Agenda – Council – May 30, 2023

Report – Executive Policy Committee – May 16, 2023

Item No. 13 New 2023 Capital Budget Project – St. Mary's Road Riverbank Stability Study

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

On May 16, 2023, the Executive Policy Committee concurred in the recommendation of the Winnipeg Public Service and submitted the following to Council:

1. That a new 2023 capital project in the amount of $120,000 be authorized and included in the 2023 Capital Budget, Regional and Local Street Renewal Program for "St. Mary's Road Riverbank Stability Study" (hereinafter "Project").

2. That the City enter into, execute, and deliver a funding agreement with the Province of Manitoba with respect to a $50,000 grant for the Project and that the Chief Administrative Officer be authorized to negotiate the terms and conditions of such funding agreement in accordance with this Report and such terms and conditions deemed necessary by the Director of Legal Services and City Solicitor to protect the interests of the City.

3. That the remaining $70,000 budget requirement be funded with unallocated funding from within the Regional and Local Street Renewal Program.

4. That, subject to the approval of Recommendations 1, 2, and 3, the City enter into single source negotiations, and award, enter into, and execute a contract, with Kontzamanis Graumann Smith MacMillan Inc. (KGS) for Engineering Services in the initial amount of $100,000.

5. That, subject to the approval of Recommendations 1, 2, 3 and 4, authority be delegated to the Chief Administrative Officer to approve single-source negotiations, and that the City award, enter into, and execute, subsequent phases of Engineering Services contracts with Kontzamanis Graumann Smith MacMillan Inc. (KGS), subject to future phases of this riverbank stabilization project being approved and funded and subject to a suitable offer as determined by the Chief Administrative Officer, up to an upset limit of $1,000,000.

6. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

Report – Executive Policy Committee – May 16, 2023

DECISION MAKING HISTORY:

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

On May 16, 2023, the Executive Policy Committee concurred in the recommendation of the Winnipeg Public Service and submitted the matter to Council.

ADMINISTRATIVE REPORT

Title: New 2023 Capital Budget Project – St. Mary's Road Riverbank Stability Study

Critical Path: Executive Policy Committee – Council

AUTHORIZATION

Author	Department Head	CFO	CAO
B. Neirinck, P.Eng.	J. Berezowsky	C. Kloepfer	M. Jack

EXECUTIVE SUMMARY

This report identifies a proposed new capital project to investigate riverbank instability along St. Mary's Road north of the Perimeter Highway including acceptance of a grant from the Province of Manitoba, and sole source authorization to hire an engineering consultant.

Manitoba Transportation and Infrastructure (MTI) is in the process of constructing the St. Mary's Road Interchange Project at the Perimeter Highway. This Project includes the realignment of St. Mary's Road to the east, a grade separation of St. Mary's Road at the Perimeter Highway, the realignment of Seniuk Road, modifications to the Maple Grove Park access, and associated works.

The existing St. Mary's Road alignment will remain in place to access properties on the west side of the road south of Redview Drive including becoming the new and only access into Maple Grove Park.

The City has identified active slope instabilities along the riverbank adjacent to the existing St. Mary's Road south of 2360 St. Mary's Road as well as along Frobisher Road, which is the current access to Maple Grove Park.

These riverbank conditions are considered to be a threat to the existing road alignment as an additional slope failure could result in the closure of the only access into Maple Grove Park.

The interchange design and proposed road alignments impact the options available to stabilize the riverbank to ensure access into Maple Grove Park.

MTI has agreed to cost share a study to investigate the extent of the riverbank slope instabilities and develop remediation strategies and associated costs. The study area is identified in Appendix 1.

This report recommends that the City enter into a single source contract with Kontzamanis Graumann Smith MacMillan Inc. (KGS) for engineering services for this study. KGS has undertaken previous investigative engineering works at this location which will provide invaluable insight into the current conditions and proposed solutions. This recommendation is compliant with the Materials Management Policy and applicable Trade Agreements. Further detail is included in the History/Discussion Section.

RECOMMENDATIONS

1. That a new 2023 capital project in the amount of $120,000 be authorized and included in the 2023 Capital Budget, Regional and Local Street Renewal Program for “St. Mary’s Road Riverbank Stability Study” (hereinafter “Project”).

2. That the City enter into, execute, and deliver a funding agreement with the Province of Manitoba with respect to a $50,000 grant for the Project and that the Chief Administrative Officer be authorized to negotiate the terms and conditions of such funding agreement in accordance with this Report and such terms and conditions deemed necessary by the City Solicitor/Director of Legal Services to protect the interests of the City.

3. That the remaining $70,000 budget requirement be funded with unallocated funding from within the Regional and Local Street Renewal Program.

4. That, subject to the approval of Recommendations 1, 2, and 3, the City enter into single source negotiations, and award, enter into, and execute a contract, with Kontzamanis Graumann Smith MacMillan Inc. (KGS) for Engineering Services in the initial amount of $100,000.

