#### FEASIBILITY REPORT AND COST ESTIMATE FOR

#### IMPROVEMENT PROJECT NO. 15-07 PAVEMENT MANAGEMENT PROGRAM 2015 STREET RECONSTRUCTIONS VARIOUS CITY STREETS

### CITY OF BLAINE, MINNESOTA February 19, 2015

# spot concrete curb and gutter replacement, asphalt pavement replacement, class 5 aggregate base, and related appurtenant construction.

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Stefan T. Higgins, PE Assistant City Engineer Minn. Reg. No. 41290



**CITY OF BLAINE** 10801 Town Square Drive NE Blaine, Minnesota 55449 (763) 784-6700

Prepared By:

Stefan Higgins, PE Assistant City Engineer

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# **EXHIBITS**

- Project Location
  92<sup>nd</sup> Circle Assessment Map
  92<sup>nd</sup> Circle Proposed Assessment Roll
  3<sup>rd</sup> Street Assessment Map
  3<sup>rd</sup> Street Proposed Assessment Roll

# FEASIBILITY REPORT PROJECT NO. 15-07

#### EXECUTIVE SUMMARY

The proposed project will partially reconstruct 3<sup>rd</sup> Street from 101<sup>st</sup> Avenue to approximately 400 feet north and 92<sup>nd</sup> Circle from Woodland Road to the cul de sac. Proposed improvements include spot concrete curb and gutter replacement, asphalt surface removal and replacement, aggregate base and appurtenant construction.

The estimated cost of improvements is \$125,500 with \$34,528.73 proposed to be assessed over a ten-year period. Replacement of existing sanitary sewer structure castings/rings, at an estimated cost of \$3,225, is proposed to be paid for by the City Public Utility Fund. The remaining portion of \$87,746.27 is proposed to be paid from the City's Pavement Management Program Funds.

The project is necessary, cost-effective, and feasible and will result in a benefit to the properties proposed to be assessed.

## 1. **PROJECT HISTORY**

The Blaine City Council initiated the project and ordered the preparation of a feasibility report on January 22, 2015, with Resolution No. 15-013.

This report is based on field observations, record drawing information and 2014 aerial photography.

### 2. **PROJECT AREA CHARACTERISTICS**

The project area includes the following streets:

- 3<sup>rd</sup> Street from 101<sup>st</sup> Avenue to approximately 400 feet north
- 92<sup>nd</sup> Circle from Woodland Road to the cul de sac

3<sup>rd</sup> Street was constructed in 1992 with a section consisting of 3 inches of bituminous pavement on 4 inches of aggregate base. No pavement preservation treatments have previously been done on this street. The street has not received an overlay. The pavement has reached the point of failure with significant block, transverse and longitudinal cracking and has failed to a point where an overlay is not feasible.

92<sup>nd</sup> Circle was constructed in 1988 with a section consisting of 2 inches of bituminous pavement on 4 inches of aggregate base. Previous pavement preservation treatments on this street consisted of a sealcoat done in 1995. The street has not received an overlay. The pavement has reached the point of failure with significant block and alligator cracking and has failed to a point where an overlay is not feasible.

The proposed project is located in the Coon Creek and Rice Creek Watershed Districts. No portion of the project will impact wetlands as identified on the City's wetland inventory map.

See Exhibit No. 1 for the project location.

#### 3. **PROPOSED IMPROVEMENTS**

The proposed improvements will include partial reconstruction of the existing urban street section to a 3-1/2 inch bituminous pavement over 4 inches of aggregate base typical section, spot replacement of failed curb and gutter, and replacement of sanitary sewer castings and rings. The improvements are necessary, cost-effective, and feasible. Each improvement is further described as follows:

#### A. Sanitary Sewer

Public Works and Engineering staff has reviewed the existing sanitary sewer on the project streets and concur that there are no issues with the existing mains. The project will include the removal of the existing manhole castings/rings and installation of new castings/rings on all sanitary manholes.

#### B. Water Main

Public Works and Engineering staff has also reviewed the water main installation dates and water main break data along the project streets and concur that there are no issues with the existing main. Therefore, the scope of the project will not include any replacement of existing water main along the corridor. The project will include adjusting existing gate valve boxes located within the street typical sections.

