## RECORD OF PROCEEDINGS SPECIAL COUNCIL MEETING - STORMWATER (VIA ZOOM) MONDAY, JULY 20, 2020 – 7:00 P.M. MAYOR WILLIAM G. KOONS PRESIDING

MEMBERS PRESENT: Berger, Canton, Carroll, Galicki, Nairn, Porter

OFFICIALS PRESENT: Fiscal Officer Romanowski, Street Commissioner Alder, Engineer

Haibach

VISITORS: Mitchejm (Davey Resource Group), Kim Brewster (CRWP), "Jim",

Allison Kaas, "97103506665", Angie Berger, Bruce Hendricks, "Casey", Eric Doland, Grace Yarcusko, Greg Heilman, "iPad", "Jessica K", Kelly

Kimball, Lisa Salyers, Marty Williard, Kent Kristensen, Michael

McHugh, Todd Kruse, "Mary", Matt Valencic, Barbara Bacher, Chris Bell, "SutliffDo", "Elke", Jessica Ross, Susan Morgan, 14403840938, "Julie's Ipad" Nina Lalich, Ricardo Pineiros, "Richar", Stan Plante, Steven W. Waugh, "rebloch", Mark Jackson, Joan Hollis, John Novak,

Kathy Quinn, Kathleen Mylecraine, Gregg Dickson, Jen Lyndall, "GDY1", "A1291253", "Brian", Andy Hitchcock, "BQUA"

The Mayor called the meeting to order at 7:04 and stated that the meeting was a stormwater update. There would be three presentations and would not have a lot of participation due to the large size of the group. Email addresses for the four speakers would be provided to the participants for questions.

The Mayor utilized a Power Point presentation. He addressed the last four heavy rains that occurred in South Russell, two of which happened this year. The Mayor reported that in 2004, the Village paid \$470,000 to install a large area to catch and retain stormwater on Chelsea Court. At the Bainbridge Life Center, the Village spent about \$1,000 to put in a device to catch the water coming through their retention pond. It greatly reduced the stormwater that would flow onto the Lantern property. The Village also applied for a grant to purchase a sensor to be placed in the culvert near Gurney School to monitor the water that flows south into Sugarbush Dr.

The Mayor introduced Kim Brewster, Chagrin River Watershed Partners (CRWP) as the first presenter. First, the Mayor described the flow of water through the Village. Brewster provided an overview of the Chagrin River Watershed. She stated that despite being a high-quality watershed, it is impacted by development activities which can increase flooding, erosion, and cause water quality problems. In 1996, 16 communities came together to help protect the resources in the Chagrin River Watershed as communities develop and grow. CRWP assists with grant writing and is currently assisting the Village with grant writing and project implementation for two projects. Brewster described the watershed as it relates to South Russell.

Brewster described stormwater and what causes it, to include impervious surfaces and different types of landscape management as well as changes in rainfall patterns. The stormwater can result in flooding, erosion, pollutants, damage to infrastructure, and degradation of streams and water resources. Brewster

described what residents can do to address the issues. Native plantings with longer root structures for landscaping, establishing a "no-mow" zone, installing a rain garden, planting trees, and lawn aeration are some of the strategies homeowners can use. Disposing of yard waste into streams or ravines is not recommended. CRWP also recommends pond management, to include dredging. She advised that some ponds were created for aesthetic purposes but could be retrofitted to assist with stormwater retention or storage. Brewster also suggested that in some situations removal of the pond or restoration of the pond to a stream or wetland, is advisable and may require a permit.

Judith Mitchell, Davey Resource Group, advised that she was involved with two Village projects which were funded in part by the Ohio Environmental Protection Agency (EPA) non-point source 319 grant program. One project is next to Village Hall and the other is in the Village park. The project involved restoration of a stream next to Village Hall for a portion of the stream that had lost flood plain connection. She described the watershed for the site, and stated the water came primarily from Kensington Green from residential development. The water ultimately drained offsite through a culvert under Chillicothe Rd. through Maple Springs Drive and Southwyck Drive and ultimately to MacFarland Creek. The project goals were to restore the stream, ¼ acre of wetland, which would be excavated to increase flood plain storage; to address the appearance of the stream; decrease the erosion; increase the habitat; to stop mowing in the area; and revegetate the stream corridor and the surrounding wetland area. The overall goal was to provide an ecologic lift.

