

City of Northfield

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Legislation Text

File #: Res. 2018-138, Version: 1

City Council Meeting Date: December 11, 2018

To: Mayor and City Council

City Administrator

From: David Bennett, Public Works Director/City Engineer

Sean Simonson, Engineering Manager

Subject:

Consider Resolution Accepting Feasibility Report and Call for Improvement Hearing - 2019 Street Reclamation Project.

Action Requested:

The Northfield City Council considers adopting the attached <u>Resolution</u> Accepting Feasibility Report and Call for Improvement Hearing - 2019 Street Reclamation Project.

Summary Report:

The feasibility report has been completed, and finds that the 2019 Street Reclamation Project is necessary, feasible, and cost effective. See attachments for the project process (Attachment 2) and location map (Attachment 3). A link to the feasibility report is below:

https://www.ci.northfield.mn.us/1239/2019-Street-Reclamation-Project

At the October 16, 2018 City Council meeting, Council passed Resolution 2018-109 which directed staff to prepare a feasibility report for the 2019 Street Reclamation Project. The feasibility report provides costs for all segments of the project. The project segments are as follows:

- Blue Stem Court
- Covey Court
- Eklund Court
- Grundhoefer Court
- Hackerson Court
- Kimble Court
- Nelson Court
- Simione Court
- Wilson Court
- Zanmiller Drive from Meldahl Lane to Gill Lane
- Gill Lane from Zanmiller Drive to Lockwood Drive
- Lockwood Drive from Meldahl Lane to Gill Lane
- Orchard Street from Third Street to Fifth Street
- Plum Street from Third Street to Fifth Street

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- Poplar Street from Fourth Street to Fifth Street
- Forest Avenue from Lincoln Street to Fifth Street
- Forest Avenue Loop
- Third Street from Railroad Tracks to Forest Avenue
- Fourth Street from Odd Fellows Lane to Poplar Street

The next step in moving this project forward is for the City Council to receive the feasibility report and call for a public hearing on the improvements.

Existing Conditions/Proposed Improvements

The properties adjacent to the project area (Attachment 5) consists of a combination of single-family properties, multi-family properties, commercial properties and public and institutional properties. The project area is fully developed and, in most cases, there are mature trees. Sidewalks exist in portions of the project, but are missing in several areas (Attachment 3).

All streets within the project area are classified as local roadways, with the exception of Lockwood Drive, which is classified as an Urban Collector. Along with public utilities in the project area, other private utilities include overhead and underground power, gas, telephone, and cable television lines.

Streets

All of the streets in the project area are bituminous with concrete curb and gutter. The widths vary from 25' to 45' face of curb to face of curb. All streets are aged and exhibit wear and distress to different degrees. The pavement is generally in fair to poor condition with significant transverse and longitudinal cracking, alligator cracking, potholes, and rutting. Some street segments have significant settlements, which allow water to pond, infiltrate, and weaken the subgrade. This has led to frost heaving, and additional transverse cracking during freeze-thaw cycles.

Full depth reclamation is planned for the streets on all segments of the 2019 Street Reclamation Project. No change in horizontal alignment is planned, and the curb and gutter, which will have as-needed spot repairs, will remain in place.

In addition to the street improvements, partial/spot retaining wall replacement is anticipated as part of this project. Due to the age and wear of the existing walls in the project location, it is anticipated that portions of these walls will need to be removed and replaced. The areas where this work is being considered is along Orchard Street (between Third and Fourth Street), Plum Street (between Third and Fourth Street), and Third Street (west of Plum Street).

Watermain

As-built information indicated there is currently 4-inch to 8-inch cast iron pipe (CIP) and ductile iron pipe (DIP) within the project area. It will be proposed to upgrade the existing 4-inch CIP on Orchard Street (Fifth Street to Fourth Street) and Fourth Street (Orchard Street to Plum Street) with a new 8-inch DIP watermain. Another improvement to the water system includes installing an 8-inch watermain on Plum Street (Fourth Street to Fifth Street) to connect the missing watermain system loop. Lastly, the existing 8-inch watermain on Third Street (Odd Fellows Lane to Orchard Street) will be replaced with a 12-inch watermain to support future capacity needs outlined in the City's Comprehensive Plan.

