 2008-2015 American Community Survey 5-Year Estimates and the 2010 Census.

$$\log\left(\frac{N}{No}\right) = r * t$$

Table 1 - Estimated Population Growth 2010-2035							
2010	2015	2025	2035	Net Increase by 2035			
4094	4125	4167	4209	+115			

The projections for population growth and increase of newly created households, is a strong indicator of new construction of homes, apartments, and businesses to support these residents.

In the study area, there are currently 190 vacant and buildable parcels, in the Town of Warrensburg, and 2 vacant and buildable parcels, in the Town of Lake George. From these 192 vacant buildable parcels, 124 (65%) are zoned and/or are appropriate for residential development, whereas 68 (35%) are zoned and/or are appropriate for commercial development.

Based on current zoning regulations, those parcels that are entirely within the hamlet, 154 lots (52 commercial, 102 residential), there exists the possibility to subdivide some of those parcels. If all of these lots were subdivided the number of vacant buildable parcels would increase to 180 lots (64 commercial, 116 residential).

Assuming that the current average house size of 2.34 continues through the year 2035, the additional projected residents will result in the creation of approximately 50 new households. There is more than adequate room for this anticipated growth within the next 20 years, even if it is assumed that each new household is a single-family dwelling. Assuming 1 EDU per family there will be an increase of 50 EDU's to the system due to population growth alone.

#### 3.0 Alternative Analysis

An analysis of alternatives was conducted to evaluate improvements for the Warrensburg Water District. The following three alternatives were evaluated;

Alternative 1 - No Action,

Alternative 2 - Interconnection with the Village of Lake George.

Alternative 3 - Water System Storage Tank Transmission Line Replacement.

#### 3.1 Alternative 1 - No Action

The No Action Alternative was evaluated for this project. There is no capital cost associated with this alternative; however, the O&M costs will continue to increase and repairs of the critical components will likely need to be made on an emergency basis which can be very disruptive to its water customers.

The No Action Alternative for this system would not be protective of human health because the loss of the transmission line for an extended period would result in many residents without

public water. Based on this evaluation Alternative 1 - No Action is not an acceptable alternative and will not be further evaluated.

#### 3.2 Alternative 2 - Interconnection with Village of Lake George

An interconnection with the Village of Lake George water system has been evaluated. The Village of Lake George water system is located approximately 5.5 miles south of the Warrensburg Water District. A transmission line could be constructed along NYS Route 9. A 12-inch diameter transmission main would be required. A booster pump station may also be required.

Interconnection with Village of Lake George Cost Estimate

29,000ft - 12" Transmission Line @ \$225/ft	\$6,525,000
WD System connection modifications (booster	\$500,000
pump)	
Sub Total	\$7,025,000
10% Contingency	\$702,500
Engineering/Permitting/Construction Over sight	\$500,000
Legal and Grant Administration	\$30,000
	<b>TOTAL \$8,257,500</b>

The estimated total cost makes it cost prohibitive to connect to the Village of Lake George's water system. Moreover, the Village's treatment system likely does not have the capacity to process the additional quantity of water for Warrensburg. Based on this evaluation Alternative 2 – Interconnection with the Village of Lake George public water system is not an acceptable alternative and will not be further evaluated.

#### 3.3 Alternative 3 – New Transmission Line and Valve Vault

This alternative evaluates the feasibility of the full replacement of the existing water storage tank transmission line. The transmission line connecting the 500,000-gallon storage tank to the distribution system is the only connection between the storage tank and the distribution system. The 12" diameter cast iron line is approximately 3,700 feet long. The cast iron transmission line is in poor condition and is highly susceptible to damage due to insufficient burial depth. As previously stated, when this line leaks or is damaged by a storm event and is out of service for repairs, system demands and fire flow cannot be adequately met. Fire flows and system demands cannot be provided by the well pumps alone.

A replacement transmission line would be installed along the same route as the existing line. A new 12-inch line to the tank would be constructed along with new control valves located in a new below grade vault. The transmission line would be either Ductile Iron or HDPE. If HDPE is installed a tracer wire will be included in the installation.

Alternative 3 is a replacement in kind and will be considered a SEQRA Type II action.

An opinion of project cost estimate for Alternative 3 is presented in Table 3.3 below.

