FEASIBILITY REPORT AND COST ESTIMATE FOR

IMPROVEMENT PROJECT NO. 16-12 RECONSTRUCTION OF RESTWOOD ROAD AND FLOWERFIELD ROAD FROM NAPLES STREET TO N HIGHWAY DRIVE

CITY OF BLAINE, MINNESOTA April 6, 2017

concrete curb and gutter, asphalt pavement replacement, class 5 aggregate base, storm sewer 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, PÉ 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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- 2. Restwood Road Assessment Map
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- 3. Residential Property Proposed Assessment Roll
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FEASIBILITY REPORT PROJECT NO. 16-12

EXECUTIVE SUMMARY

The proposed joint project between the City of Lexington and the City of Blaine will reconstruct Restwood Road from Naples Street to North Highway Drive and Flowerfield Road from Naples Street to North Highway Drive. The work will consist of reclaiming the existing bituminous pavement, installation of new concrete curb and gutter or concrete ribbon curb where not already present, minor storm sewer improvements, aggregate base, installation of new bituminous pavement and appurtenant construction.

The estimated cost of the improvements is \$796,500. The estimated cost split is 53.4% of the costs to the City of Lexington and 46.6% of the costs to the City of Blaine. The estimated City of Blaine portion of the cost of improvements is \$370,800 for with \$124,583.46 proposed to be assessed over a ten-year period. The remaining portion of \$246,216.54 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 May 5, 2016, with Resolution No. 16-080. A Joint Powers Agreement with the City of Lexington was approved by Council on May 5, 2016 with Resolution No. 16-080 for the reconstruction of Restwood Road from Naples Street to North Highway Drive and Flowerfield Road from Naples Street to North Highway Drive.

This report is based on field observations, record drawing information, a 2016 topographic survey and 2014 aerial photography.

2. PROJECT AREA CHARACTERISTICS

The project area includes Restwood Road and Flowerfield Road, beginning at Naples Street on the west end and ending at North Highway Drive on the east end. The centerline of both Restwood and Flowerfield Road serves as the border between the cities of Blaine and Lexington (Blaine lies on the south side of Flowerfield Road and the north side of Restwood Road).

Restwood road is a rural section road and is approximately 30 feet in width. The surrounding land use is primarily high density residential housing (manufactured home park) on the Blaine side of the road except for a small commercial lot located on the northeast corner of Restwood Road and Naples Street and two single family residential lots on the east end. Low density single family residential housing lies on the Lexington side of the road.

Flowerfield road is an urban section road with bituminous curb and is approximately 30 feet in width. The land use on the Blaine side is commercial. The land use on the Lexington side of the road is low density single family residential housing.

Both Restwood Road and Flowerfield Road are in poor condition with clear evidence of pavement structure failure along the entire length. Severe deterioration of pavement structure is present along the roadway edges and certain intersection areas where there is a lack of defined storm drainage and storm water runoff becomes trapped, causing further deterioration of the pavement structure.

Storm sewer is present in a few locations along the Restwood Road, generally on the Lexington side and is composed of a combination of catch basins and spillways with culverts. No storm sewer is present on Flowerfield Road beyond spillways at the west end which empty into an existing ditch.

Utilities owned by the City of Lexington within the road corridor consist of an 8-inch water main and an 8-inch sanitary sewer line. The City of Blaine does not have any sanitary or water lines in either road.

The proposed project is located in the Rice Creek Watershed District. 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 reconstruction of the existing street section to a 3-1/2 inch bituminous pavement over 4-6 inches of reclaimed aggregate base material, installation of concrete ribbon curb on Restwood Road and concrete curb and gutter on Flowerfield Road, installation of storm sewer, catch basins and culverts. The improvements are necessary, cost-effective, and feasible. Each improvement is further described as follows:

A. <u>Street Construction</u>

The proposed project will reconstruct the existing roads by reclaiming the failed pavement surface and aggregate base and then installing a new pavement surface in accordance with city standards. The street typical section will be reconstructed with a section composed of 3-1/2 inches of bituminous on 4-6 inches of reclaimed gravel base over a compacted subgrade.