### C. Street Construction

The proposed project will partially reconstruct the existing road by removing the existing failed pavement surface and aggregate base and installing a new aggregate base and pavement surface in accordance with city standards. The street typical section will be reconstructed with a section composed of 3-1/2 inches bituminous on 4 inches of gravel base over a compacted subgrade. Partial reconstruction of the existing curb is proposed where necessary due to curb failure.

### D. Storm Drainage

Storm water runoff from the streets will be captured and controlled with the existing catch basins and storm sewer pipe system. Public Works has inspected and/or completed rehabilitation on all catch basins so no additional storm sewer work is anticipated with this project.

## 4. **IMPACT OF PROPOSED IMPROVEMENTS**

The proposed street improvements will not create any new maintenance issues for the Public Works staff. The City will work with affected property owners and the Contractor to resolve any situation that may arise during construction. Short term traffic delays, construction dust and noise, and erosion will occur. Efforts to minimize these impacts include the restriction of work hours and dust and erosion control measures included in the project. Any disruptions that occur to existing yards, sprinkler systems, and driveways will be restored.

#### 5. SUMMARY OF ESTIMATED PROJECT COSTS AND FUNDING

**Project:** 15-07

**Description:** 2015 Street Reconstructions

Cost Item	Percent Amo			ount	
Construction Costs 92 <sup>nd</sup> Circle Street Construction 3 <sup>rd</sup> Street Construction		\$	60,000 33,000		
Total Construction Costs				\$	93,000
Administrative Costs (rounded to nearest \$100) Engineering Assessment Legal Administration Capitalized Interest	18% 1% 2% 4% 8%	\$	16,700 900 1,900 3,700 7,400		
Bonding	2%		1,900		
Total Administrative Costs				\$	32,500

#### TOTAL ESTIMATED PROJECT COSTS

\$ 125,500

Temporary Funding Source Permanent Funding Source	City Internal Funds Assessments, Pavement Management Program Funds (PMP Funds), and Public Utility Funds,
Funding	
Total Paid from Public Utility Funds	\$ 3,225.00
Total Generation from Assessments	\$ 34,528.73
Total Paid from PMP Funds	\$ 87,746.27

#### 6. ASSESSMENT METHODOLOGY

It is proposed that the project be assessed over 10 years in accordance with the City's Assessment Policy. It is proposed to assess 92<sup>nd</sup> Circle using the unit method for residential properties based on 25% of the entire cost of the improved street section. It is proposed to assess 3<sup>rd</sup> Street using the linear foot method for commercial/industrial/high density residential zoned properties based on 50% of the entire cost of the improved street section. Both assessment methods are per the city special assessment policy.

See Exhibit Nos. 2 & 3 for the parcels proposed to be assessed and Exhibit Nos. 2A & 3A for the proposed assessment rolls.

#### 7. <u>FINANCE</u>

The proposed project will be temporarily financed by the City. Permanent funding will be provided by the Pavement Management Program Funds, public utility funds, and the costs assessed to the benefiting parcels in accordance with current City Assessment Policy and Minnesota Statutes Chapter 429, Special Assessment Laws.

#### A. <u>Finance Director Statement</u>

With reference to this Feasibility Report for Improvement Project 15-07 as prepared by the City of Blaine Engineering Department dated February 19, 2015, I find the following:

- 1. The project will be temporarily funded through existing City internal funds whereupon permanent financing will be obtained through the Pavement Management Program Funds, Public Utility Funds, and assessments.
- 2. Sufficient moneys are currently available from the City's internal funds to temporarily fund the special assessment portion of the project. It is estimated that \$34,528.73 will be assessed.
- 3. Sufficient moneys are currently available from the City's Public Utility Funds to pay for proposed utility improvements for street reconstruction at an estimated cost of \$3,225.

Joseph Huss. Finance Director

# 8. PROJECTED SCHEDULE

February 19, 2015	Receive Feasibility Report Order Public Hearing
March 3, 2015	Public Information Meeting to discuss project and proposed assessments
March 19, 2015	Hold Public Hearing Order Improvements and Order Preparation of Plans and Specifications
March 19, 2015	Approve Plans and Specifications Order Advertisement for Bids
April 21, 2015	Open Bids
May 7, 2015	Award Contract
June-Sept 2015	Construct Improvements
Sept 2015	Assess Project
2016	First assessment payment due with real estate taxes

