Department of Engineering

CITY OF MIDDLEBURG HEIGHTS

15700 Bagley Road • Middleburg Heights, Ohio 44130

Matthew J. Castelli Mayor Michael Mackay City Engineer



MIDDLEBURG HEIGHTS FLOODING ISSUES NOVEMBER 9, 2020

Localized Flooding Areas - The City administration has decided to begin planning and to determine possible funding sources for the following projects:

Newton/Elmdale - begin planning and determine possible funding sources.

Indian Creek - funding application has been submitted to OPWC.

Elderdale/Farnum - determine possible funding sources.

Old Pleasant Valley/Shawnee. - The County has cleaned the rear yard storm sewer. Additionally, the construction of Big Creek Detention Basin No. 2 should also improve the flow through this sewer.

<u>City Hall Detention</u> – Begin planning and design for a small detention basin at City Hall to intercept water flowing towards Big Creek Parkway residents.

Big Creek Detention Basins - Currently performing surveying and engineering for Basin No. 3.

- Continue to pursue acquisition of land for Basin Nos. 1 and 2.

Michael Mackay

Department of Engineering

CITY OF MIDDLEBURG HEIGHTS

15700 Bagley Road • Middleburg Heights, Ohio 44130

Matthew J. Castelli Mayor Michael Mackay City Engineer



MIDDLEBURG HEIGHTS 2020 STREETS PROGRAM UPDATE NOVEMBER 9, 2020

Bartholomew Drive - This project is complete.

Middlebrook Blvd. - Fabrizi is working on this project and completion is scheduled for December 17, 2020. Paving, curbs, and underdrains on east side are complete, including intersections. Paving and curbs on west side are complete from Ramona to approximately Galemore. They will continue working on paving on the west side.

Newton Drive, Parklawn Avenue and Byron Boulevard -

Newton - Paving is complete. Punch list items to finish.

Parklawn - Paving is complete. Punchlist items to finish. We received a bill from the contractor for Parklawn and we will forward it to Finance as soon as possible for processing.

Byron - Full depths on north side complete. Beginning work on full depth repairs on south side.

Asphalt resurfacing will be completed in Spring 2021.

Michael Mackay

Department of Engineering

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: J

Jim Herron

Richard Halishak

Kim Kerber

FROM:

Michael Mackay

DATE:

November 9, 2020

RE:

2020 FLOODING INVESTIGATION

The following is an update of the City's plan of action in connection with the three recent rainfalls (March 29, May 15 and September 7, 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 162 homeowners who have reported flooding from these past three storms. Each resident that has reported flooding to the City (and for whom we have a telephone number) has been called by Rick Halishak, our resident flooding specialist, and he is meeting with the residents to discuss their flooding issues and make recommendations to the homeowners.

Approximately 94 residents have been visited by Rick Halishak to date. Additionally Rick Halishak has made site visits with City personnel involving issues that affect an additional approximately twelve residents. Each resident will be provided with a flooding investigation report that will detail the advice provided to the homeowner.

2.0 LOCALIZED FLOOD AREAS

Mackay has been working with R2O on the four chronic flooding areas discussed below. R2O has studied these areas utilizing the sanitary sewer modeling that is now available to the City from NEORSD.

The City administration met with R2O and decided to begin planning and to determine possible funding sources for the following projects. The project priorities will be established after some additional planning and a determination of how each project will be financed.

Newton/Elmdale – begin planning and determine possible funding sources.

Indian Creek – an application for partial funding has been submitted to Ohio Public Works Commission.

Elderdale/Farnum – determine possible funding sources.

The Old Pleasant Valley/Shawnee area will be studied as part of the design of Big Creek Parkway Basin No. 2. We feel the installation of this detention basin should benefit this area and the design of this basin will help us to determine the extent of the benefit. Additionally, the rear yard sewer was recently cleaned by the County.

3.0 BIG CREEK PARKWAY DETENTION BASINS

The City has closed on the acquisition for the properties needed for Basin No. 3 and we are in the planning and design phase for the basin. The acquisitions necessary for Basin Nos. 1 and 2 are continuing.

4.0 ADDITIONAL FLOODING AREAS

The following areas of general surface flooding have also been investigated by Mackay and the City.

- 4.1 Revere Circle
 - The City provided the residents with permission from CEI to install swales to protect their homes from the water drainage off the CEI property.
- 4.2 Ragall Parkway
 - The City presented to several residents on Ragall Parkway a similar solution (i.e. rear yard swales) to water drainage off the CEI property.
- 4.3 Craigmere
 - a) The City is investigating whether it is feasible to add another outlet from the Craigmere area to the existing ditch near the railroad tracks.
 - b) The City will also investigate whether to reinstall a catch basin that was removed nearly 20 years ago.
- 4.4 Grant

The City will continue to monitor and clean the flow restrictors that were installed on the catch basins in this area. The City will also request the County to film and clean any sewers in this area that are not functioning properly.

4.5 Fry Road

Two areas need swales/ditches installed or cleaned in order to provide better yard drainage. The City will need to obtain permission from the landowners prior to any work.

4.6 Bagley Road

The City will have the County film and clean pipes that are draining rear yards and which do not appear to be functioning properly since the Bagley Road widening.

4.7 Pine Valley Apartments

The City has granted permission to the apartment owners to extend the earthen berm along Baldwin Creek.

4.8 First Avenue

The City is working with the City of Berea to install a secondary storm sewer outlet for the area of First Avenue which floods during large rain events.

4.9 City Hall Park Detention Basin

Mackay has submitted a proposal to the City for the design of a detention basin at City Hall which will protect adjoining residents along Big Creek Parkway from storm water runoff from the City park.

Michael Mackay

/pmb