

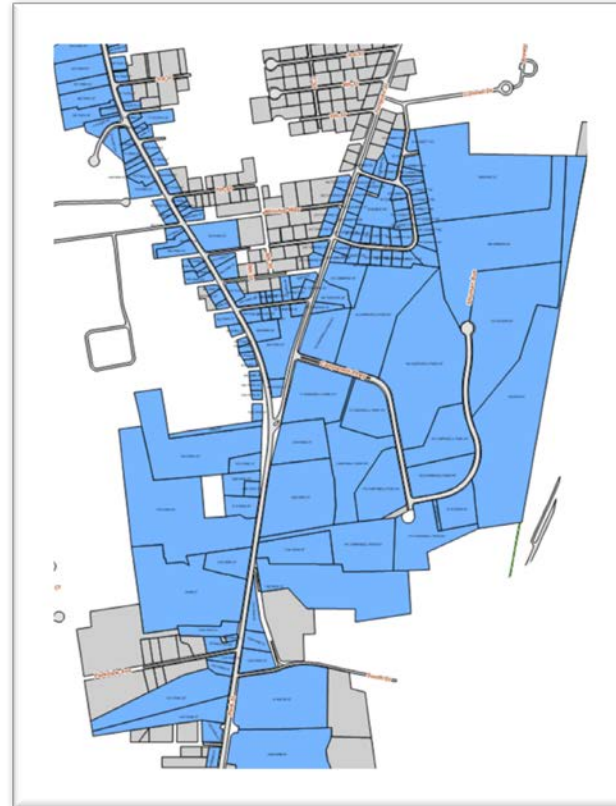
PARK STREET SEWER EXTENSION PROJECT



Finance Committee Presentation
March, 2019

Agenda

- Project Overview
- Project Costs and Revenues
- New Growth Analysis
- Environmental Issues/ Benefits
- Funding Approach
- Recommendations



Why are we here again?

- Sewer for the Park Street Area has been identified as a Goal by:
 - The Board of Selectmen
 - The Town of Stoughton Master Plan
 - Town-wide Sewer Priority Plan
- Latest Approach to provide sewer to the Park Street Area has:
 - Explored alternative methods to provide sewer (Conventional vs. Low-Pressure)
 - Explored alternative discharge locations (MWRA vs. Brockton)
 - Explored adjustments to project limits and phasing
 - Explored Alternative Funding Sources
- Support is sought for an Article at the Annual Town Meeting to fund the Design (not construction) of the Sewer Extension

Proposed Design Article (not construction)

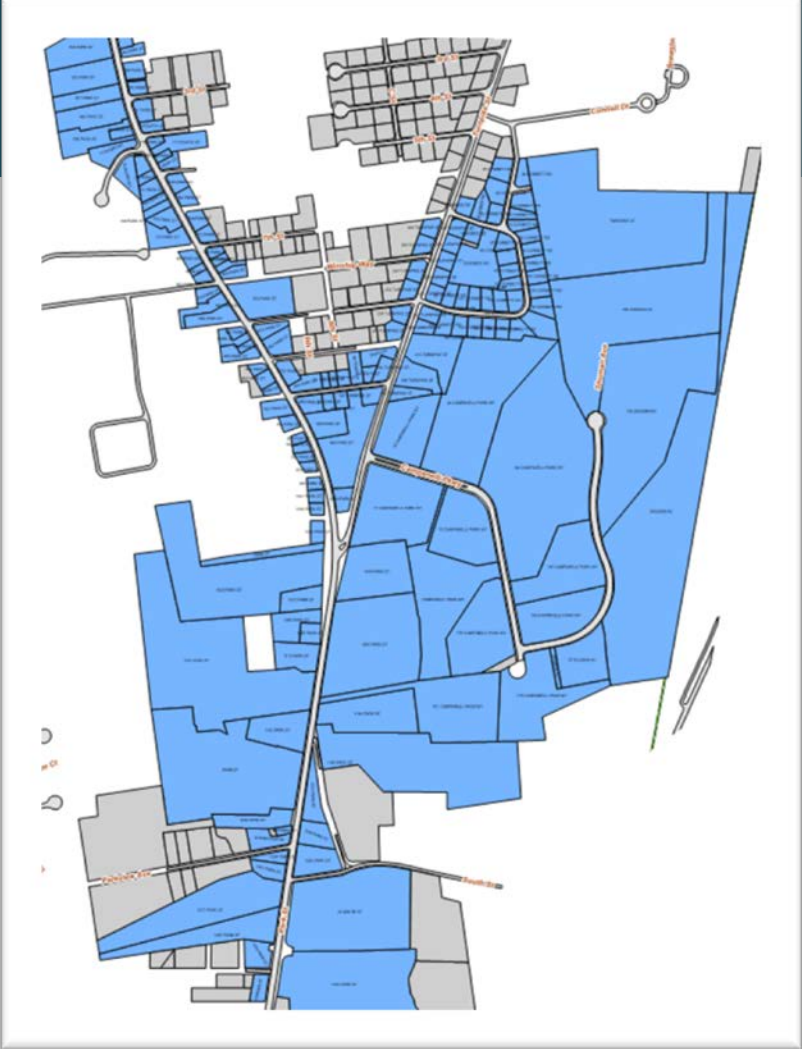
Survey and Design of Sewer Expansion Plans for the Southern Area of Park Street and the Campanelli Industrial Park