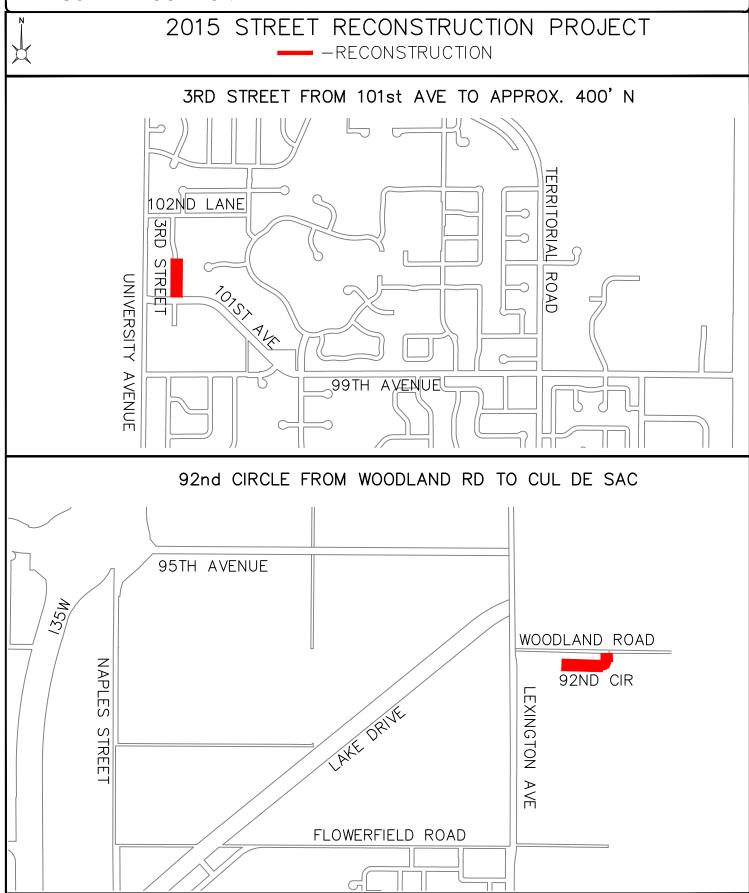
## 9. PROJECT FEASIBILITY AND RECOMMENDATION

The project as proposed is technically and financially feasible, cost effective, and will result in a benefit to the properties proposed to be assessed. It is recommended that the Council accept this report, hold the public hearing, and order the improvements.

