

Beaver Creek Mini-Basin BC-7/8 –
Total Sewer Replacement and Stormwater
Improvements Project – Acquisitions of
Stormwater Easements and Private Sewer
Replacement Agreements for Construction

***Public Meeting via YouTube:
July 2020***



William Weaver

Lower Paxton Township Sewer Department Director

Project Team

- *Property Owners*
- Board of Supervisors/Sewer Authority Board
- Bradley Gotshall, Township Manager
- Shellie Smith, Administrative Assistant to Township Manager, Notary
- Sewer Department Staff
 - Bill Weaver, Director
 - Tim Nolt, P.E., Sewer Department Engineer
 - Jim Wetzel, Operations Supervisor
 - Eric Morgan, Replacement Project Coordinator
 - John Deibler, I/I Coordinator
 - Christine Mayer, Sewer Administration Staff
 - Hanna Brown, GIS Technician



Project Team (contd.)

- Consulting Sanitary Sewer Authority Engineer - GHD
 - Kevin Shannon, P.E., Project Manager
 - Barry Wampler/Mitch Collins, Design Engineers
 - Melissa Smith, P.E., Project Engineer
- Consulting Stormwater Engineer - HRG
 - Jason Hinz, P.E., Project Manager/Stormwater Program
 - Jack Hildebrand, Easement Acquisitions



History – Sanitary Sewer System Recognized Infiltration/Inflow (I/I) Problems

- Overflowing Manholes
- Sewer Basement Backups
- Exceeding Interceptor Capacity Limits within Inter-Municipal Agreements-Harrisburg/ Susquehanna/ Swatara
- PADEP, Act 537, Chapter 94, and Clean Stream Violations



Second Amendment to the Consent Decree Requirements - Beaver Creek Basin

- Replace/Rehabilitate asbestos cement and clay sanitary sewers that have reached their useful life including private sewers.
- Test and replace or repair PVC sewers that fail an air test and are contributing unacceptable amounts of flow, including private sewers.
- Eliminate Overflows and Basement Back-ups by 2028.
- Reduce Sewer System Hydraulic Overload by 2033 (Reducing the flow in the sanitary sewer system so that it will properly function without the threat of sewer backups and overflows).



Second Amendment to the Consent Decree Requirements - Beaver Creek Basin (contd.)

- Storage tanks may be required for eliminating sanitary sewer overflows and hydraulic overload. Storage tanks would be located at the Conway Road Site.



History - Stormwater System

- Township receives new Municipal Separate Stormwater System (MS4) Permit from the PADEP.
- New MS4 Permit requires significant expenditures to comply with the new Chesapeake Bay Pollution Reduction requirements and new requirements to reduce sediment to the Paxton Creek Watershed.
- Township hires a financial consulting firm, Raftelis, to evaluate a stormwater fee to fund the required improvements.
- November 2018, Township transfers stormwater system to the Lower Paxton Township Authority.



History - Stormwater System (contd.)

- December 2018, the Lower Paxton Township Authority (LPTA) adopts a stormwater fund budget and rates, including a capital budget for stormwater improvements.
- Township enters into an agreement with CRW and Susquehanna Township to complete MS4 Joint Pollution Reduction Plan (PRP) for the Bay and Paxton Creek to comply with MS4 permits.
- February 2019, the LPTA establishes a stormwater fee at \$32/quarter per ERU.
- July 2019, the storm water fee of \$32/quarter is billed with the quarterly sanitary sewer billing.
- Township partners with PENNDOT, CRW and Susquehanna to complete MS4 permit PRP projects.