To see if the Town will vote to raise and appropriate, transfer from available funds in the Treasury, if any, and/or borrow a sufficient sum of money to pay for professional consulting services to provide engineering analysis, design, surveying, and other related consulting services with respect to sewerage of the so-called southern area of Park Street, Campanelli Industrial Park and surrounding areas, including all incidental and related expenses, or take any other action relative thereto.

Est. Design Cost: \$800,000



Project Map



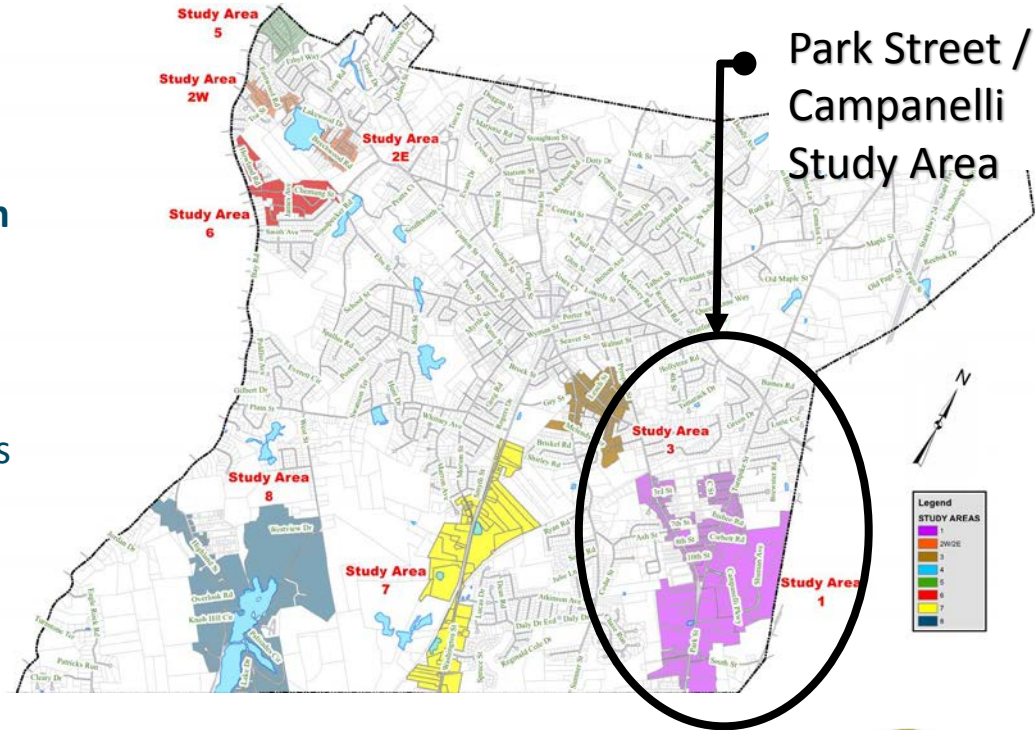
History of Funding Sewers

- 1911 through 2000
 - Town bears a minimum of 1/3rd of Sewer Costs
 - **Result:** 70% of Stoughton has Public Sewer

- 2000 – Enabling Act Amendments
 - Allowed Town Meeting to Determine funding participation by the Town
 - In practice, Town has required Abutters to bear 100% of costs
 - Little or no Federal or State Grant money has been available since 2000
 - **Result:** Little to No Interest in Sewer Extensions since 2000
- Park Street Funding Objective: NO BETTERMENTS TO ABUTTERS

Project Overview

- 9 Studies since 1963
- Focused study since 2012
 - ✓ **Completed a Sewer Priority Plan**
Confirmed Park Street is Top Option as an Unsewered Area
 - ✓ **Established** Economic Benefits
 - ✓ **Established** Environmental Benefits
 - ✓ **Completed** Project Revenue Analysis



