



ERIE COUNTY WATER AUTHORITY

3030 Union Road • Cheektowaga, New York 14227-1097
716-684-1510 • FAX 716-684-3937

November 28, 2023

The Honorable Jason Keding
Supervisor of Town of Boston
8500 Boston State Rd.
Boston, New York 14025

RE: 2024/2025 Construction Projects
ECWA Project No.: 199300453

Dear Supervisor Keding:

In an effort to provide continuous safe and affordable water to all of the citizens within your municipality, and as you prepare for your 2024/2025 capital planning process, we urge you to secure funding for capital improvement projects to your water system.

We have attached a list of recommended improvements to the system which are based upon watermain break and leak history and the age and size of existing water lines and in some cases the capacity of the existing mains. Again this year, as shown on the attached list, these recommended improvements have been prioritized into three categories (high, medium, and low). These priorities serve as our recommendation as to the order in which we feel the projects should be completed. In general, these priorities are based on the level of risk we feel is posed by the failure of a given line including the number of properties impacted, the type of property impacted (e.g., hospitals or other health care facilities or large commercial or industrial facility) as well as the complexity of the emergency repair that would be necessary should the line fail.

In addition, attached is the letter dated December 3, 2021 regarding potential options for a secondary source of water supply (Priority #1).

You should review the list with your Engineering Department to determine how to proceed with implementing these important capital improvement projects and feel free to contact ECWA if you would like to discuss further. We feel that the main replacement programs are imperative to help limit interruptions of service, to maintain quality fire protection, to avoid property damage and limit the overall risk to your residents posed by unplanned failures of this critical infrastructure.

Attached to this letter is a map that depicts the Town's distribution system and shows the locations of the recommended projects. Each project has been numbered to coincide with the attached list.

The Honorable Jason Keding
Supervisor of Town of Boston

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November 28, 2023

We recognize that some of these projects may already be planned and if so please advise us of these projects so that we may update our records. We also recognize the challenges that municipalities have with completing sizable capital improvements and the time it takes to do so, so in the future we will continue to provide our recommendations bi-annually. This being the case, we request that the Town keep us updated as to the projects that are complete or substantially complete so that we can keep this list as up to date as possible in the interim.

We appreciate your continued cooperation as we share in the delivery of quality water to all Town of Boston residents. If you have any questions or require additional information concerning these recommendations, please contact me at 716-685-8220.