Through the Power Point presentation, Mitchell described the design of the project to included creating meanders and reconnecting to the flood plain to increase storage as well as reintroducing native plantings. The goal was to provide habitat, interspersion, and diversity, but also to include attractive species. Mitchell advised that the goal was exceeded in that 450 linear feet of stream were restored, and .3 acre was restored.

At the Village Park site, the goals were to try to improve wetland in the fields, vegetative diversity, to improve interspersion of plant communities, increase stormwater storage, and provide an ecologic lift to the park. The site consisted of .035 square mile, which drains in from the east, west, and south and goes north to Spring Dr., Alderwood Dr., and Southwyck Dr. It also drains to MacFarland Creek. Utilizing the PowerPoint presentation, she described the project. The project included creation of a berm as well as the installation of an Agri Drain, which would allow for water level control. To enhance the park for the public, 180 linear feet of elevated path was installed as well as microtopography in the wetland for habitat value improvement. On completion of the project, trees were planted to create a demarcation of the edge of the wetland restoration area so that long term, the area would not be mowed. In total, an acre and a half of potential wetland was created as well as stormwater storage area.

The Engineer stated in 2018, the Village engaged the Engineer to explore the causes of severe flooding the Village was experiencing in the North Central Drainage region, specifically around the "red ranch" home on Chillicothe Rd. just north of Manor Brook Dr. He explained there is a large stormwater channel that flows through the area. The Engineer found that the existing stormwater channel that drains westward under Chillicothe has a 43' by 68' elliptical concrete culvert, which was determined to be sized correctly. Just south of this, there was an old existing 15' culvert that had 29 acres that were tributary to this culvert crossing. The culvert needed to be increased to a 36' culvert. The Engineer described flooding that occurs on the east side of Chillicothe Rd. with big rains, but explained that this actually acts as storage, preventing the water from rushing beneath Chillicothe Rd. into Fox Run and

Sugarbush and ultimately Chelsea Ct. To be more responsible, the Village considered providing an equal amount of storage on the west side of Chillicothe Rd. and replacing the culvert. This would allow the stream on the west side of Chillicothe the capacity to accept the additional water, and it would widen the flood plain to an extent that it will equal or increase the amount of storage on the west side as compared by what happens by default on the east side. The goal is to have a net zero impact for areas downstream of this when the 15' culvert is eventually replaced.

The Engineer described a similar successful project with which he was involved in Madison, Ohio, utilizing the Power Point presentation.

He advised that the Village with the assistance of CRWP obtained a 319 grant to cover the \$460,000 anticipated project costs. The Village's share of this would be \$184,000. The project is to restore and enhance 1,360 linear feet of stream on the west side of Chillicothe Rd., to widen the flood plain to slow the velocity and allow the water to pile up safely while eliminating the flooding on the east side of the road. The design has just started, and construction should begin by 2021.

The Mayor stated that at the next Council meeting on August 10<sup>th</sup>, Charles Hart from the United States Geological Survey (USGS) would be presenting information about the water wells that are monitored in the Village. The meeting would be via Zoom. The Mayor provided contact information to the participants through the Power Point presentation.

The Mayor stated that Council would do everything possible to find funding sources to solve some of the flooding problems. He advised that the Village could not solve them all and would not try to do so. It would, however, do everything possible to help every neighborhood.

