

Cheltenham Township: Correction Action Plan (CAP) Quarterly Status

(revised 4/7/2016)

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 2018).
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	Plan revisions for cost reduction and permit review completed and resubmitted to ACoE, PaDEP, PHMC, and MCCD. PaDEP WQMII permit approved for revisions. NPDES permit obtained. Phase 1A Archeological Investigation as required by PHMC and ACoE started. Phase 1B Investigation may also be needed. Additional Bog Turtle investigation confirmed no impact. PennDOT permits extended.
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	Contract documents are currently being prepared. The manhole rehab will take place with the upcoming Regional Repair projects.
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
Lateral Ordinance	NOT STARTED	Ordinance currently being prepared for adoption by 7/2016
Sump Pump Inspections	ONGOING	

CHELTENHAM TOWNSHIP SUMMARY OF SANITARY SEWER PROJECTS AND WORK COMPLETED FIRST QUARTER 2016

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.
6. **Bi-weekly technical meetings are being held with DEP, PWD, Abington, and Jenkintown to prepare the detailed I/I reduction plan**

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. Construction Bids were received 5/2015 from 5 contractors and rejected due to unexpected high costs.
7. Meetings were held with Township Officials to incorporate design revisions for reducing construction costs and meeting additional permit requirements including placement of fill material within the Township
8. The revised project was resubmitted for permits (NPDES, Stream Crossings, Water Quality Management, Highway Occupancy) 11/2015.
 - a. **NPDES (MCCD) permit received 1/2016.**
 - b. Stream Crossings (PaDEP) review in progress.
 - c. Stream Crossings (ACoE) review in progress.
 - d. Water Quality Management (PaDEP) permit received 12/2015.
 - e. Highway Occupancy (PennDOT) permits received 11/2014 and extension received 10/2015.
9. **ACoE and the Pennsylvania Historical and Museum Commission (PHMC) are requiring historical investigation for the project. CHRS Inc. has been hired to prepare a Phase 1A Archeological Survey Investigation (Geomorphological Evaluation) to determine if a Phase 1B Archeological Survey Investigation is required and to the extent needed to satisfy ACoE and PHMC requirements.**
10. **ACoE determined the project site contains areas of possible Bog Turtle habitat. The project was submitted to US Fish and Wildlife for further review and made the final determination that the project is not likely to adversely affect any bog turtles.**

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. **6 meters were installed in 8/2014, 7 additional regional meters were installed in 2015 including for the Abington connections, plus 6 micro-monitoring meters in 2/2016 in Cheltenham Village**
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 6/16/2015 for the revised Connection Management Plan submitted 5/29/2015.

SANITARY SEWER STATUS UPDATE

April 6, 2016

PWD Timeline per agreement dated March 19, 2014 – no longer applicable as agreement timeline has been temporarily suspended for preparation of the I/I plan. The I/I Plan will be added as an option in the revised agreement.

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. DEP is not in favor of this option. PWD supports this option.
2. Equalization Tank – Evaluation of potential 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 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 Nov. or Dec. 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 and October 15, 2015 with DEP, Jenkintown, and Abington

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

Progress Meeting October 15, 2015 with DEP, PWD, and Abington (Jenkintown absent due to emergency) – discussion brought all parties up to speed on all aspects of evaluation since some had not been at all of the meetings. Discussed the concept of diversion and projected I/I reduction to meet 2021 date. PWD's staff reviewed diversion and found that diversion could not occur at the Township line since the pipes accepting flow

already had capacity issues – diverted flows could not enter the system until some distance further into the City. ARRO's I/I reduction modeling is not putting Township close to the 18cfs on its own. DEP agreed that intense I/I reduction and an EQ tank and seemed to be the only answer. They stated that the Township should do some intense I/I work prior to sizing the tank to try to keep the tank as small as possible. DEP indicated the Township would likely be under a consent decree with the tank. DEP agreed to send a letter to the Township shortly after the meeting once they had a chance to determine if this would be handled as 537 planning or as a CAP matter.

Township Planning Meeting November 12, 2015 with staff, consultants, and select Commissioner group to discuss 10-year plan for I/I Identification and Remediation.

Presentation by Township Engineer's office to Public Works Committee January 13, 2016 to outline proposed neighborhood I/I remediation work.

Meeting held with USACE, DEP and Township on January 28, 2016 to review and discuss requirements for archaeological Phase 1 study required for Chapter 105 Joint Permit for the Interceptor A replacement project.

Technical Presentation on Micro-monitoring on January 28, 2016 attended by Cheltenham, Abington, Jenkintown, and PADEP staff to review methodology and benefits of short-term localized low-flow sewer metering. This technology will allow the Township to narrow down the high I/I areas within the larger neighborhood drainage basins thereby reducing repair costs, saving time, and maximizing repair benefits.

Progress Meeting February 3, 2016 with DEP, PWD, Abington, and Jenkintown to discuss completion of the Act 537 Plan including selection of Option 3. PWD agreed to suspend the current agreement deadlines and to evaluate a new agreement with Cheltenham. Cheltenham has requested a 10-year time line for the I/I removal work, PWD would like an 8-year time line. DEP will be hosting a series of Technical Meetings with all parties to prepare the detailed I/I plan and milestones which will then be incorporated into the Act 537 Plan and the new agreement with PWD. The first meeting is set for February 10, 2016.

Technical Meetings held February 10th and 24th with DEP, Abington, and Jenkintown. In depth discussions regarding the preparation of the detailed I/I plan. First draft of the plan was submitted to DEP on February 19th. Next draft is expected to be sent on March 7th. Additional technical meetings are set for March 9th and 23rd and April 6th. PWD is expected to attend the meeting on the 9th.

During the week of February 22, ten (10) micro-monitoring (short-term, low flow) sewer meters were installed within the Cheltenham Village project area. Six (6) additional regional sewer meters were installed in the Cheltenham Village, Glenside, Wyncote, and Melrose Park East project areas. This brings the total number of regional meters to nineteen (19). It is anticipated that a number of the meters which have been in place and collecting data on Interceptor A for the past 12-18 months will be relocated in the near future.

Technical Meetings held March 9th and 23rd and April 6th with DEP, PWD, Abington, and Jenkintown. In depth discussions continued regarding the preparation of the detailed I/I plan and status of the CAP. Additional technical meetings are set for April 20th (if needed) and May 4th. A final version of the I/I Plan will be distributed for review and discussion at the May 4th meeting. It will be determined at that time if any additional technical meeting dates will be required.

Total expenditure 2000-2006: \$ 1,539,697.59

Total expenditure 2007-2016: \$16,285,637.98*

*also \$7.5M borrowed but not yet spent for Interceptor A Ph. 2A, 2B, 3 and part of 4 work