



Westford Community
Wastewater Project

www.westfordsfuture.com

Wednesday, September 13
Community
Meeting



Photo by Orah Moore



Meeting Roadmap

Purpose and Scope of the Meeting

- No actions will be taken tonight
- Purpose of the wastewater system

Presentation ~30 mins

- System design
- Service area
- Costs

Discussion

- Questions from the floor and from on-line participants
- Please request the microphone to speak

People and Roles



Town Bodies

PLANNING COMMISSION

Five Members

Appointed by the Select Board to carry out short- and long-range planning to achieve the vision in the Westford Town Plan.

WASTEWATER OUTREACH COMMITTEE

Six Members

Appointed by the Select Board to support community education on the project's impacts and benefits.

Town Staff, Project Team, and State Officials

MELISSA MANKA

Town Planner

Key grant writer and manager; responsible for coordination of project progress, financial management, and committee/ commission organization.

JULI BETH (JB) HINDS, AICP

Project Consultant, Birchline Planning

Responsible for drafting of the wastewater ordinance and preparation of financial projections under different bond and rate options

EMILY HACKETT, PE

ACHOUAK ARFAOUI, PE

Vermont Department of Environmental Conservation, Water Investment Division

Oversight of the engineering and permitting process; financing recommendations

PETER LAZORCHAK, PE, LEED AP

PROJECT ENGINEER, Stone Environmental

Licensed Civil Engineer in the State of Vermont responsible for engineering design of the Community Wastewater System.

AMY MACRELLIS

Project Scientist, Stone Environmental

Responsible for preparation of environmental information document, permitting, soils evaluation, and coordination with manufacturers and vendors

ROB SARMANIAN

Oakson, Inc.

Responsible for design of drip dispersal system; coordination with engineering design and permitting

Select Board roles

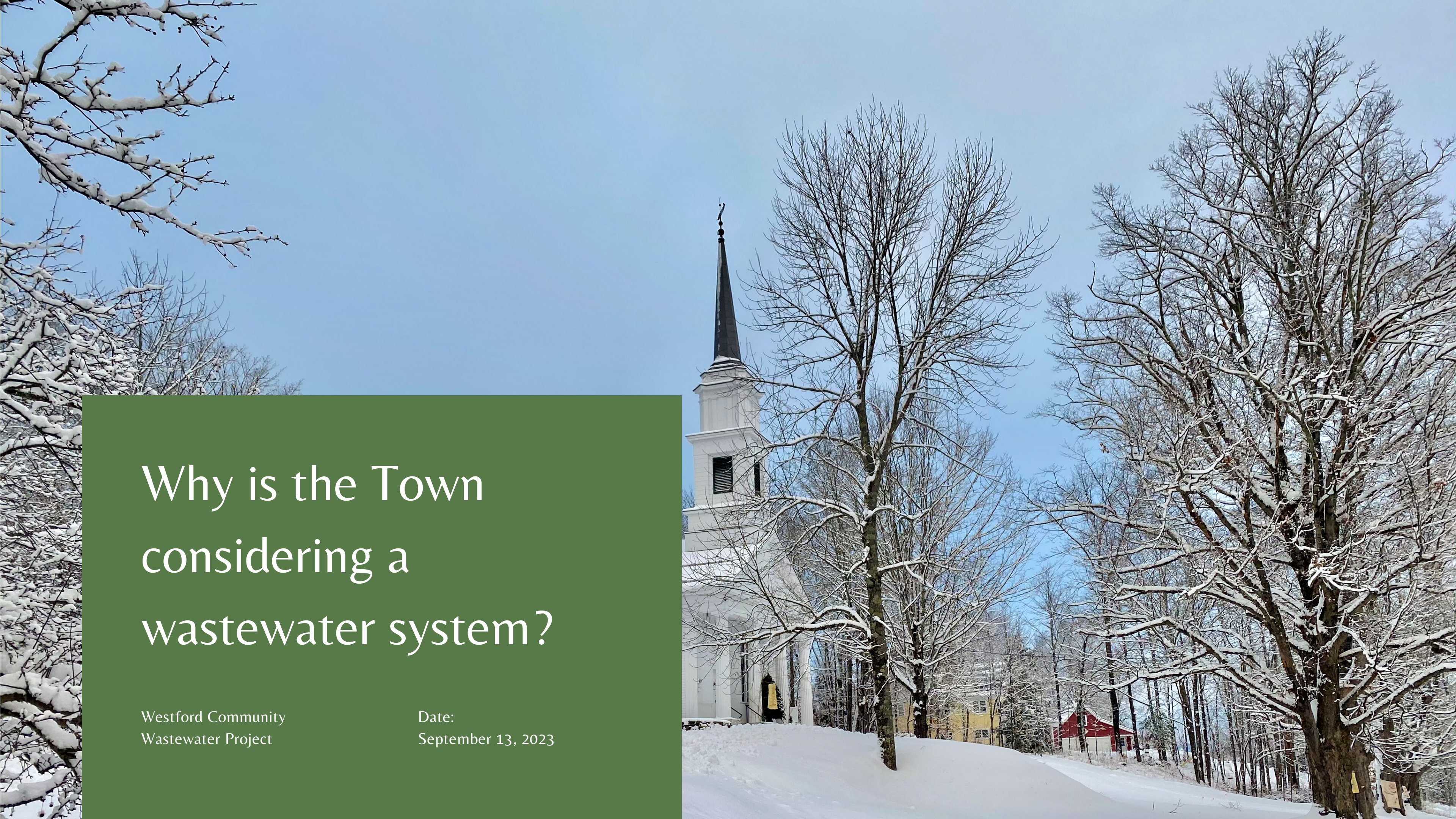
- Town's elected leadership
- The Select Board has set the bond amount at \$400,000 and will warn the bond vote for November 7th
- Adopt a wastewater ordinance to govern use of the system, including how costs will be allocated and connection policies
- If a system is established: Convene as the Board of Sewer Commissioners under authority granted in 24 V.S.A. § 3506

