Agenda – Executive Policy Committee – December 4, 2024

Report – Standing Policy Committee on Public Works – November 29, 2024

Moved by Councillor

That Rule 10(3) of The Procedure By-law No. 50/2007 be suspended in order that the following item, which was received less than four business days preceding the committee meeting, be considered by Committee.

Item No. 2 Arlington Street Bridge Over the CPR Yards Rehabilitation Feasibility and Preliminary Design Study

STANDING COMMITTEE RECOMMENDATION:

On November 29, 2024, the Standing Policy Committee on Public Works concurred in the recommendation of the Winnipeg Public Service and submitted the following to Council:

1. That the Preliminary Design as presented be accepted and that the project be referred to the 2025 Capital Budget process.

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

Agenda – Executive Policy Committee – December 4, 2024

Report – Standing Policy Committee on Public Works – November 29, 2024

DECISION MAKING HISTORY:

STANDING COMMITTEE RECOMMENDATION:

On November 29, 2024, the Standing Policy Committee on Public Works concurred in the recommendation of the Winnipeg Public Service and submitted the matter to the Executive Policy Committee and Council.

The following persons submitted communications:

- Steve West, in support of the matter
- David Grant, in support of the matter
- Linda van de Laar, in support of the matter
- Mark Cohoe, Executive Director, Bike Winnipeg, in support of the matter

On October 2, 2024, the Standing Policy Committee on Public Works granted an extension of time of 60 days for the Winnipeg Public Service to report back with rehabilitation options and associated costs for the Arlington Bridge.

COUNCIL DECISION:

On March 21, 2024, Council concurred in the recommendation of the Standing Policy Committee on Public Works and adopted the following:

1. That the Winnipeg Public Service be directed to report back in 180 days to the Standing Policy Committee on Public Works with rehabilitation options and associated costs for the Arlington Bridge.

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

On January 25, 2024, Council concurred in the recommendation of the Standing Policy Committee on Public Works and adopted the following:

Report – Standing Policy Committee on Public Works – November 29, 2024

DECISION MAKING HISTORY (continued):

COUNCIL DECISION (continued):

1. That in accordance with Section 16(4) of the Procedure By-law No. 50/2007, an extension of time of 60 days be granted for the Standing Policy Committee on Public Works to submit a recommendation on the Council Motion of November 23, 2023.

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

On November 23, 2023, Council ruled automatic referral of the following motion to the Standing Policy Committee on Public Works:

Moved by Councillor Eadie,
Seconded by Councillor Gilroy,

WHEREAS the closure of the Arlington Bridge will have a negative effect on the surrounding community in terms of social and economic outcomes;

AND WHEREAS the Arlington Bridge is vital to the overall traffic plan for the north segment of the City, which is growing;

AND WHEREAS emergency service vehicles require use of the Arlington Bridge;

AND WHEREAS the City has been focused on building roads for new developments while at the same time, the City has not maintained its older infrastructure;

AND WHEREAS the City would require capital investment from other levels of government for the replacement of the Arlington Bridge, and direction should be given to explore various sources of funding;

THEREFORE BE IT RESOLVED that the cost for the replacement of the Arlington Bridge be referred to the 2024-2027 Multi-Year Budget Review Process.

ADMINISTRATIVE REPORT

Title: Arlington Street Bridge Over the CPR Yards Rehabilitation Feasibility and Preliminary Design Study

Critical Path: Standing Policy Committee on Public Works – Executive Policy Committee - Council

AUTHORIZATION

Author	Department Head	CFO	CAO
B. Neirinck, P. Eng.	J. Berezowsky	T. Graham	S. Armbruster, Interim CAO

EXECUTIVE SUMMARY

This report summarizes the Arlington Street Bridge Over the CPR Yards Rehabilitation Feasibility and Preliminary Design Study and recommends next steps. The Class 3 estimate of a six-year project timeline is $166.3 million plus an additional $27.0 million in construction period interest (assuming the project is solely funded by the City using debt).

Information known prior to this report is as follows:

- On June 20, 2019, Council approved the Arlington Bridge to be replaced on a westerly alignment. The project was to be prioritized amongst other major unfunded capital projects.
- In August 2023, the Public Service contracted an engineering study through Tetra Tech Canada Inc. to determine whether the existing bridge could be rehabilitated to remain in service for an additional 25 years until a bridge replacement could be prioritized and funded.
- As part of the study's Phase 1, a comprehensive bridge inspection and structural assessment determined the bridge has to be immediately taken out of service.
    - The bridge was indefinitely closed on November 21, 2023.

Further study determined it is not feasible to repair the existing truss spans of the bridge due to severe deterioration and lack of strength to support construction loading and operations. Crews attempted to salvage the existing concrete piers within the Canadian Pacific Kansas City (CPKC) Yard; however, load testing showed the foundations could not support a new bridge superstructure.