Table 3.3 - Opinion of Project Cost Estimate - Alternative 3

Component		Installed Cost*
12" Transmission Line - 3,700 feet@\$225/ft		\$832,500
Valve Vault		\$110,000
Service Road		\$50,000
Subtotal		\$992,500
10% Contingency		\$99,250
Construction Subtotal		\$1,091,750
Engineering and Permitting		\$85,000
Grant Administration		\$25,000
Construction Oversight		\$30,000
Legal		\$10,000
*Figures rounded	TOTAL	\$1,241,750

#### 4.0 Summary and Comparison of Alternatives

Alternative	Advantage	Disadvantage	Estimated Cost
1-Do nothing	No capital cost	Does not address	N/A
		existing issues	
2 - Connect to	N/A	Not technically or	\$8,257,500
neighboring system		financially feasible	
3 - Water System	Addresses serious	None	\$1,241,750
Storage Tank	system issue		
Transmission Line			
Replacement			

#### 5.0 Alternative Selection

Alternatives are evaluated to determine if an alternative would adequately address the problem, ensuring that: 1) acceptable engineering principles, including applicable design criteria, were utilized in the evaluation; 2) the data justifies and supports the conclusions; and 3) the proposed solution has reasonable expectations of solving the problem.

#### 5.1 Rejected Alternatives

Alternative 1 is not acceptable as it will do nothing to address the existing issues or satisfy the need for the project. Alternative 2 is not technically or financially feasible.

#### 5.2 Recommended Alternative

Alternative 3 - Water System Storage Tank Transmission Line Replacement is the recommended alternative because it will address the potentially serious issue currently facing the District, as described above, and is technically and financially feasible.

Alternative 3, includes the construction a new storage tank transmission line that will provide the necessary uninterrupted flow of water to and from the storage tank. A new valve vault is included to provide a means of isolating the tank when tank cleaning is required, usually every 5 years. The new line will be constructed of ductile iron or HDPE pipe and if HDPE pipe is used, tracer wire will be installed.

#### 5.3 Project Cost and Potential Cost to Ratepayers

The Engineers Opinion of project cost to implement Alternative 3 is **\$1,241,750**. If the District can obtain a 60% grant, the remaining financial obligation can be estimated to be 40% of \$1,241,750, or \$496,700. Based on long term financing of 3% for 20 years applied to \$496,700, the annual obligation may be estimated to be about \$33,060. Based on long term financing of 0% (Hardship) for 20 years applied to \$496,700, the annual obligation may be estimated to be about \$24,840. Based on equal distribution to 1300 ratepayers, the impact to individual rate payers can be estimated to be an additional \$25.43 per year at 3% interest rate financing and \$19.10 per year at 0% interest rate financing. If reserve funds are used for the 40% match, the amount of loan, if any, would have to be recalculated. Non-residential users pay 2Xs the residential connection fee so the increase to rate payers can be calculated as follows for the 3% loan:

((# of non-residential connections) X (2x)) + ((# of Residential connections X (1x)) = 31,080.

Milestone	Date
Submit Funding Application	September 2018
Design Development	January 2019
Submit Plans for Approval	March 2019
Advertise for Bids	February 2019
Award Contract	June 2019
Start of Construction	July 2019
Substantial Completion	December 2019

#### 5.4 Project Schedule

#### **Engineering Report Certification**

During the preparation of this Engineering Report, I have studied and evaluated the cost and effectiveness of the processes, materials, techniques, and technologies for carrying out the proposed project or activity for which assistance is being sought from the New York State Drinking Water State Revolving Fund. In my professional opinion, I have recommended for selection, to the maximum extent practicable, a project or activity that maximizes the potential for efficient water use, reuse, recapture, and conservation, and energy conservation, considering the cost of constructing the project or activity, the cost of operating and maintaining the project or activity over the life of the project or activity, and the cost of replacing the project and activity.