**ADJOURNMENT:** The meeting was adjourned at 8:00 p.m.

William J. Koons William G. Koons, Mayor

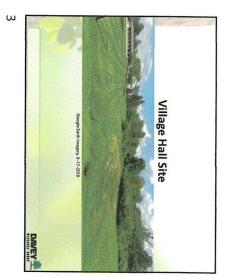
Danielle Romanowski, Fiscal Officer

Prepared by Leslie Galicki



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Village Hall Site – Pre-Construction Overview On-site stream through wooded corridor, channelwas wider was stable

Village Hall – Watershed Information

Village Hall Site - Project Goals

Restore 200 linear feet of

stream

 Increase floodplain storage Restore 0.25 acre of wetland
 Address impairments of stream

Discontinue habitat

modifications

Revegetate the area

As the stream drained west, channel- had wooded corridor was connected to adjacent floodplain had in-stream habitat

 had minimal to no habitat
 had no floodplain storage
 lost all floodplain vegetation lost floodplain connection

" narrowed eroded

had high coverage of non-native vegetation

4

First receiving stream: unnamed tributary which drains to McFarland

Drainage area (watershed) of site: 0.09 square miles Drainage continues west through Maple Small stream drains west through the project area and off site through a culvert under Chillicothe Road Water drains onsite from the southeast, Springs Drive and Southwyck Drive primarily from Kensington Green Land covers within watershed primarily esidential with 85% developed

DAVEY

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Provide an ecologic lift

DAVEY

interspersion, and nativeness Increase vegetative diversity,







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## Village Hall Site - Post-Construction **Goals Achieved**

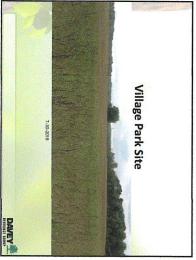
- Bank stabilization activities were implemented.
- 450 linear feet of stream restored (Goal 200 lf)
   0.32-acre wetland area created (Goal 0.25 acre)
- 0.32-acre floodplain storage area created (Goal reconnect to floodplain)
- Revegetated 0.43 acre (Goal 0.25 acre) with native woody and herbaceous plants
- Mowing has been discontinued
- Non-native vegetation has been treated
   Ecologic lift achieved!
- Water quality improvement
  In-stream and riparian habitat increased and improved

- tation diversified and dominance of native plants community interspersion

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DAVEY

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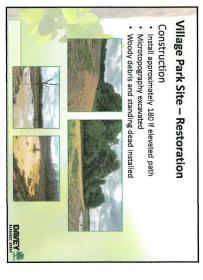
Wetland Restoration Project Village Park Site - Pre-Construction Overview Existing wetland impacted by regular mowing, low vegetative diversity, and no interspersion. Overall park has low plant community interspersion DAVEY









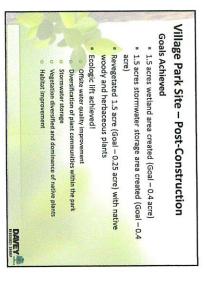


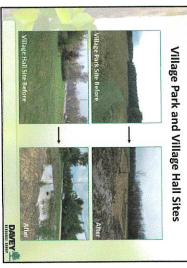
Village Park Site – Restoration

Planting

• Seeded with native wetland seed mix
• Stabilized with straw
• Large balled & burlapped trees planted
• Herbaceous native wetland and pollinator plugs planted

S







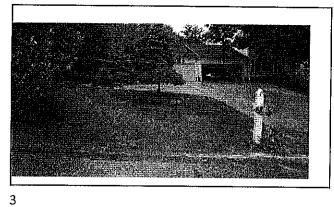
## SRV Stormwater Meeting, July 20th 7:00 p.m.

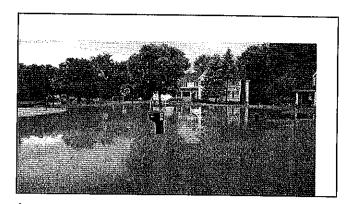
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- We are busy admitting residents Into the Zoom meeting.
- We will start the presentations as soon as possible.

