

BOROUGH OF ALPHA

**GENERAL CAPITAL PROJECTS AND WATER UTILITY
ENGINEERING STATUS REPORT**

July 12, 2016



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ACTION ITEMS

1. The stream section below Homa's Lane cannot be cleaned/regraded by the Warren County Mosquito Commission as their NJDEP Wetlands Permit will not cover this reach (blue line on the USGS map). They will perform the installation of check dams upstream of the Lane if the Borough provides the material. Various options with project costs were outlined and provided to the Borough for their consideration. The Borough authorized us to perform a detailed study. We have recently contacted the Warren County Mosquito Control Commission to determine if they can perform one (1) of the alternatives we developed under their existing NJDEP permit. They have researched and determined that they cannot do the work under their NJDEP permit as it applies to maintenance work only. We have completed the DRAFT report and transmitted to Council for review and discussion prior to finalizing. Council has authorized us to set a meeting with the NJDEP to discuss the detention basin option including the permit requirements. We met with the NJDEP and the Flood Hazard Area Permit requirements will not be an issue for preferred alternative of a detention basin upstream of Homa Lane but the Wetlands Permit requirements will be more difficult. The NJDEP will review and discuss with their supervisor once they are available. The NJDEP will contact us upon completion of their review. We have recently discussed the project with Lou Catuna of the NJDEP. He is the supervisor for the NJDEP initial wetlands reviewer whom we had a meeting. He is acceptable to the preferred alternative of a detention basin near the Borough Recreation Fields as long as we limit the excavation and add berms with smaller pipes to meter the storm water. He views this type of work as the installation of a driveway which is allowed in State Open Waters. He will be performing a site visit when he is in the area and contact us to meet him on site to review further. We provided a proposal for the engineering and inspection services for the project to be considered by the Borough. The Borough has authorized us to perform the engineering and inspection services and the surety work will begin in mid -July.
2. We have prepared the application for a Preliminary Assessment (PA) Grant for the Leigh Fuel Corp Property. The requested grant amount is \$3,000 and the Borough would not be responsible for any portion of it. The following is necessary for the application

- Proof of ownership interest (tax sale certificate, deed, or resolution to acquire property by voluntary conveyance)
- Resolution that public entity authorized to apply to HDSRF for the remediation of a discharge/ suspected discharge.
- Comprehensive redevelopment plan or resolution (indicating a realistic opportunity exists to develop within three years following completion of the remediation).

Both resolutions were approved by Council at the October 27, 2015 meeting. We received from the Borough's Tax Collector the tax sale certificate. The Mayor has signed the application and it has been submitted to the Funding Agency. The grant application is being reviewed now by the Funding Agency and we expect a response in July 2016. We recently inquired again on the status and it is still under review.

CAPITAL IMPROVEMENT AND GENERAL ENGINEERING PROJECTS

1. RECREATION COMPLEX CONCEPTUAL PLAN AND ESTIMATE

We have prepared a base plan of existing conditions and utilizing information from Council and the public meeting we developed two (2) concept plans for review and discussion purposes. Councilwoman Schwar met with the Recreation Association to obtain input. A Plan of Action was recently sent to Green Acres with timelines established. Enrich Hornung of David Hornung Architect Planner Inc made a presentation to Council at the June 25, 2013 Council Meeting regarding transformation of the pool into a skate park. There was also more discussion regarding opening the pool again. Additional discussion occurred at the February 25, 2014 Council meeting and opening of the pool is now being considered. Council needs to determine their plans for the pool and advise Green Acres. Council has decided to open the pool and they need to prepare a plan of action or make some type of progress with opening it as Green Acres is due to inspect the pool again in 2015.

