

**CHELTENHAM TOWNSHIP SUMMARY OF SANITARY SEWER PROJECTS AND WORK COMPLETED  
THIRD QUARTER 2015**

**Act 537 Plan**

1. Arro and BCM collaborated with Cheltenham Township and the municipal engineers from Abington and Jenkintown on final plan revisions, clarifications, etc., in particular regarding draft Agreement flow limits for each municipality and related cost-sharing responsibilities.
2. Comments generated by participating municipalities were incorporated into the Agreements.
3. The completed plan was approved by all municipalities and submitted to PaDEP 10/2014.
4. Meetings were held with PaDEP to review the plan 12/2014. PaDEP has requested that the plan be withdrawn and revised to emphasize long range I/I reduction and remove equalization tank planning.
5. Monthly meetings are being held with PaDEP to review the progress of plan revisions and study for I/I reduction.

**Interceptor A Replacement – Phases 2A, 2B and 3**

1. BCM is continuing with the replacement design of the interceptor along Tookany Creek, from York Road to Central Avenue. This includes development of base topography plans from previously completed aerial surveying, manhole and utility surveying, system layout and connections, basic pipe design and material selection, PADEP and other Agencies permitting, bidding and technical specifications, site inspections, etc.
2. An additional crossing was added to the project to remove a portion an existing connector that has been a source of SSOs and constant maintenance work. The crossing is located behind Ogontz Park.
3. An additional crossing and design modification behind the Public Works facility has been added to the project. This will allow the removal of the Public Works pumping station also a source of maintenance work and operational costs.
4. Wetlands investigations and clearance reports for all utility line stream crossings were prepared and provided to Cardno BCM by Munro Ecological Services in August 2014.
5. The design is being coordination with the replacement of the Tookany Creek Parkway Bridge replacement project and Tookany Creek Trail Master Plan.
6. The project was submitted for permits (NPDES, Stream Crossings, Water Quality, Highway Occupancy) 10/2014.
  - a. NPDES (MCCD) permit received 8/2015.
  - b. Stream Crossings (PaDEP) review received 5/2015 Revisions in progress.
  - c. Stream Crossings (ACoE) review received 5/2015; Revisions in progress.
  - d. Water Quality (PaDEP) permits received 1/2015.
  - e. Highway Occupancy (PennDOT) permits received 11/2014 and extension received 10/2015.
7. PaDEP has stated a desire to expedite the permitting prior to Act 537 Plan approval with the expectation that the project will be alleviating a large source of Inflow and Infiltration into the sewer system.
8. Construction Bids were received 5/2015 from 5 contractors and rejected due to unexpected high costs.
9. Meetings have been held with Township Officials to discuss and finalize design revisions for reducing construction costs and meeting additional permit requirements.
10. Cardno BCM is incorporating agreed design revisions for possible cost savings.
11. Cardno BCM and Munro Ecological Services are completing additional services for resubmission of permit applications.
12. The Township Engineer is preparing plans for placement of fill material within the Township for additional costs savings.

**Additional Items**

1. The agreement with PWD raise the flow limit from 18 cfs to 29 cfs has been approved by all municipalities and PWD 9/2014. Option 3 is being evaluated to determine if the flow limit can be reduced back down to 18 cfs.
2. In late-August, six (6) flow meters were installed through the Township to collect flow data for a period of 52 weeks. The information obtained will be analyzed to determine the effectiveness of prior repairs and locate other areas where I/I repairs are needed. 4 additional flow meters were installed in March 2015 for a total of 10 meters. 3 more meters are being considered for the Abington connections.
3. In light of the submitted documentation showing a reduction of flows as a result of the work completed in the watershed, PaDEP released 584 EDUs on June 16 for the revised Connection Management Plan submitted 5/29.

## Cheltenham Township: Correction Action Plan (CAP) Quarterly Status

(revised 10/2/2015)

