

ATTENDEES: SWMAC: Paige Maz, Regina Majercak, Paul Burgmayer, Heather Gill, Joe Schanne
CH2M: Daniel Wible, Courtney Finneran

PREPARED BY: CH2M

MEETING DATE: October 13, 2016

SUBJECT: October 2016 meeting

YouTube link:

The meeting was held in the 2nd Floor Administration Lobby and therefore was not televised.

Review of Previous Meeting Minutes

- SEPTEMBER 8, 2016 SWMAC meeting minutes – approved with one minor typographical edit

Public Comment

- Ken Taylor (Radnor resident; Willow Ave) asked if CH2M could determine whether there would be any adverse impacts downstream of the N. Wayne basin outfall (i.e. at Plant Ave, Pennsylvania Ave, Willow Ave, PECO property, etc.) if 1) the N. Wayne basin is cleaned out and restored, which is what the SWMAC is recommending to the Board of Commissioners (BOC) or if 2) the proposed N. Wayne basin (Chagrin Valley Option “E”) and pipe realignment are constructed
 - Daniel noted that this is something CH2M can determine with its model
 - Cynthia Curley (Radnor resident; Plant Ave) noted that it would be helpful for N. Wayne residents to understand why the proposed basin, which has 3x the volume capacity of the existing basin, will not eliminate flooding associated with the 25-year storm
 - The concern is that the proposed basin might help Poplar Ave, but make conditions worse at Plant Ave and Willow Ave
 - Daniel noted that the “proposed design” that CH2M modeled included both the basin (Option “E”) and the new outlet pipe, which connects into the existing storm sewer on N. Wayne Ave (i.e. does not extend all the way to the creek)
- Bill Bruno (Radnor resident; N. Wayne Ave) expressed frustration that his recent email to Daniel had gone unanswered
 - Daniel was directed by Steve to forward resident emails to him (Steve)
 - The SWMAC noted that resident concerns should not be sent directly to Daniel, but to the Township’s stormwater email account (Stormwater@radnor.org); going forward, Daniel will acknowledge any resident emails he receives and for to Steve if he was not copied on the original email
 - Bill stated that he has lived at his N. Wayne Ave residence for many years and has intimate knowledge of the flooding situation there; he wants to make sure that his concerns and ideas are acknowledged
 - Bill stated that Chagrin Valley’s engineer said that the proposed basin and pipe realignment would not increase the volume discharged downstream
 - Bill also noted that flooding at the culvert is such that it doesn’t allow the basin and its outlet pipe to efficiently drain out
- Ken asked whether stormwater funds were being considered to help fund a permeable pavement parking lot at Clem Macrone Park; this was discussed at the BOC earlier in the week

- Ken also reminded the SWMAC that AMEC had previously warned the Township to not underfund stormwater, but that is exactly what happened when the fees were reduced from \$58/billing unit to \$29/billing unit

Discussion of Draft Budget for 2017-2021

- Paul presented several slides summarizing the SWMAC's stormwater budget for 2017-2021
 - Budget objectives:
 - Maintain steady flow of capital projects (~67%)
 - Repair/maintenance spending (~20%)
 - Make significant progress on prioritized repairs
 - Maintain small \$ buffer to respond to future contingencies
 - Provide money for admin, MS4, and rebate program
 - Recommendations to the BOC:
 - Starting in 2018, generate one major stormwater repair project each year and one stormwater improvement project every two years
 - Only the stormwater-related repairs be assigned to SWMAC budget
 - All other work (roads, signs, safety) comes from another Township budget
 - SWMAC review each repair project and recommend cost allocations to BOC after the proposal is completed but before it is sent for construction bids.
 - With the current fees collection rates, by 2021, Radnor Twp will have a backlog of ~\$880K in known repairs
 - Does not include unknown needed repairs
 - Joe said it should be made clear that this assumes one repair project would be done per year, starting next year
 - SWMAC voted in favor of approving the budget; SWMAC to present budget at a BOC meeting in November

Township Wide Assessment (TWA) Update

- Daniel presented several slides demonstrating the accuracy of CH2M's flood model
 - Daniel showed the modeled flood maps for a section of Forest Road that experienced flooding on 7/25/16
 - On that date, there were actually two events, the second of which was very close to a 1-year storm (1.21 inches)
 - The modeled flood depths (6 to 12 inches) on Forest Road appear reasonable when compared to photographs taken of the flooding in the vicinity of 3, 6, and 8 Forest Road
 - Potential cause of this flooding: the stream channel is undersized and unable to convey the significant flows coming from upstream
- Daniel presented slides focusing on over 50 potential flood mitigation projects that CH2M identified as part of Task 4 of the TWA
 - Three main types of projects were identified:
 - Basin-Scale Systems: subsurface storage (aggregate/chambers), constructed wetlands, bioretention, detention basin retrofits, residential Best Management Practices (BMPs, such as rain barrels and rain gardens)
 - Green Streets: commercial and residential
 - Conveyance & Stream/Floodplain Enhancement Systems: pipe conveyance, natural channels, and natural channels with structural elements (check dams, aggregate reinforcement, etc.)
 - Field visits and desktop analysis were conducted to identify project opportunities
 - Public (Township & School District) lands in Radnor Township were preferred – such locations are fairly limited
 - Some private opportunities were identified – private lands must be part of the solution