5. That, subject to the approval of Recommendations 1, 2, 3 and 4, authority be delegated to the Chief Administrative Officer to approve single-source negotiations, and that the City award, enter into, and execute, subsequent phases of Engineering Services contracts with Kontzamanis Graumann Smith MacMillan Inc. (KGS), subject to future phases of this riverbank stabilization project being approved and funded and subject to a suitable offer as determined by the Chief Administrative Officer, up to an upset limit of $1,000,000.

6. That the proper officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

REASON FOR THE REPORT

Council approval is required to authorize new capital projects and to enter into the recommended funding agreement.

Pursuant to B1.1 of the Materials Management Policy, the approval of Executive Policy Committee is required for any single source negotiation for Consultant Services where the estimated value of any Consultant Service exceeds $75,000 in total.

IMPLICATIONS OF THE RECOMMENDATIONS

Approval of this report provides Council approval for the Project Study estimated at $120,000, including $50,000 in funding from the Province of Manitoba. The remaining $70,000 will be funded using existing resources using currently unallocated funding within the Regional and Local Streets Renewal program. For clarity, the 2023 Regional and Local Streets Renewal program will be increased by $50,000 ($120,000 less $70,000 of unallocated funding from within the program).

Usage of the unallocated funding from within the Regional and Local Street Renewal program will reduce program contingency by $70,000. Usage of this amount for the study is not expected to materially impact the delivery of the Regional and Local Streets Renewal program.

KGS undertook multiple previous assignments assessing stability at this location for the City in 1998 and for the Province in 2012. As a result, KGS has test hole information and monitoring results from these previous assignments which other engineering firms would not have. In addition, they have undertaken assignments related to geotechnical considerations for the St. Mary's Interchange Project in the same vicinity.

A change in suppliers cannot be made due to economic and technical reasons of interoperability with existing survey information provided to the City and/or already created by KGS. Retaining a different engineering firm would require the repetition of studies previously carried out by KGS, and would cause significant and unnecessary duplication of costs for the City.

HISTORY/DISCUSSION

BACKGROUND TO ST. MARY'S ROAD INTERCHANGE PROJECT

The Province of Manitoba, via Manitoba Transportation and Infrastructure (MTI), are undertaking the construction of Stage 1 of a grade-separated interchange at St. Mary's Road and the Perimeter Highway. The limits of the interchange work extend into the City of Winnipeg jurisdictional boundaries from Redview Drive to the north and Paul Boulevard to the south. North of the Perimeter Highway, St. Mary's Road is realigned to the east where it crosses the Perimeter Highway at a grade-separated structure approximately 300 m to the east of the existing intersection. South of the Perimeter Highway, the alignment of St. Mary's Road extends through the agricultural land west of the South End Water Pollution Control Center and curves to the east to tie into the existing St. Mary's Road between Paul Boulevard and Viking Road. The interchange configuration, currently under construction, is shown in Appendix 1.

Stage 1 works for the interchange will shift the access into Maple Grove Park north by utilizing the existing St. Mary's Road pavement and modifying the existing St. Mary's Road/Frobisher intersection to create a direct connection. A new intersection will be created for the new St. Mary's Road Alignment identified in Appendix 1.

The future Stage 2 of the St. Mary's Road Interchange Project will modify the grade separation structures to accommodate a diverging diamond interchange configuration. This configuration will introduce additional pavements in close proximity to the existing St. Mary's Road alignment.

BACKGROUND AND PROJECT AREA

The risk to St. Mary's Road associated with riverbank erosion and retrogressing slope failures have been noted since at least 1997, when slope movements were observed within 10-12 m of the road. In 2000, erosion protection was installed along approximately 180 m of City-owned riverbank in this area, but this work did not extend along the entire length of the high-risk reach. Also, the 2000 project did not include additional stabilization work (recommended by the engineers) that would have fully addressed the risk to the road. Since that time, slope movements have been observed at less than 5 m from the road embankment, and the Waterways Branch has classified this segment as a "Critical Risk" (i.e. the highest category)

based on their Riverbank Asset Management System. The riverbank adjacent to St. Mary's Road has been identified for potential risk of failure.

There are two main risks associated with a failure of the riverbank adjacent to St. Mary's.

First, the existing St. Mary's Road alignment serves as the City's Primary Line of Defense (PLD) from overland flooding from the Red River. Through collaboration between the City and MTI, this risk was mitigated by relocating the PLD to the east and constructing it as part of the proposed southbound to westbound off-ramp as shown in Appendix 1.

Second, upon completion of the St. Mary's Road Interchange Project, the existing St. Mary's Road will serve as the only point of access to Maple Grove Park. A failure in the Riverbank at this location will result in the loss of the only road access to Maple Grove Park. If this failure occurs, the City would need to seek approval from MTI to construct a temporary access onto the interchange. There are no assurances that MTI would grant access to the interchange as it would introduce operational impacts and potential road hazards. In addition, a temporary access would limit access to the park from only southbound St. Mary's Road.

