

2016 SPECIAL TOWN MEETING

April 2, 2016

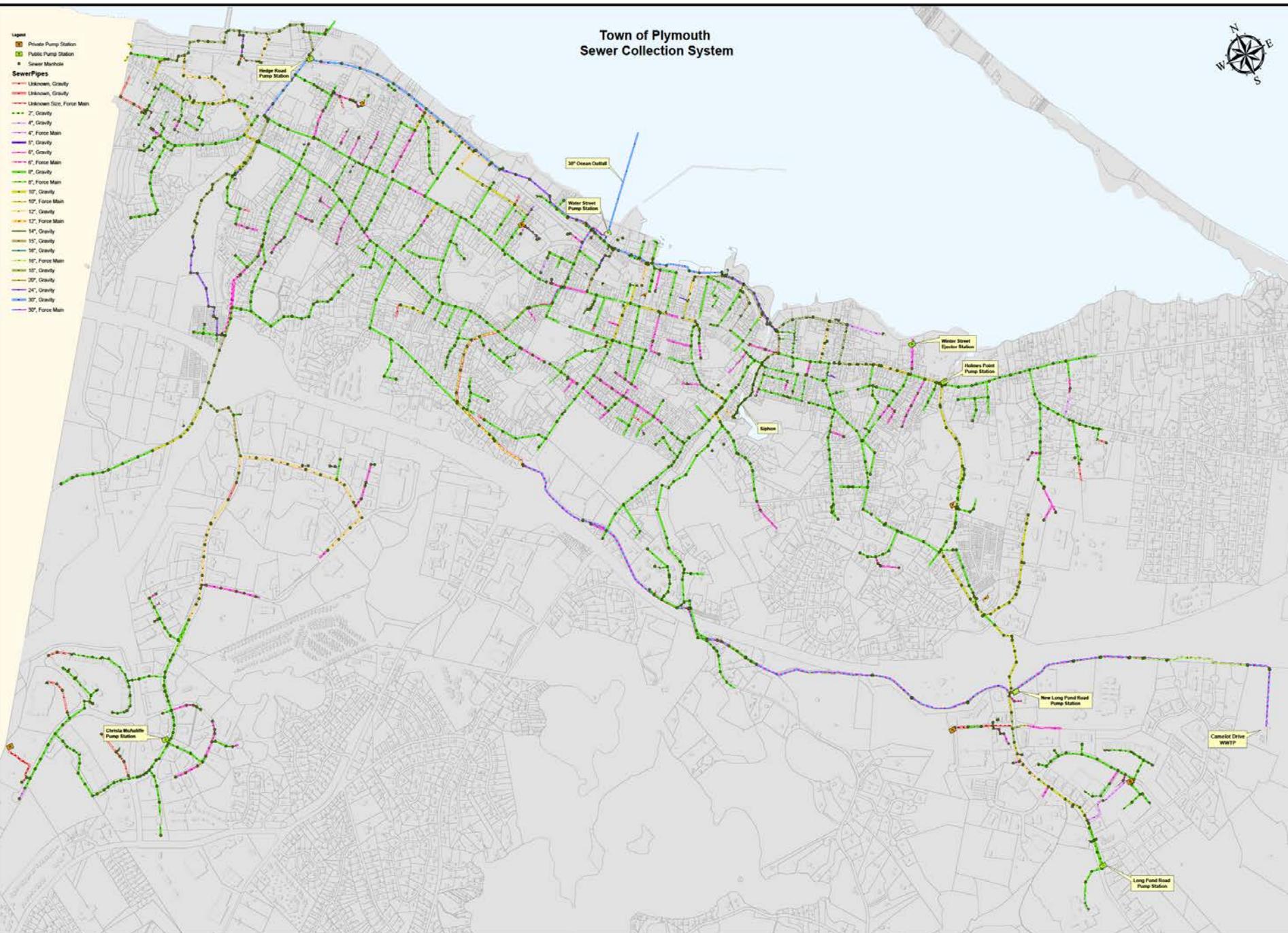
ARTICLE 8

Emergency Sewer Force Main Repair

Town of Plymouth Sewer Collection System



- Legend**
- Private Pump Station
 - Public Pump Station
 - Sewer Manhole
- Sewer Pipes**
- Unknown, Gravity
 - Unknown Size, Force Main
 - 2", Gravity
 - 4", Gravity
 - 4", Force Main
 - 6", Gravity
 - 6", Force Main
 - 8", Gravity
 - 8", Force Main
 - 10", Gravity
 - 10", Force Main
 - 12", Gravity
 - 12", Force Main
 - 14", Gravity
 - 15", Gravity
 - 16", Gravity
 - 16", Force Main
 - 18", Gravity
 - 20", Gravity
 - 24", Gravity
 - 30", Gravity
 - 30", Force Main



Bypass 1-5,100 feet

Bypass 2-2.75 miles