**Title of Engineering Report:** Town of Warrensburg Water Storage Tank Transmission Line Replacement Project

Date of Report: September 2018

Professional Engineer's Name: Thomas Suozzo

Signature: < nom Date: September 7, 2018



FIGURE 1 SITE MAP





# FIGURE 2 WATER SYSTEM SCHEMATIC



# APPENDIX A CAPACITY DEVELOPMENT EVALUATION FORM

# **CAPACITY DEVELOPMENT PROGRAM**

#### TECHNICAL, MANAGERIAL, AND FINANCIAL EVALUATION CRITERIA FOR: COMMUNITY PUBLIC WATER SYSTEMS

SY	/ST	<mark>ЕМ NAME</mark> : <i>То</i> юп о	f War	rensbi	rrg				
СС	DUN	NTY: <u>Na</u>	rren		J	PW	SID #: NY-5600112		
COMPLETED BY: Tracy Benoit DATE							TE: <u>9/4/18</u>		
	Technical Capacity								
٨	c.	ictom Infractr	ucturo						
А.	.oy		ucture						
	1.	Does the sys treatment, st	stem have a orage, and	as-built plan distributior	ns, drawir n?	ngs, or maps o	it its facilities including source,		
			Yes	$\bowtie$	No		Not Applicable		
		lf the system <u>There</u> <u>transmi</u>	lacks certa <u>Cre_no</u> Sbion_l	ain plans, p plans inc.	lease spe for H	ecify: Ne Water	storage tank		
	2.	Does the sys offs?	tem have e	exact locati	on measu	urements of all	main valves and service shut-		
			Yes	Д	No		Not Applicable		
	3.	Can the systemeter construction	em's pump ds and requ	ing, storage uired distrib	e and dist oution pre	tribution faciliti ssures?	es meet current normal and		
		$\bowtie$	Yes		No		Not Applicable		
	4.	Does the sys	tem have a	a water con	servation	plan?			
		X	Yes		No		Not Applicable		
	5.	Are all custor	mers on the	e water sys	tem mete	ered?			
		$\mathbf{X}$	Yes		No		Not Applicable		
	6.	Is the system system produ	a equipped uces or pure Yes	with "maste chases for	er" meters each sou No	s that measure rce of water?	e the amount of water the Not Applicable		
8									

#### **B. Source Water Evaluation**

1. Does the system have a copy of its Source Water Assessment?

		-					
			Yes	$\mathbf{X}$	No		Not Applicable
	2.	Has a yield a	inalysis been	done for	the system's	source?	
		$\ge$	Yes		No		Not Applicable
	3.	Does the sys system's raw	stem have a do and finished	escription water sto	n of the existir prage capacity	ng source /?	-pumping capacity and the
		$\bowtie$	Yes		No		Not Applicable
	4. pla	For groundwa	ater systems, (	does you	ır system have	e a wellhe	ead protection program in
		$\mathbf{X}$	Yes		No		Not Applicable
c.	Te	chnical Know	vledge				
	1.	Has an evalu to reliably me	ation of the w	ater syst	em facilities b ed State and I	een conc Federal d	lucted with respect to its ability rinking water regulations?
		M	Yes		No		Not Applicable
		Ly <u>k</u> in	100				
		ہے۔ If system can	i't meet regula	utions, ple	ease specify:		
		if system can	i't meet regula	utions, ple	ease specify:	·	
	2.	If system can	i't meet regula tem have mor nthly water pro	nthly wat	ease specify: er production for <u>each sour</u>	records c	or treatment records that show
	2.	If system can Does the sys daily and mor	i't meet regula tem have mor nthly water pro Yes	nthly wate	ease specify: er production for <u>each sour</u> No	records c ce used b	or treatment records that show by the system? Not Applicable
	2 <i>.</i> 3.	If system can Does the sys daily and mod Ally ally and mod Ally ally and mod Ally ally ally ally ally all ally all all	i't meet regula tem have mor nthly water pro Yes ation been co	nthly wate oduction	ease specify: er production for <u>each sour</u> No to document t	records o ce used t	or treatment records that show by the system? Not Applicable tion and remaining service life
	2.	If system can Does the sys daily and mod All and mod Has an evalue of existing fac	i't meet regula tem have mor nthly water pro Yes vation been co cilities? Yes	nthly wat oduction nducted	ease specify: er production for <u>each sour</u> No to document t	records c <u>ce</u> used t the condi	or treatment records that show by the system? Not Applicable tion and remaining service life Not Applicable
	2. 3. 4.	If system can Does the sys daily and mod An evalue of existing fac Has the system results?	a't meet regula tem have mor nthly water pro Yes vation been co cilities? Yes Yes	nthly wate oduction nducted within th	ease specify: er production for <u>each sour</u> No to document t No e past two ye	records o <u>ce</u> used b the condi ars for fa	or treatment records that show by the system? Not Applicable tion and remaining service life Not Applicable
	2. 3.	If system can Does the sys daily and mod An evalue of existing fac Has the system results?	a't meet regula tem have mor nthly water pro Yes vation been co cilities? Yes em been cited Yes	nthly wat oduction nducted within th	ease specify: er production for <u>each sour</u> No to document t No e past two ye No	records c ce used t the condi ars for fa	or treatment records that show by the system? Not Applicable tion and remaining service life Not Applicable iling to sample and report test Not Applicable
	2. 3. 4.	If system can Does the sys daily and more All the system Has the system results? Has the system result of a same	a't meet regula tem have mor nthly water pro Yes vation been co cilities? Yes m been cited Yes em been cited nitary survey o	ations, ple	ease specify: er production for <u>each sour</u> No to document t No e past two ye No	records o ce used to the condi ars for fa	or treatment records that show by the system? Not Applicable tion and remaining service life Not Applicable iling to sample and report test Not Applicable perating deficiencies as a y the DOH?
	2. 3. 4.	If system can Does the sys daily and mod All as an evalue of existing factor Has the system results? Has the system result of a same I as the system I a setm I a	a't meet regula tem have mor nthly water pro Yes ation been co cilities? Yes em been cited Yes em been cited nitary survey of Yes	ations, ple	ease specify: er production for <u>each source</u> No to document to No he past two years nopection con No	records o ce used b the condition ars for fa	or treatment records that show by the system? Not Applicable tion and remaining service life Not Applicable iling to sample and report test Not Applicable perating deficiencies as a y the DOH? Not Applicable

