



Thomas and McPherson Stormwater Project Virtual Community Meeting Minutes 6:30 – 8:00 p.m. on Thursday, June 25, 2020

Rebecca Zito, Acting Senior Manager of Public Affairs at the Pittsburgh Water and Sewer Authority (PWSA) welcomed meeting participants and explained the purpose of the meeting.

Meeting participants introduced themselves and shared their interest in this project. Participants included local residents, project stakeholders, and representatives from Pittsburgh United, Negley Run Watershed Task Force, and the City of Pittsburgh Department of Public Works (DPW).

Ana Flores, Project Manager at PWSA began the presentation by providing an overview of stormwater issues in Pittsburgh and PWSA's strategy for capturing and slowing stormwater using green infrastructure.

Phase One of the Thomas and McPherson Stormwater Project includes underground storage systems in the medians on Thomas and McPherson Boulevards and under asphalt on North Dallas Avenue, permeable paver parking lanes with underground storage on North Linden Avenue, and a green alley with underground storage on Starling Way. Since the soil in the project area does not allow much water to soak into the ground, we will be lining the underground storage systems to prevent the stormwater inside from soaking out onto nearby properties.

In coordination with the Phase One stormwater project, PWSA will replace the existing water mains and all public and private lead service lines along McPherson Boulevard between Fifth Avenue and North Dallas Avenue and along North Linden and North Dallas avenues from McPherson to Thomas boulevards. By coordinating the stormwater, water main replacement, and lead service line replacement projects, we will minimize disruptions and more efficiently manage costs.

Scott Duda, Professional Engineer at Wade Trim provided an update about the Phase One project construction schedule and details. The construction will be done in sequenced phases to minimize disruption to the entire neighborhood. Roads will be temporarily closed during construction hours (Monday to Friday from 9 AM to 3 PM) and opened again outside of construction hours so that traffic can pass.

Wade Trim completed the 90% design plans in June 2020 and anticipates completing the 100% design plans in late fall or winter 2020, depending on permit reviews. Phase One construction is expected to begin in winter 2020 and take approximately one year.

The presentation and the following question and answer session were recorded and are available at www.pgh2o.com/thomas-and-mcpherson.

Discussion:

- Question: What happens if the stormwater exceeds the capacity of the storage systems?
 - Answer: All the storage systems have an overflow option. There will be a pipe at the top of each system that will direct any excess stormwater directly into the sewer system. If more rain enters the storage system than it is design for, the stormwater will go into the sewer system. For example, within the green alley, there is a pipe just below the top of the underground storage system, to prevent the stormwater from getting back out onto the surface. Once the storage system fills up with water to the level of that pipe, the water enters the pipe and discharges to the sewer system. All the underground storage systems will have that overflow pipe, whether in the parking lanes or the medians.

- Question: Are the storage tanks controlled electronically or pneumatically?
 - Answer: They are not electronically controlled. There are pipes set up at certain elevations to direct water into or out of each storage system. For the water leaving the storage system, there is a pipe at the bottom of the system which has a small opening so that the stormwater will drain into the sewer pipes slowly. To avoid any overflows from overwhelming the storage system capacity, there is a pipe near the top of the system to direct any excess stormwater back into the sewer pipes.

- Question: For the two Norway Maple trees that you mentioned removing as part of the project, one of those trees came down in a storm a couple months ago. For the other tree that you might have to remove, you mentioned replacing it with a new tree in a different location. Does that mean it is not possible to plant another tree in the existing location?
 - Answer: We will be working with the City Forester to figure out the tree location. Since our underground stormwater storage systems will be in that area, we want to try to avoid any tree roots breaking into those systems. The type of replacement tree makes a difference for placement options. We will have a certified arborist onsite to try to limit the impacts on existing tree roots. Until we dig up the road and see the extent of the existing tree roots, we won't know if that existing tree will need to come down or if it can remain up.

- Question: What happens if these pipes plug up? How do you keep the storage systems from getting plugged up with litter and debris? Do you use screens?
 - Answer: For the underground storage systems with catch basins (also known as storm drains), we will be inserting a trash guard before the stormwater leaves the catch basin and enters the underground storage system. The trash guard is a flat plate with holes of various sizes, which increase in size toward the top of the trash guard. This allows the sediment and debris to filter down and settle at the bottom of the catch basin. Our maintenance crews will then clean out the catch basins. Since fine sediment in stormwater can bypass these catch basin filters and accumulate in storage systems, the systems will all have a manhole and cleanout ports so that we can open up the systems and clean them using a giant vacuum.