Lee McClenny, Chair

Dave Baczewski

Bill Cleary



A winter scene with snow-covered trees and a church steeple in the background. The image is split into two halves. The left half is a dark green vertical rectangle containing white text. The right half is a photograph of a snowy landscape. In the background, a white church with a tall, dark steeple is visible. The foreground is filled with snow-covered trees and a snow-covered ground. The sky is a clear, pale blue.

Why is the Town considering a wastewater system?

Westford Community
Wastewater Project

Date:
September 13, 2023



Why is the Town considering a wastewater system?

1992 Town Plan

The need for off-site wastewater treatment to ensure ongoing viability of properties around the historic Town Common is included in the Town Plan.

2008 Planning Commission actions

The Planning Commission has publicly evaluated wastewater options since 2008

Challenges for keeping civic buildings in the Town Common

There are no viable on-site wastewater solutions for the Westford Common Hall, Red Brick Meeting House, Town Library, and Town Office.

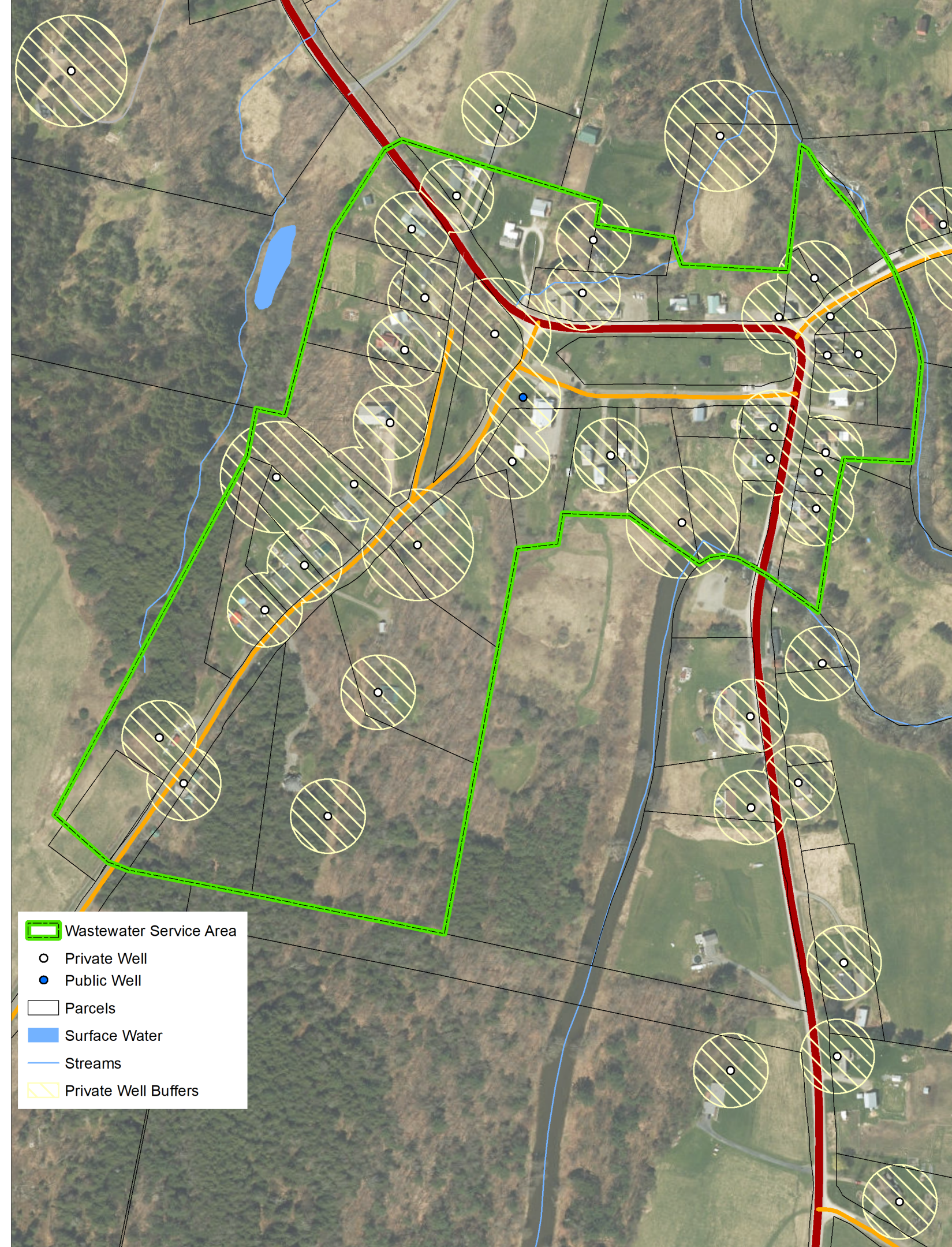
Historic levels of grant funding are available

