



## **Stormwater Commission Meeting Summary Thursday January 24, 2019**

**Members Present:** Fred Kudert, Steven Vinezeano, Thomas Powers, Andrew Vitale, Joseph LoVerde, Robert Callero, Fred Braun, and Chuck Ostman.

Residents in attendance: Rosemary Palicki, Lednard Palicki, Karen Diamond; Karol Giokas, Robert Hoglund, Alex Kravetz, Mike Shields

Others in attendance: Jeff Wickenkamp, Hey and Associates; Dan Randolph, Village of Niles

The Stormwater Commission meeting convened at 8:00 a.m. in the Council Chambers at Village Hall.

**Old Business:** The following topics were presented and discussed.

The Meeting Summary for the August 23<sup>rd</sup> 2018 meeting was approved.

The following items were considered out of order to allow the full commission to hear the resident concerns.

### **New Golf Mill/Greenwood Stormwater Park – Project Update**

The Village and Park District continue to work together to design a park improvement at the Golf Mill/Greenwood Stormwater Park. The park landscape design contract will be considered in February. The stormwater project has nearly completed the topographic survey. Staff submitted an O&M manual to the MWRD to meet the requirements of the IGA.

### **Howard Sewer Outfall - Project update**

The new Howard sewer outfall was included with Howard Street watermain project bid documents. The outfall is a modification to one of the projects from the stormwater update. The project is currently out to bid.

### **Flood Control Program – Budget Recommendation**

The annual review of the budget for the flood control program was reviewed. The current budget includes \$50,000 which would cover 12 homes. Community Development indicated that there isn't currently a

backlog of projects, however at the current funding level, the funds are typically used each fiscal year. The commission unanimously approved a motion for a formal recommendation to the budget committee to retain funding for the homeowner flood control assistance program at \$50,000 for FY 20.

The Commission considered the following old business with input available from the Chair.

**8607 National** - Hey and Associates reported their findings regarding the National analysis. They reported the sewer capacity is inadequate and that adding additional inlets to a sewer that has capacity issues does not resolve the sewer capacity issues. However they did find that the block has a fairly large drainage area tributary to one inlet located at the sag point. Sag inlets do not have the ability to bypass flow, so street flooding occurs when sag inlets are clogged. Therefore it would be good engineering practice to provide an additional inlet at the sag location. There would also be a minor inlet capacity benefit to provide the additional inlet at the sag for smaller storms. Hey did not recommend adding an additional inlet further north as when the sag clogs the extra inlet provides the most benefit when located at the sag.

The resident, Alex Kravetz, indicated that there is a problem with trash clogging the sag inlet. He also indicated that he often had to clean the inlet. The resident was concerned because the lateral sewer drained in a triangle and that was part of the problem. The Village engineer confirmed with Hey that the sewer geometry was accounted for in the model and headloss was accounted for. The 48" sewer lack of capacity is the problem and not headloss due to the lateral sewer geometry. Hey indicated that even with thought the additional inlet provides additional protection, flooding will still occur. The resident indicated that something is better than nothing, and appreciated anything that could be done to provide even a small benefit. The Commission agreed to install an additional inlet at the sag point to provide extra protection from clogging and surface flooding. Staff would reach out to notify the resident when the extra inlet would be installed.

**Wisner Green Infrastructure** - Mike Shields presented some photos of flooding on Wisner from multiple flooding events. The pictures also documented that certain streets around 8100 Wisner that do not flood. Mr. Shields indicated that green infrastructure may not be the best solution and that the real solution is larger sewers. He understood that a sewer replacement project is large project, but asked that this area is kept in mind.

Hey concurred with the residents understanding of the flooding situation on Wisner. Hey explained that the Wisner project identified in the stormwater update is a good project, however in terms of prioritization there were 12 projects which were found to provide more benefit. Wisner is bathtub which has a tributary area consisting of the block itself. The 15" combined sewer downstream is too small and backups to the low point of the block. Hey evaluated some smaller green infrastructure based solutions for interim relief. The first option is lot level green infrastructure to store half the storm run off, this would reduce the 25-yr and 100-yr flood depths by 6 inches. The stormwater plan update indicated the recommended project reduced 100-year flood depth by 2.1 feet. The second option of a bioswale for the entire block length resulted in

0.1 to 0.3 foot flood depth reduction, the third option of permeable pavement would reduce flood depths by 0.2 to 0.4 flood depth reduction. Hey felt the flood depth reductions from green infrastructure were minor compared to the reduction indicated by the recommended project in the stormwater plan update.

The chair inquired as to whether there was a way to increase sewer capacity to protect the homes from the back up. Hey indicated that we could increase the sewer on Merrill but we would increase flooding downstream. The resident asked about creating a barrier or berms in front of the homes to protect them. Hey indicated that the barrier would be possible with extensive rework but the barrier would trap lot level water. The Chair indicated there is the overland flood protection program available to home owners to provide flood protection to homes as well. The engineering department is available to consult for residential level flood issues and the flood control program.