Town-wide Benefits Summary

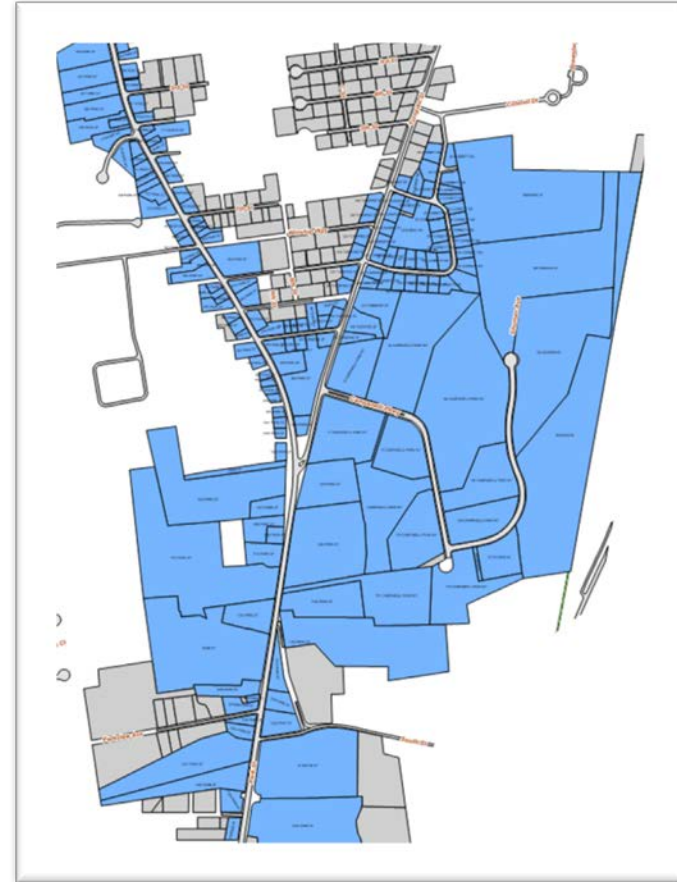
- Economic Growth for the entire Town
- Opens Opportunities for Improved Land Use
- Increased Commercial/ Industrial Land Value
- Increase in Town Revenues:
 - a. Tax Levy
 - b. Water user Fees
 - c. Sewer user Fees
- Public and Environmental Health Protection

Construction Cost Breakdown

Cost Category

Cost

Total Construction Cost	\$7,420,000
Construction Contingency (25%)	\$1,855,000
Construction Sub-Total	\$9,275,000
Engineering Support During Construction	\$ 700,000
Project Total	\$9,975,000



Financial Approach – Construction Bonding Schedule

YR	PRINCIPAL BALANCE	PRINCIPAL PAYMENT	INTEREST PAYMENT	TOTAL PAYMENT
1	\$9,975,000	\$498,750	\$399,000	\$897,750
2	\$9,476,250	\$498,750	\$379,050	\$877,800
3	\$8,977,500	\$498,750	\$359,100	\$857,850
4	\$8,478,750	\$498,750	\$339,150	\$837,900
5	\$7,980,000	\$498,750	\$319,200	\$817,950
6	\$7,481,250	\$498,750	\$299,250	\$798,000
7	\$6,982,500	\$498,750	\$279,300	\$778,050
8	\$6,483,750	\$498,750	\$259,350	\$758,100
9	\$5,985,000	\$498,750	\$239,400	\$738,150
10	\$5,486,250	\$498,750	\$219,450	\$718,200
11	\$4,987,500	\$498,750	\$199,500	\$698,250
12	\$4,488,750	\$498,750	\$179,550	\$678,300
13	\$3,990,000	\$498,750	\$159,600	\$658,350
14	\$3,491,250	\$498,750	\$139,650	\$638,400
15	\$2,992,500	\$498,750	\$119,700	\$618,450
16	\$2,493,750	\$498,750	\$99,750	\$598,500
17	\$1,995,000	\$498,750	\$79,800	\$578,550
18	\$1,496,250	\$498,750	\$59,850	\$558,600
19	\$997,500	\$498,750	\$39,900	\$538,650
20	\$498,750	\$498,750	\$19,950	\$518,700
TOTAL	\$9,975,000	\$4,189,500	\$4,189,500	\$14,164,500