Bypass 3-5, 2000 feet





West of Route 3



Westerly Road

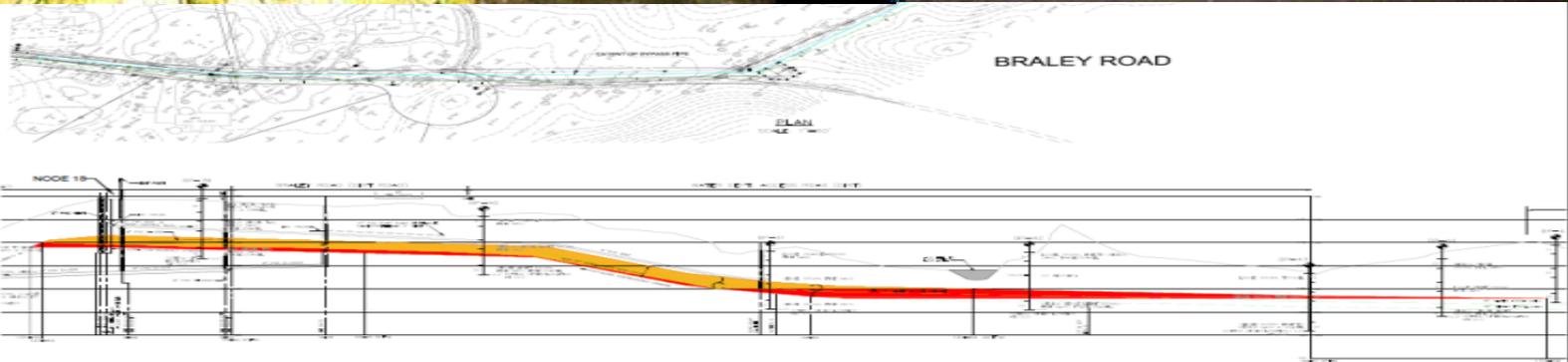


Off Braley Road



12.30.2015 13:50

NWM PRELIMINARY FINDINGS



NO.	DATE	REVISION
1	26.02.2016	TEST PIT
2	26.02.2016	TEST PIT
3	26.02.2016	TEST PIT
4	26.02.2016	TEST PIT
5	26.02.2016	TEST PIT
6	26.02.2016	TEST PIT
7	26.02.2016	TEST PIT
8	26.02.2016	TEST PIT
9	26.02.2016	TEST PIT
10	26.02.2016	TEST PIT

UNIVERSITY OF MASSACHUSETTS
TOWN OF PLYMOUTH, MASSACHUSETTS
RECORD DRAWINGS PREPARED BY EAST
MODIFIED PLANS PROVIDED BY EPD

NO. 16

TEST PIT

Pipe condition 244' downstream from the bypass tap access on Braley Road (≈Sta. 127+70)
Approximate break location Sta. 127+76