2 FIREHOUSE GENERATOR – FEMA MITIGATION GRANT

ESTIMATED COMPLETION OF DESIGN: Complete

ESTIMATED COMPLETION OF CONSTRUCTION: October 2016

CONSTRUCTION COST: \$48,000

FEMA GRANT AMOUNT: \$52,000

CONTRACTOR: Sampson Concrete

A letter of intent for the installation of an emergency generator was submitted to request a FEMA Mitigation Grant. The letter was submitted electronically on January 31, 2013. FEMA recently informed us they will provide a 50,000 grant with a 10 % match from the Borough. The Borough has accepted the grant with the understanding that if there are any additional funds, it would be provided to the Borough as part of the grant. We attended a seminar regarding the Grant on February 12, 2014. We need to complete the Grant Agreement on line now that we are a registered user. We have verified that there are no State Contracts for purchase and install; just purchase. Thus we will need to publically bid the work and have provided the Borough a proposal to prepare plans and publically advertise the project for construction bids. We continue to push for additional grant dollars. We completed additional documents consisting of photographs, site plan and a questionnaire and it was submitted to NJOEM as requested. Further information was recently requested and was provided. We have requested the Fire Companies annual budget which NJOEM also desires. The NJOEM has now requested further information on the Firehouse person capacity and square footage and we provided it to them on April 10, 2015. The Grant has been received in the amount of \$111,739.00. Council has authorized us to perform the engineering services for the project. We attended a kick-off meeting with NJOEM and before any work can be done the agreement needs to be signed in duplicate and send to NJOEM. Recent correspondence has indicated that the funding amount announced was a mistake. A revised agreement has been provided for NJOEM and the agreement has been executed by the Borough. We are preparing construction documents for public bidding. We met with Fireman personal to review the construction documents and some revisions were necessary which we completed. Final

construction documents are complete and Council authorized advertisement at the March 8, 2016 Council Meeting. Bids were received on April 7, 2016 and the project was awarded to Sampson Concrete at the May 24, 2016 Borough Council Meeting and contracts were prepared and transmitted to the contractor. We will need to coordinate a conference call with NJOEM (Laura Connelly) and Charles Daniel, Borough CFO regarding the funding reimbursement. Contracts have been received for the contractor and sent to the Borough for execution. We have tentatively set a preconstruction meeting for July 21, 2016

3. SCHLEY AVENUE SIDEWALK IMPROVEMENTS - NJDOT SAFE ROUTES TO SCHOOL PHASE II (West Vulcanite Avenue to North Boulevard)

ESTIMATED COMPLETION OF DESIGN: Complete

ESTIMATED COMPLETION OF CONSTRUCTION: October 2016

ESTIMATED CONSTRUCTION COST: \$185,000

NJDOT GRANT AMOUNT: \$200,000.00

CONTRACTOR: To Be Determined

We were authorized by the Borough to proceed with the Engineering. The sidewalk lays out better on the west side as there are far less obstructions. We performed a field review with Councilman Seiss and the one (1) of the two obstructions on the west side (large tree) has been removed by the homeowner. The second obstruction (landscape and a tree) is being discussed between Councilman Seiss and the property owner. It was very evident that the sidewalk should be installed on the west side and that is the direction we are proceeding. We completed the procedures manual and transmitted to the NJDOT as per the grant requirements. The NJDOT provided comments on the Manual and it has been revised. The final copy will be sent to the NJDOT by the Borough certifying Borough compliance. The Draft CED and Preliminary Plans were sent to the NJDOT and they have approved us to advance both documents. A Public Hearing at the April 28, 2015 Council Meeting was held to finalize the CED. The CED and preliminary plans were sent to the NJDOT on May 19, 2015. We received comments from the NJDOT requesting photographs, revisions to the project narrative and additional information regarding the historic section 106 approval process. Items were sent to the NJDOT on July 2, 2015. The NJDOT has requested a resolution of support as part of the CED review and approval and it was approved by council t the October 27, 2015 council meeting and sent to the NJDOT. The review of the CED by the NJDOT Environmental Bureau is being pushed by the NJDOT Local Aid Bureau. The CED has been approved by the NJDOT Environmental Bureau and the NJDOT needs to interview the Borough's LPA prior to submission of final construction documents for NJDOT/FHWA review and approval. An organizational chart was sent to the NJDOT for formal approval of our procedures manual and we conducted the interview with the NJDOT on January 28, 2015 at which time we also provided the final documents to the NJDOT for review and federal authorization to advertise. The documents have been reviewed by the NJDOT and they provided us with comments. Plans and specifications have been revised based on NJDOT comments and we resubmitted. The Soil Erosion & Sediment Control has been received and sent to the NJDOT. The Borough provided the NJDOT with the negotiated construction inspection services authorization and the project documents are with the Federal Highway for review and federal authorization for advertisement.

4. FY 2015 NJDOT MUNICIPAL AID – RECONSTRUCTION OF 7th AVENUE – PHASE II (Cement Alley to New Brunswick Avenue (State Route 122))

ESTIMATED COMPLETION OF DESIGN: Complete
ESTIMATED COMPLETION OF CONSTRUCTION: July 2016
CONSTRUCTION COST: \$247,749.25
NJDOT GRANT AMOUNT: \$250,000.00
CONTRACTOR: Renda Roads, Inc.