The Town has access to over \$4 million in grant funding for the capital cost of the system - 103% of the estimated total project cost including a 30% construction cost contingency



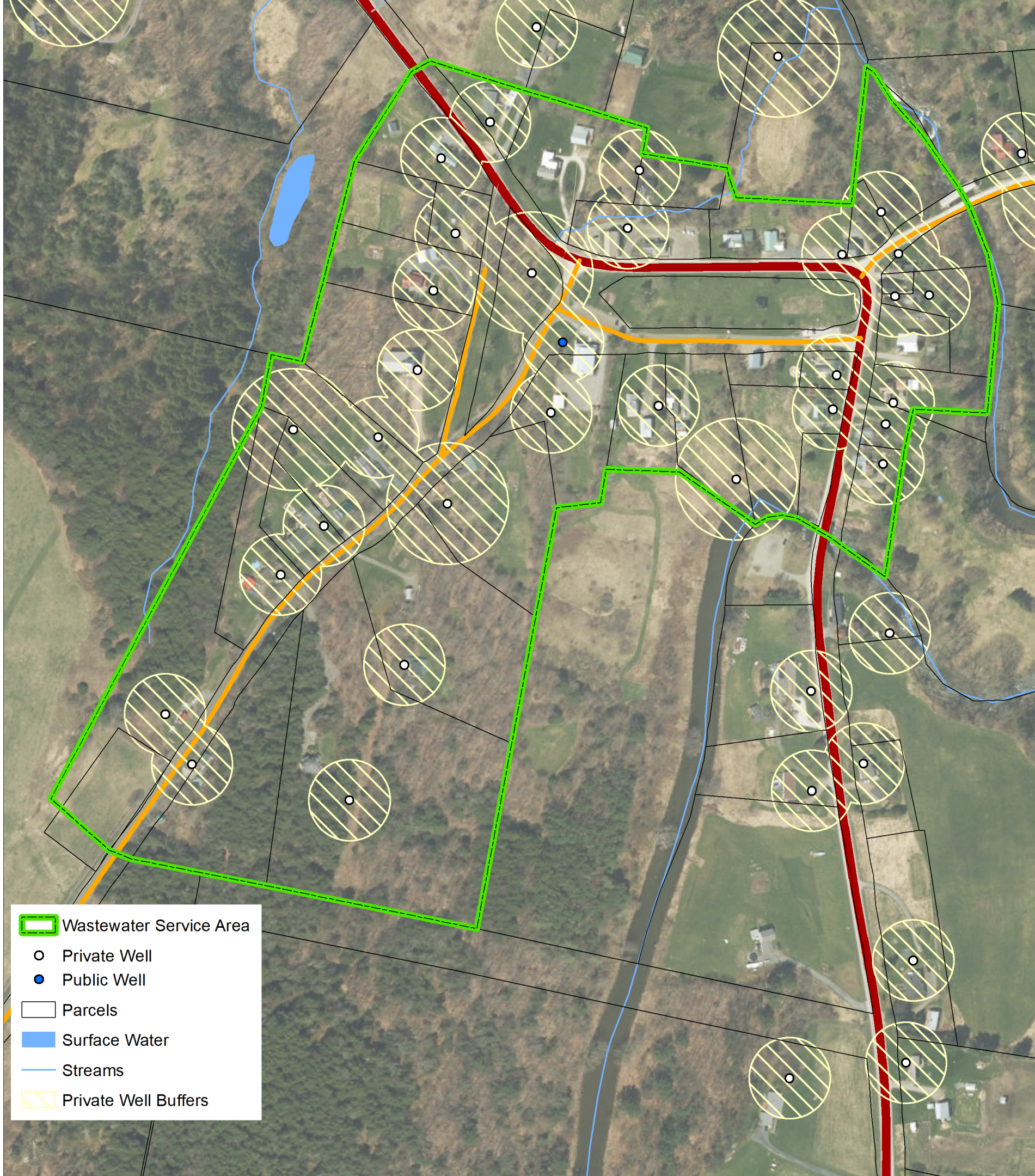
Westford
Community
Wastewater
Project

What are the current physical limitations in the proposed service area?



