



MEMORANDUM

To: Thomas Fallon, CFO/Borough Administrator

From: Thomas P. Neff, P.E., P.P., C.M.E., C.F.M., Borough Engineer

Re: March 2020 – Engineering Report

Borough Projects:

Infrastructure

2020 Road Improvement Program – T&M was authorized at the November 12th Council meeting to prepare surveys, plans, specifications, and permits for the Borough's 2020 Road Improvement Program. The roads to be paved as part of this project include:

- Hope Road (Sycamore Avenue to Tinton Avenue)
- Alden Lane
- Wayside Terrace
- Edison Avenue
- Wyckham Road
- Danbury Road
- Plum Street
- Squankum Road (Hamilton Road to Hockhockson Road – ½ Width)
- Holly Drive
- Sylvan Drive
- Hartford Drive

In addition to paving the roads, significant drainage improvements are also proposed on Alden Lane, Wayside Terrace, and Edison Avenue. Drainage improvements are also proposed along a portion of Pine Brook Road near the railroad tracks to alleviate a chronic flooding issue. A continuation of the Wayside Road Sidewalk Extension is also proposed between Rutgers Drive and Valencia Drive. Field surveys, basemaps, and preliminary design have been completed. We are in the process of completing final design, cost estimates, and specifications. We anticipate submitting to NJDOT for review in the near future.

2018 Road Improvement Program – T&M was previously authorized to prepare plans and specifications for the Borough's 2018 Road Improvement Program. The roads to be paved as part of this project are as follows:

- Steven Avenue
- Howard Avenue
- Cross Way
- South Terrace
- Springdale Avenue
- Old Mill Road
- Marland Road
- Water Street
- Liberty Drive
- Wheeling Court



- Fox Chase Drive (Asbury Avenue to Filly Way North)

In addition, new sidewalks will be constructed along the west side of Tinton Avenue and Wayside Road to fill in the missing gaps between Water Street and Rutgers Drive. Traffic calming measures will also be added along Heritage Boulevard. Construction plans and specifications are complete. A construction contract was awarded to Earle Asphalt Company at the September 18th Council meeting in the amount of \$2,126,913.13. The Contractor began work in the Fall of 2018 and re-mobilized for the Spring on March 11, 2019. All work is now substantially complete on Steven Avenue, Howard Avenue, Cross Way, South Terrace, Springdale Avenue, Old Mill Road, Marland Road, Liberty Drive, Wheeling Court, Fox Chase Drive, and the portion of Water Street between Tinton Avenue and Rutgers Drive. The new sidewalks along Tinton Avenue and Wayside Road have also been completed.

Change Order #3 was approved at the December 17, 2019 Council meeting. The main purpose of the change order was to authorize the Water Street sewer improvements described below. Note that although the new sewer work is an additional amount of \$214,788.13, the overall change order is only for an additional \$65,827.61. This is because we have been able to work with Earle to keep the costs down and were able to limit the use of contingencies that are built into every contract for unforeseen circumstances

Earle will return to the remaining portion of Water Street in the Spring of 2020 to complete milling and paving from Rutgers Drive to the western terminus at Colts Neck once additional sanitary sewer work has been completed.

Borough Wide Infrastructure Mapping – The current sanitary and storm sewer mapping was prepared and last updated in 1995. Over the last 20 years, the Borough has experienced significant development growth, especially in the 'South End'. We are in the process of mapping sanitary and storm sewer infrastructure using Geographic Information System (GIS) standards and equipment. This process will digitize the Borough infrastructure asset for use by DPW, Planning and Zoning, and Construction Departments. The information will be available to field personnel on mobile devices to facilitate the use of dynamic mapping tools and geospatial locating of structures. We are currently working with DPW to complete Phase II of the field data collection.