Restwood Road

On Restwood Road, concrete ribbon curb will be installed on the Blaine side of the street and surmountable curb and gutter will be installed on the Lexington side. On the Blaine side, the boulevard area has swales that are lower than the road while the boulevards on the Lexington side generally slope upward from the road edge. By utilizing ribbon curb on the Blaine side, the storm water runoff from the north half of the street can be directed to and captured by the existing swales and then directed to storm sewer flared end sections or infiltrated.

Flowerfield Road

Flowerfield Road currently has bituminous curb so it is proposed to install surmountable concrete curb and gutter along both sides of the road. This curb will best match in with the existing boulevard elevations, minimizing the amount of grading that will need to be done in yards.

D. Storm Drainage

Restwood Road

Storm water runoff from the Blaine side of Restwood Road will be directed to existing swales in the boulevard. Storm sewer pipe with flared end sections will be installed in pertinent locations in the swales to capture this runoff and direct it to a storm water pipe in the boulevard on the Lexington side of the road. This storm water pipe then outlets into the ditch (Judicial Ditch 1-2) which crosses under Restwood Road near Arona Avenue in Lexington.

Flowerfield Road

Storm water runoff on Flowerfield Road will be captured by catch basins at the western end of the road and discharged into the existing ditch which crosses under Flowerfield Road (Judicial Ditch 1-2).

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: 16-12

Description: Reconstruction of Restwood Road

Percent	nt Amount			
	\$	440,000		
			\$	440,000
			\$	231,900
			\$	208,100
18%	\$	37,500		
1%		2,100		
_,,		.,	\$	72,900
		18% \$ 1% 2% 4% 8%	18% \$ 37,500 1% 2,100 2% 4,200 4% 8,300 8% 16,600	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$

TOTAL BLAINE ESTIMATED PROJECT COSTS

\$ 281,000

Temporary Funding Source City Internal Funds

Permanent Funding Source Assessments, Pavement Management

Program Funds (PMP Funds)

Funding

Total Generation from Assessments \$ 124,583.46

Total Paid from PMP Funds \$ 156,416.54

Project: 16-12

Description: Reconstruction of Flowerfield Road

Cost Item	n Percent Amo		ount	unt	
Construction Costs					
Flowerfield Road Construction		\$	150,000		
Total Construction Costs				\$	150,000
City of Lexington Cost Share Portion				\$	83,500
City of Blaine Cost Share Portion				\$	66,500
Administrative Costs (rounded to nearest \$100)					
Engineering Assessment Legal Administration Capitalized Interest Bonding	18% 1% 2% 4% 8% 2%	\$	12,000 700 1,300 2,700 5,300 1,300		
Total Administrative Costs				\$	23,300
TOTAL BLAINE ESTIMATED PROJECT COSTS				\$	89,800

Temporary Funding SourceCity Internal Funds

Permanent Funding Source Pavement Management Program

Funds (PMP Funds)

Funding

Total Generation from Assessments \$ 0.00

Total Paid from PMP Funds \$89,800.00

6. ASSESSMENT METHODOLOGY

Project costs are proposed to be divided between the two cities based on the frontage each city has along the project corridor. In addition, each city will pay for the costs associated with driveway work on its side of the road.

It is proposed that the Restwood Road project be assessed over 10 years in accordance with the City's Assessment Policy. It is proposed to assess residential properties using the linear foot method for residential properties based on 25% of the entire cost of the improved street section. It is proposed to assess properties zoned commercial/industrial 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.

The Blaine side of Flowerfield Road is fronted by commercial zoned properties of the Naples Marketplace plat. All of these properties take access off of Naples Street and Lake Drive and have no access to Flowerfield Road and thus are not assessable under the current assessment policy. These parcels will be assessed for any future projects on Naples Street.