- 5 properties with shallow water supplies
- Septic systems are located within some well shields
- A “best fix” has been implemented at least once; this ‘freezes’ use and capacity in place
- Options studied for Red Brick Meeting House, Westford Common Hall, Town Office/Library = no viable option to allow changed or expanded use; high potential for ongoing pumping/repair costs or active failure

Date:
September 13, 2023



What is the “Growth Potential” with a system?

- There are two (2) vacant parcels in the proposed wastewater service area.
- The Select Board will establish the sewer service area boundaries, and available capacity, in the wastewater ordinance.
- A wastewater system does not change the Town’s zoning bylaws, the Town’s review processes, or any citizen’s appeal rights.
- There is no “state zoning” if a wastewater system is built. No water system is proposed and both public wastewater AND public water required to trigger any S.100 provisions.





Wastewater System Facts

1 What is proposed, and where?

2 Who would be eligible to connect?

3 How would the system work?

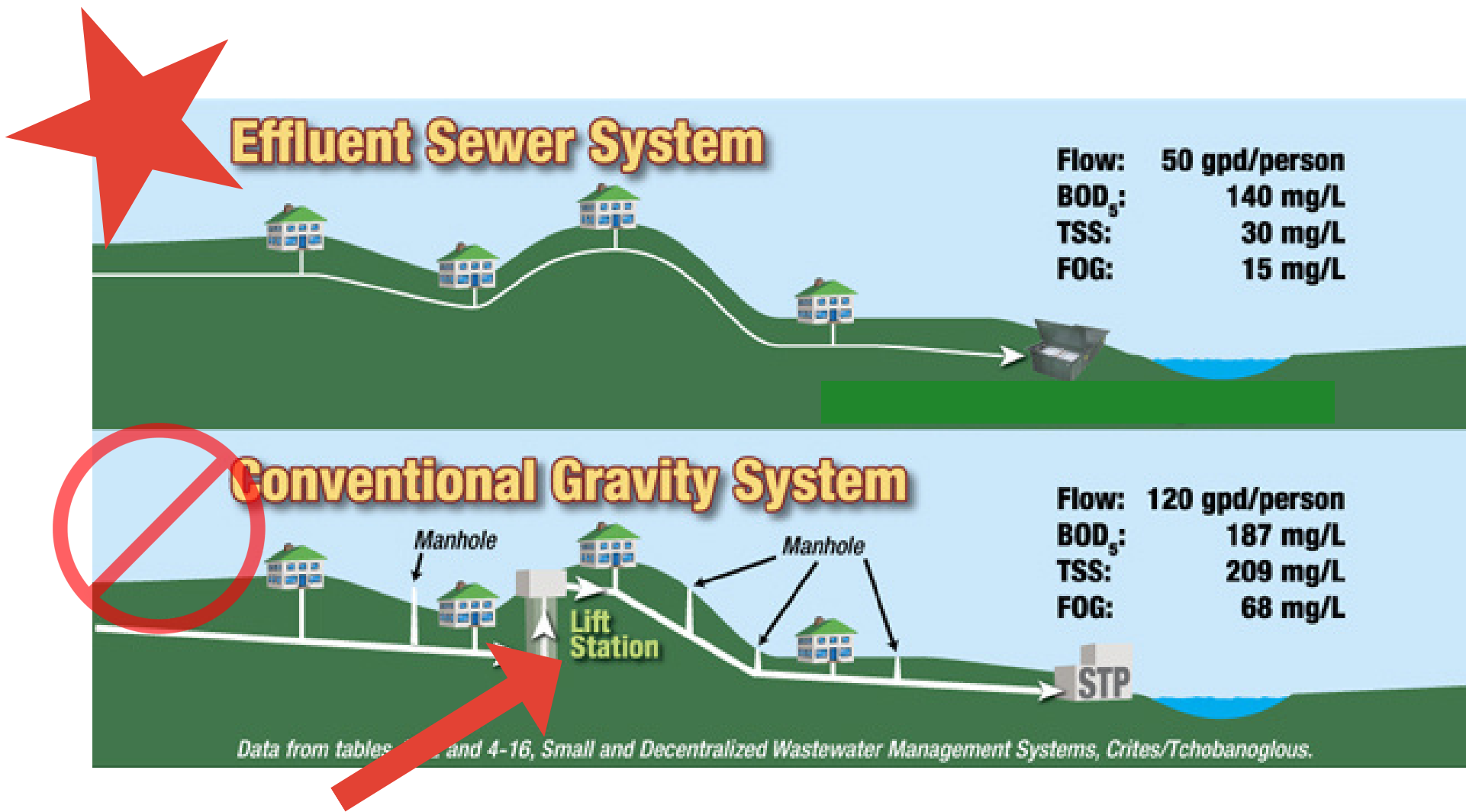
4 When would construction happen?