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6. If you answered "Yes" to Questions 4 or 5, has corrective action been taken to correct all deficiencies?

No

No

#### D. Certified Operators

1. Does the water system have a certified water operator(s) and designated an operator in responsible charge?

Yes	
-----	--

Yes

2. If the water system does not have a state-certified water treatment operator, or lacks the necessary number of operators to safely and reliably operate the system, does the system have a plan to acquire the services of a (additional) state-certified operator?

Not Applicable Yes No

#### Managerial Capacity

#### A. Staffing and Organization

- What type of training/continuing education did system personnel attend within the last two years (please specify)? <u>Attend training to maintain water operator's license</u>.
- 2. Who is responsible for policy and operational decisions for the water system (name and title)?

Policy-Kevin Geraghty (Town Supervisor) Tracy Benoit - Operational (Chief Operator)

3. Who is responsible for ensuring compliance with state regulatory requirements (name and title)?

Tracy Benoit - Chief Operator

4. Who is responsible for approving expenditures (name and title)?

5. For systems that contract for system operation or management: Does the system have a valid (signed) contract that summarizes the duties and responsibilities the contractor must provide to the system?

Yes No

Not Applicable

Not Applicable

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В.	٥v	vnership						
	1.	<i>If the system is under temporary ownership</i> , has a future owner been found for the water system?						
			Yes		No	X	Not Applicable	
		lf "Yes", who	will the future	owner be	e?			
	2.	For systems a operation: Is the owner of t	that use, but d there a valid lo the land or fac	o <i>not ow</i> ong-term ilities es	n, land or fact contract (i.e., sential to the c	<i>ilities tha</i> lease) b ope <b>r</b> atior	t are essential to water system etween the water system and n of the system?	
			Yes		No	$\ge$	Not Applicable	
	3.	For systems of continuing systems of his/her response	<i>with a single p</i> stem operation nsibilities?	<i>roprietor</i> n in the e	: Does the sys event the own	stem hav er becorr	e a contingency plan for nes incapable of carrying out	
			Yes		No	X.	Not Applicable	
C.	Co	nsolidation/R	estructuring					
	1.	Has the syste a) Incorporat	m examined t ting <b>w</b> ith an ex	he feasik tisting wa	oility of: ater system in	the imm	ediate proximity?	
			Yes	X	No		Not Applicable	
		b) Selling owr	ιership to an ε	existing w	vater system?			
			Yes	$\bowtie$	No		Not Applicable	
		c) Contractir or satellite	ng for the man management	agement t/operatio	t or operation ons agency?	of the sy	stem with an existing system	
			Yes	$\bowtie$	No		Not Applicable	
D.	Em	ergency/Disa	ster Respons	se Plans				
	1.	Has the syste	m developed a	an Emer	gency Respor	nse Plan	?	
		X	Yes		No		Not Applicable	
	2.	Does the Eme	ergency Respo	onse Pla	n:			
		a) Designate	responsible p	ersonne	I in the event	of an em	ergency?	
		$\bowtie$	Yes		No		Not Applicable	