Water Street Sanitary Sewer Improvements – Phase II – Our office has prepared plans and specifications for the installation of approximately 1,000 linear feet of 8" sanitary sewer main along a portion of Water Street west of Rutgers Drive. The new sewer main will provide public sanitary sewer service for five single family homes that are currently on septic systems. The necessary TWA Permit Application Package was reviewed and approved by Two Rivers Water Reclamation Authority and NJDEP. This work will be completed under a change order to Earle Asphalt Company's existing contract. The change order was approved at the December 17, 2019 Council meeting. The installation of the sewer main began on March 16, 2020 and is anticipated to be complete by approximately May 6, 2020. A detour will be in place for Water Street during this time. The new trench will then be allowed to settle for a period of time before the contractor returns for final surface course paving.

Sanitary Sewer Pump Stations Cellular Dialer Conversions – Our office was authorized at the June 18, 2019 Council meeting to prepare plans and specifications for a cellular dialer conversion project at the Borough's sanitary sewer pump stations. Autodialers are necessary at the pump stations to notify DPW and other personnel of emergency situations such as high water levels or power outages. These dialers currently operate on landline telephone lines, which are susceptible to damage. All autodialers will be upgraded to operate on a cellular network to provide continuous coverage. Our office has completed the necessary site visits to gather all required information. We solicited informal quotes from three local electricians for the installation of the equipment. Pumping Services, Inc. was the low bidder, and the Borough has authorized a Purchase Order in the amount of \$17,290.00 for this work on November 22, 2019. All work is now substantially complete. All



pump stations, with the exception of Nutmeg Court, are now utilizing cellular service. The dialer at Nutmeg Court will be upgraded as part of the overall pump station upgrade later this year.

Shark River Road Truck Restriction Study – The Borough has received numerous complaints and concerns over the number of trucks travelling along the portion of Shark River Road between Route 66 and Shafto Road and would like to enact a Commercial Motor Vehicle (CMV) restriction along this road. As a result, our office has completed a detailed traffic study and report to submit to NJDOT for review and approval. The goal of the study is to enact an enforceable 4-ton weight limit for all CMV's along this portion of Shark River Road. The Borough Council adopted a resolution of support at the July 16, 2019 Council meeting. The traffic study and report was then submitted to NJDOT for review. We received formal NJDOT approval on October 7, 2019. The necessary Ordinance to limit truck traffic was introduced at the October 15th Council meeting and adopted at the November 12th Council meeting. Our office has since prepared the necessary signage plan, which has been submitted to DPW for fabrication and installation. All signs are now installed, and the truck restriction is in effect.

Rutgers Drive and Nutmeg Drive Pump Station Upgrades – Our office was authorized at the September 3, 2019 Council meeting to prepare plans and specifications for various upgrades to these two aging sanitary sewer pump stations. The upgrades will improve the overall operation and functionality of each station. The necessary plans and specifications have been completed, and a contract in the amount of \$415,000 was awarded to T.R. Weniger at the December 17, 2019 Council meeting. A pre-construction meeting was held on January 28, 2020. The contractor is currently in the process of preparing the necessary shop drawings for our review and approval.

TNSA – The 2019 Customer Report was submitted to TNSA on February 5, 2020. We will continue to work with TNSA on obtaining additional reserve capacity and various other matters as previously discussed with Council and Borough Staff.

TRWRA –We continue to communicate with TRWRA regarding development at Fort Monmouth and the impacts that development will have on the sanitary sewer system.

Fort Monmouth Redevelopment – We have been meeting with FMERA regularly to review the infrastructure needs to support the redevelopment efforts.

Buildings & Grounds

Library Investigation – Earlier in 2017, it was discovered that there was a mold problem at the Tinton Falls Public Library that has caused the building to be closed to the public. At the December 19, 2017 meeting, the Council authorized T&M Associates to conduct an overall evaluation and investigation of the mold issues, including the HVAC and structural systems of the building. The complete and final report was submitted to Borough Administration and Council on March 16, 2018 for their review. The report focused on indoor air quality, HVAC, structural, lead based paint, and radon tests, evaluations, and recommendations. The Borough Council and the Library Board have since decided to work with an architect on necessary building renovations and to apply for potential grant funds through the New Jersey Library Construction Bond Act for the building improvements. The grant application was recently released by the State, with a due date of April 6, 2020. The Library Board's architect is taking the lead on preparing the necessary grant application.