Annual Average Bonding Cost \$708,225

Without Massworks Grant

YEAR	PRINCIPAL BALANCE	PRINCIPAL PAYMENT	INTEREST PAYMENT	TOTAL PAYMENT
1	\$7,475,000	\$373,750	\$299,000	\$672,750
2	\$7,101,250	\$373,750	\$284,050	\$657,800
3	\$6,727,500	\$373,750	\$269,100	\$642,850
4	\$6,353,750	\$373,750	\$254,150	\$627,900
5	\$5,980,000	\$373,750	\$239,200	\$612,950
6	\$5,606,250	\$373,750	\$224,250	\$598,000
7	\$5,232,500	\$373,750	\$209,300	\$583,050
8	\$4,858,750	\$373,750	\$194,350	\$568,100
9	\$4,485,000	\$373,750	\$179,400	\$553,150
10	\$4,111,250	\$373,750	\$164,450	\$538,200
11	\$3,737,500	\$373,750	\$149,500	\$523,250
12	\$3,363,750	\$373,750	\$134,550	\$508,300
13	\$2,990,000	\$373,750	\$119,600	\$493,350
14	\$2,616,250	\$373,750	\$104,650	\$478,400
15	\$2,242,500	\$373,750	\$89,700	\$463,450
16	\$1,868,750	\$373,750	\$74,750	\$448,500
17	\$1,495,000	\$373,750	\$59,800	\$433,550
18	\$1,121,250	\$373,750	\$44,850	\$418,600
19	\$747,500	\$373,750	\$29,900	\$403,650
20	\$373,750	\$373,750	\$14,950	\$388,700
TOTAL	\$7,475,000	\$3,139,500	\$3,139,500	\$10,614,500

Annual Average Bonding Cost \$530,725

With \$2.5M Massworks Grant



Project Costs and Revenues

COSTS

- Engineering & Permitting
- Construction Costs
- MWRA Sewer Assessment Fees

POTENTIAL OFFSETS IN COSTS

- MassWorks
- Clean Water SRF (Low Interest Loan)
- MassDevelopment Site Readiness
- Chapter 90 paving funds



DEFINITIVE REVENUES

- Sewer User Charges (Existing Flow)

POTENTIAL REVENUES

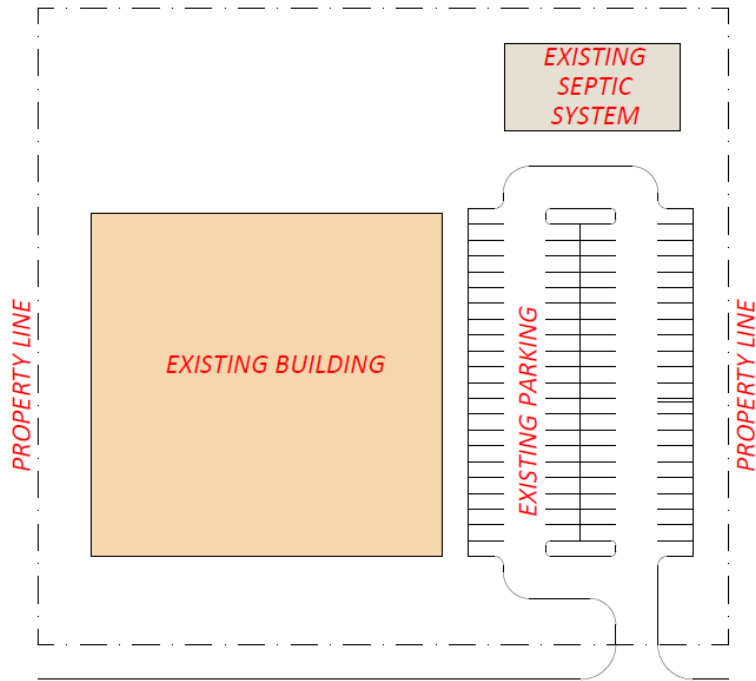
- Additional Tax Levy from Better Uses
- Additional Sewer User Charges from Better Uses
- Additional Water User Charges from Better uses