**New Business:** The following topics were presented and discussed

**MS4 Stormwater Management Plan (SWMP)** - The annual public review of the SWMP was completed by having the item on the agenda. There were two main changes to the plan 1) Outfall map changed based on the Harts Road project 2) The private property program inspection requirements was revised to meet a lower standard of inspection frequency by the Village. Inspection will be performed in response to complaints, during the normal course of business, and via the routine outfall inspections. The inspections frequency previously conceived in the SWMP would have been the most aggressive private property inspection program in the state.

**Resident Concerns 8200 Merrill** Residents at 8200 Merrill experienced back yard flooding and would like to address the commission.

The residents reported the following:

They have had a problem for many years with significant increases in frequency; flood depth and perimeter (proximity to the home) occurring in the past several years.. They feel the problem has been exacerbated by new development in the area that resulted in additional runoff. The standing water does not reach the house but is getting close to the house. The residents have tried various methods to address the problem including installation of a raingarden (failed) and installing multiple pumps that have burned out. Despite their efforts to resolve the standing water issues the issue persists.

The Chair asked whether when the pumps operate if the yard drains. The residents confirm the pumps do drain the yard when they are working, but they must take them out of service in the fall to prevent freezing damage to the pumps. Late fall flooding, pumps removed, resulted in freezing this winter season. The pumps have also routinely failed due to sediment plugging the

pumps. . The pumps (3,000 gal. per hr. capacity) also take a long time to remove the water, generally over a period of 6-8 hours. Without the aid of pumps, 7 to 10 days are generally needed for the yard area to dry. Photos of the flood conditions described above were submitted by the residents.

One of the residents felt the problem started once the Village required that downspouts were disconnected. The additional surface runoff from downspouts has exacerbated the problem. The residents feel they have been proactive in trying to address the problem, but factors out of their control have caused the problem to persist and get worse. Currently a 1" rain will cause the yards to have standing water. The back yard is low and as properties redeveloped around them they have raised their properties.

The Chair asked if the downspout water could be redirected to the front. The resident felt it would not help since the rear of the property is lower than the street and surrounding properties. The resident believed there was supposed to be an alley built in the rear which is why the properties slope to the rear. The Chair inquired if staff had any records of grades on adjacent properties. Staff indicated they would have to research to historic grades to find if they were available. Commissioner Ostman indicated he researched a nearby property with a private storm sewer. Commissioner Ostman requested to continue the discussion to the next meeting so that a private property sewer on Elmore could be investigated. The storm sewer on Elmore is located short distance away and could potentially be used for gravity drainage.

The Commission explained that the Village would not get financially involved in resolving back yard flooding, but would research the private sewer option for the residents.

**IICP – Draft Long Term Plan** -The Village Engineer reported on the MWRD Infiltration and Inflow program that is required by the MWRD for the separate sewer area of town. The Village will be submitting a long term plan in July. The draft long term plan was attached to the information packet submitted for the review of the Commission. The engineering department noted the final plan would also be submitted to the commission prior to final submittal to MWRD. Dan Randolph explained the major point of interest for the commission was the private sector program. The private sector program while technically new would follow existing enforcement procedures. The current ordinance already grants the Village the right to access property for code inspection purposes.

A sanitary services inspection program at point of sale is not currently included in the program.

The Commission asked about who assigns the fine in the private sector program. Commissioner Ostman explains that fines are determined during an adjudication process. There was a question about how downspout disconnections were inspections were addressed now. Downspouts are reviewed during flood control projects, major renovations, and real estate transfers. A question was raised about service inspection and what triggers it now. Currently laterals are only inspected during a major renovation, this policy will be continued under the IICP long term plan.

Commissioner Ostman indicated that due to the 500 real estate transfers per year and the amount of inspectors available that looking for stormwater connections to the sanitary system inside the home (aka illegal ejectors) was very difficult. The commission recommended that a resident education process is established once the plan is issued.

The second part of the IICP is the long term operation plan. This portion of the plan basically documents our existing processes.

**MWRD Ordinance update** - The MWRD is currently revising the Watershed Management Ordinance. One of the major points of revision is the detention system release rate developed based on the result of watershed release rate. The North Branch of the Chicago River will have no change in release rate, the DesPlaines watershed will have a reduction in release rate to 0.20 cfs/acre. The effective date of the new release rate is January 1, 2020 and there will be no grandfathering of developments after January 1, 2020.

A second major component to the revised ordinance was a stormstore stormwater credit program being considered. The third major revision is that pavement maintenance projects which utilize green infrastructure will not trigger stormwater detention. Finally a redevelopment provision will become more stringent requiring previously grandfathered properties to come into compliance. To date very few projects in Niles would have triggered the new redevelopment provisions.

The Village engineer encouraged the commission to review and comment on the ordinance revisions.

Hey discussed the need to revise the Village of Niles stormwater ordinance based on the revised MWRD WMO. The ordinance revisions would be considered after the MWRD WMO revision becomes official

### **Next Meeting Date**

The date of the next meeting will be at the call of the chair.

The meeting was adjourned at 9:43am