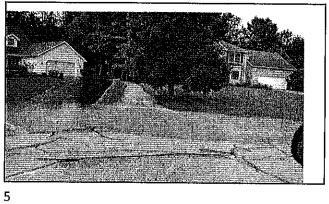
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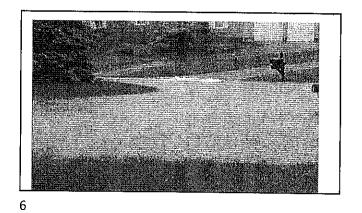
In the meantime, the following are pictures submitted to us from residents showing stormwater issues in their homes and neighborhoods.

Stormwater in SRV

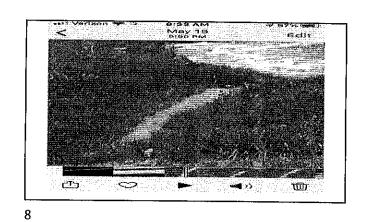




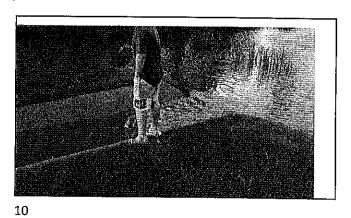




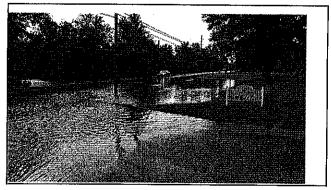


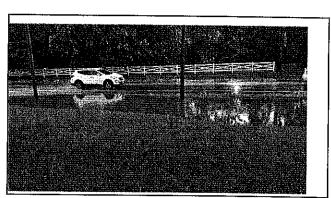




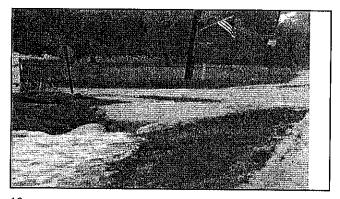


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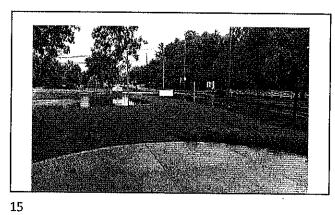


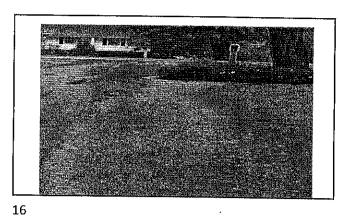
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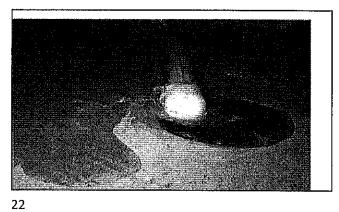
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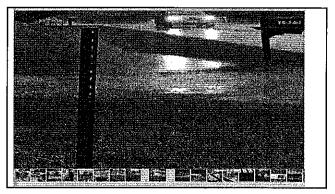


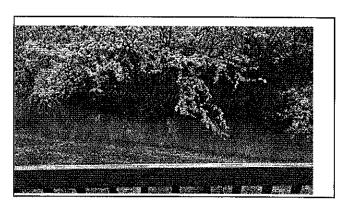
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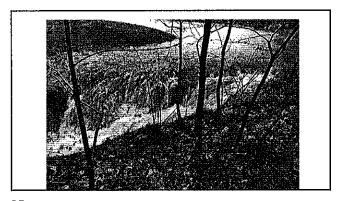


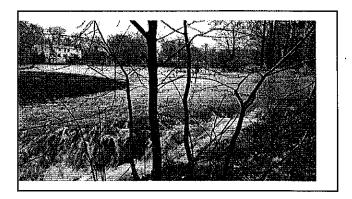
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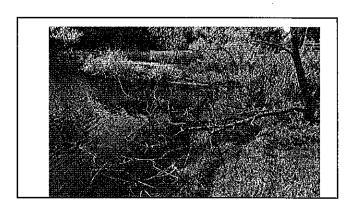
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