5 How much will the system cost?



- STEP effluent sewer system with subsurface drip disposal at Maple Shade Town Forest
- Total system disposal capacity: 24,300 gallons per day
- Expected initial capacity connected: 10,475 gallons per day
- Connection is voluntary.
- No cost to connect during construction
- Properties that exist in the service area:
 - 17 single-family houses
 - 7 apartments on 2 parcels
 - Westford Common Hall
 - Red Brick Meeting House
 - Town Library
 - Town Office
 - Westford Country Store + Cafe
 - 2 other properties (1705 and 'old store')

- 1 What is proposed, and where?
- 2 Who would be eligible to connect?



Using effluent sewers eliminates the use of lift stations, which are the main source of clogging and maintenance problems in conventional gravity systems. Effluent sewers require much less excavation than gravity sewers.

All illustrations and photo from Orenco Systems, Inc.

3 How does a STEP system work?

- Each property has a septic tank with an effluent pump (top, right)
- Pumps and tanks have alarm systems
- Tanks are designed for minimum of 24 hrs storage during power loss
- Problems caused at one property - stay at that property
- STEP systems in use in Warren, Addison, Waitsfield

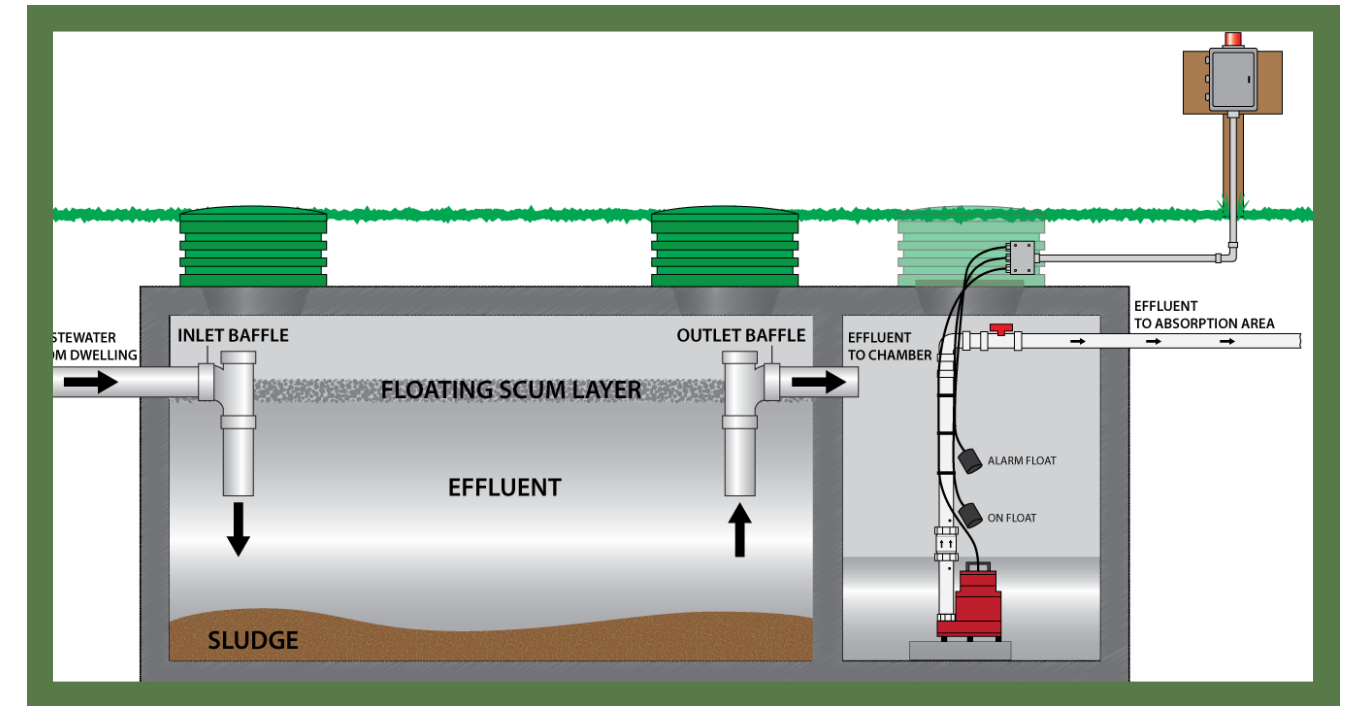
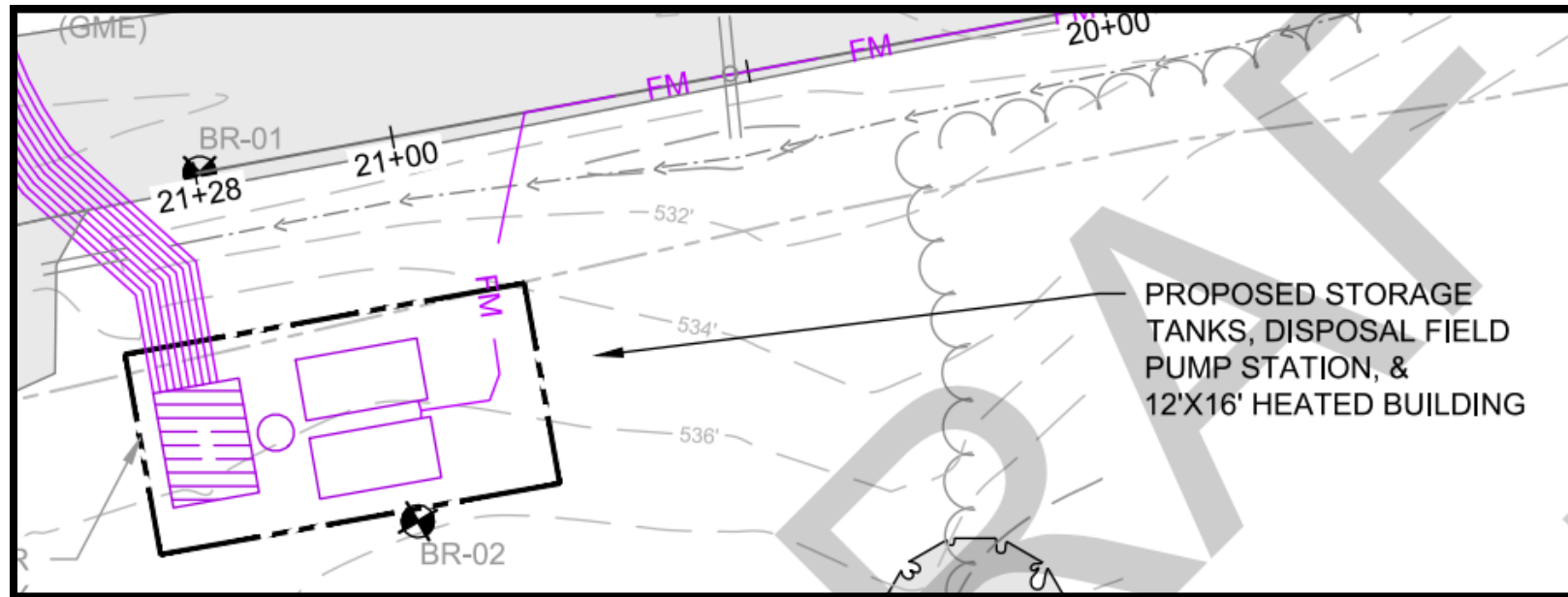


