

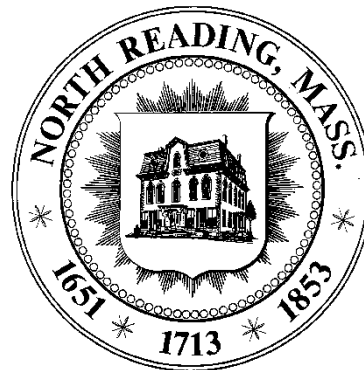
# Town of North Reading

## Wastewater System Planning/Design

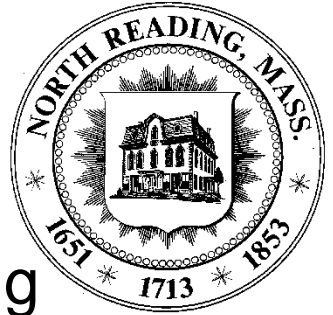
**Warrant Article #10**

**Monday, October 4, 2021 Town Meeting**

**Middle/High School – 7:00 PM**

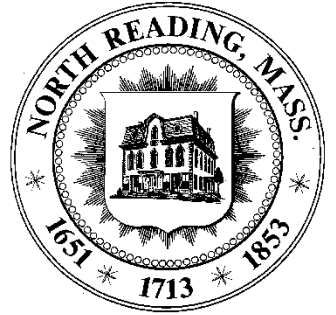


# Supporting Economic Development



- Currently, any residential or commercial development in North Reading requires construction of an on-site disposal (septic) system.
- The Town believes that making available a wastewater collection utility (public sewer) in commercial areas will promote economic development by making more land area usable for development and by allowing for more dense development in our commercial/industrial areas
- Increased economic development will provide more local services and more local job opportunities for the region.
- A wastewater collection system will also make possible more multi-family housing construction along Main Street, creating population density to support new businesses.

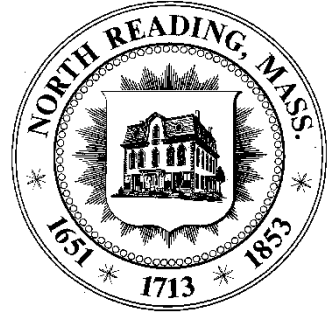
# Protecting the Environment and Public Health



Protecting each by:

- Improving surface and ground water quality (i.e., lakes, rivers, aquifer, wetlands)
- Providing sustainable long-term solution for wastewater management
- Establishing sewer service for existing commercial/industrial base
- Establishing sewer service for future commercial/industrial/residential base

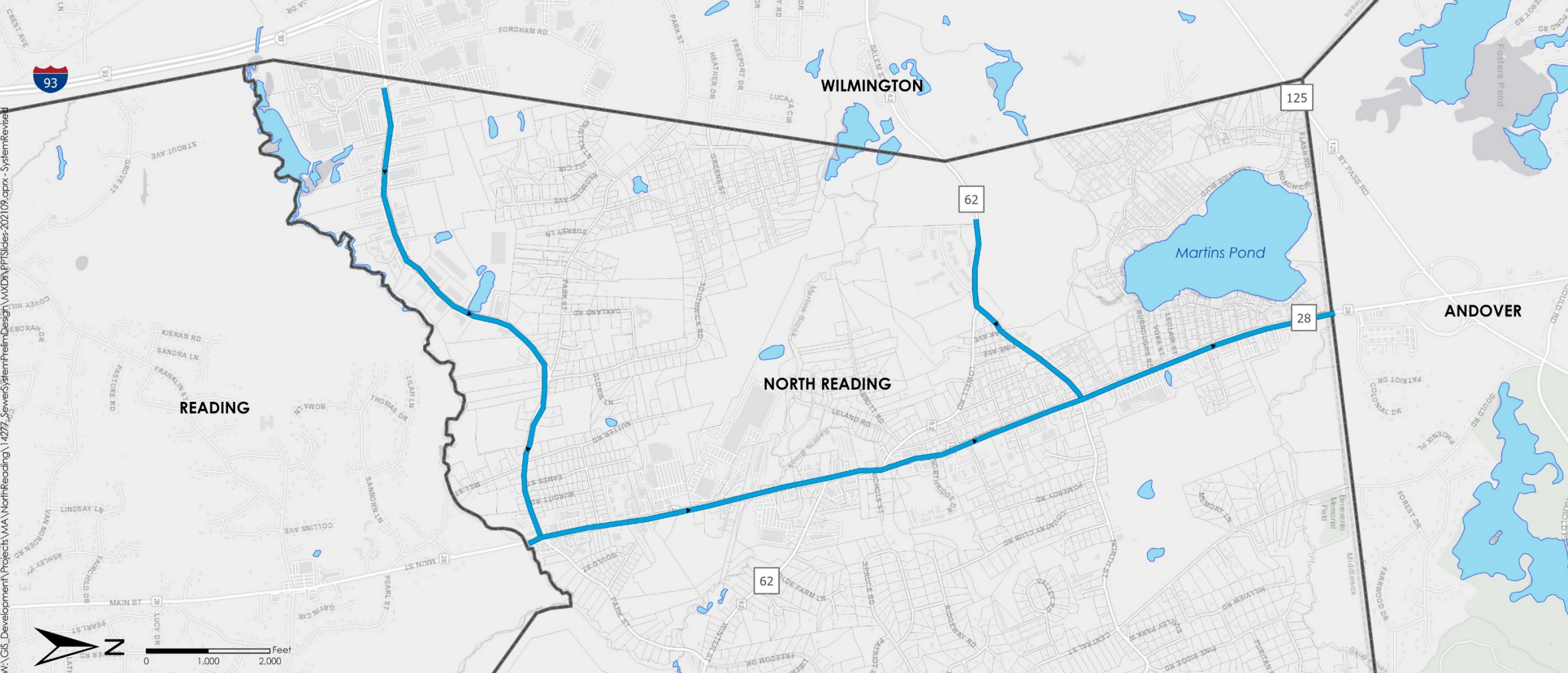
# Why is this funding needed now?