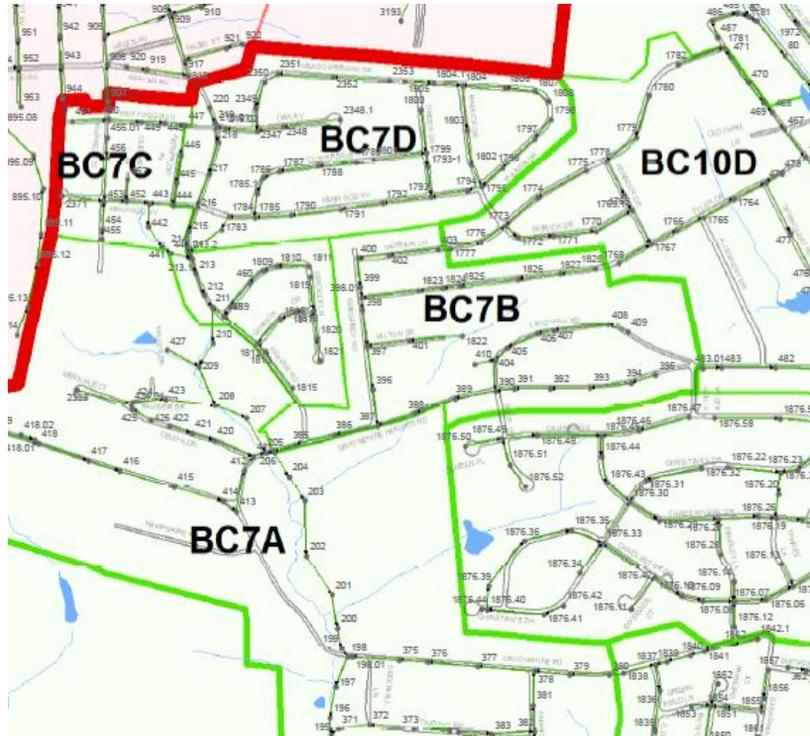


BC-7/8 Total Sewer/Storm Sewer Replacement Project Summary

- The project will consist of replacing 6.6 miles of the existing neighborhood sanitary sewer system, including 205 manholes, 596 private building sewers on private property and portions of the 3.8 miles of stormwater conveyance system including 255 associated drainage structures.
- Other misc. work includes right-of-way clearing, bypass pumping, ADA ramp construction, and restoration of paving, curbs, sidewalk and yards/right-of-way.
- This project is estimated to cost \$19 Million Dollars.



BC-7A/7B/7C/7D Project Area



Project Location: The Devonshire and Southern Paxtonia areas, covering the development areas of Meadowbrook, Beaver Brook Manor, Devonshire Heights, Paxton Acres, Lamplight Village, South Devonshire Estates, and Winsor Manor.



BC-8C/8D Project Area



Acquisition of Stormwater Easements

- The PADEP design criteria for sanitary sewer and storm sewer replacement projects requires Engineers to minimize impacts to streams and wetlands. The Authority recently acquired new sanitary sewer easements from 35 property owners to relocate the sewers and to minimize the impacts to wetlands and streams, as required by DEP. Some of these easements were combined storm and sanitary sewer easements.
- The Stormwater Design is now complete and includes an additional 33 properties that have stormwater conveyance facilities on the property needed replacement but no sanitary sewer facilities.



Acquisition of Stormwater Easements (contd.)

- Upon request, Township Staff and the Engineer will meet with the affected property owners to discuss the permanent and/or temporary easement agreement and to address any concerns or impacts that the easement and relocation, as applicable, may have on the property owner.
- Following construction, all easement areas will be restored to existing condition at no expense to the property owner. Obstructions over the proposed sewer will be addressed on a case by case basis. Examples include sheds, fences, and trees. In most cases, sheds can be relocated, fences temporarily removed and replaced, and trees replaced in a different location adjacent to the easement area.



