

CITY OF MIDDLEBURG HEIGHTS

15700 Bagley Road • Middleburg Heights, Ohio 44130

Matthew J. Castelli
Mayor

Michael Mackay
City Engineer



MEMO

TO: Mayor Castelli
Council

CC: Jim Herron
Richard Halishak
Kim Kerber

FROM: Michael Mackay

DATE: July 13, 2020

RE: 2020 FLOODING INVESTIGATION

The following is an update of the City's plan of action in connection with the two recent rainfalls (March 29 and May 15, 2020) that resulted in flooding in the City.

1.0 INDIVIDUAL HOME DIAGNOSTICS

Mackay Engineering is maintaining a spreadsheet and a file for each homeowner that has reported flooding to the City. Our current spreadsheet has about 125 homeowners who have reported flooding from these past two storms. Each resident that has reported flooding to the City has been called by Rich Halishak, our resident flooding specialist, and he is meeting with the residents to discuss their flooding issues and he is making recommendations to the homeowners.

Approximately 25 sites have been seen by Rick Halishak to date. Additionally Rick Halishak has made site visits with City personnel involving issues that affect an additional ten residents. Each resident will be provided with a flooding investigation report that will detail the advice provided to the homeowner.

Individual homeowners are being encouraged to install safeguards to their homes to protect against surcharging sewer mains [e.g. improve sump pumps/install back-ups; disconnect downspouts; eliminate/protect sanitary drains from sanitary main back-ups (backflow preventers 1 or 2, stand pipes, grinder pumps, seal drains); eliminate cross connections.]

2.0 LOCALIZED FLOOD AREAS

Mackay has been working with R2O on the four chronic flooding areas listed below. R2O is studying these areas utilizing the sanitary sewer and storm water modeling that is now available to the City from NEORS. R2O plans to provide us with conceptual alternatives for three of the areas within the next couple of weeks. The Old Pleasant Valley/Shawnee

area requires additional studying and we will have a schedule for that area after we discuss with R2O this week. Mackay will then work with R2O and the City to develop conceptual cost estimates for each of the proposed alternatives.

- 2.1 Old Pleasant Valley/Shawnee – In addition to the hydraulic study R2O is providing for this area, Mackay is also working with the City on a solution to the rear yard and basement flooding for the two houses at the north end of Shawnee.
- 2.2 Indian Creek/Gerald Drive
- 2.3 Newton/Elmdale/Bellmeadow
- 2.4 Elderdale/Farnum

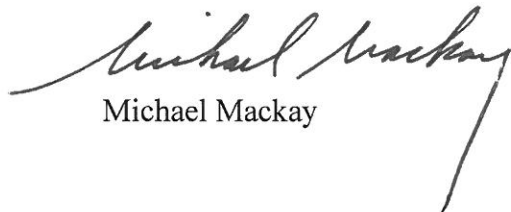
3.0 BIG CREEK PARKWAY DETENTION BASINS

The City is in the process of talking with the landowners about land acquisition in the areas where the detention basins are currently planned.

4.0 ADDITIONAL FLOODING AREAS

The following areas of general surface flooding are also being investigated by Mackay.

- 4.1 Revere Circle
CEI met with the City in the areas of the flooding. CEI is willing to allow the residents to construct swales and mounding to protect their yards from this rear yard drainage, so long as any encroachments onto the CEI property are removed. The residents will also need to re-establish their sideline swales. Councilman Grech has sent a letter to the residents concerning this issue.
- 4.2 Craigmere/Grant Area
Rick Halishak has met with several residents in this area concerning yard flooding. These areas are being reviewed with the City and the actions recommended by Rick Halishak are being considered by the City. Additionally the area of the City property which adjoins the neighborhood is being considered for a small detention basin.



Michael Mackay