CITY OF NORTH RIDGEVILLE

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

DRAINAGE AND FLOOD CONTROL BOARD

Minutes for Tuesday, October 23, 2018 Meeting

Meeting called to order by City Engineer Daniel Rodriguez at 7:00 p.m.

In attendance were:

Eugene Kleinholz	John Vrtachnik	Bob Chapek
Mike Gillespie	Dennis Boose	Asst. City Engineer Christina Eavenson
Mike Borow	Ed Dunham	City Engineer Daniel Rodriguez

Old Business

A. Minutes for July 24, 2018 Meeting

City Engineer Daniel Rodriguez asked for a motion to approve the minutes from the July 24, 2018 meeting. Board Member Mike Gillespie made a motion to approve the minutes. Board Member Eugene Kleinholz seconded the motion. The motion was unanimously approved.

New Business

City Engineer Daniel Rodriguez introduced the new Assistant City Engineer, Christina Eavenson, to the Board. He then asked all the board members to introduce themselves.

A. Stormwater Utility Update

City Engineer and Chairman of the Board of Drainage and Flood Control Daniel Rodriguez explained that the stormwater utility will be discussed at the next Council meeting on November 5, 2018 and will likely have its first reading at the November 16, 2018 meeting. The proposed residential fee will be $3.76 a month. Commercial properties will be charged based on an equivalent ERU which is based on the amount of impervious surface of the property. Property owners will only be charged if they receive a water bill from the utility department. The fee is intended to begin with the January 2019 billing cycle.

A board member inquired as to what the generated funds will be from the stormwater utility. City Engineer Rodriguez noted that the expected revenue is $800,000 annually. He also noted that this estimate was based on 2015 data and new construction since then needs to be taken into account.

A board member inquired as to what the funds will be used for. City Engineer Rodriguez explained that the funds will be used for equipment and manpower to maintain the City's named ditches. Funds will also be used to address storm sewers in need of repair in the older sections of the City and regional basins planned to help with flood control.

City Engineer Rodriguez noted that in August of 2018 they had a crew cleaning out a ditch that bisects Lorain Road and Root Road. The crew found a vast amount of obstacles impeding the flow of the ditch including farm tires and other tires. He also noted that there were undersized culverts along this same ditch that were impeding flow. The Engineering Department is reviewing these structures to see if proper approval was obtained. In the meantime the property owners have been notified that the culverts are under review.

City Engineer Rodriguez also noted that the funds will help in assuring that the City meets the requirements of our EPA MS4 permit. This permit has six components that must be met annually including a public outreach component and ensuring that the City uses good housekeeping measures with our work force.

City Engineer Rodriguez explained that commercial properties can apply for a credit if they have stormwater measures in place. The maximum credit that can be obtained is 50% - 25% for a reduction in volume runoff and 25% for addressing water quality. In addition to the 50% that may be obtained, schools can get an additional 25% credit, for implementing stormwater education into their curriculum.

B. Home Drainage Systems 101

City Engineer Rodriguez went through a presentation describing how residential drainage systems work. He noted that many of the City's older homes have their basement footer tiles tied into the sanitary sewer laterals. Not only does the tile collect the water from the footers around the perimeter of the house, some of those homes also have their roof drains tied into their footer tiles. This stormwater flow causes capacity issues on the City's sanitary sewers during rain events and causes the sanitary flow to backup into their basements.

In the recent past the practice was to either pump the basement sumps to drain at grade or have the sumps tied into the public storm sewer systems. The policy was revised this year so that all sump pumps shall be tied to the public storm sewer system. Roof drains are allowed to drain at grade on splash blocks.

Historically, the City allowed runoff from the residential yards to flow across multiple properties before collecting the surface flow into the storm sewer system. Often, home owners would re-grade their yard or install structures like a fence that would impede the drainage flow. In order to contend with that, a policy was implemented this year to enforce new construction to install on each residential lot a yard drain unless their yard abuts a stormwater pond. If that is the case, they may have their yard graded to drain to the pond.

A board member inquired if side yard drainage is still an issue. City Engineer Rodriguez replied that side yard drainage is a constant issue. He noted that home owners often re-grade their yards, which impedes flow.

C. **Items from Committee Members**

A board member inquired if the stormwater funds could be used to address the sanitary sewer issue. City Engineer Rodriguez explained that instead of oversizing the sanitary sewers to address the additional stormwater flow, the City is trying to educate the home owners of the older homes the importance of disconnecting their footer tiles and roof drains from the sanitary sewers. Although it may be a costly investment to the home owner, it would help alleviate basement backups. City Engineer Rodriguez noted that this problem is referred to as an I & I issue whereby the ground water is infiltrating into the sanitary sewers and the roof drains are direct inflow connections.

He noted that often home owners install a check valve on their sanitary lateral to aide in sanitary backups but it doesn't alleviate the stormwater and ground water collection from backing up if the footer tiles have not been disconnected.

City Engineer Rodriguez also noted that typically there is guidance information for home owners about why they may get water backups in their basement on the City's website but it has been temporarily removed to update a couple of the practices. It will be reposted to the website when revised.

A board member asked if the flooding issues have subsided this year. Other members noted that they thought complaints subsided. City Engineer Rodriguez noted that there will always be areas that are difficult for the City to address. For instance, the area between Island Road and SR 83 is very flat and it is in a floodplain. It is very tough to contend with the flooding in this area.

A board member asked if we found any illicit sanitary discharges for this year. City Engineer Rodriguez noted that we always contract with the Cuyahoga County Soil and Water Conservation District to perform our outfall sampling and the findings will be in the report for this year.

A board member commented that City Engineer Rodriguez created a well prepared presentation on the home drainage systems.

City Engineer Daniel Rodriguez adjourned the meeting at 7:59 p.m.

Respectfully Submitted,

Christina Eavenson
Assistant City Engineer