



## MEMORANDUM

**To:** Mayor Gerald M. Turning, Sr.

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

**Re:** September 2017 – Engineering Report

### State Projects:

**Garden State Parkway Interchange 105 Improvements** – The Phase 1 segment of the project is complete with the new traffic patterns in operation as of late May 2015. Phase 2 of the project consists of a new GSP southbound local lane exit onto Wayside Road approximately opposite Stavbro Lane. In addition to the exit and traffic signal onto Wayside Road, the Turnpike Authority proposed significant intersection improvements at Wayside Road and Pine Brook Road. The Turnpike Authority awarded a \$20.1M contract to Earle Asphalt Company and the work is currently underway. The contractor has completed the installation of new traffic signals at the intersection of Pine Brook Road and Wayside Road, curb and sidewalk improvements, and surface course paving. A new traffic signal at the intersection of the new exit ramp and Wayside Road was activated on February 1, 2017. The substantial completion date for the entire project is June 19, 2018; however, the contractor anticipates all work to be complete before the end of this summer.

**Pine Brook Road Railroad Crossing** – Conrail has awarded a contract to Tracks Unlimited for the replacement of the railroad crossing on Pine Brook Road next to the intersection with Park Road. A pre-construction meeting was held on June 29, 2017. Replacement of the tracks has been completed. Signage and striping remain to be completed.

### County Projects:

**Intersection Improvements at Asbury Avenue & Foxchase Drive/Cannonball Drive** – The project consists of minor roadway widening at the intersection to provide dedicated left hand turn lanes and left hand turn signals on each leg of the intersection to facilitate improved movements at the intersection. The County awarded a contract to Vision Construction Group and construction is now substantially complete. The new traffic signal was activated on January 9, 2017. Minor site restoration and site stabilization remain to be completed.

**2017 Resurfacing Program** – The County has awarded a contract to Black Rock Enterprises, LLC for the resurfacing of numerous roads throughout the County. A pre-construction meeting was held on July 31, 2017. The contractor anticipates construction to begin on or around August 15, 2017. The contract completion date is December 1, 2017. The contractor will provide the Borough seven days advance notice of any construction activities within the Borough. The following roads within Tinton Falls will be resurfaced. All work will be performed at night.

- Asbury Avenue (from 800 feet east of Essex Road to Route 66)
- Wayside Road South (Shafto Road to Green Grove Road)
- Swimming River Road (Grant Court to Route 537)



### **Borough Projects:**

#### Roadway

**2016 Road Program** – A contract was awarded to Stavola Construction Co. on August 9, 2016 for the 2016 Road Improvement Program. Work consists mainly of pavement reconstruction and concrete curbs and ADA ramps where necessary. The roads included with this program are:

- Pine Street – Received \$250,000 NJDOT Municipal Aid Grant
- Hamilton Street (Pinebrook Road to Stavbro Lane)
- Surrey Lane
- Acorn Drive
- Tracy Place
- Chestnut Court
- Apple Orchard Drive
- Department of Public Works Complex

All paving and punch list work is now substantially complete. We anticipate final payment and project closeout to be completed in the near future.

#### Infrastructure

**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 coordinating our deliverable for incorporation into the Borough's GovPilot program. We are currently completing Phase II of the field data collection. We are also working with GovPilot on creating additional layers for the Borough.

**Water Street Sanitary Sewer Improvements** – The Borough does not currently have any sanitary sewer infrastructure in Water Street between Tinton Avenue and Marissa Lane. There are a number of homes in this area currently serviced by private septic systems. Toll Brothers recently installed a new 8" PVC sanitary sewer main down an emergency access road toward Water Street as part of the Regency at Trotter's Pointe development. We have prepared plans and specifications for the installation of a new 8" sewer main down a portion of Water Street to provide service for a number of homes. The Borough Council awarded a contract to Messercola Excavating at the August 8, 2017 Council meeting for this work. Construction is tentatively scheduled to begin on Monday, September 11, 2017. A full road closure will be necessary on Water Street between Thor Road and Marissa Lane. Traffic will be detoured along Rutgers Drive and Wayside Road.

**Parmly Road Outfall Repairs** – An existing stormwater outfall has collapsed and caused a large void in the slope. Our office has prepared construction plans for the replacement of this outfall and the stabilization of the slope. We received NJDEP Wetlands and Flood Hazard Area permit approvals on January 23, 2017. Construction plans and specifications are complete. A contract was awarded to Your Way Construction at the May 2, 2017 Council meeting. Construction is now substantially complete and the contractor is in the process of addressing minor punch list items.

**Tinton Avenue Pump Station Upgrades** – The Borough asked T&M to conduct a preliminary analysis and evaluation of the pump station and associated force main to determine possible causes for three force main breaks over the last four years. We completed a number of tests and measurements and believe that the failures are related to trapped air and column separation. Our preliminary report, including recommended upgrades to address the issues, was submitted to the Borough on August 10, 2016. Our office has since completed final construction plans and specifications for the recommended improvements. Bids were opened on August 22, 2017, and the low bidder is T.R. Weniger. We anticipate awarding a contract at the September 5, 2017 Council meeting.



**Heritage Boulevard Pump Station Upgrades** – Over the last few years, there have been a number of instances of the downstream manhole closest to this pump station surcharging. The pump station equipment is also reaching the end of its anticipated life expectancy. Our office has completed plans and specifications to update the pump station equipment. We will also remove the gravity manhole and sewer main and replace it with a force main out to Cannonball Drive. We have applied for a TWA Permit from NJDEP for the proposed construction. Once the permit is approved, we can proceed with advertising the project for bids and awarding a contract.

**2017 Tax Map Updates** – The Borough’s tax maps have not been updated since 2015. We are in the process of updating the tax maps to include the many new developments and subdivisions that have taken place since that time.

**TNSA** – The 2016 Customer Report was submitted to TNSA on February 3, 2017. 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.

**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.

<b>Grant Opportunity</b>	<b>Amount Requested</b>	<b>Status</b>
NJDOT – Local Aid FY 2017, Hope Road	\$679,500	Awarded: \$185,000
Monmouth County CDBG – FY 2017	\$200,000	Pending
NJDOT – Local Aid FY 2016, Pine Street	\$486,000	Awarded: \$250,000
NJDOT – Local Aid FY 2015, Green Grove Rd	\$400,000	Denied
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	Up to \$250,000	Awarded: \$250,000
NJDOT – Local Aid FY 2012, Heritage Blvd – Ph II	\$491,000	Awarded: \$225,000
New Jersey Department of Transportation – Local Aid FY 2010	\$320,401	Awarded: \$200,000

**Completed Projects:**

- 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