Diagram: Septic Tank with Effluent Pump



Photo: Typical septic tank lid



A 12'x16' control building, 5,000 gallon storage tanks, and a pump station would be located on Brookside Road



Photo:
Control
building,
Waitsfield

3 How does drip disposal work?



- This technology is approved for use by the State of Vermont.
- Effluent from individual STEP tanks is pumped to two (2) 10,000 gallon storage tanks and a pump station near the Maple Shade Town Forest
- Effluent is dispersed through five (5) subsurface dispersal zones, which allows fields to “rest” and improves environmental performance
- Using the full surface area enhances the capacity of the soils to absorb and fully treat wastewater

④ When would construction happen?

November 7,
2023
Bond Vote

2024
Final Design
Engineering;
State permitting

Early 2025
Bid documents
+ Bid opening

2025
Construction

2026
System
completion +
operation;
warranty period

5 How much will the system cost?

TOTAL PROJECT COST

\$3,867,000

- Collection system \$1,641,000
- Control building + drip disposal system \$699,800
- 30% construction contingency \$702,300
- All other costs \$824,900 (21% of total project cost)

TOTAL GRANT FUNDING

\$4,008,997

Available grants exceed the total project cost

- Federal ARPA grant \$2,377,136
- State Communities grant \$757,427
- Federal Northern Borders grant \$454,909
- Clean Water Fund subsidy \$269,525
- Local ARPA funds \$150,000

MAXIMUM BOND AUTHORITY

\$400,000

- Maximum annual payment of \$17,860/30 years
- Bonded debt is the “last line of defense” in the event of higher construction costs
- No bonds will be issued unless necessary to complete the system
- Authorization to issue up to \$400,000 provides a 53.2% construction cost contingency

ANNUAL SYSTEM OPERATING COST (not eligible for state/federal grants)

