FEASIBILITY REPORT FOR PROPOSED ROAD IMPROVEMENT PROJECT OF FRANCE BOULEVARD AND FRANCE COURT

CREDIT RIVER TOWNSHIP, MINNESOTA OCTOBER 5, 2020

Prepared by:



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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 State of Minnesota Statutes 326.02 to 326.16.

Rum Ner

Shane Nelson, PE

43381 License No.

<u>October 5, 202</u>0 Date

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1.0 INTRODUCTION

The purpose of this feasibility report is to present Credit River Township with a preliminary examination of road improvements for France Boulevard and France Circle.

The report discusses the scope of improvements to France Boulevard from Frontier Lane to the terminus, and France Court from France Boulevard to the terminus.

The report was initiated by the Credit River Town Board at a Township meeting, and has been prepared in compliance with Minnesota State Statutes 429 for projects resulting in special assessments.

2.0 PROJECT LOCATIONS

France Boulevard and France Circle are located in Section 34, Township 114 North, Range 21 West in Credit River Township, Scott County, Minnesota. There are currently 19 existing properties located in the project area. The residential properties are large rural type lots with an average lot size ranging from 3.8 acres to 5.2 acres. The project area and roadway locations are depicted in Figure 1.

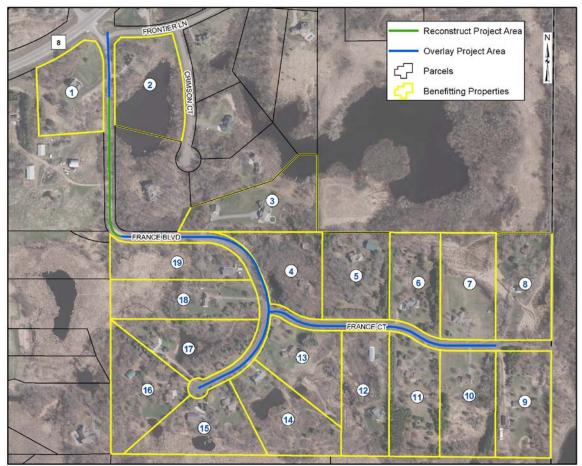


Figure 1 – France Area 2021 Overlay Project Project Location and Benefitting Properties Exhibit

3.0 EXISTING CONDITIONS

France Boulevard and France Court were initially constructed in 2004. The roads have been degrading as anticipated, normal transverse and longitudinal cracking are observed in the pavement surface. The roads in general appear to be structurally sound and would benefit from a bituminous overlay to add structural strength and extend the pavement life.

The existing roadways are predominately rural in nature. The width of the roadways vary slightly, but generally are 22 feet consisting of two 11-foot-wide drive lanes with 2-foot shoulders.

There is one section of France Boulevard (to the south of Frontier Lane) that utilizes a gravel surface. The section is approximately 900 feet in length and is narrower at the surface (19 feet) with steep in-slopes. The total length of the project is approximately 0.9 miles (4,930 feet).

3.1 Existing Drainage System

The roadways utilize ditches and culverts to convey stormwater. The existing drainage system appears to be functioning sufficiently.

4.0 ROADWAY IMPROVEMENT PROJECT

4.1 Proposed Improvements

This project consists of improving France Boulevard and France Court by constructing a bituminous overlay to a constructed thickness of 1.5". We propose that the existing bituminous surface be thoroughly cleaned and tack coat applied prior to the construction of the 1.5" bituminous overlay. The gravel portion of France Boulevard will be widened to provide two 11' lanes with 2-foot aggregate shoulders. This portion of the roadway will also be overlaid with the 1.5" bituminous surfacing.

The finished grade of the new streets will be approximately the same elevation, or slightly higher (1.5"), as the current roads. The proposed typical section is shown below in Figure 2. Driveways will be matched into the new bituminous surface.