ų.

	b)	Provide fe	or emergency	phone a	nd radio capa	bilities?	
		[X]	Yes		No		Not Applicable
	c)	Describe	public and he	alth depa	artment notific	ation pro	cedures?
		$\square$	Yes		No		Not Applicable
3.	Do (e.	es the sys g., emerge	tem have any ency water inte	emerger erconnec	ncy contract a tions and alte	greemen rnative so	ts under which it operates ources)?
			Yes	$\bowtie$	No		Not Applicable
E. Wa	ter \$	System Po	olicies				
1.	. D	oes the sy	stem have a ห	/ritten Sy	stem Operation	ons Manu	al or Policy?
			Yes	$\square$	No		Not Applicable
F. Re	cord	l Keeping					
	1.	Does the operation correspor (and whe	system keep was and mainten adence with th re appropriate	water util ance, da e NYS D , the NYS	ity records ind ta quality, An epartment of SPSC)?	cluding: fi nual Wat Health ar	nancial, regulatory, facility, er Quality Reports, and nd/or local Health Departments
		$\bowtie$	Yes		No		Not Applicable
				<u>Finan</u>	cial Capac	<u>city</u>	
A. Bu	ıdge	t Projecti	on – Revenue	es and E	xpenses		
1.	Do	es the syst	tem have a wa	ater budg	jet?		
		$\bowtie$	Yes		No		Not Applicable
2.		Are the sy expenses	vstem's annua as well as an	l water re ticipated	evenues suffic capital improv	cient to co vements?	over the annual water
		$\bowtie$	Yes		No		Not Applicable
3.		Are the sy to cover a	/stem's water Il listed expen	rates, wh ditures fo	nen combined or the water s	with othe ystem?	er revenue sources, sufficient
		$\bowtie$	Yes		No		Not Applicable
				·			

4. Does the system retain budget information for at least two years?

		X	Yes		No		Not Applicable		
в.	Re	serves							
	1.	Does the sys to:	tem have a re	serve ac	count (or fund	ls within a	a reserve account) dedicated		
		a) Financing the emergency replacement of critical facilities in the event of their failure?							
		X	Yes		No		Not Applicable		
		b) The main	tenance of cas	sh flow in	the event of	an unexp	ected funding shortfall?		
			Yes	$\square$	No		Not Applicable		
	2.	If the system account?	has a reserve	account	, how does it	determine	e the amount to put into the		
		Fixed A	AmountF	Percenta	ge of Revenu	esF	Percentage of Expenses		
	X Other (please specify) Any surplus revenue is placed in reserve								
	3. If the system has a reserve account, what type(s) of reserve account(s) does it have?								
		Operation and MaintenanceCapital ProjectsDebt Service							
	X Other (please specify) general								
_	J ·								
C.	Capital Improvement Plan								
	1. How do you finance operation and maintenance costs (Check all that apply)?								
	X Rates collected from ratepavers Rental fees						ees		
		Other b	ousiness rever	nue		 Persona	al capital		
		Surcha	rges		·	_Reserve	e account		
		Other (	Please specify	/)					
	2.	2. How did you finance your LAST major repair or improvement?							
		Comme	ercial bank loa	n j	$\underline{\times}$ Bonds				
		DWSR	RF	_	Other Sta	ate or fed	eral loan/grant program		
		Surcha	rge	F	Personal	Capital <sup>-</sup>			
		Reserv	e Account	_	Revenue	from othe	er business		
		Other (	Please specify	/)	········				