Corrective Action Plan Task	Status	Comments
Interceptor "A" Bypass Pumping	ONGOING	Currently in operation. Anticipated to no longer be needed after Interceptor A Replacement Phases 2A, 2B, and 3 are completed (target date: early 2017).
Act 537 Plan	ONGOING	Monthly meetings are being held with PaDEP to review the progress of plan revisions and study for I/I reduction based on more recent data for improvement recommendations
PWD Intermunicipal Agreement	ONGOING	Update agreement with PWD to raise flow limit from Township from 18 cfs to 29 cfs. Approved by Cheltenham, Abington, Jenkintown and PWD 9/2014. Agreement required to be in place prior to Act 537 plan approval.
Connection Management Plan (CMP)	ONGOING	In light of the submitted documentation showing a reduction of flows as a result of the work completed in the watershed, PaDEP released 584 EDUs on June 16 for the revised Connection Management Plan submitted 5/29.
Phase 1A and 1B Sanitary Sewer Lining	COMPLETED	Construction was completed in 9/2013. Flow metering project started to quantify the lining improvements. Closeout administration work in progress.
Phase 2: Lining of Sanitary Sewers and Laterals	COMPLETED	Construction is complete. Closeout administration work completed. Final change order and payment approved
Phase 2A, 2B, & 3: Interceptor "A" Replacement, Manhole A-94 to A-31	ONGOING	ACoE/PaDEP Stream Crossings Permit review revisions in progress. MCCC NPDES, PennDOT and PaDEP WQMII permits obtained. Construction Bids were received 5/2015 from 5 contractors and rejected due to unexpected high costs. Plan revisions are in progress for costs reduction and additional permit requirements.
Phase 4: Interceptor "A" Replacement, Manhole A-31 to A-1	NOT STARTED	Section A-36 to A-31 removed and added to Phase 2A
Phase 5A, 5B: Replacement of Sewer from Phase 1A/1B lining	IF NECESSARY	
Hydrogeologic/Groundwater monitoring study	COMPLETED	Installation of groundwater (GW) monitoring wells by Del Val. High GW areas would have lateral rehab priority. Item #6b in 2012 CAP
JC Melrose Interceptor D Pipe Bridge & Sanitary Sewer Replacement	COMPLETED	Completed in 2012
Roof Drain Inspection and Disconnections	NOT STARTED	Item #7 in 2012 CAP. Awaiting implementation.
Manhole Inspection Program	COMPLETED	
Manhole Rehabilitation	NOT STARTED	Review field inspection results to determine manholes to be replaced. Contract documents to be developed.
Development of FOG ordinance	COMPLETED	The ordinance for management of fats, oils and grease in the sanitary sewer system was adopted late 2013. Implementation and compliance issues being reviewed by Township and Township Engineer
Sump Pump Inspections	ONGOING	

SANITARY SEWER STATUS UPDATE  
October 7, 2015

Philadelphia Water Department (PWD) Timeline per agreement dated March 19, 2014 – see attached flow chart

Options evaluated:

1. Interceptor – Evaluation of a sanitary sewer interceptor through Philadelphia per PWD direction to connect to a point downstream of their limiting pipe. Department of Environmental Protection (DEP) is not in favor of this option. PWD supports this option.
2. Equalization Tank – Evaluation of potential Equalization (EQ) sites and potential for EQ tank to control flows to 18 cfs per PWD direction. DEP is not in favor of this option. PWD supports this option.
3. Inflow/Infiltration (I/I) reduction and diversion – Evaluation of substantial and concentrated reduction of I/I and flow diversion to other municipalities or PWD sewer line as directed by DEP. PWD has expressed concern that flows will not be able to be reduced enough to meet the 18 cfs limit, and even if they can be, it would not be able to occur within the remaining Timeline period. Evaluation expected to be completed in November or December 2015 depending on input from agencies.

Key Dates:

PWD agreement signed – 3/19/14

Options 1 and 2 evaluated – April 2014 to October 2014

Act 537 Plan submitted to DEP – 10/8/14

Meeting with DEP to discuss Option 2 and 3 evaluation – 12/12/14

Meeting with DEP where Option 3 was requested – 12/17/14

Act 537 Plan withdrawn per DEP request – March 2015

Option 3 evaluation started – February 2015

System Model sent to PWD on September 2, 2015

Meetings:

Progress Meetings held: April 7, 2015, May 5, 2015, June 16, 2015, July 16, 2015 with DEP, Jenkintown, and Abington

Conference calls with PWD: August 5, 2015, September 1, 2015, October 8, 2015

Next Progress Meeting: October 15, 2015 (will also include PWD)

Starting with the October 15<sup>th</sup> meeting, a brief summary of the discussion will be provided.

Total expenditure 2010-2014: \$10,603,365.03

184 Reduction Evaluation

March 19, 2014 (Effective Date) + 1 year = March 19, 2015

Best Option Evaluation

March 19, 2014 (Effective Date) + 2 year = March 19, 2016

Conceptual Design Plan

March 19, 2014 (Effective Date) + 3 years = March 19, 2017

Final Design Plan 100%

March 19, 2014 (Effective Date) + 4 years = March 19, 2018

Construction Contract Awarded

March 19, 2014 (Effective Date) + 4 years 6 months = September 19, 2018

Construction Complete

March 19, 2014 (Effective Date) + 6 years 6 months = September 19, 2020

Online and In Full Final Operation

March 19, 2014 (Effective Date) + 7 years = March 19, 2021