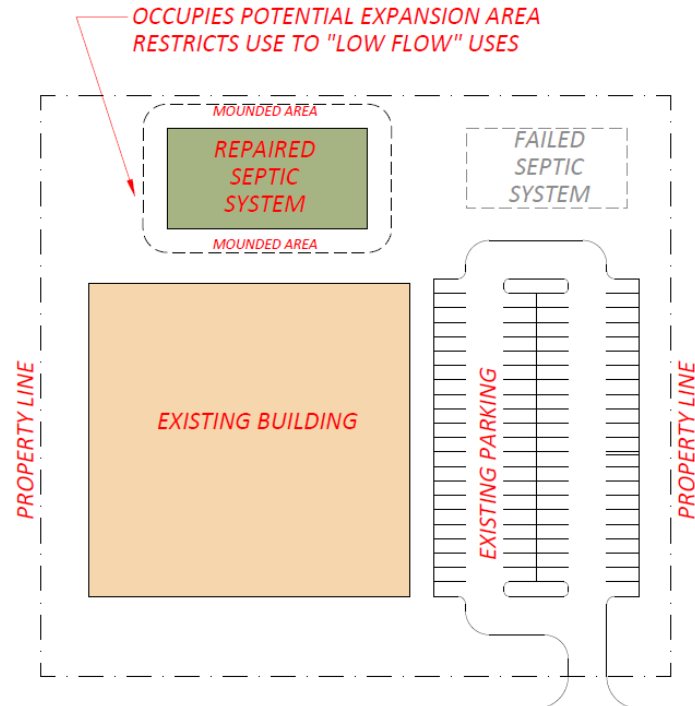
New Growth Analysis

- A study was performed on **44** Commercial/Industrial Properties within the Sewer Expansion Area in Comparison to a similar Commercial/Industrial area in North Stoughton
 - Land values of Comparable Lots were found to be 4-5% lower in the Park Street Area
- Estimated increase of assessed value due to:
 - Expansion of Existing Properties
 - Viability of Higher and Better Uses (Manufacturing, Office, Retail within Industrial Park)
 - Increased Occupancy
 - New Construction
- Increase to Tax Levy estimated at \$1.1 Million Dollars (within 10 years of installation)
 - Does not include other additional revenues
 - Personal Property Taxes
 - Excise Tax
 - Additional Residential Growth
 - Building Permit Fees, Sewer Connection Fees, Site Plan Review Fees
- If all other additional revenues above are considered, increase to Tax Levy is estimated at \$1.5 Million Dollars (within 10 years of installation)