SATM -ART 8-\$48.2 Million

Slipline Existing 30-inch Ductile with 24-inch HDPE Pipe

Remove Existing Bypass

Develop Detailed Design and Permit new 24-inch secondary force main

Install New 24-inch secondary plastic forcemain

Restoration work

COST ESTIMATE BREAKDOWN

Emergency Response Costs-	\$7,597,393.63
Pipe Assessment-	\$1,191,000.00
New Pipe Work-	\$22,967,250.00
Restoration-	<u>\$3,438,045.00</u>
	Subtotal-\$35,193,688.63
*Engineering/Contingencies-	\$12,979,427.68
	<u>Total- \$48,173,116.31</u>

STM Article 8 Sewer Emergency Repair & Permanent Solution

- Authorization to Borrow Today
- Time Line for Project and Financing:
 - Massachusetts Clean Water Trust (MCWT)
 - Application Process & Approval
 - Low Interest Rates / Possible Contract Assistance
 - Timing of Project / Short Term and Permanent Financing
- Emergency Declaration under MGL Ch44 Sec31
- Budget Process
- Rate Setting Process
- Possible Sewer Rate Relief with the State on annual debt service payment

Sewer Enterprise Fund & Original Sewer Plant & Force Main Project History

- Established at Town Meeting April 1994 (Accounted for starting in Fiscal Year 1997)
- Sewer Plant and Force Main Projects Authorized by Town Meeting in 1997, 1999 and 2001 – Total Project \$44.67 Million
 - Result of Original Plant failures in 80's
 - 1992 Consent Order from Mass DEP
 - Compliance with Town's Discharge Permit and MA Clean Water Act
 - Stipulated Town commence Wastewater Facilities Planning
- Financing was through MCWT (formerly Massachusetts Water Pollution Abatement Trust)
- Remaining Debt Service Outstanding on the Sewer Plant and original Force Main
 - \$10.3 Million to be paid off in 2021, 2022 and 2023

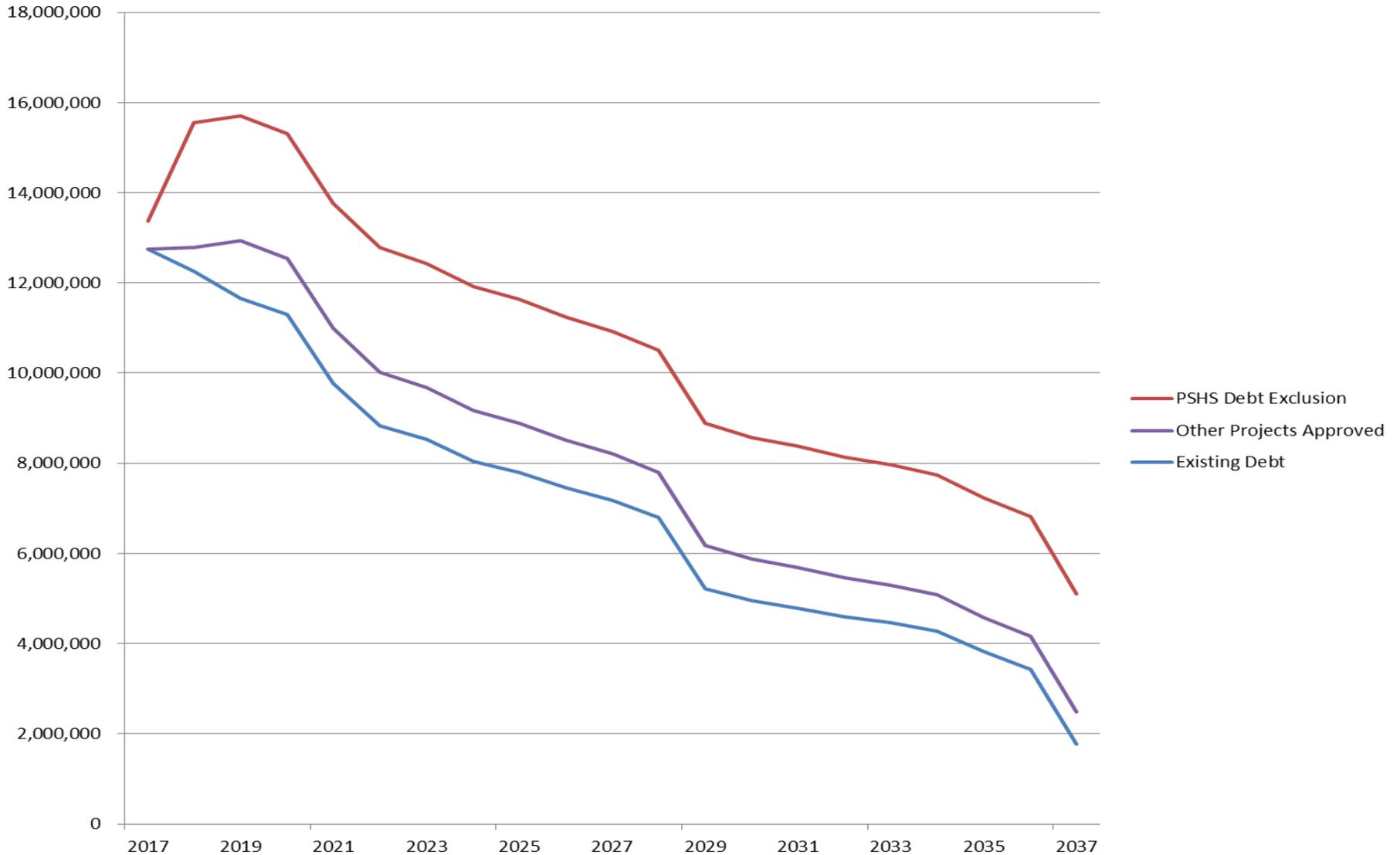
Historical Town Wide & Sewer Users funding of the Sewer Plant & Original Force Main