- Question: Will PWSA check the storage systems often to see if there is any debris?
 - Answer: Yes. We have a maintenance program and we will have these storage systems under an inspection schedule. If maintenance is needed, it will be issued out to our contractors or our maintenance crews.

- Question: What happens if the permeable pavers plug up over the years?
 - Answer: For permeable pavers, there is a need for routine maintenance. On yearly basis, during the spring and in the fall when the leaves drop, we need to vacuum the permeable pavers to get debris out. Every 10-15 years, depending on how much debris builds up, there is a way to wash those permeable pavers to suck out any debris that has been compacted between the paver cracks.

- Question: There won't be any stormwater overflow coming out of these storage systems that could affect the properties, correct?
 - Answer: Correct. The storage systems will be lined so that there is no migration of the water underground. Also, before the storage systems fill up with stormwater completely, there will be a pipe near the top to direct any excess stormwater into the sewer system pipes before it overflows. There is always the possibility of a larger storm that would rain more than the storage systems could take in, but that would be localized surface flooding rather than the storage systems backing up into the streets.

- Question: So, would the excess stormwater during a larger storm would just run off where it normally goes now?
 - Answer: Correct.

- Comment from PWSA: These stormwater systems are heavily intensive to maintain and everyone has a responsibility to manage stormwater together. You can help us out by sweeping or picking up litter and debris if you see it piling up on a catch basin or permeable pavers. Picking up litter and debris is a good way to keep your eyes on these systems and keep your neighborhood clean. If there is a lot of debris in a catch basin or stormwater facility, please call our dispatch center at 412-255-2423 (press option 1) or call 311. We have a lot of catch basins and facilities throughout the entire city, so putting in call helps us know that we need to send someone out, maybe sooner than we expected, to check it out.

- Question: When will construction start on the project's sequence B on Thomas Boulevard?
 - Answer: That depends on when the overall construction starts. We are waiting on permits to know the exact start date for construction, but we generally expect construction to start sometime this winter. Once we get the permits, go out to bid, and get a contractor, we will send out an update about the construction start date and sequencing to community members. If you haven't signed up for our email updates about this project, please sign up using the form at the bottom of the Thomas and McPherson Stormwater Project webpage (<http://www.pgh2o.com/thomas-and-mcpherson>).

- Question: It looks like the 6900 block of McPherson Boulevard is not directly impacted by this project at this time. Is that correct?
 - Answer: Correct. This construction project stops right at the beginning of that intersection.

- Question: How long do you expect each of the construction sequence phases to last?
 - Answer: We are estimating three to six weeks for each phase, depending on how big they are. Thomas Boulevard and McPherson Boulevard are larger sequences so they will probably take close to six weeks. McPherson Boulevard itself may take a little longer because we have the water line construction to do in addition to the stormwater components construction.

- Question: I've heard you speak in previous meetings about the research component of this project, with studying how well these measures can impact the amount of stormwater that is coming into the big main sewer line that runs down Fifth Avenue. For the people in this meeting who are unfamiliar with the project, could you speak about how this is going to be studied and how the results are going to be used to inform future projects?
 - Answer: One of the reasons we selected this project is because it sits at the top of the A-42 sewershed. The "A" stands for Allegheny River and the "42" refers to the 42nd sewer outfall along the Allegheny River from the point where the three rivers meet. All of the stormwater and sewage within this neighborhood travels down combined sewer lines that eventually go down Washington Boulevard. That combined stormwater and sewage enters the river during large storm events. Since this project is in the upper-most part of the sewershed, capturing and detaining water here before slowly releasing it into the sewers provides more capacity in the sewer system to manage more stormwater and sewage as it flows down to Washington Boulevard. With this project, we aimed to manage stormwater from 12 impervious acres because that gives us about 470,000 gallons of stormwater managed. For every gallon of stormwater that we manage up in the neighborhood, we see a ½ gallon reduction in combined sewage and stormwater overflowing at the outfall into the river. We will be studying how these storage systems are performing by installing monitors within the sewer system pipes to tell us how much water is making into the sewer pipes and how much is overflowing into the river.

- Question: What is the size on the storage pipes?
 - Answer: The storage pipe sizes vary. The pipes on Thomas and McPherson boulevards will be three 36-inch diameter pipes with gravel around them to provide additional stormwater storage. The storage pipes on North Linden Avenue, North Dallas Avenue, and Starling Way are 24-inch diameter pipes.