Sanitary Sewer

Work on the sanitary sewer as part of this project includes adjusting the sanitary sewer

castings and covers to provide a smooth/drivable street surface in conjunction with the street resurfacing portion of the project. Minor grouting and concrete patching of the structures may also be completed to prevent infiltration/exfiltration in/out of the existing sanitary sewer manhole. City Staff is working on completing the remaining sanitary sewer evaluations, but only minor repairs are anticipated at this time.

Storm Sewer

The current pipe network consists of Reinforced Concrete Pipe (RCP) with sizes ranging from 12" to 24" in diameter. The catch basins in the project area consist of precast concrete and block structures with 2' x 2' or 2' x 3' castings. The systems have multiple outfalls to local treatment basins, but all ultimately discharge to the Cannon River.

The conditions of the treatment basins will be evaluated during final design to determine if any maintenance activities are required. At this time, it is anticipated that all castings will need to be replaced/reset and some structures may be in need of grouting or sealing to better contain the storm water runoff in this system.

Sidewalks/Pedestrian Improvements

The proposed project includes sidewalk gaps that have been identified by Staff along the proposed project area (Attachment 3). These areas include Armstrong Road/Forest Avenue (from TH 19 to Lincoln Street), Fourth Street (from Odd Fellows Lane to Poplar Street), Orchard Street (south of Fourth Street W), and Plum Street (South of Fourth Street W). Each improvement will connect important portions of the pedestrian

system with existing sidewalk locations. There are no sidewalks existing in these areas, so it is likely there will be some tree and landscaping removals to accommodate the new walk. The design will be adjusted to minimize these removals as much as possible.

Additionally, the 2009 Safe Routes to School study adopted by City Council at the February 16, 2010 meeting also identifies a proposed sidewalk on Zanmiller Drive (from Meldahl Lane to Gill Lane).

In addition to the above-mentioned sidewalk improvements, existing sidewalk pedestrian ramps will be updated to comply with the latest Americans with Disabilities Act (ADA) requirements, and spot repairs of failing sidewalk sections will be completed.

Trail System Plan

The City's Master Bike & Pedestrian Plan does call for shared use lanes on Fourth Street, Orchard Street, Armstrong Road/Forest Avenue, and Lockwood Drive (Attachment 6). These lanes will accommodate bicycle traffic along with vehicular traffic. These lanes will be indicated with appropriate pavement striping.

Alternative Options:

The City Council could delay this project; however, the street pavements in the area will require repair work in order to keep this area in a marginal condition for traffic.

Financial Impacts:

This project will be funded through a variety of sources, including assessments, enterprise funds, Municipal State-Aid (MSA), and bonding. See below of the proposed costs and funding at the time of feasibility:

ESTIMATED TOTAL PROJECT COSTS	
	ESTIMATED
	COSTS
Street	\$1,933,518
Storm Sewer	\$47,010
Sanitary Sewer	\$14,000
Watermain	\$239,565
Subtotal	\$2,234,093
Art (1%)	\$22,341
Subtotal with Art	\$2,256,434
Contingency (15%)	\$338,465
Construction Total	\$2,594,899
Overhead (15%)	\$389,235
PROJECT COSTS	\$2,984,134

TOTAL PROJECT FUNDING	
FUNDING SOURCE	ESTIMATED
	FUNDING
Bonding	\$1,050,568
Assessments	\$677,347
Storm Fund	\$62,792
Sanitary Fund	\$18,700
Water Fund	\$319,993
MSA	\$854,733
TOTAL FUNDING	\$2,984,134

A Benefit Appraisal will be performed by a licensed certified general real estate property appraiser. This Benefit Appraisal calculates an opinion of the special value benefits, if any, accruing to the subject properties resulting from the proposed Reclamation Project. Staff recommends using a combination of a *Front Foot Method* and *Per Lot Method* for calculating assessments. Staff is scheduled to meet with the appraiser prior to the completion of the benefit appraisal to ensure a variety of lots are appraised to obtain a suitable cross section of properties that are included in this proposed project. Funding will be updated when the Benefit Appraisal is complete.

Tentative Timelines:

See attached Project Process (Attachment 2).