

INITIATION & ISSUES:

The Wood End Drive project was initiated by the Engineering Department as part of the City's street reconstruction program and Capital Improvement Program to update aging infrastructure and address several issues including watermain improvements, drainage problems and sanitary sewer problems.

The following are existing features that present issues in determining the feasibility of the project and are addressed in this report:

- Undersized watermain
- Poor condition of existing pavement
- Surface rainwater drainage and storm sewer issues
- Existing landscaping, retaining walls, driveways.
- Sump pump discharge
- Sanitary sewer and watermain deficiencies
- Existing mature trees

EXISTING CONDITIONS:

The roadway and utilities in this neighborhood were originally constructed in the early 1950's. The roadway width varies from 28-ft to 32-ft. General ongoing maintenance has occurred throughout the years to minimize cracking and potholes. The pavement throughout this street is at the end of its useful life while the costs to maintain and repair the roadways are steadily increasing. Overlaying or seal coating the pavement is no longer feasible or cost effective.



Photo 1. Existing Pavement Condition



Photo 2. Cracking and Patches

The street grade is steep from France Avenue to the cul-de-sac at the west end. The street has a rural cross section without curb and gutter. However, there is a set of storm sewer catch basins that take water from Wood End Drive and some of France Avenue.

Watermain and service breaks haven't been an issue but water quality and pressure has been a concern to the residents and this is due to the watermain being only 1.5" diameter at the very west end (cul-de-sac) The watermain is also on a dead end system . The existing watermain on Wood End Drive was installed in the early 1950's. The main is undersized for distribution of water to 4 homes and does not provide water volumes for proper fire protection.

Sanitary sewer blockages have not been reported with much frequency. However, the sanitary sewer was inspected using a televising system in December of 2007 and has shown no areas the need improvement.

Most of the private utilities in this neighborhood are overhead (with the exception of the gas lines). There is one decorative acorn style street light that is need of upgrading.

No sidewalk is present along Wood End Drive. All pedestrian movements currently occur on the street network. The roadway serves just 12 homes and is a dead end.

RESIDENT INVOLVEMENT: City staff initiated the project by sending out an informational newsletter and questionnaire to the 12 residents of the neighborhood on April 24, 2008, to inform them of the project. Seven of the questionnaires were returned, for a 58% return rate. The results to the survey are shown in Figure 2.

WOOD END DRIVE - Survey Results from April 24, 2008 Questionnaire Sheet

Total Surveyed	Surveys Returned	Lighting Style Preference			Prefer New Sidewalk	
		Basic	Decorative	No Change	Yes	No
12	7	0	1	6	0	7
% of Returned Surveys	58%	0%*	8%*	50%*	0%*	100%*

* Percentages are based on responses of returned surveys and may not equal 100% if survey questions were not answered on questionnaire.

Figure 2. Survey Results from April 24, 2008 Questionnaire

A neighborhood informational meeting was held on May 22, 2008 to provide information, gather data and answer questions the homeowners had relating to the project. We also invited the residents who live on Woodland Circle and Woodland Lane to the meeting as there is a potential project for their street. Four residents attended this meeting, representing approximately 3 households. Input from this meeting and comments received throughout the planning of this project have been included in this report as attachments in appendix A-I. There has been very little correspondence from residents on this project.

PROPOSED IMPROVEMENTS:

Staff has analyzed the feasibility of reconstruction of Wood End Drive and has addressed the various components of the project. The following information is staffs recommendations for this project:

- Removal of the bituminous roadway section along the street and replacement with 8” of aggregate base material and 4” of bituminous pavement.
- New watermain along at the cul-de-sac and between 4012 and 4016 Wood End Dr. and under Minnehaha Creek to Woodland Lane to create a “looped” system.
- Construct bulkhead style concrete curb and gutter through out the neighborhood.
- New driveway aprons to tie-in to the new curb and gutter.
- Construction of the storm sewer system including additional catch basins and a stormwater treatment structure.
- Upgrading fire hydrants.
- Installing sump pump drains where needed.

The proposed design acknowledges and addresses as many comments and concerns by residents of the neighborhood as possible while still maintaining the desired minimum standards of the engineering and public works staff.

**RIGHT-OF-WAY
& EASEMENTS:**

The majority of the right-of-way throughout the streets are 50 feet wide. All proposed improvements stay within this right-of-way and existing easements. In order to facilitate the installation of a watermain to loop under Minnehaha Creek a 10-foot utility easement was purchased from two homes on Wood End Drive.

PROJECT COSTS:

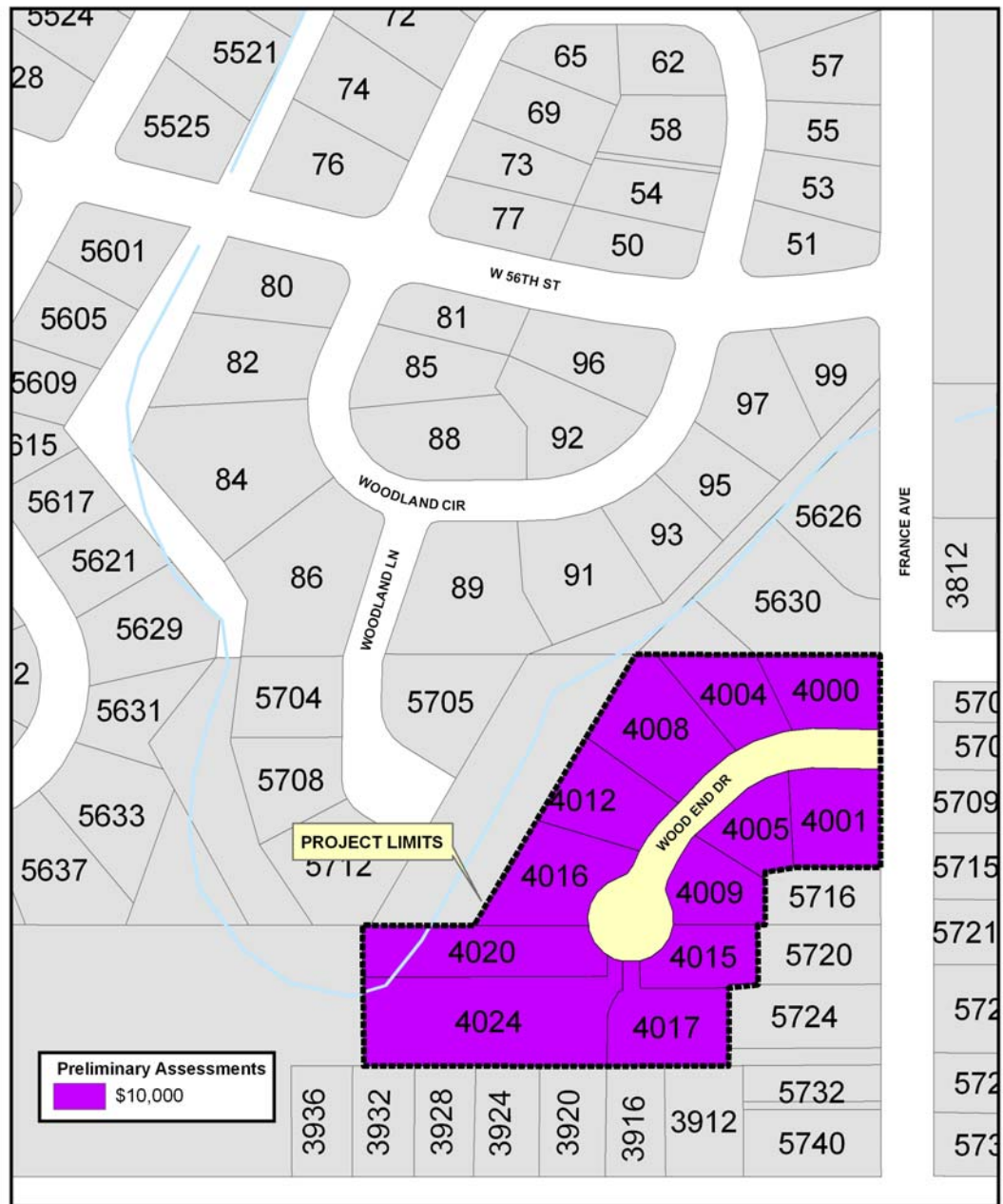
The total estimated project cost is \$255,000 (see Table 1). The total cost includes indirect costs of 15% for engineering and clerical costs and 7.5% for first year finance costs. Funding for the entire project will be from a combination of special assessment and utility funds. The estimated roadway construction cost is \$120,000 and will be 100 percent funded by special assessments. The new concrete curb and gutter is included under the storm sewer fund not under the roadway special assessment. The estimated utility improvements and repairs amount to \$135,000 and will be funded through the respective utility fund.

Item	Amount	Total Cost
Roadway:	\$120,000	
Roadway Total:		\$ 120,000
Utilities:		
Storm Sewer	\$ 65,000	
Watermain	\$ 60,000	
Sanitary Sewer	\$ 10,000	
Utility Total:		\$ 135,000
Total Project Cost:		\$ 255,000

Table 1. Estimated Project Costs

ASSESSMENTS:

A special assessment of approximately \$10,000 per residential equivalent unit will be levied against residents adjacent to the neighborhood's roadways. The justification for assessments is attributed to properties receiving benefit of the new roadway and is established in accordance with the City's Special Assessment Policy dated August 16, 2005. The assessable lot is based on a detached single family home (see Figure 3).



Preliminary Assessments
Wood End Drive Neighborhood
BA352

Engineering Dept.
June, 2008

Figure 3. Preliminary Assessment Map

PROJECT SCHEDULE: The following schedule is feasible from an Engineering standpoint:

Informational Meeting/Open House.....	May 22, 2008
Council Orders Public Hearing	June 3, 2008
Receive Feasibility Report.....	July 1, 2008
Public Hearing	July 1, 2008
Bid Opening	July/August 2008
Award Contract	August 2008
Begin Construction	Summer 2008
Complete Construction	Fall 2008
Final Assessment Hearing.....	Fall 2009

FEASIBILITY: Staff believes the construction of this project is necessary, cost effective and feasible to improve the road and utility infrastructure of Woodend Drive.

ATTACHMENTS:

- A. Informational Newsletter
- B. Property Owners Questionnaire
- C. Questionnaire Results
- D. Informational Meeting Attendance List and Comments
- E. Information Meeting PowerPoint Presentation
- F. Project comments and Letters Received
- G. Recommendation to Set Public Hearing
- H. Public Hearing Notices, Certificate of Mailing and List of Labels
- I. Preliminary Assessment Roll
- J. Location of proposed new 6 inch watermain