3. What options do you have for financing your NEXT major repair or improvement?

Commercial bank loan	_X_Bonds
DWSRF	Other State or federal loan/grant program
Surcharge	Personal Capital
Reserve Account	Revenue from other business
Other (Please specify)	

#### **D. Water System Rates**

1. Does the water system management review user fee, user charge, or rate system at least once every two years?

	[X]	Yes		No		Not Applicable	
2.	What is the f	requency o	of billing (e.ç	g., 12, 6, o	r 4 times per/	year)? <u>4</u> time	es/year
3. Residential - #, Commercial -	Where applic 195/yp for 1 whit - *9 What are rate	able, what 30,000	are the sys	stem's wat ? */. /gal/yR	er rates? <u>95/ga</u> / a ? *3,92/ga	L above 30,0	00 gal 1000 gal.
4.			Capita	l Improve	ment Plan and	d Annual Budgel	t
		-	Cash o	on Hand	Shiy		
		_	Last ye Not su	ear's expe re	enses		
			Other pecify	(Please			)

5. What was the date of the last rate increase? -2012-2013

#### END OF DOCUMENT

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# APPENDIX B SMART GROWTH ASSESSMENT FORM



### Smart Growth Assessment Form

This form should be completed by the applicant's project engineer or other design professional.<sup>1</sup>

Applicant InformationApplicant:Project No.:Project Name:Project No.:						
Is project construction complete?   Yes, date:  No						
Project Summary: (provide a short project summary in plain language including the location of the area the project serves)						
Section 1 – Screening Questions						
1. Prior Approvals						
1A. Has the project been previously approved for EFC financial assistance?	□ Yes	□ No				
1B. If so, what was the project number(s) for the prior Project No.: approval(s)?						
Is the scope of the project substantially the same as that which was approved?	□ Yes	□ No				
IF THE PROJECT WAS PREVIOUSLY APPROVED BY EFC'S BOARD AND THE SCOPE OF THE PROJECT HAS NOT MATERIALLY CHANGED, THE PROJECT IS <b>NOT</b> SUBJECT TO SMART GROWTH REVIEW. SKIP TO SIGNATURE BLOCK.						
TO SMART GROWTH REVIEW. SKIP TO SIGNATURE BLOC	5 <b>NOT</b> SU CK.	BJECT				
2. New or Expanded Infrastructure	S <b>NOT</b> SU CK.	BJECT				
<ul> <li>2. New or Expanded Infrastructure</li> <li>2A. Does the project add new wastewater collection/new water mains or a new wastewater treatment system/water treatment plant? Note: A new infrastructure project adds wastewater collection/water mains or a wastewater treatment/water treatment plant where none existed previously</li> </ul>	S NOT SU CK. □ Yes	BJECT □ No				
<ul> <li>2. New or Expanded Infrastructure</li> <li>2. A new infrastructure project add new wastewater collection/new water mains or a new wastewater treatment system/water treatment plant? Note: A new infrastructure project adds wastewater collection/water mains or a wastewater treatment/water treatment plant where none existed previously</li> <li>2. New or Expanded Infrastructure plant where none existed previously</li> <li>2. New or Expanded Infrastructure project adds wastewater collection/water mains or a wastewater treatment/water treatment plant where none existed previously</li> <li>2. Will the project result in either:</li> </ul>	S NOT SU CK. □ Yes	□ No				
<ul> <li>2. New or Expanded Infrastructure</li> <li>2. A Does the project add new wastewater collection/new water mains or a new wastewater treatment system/water treatment plant? Note: A new infrastructure project adds wastewater collection/water mains or a wastewater treatment/water treatment plant where none existed previously</li> <li>28. Will the project result in either: An increase of the State Pollutant Discharge Elimination System (SPDES) permitted flow capacity for an existing treatment system;</li> </ul>	□ Yes	□ No				
<ul> <li>2. New or Expanded Infrastructure</li> <li>2A. Does the project add new wastewater collection/new water mains or a new wastewater treatment system/water treatment plant? Note: A new infrastructure project adds wastewater collection/water mains or a wastewater treatment/water treatment plant where none existed previously</li> <li>2B. Will the project result in either: An increase of the State Pollutant Discharge Elimination System (SPDES) permitted flow capacity for an existing treatment system; OR</li> </ul>	□ Yes	□ No				
<ul> <li>Define PROJECT has not matteriable of matteriable of the PROJECT is TO SMART GROWTH REVIEW. SKIP TO SIGNATURE BLOC</li> <li>2. New or Expanded Infrastructure</li> <li>2A. Does the project add new wastewater collection/new water mains or a new wastewater treatment system/water treatment plant? Note: A new infrastructure project adds wastewater collection/water mains or a wastewater treatment/water treatment plant where none existed previously</li> <li>2B. Will the project result in either:</li> <li>An increase of the State Pollutant Discharge Elimination System (SPDES) permitted flow capacity for an existing treatment system;</li> <li><u>OR</u></li> <li>An increase such that a NYSDEC water withdrawal permit will need to be obtained or modified, or result in the NYSDOH approving an increase in the capacity of the water treatment plant?</li> </ul>	□ Yes	□ No				