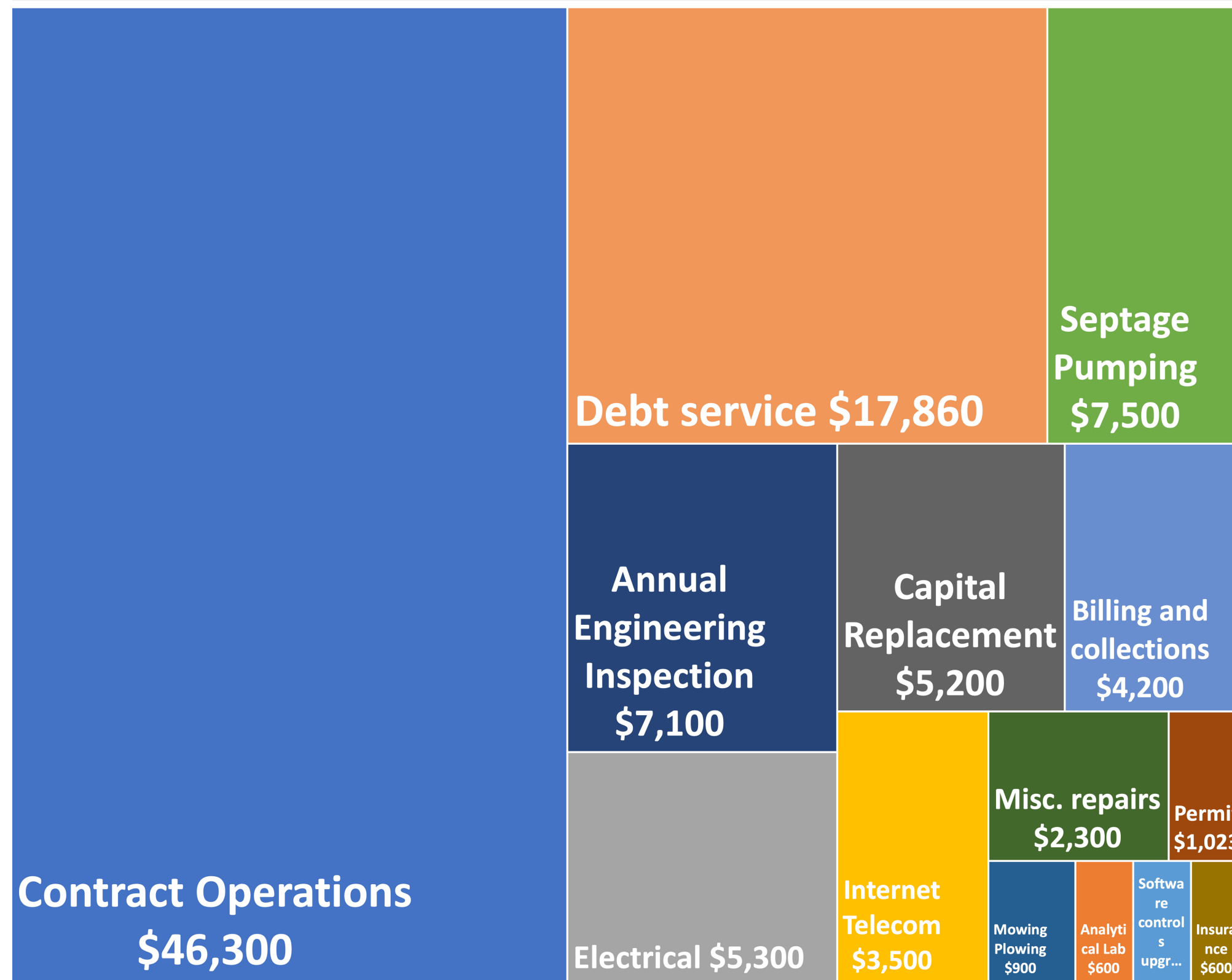
Estimated total cost
\$85,123 beginning 2026

TOWN'S ANNUAL TOTAL COST

Library + Office + un-allocated
capacity: ~\$64,000 / year in 2027



What are the projected operating and debt service costs?



- The Select Board would execute a service contract with a qualified, licensed operator to maintain the system
- If no bonded debt is issued (i.e., construction costs are no more than 36% over current estimate), the annual costs will be operating only with no capital debt, reducing annual costs by ~16%

5

How much will the system cost taxpayers and system users?

SINGLE FAMILY RESIDENTIAL

245 gallons per day

2026 (operating only)

\$71.52/month, \$858/year

2027 if full \$400k debt issued

\$89.74/month, \$1,077/year

ONE-BEDROOM APARTMENT

105 gallons per day

2026 (operating only)

\$30.62/month, \$368/year

2027 if full \$400k debt issued

\$38.46/month, \$462/year

ESTIMATED TAXPAYER IMPACT

Based on 4.5% inflation and 2% grand list growth

2026 (operating only)