Drainage Easement (example first page)

**DRAINAGE EASEMENT
AND TEMPORARY CONSTRUCTION EASEMENT
TAX PARCEL # _____**

THIS INDENTURE, made the _____ day of _____, in the year two thousand twenty (2020)

BETWEEN

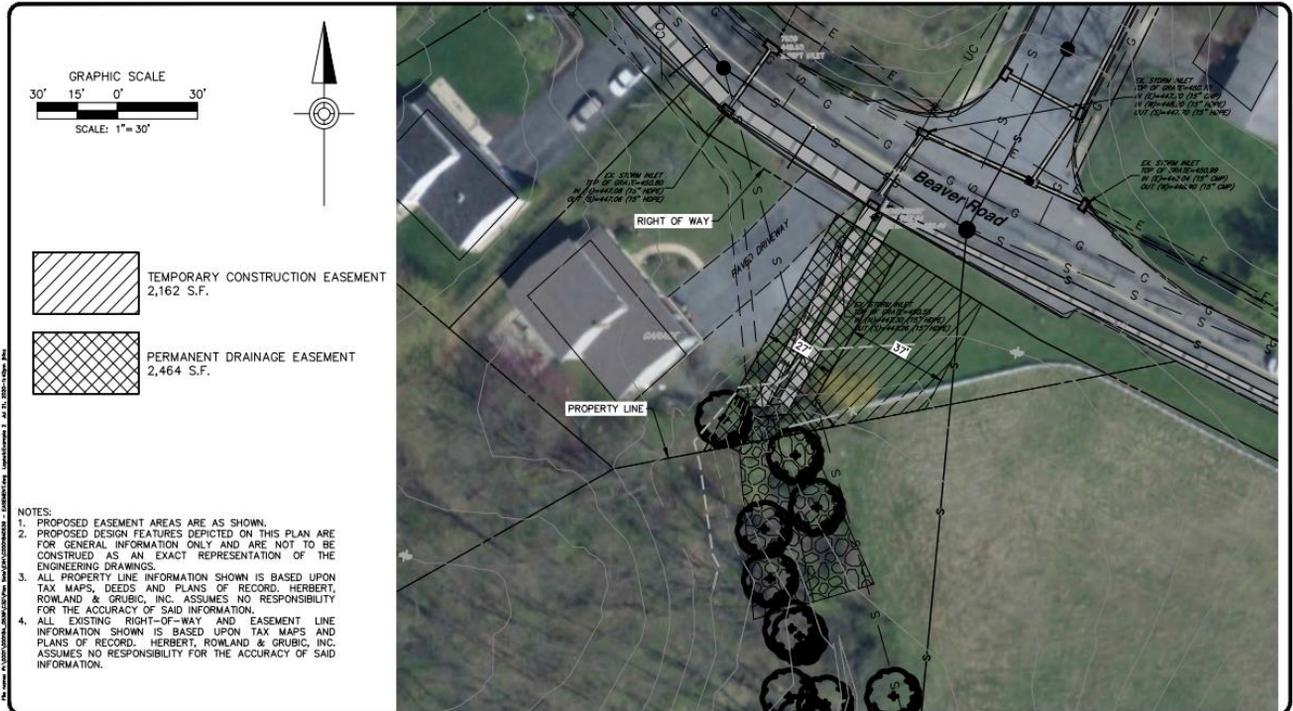
AND

LOWER PAXTON TOWNSHIP AUTHORITY, Dauphin County, Pennsylvania
Grantee

WITNESSETH That the said Grantors, for and in consideration of the sum of ONE DOLLAR (\$1.00), have granted, bargained, released and confirmed and by those presents do grant, bargain, release and confirm unto the said Grantee, its successors and assigns that certain permanent easement and temporary construction easement to the Lower Paxton Township Authority, County of Dauphin, Pennsylvania, as more particularly described on the attached plat marked as Exhibit "A".



Example Easement – Permanent Drainage and Temporary Construction Easements



HRG
Herbert, Rowland & Grubic, Inc.
Engineering & Related Services
www.hrginc.com

200 East Park Drive
Harrisburg, PA 17111
717-658-2281
Fax: 717-658-4108
hr@hrginc.com
www.hrginc.com

LOWER PAXTON TOWNSHIP AUTHORITY
425 PRINCE STREET
HARRISBURG, PA 17109
(717) 657-5817

EXHIBIT A
PROPERTY OWNER
PARCEL ID
INSTRUMENT NO.

