

MINUTES
PUBLIC WORKS COMMITTEE
SEPTEMBER 6, 2022

Committee Attendees:

Daron Stephens, Engineer
Mike Flynn, City Manager
Dianna Layne, Deputy City Clerk
JoEllen Reed, City Commissioner
Shanda Cecil, Planning

Pat Clark, Public Works Director
Kitty Strode, City Commissioner
Jonathan McCracken, Prime AE
Jason Ainslie, LE Gregg

NEXT MEETING – Monday, October 6, 9:30 AM, in the Training Room.

MINUTES – JoEllen made a motion to approve the August 1, 2022 minutes; Kitty seconded. Minutes approved.

WALL ALLEY SINKHOLE STUDY

Jonathan McCracken, Prime AE, and Jason Ainslie, LE Gregg President, presented plans and alternatives for the Wall Alley Sinkhole that is in Carmack Kersey's back yard.

The first phase of this study was to have NSG do a study of the electrical resistivity of the soil. They can determine where the bedrock is located, where air pockets are located, etc. There is a steel gas line on the edge of the pavement in the alleyway that runs parallel to the unnamed alley. The study revealed that the bedrock is not continuous and that there is a cave at least 50' down. There is 50' of nothing but soil – no rock at all. The extent of the sinkhole was much bigger than initially thought. The study also revealed that there are actually two sinkholes. They took core drillings and there was a 2' void in the core. What does this mean?

The typical sinkhole remediation is to do mass excavation down to the throat and then fill it with rock. This would require 6000 cubic yards of excavation, taking up Mr. Kersey's entire back yard. Mr. Ainslie's professional opinion is that if the sinkhole is not a threat, you don't have water coming up out of the area, you should not do this excavation work. Instead, he recommended two test wells and a dry injection well for the area drainage. We would have to put in two test wells 50-100' deep to determine what the conductivity is and if there is the capacity to handle the type of volume we need. We would want to monitor these wells through some major storm events. Then, we would run everything into the dry well and not have to tear up the street.

The question is, "Do we want to use this as an alternative to remediating the stormwater in this area?" The chances that the dry well would cause the sinkhole to open further is almost non-existent. There is nothing that presents a risk in the soil itself. We would create an artificial throat and line it so the soil cannot move down into the throat of the well. There would be less surcharging, less water on the head. In 150 years, it may eventually create a problem, but the problem is already there.

We still have a crushed pipe across the street that we need to repair as well. We could use a smaller pipe to the manhole on College and prevent the overload of the system.

We still have some work to do, such as research of the regulations for a dry injection well. This would be a hybrid to full piping. There would still be piping from the other back yards and from Wall Alley. There will be a beehive grate at the top. LE Gregg will have to do a proposal before we are ready to present to the Commission.

Mike expressed some concern with not doing conventional piping. Mr. Ainslie said that even if we don't go with the dry well, he still does not recommend remediating the sinkhole. The void is not causing any problems. For all intents and purposes, it is an underground river. Ground penetrating radar does not work in this area. There is too much clay, and it is typically only good about 5' down. Mr. Ainslie recommends monitoring the ground water for four months. Testing the capacity of the wells can be done as soon as we get the wells installed. Drillers are booked out for about two months. The approximate cost would be \$10,000 to put the two test wells in the ground. Mike suggested that they talk with Mr. Kersey and the neighbors so they know that we are investigating different options in regard to storm water remediation.

ASSET MANAGEMENT PLAN

Jonathan has been charged with mapping stormwater structures, inlets, piping, etc. to create an asset inventory system so we can monitor and track deterioration, cracking, collapses, etc. The initial basin we are looking at is Colby Ridge Subdivision. This should help us make better decisions about stormwater programs and manage assets better.

The City provided some initial information and then Prime AE put together what they thought was there. They think there are approximately 270 stormwater structures and 2,650 linear feet of pipe. They will do a CCTV inspection with Buchanan Contracting where a survey crew goes out, locates the storm structures, opens them up, does a condition assessment, and documents pipe sizes. They connect the structures and map them out. All of this information will be provided to the City to update and correlate with the GIS system. There are some unknowns because they have estimated the number of structures so the proposal is "not to exceed". Currently, we do not know how many miles of pipes the City is responsible for or how old they are or how they connect or what their condition may be.