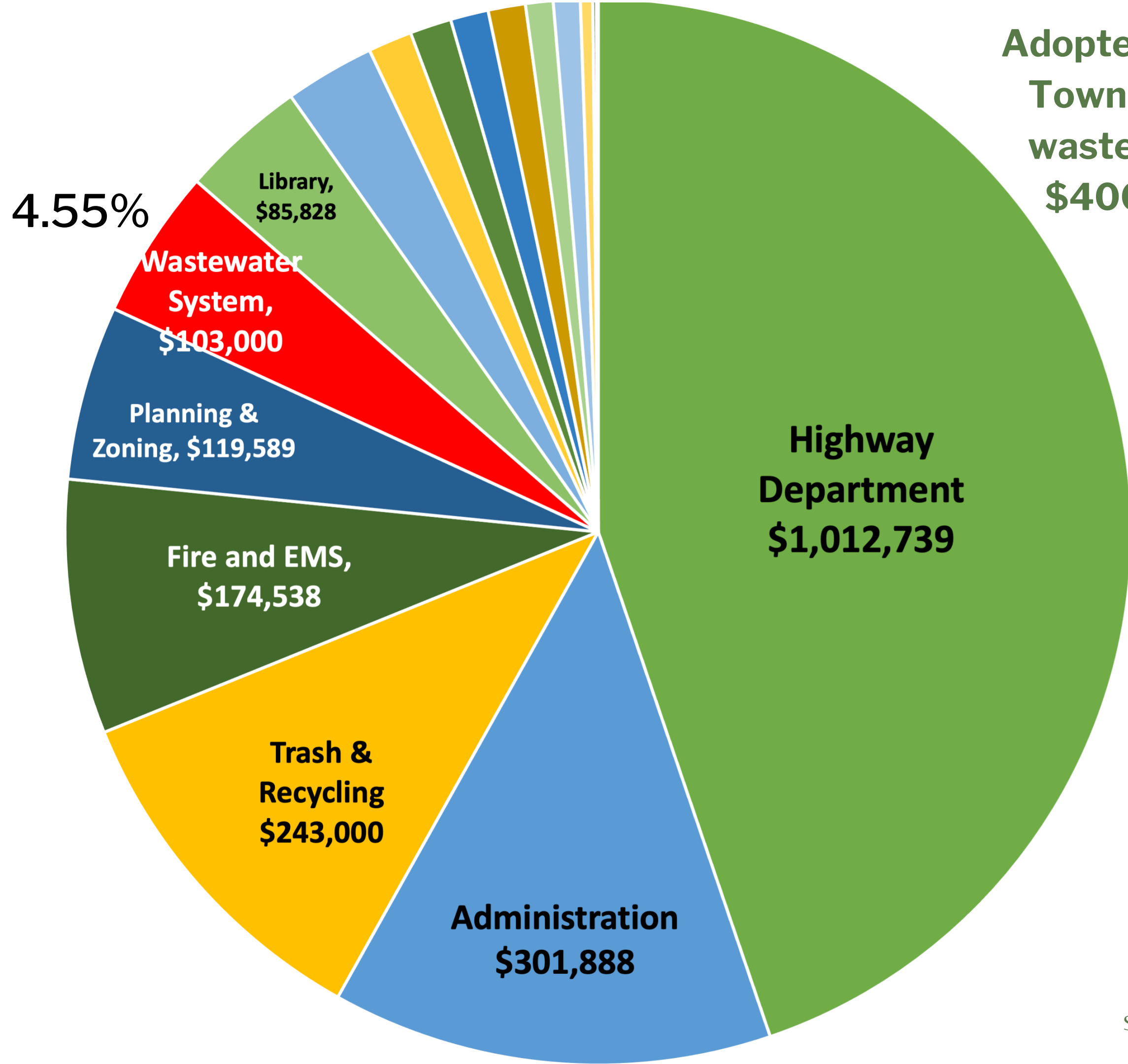
\$19.03/\$100,000 assessed value

2027 if full \$400k debt issued

\$23.41/\$100,000 assessed value



How would a wastewater system compare to other Town budget items?



Adopted 2023-2024
Town Budget plus
wastewater at full
\$400,000 bond



What happens if a system is not built?



Un-expended grant funding will be returned to State/federal government no later than 2027 if interim milestones are not met.

Ongoing and unpredictable costs to taxpayers for septic pumping at the Town Office and Library

Ongoing and unpredictable system repair or replacement costs for property owners in the service area.

Significant limitations on use of the Westford Common Hall and Red Brick Meeting House

Significant limitations on use of properties in the Common, such as adding accessory apartments for family members, adding a bedroom, changing or enhancing a business use

Comparison of septic system costs vs. user fees

- Typical septic pumping cost for residential septic system, north-central Chittenden County \$380 - \$500
Every 3 to 5 years
- Typical septic system replacement cost \$35,000 to \$50,000+

Replacing a septic system for \$35,000

Home equity loan payment for \$35,000
(Northfield Savings Bank current rates)

vs.

Wastewater system user fees
for single-family residence

Monthly

10 year term: \$402.24/mo
15 year term: \$319.90/mo
20 year term: \$286.25/mo

Loan term

10 year cost: \$48,269
15 year cost: \$57,581
20 year cost: \$68,700

Monthly

2026: ~\$72/mo
2027: ~\$90/mo

Long term

10 year cost: \$12,167
15 year cost: \$20,359
20 year cost: \$30,260



Upcoming Meeting Dates + More Information



Select Board meeting on
bond vote warning

- Thursday, September 14

Site walks - Fire District #1 / North
Road and Town Common

- Saturday, September 23

Next community presentation

- Wednesday, October 18

Bond vote Public Hearing

- Wednesday, November 1st

Bond Vote

- Tuesday, November 7th

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