Fiscal Year	Town Wide Contribution	Sewer Rate Payers	Total Sewer Debt Associated with the Sewer Plant & Force Main
2016	\$0	\$1,833,672	\$1,833,672
2015	\$0	\$1,835,998	\$1,835,998
2014	\$0	\$1,862,901	\$1,862,901
2013	\$0	\$1,884,213	\$1,884,213
2012	\$390,000	\$1,511,058	\$1,901,058
2011	\$390,000	\$1,407,622	\$1,797,622
2010	\$666,120	\$1,128,161	\$1,794,281
2009	\$654,000	\$1,283,359	\$1,937,359
2008	\$498,274	\$1,443,067	\$1,941,341
2007	\$764,748	\$1,182,114	\$1,946,862
2006	\$981,164	\$939,820	\$1,920,984
2005	\$965,514	\$306,351	\$1,271,865
2004	\$418,061	\$1,597,875	\$2,015,936
2003	\$471,963	\$1,439,163	\$1,911,126
2002	\$310,695	\$816,030	\$1,126,725
2001	\$0	\$121,890	\$121,890
2000	\$0	\$88,700	\$88,700
1999	\$0	\$64,185	\$64,185
1998	\$0	\$59,120	\$59,120
1997	\$0	\$60,840	\$60,840
1996	\$62,920		\$62,920
1995	\$65,000		\$65,000
1994	\$13,020		\$13,020
Total	\$6,651,479	\$20,866,139	\$27,517,618

Sewer Debt Picture



General Fund Debt Picture



Objectives

- Thoughtful debate regarding payment plan
- Thorough analysis of project costs, borrowing options, retained earnings and other considerations
- Public process for input
- Fair & Equitable budgeting
- Recovery of Costs (Through legal process)
- Town wide Benefits
 - Tax Base Diversity
 - Environmental
 - Harbor / Water Quality
 - Economic Development
 - New Commercial Growth