- There is an opportunity to partner with the Massachusetts Department of Transportation, potentially reducing the cost of construction. To take advantage of this opportunity, planning and design need to begin this fall.
- A request for construction funding will be prepared for the October Town Meeting next year (2022).
- Investing in design now will better position the Town for anticipated federal/state grant programs.

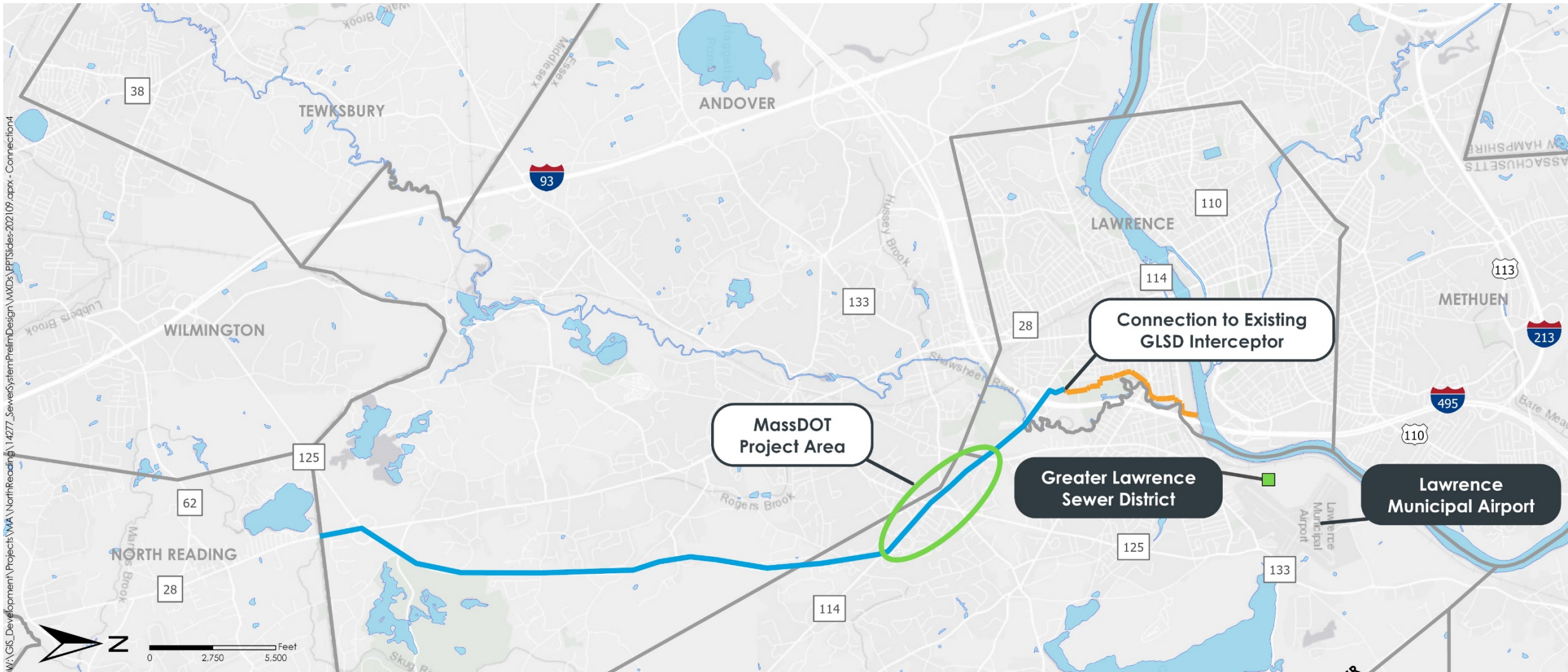


# In-Town Wastewater Collection System





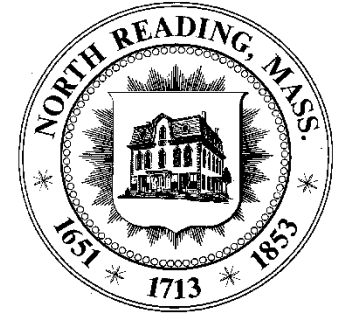
# Wastewater Conveyance System to GLSD



# Anticipated Project Schedule

Item	2021	2022				2023				2024				2025				2026				
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Permitting	█	█	█	█																		
Sewer Financing Planning & Update Property Value Analysis	█	█	█	█																		
MassDOT Project Design	█	█	█	█	█	█	█	█														
MassDOT Project Bidding									█	█												
Preliminary Design	█	█	█	█	█	█																
Final Design						█	█	█	█													
Bidding										█												
Construction											█	█	█	█	█	█	█	█	█			

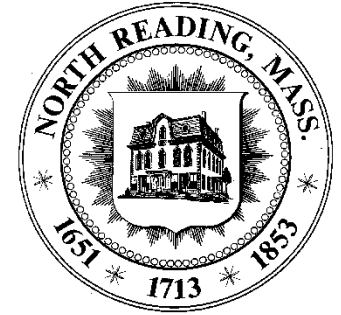
# Preliminary Design Cost Estimate



Item	Area	Preliminary Design Engineering/ Permitting <sup>2</sup>
1	<b><u>In-Town Wastewater Collection System</u></b> includes local gravity collection system along Main Street; North Street and Lowell Road; and Park Street and Concord Street	\$1,063,000
2	<b><u>Wastewater Conveyance System to GLSD<sup>1</sup></u></b> includes local pump stations and force mains and primary pump station and force main in North Reading continuing along Routes 28, 125 and 114 to the GLSD connection	<u>\$1,630,000</u>
	Sub-Total	\$2,693,000
3	<b><u>Other Project Costs</u></b>	
	Legal/Administration	\$100,000
	Sewer Financing / Update Property Value Analysis	<u>\$100,000</u>
	<b>TOTAL</b>	<b>\$2,893,000</b>
	Town Meeting Funding Request	Oct-21