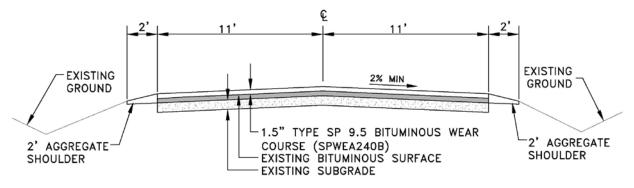


Figure 2 – Residential Overlay – Bituminous Overlay Typical Section

4.2 Paving the Gravel Portion

The preliminary costs for widening and paving the gravel portion have been estimated. For this section, it is assumed that the road bed will be widened to achieve a 22' pavement width with 2' aggregate shoulders on either side. The total bituminous thickness will be 4 inches, paved in two lifts.

4.3 Easements

This project proposes to confine the improvements to the existing roadway widths. No easements or right of way are proposed to be acquired.

4.4 Drainage System

No improvements are proposed to the existing drainage system. The existing drainage system appears to be functioning sufficiently.

5.0 ESTIMATED COSTS

The 2021 construction costs have been estimated for the proposed France Boulevard and France Court Improvement project. The estimated costs are estimates only and are not guaranteed prices. The costs shown are estimates based on actual bid prices from projects of similar scope and adjusted for inflation. Final contracts will be awarded on a unit price basis and the contractor will only be paid for work completed.

It is assumed that this project will be bid concurrently with other similar projects, which is anticipated to reduce bid prices.

The total estimated cost for the overlay portion of this project is \$113,240. It is proposed that the Town will assess fifty percent of the total project costs to the benefitting properties.

An estimate of the cost of the overlay portion is shown below in Figure 3.

ITEM NO.	ITEM DESCRIPTION	QTY	UNIT		E	TENSION
1	MOBILIZATION	1	LS	\$4,145.00	\$	4,145.00
2	MILL BITUMINOUS SURFACE (1.5")	200	SY	\$5.00	\$	1,000.00
3	CLASS 2 AGGREGATE SHOULDERING	130	TON	\$35.00	\$	4,550.00
4	CLASS 5 AGGREGATE	50	TON	\$25.00	\$	1,250.00
5	BITUMINOUS MATERIAL FOR TACK COAT	610	GAL	\$2.00	\$	1,220.00
6	TYPE SP 9.5 WEARING COURSE MIXTURE (2,B)	1000	TON	\$65.00	\$	65,000.00
7	RELOCATE MAIL BOX	4	EACH	\$150.00	\$	600.00
8	RELOCATE E911 SIGN	4	EACH	\$75.00	\$	300.00
9	WEED SPRAYING	54	RDSTA	\$20.00	\$	1,080.00
10	SELECT TOPSOIL BORROW	290	CY	\$50.00	\$	14,500.00
11	RESTORATION	1	LS	\$1,405.00	\$	1,405.00
12	TRAFFIC CONTROL	1	LS	\$1,250.00	\$	1,250.00
ESTIMATED CONSTRUCTION COST SCHEDULE "A"					\$	96,300.00
CONSTRUCTION CONTINGENCY					\$	1,000.00
ENGINEERING, LEGAL, AND ADMINISTRATIVE					\$	13,800.00
FINANCING COSTS				\$	2,140.00	
TOTAL ESTIMATED PROJECT COST				\$ ·	113,240.00	

Figure 3 – France Area 2021 Overlay Project - Preliminary Cost Estimate

The cost estimate for the overlay portion does not include the cost for widening and improving the gravel section of France Boulevard to a paved surface. The estimated cost for widening and improving the gravel section of France Boulevard is \$112,200.

An estimate of the cost for widening and paving the gravel section of France Boulevard is shown below in Figure 4.