PROJ. NO. - J91
DESIGN- JKS
CADD- JKS
CHECKED-J91
SCALE- AS SHOWN
DATE- 04/17/2023

DRAWING NO.
1
SHEET NO.
1 OF 1
PROJECT 184-0539

Existing Drainage Facilities to be Replaced

Many of the drainage facilities (pipes, inlets, manholes, endwalls, etc.) in the project area have reached and surpassed the end of their functional lifespans. Materials such as corrugated metal pipe and cast-in-place concrete or brick structures have failed in various locations.



The project will replace the failing infrastructure with new modern materials such as smooth lined corrugated polyethylene pipe and PennDOT standard pre-cast concrete drainage structures.



Private Sewer Replacement Agreement (example first page)

THIS AGREEMENT, entered into this ____ day of _____, 2020 by and between LOWER PAXTON TOWNSHIP, (hereinafter “LPT”) a Township of the Second Class organized and existing under the Second Class Township Code, with offices located at 425 Prince Street, Harrisburg, Dauphin County, Pennsylvania, and **PROPERTY OWNER** (hereinafter “Property Owner”) who owns property at _____, Harrisburg, Dauphin County, Pennsylvania.

WHEREAS, LPT has established Resolution 2011-11 which sets forth terms, conditions and procedures by which the LPT shall assist customers in the correction of groundwater entering the sanitary sewer system due to deficient conditions in private building sewers and laterals (“private sewer”), known as the Private Sewer Replacement Program; and

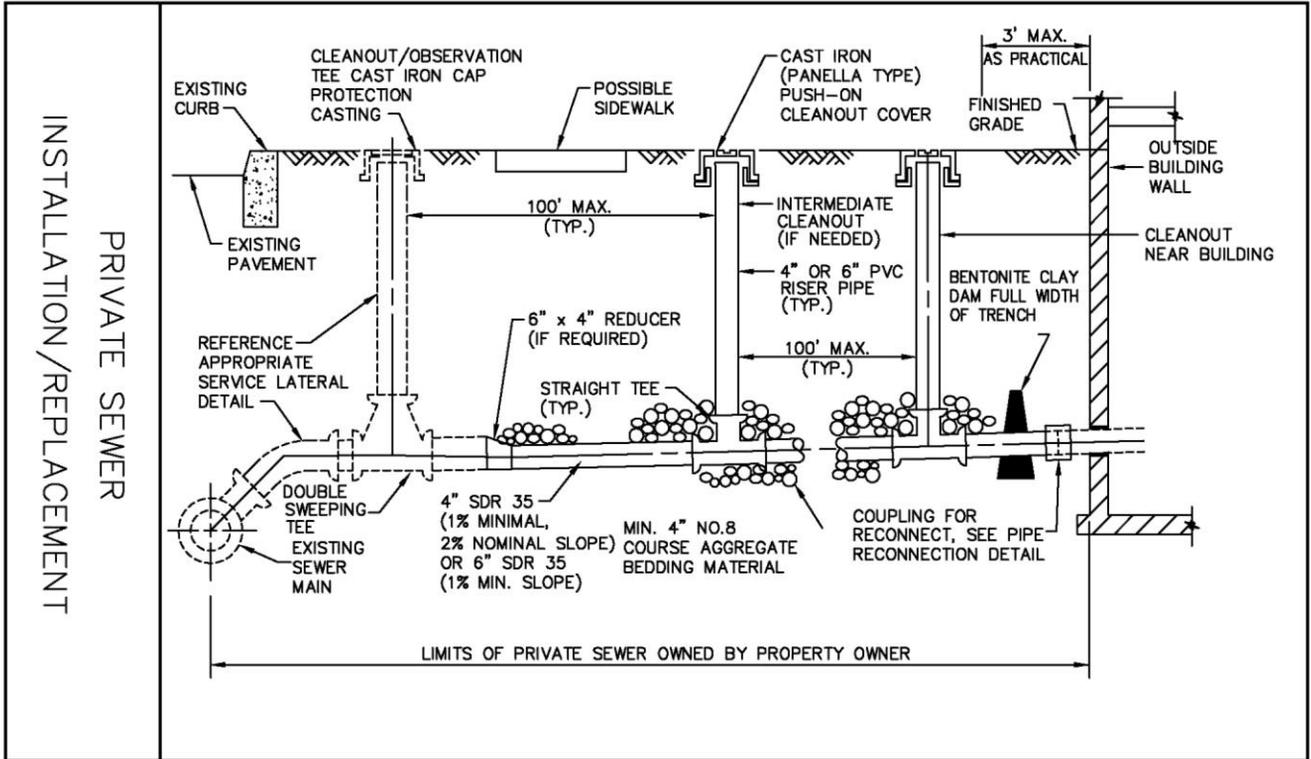
WHEREAS, Resolution 2011-11 provides that the Private Sewer Replacement Program shall be at no cost to Property Owners and further provides that Property Owners must provide access to their property for the purpose of replacement and shall also hold LPT harmless in regard to activities undertaken in or replacement of their private sewer; and