New Growth Analysis

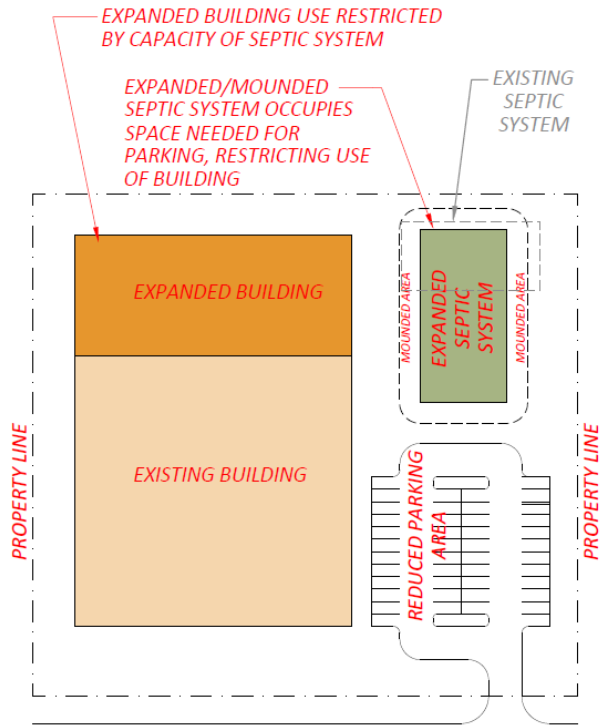


EXISTING SITE

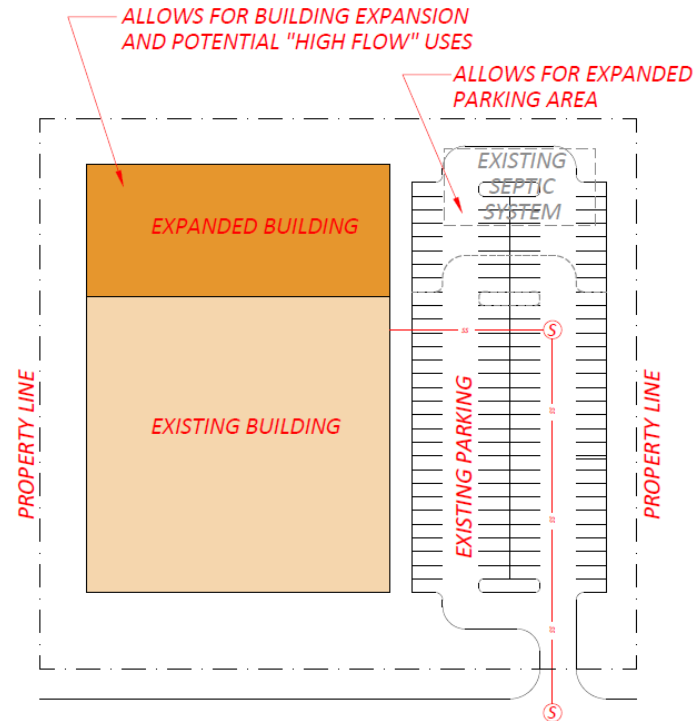


FAILED & REPAIRED SEPTIC SYSTEM

New Growth Analysis



**EXPANDED FACILITY
CONNECTED TO ON-SITE
SEPTIC**



**EXPANDED FACILITY
CONNECTED TO MUNICIPAL
SEWER**



Environmental Benefits of Municipal Sewer

- Typical Sewer Connection is less expensive to install than Septic System.
- Minimal maintenance of Sewer Connection compared to Septic System. Septic systems should be pumped every 2 years.
- Sewer Connections have higher Peak capacity than Septic Systems. Less chance for back-ups during higher flow events (parties, storms)
- Septic Systems are more prone to contaminate groundwater and surrounding water bodies (nitrates, bacteria, etc.)
- Septic systems impact the useable area of the lot. Generally speaking, the Project Area has poor soils that equate to larger than normal sized septic systems.
- Project Area has high groundwater tables. Raised Septic Systems with pumps are typically required to be constructed to meet state regulations.

- Project Area has substantial wetland resource areas (wetlands, streams, etc.) and flood zones. Septic systems are more difficult to design and site in these areas. This yields higher construction costs and less useable areas of the lot.
- Project Area has 76 properties (28%) that either have cesspools or older unknown system types that most likely would not pass a Title 5 inspection. Title 5 Inspections are required prior to the sale of any property. Cesspools automatically fail and are required to be upgraded upon sale of the property.
- Project Area has at least 63 (24%) Septic Systems that are older than 20 years. Systems this old are typically more susceptible to failure within the next 10 years or so. The average lifespan of septic systems is roughly 20-30 years.
- **In Summary, 52% of properties within the Project Area have cesspools or systems older than 20 years.**

Raised Septic system located within Project Area



Environmental Benefits of Municipal Sewer vs. Septic System

Raised Septic system located within Project Area



Construction Cost Offsets:

- MassWorks - \$2.5 million grant utilized for analysis

Note: Conservative approach used. Low interest SRF loans, chapter 90 paving and other possible grants not considered in any Financial Model.

Revenues:

- Sewer Revenue – increases as properties connect and redevelop
- Water Revenue – increases as properties redevelop
- Tax Growth – increases in proportion to increase in property values

Financial Approach – Scenario #1 (with MassWorks)

Offsets:

- ✓ MassWorks = \$2.5M

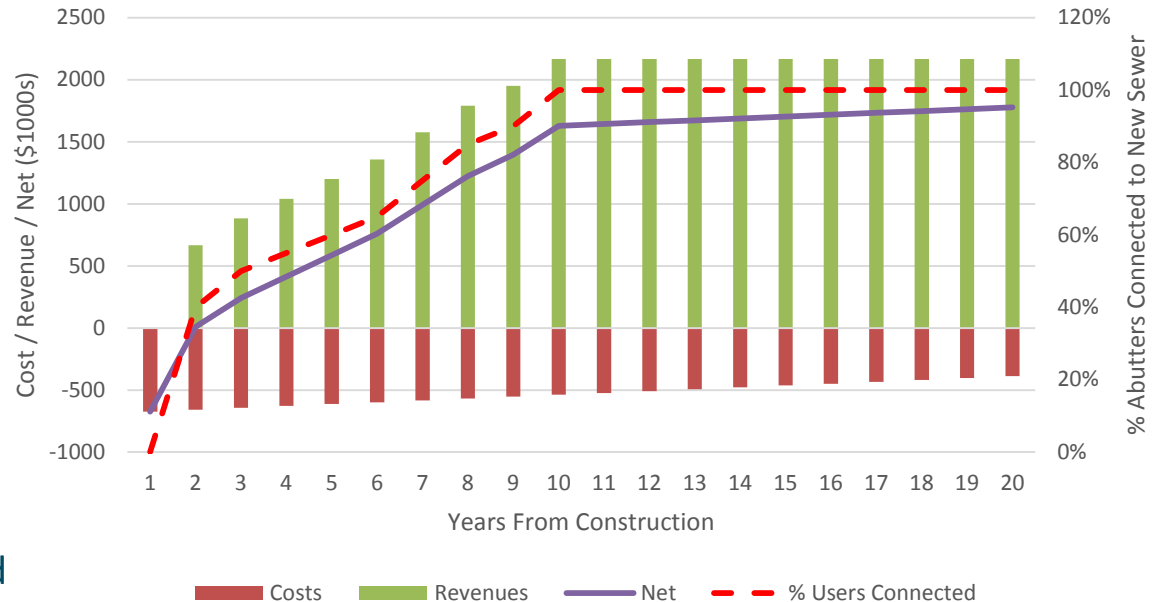
Revenues:

- ✓ Sewer User Charges
- ✓ Water Use Charges
- ✓ Growth in Taxes

Assumptions:

- ❖ Flow at Buildout = 258,000 gpd
- ❖ Rapid Rate of New User Connections

Best Case Financial Outlook



Financial Approach – Scenario #2 (without Massworks)

Offsets:

✗ None

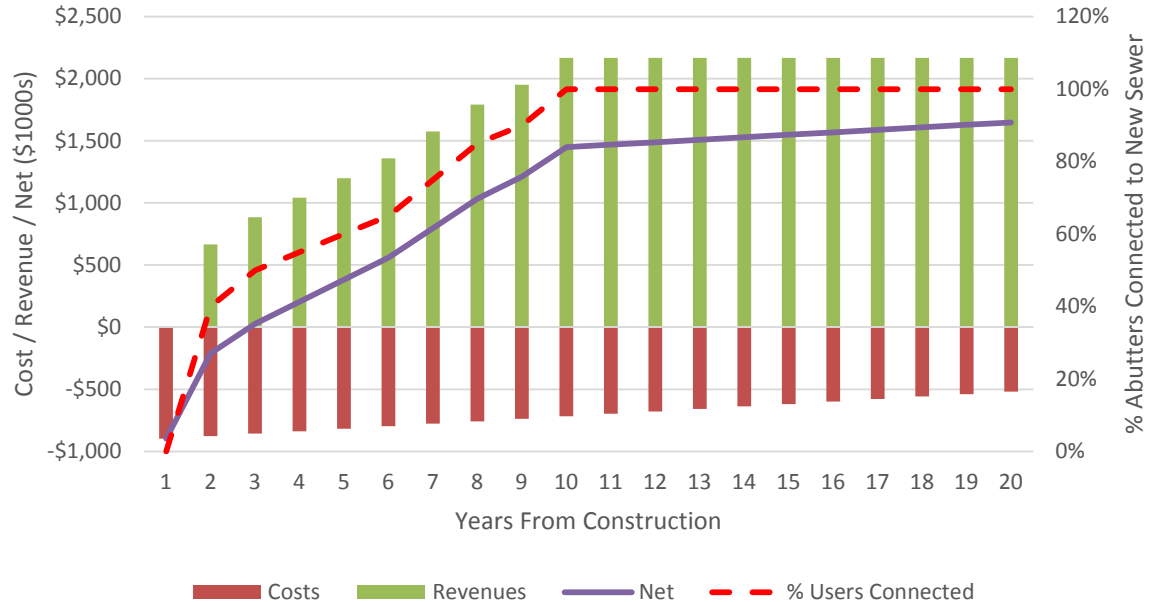
Revenues:

- ✓ Sewer User Charges
- ✓ Water Use Charges
- ✓ Growth in Taxes

Assumptions:

- ❖ Flow at Buildout = 258,000 gpd
- ❖ Rapid Rate of New User Connections

Best Case Financial Outlook (No MassWorks)



Financial Approach – Scenario #3

Offsets:

✗ None

Revenues:

✓ Sewer User Charges

✓ Water Use Charges

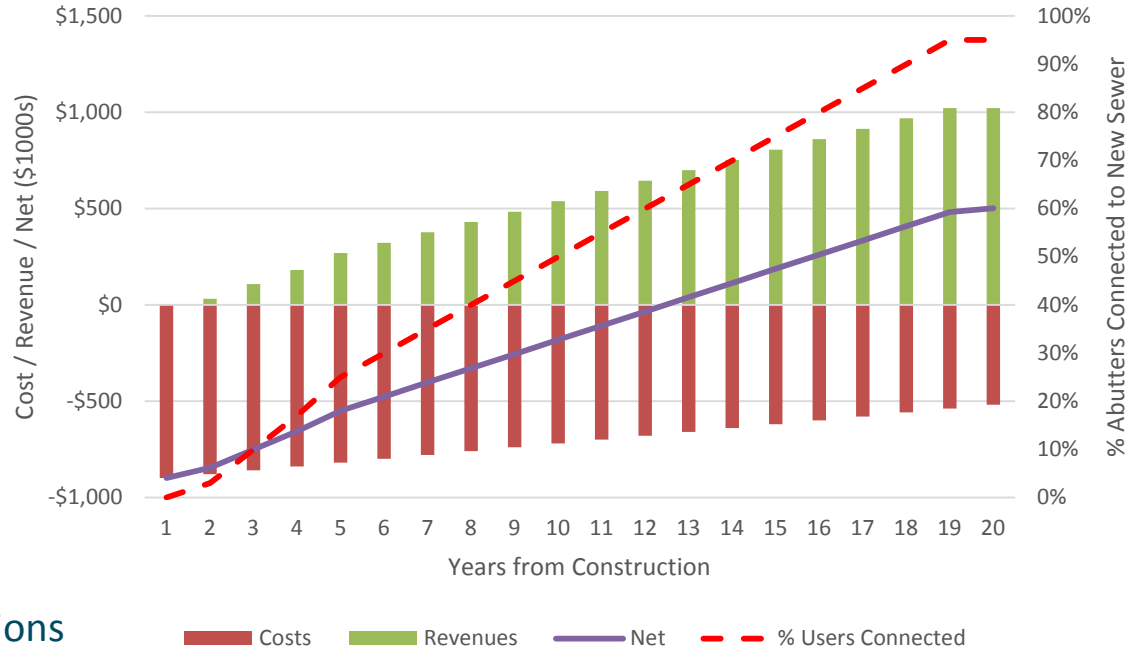
✗ No Tax Growth

Assumptions:

❖ Flow at Buildout = 245,000 gpd

❖ Slow Rate of New User Connections

Moderate Scenario



Financial Approach –Scenario #4

Offsets:

✗ None

Revenues:

✓ Sewer User Charges

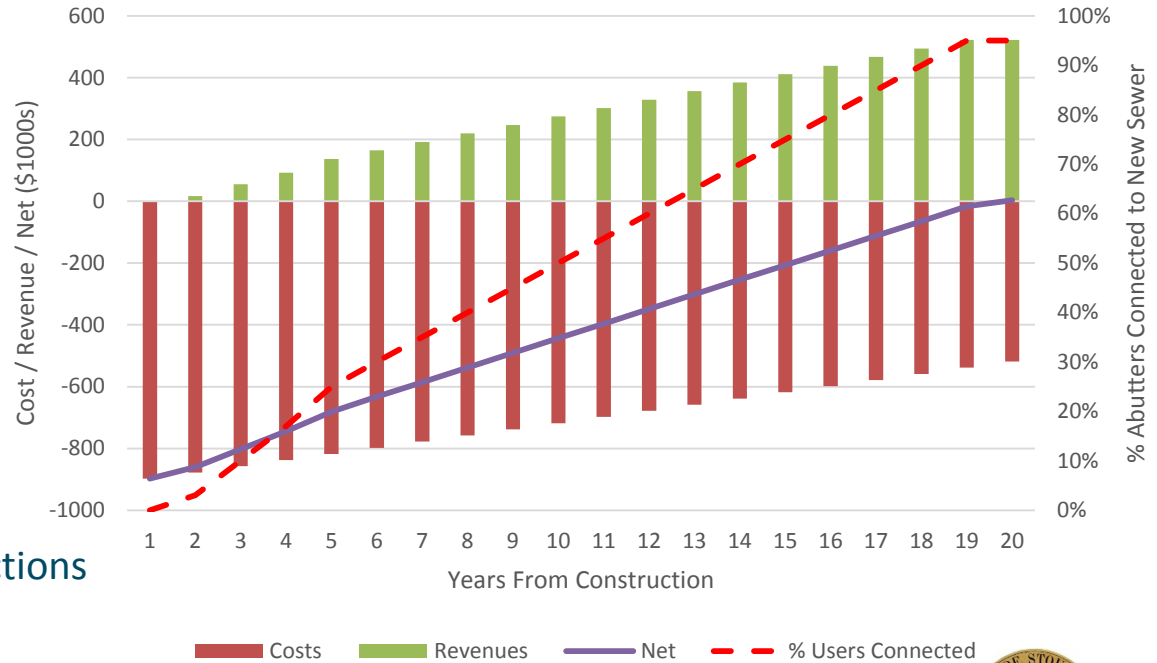
✗ No Tax Growth

Assumptions:

❖ No Build-out = 135,000 gpd

❖ Slow Rate of New User Connections

Worst Case Financial Outlook (No MassWorks)



- 1. Appropriate funds for Design 2019 Annual Town Meeting (\$800k)**
2. Pursue MassWorks Funding
3. Review Zoning for Project Area to Maximize Best Uses that fit with the character of the surrounding neighborhoods
4. Consider Sewer Connection Policy revisions that benefit the Residential Property Tax Payer
5. Provide Traffic and Pedestrian Safety Improvements for Surrounding Area

Questions?