Council authorized the engineering at their April 28, 2015 meeting. Survey and base plans are completed. We performed a walk through with the Borough on July 10, 2015 and revised the construction documents. The construction documents are complete and were submitted to the NJDOT for approval to advertise the project for construction bids. We received NJDOT approval of the plans and specifications. A public hearing was held on January 11, 2016 at the Council Meeting and a resolution for advertisement was passed by council at the meeting as well. Bids for the project were received on February 3, 2016 and Renda Roads is the low bid for base bid no. 1 in the amount of \$243,999.25 and base bid no. 2 in the amount of \$247,749.25. Base bid no. 2 includes the installation of concrete curb and associated restoration along Industrial Drive. We have called references for Renda Roads and all were positive. Council awarded the construction contract to Renda Roads for Based Bid No. 2 at the February 22, 2016 meeting. Contracts have been sent to the Borough for execution. A preconstruction meeting was held on March 22, 2016. The work is complete. A punchlist has been prepared and the contractor is proceeding to complete the work outlined in it.

5. BENKE FIELD BLEACHER AND ROOF REPAIR

ESTIMATED COMPLETION OF DESIGN: Complete
ESTIMATED COMPLETION OF CONSTRUCTION: To Be Determined
ESTIMATED CONSTRUCTION COST: To Be Determined
CONTRACTOR: To Be Determined

We performed a detailed site investigation and obtained necessary measurements. Due to making necessary modifications and actually designing them, the construction cost has increased from our original estimate from August of 2014 when we originally performed a structural inspection of it. The construction documents are complete and were presented to Council at the October 27, 2015 Council Meeting. We are waiting for authorization from Council to publicly advertise for construction bids. Council has contracted to remove the roof in its entirety including timber framing and the work is completed. We met with some council members at the field on February 8, 2016 to review the scope of work and discuss possible additional repairs. Additional costs were provided for a new metal roof including framing as well as replacement of the sidewalk within the bleacher area and a chain link fence along the rear of the bleachers to replace the existing snow fence. We prepared a report with estimates outlining roof options. Council has selected Option 2 b – Metal Roof Deck with Steel Framing which is \$26,760 and is the middle cost/quality option (22K and 48K other two option costs). We are revising the construction documents to add the roof as well as the sidewalk within the bleachers and the chain link fence. The Borough also wants to replace the dugout roofs to match the new bleacher roof.

6. 1ST AVENUE IMPROVEMENTS – ALPHA STREET TO HIGH STREET

ESTIMATED COMPLETION OF DESIGN: July 2016

ESTIMATED COMPLETION OF CONSTRUCTION: To Be Determined

ESTIMATED CONSTRUCTION COST: \$225,000

CONTRACTOR: To Be Determined

Field survey and base plans are complete. We will need to obtain Warren County approval for connection into their storm sewer system. Construction documents have been prepared and authorized for advertisement by Council at the June 28, 2016 meeting. A field review was performed with the Borough. The project will be advertised July 22, 2016 so it can be awarded at the August 9, 2016 Council Meeting. We will also need to obtain Warren County approval for connection into their storm sewer system.

7. OLIVE STREET IMPROVEMENTS – 7TH AVENUE TO 5TH AVENUE

ESTIMATED COMPLETION OF DESIGN: July 2016

ESTIMATED COMPLETION OF CONSTRUCTION: To Be Determined

ESTIMATED CONSTRUCTION COST: 220,000

CONTRACTOR: To Be Determined

Field survey and base plans are complete. No private easement will be necessary for the new storm sewer system. We will need to obtain Railroad approval for conveying storm water to their property. Construction documents have been prepared and authorized for advertisement by Council at the June 28, 2016 meeting. A field review was performed with the Borough. The project will be advertised July 22, 2016 so it can be awarded at the August 9, 2016 Council Meeting.

8. RECONSTRUCTION OF 6TH AVENUE – ALPHA STREET TO OLIVE STREET

ESTIMATED COMPLETION OF DESIGN: July 2016

ESTIMATED COMPLETION OF CONSTRUCTION: To Be Determined

ESTIMATED CONSTRUCTION COST: 135,000

CONTRACTOR: To Be Determined

Field survey and base plans are complete. Construction plan has been completed. We will be including the project with Olive Street and 1st Avenue Projects. Construction documents have been prepared and authorized for advertisement by Council at the June 28, 2016 meeting. A field review was performed with the Borough. The project will be advertised July 22, 2016 so it can be awarded at the August 9, 2016 Council Meeting.