WHEREAS, the parties desire to cooperate in the replacement of Property Owner’s private sewer.

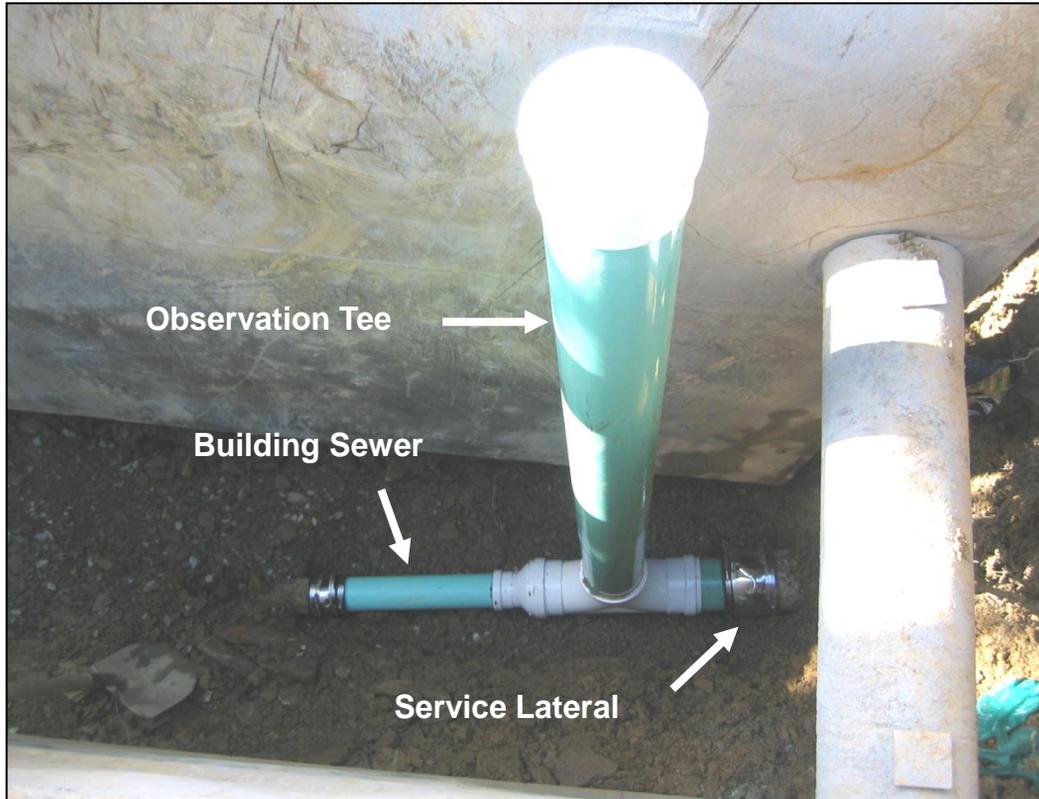
NOW, THEREFORE, in consideration of the mutual promises of the parties hereto, it is agreed as follows:



Service Laterals & Building Sewers



Observation Tee Installed at Service Lateral & Building Sewer Connection



Service Laterals & Building Sewers

Typical building
sewer replacement
(during construction)



Yards Before and After Service Lateral & Building Sewer Replacement



Typical building
sewer replacement
(prior to restoration)



Typical
Sidewalk and
Lawn
Restoration



Watering Lawns is Essential!

Home owner
must water
lawn once
seeded



Un-watered
Lawn





Day 20

Watering 2-3 times a day for 15-25 minutes promotes germination over the restored area. Greater germination helps the new lawn choke out weeds.

Overall Project Process

- Identify wetland and stream impacts and sewers that need to be relocated for DEP permit application.
- Prepare/Send to property owners the required easement agreements and Private Sewer Replacement Agreements.
- Conduct public neighborhood meeting/you tube –video with property owners.
- Receive sanitary and storm sewer easement agreements.
- Submit DEP Permit Applications.
- Receive private sewer replacement agreements.



Overall Project Process

- Schedule/perform house inspections.
- Receive DEP permits.
- Bid/Award Project to contractor.
- Contractor to replace sanitary and storm sewers facilities – public and private.
- Restore areas affected by construction.
- Perform final restoration.
- Monitor for long-term success.



Schedule Milestones

Easement property owner meetings	July-August 2020
Receive stormwater easement agreements	July-August 2020
Submit DEP permit	September 2020
Receive Private Sewer Agreements	October 2020
Perform house inspections	Oct. 2020– Dec. 2021
Complete design/receive permits	September 2021
Bid/award project	November 2021
Sewer/Stormwater construction	Jan 2022-Dec. 2023



Property Owner Responsibility

- Schedule a meeting with Township Staff to discuss the new stormwater easement and/or Private Sewer Replacement Agreement.
- Sign and return stormwater easement agreement, if applicable and sign and return private sewer replacement agreement. (note: after 30 days staff must send a list of all un-signed easement agreements to the Authority Attorney. All un-signed easement agreements must then be acquired by eminent domain to comply with the DEP Consent Decree.) Schedule house inspection for the private sewer replacement.
- Notify Township Staff of any underground utilities installed by property owner including gas/water/ electric for swimming pools, dog fences, water lines for sprinkler systems and electric for landscape lighting. Water Lawn following seeding.



Benefits to Community/Future Rates

- 50 year old public sewer system and stormwater system replaced/rehabilitated, including private sewers.
- Community asset maintained/preserved. Public Roads paved following construction.
- Environment protected – for Sanitary sewer- elimination of overflows and basement backups. For Stormwater – comply with PADEP MS4 Permit
- Sanitary Sewer rates are currently scheduled to remain at \$153/quarter in 2021. Nominal increases at 3% will occur in future years to fund the remaining Consent Order projects.
- Stormwater fees are scheduled to be reevaluated in 2020 with the draft Credits program scheduled to begin in 2021. Please visit the Township web page at www.lowerpaxton-pa.gov for updates on the credit policy and the credits available to Residential and Commercial property owners.



Please visit the Township's Sewer & Stormwater Projects website to stay updated on the project and to sign up to receive project updates via email or mobile app.

www.lowerpaxtonatwork.com



To schedule a stormwater easement meeting please call Jack Hildebrand at 717-564-1121 (office) or 717-418-5874 (mobile) or by email at jhildebrand@hrg-inc.com.

For a Private Sewer Agreement meeting call 717-657-5617 and ask for Tim Nolt or Bill Weaver. You may also send questions to mynewsewer@lowerpaxton-pa.gov

For owners with both agreements the Township staff can coordinate a combined meeting with HRG.