<sup>&</sup>lt;sup>1</sup> If project construction is complete and the project was not previously financed through EFC, an authorized municipal representative may complete and sign this assessment.

# IF THE ANSWER IS "NO" TO BOTH "2A" and "2B" ON THE PREVIOUS PAGE, THE PROJECT IS NOT SUBJECT TO FURTHER SMART GROWTH REVIEW. SKIP TO SIGNATURE BLOCK.

#### 3. Court or Administrative Consent Orders

3A. Is the project expressly required by a court or administrative consent order?	□ Yes	□ No
3B. If so, have you previously submitted the order to NVS EEC or DOH2		

3B. If so, have you previously submitted the order to NYS EFC or DOH? □ Yes □ No If not, please attach.

#### Section 2 – Additional Information Needed for Relevant Smart Growth Criteria

EFC has determined that the following smart growth criteria are relevant for EFC-funded projects and that projects must meet each of these criteria to the extent practicable:

#### 1. Uses or Improves Existing Infrastructure

1A. Does the project use or improve existing infrastructure? □ Yes □ No <u>Please describe</u>:

#### 2. Serves a Municipal Center

Projects must serve an area in either 2A, 2B or 2C to the extent practicable.

2A. Does the project serve an area **limited** to one or more of the following municipal centers?

i. A City or incorporated Village	□Yes	□No
ii. A central business district	□Yes	□No
iii. A main street	□Yes	□No
iv. A downtown area	□Yes	□No
<ul> <li>A Brownfield Opportunity Area (for more information, go to <u>www.dos.ny.gov</u> &amp; search "Brownfield")</li> </ul>	□Yes	□No
vi. A downtown area of a Local Waterfront Revitalization Program Area (for more information, go to <u>www.dos.ny.gov</u> and search "Waterfront Revitalization")	□Yes	□No
vii. An area of transit-oriented development	□Yes	□No
viii. An Environmental Justice Area (for more information, go to <u>www.dec.ny.gov/public/899.html</u> )	□Yes	□No
ix. A Hardship/Poverty Area Note: Projects that primarily serve census tracts and block numbering areas with a poverty rate of at least twenty percent according to the latest census data	□Yes	□No

Please describe all selections:

2B. If the project serves an area located outside of a municipal center, does it serve an area located adjacent to a municipal center which has clearly defined borders, designated for concentrated development in a municipal or regional comprehensive plan and exhibit strong land use, transportation, infrastructure and economic connections to an existing municipal center? □Yes □No

Please describe:

2C. If the project is not located in a municipal center as defined above, is the area designated by a comprehensive plan and identified in zoning ordinance as a future municipal center?

Please describe and reference applicable plans:

#### 3. Resiliency Criteria

3A. Was there consideration of future physical climate risk due to sea-level rise, storm surge, and/or flooding during the planning of this project? □Yes □No

Please describe:

**Signature Block:** By entering your name in the box below, you agree that you are authorized to act on behalf of the applicant and that the information contained in this Smart Growth Assessment is true, correct and complete to the best of your knowledge and belief.

Applicant: Town of Warrensburg	Phone Number:			
Kevin B. Geraghty, Town Supervisor	518-623-9511			
(Name & Title of Project Engineer or Design Professional or Authorized Municipal Representative)				
hen B. Mylt	9/4/2018			
(Signature) J	(Date)			