WATER PROJECTS

1. 2016 UTILITY IMPROVEMENTS

ESTIMATED COMPLETION OF DESIGN: August 2016

ESTIMATED COMPLETION OF CONSTRUCTION: 120 Days upon issuing Notice to Proceed

ESTIMATED CONSTRUCTION COST: \$700,000 to be finalized upon completion of design

CONTRACTOR: To Be Determined

The project has been surveyed and base plans are being generated so that the project can be designed. Upon completion of the preliminary plans and specifications, we will meet with the Director of Public Works to review the plans prior to authorization to advertise.

2. FRACE WTP BACKWASH NEUTRILIZATION TANK

ESTIMATED COMPLETION OF DESIGN: September 2016

ESTIMATED COMPLETION OF CONSTRUCTION: 120 Days upon

ESTIMATED CONSTRUCTION COST: \$60,000 to be finalized upon completion of design

CONTRACTOR: To Be Determined

The project is currently being designed. We will meet with the Director of Public Works to review the plans prior to authorization to advertise.

3. TREATMENT PLANT – REDUNDANCY DESIGN

ESTIMATED COMPLETION OF DESIGN: Complete

ESTIMATED COMPLETION OF CONSTRUCTION: 90 Days upon issuing Notice to Proceed (NTP)

ESTIMATED CONSTRUCTION COST: \$190,000.00 (negotiated price)

CONTRACTOR: Pact Two Construction

The piping material for connection of Pursel to Frace WTP has been delivered. The contractor is scheduled to begin the piping work when the degassifier packing material is delivered. The contractor will be providing an alternate high service pump with a corrosion resistant impeller/housing so that the caustic injection point can be modified.

4. SYSTEM CONTROL UPGRADES

ESTIMATED COMPLETION OF DESIGN: Complete

ESTIMATED COMPLETION OF CONSTRUCTION: 90 Days upon issuing NTP

ESTIMATED CONSTRUCTION COST: \$70,000.00

CONTRACTOR: Pact Two Construction / Municipal Maintenance

This work is being completed during the piping and valve project. A portion is also included in the Redundancy project.

5. **PIPING & VALVE UPGRADES – FRACE STREET TREATMENT PLANT**
ESTIMATED COMPLETION OF DESIGN: Complete
ESTIMATED COMPLETION OF CONSTRUCTION: March / April 2016
ESTIMATED CONSTRUCTION COST: \$325,000.00
CONTRACTOR: Pact Two Construction / Municipal Maintenance

The plant is offline until the degassifier packing material is replaced and the caustic injection point is modified. The modification of the injection point will require chemical resistant high service pumps. The contractor will be forwarding a revised shop drawing for the high service pump which meets this requirement.

6. **DISINFECTION MODIFICATIONS – FRACE STREET**
ESTIMATED COMPLETION OF DESIGN: May 2016
ESTIMATED COMPLETION OF CONSTRUCTION: TBD
ESTIMATED CONSTRUCTION COST: \$90,000.00
CONTRACTOR: TBD

We are currently working on the disinfection modifications for Frace Street WTP. It is proposed to utilize an Accutab system which makes chlorine, as needed, from calcium hypochlorite “pucks”. This system will replace the existing chlorine gas system.

We are working with the operator to obtain current analytical data from the raw and treated water streams. This information will assist us in selecting the appropriate chlorination “puck”. After sizing and selecting of the disinfection equipment, we are required to submit this information to the NJDEP to obtain a permit. This permit is required for any changes in disinfection.

Part of the application will include address “chlorine contact time” as part of the new disinfection method. To accomplish this, an oversized pipe will be designed to be installed in the WTP driveway.

7. **DEGASSIFIER MODIFICATIONS – FRACE STREET WTP**
ESTIMATED COMPLETION OF DESIGN: July 2016
ESTIMATED COMPLETION OF CONSTRUCTION: TBD
ESTIMATED CONSTRUCTION COST: TBD
CONTRACTOR: TBD

The Borough purchased the replacement packing material. PACT Two will be provided costs to remove the existing packing material and install the new material. This work will be completed as a change order to their existing Piping & Valve Contract.

8. **ACID STORAGE TANK – FRACE STREET WTP**
ESTIMATED COMPLETION OF DESIGN: April 2016
ESTIMATED COMPLETION OF CONSTRUCTION: TBD
ESTIMATED CONSTRUCTION COST: TBD
CONTRACTOR: TBD

We have been requested to identify a new storage tank for the sulfuric acid used in the backwash process for the water softener process. The existing tank is original in nature and is oriented which makes working around the tank and associated chemical feed pumps problematic.

We have identified a vertical, double wall storage tank that may fit in the same location as the existing tank. However, the new tank does not resolve the space limitations. Accordingly, we are researching alternative tanks sizes and manufacturers for a tank to better suit the space limitations.