Grant Applications

T&M continues to work on identifying applicable grant funding opportunities on Federal, State and Local levels and linking those grants to various capital projects or programs in the Borough.

Grant Opportunity	Amount Requested	Status
Monmouth County Open Space Grant – FY 2019	\$250,000	Awarded \$200,000
NJDOT – Local Aid FY 2019, Hope Road – Ph II	\$637,251	Awarded \$215,000
NJDOT – Local Aid FY 2019, Hope Road – Ph I	\$955,520	Awarded \$325,000
Monmouth County Open Space Grant – FY 2018	\$250,000	Awarded \$250,000
NJDOT – Local Aid FY 2018, Fox Chase Blvd	\$641,472	Not Selected
Monmouth County Open Space Grant – FY 2017	\$250,000	Not Selected
NJDOT – Local Aid FY 2017, Hope Road	\$679,500	Awarded: \$185,000
Monmouth County CDBG – FY 2017	\$200,000	Awarded: \$142,486
NJDOT – Local Aid FY 2016, Pine Street	\$486,000	Awarded: \$250,000
NJDOT – Local Aid FY 2015, Green Grove Rd	\$400,000	Not Selected
NJDOT – Local Aid FY 2014, Corregidor Road	\$375,000	Awarded \$250,000
Monmouth County CDBG – Library Addition	±\$185,000	Awarded: ±75,000
Monmouth County Open Space Program	\$250,000	Awarded: \$250,000
NJDOT – Local Aid FY 2012, Heritage Blvd – Ph II	\$491,000	Awarded: \$225,000
NJDOT – Local Aid FY 2010	\$320,401	Awarded: \$200,000

Completed Projects:

Parks & Recreation 5-year Capital Plan
 2019 Tax Map Updates
 Heritage Boulevard Pump Station Improvements
 Hockhockson Park Field Upgrades
 Hope Road Drainage Repairs
 310 Riveredge Road Outfall Repairs
 Water Street Sanitary Sewer Improvements
 Borough Hall Curb & Sidewalk Replacement
 Hance Park Playground Improvements
 Tinton Avenue Pump Station Improvements
 2016 Road Improvement Program
 2017 Tax Map Updates
 Parmly Road Outfall Repairs
 2015 Park Improvement Program
 Riveredge Road and Woodland Manor Pump Station Upgrades
 Hance Avenue and Heritage Boulevard Pump Stations Emergency Generator Replacement
 2015 Road Program
 2015 Borough Tax Map Updates
 2015 Borough Map Updates
 2014 Road Program
 Asbury Avenue & Pine Street/Essex Road Intersection Improvements by Monmouth County
 Asbury Avenue Resurfacing by Monmouth County
 Hockhockson Road Bridge Replacement by Monmouth County
 IT Server Room Upgrades
 Sanitary Sewer Pump Station Upgrades @ Jumping Brook Road & Hance Avenue
 2013 Road & Sidewalk Program



West Park Avenue Sewer Rehabilitation & Roadway Resurfacing
Open Space List Reconciliation & Recording
Municipal Complex Water Meter Installation
Third Party Electric Supplier
2012 Road Program
Apple Street & Old Farm Road Improvements
2010 Tax Map Updates
2010 Road Program
Crawford House Accessibility Improvements
Monmouth County Reclamation Center Leachate Discharge Evaluation
2010 Borough Mapping Updates
Green Grove Road Sewer Lateral Installations
Monmouth County Resurfacing of Shafto Road and Newman Springs Road
Energy Efficiency Conservation Block Grant & Direct Install Programs 2010 & 2011
Sycamore Avenue Drainage Improvements at Homestead Parkway East