- Identified specific projects, as well as typologies over broad areas (i.e. residential parcels and streets)
- Generally located upstream or in vicinity of known/modeled problem areas
- Assumed sizing depends on project type, varies from 1-2 inches off contributing impervious area
- Over 50 potential projects identified; scope of work included up to 28 potential projects – need to identify best opportunities
- Key initial project screening factors include: ownership, size of drainage area, storage volume, cost, constructability
- Conceptual costs were based built project cost database, manufacturer cost data, or published cost data; unit costs were generally based on either cost per managed impervious acre, cost per cubic foot of storage, cost per square foot of BMP, or cost per linear foot (pipes)
- For each priority problem area, Daniel presented the following information:
 - An opportunity parcel map showing the parcels owned by the Township, Radnor School District, SEPTA/AMTRAK, private schools, colleges/universities, religious and institutions
 - A map showing both the potential flood mitigation projects and their approximate drainage areas
 - A summary table listing the identified projects (name/location, watershed, type, owner, drainage area, and preliminary cost)
- Next steps for the TWA: refine the potential project list (screen down to 28-30 projects), refine the cost templates, model the selected potential projects, and then prioritize those projects
- Cynthia asked if residential BMPs were monitored or inspected by the Township; on a related note, Joe asked if the SWMAC could reimburse residents for the cost of maintaining their BMPs
- Joe repeated his earlier request for CH2M to adjudicate all previously documented flood locations in the Township that are not located within one of the priority problem areas being modeled as part of the TWA
- Joe had several comments related to the potential flood mitigation projects:
 - A more practical assumption for residential BMP implementation is needed
 - Estimated costs should be rounded off
 - Other potential factors that could be used to screen project concepts include constructability, runoff reduction, and traffic impacts
 - CH2M should develop criteria in order to reduce the potential project list from 50 down to 28-30
- Discussion on potential project prioritization and an open house / workshop
 - Regina advocated for a more nuanced approach to project prioritization
 - Both the pros and cons of various flood mitigation projects should be considered
 - The list of criteria is too long and certain criteria is too subjective (e.g. aesthetics)
 - The importance of certain prioritization criteria (e.g. flood reduction) should be considered a given, and not subject to the vagaries of a public workshop
 - Certain criteria are more “flexible” (e.g. aesthetics) and it should be the goal of the public workshop to better ascertain the public’s view of such criteria
 - It may not be necessary or useful to develop rigid prioritization criteria; similarly, it may not be necessary to prevent bias in prioritization – there are not that many potential projects that they cannot be prioritized via careful consideration by the SWMAC

- Flood maps presented at the workshop should show all of the known / modeled problem locations
- Paul noted that an important part of the workshop is public education
 - Paul also asked why the SWMAC can't just prioritize projects themselves
 - Paul noted that with respect to prioritization, the public's scope should be kept fairly limited
- General SWMAC consensus that a second SWMAC meeting in October should be held
 - This meeting, which would be public, could potentially take place on 10/27
 - The purpose of this meeting would be two-fold:
 - First, CH2M would present its list of 28-30 potential flood mitigation projects that they propose to model as part of Task 4 of the TWA and the reasons why they selected those projects
 - Second, CH2M and the SWMAC will discuss the goals, format, and potential dates of a stormwater open house / workshop

Discussion of MS4 Permit Scope / Fee Proposal

- Discussion on CH2M proposal for addressing new MS4 permit requirements
 - Heather said that in her opinion, CH2M's proposal was a "Cadillac" plan and that she would rather see stormwater funds go toward implementing capital projects; general SWMAC agreement with this
 - General SWMAC consensus that certain required items can easily be updated for compliance, especially some of the Minimum Control Measures (MCMs)
 - Courtney noted that this might be true, but only up to a point; for example, one of the requirements is a public outreach plan, which currently does not exist at the Township
 - General SWMAC desire to do the bare minimum regarding the new MS4 requirements and have DEP come back to request additional information should it be needed
 - Discussion about the BMP mapping requirement
 - The Township currently uses a grading permit application process which is entered into an internal database, but it does not log the specific BMP types constructed at each project
 - CH2M proposed to review the Township's current database management system, generate a list of recommended improvements, and implement a streamlined workflow that will allow for site location information to be converted into a GIS compatible format in order to output annual BMP location map updates which is required by the DEP for the Annual Report
 - Heather and Regina said this effort should be covered by permit fees
 - Heather acknowledged that most of the proposed fee is for mapping and the Pollutant Reduction Plan (PRP), neither of which can easily be done by the SWMAC; however, to help reduce the cost of the proposal, the SWMAC could work on some of the required MCMs themselves (e.g. the public outreach plan)
 - The SWMAC would like CH2M to try to reduce their proposed scope and fee based on their comments

Old/New Business

- See October 2016 Stormwater Tracking Table for updates on various stormwater management efforts

Next SWMAC meeting: 10/27/16 (Radnorshire room) – special meeting to discuss 1) potential flood mitigation projects to be modeled and 2) goals, format, and date for public stormwater open house

Action Items

- **CH2M** to reduce list of potential projects from 50+ to 28-30 and prepare a presentation for the special 10/27/16 SWMAC meeting in which they discuss their reasons for selecting certain projects in each priority problem area
- **CH2M** to adjudicate all previously documented flood locations in the Township that are not located within one of the priority problem areas being modeled as part of the TWA (*Note: CH2M completed this on 10/25/16*)
- **CH2M** to update their MS4 proposal based on the SWMAC's comments