

# MEDFORD LAKES BOROUGH SEWER LINING FACT SHEET

APRIL 11, 2019



## OVERVIEW

The Borough of Medford Lakes is pursuing an infrastructure improvement to our collection (sewer) system lines. The information in this document was provided in part by a planning document provided by T&M Associates, 11 Tindall Road, Middletown NJ, and information from the Office of the Borough Manager.

### The Objective

As part of the Borough's Collection System Lining Improvements, the Borough proposes to rehabilitate and repair its existing collection system located throughout its Sewer Service Area which is comprised of approximately 90% of non-PVC material. Detailed proposed work includes interior lining from manhole to manhole of approximately 110,000 lineal feet (LF) of 8" and 12" sanitary sewer piping; interior manhole lining and grout repairs to approximately 500 manholes; and testing and sealing of approximately 1,350 4-inch and 6-inch lateral connections.

Other proposed improvements include open-cut replacement of approximately 5,000 LF of 8" and 12" sanitary sewer pipe and up to twenty (20) 4-foot diameter sanitary sewer manholes. Replacement of the sewage infrastructure will be done in kind in the same trench as the existing infrastructure and maintain similar slopes and inverts unless the pipe is back-pitched or does not meet NJDEP's minimum design requirements.

The majority of the proposed work will be done via trenchless methods and will not impact adjacent environmentally sensitive areas. Proposed excavation necessary for pipe and manhole replacement will be conducted within existing roadways and/or right-of ways and no additional clearing or tree removal is anticipated. Proposed staging and/or stockpiling areas will be coordinated during design and will either be within existing roadways or in a paved area in the Borough's treatment plant facility.

### Project Need

The proposed work is necessary to improve the existing collection system located throughout the Borough's Sewer Service Area. The existing system was originally constructed in the 1930's and upgraded in the 1960's and 1970's. The rehabilitation and repair work proposed will minimize blockages and eliminate potential sewage spills. The proposed improvements will assure proper functioning of the system and will provide a benefit to the local communities by

improving public health and safety and minimizing impact to adjacent environmentally sensitive areas located throughout the Borough

## Project Alternatives

### Alternative No. 1 – “No Action”

If no action is taken the existing collection system, which was built in the 1930’s and last upgraded in the 1960’s and 1970’s, will continue to deteriorate and may potentially break and/or collapse causing a failure in the system in the near future. This may result in sewage backups and/or spillage into subwatersheds that already have elevated pH levels and are adjacent to environmentally sensitive areas located throughout the Borough. Additionally, there is potential damage to property owners and increased costs to Borough rate payers associated with the additional maintenance and repairs.

### Alternative No. 2 – Lining Improvements

The Authority proposes to rehabilitate and/or replace its existing collection system throughout its Sewer Service Area. Approximately 90% of its system is comprised of non-PVC material and was last upgraded in the 1960’s and 1970’s. The proposed work will result in improved reliability of the existing sewer system and reduce maintenance costs. Improvements proposed include lining of sewer pipe and manholes and replacement of pipes and manholes where necessary. Implementation of this project will result in *de minimus* increases in dust, noise and traffic during the construction phase; however, these effects will be temporary. Since the project area is located within active commercial/residential properties, coordination during construction will be undertaken to minimize disturbance to area residents. Once the project has been completed, any excavation areas needed will be restored to pre-existing conditions and no adverse impacts are anticipated.

## FUNDING AND COSTS

### Bonding and H2Loans

The Borough of Medford Lakes is requesting funding from the New Jersey Environmental Infrastructure Financing Program (NJEIFP), currently referred to as H2Loans. As part of the funding application process, a Bond Ordinance must be passed for the H2Loans to be issued. The sum of the Bond Ordinance is based on the H2Loans worksheet that includes estimated costs for all aspects of the project. Our engineering firm as already provided a price for services that is less than what the H2Loans requires, however the process must follow the formula in the application process. An important detail of this funding is that the Bond Ordinance will not be executed; it is simply a required application component to receive the loan funds. Additionally, the loan does not reflect the full amount of the Bond Ordinance. The loan is dispersed on an as needed basis in small amounts. As the project moves along, vouchers are provided to the Borough in increments depending on the current cost. The Borough does not

believe the project will cost more than \$6.5 million based on information provided by our engineer, hence the funding for the project from the H2Loan would then stop at \$6.5 million. It the Borough, under the guidance of our professionals, wishes to stop the project at any time, the repayment of the loan will only be what has been spent up to that point. The repayment of the loan would begin approximately six months after the completion of the project. Additionally, should certain conditions warrant a reduction in scope, the cost could be sustainably lower.

### **Paying for the H2Loan**

The lining project has been discussed for over 15 years with plant personnel and administration. The sewer rate was increased over time in anticipation of this project to cover the costs. At the present time we do not need a rate increase to pay back the debt service on the H2Loan. At the current level the rates and surplus will allow this project to be done without any sewer rate increase for the foreseeable future, barring any other infrastructure needs.

## **SUMMARY OF FUNDING AND COSTS**

- Bond Ordinance 622 for \$9 million is for the application for a low interest H2Loan only
- Bond Ordinance 622 will NOT be executed, the H2Loan will be used to fund the project
- The H2Loan fund comes in small disbursements as the project progresses (not in a lump sum, the loan provides fund as we need them)
- The Borough is only responsible to pay back what is actually spent i.e. if the project costs \$6 million, the Borough repayment is that amount, if it cost \$5 million, that is the repayment amount.
- The Borough can stop the project at any time and will only be responsible for what has been loaned to that point.

## **CONCLUSION**

Our sewer infrastructure is ageing and breaking down. Emergency appropriations to pay for failures are a common occurrence. It is important to note that these failures when fixed only fix the affected area. It stands to reason that the current system will not get better with time. This project is of the utmost importance in protecting our ground water, lake water, and the way our community functions. A week before 2018 Canoe Carnival we had a major break on the corner of McKendimen and Tabernacle Roads. The cost was approximately \$40k, not to mention the inconvenience to our citizens. Although the repair was done, the same pipe could

break 2 feet down from the previous break. That was one of two breaks in 2018, and 2019 that number could increase. The lining project would eliminate 99% of these issues.