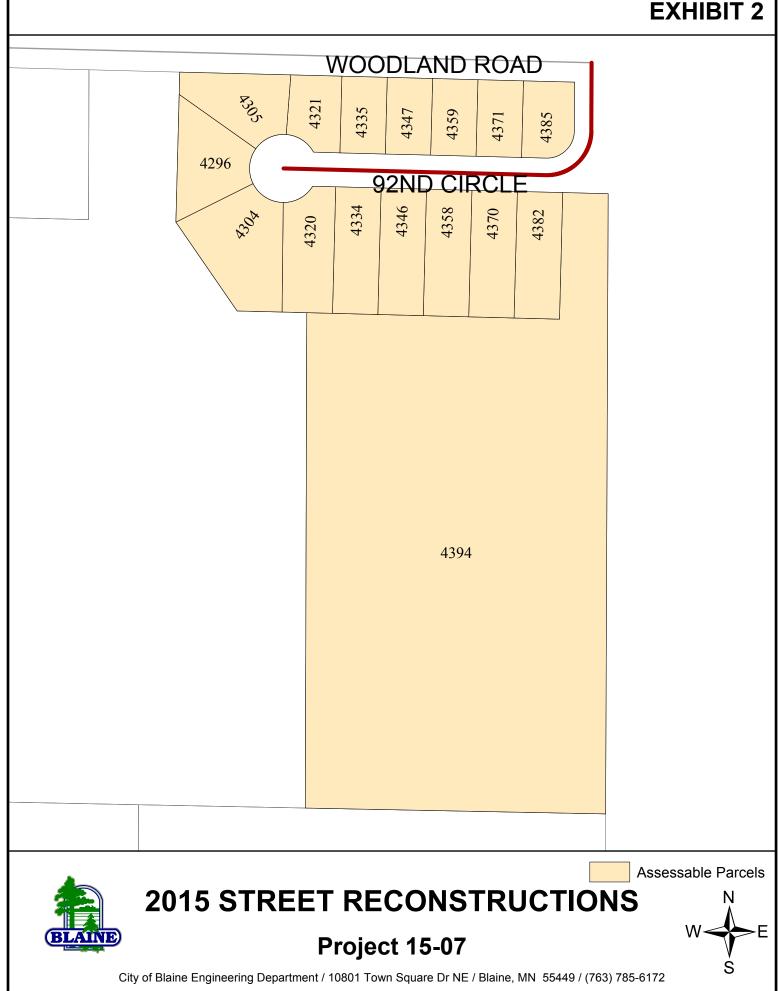


# **CITY OF BLAINE**





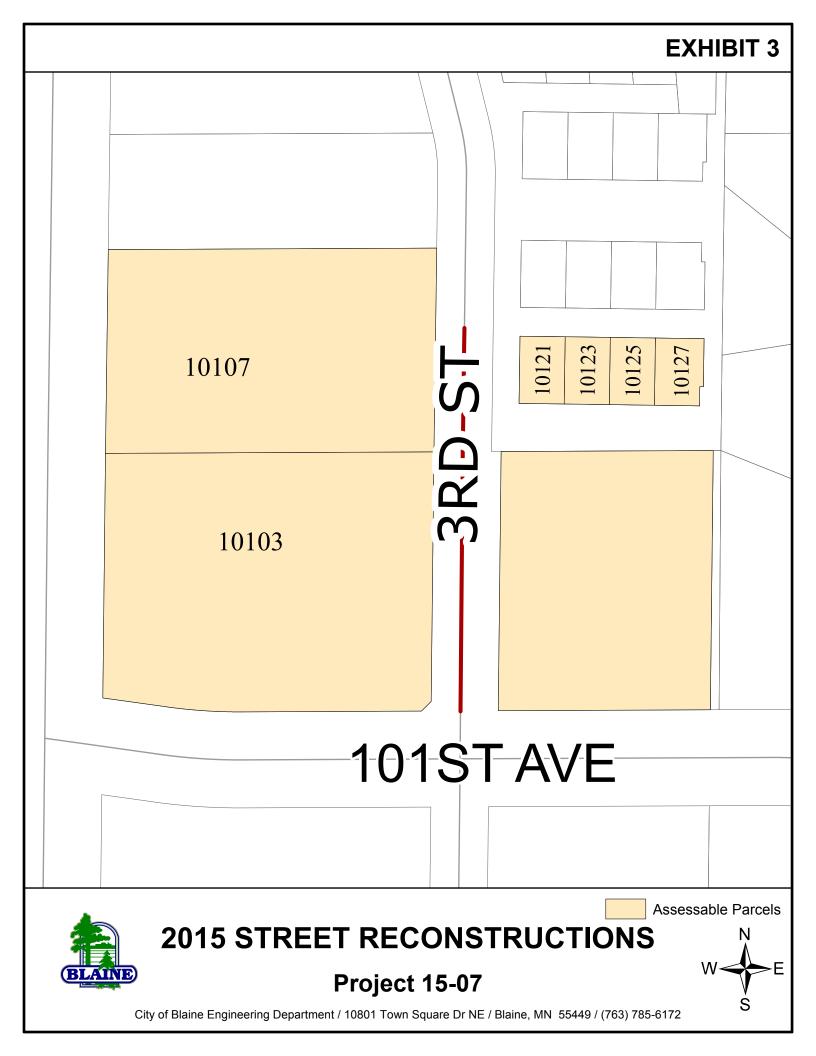
# **EXHIBIT 2**



### PROJECT 15-07 2015 STREET RECONSTRUCTIONS CITY OF BLAINE EXHIBIT NO. 2A - 92nd Circle PROPOSED ASSESSMENT ROLL

ASSESSMENT RATE BREAKDOWN						
CONSTRUCTION COSTS	\$60,000.00					
DMINISTRATIVE COSTS	\$21,000.00					
SAN SEWER FUND COSTS	(\$3,225.00)					
OTAL COST	\$77,775.00				ASSESSMENT	
_	x25%		TOTAL FRONT FOOTAGE		RATE	
ASSESSABLE COST	\$19,443.75	/	1505.1 LF	=	\$12.92	
				F	RESIDENTIAL LOT	ASSESSMENT RATE PER RESIDENTIAL LOT
SSESSMENT RATE	ASSESSABLE FOOTAGE		AMOUNT ASSESSED		UNITS	UNIT
\$12.92 X	1291.3 LF	=	\$16,681.76	1	16 =	\$1,042.61