Sincerely,

ERIE COUNTY WATER AUTHORITY



Leonard F. Kowalski, PE
Executive Engineer

LFK:mab

Attachment

cc: C.Eaton
M.Quinn
M.Bellacose
J.Catanzaro
M.McAuley
M.Musarra
BOTN-326-9301-F

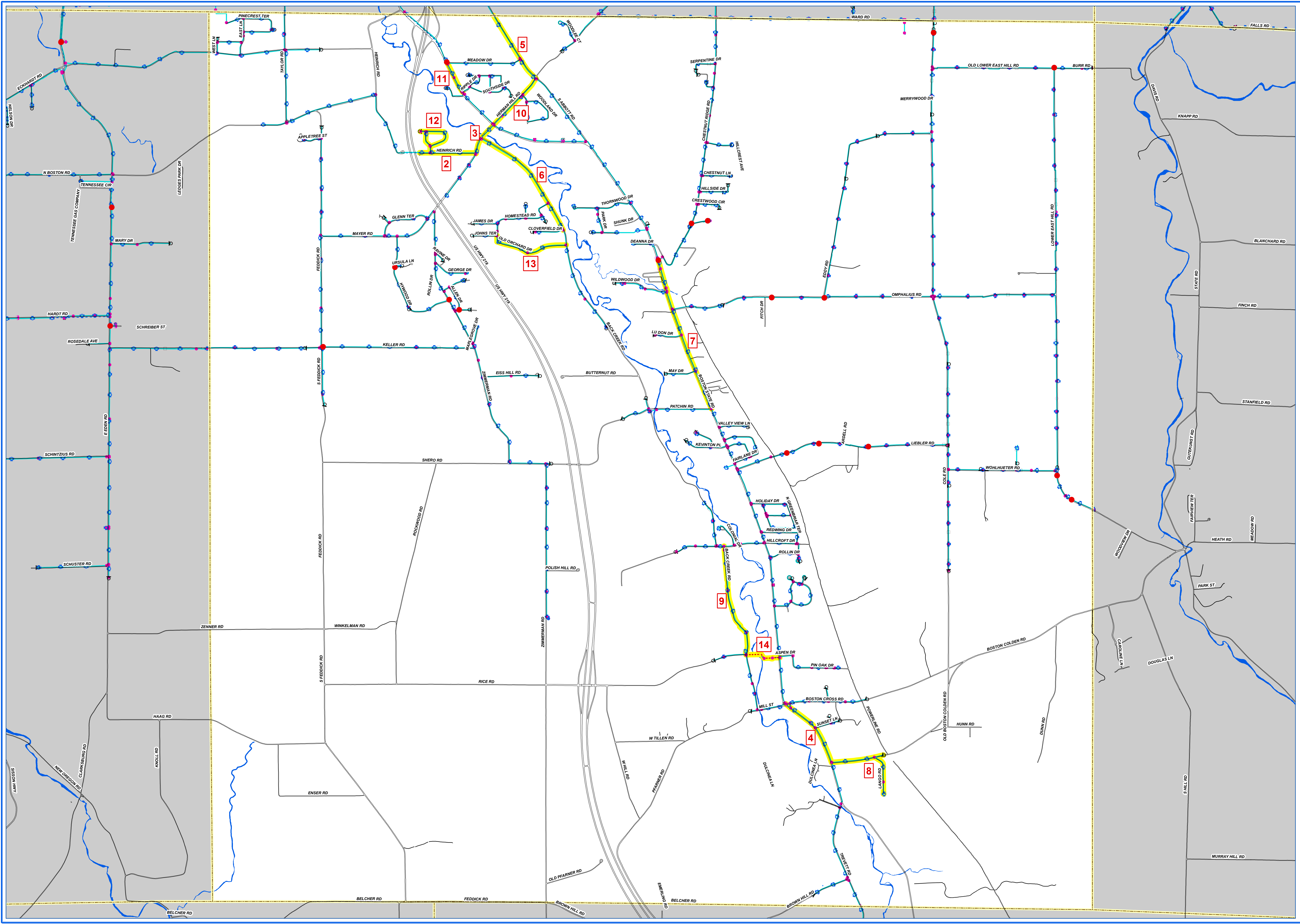
TOWN OF BOSTON

ECWA PROPOSED CAPITAL IMPROVEMENT PLAN
FOR TOWN WATER DISTRICTS
FOR 2024/2025

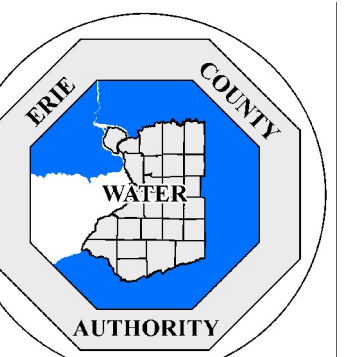
	Priority	Location	Recommendation	Initial Year of Recommendation
H I G H	1.	<u>Secondary Source of Water Supply</u>	Refer to attached 12/03/21 letter outlining options	2023
	2.	<u>Heinrich Road</u> Rt. 219 to Zimmerman Road	Replace 2,010 LF of 12" main	2019
	3.	<u>Zimmerman Rd.</u> Heinrich Road to Boston State Road	Replace 1,250 LF of 12" main	2012
	4.	<u>Boston State Road</u> Boston Cross Road to Boston Colden Road	Replace 2,730 LF of 12" main	2020
	5.	<u>South Abbott Road</u> Herman Hill Road to Orchard Park Town Line	Replace 2,725 LF of 8" main	2013
	6.	<u>Back Creek Road</u> Zimmerman Rd. to Cloverfield Dr.	Replace 4,500' of 8" main	2020
	7.	<u>Boston State Road</u> Chestnut Ridge Rd. to Patchin Road.	Replace 5,600 LF of 12" main	2023
M E D	8.	<u>Boston Colden Road & Lango Road</u>	Replace 3,335 LF 6" & 8" main	2016
	9.	<u>Back Creek Road</u> Hillcroft Road to Rice Road	Replace 4,135 LF of 8" main	2020
	10.	<u>Herman Hill Road</u> Boston State Road to South Abbot Road	Replace 2,230 LF of 8" main	2008
L O W	11.	<u>Boston State Road</u> Meadow Drive to Ripple Drive	Replace 1,145 LF of 12" main	2016
	12.	<u>Valley Circle Lane</u>	Replace 2,555 LF of 6" main	2019
	13.	<u>Old Orchard Drive</u> Back Creek Road to Johns Terrace	Replace 2,815 LF of 6" main	2020
	14.	<u>Eighteen Mile Creek Crossing</u> From Boston State Road & Aspen Drive to Back Creek Road at Rice Road	Abandon 8" watermain under creek	2008



Town of Boston ECWA Proposed Capital Improvement Plan



November 1, 2023



Erie County Water Authority
Buffalo, New York



ERIE COUNTY WATER AUTHORITY

3030 Union Road • Cheektowaga, New York 14227-1097
716-684-1510 • FAX 716-684-3937

December 3, 2021

The Honorable Jason Keding
Supervisor of Town of Boston
8500 Boston State Rd.
Boston, NY 14025

Re: Secondary Supply to Town of Boston
ECWA Project No.: 199300453

Dear Supervisor Keding:

As you are aware, the Town of Boston recently experienced a service interruption due to a watermain break near 8081 Boston State Road (CW #63509). This main is supplied via a single transmission main along Boston State Road and as such, due to the interruption the entire service area south of the break was out of service. Unfortunately, this event resulted in the need to issue a boil water notice for the area due to the length of time that the mains in the area were shut down.

Due to the lack of redundancy within the Town's water system and the history of deterioration of the single transmission main along Boston State Road, the frequency of service interruptions like the one experienced in September will most likely increase in the future. In response to this event, the Erie County Water Authority (ECWA) is recommending that the Town start exploring their options for a secondary feed.

ECWA conducted a preliminary review of three alternatives to supply a secondary source of water supply to the area south of Liebler Road. The three alternatives include the following and are shown graphically on Figure 1:

- Alternative 1 – Wohlhueter Tank Service Area via Boston Colden Road
- Alternative 2 – Wohlhueter Tank Service Area via Boston Cross Road
- Alternative 3 – Rice Hill Tank Service Area via Polish Hill / Hillcroft Road

Note that our evaluation was only preliminary and as such each alternative should be vetted further by a consultant to develop a Basis of Design report. Our review was only to provide proof of concept and not for development of detailed design drawings and construction. A cost benefit analysis should also be conducted comparing the cost of a secondary feed to a capital improvement project for the Boston State Road transmission main.

Alternative 1 – Wohlhueter Tank Service Area via Boston Colden Road

Implementation of Alternative 1 would require the installation of approximately 7,900 LF of 10" watermain from the existing dead end along Boston Colden Road (west of Powerline Road) to Cole Road, then north along Cole Road until the existing dead end near 8859 Cole Road. This alignment would require two trenchless road crossings, 4 PRV chambers, and 14 gate valves. The

estimated cost of this alternative would range between \$1,750,000 and \$3,750,000 (Point Estimate \$2,500,000). See Figure 1 for project limits.