The information would be in one document per structure. They will finalize with Daron exactly what information the City is looking to obtain. Enough information without overkill so we get the most for our money. Once this information is documented, the City would use the exact same form when we go through with the camera and track the structures ourselves. Jonathan will plan to be at the next City Commission meeting.

The advantages of a Stormwater Asset Management System include:

- The ability to identify potential problems before they become critical;
- Monitor problems to know the optimal time to replace/repair;
- Prioritize needs and do a long-range plan for scheduling work;
- Decrease the number of change orders that we have to process;
- Help in the budgeting process;
- When someone calls with a potential problem, we can tell them we are aware of the problem; we have a plan; and, where that area is on the priority list;
- Update the GIS system to make it more accurate and useful.

ENGINEERING PROJECT UPDATES REPORT

Town Branch Culvert Repairs and Demolition Project - UPDATE AS OF 9/6/22:

Sunesis is on site to complete asbestos abatement and install job-site fencing. Three dumpster loads of trash and debris were removed in mid-August to allow for geotechnical investigation for the shoring design. Demolition of the two-story section of the building is set to begin Monday, September 12th.

Columbia Gas Upgrades - UPDATE AS OF 9/6/22: Project is being shut down in the coming weeks due to budgetary concerns following the floods in Eastern Kentucky. Current work will be completed and patched with hot mix asphalt until spring when final milling/paving will be completed.

FY23 Concrete Services - UPDATE AS OF 9/6/22: Initial section of steps at 15 South Main as well as sidewalk were poured prior to Pioneer Festival, however, the finish on the concrete did not meet engineering standards. Southern will go over the project and begin removal of sub-par concrete. Project will then continue to the North and South of the current site. Currently on the schedule are a sidewalk repair on Winn Avenue, sidewalk repair from Dr. Bishop's parking lot up to the sidewalk leading into the building, and an apron on Wheeler Avenue.

Barlow Drive Storm Sewer - Final design is underway. Once final design is complete, this project will be ready for grant applications for funding through infrastructure bill grants. If the City has to wait several months for finalization of the Wall Alley/North Main project, we may consider moving this project up in priority.

North Main Storm Sewer - Preliminary design is underway. Engineers have sent schematic plans to both Columbia Gas and WMU, in hopes of identifying any potential relocations that would need to take place. Jonathan will be presenting this plan to the City Commission September 6th.

222 Cook Avenue - UPDATE AS OF 9/6/22: Palmer is working on the grading/drainage plan, and Poage is working on the structural plans for the foundation of the salt barn. Final plans are expected to be delivered on or around 9/23. There needs to be a new roof on the building. Electrical poles are set.

WINN AVENUE/MUTUAL AVENUE LOT – Sekisui has agreed to donate \$750 toward a project to get rid of the concrete foundation and reseed the lot, making it a green space. Shanda asked about starting a GoFundMe account. She will run this by Bill. Kitty mentioned that Beautification might be able to donate \$1,000.

PAVING PROGRAM – We have 15 streets on the list. Weather permitting, The Allen Co., Inc. will begin milling/paving the streets listed below from September 13th through September 27th. Milling will take place first and the last 5 - 6 days will be paving:


FY2023 Paving Program

1. Jefferson Street
2. Buffalo Trace
3. Hopkins Lane

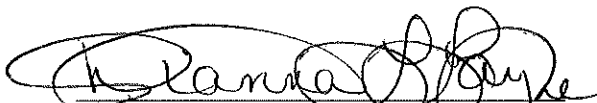
4. Calloway Street
5. Belmont Avenue
6. Lisle Lane
7. Country Club Court
8. Frontier Way – Portion from Bypass Road to asphalt seam West of Lowe’s Construction Entrance
9. Holiday Road – Portion from Shelley Drive to House #45. Including Holiday Circle
10. White Circle
11. Beckner Street
12. Hays Street
13. Perkins Street
14. Bells Alley – Portion from West Hickman Street to West Lexington Avenue
15. Waldo Alley

CROSSWALKS – Kitty was lamenting that no one pays attention to the mid-block crosswalks. She was nearly hit trying to cross the road from the high side to the Courthouse. There was a discussion about doing away with the mid-block crosswalks. The feeling was to do the one in front of Leed’s Theater and take the other two out.

ADJOURN – JoEllen made a motion to adjourn; Kitty seconded. Meeting was adjourned.



Daron Stephens, Chair



Dianna Layne, Deputy City Clerk