See Exhibit Nos. 2 and 3 for the parcels proposed to be assessed and Exhibit Nos. 4 and 5 for the proposed assessment rolls.

7. FINANCE

The proposed project will be temporarily financed by the City. Permanent funding will be provided by the Pavement Management Program 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 16-12 as prepared by the City of Blaine Engineering Department dated April 6, 2017, 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, 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 \$124,583.46 will be assessed.

Joseph Huss, Finance Director

8. PROJECTED SCHEDULE

April 6, 2017	Receive Feasibility Report Order Public Hearing
April 11, 2017	Public Information Open House to discuss project and proposed assessments
April 20, 2017	Hold Public Hearing Order Improvements and Order Preparation of Plans and Specifications
April 20, 2017	Approve Plans and Specifications Concur with City of Lexington on Advertisement for Bids
May 4, 2017	Concur with City of Lexington in Accepting Bid and Awarding Contract
June-Sept 2017	Construct Improvements
Sept 2017	Assess Project
2018	First assessment payment due with real estate taxes

9. **PROJECT FEASIBILITY AND RECOMMENDATION**

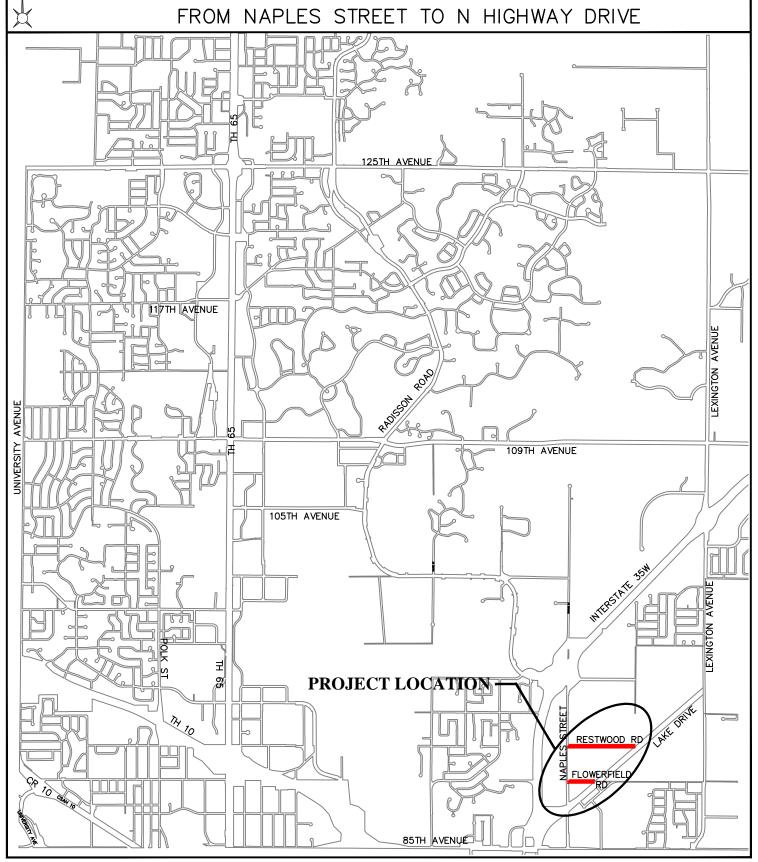
The project as proposed is technically and financially feasible, cost effective, and will result in a benefit to the properties proposed to be assessed in accordance with Minnesota Statute 429. It is recommended that the Council accept this report, hold the public hearing, and order the improvements.