SCOPE OF STUDY

The Public Service is seeking $70,000 in addition to the $50,000 grant provided by the Province of Manitoba to retain Kontzamanis Graumann Smith MacMillan Inc. (KGS) consulting to undertake an assessment of the existing conditions of the Riverbank, develop a preliminary design for an appropriate mitigation strategy, and complete a cost estimate.

The scope of the study will include undertaking survey, monitoring and stability assessments to determine the condition of the riverbank and quantify the risk to infrastructure. This information will then be used to develop and evaluate preliminary design options, to assist the Public Service in determining the best course of action to mitigate risks. The options will be developed to a level of details such that cost estimates can be prepared in order to facilitate possible future budget referrals.

This procurement is subject to the New West Partnership Trade Agreement and the Canadian Free Trade Agreement (collectively, the "Trade Agreements"). The Trade Agreements permit single sourcing in situations where additional deliveries are made by the original supplier of goods or services that were not included in the initial procurement, if a change of supplier for such additional goods or services:

> (i) cannot be made for economic or technical reasons such as requirements of interchangeability or interoperability with existing equipment, software, services, or installations procured under the initial procurement; and
>
> (ii) would cause significant inconvenience or substantial duplication of costs for the procuring entity;

KGS undertook multiple previous assignments assessing stability at this location for the City in 1998 and for the Province in 2012. The 1998 assignments for the City were procured in compliance with the requirements of the Agreement on Internal Trade then in effect. As a result, KGS has test hole information and monitoring results from these previous assignments which other engineering firms would not have. In addition, they have undertaken assignments

related to geotechnical considerations for the St. Mary's Interchange Project in the same vicinity.

A change in suppliers cannot be made due to economic and technical reasons of interoperability with existing survey information provided to the City and/or already created by KGS. Retaining a different engineering firm would require the repetition of the above studies previously carried out by KGS, and would cause significant and unnecessary duplication of costs for the City.

FINANCIAL IMPACT

Financial Impact Statement

Date: March 13, 2023

Project Name:

New 2023 Capital Budget Project – St. Mary's Road Riverbank Stability Study

First Year of Program **2023**

	2023	2024	2025	2026	2027
Capital					
Capital Expenditures Required	$ 120,000	$ -	$ -	$ -	$ -
Less: Existing Budgeted Costs	70,000	-	-	-	-
Additional Capital Budget Required	$ 50,000	$ -	$ -	$ -	$ -
Funding Sources:					
Debt - Internal	$ -	$ -	$ -	$ -	$ -
Debt - External	-	-	-	-	-
Grants - Province of Manitoba	50,000	-	-	-	-
Reserves, Equity, Surplus	-	-	-	-	-
Other - Trans Canada Trail		-	-	-	-
Total Funding	$ 50,000	$ -	$ -	$ -	$ -
Total Additional Capital Budget Required	$ 50,000				
Total Additional Debt Required	$ -				
Current Expenditures/Revenues					
Direct Costs	$ -	$ -	$ -	$ -	$ -
Less: Incremental Revenue/Recovery	(3,490)	-	-	-	-
Net Cost/(Benefit)	$ 3,490	$ -	$ -	$ -	$ -
Less: Existing Budget Amounts	3,490	-	-	-	-
Net Budget Adjustment Required	$ -	$ -	$ -	$ -	$ -

Additional Comments: The St. Mary's Road Riverbank Stability Study is estimated to cost $120,000. Pending approval of the recommendations in this report and will be funded by a Cost Share Grant Agreement with the Province of Manitoba in the amount of $50,000 plus $70,000 of unallocated funding from within the Regional and Local Street Renewal program. The project will be identified as #1804800123 – St. Mary's Rd Stable & Safety. Incremental Revenue/Recovery represents the estimated Departmental and Corporate interest overheads.

J. Ruby, 2023-03-13

J. Ruby, CPA, CA
Manager of Finance and Administration

CONSULTATION

This Report has been prepared in consultation with:

- Planning, Property and Development Department (Riverbank Management Branch)

OURWINNIPEG POLICY ALIGNMENT

The Sustainable Transportation Direction Strategy developed as part of OurWinnipeg forms the policy framework for the Transportation Master Plan (TMP). Sustainable Transportation identified a vision and five Key Strategic Goals which are critical to achieving a balanced and sustainable transportation system for Winnipeg. These goals form the basis for the TMP and the directions and strategies contained within it:

1. A transportation system that is dynamically integrated with land use;
2. A transportation system that supports active, accessible and healthy lifestyle options;
3. A safe, efficient and equitable transportation system for people, goods and services;
4. Transportation infrastructure that is well maintained;
5. A transportation system that is financially sustainable.

The recommendations within this report are consistent with the Key Strategic Goals.

WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

N/A

WINNIPEG POVERTY REDUCTION STRATEGY ALIGNMENT

N/A

SUBMITTED BY

Department: Public Works
Division: Engineering
Prepared by: Andrew Condon, P.Eng., Streets Project Engineer
Date: March 15, 2023

Attachment:
Appendix 1 – Stage 1 St. Mary's Road Interchange – Proposed Study Area

Appendix 1 – Stage 1 St. Mary's Road Interchange – Proposed Study Area

