



CITY OF NORTH RIDGEVILLE

**Engineering Department
Daniel Rodriguez, P.E., City Engineer**



DRAINAGE AND FLOOD CONTROL BOARD

Minutes for the Tuesday, July 27, 2021 Meeting

Meeting called to order by City Engineer Daniel Rodriguez at 6:57 p.m.

In attendance from the Board were:

Daniel Rodriguez, City Engineer (Chair)
Rayborn Ford, Ward 1
Paul Balog, Ward 1
Ed Dunham, Ward 2
Brendan McCool, Ward 3
James Cleveland, Ward 4

William Gardner, Ward 4
James Maleski, Council at Large
Dennis Boose, City Council
Clifford Winkel, City Council
James Smolik, Zoning Board Rep.
Linda Masterson, Zoning Board Rep.

Also in attendance were:

Christina Eavenson, Asst. City Engineer

Old Business

A. Minutes for April 27, 2021 Meeting

City Engineer, Mr. Rodriguez asked for a motion to approve the minutes from the April 27, 2021 meeting. Board Member Masterson made a motion to approve the minutes. Board Member Maleski seconded the motion. The minutes were unanimously approved by vote.

New Business

A. Mills Creek Bridge over French Creek Ditch

Mr. Rodriguez noted that the contractor will be starting soon on the bridge. They will remove the existing structure and replace with the new sections in phases. The new bridge is a precast structure. Work will include driving pylons for the foundation. The new structure is the same size as the existing one. The new structure will clear the 25 year storm event. Rip rap is included with the project. The bridge will have capacity for pedestrian traffic but sidewalks are only being added on the Avon side.

Mr. Gardner asked if the French Creek channel could be reshaped wider. Mr. Rodriguez noted that we do not have the jurisdictional authority to reshape the channel. Ms. Masterson noted that the HOA pays for flood insurance there.

Mr. Rodriguez showed pictures of the area around the bridge where the Service Department recently did some work. Mr. Ford, who also works at the Service Dept., noted that they will be working on the channel upstream of the bridge area this fall in the Dorchester area. As they go they will clean out any plugged pipes they find

discharging to the channel.

B. Mills Creek Conservation Flood Control

Mr. Rodriguez noted that the project will capture flow upstream of Cypress Avenue and bring it to the Boulder Drive area in a series of ponds, falling through 35 feet of drop, that will eventually outfall to Mills Creek. The project will have plenty of walking trails.

The City is currently working on negotiations with the Cypress land owners as to where the City may be able to obtain an easement to direct the drainage through their property where it will continue north through the Palmentera property.

The City has already received \$1.4M in ODNR grants and just received another \$0.5M. The City has already spent some of the funds on design, easement preparation and negotiations, and tree clearing. Tree clearing needs to be done between April and October to avoid bat habitat.

Mr. Rodriguez showed the attendees the current set of improvement plans for the Mills Creek Conservation project noting the areas of wetlands and trails. He further noted that this project should help alleviate the flooding around Lear Nagle, Hersey Circle and the Mills Creek Development.

C. Inflow and Infiltration

Mr. Rodriguez relayed that last year the City did a relining project for the sanitary sewers on Broad, Main and Pleasant to remove any possible areas of inflow and infiltration into the sewer. He further noted that the City had flow testing done in this same area and that the results showed that during dry weather the sewers operated under capacity but during certain storm events they were operating at over 900% capacity. Most likely this is happening because of inflow (direct connections) rather than infiltration.

In years past the City had performed smoke tests to investigate I&I problems. This year, the City will be doing a pilot test on Broad Blvd. where an outside firm will be doing dye testing to find plausible locations of connections.

Mr. Rodriguez noted that the City has to do something because every rain event causes an excessive peak at the French Creek WWTP (FCWWTP). The City has done some investigation and our findings point to North Ridgeville's drainage being the problem for the excessive flows at FCWWTP.

Mr. Rodriguez said that through the pilot project, the City is hopeful to determine the illicit connections and will follow through on enforcement action to remove these connections. The City wants to work with its residents and will look for ways to help the remediation efforts - including offering financing options and offer cost controlled contractor pricing.

Mr. Rodriguez noted that the results from this small pilot project could be used to develop a global program that can be applied to other areas. Engineering has already discussed this plan with the Mayor.

Another area showing potential I&I situations is Luanne Drive. Historical data from the pump station tells us that we have had over 85,000 GPD run through that system during a rain event, which is significantly more than a dry weather day. This is another area that needs I&I investigation.

Ms. Masterson inquired if any of these developments would be eligible for a CDBG grant. Mr. Rodriguez noted that there is no low income areas designated in the City.

Mr. Rodriguez noted that the pilot project is just kicking off and he would have more to report by the next

Board meeting.

Mr. Gardner inquired if all of the storm sewers are designed to the appropriate size to be able to handle the drainage flow. Mr. Rodriguez noted that all subdivisions are to be designed to the City's standards but the criteria is not for conveying the higher storm events so there will still be flooding.

Mr. Gardner asked if after the I&I situations are fixed, will this guarantee that the residents will not flood anymore. Mr. Rodriguez noted that this will not guarantee that they still won't flood but it should assure that they will not flood with sewer water.

Mr. Boose inquired how long we will be giving the residents to fix the I&I problems found. Mr. Rodriguez noted that the City will be collecting all of the data first before developing the plan.

Mr. Winkel inquired as to how much the testing will cost. Mr. Rodriguez noted that the estimated costs are to be around \$2,500/house. He further noted that during this pilot project the Engineering Dept. will be training City personnel in order to potentially continue the testing operations with the City's forces.

Mr. Winkel inquired as to the Engineering Department's approach to the general public. Mr. Rodriguez noted that the Department will have open communication with the public by offering public meetings for those affected and provide additional resources for residents. The City will encourage home owners to make the investment to hopefully add value to their homes and potentially keep their sewer rates from increasing.

Mr. Winkel asked if the City could enforce the improvements at points of sale. Mr. Rodriguez noted that it was a possibility. Mr. Winkel also asked if the City would be enforcing the fixes with the pilot project. Mr. Rodriguez stated that we are not mandating anything at this time.

Mr. Rodriguez noted that it seems most of our I&I problems are in Wards 2 and 4. Next year, the Engineering Dept. is looking to create a Master Stormwater Program that would help determine areas that could be used to implement measures to address our storm water problems. The City will likely do this in phases and the first phase will likely be the area between Lear Nagle and SR 83.

D. Other Items from Committee Members and Audience

Mr. Winkel inquired about ditch maintenance on Mills Creek, south of Center Ridge Road. Mr. Ford stated that the Service Dept. doesn't have the right machinery available yet to do this area and they don't want to start it until they have the appropriate tools and manpower for the job. Mr. Ford is hopeful that it will be done this fall.

Mr. Rodriguez showed some pictures of Frontier Park and the final outcome of the work there that the Service Department did for over three months.

E. Meeting Adjourned

Meeting adjourned at 8:20pm.

Respectfully Submitted,



Christina Eavenson, P.E.
Assistant City Engineer