

Public Works Committee**Meeting Date:** 09/19/2023**Primary Strategic Plan Initiative:** Not Applicable**Title:**

Review Drainage Concerns at 5725 180th Lane NW

Purpose/Background:**Purpose:**

The purpose of this case is review drainage concerns of the property owners at 5725 180th Lane NW. Staff will also present and discuss optional improvements to address their concerns and will seek direction for further action.

Background:

The property owners at 5725 180th Lane NW, Scott and Lisa Monserud, shared their drainage concerns with City Staff during the design and construction of City Improvement Project #19-01, Ford Brook Estates Street Reconstructions. In summary, they purchased this property over 25 years ago and have had concerns about stormwater runoff backing up into the property from the drainage ditch located within City right-of-way along 180th Lane.

When the street was reconstructed in 2019, minor drainage improvements were completed as part of the project. At the time staff informed the property owners that if they wanted the City to address their drainage concerns in greater detail following completion of the project Staff would explore options and present them to the Public Works Committee for review and consideration of further action.

Staff has since identified two primary options.

1. Option 1 - Fill the swale in between the ditch and the shallow pond east of their home that allows water to back up onto their private property. If this option is pursued the fill would have to be designed to allow runoff from the back yard to drain south into the drainage ditch unimpeded. Estimated costs for this option could approach \$25,000 depending on the scope of the work.
2. Option 2 - Construct an underground storm sewer system to direct runoff from the ditch to Ford Brook. Estimated costs for this option total \$183,000 if completed as a City Improvement project. Below is a cost breakout.

Option 2 estimated project costs -

48" Inlet Structure w/HC casting	\$ 10,000
4 x 48" Storm MH w/casting	\$ 30,000
18" Flared End Section w/ grate	\$ 3,000
650 LF 18" RCP	\$ 60,000
2 Driveway remove & replace	\$ 6,000
83 LF Culvert Removal	\$ 1,200
0.25 Acre Seeding	\$ 1,500
155 CY Topsoil	\$ 8,000
Erosion Control	\$ 1,200
Traffic Control (TH 47)	\$ 5,000
Mobilization	\$ 15,000

Construction Total	\$140,900
Contingency (10%)	\$ 14,090
<u>Indirect (18%)</u>	<u>\$ 27,898</u>
Total Project	\$182,888 è say \$183,000

A MnDOT right of way permit would be required to construct this project.

A LRRWMO permit would also likely be required since work will likely be required in close proximity to Ford Brook.

Permission from the City of Nowthen would also be required to construct this project.

Staff have visited the site numerous times since 2018 when Improvement Project #19-01 was first being scoped. Staff have taken numerous pictures of the streets, drainage ditches, driveways, culverts and abutting properties. Staff will share some of these pictures during the meeting.

The property owners have also taken and shared many pictures and videos with Staff, some of which will also be shared during Staff's presentation.

Drainage generally runs north to south, towards 180th Lane NW, across the property. Attached is a figure showing 2023 aerial photography with 2-foot contours.

Attached is a figure that shows the proposed storm sewer system outlined in option 2.

Notification:

N/A

Time Frame/Observations/Alternatives:

Timeframe:

Staff anticipates up to 45 minutes will be required to present this case and respond to questions.

Observations/Alternatives:

The property owners received notice of this meeting and a link to the Public Works agenda, including this case, and are planning to attend the meeting in person.

Funding Source:

Dependent on discussions and direction from the Public Works Committee.

Recommendation:

Staff has no recommendations to offer at this time.

Outcome/Action:

Dependent on discussions and direction from the Public Works Committee.

Attachments

Option 2 Project Layout
2023 Aerial w 2' Contours

Form Review

Inbox	Reviewed By	Date
Brian Hagen	Brian Hagen	09/14/2023 03:20 PM

Form Started By: Bruce Westby
Final Approval Date: 09/14/2023

Started On: 09/12/2023 01:38 PM

5725 180th Ln Storm Sewer Improvements



