April 19, 2023

Owner/Resident
<Address>
McLean, VA, 22101

Re: Little Pimmit Run Stream Restoration and Sanitary Sewer Realignment Project Decision

Dear Owner/Resident:

The purpose of this letter is to inform you of how Fairfax County intends to proceed with the proposed Little Pimmit Run Stream Restoration and Sanitary Sewer Realignment Project. More background about the project is available from the project webpage:

> fairfaxcounty.gov/publicworks/little-pimmit-run-chesterbrook-stream-restoration-sewer-alignment

Throughout the County's involvement with the community on the project, staff made it clear that the County does not have the option of leaving the condition of the sanitary sewer unaddressed. While the stream restoration has many benefits, it is not mandatory that it be undertaken.

We had hoped that by working closely with the community, we would find a design for both the sanitary sewer realignment and the stream restoration that would be feasible and acceptable to property owners. Unfortunately, that did not happen. As a result, we will move ahead with only the sewer realignment project.

Since 2020, Fairfax County's Department of Public Works and Environmental Services has been working on the design of the Little Pimmit Run Stream Restoration and Sanitary Sewer Realignment Project ("project") that would be constructed in two phases. The design development included multiple meetings with the community beginning in April 2021.

In November 2022, I sent a letter highlighting two design approaches for the project: an option that would restore the stream and protect the sanitary sewer, and an option to relocate the sanitary sewer. The letter was sent to and requested feedback from property owners who would need to provide easements for one or both options to occur.

In December 2022, the County began meeting with these property owners on the options and determine if easements would be conveyed to the County. The County only received input from 70% of those property owners, and there was not sufficient support for the stream restoration option.

On February 24, 2023, an informal group of six landowners submitted a set of concepts as a third potential "hybrid" option. The County evaluated the proposed hybrid option concepts which contained multiple conflicting directives and could not be implemented as suggested. The proposed hybrid option

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asked the County to raise the bed of the stream to protect the sanitary sewer in place, widen the stream to accommodate the raised stream bed, limit floodplain encroachment on private property, focus on stabilizing stream banks using riprap or walls, and to preserve existing healthy trees. Raising the stream would increase floodplain impacts to adjacent property owners. Widening the stream would increase tree loss. Using riprap would not provide the desired improvement to the ecological functions of the stream, and protecting additional existing trees would jeopardize the stability of the restored stream. More information on the County's analysis of the hybrid option is in Attachment 1 to this letter.

The County agreed to adjust the stream restoration design based on community feedback to the maximum extent practicable. As described in Attachment 1, the fundamental concepts of the proposed hybrid option such as protecting trees, protecting the sewer, restoring the stream, limiting floodplain impacts to adjacent property owners, and not increasing the flood risk were considered. Staff met with property owners and agreed to make design changes that would save specific trees. Access road and staging area locations were also reviewed, and staff agreed to make adjustments to reduce tree and property impacts. The existing stream restoration plan shows the County protecting the sanitary sewer in place, removing the need to add the 8-inch sanitary and realign the 21-inch sewer in Phase I.

Despite staff agreeing to make changes to the design, an insufficient number of landowners were willing to donate easements to Fairfax County to enable the stream restoration project to occur. However, the County cannot wait longer before taking action to protect the exposed sanitary sewer. Therefore, Fairfax County will proceed with the necessary sanitary sewer project without the additional stream restoration.

The County will now proceed with Attachment 2, the sanitary sewer realignment option which entails removal of sanitary sewer stream crossings, installation of a new 8-inch diameter sewer along the west bank of Little Pimmit Run, and relocation of a portion of the 21-inch diameter sewer along the east bank where it has been exposed by stream erosion.We estimate that the design will be completed as early as fall 2024, and construction would therefore begin as early as spring 2025. Once the design has progressed far enough to identify the easements that will be needed, our Land Acquisition Division representatives will contact property owners to purchase the necessary easements. We will work with affected property owners to the extent possible to mitigate the impacts the sanitary sewer realignment will have to their property.

For additional information about the sanitary sewer project please contact Frank Roberts at 703-324-6888 or Franklin.Roberts@fairfaxcounty.gov.

Sincerely,

Christopher Herrington, Director
Department of Public Works and
Environmental Services

Enclosures: As Stated

cc: John Foust, Supervisor, Dranesville District, Fairfax County
Franklin Roberts, Project Manager, Wastewater Design and Construction Division, Department of Public Works and Environmental Services (DPWES)
Fred Wilkins, Engineer IV, Stormwater Planning Division, DPWES
Sarah Guy, Sr. Right-of-Way Agent, Land Acquisition Division, DPWES

Attachment 1:

County Analysis of Hybrid Option

Concerns with easement. Sanitary and Stormwater easements serve a vital component of County projects and are required per the County's Public Facilities Manual. Projects implemented for stormwater are required to perform a floodplain analysis to determine if there are any impacts in the floodplain resulting from changes made to address the eroded channel. Where there is no easement or insufficient easement, the County would need to acquire enough easement to contain the limits of the 100-year storm before the project can be approved. Based on our communication with property owners, the County did not receive sufficient commitment to granting easements to allow stream restoration. Temporary easements and permanent sanitary sewer easements allow the initial construction of the sewer infrastructure and future access in the event repair or maintenance is needed. Once the County has made improvements, the easements provide the County with the ability to maintain the stream improvement in the future. The easement would enable the County to repair the improvement as well as address the conditions that led to any damage. Floodplain and Storm Drainage easements also protect the flow of water in the floodplain and prevent any development from interfering with the flow of water which could worsen flooding on adjacent properties. Additionally, permanent sewer easements prevent structures from being constructed over the sewer, which could damage sewer infrastructure or block access to the sewer infrastructure when maintenance or repair is necessary in the future.