ITEM NO.	ITEM DESCRIPTION	QTY	UNIT		E	KTENSION
1	ROAD WIDENING	1	LS	\$30,000.00	\$	30,000.00
2	WETLAND REPLACEMENT	1	LS	\$8,000.00	\$	8,000.00
3	CLASS 2 AGGREGATE SHOULDERING	80	TON	\$35.00	\$	2,800.00
4	CLASS 5 AGGREGATE BASE (LIMESTONE)	150	TON	\$25.00	\$	3,750.00
5	BITUMINOUS MATERIAL FOR TACK COAT	120	GAL	\$2.00	\$	240.00
6	TYPE SP 9.5 WEARING COURSE MIXTURE (2,B)	200	TON	\$65.00	\$	13,000.00
7	TYPE SP 12.5 NON WEARING COURSE MIXTURE (2,B)	300	TON	\$70.00	\$	21,000.00
8	SILT FENCE MACHINE SLICED	1800	LF	\$2.50	\$	4,500.00
9	RESTORATION	1	LS	\$3,475.00	\$	3,475.00
10	TRAFFIC CONTROL	1	LS	\$1,250.00	\$	1,250.00
ESTIMATED CONSTRUCTION COST SCHEDULE "A"					\$	88,015.00
CONSTRUCTION CONTINGENCY					\$	5,085.00
ENGINEERING, LEGAL, AND ADMINISTRATIVE				\$	17,100.00	
FINANCING COSTS				\$	2,000.00	
TOTAL ESTIMATED PROJECT COST				\$	112,200.00	

Figure 4 – France Boulevard 2021 Widening and Paving Project - Preliminary Cost Estimate

6.0 FINANCING AND ASSESSMENTS

The cost for improving France Boulevard and France Court is proposed to be partially assessed to the benefitting properties. For this project, the recommended assessment method is to assess the benefitting properties on a per unit basis. We have identified 19 properties that receive access and will receive benefit from the proposed overlay improvements.

The total estimated overlay cost to be assessed to the benefitting properties is \$56,620. The total estimated cost to be paid by the Town is \$56,620. Fifty percent assessment of the estimated overlay project cost to the benefitting properties on a per unit basis would yield an assessment of approximately \$2,980 per unit. The per unit assessment for this project is proportionate to the large lot size.

If the Town elects to improve the gravel section of France Boulevard as discussed in this report, 17 of the 19 properties would benefit from the additional improvements. If improving the gravel section of road is included in the project, the total estimated cost to be assessed to the benefitting properties increases to \$112,720 and the total estimated cost to be paid by the Town increases to \$112,720. Fifty percent assessment to the benefitting properties on a per unit basis would yield an assessment of approximately \$2,980 per unit for the two properties that do not have additional benefit (indicated by numbers 1 and 2 on Figure 1) and \$6,280 per unit for the 17 units that would benefit from the additional improvements (identified as properties 3 thru 19 on Figure 1). The per unit assessment for this project is proportionate to the large lot size.

We understand that the Town proposes to partially finance this project by obtaining a bond. The Town will work with its financial advisor to determine the bond amount and terms.

The assessments may be paid in full up front or amortized over a period of time, typically 10 years, with an interest rate as determined by the Town Board. Generally, interest rates on assessments are on the order of 6 percent.

7.0 PROJECT SCHEDULE

The schedule of the project will be determined by the Town Board with consideration of resident input. A tentative schedule is as follows:

July 2020	Town Board orders preparation of Feasibility Report
October 2020	Town Board Approval of Feasibility Report and Calls for a Public Improvement Hearing Mail and Publish Notice of Public Improvement Hearing
November 2020	Town Board conducts Public Improvement Hearing Town Board Orders Plans and Specifications
February 2021	Town Board Approves Plans and Specifications and Authorizes Advertisement for Bids Town Board Calls for the Assessment Hearing Mail and Publish Notice of Assessment Hearing
March 2021	Bid Opening
April 2021	Town Board Conducts Assessment Hearing Town Board Approves Bids and Awards Contract

8.0 CONCLUSIONS AND RECOMMENDATIONS

We find that this project is necessary, cost effective and feasible from a technical and engineering standpoint, and benefits the properties proposed to be assessed.

This project should be made as proposed, with consideration of combining it with upgrading the existing gravel portion of France Boulevard. We would recommend that the Town Board accept this report.