This secondary feed is supplied from the Wohlhueter Tank. As part of our evaluation of this alternative, the ECWA Engineering Department completed hydraulic modeling to verify and evaluate the impact of this secondary connection on the system. The results suggest that the Ward Pump Station and Wohlhueter Tank have sufficient capacity to supply this feed.

Further, this connection would supply sufficient pressure equivalent to existing conditions, but available fire flow could be negatively impacted. In addition to providing a secondary supply to the area, based on the potential route of the new interconnecting main, there is a potential to provide public water service to approximately 17 residential properties currently supplied off private well systems.

Alternative 2 – Wohlhueter Tank Service Area via Boston Cross Road

Alternative 2 would require the installation of approximately 6,700 LF of 10” watermain from the existing dead end along Boston Cross Road (west of Powerline Road) to Cole Road, then north along Cole Road until the existing dead end near 8859 Cole Road. This alignment would require one trenchless road crossing, 3 PRV chambers, and 12 gate valves. The estimated cost of this project alternative would range between \$1,470,000 and \$3,150,000 (Point Estimate \$2,100,000). See Figure 1 for project limits.

Similar to Alternative 1, our overall evaluation suggests the Ward Pump Station and Wohlhueter Tank have sufficient capacity to supply this at sufficient pressure equivalent to existing conditions. However, available fire flow to that area could again be negatively impacted. Again, like Alternative 1, under this alternative there is a potential to provide public water service to approximately 13 residential properties currently supplied off private well systems.

Alternative 3 – Rice Hill Tank Service Area via Polish Hill / Hillcroft Road

The Polish Hill / Hillcroft Road Alternative 3 would require the installation of approximately 4,800 LF of 10” watermain from the existing main at Zimmerman Road along Polish Hill Road, then under Route 219 continuing along Hillcroft Road to the existing dead end near 6331 Hillcroft Road. This alignment would require one trenchless road crossing (800 LF HDD under RT 219), 2 PRV chambers, and 8 gate valves. The estimated cost of this alternative would range between \$1,120,000 and \$2,400,000 (Point Estimate \$1,600,000). See Figure 1 for project limits.

This connection would again supply sufficient pressure equivalent to existing conditions. However, unlike Alternatives 1 and 2, available fire flow in the area could be positively impacted. Note also that since this secondary feed is supplied from the Rice Hill Tank and the Keller Pump Station, the hydraulics of this system were evaluated. The results suggest that under a fire flow condition when the secondary source will be needed most, the normal station operation of a single pump will not be able to maintain minimum Rice Hill service area pressures as the tank levels drop rapidly. However, both the Keller Pump Station and Rice Hill Tank have sufficient capacity to supply this feed provided that two pumps are running concurrently the full duration of the

emergency. This scenario while feasible, will eliminate any redundancy in the station and therefore a detailed analysis should be completed to determine if a third pump could be installed within the Keller Pump Station to provide redundancy. Under this alternative, there is a potential to provide public water service to approximately 15 residential properties currently supplied off private well systems.

To reiterate, our analysis was completed at a high level and is considered preliminary and only intended as a proof of concept. Prior to making any decisions on capital investment, it is recommended that the Town complete a more thorough engineering evaluation. We do however believe that this project would provide a great benefit to the Town of Boston and should be considered further in the near future. We appreciate your continued cooperation as we share in the delivery of quality water to all Town of Boston residents. If you have any questions or require additional information concerning these recommendations, please contact me at 716-685-8220.