Keep existing sanitary crossings in place using stream restoration techniques. This was the foundation of the stream restoration design presented by the County. From a very early stage we worked to minimize adverse impacts and the need for wholescale sanitary sewer realignment by demonstrating that adequate sanitary protection may be provided through stream restoration design techniques. This led to concerns over allowing water to access the floodplain by raising the stream bed to provide protection. Consistent with the desire to diminish flooding, the design was developed such that it provided the minimal required cover over the sanitary pipes while providing enhanced channel stability. The sanitary crossing locations included the installation of in-stream grade control structures. To offset potential increases in flooding, the design called for strategic grading of existing stream banks to offset lost cross-sectional area and lessen potential flooding. Bank grading was minimized to the greatest extent practicable to reduce tree loss, but the limited grading footprint results in an expansion of the modeled 100-year water surface extents. The stream restoration design from its inception made significant compromises on channel depth and width, acknowledging the concern for impacts to existing mature trees and overbank flooding. The proposed design represented the minimum footprint recommended to establish a reasonable degree of channel stability while minimizing adverse impacts such as tree removal and excessive overbank flooding.

Remove the 21-inch sanitary sewer. The stream restoration design sought to realign the channel within the existing erosional area to allow for the reestablishment of cover over the 21" sanitary sewer, while maintaining it in its current configuration. The design shifted the main channel off

of the 21-inch sewer, providing long term protection for this infrastructure. The existing sanitary sewer would have remained in close proximity to the stream channel in some locations but would be better protected by bank grading to reestablish cover over the currently exposed sewer. Due to concerns over tree loss, portions of the channel remained severely constrained by the existing sanitary sewer on the east bank and desired tree preservation. Though additional benching was recommended in areas to enhance stream stability and alleviate flooding issues, preventing tree loss was prioritized. Tree loss has been limited to the greatest extent practicable in the County's proposed designs.

Focus on streambank stabilization and a healthy riparian buffer. From the beginning, ecological enhancement has been a fundamental principle of the project. The interplay of site constraints and project goals is presented in depth within the Concept Plan and demonstrates how issues and concerns raised have been considered throughout the design development process. The proposed stream restoration project would have allowed for the removal of trees currently threatened by channel erosion, while calling for the planting of a diverse mix of native plantings to expand the native riparian buffer - a buffer that currently has significant issues with invasive species and encroachment. Hardened armoring practices such as rock walls or riprap are sometimes necessary where infrastructure or tree preservation is prioritized. The design proposed limited use of such armoring practices, mainly because these approaches do not allow for as much revegetation and restoration of ecological function. If armoring is designed in a manner such that the channel cross section area and capacity are maintained, the potential damage to the critical roots of nearby bank trees increases. The design initially reduced the scope of channel grading based on earlier conversations with the property owners to protect existing trees.

Sanitary Sewer Realignment Project

GOLDEN CT
CHESTERBROOK RD
MADDUX LN
QUAIL HOLLOW CT
CHESTERBROOK VALE CT
JAMES PAYNE CIR
CHESTERFORD WAY
WOODLAND TER
BRIAR RIDGE RD
Uncovered 21-inch sewer
STILL WATER WAY
SOLITAIRE LN
SOLITAIRE WAY
CORLAND CT
CALLISTA LN
BRIAR RIDGE CT
DUMBARTON ST
FRANKLIN PARK RD
N DUMBARTON ST
Sewer Crossing X5
Sewer Crossing X6

Existing Today

- Parcels
- Sewer Manhole
- Sanitary Sewer
- Stream

Proposed

- Sewer Manhole
- 8-inch Sanitary Sewer
- 21-inch Sanitary Sewer

N

0 50 100 200 300 400 Feet

Sanitary Sewer Realignment Project

Existing Today

- Parcels
- Sewer Manhole
- Sanitary Sewer
- Stream

Proposed

- Sewer Manhole
- 8-inch Sanitary Sewer
- 21-inch Sanitary Sewer
- Restored Stream

Sewer Crossing X1

Sewer Crossing X2

Sewer Crossing X3

Sewer Crossing X4

SUGARSTONE CT
MERIC RD
COLLEEN LN
LADY BIRD DR
INGEBORG CT
LABURNUM ST
IRONWOOD DR
COPELY LN
BALSAM DR
KIRBY RD
SOFTWOOD TRL
HARDWOOD LN
WOODACRE DR
CRESTWOOD LN
OAKDALE RD
FARVER RD
DRIVEWAY
MADDUX LN
TOMPKINS DR
CRESTW OD LN
WOODLEY RD
CHESTERBROOK RD
CHESTERBROOK VALE CT
JAMES PAYNE CIR
N ALBEMARLE ST
WOODLAND TER
WOODMAN DR
FOREST LN

N

0 75 150 300 450 600 Feet