CITY OF BLAINE

EXHIBIT 1 - LOCATION MAP

RECONSTRUCTION OF RESTWOOD ROAD AND FLOWERFIELD ROAD





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FIGURE 2 - ASSESSMENT MAP RECONSTRUCTION OF RESTWOOD ROAD FROM NAPLES STREET TO N HIGHWAY DRIVE PIN 353123220003 PIN 353123210004 NAPL RESTWOOD ROAD PIN 353123210006 PIN 353123220001 ASSESSABLE PARCELS NON ASSESSABLE PARCELS



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FIGURE 3 - ASSESSMENT MAP

RECONSTRUCTION OF FLOWERFIELD ROAD FROM NAPLES STREET TO N HIGHWAY DRIVE



- ASSESSABLE PARCELS
- NON ASSESSABLE PARCELS

PROJECT 16-12

RECONSTRUCTION OF RESTWOOD ROAD FROM NAPLES STREET TO NORTH HIGHWAY DRIVE

CITY OF BLAINE

EXHIBIT NO. 4 - RESIDENTIAL PROPERTY PROPOSED ASSESSMENT ROLL

ASSESSMENT RATE BREAKDOWN							
CONSTRUCTION COSTS ADMINISTRATIVE COSTS TOTAL COST	\$208,100.00 \$72,900.00 \$281,000.00	TOTAL FRONT FOOTAGE	TOTAL COST PER FRONT FOOT	RESIDENTIAL ASSESSMENT PERCENTAGE	RESIDENTIAL ASSESSMENT RATE PER FRONT FOOT		
ASSESSABLE COST	\$281,000.00 /	2625.70	= \$107.02 *	25%	= \$26.76		

PROPERTY PIN	PROPERTY OWNER	PROPERTY ADDRESS	ASSESSABLE FRONT FOOTAGE	ASSESSMENT RATE PER FRONT FOOT	PROPOSED ASSESSMENT
353123210006	DIEBOLD CHRIS	3785 RESTWOOD ROAD	140	\$26.76	\$3,746.40
353123210007	OTTE FIVE PARTNERSHIP	3795 RESTWOOD ROAD	155	\$26.76	\$4,147.80

TOTALS: 295 \$7,894.20

NOTES:

PROJECT 16-12

RECONSTRUCTION OF RESTWOOD ROAD FROM NAPLES STREET TO NORTH HIGHWAY DRIVE

CITY OF BLAINE

EXHIBIT NO. 5 - COMMERCIAL/INDUSTRIAL/HIGH DENSITY RESIDENTIAL PROPERTY PROPOSED ASSESSMENT ROLL

ASSESSMENT RATE BREAKDOWN							
CONSTRUCTION COSTS ADMINISTRATIVE COSTS TOTAL COST	\$208,100.00 \$72,900.00 \$281,000.00	TOTAL FRONT FOOTAGE	TOTAL COST PER FRONT FOOT	COMMERCIAL/ INDUSTRIAL/HIGH DENSITY RESIDENTIAL ASSESSMENT PERCENTAGE	COMMERCIAL/ INDUSTRIAL/HIGH DENSITY RESIDENTIAL ASSESSMENT RATE PER FRONT FOOT		
ASSESSABLE COST	\$281,000.00 /	2625.70	= \$107.02 *	50%	= \$53.51		

PROPERTY PIN	PROPERTY OWNER	PROPERTY ADDRESS	ASSESSABLE FRONT FOOTAGE	ASSESSMENT RATE PER FRONT FOOT	PROPOSED ASSESSMENT
353123220001	F & F PROPERTIES II	3401 RESTWOOD ROAD	101.0	\$53.51	\$5,404.51
353123220003	RESTWOOD TERRACE MCH LLC	9101 OKINOWA STREET	563.10*	\$53.51	\$30,131.48
353123210004	RESTWOOD TERRACE MCH LLC	9120 RENDOVA STREET	1516.6	\$53.51	\$81,153.27

TOTALS: 2181 \$116,689.26

NOTES:

^{*150} FOOT CORNER LOT CREDIT APPLIED TO ASSESSABLE FRONT FOOTAGE