Sincerely,

ERIE COUNTY WATER AUTHORITY

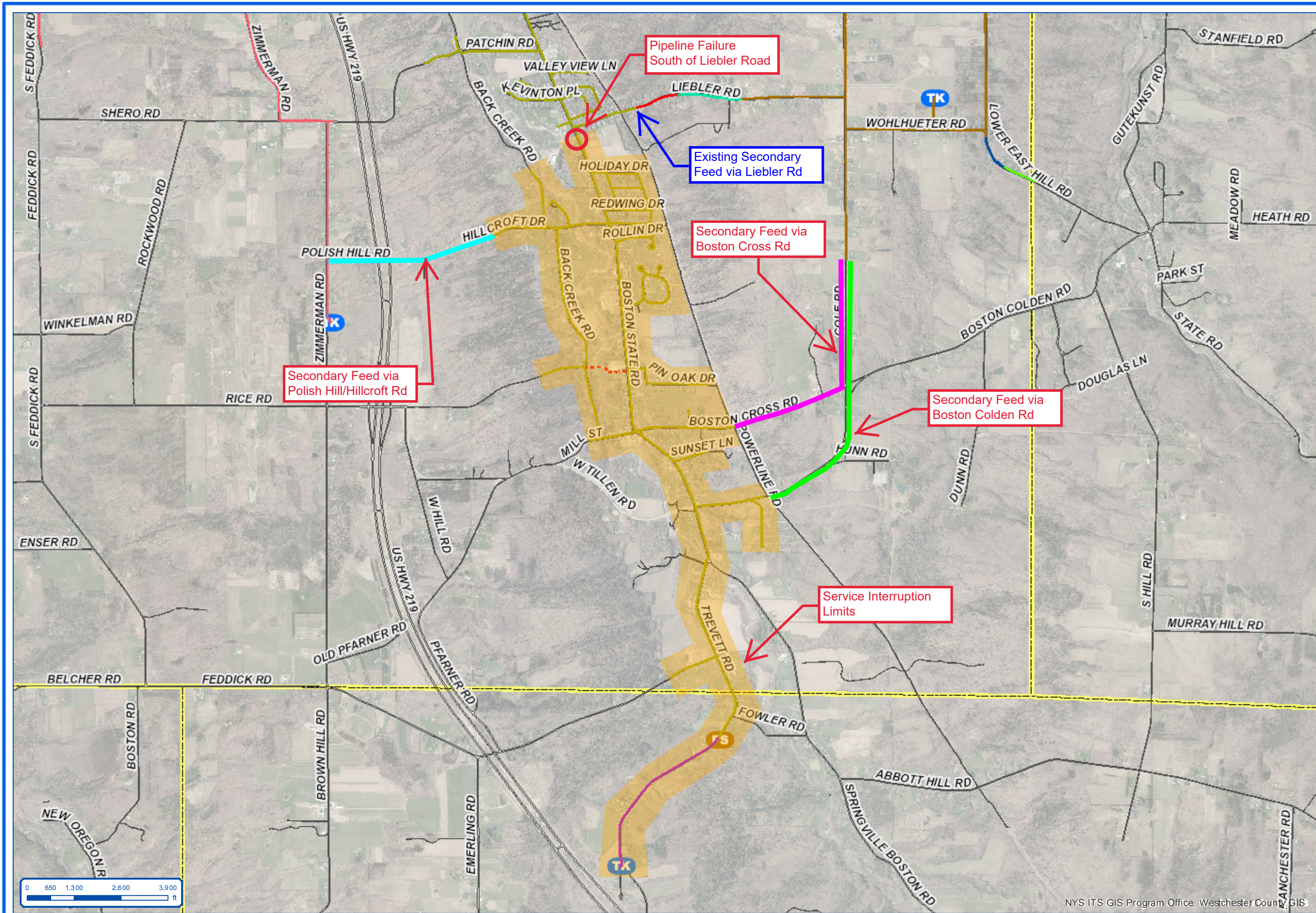


Leonard F. Kowalski, PE
Executive Engineer

LFK:jmf

Attachment

cc: R.Stoll
M.Quinn
M.Wymer
BOTN-326-9302-F



**FIGURE 1
SECONDARY SUPPLY
TO TOWN OF BOSTON**

October 6, 2021



**ERIE COUNTY WATER
AUTHORITY**
BUFFALO, NEW YORK