Notes		
1	includes MassDOT Project - Routes 114/125	
2	includes preparation of the Final Environmental Impact Report (FEIR) for state agencies approval	

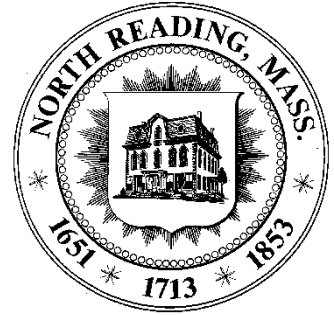


# Final Design and Construction Cost Estimate



Item	Area	Final Design Engineering/ Permitting	Construction of Wastewater Infrastructure	Construction Engineering Administration & Inspection <sup>2</sup>	TOTAL
1	<b><u>In-Town Wastewater Collection System</u></b> includes local gravity collection system along Main Street; North Street and Lowell Road; and Park Street and Concord Street	\$1,300,000	\$25,700,000	\$3,855,000	\$30,855,000
2	<b><u>Wastewater Conveyance System to GLSD<sup>1</sup></u></b> includes local pump stations and force mains and primary pump station and force main in North Reading continuing along Routes 28, 125 and 114 to the GLSD connection	<u>\$1,687,000</u>	<u>\$57,800,000</u>	<u>\$8,670,000</u>	<u>\$68,157,000</u>
	Sub-Total	\$2,987,000	\$83,500,000	\$12,525,000	\$99,012,000
3	<b><u>Other Project Costs</u></b>				
	Land Acquisition (assume 5 lots @ \$1M each)	\$5,000,000			\$5,000,000
	Legal/Administration/Financing Plan	\$1,000,000			\$1,000,000
	GLSD Connection Fee		\$2,000,000		\$2,000,000
	4:1 Infiltration/Inflow Reduction		\$6,000,000		\$6,000,000
	Sub-Total	<u>\$6,000,000</u>	<u>\$8,000,000</u>	<u>\$0</u>	<u>\$14,000,000</u>
	<b>TOTAL</b>	<b>\$8,987,000</b>	<b>\$91,500,000</b>	<b>\$12,525,000</b>	<b>\$113,012,000</b>
	Town Meeting Funding Request	Oct-22	Oct-22	Oct-22	
Notes					
1	includes MassDOT Project - Routes 114/125				
2	assumed to be 15% of construction cost				

# Funding/Financing Timeline



- Massachusetts One Stop Design/Permitting Application Pending
- Preliminary Design/Permitting 10/4/2021 Town Meeting
- Final Design & Construction 10/2022 Town Meeting
- Federal Infrastructure Funding 2022
- Massachusetts One Stop Construction Funding 2023/2024