PROPERTY PIN	PROPERTY OWNER	PROPERTY ADDRESS	ASSESSABLE RESIDENTIAL LOT UNITS	ASSESSMENT RATE PER RESIDENTIAL LOT UNIT	PROPOSED ASSESSMENT
363123220012	RUTTEN J BRADLEY	4385 92ND CIR NE	1	\$1,042.61	\$1,042.61
363123220013	CHRISTENSEN KALA	4371 92ND CIR NE	1	\$1,042.61	\$1,042.61
363123220014	ROY JOHN G & BARBARA A	4359 92ND CIR NE	1	\$1,042.61	\$1,042.61
363123220015	KUREK GEORGE M	4347 92ND CIR NE	1	\$1,042.61	\$1,042.61
363123220016	BAILEY STEVEN C & MELISSA M	4335 92ND CIR NE	1	\$1,042.61	\$1,042.61
363123220017	ROSE STEPHANIE L	4321 92ND CIR NE	1	\$1,042.61	\$1,042.61
363123220018	CRITZER DANA	4305 92ND CIR NE	1	\$1,042.61	\$1,042.61
363123220019	VEVLE LAUREL	4296 92ND CIR NE	1	\$1,042.61	\$1,042.61
363123220020	LANG BRADLEY J	4304 92ND CIR NE	1	\$1,042.61	\$1,042.61
363123220021	APIKELIS DARYLDEAN	4320 92ND CIR NE	1	\$1,042.61	\$1,042.61
363123220022	KORMAN PAUL L	4334 92ND CIR NE	1	\$1,042.61	\$1,042.61
363123220023	LEIER COLIN & SHARISSE	4346 92ND CIR NE	1	\$1,042.61	\$1,042.61
363123220024	ANDERSON KENNETH & PATRICIA	4358 92ND CIR NE	1	\$1,042.61	\$1,042.61
363123220025	LEIER RICHARD T & KATHLEEN	4370 92ND CIR NE	1	\$1,042.61	\$1,042.61
363123220026	TAO LI	4382 92ND CIR NE	1	\$1,042.61	\$1,042.61
363123220027	CAPISTRANT THEODORE M & T A	4394 92ND CIR NE	1	\$1,042.61	\$1,042.61
		TOTALS:	16		\$16,681.76



### PROJECT 15-07 2015 STREET RECONSTRUCTIONS CITY OF BLAINE EXHIBIT NO. 3A - 3rd Street

#### PROPOSED ASSESSMENT ROLL

ASSESSMENT RATE BREAKDOWN					
CONSTRUCTION COSTS	\$33.000.00				
ADMINISTRATIVE COSTS	\$11,500.00				
TOTAL COST	\$44,500.00	ASSESSMENT D RATE PER FRONT			
	x50%_	TOTAL FRONT FOOTAGE	FOOT		
ASSESSABLE COST	\$22,250.00 <i> </i>	758.0 LF	= \$29.35		

PROPERTY PIN	PROPERTY ADDRESS	PROPERTY OWNER	ASSESSABLE FRONT FOOTAGE	ASSESSMENT RATE PER FRONT FOOT	PROPOSED ASSESSMENT
193123330102	STROMBERG SHEILA	10127 3RD ST NE	27.25	\$29.35	\$799.88
193123330101	THOMPSON DONALD	10125 3RD ST NE	27.25	\$29.35	\$799.88
193123330100	NASELLI ANDREW	10123 3RD ST NE	27.25	\$29.35	\$799.88
193123330099	DRECHNIK RICHARD J & JANET L	10121 3RD ST NE	27.25	\$29.35	\$799.88
303123220003	KING OF GLORY LUTHERAN CH	10103 UNIVERSITY AVE NE	390.00*	\$29.35	\$11,447.89
193123330058	CORTRUST BANK NATIONAL ASSOCIATION	10107 UNIVERSITY AVE NE	109.00	\$29.35	\$3,199.54
		TOTALS:	608		\$17,846.97

\* FRONTAGE TOTAL FOR BOTH SIDES OF STREET, INCLUDES 150' CORNER LOT CREDIT ON EAST SIDE