As such, Phase 2 of the engineering study developed options to build a new bridge within the existing footprint.

The executive summary of the engineering report prepared by Tetra Tech is included as Appendix A. Preliminary design drawings included as Appendix B. The executive summary describes the iterations that led to the recommended preliminary design.

As the new bridge would be on the same alignment as the current bridge, building it would require full demolition of the existing bridge.

Criteria for the preliminary designs was to minimize the overall project cost while meeting the following objectives:

- Replace the two-lane bridge and include two multiuse sidewalks to reconnect residential and commercial areas north and south of the CPKC yard;
- Reduce bridge slope to improve accessibility for pedestrians, cyclists, and transit while keeping the overall bridge length as short as possible;
- Bring existing infrastructure up to current design standards;
- Design a standard bridge type with a minimum 75-year service life;
- Minimize associated roadworks but include improvements where necessary
- Minimize property acquisition;
- Minimize impacts to the CPKC Operations during and after construction; and
- Support social interaction, healthy lives, economic stability, and growth.

Based on a six-year timeline (2025 – 2030) for engineering design, bridge demolition, and reconstruction, the Class 3 estimate is $166.3 million plus an additional $27.0 million in construction period interest assuming the project is solely funded by the City using debt. For clarity, the Class 3 estimate of $166.3 million includes $16.9 million to demolish the existing bridge.

This estimate is built on the following caveats:

- Should alternate and external funding sources become available, the debt financing charges would be proportionally reduced.
- If the project is not approved for 2025 funding and commencement, the Class 3 estimate would require updating to account for construction inflation; this is currently projected to be three percent annually.
- The Class 3 estimate is based on the traditional design, bid, build project delivery method and cost estimates may need to be revised should there be a change to the project delivery method.
    - However, design-build project delivery methods including Public Private Partnerships (P3) are not viable for this project due to lack of opportunity for design innovation or risk transfer in dealing with constructing a bridge over the CPKC Yards.

The study explored two bridge profiles to meet accessibility requirements.

- Neither option required substantial changes at the south end as the bridge would meet the current Logan Avenue intersection.

- At the north end, the recommended bridge option would require Dufferin Avenue be closed at Arlington Street. It would meet existing roadway grades on Arlington Street approximately halfway between Dufferin Avenue and Stella Avenue.

A preliminary plan of the changes to the Dufferin intersection is included in Appendix B. This plan would require acquisition of 17 properties, including five partial takings and 12 full takings. An alternate plan to keep Dufferin Avenue open would require full acquisition of an additional 13 properties and would increase the project cost more than $8 million.
The recommended design is contingent on CPKC accepting modifications to their railway operations, including abandoning one railway track in the CPKC Yard that requires railway improvements at a location outside of the CPKC Yard as well as realignment/relocation of a few other railway tracks. Consultation with CPKC is still ongoing but has been generally positive in accommodating these changes.

RECOMMENDATIONS

1. That the Preliminary Design as presented be accepted and that the project be referred to the 2025 Capital Budget process.

2. 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

The 2023 Capital Budget, adopted by Council on March 22, 2023, included funding for the the Arlington Bridge Rehabilitation Feasibility Study in the amount of $850,000.

IMPLICATIONS OF THE RECOMMENDATIONS

Approval of a new preliminary design would replace the previous Council approved 2019 preliminary design with a more economical budget requirement.

Referral to the budget process would be the first step in addressing the impacts of the permanent bridge closure noted below, should the project ultimately be approved and funded.

Failure to move the project forward will still require decommissioning and demolition of the existing bridge within an estimated five-year period to mitigate the risks, impacts and associated liability of the deteriorated bridge on CPKC Operations.

The permanent closure of the existing Arlington Street Bridge has had impacts on pedestrians, cyclists, and vehicular traffic capacity across the CPKC Yards.

The permanent closure of Arlington Bridge diverts pedestrians and cyclists needing to cross the CPKC Yards. The nearest crossings for pedestrians and cyclists to cross the CPKC Yards would be McPhillips Street or Slaw Rebchuk Bridge which are not good options. Using

McPhillips Underpass via Logan Avenue and Jarvis Avenue would add a 1.65 km walk equating to an additional 25 minutes to cross the CPKC Yards.

The following traffic impacts have been observed:

- Morning peak traffic at the McPhillips underpass now lasts an hour longer and afternoon peak traffic lasts two hours longer.
- McPhillips & Logan was operating at capacity in the afternoon rush hour before the Arlington Bridge closure and is now 25% over capacity during this time. This places it in the top five busiest intersections in Winnipeg (by volume to capacity ratio), along with intersections like Lagimodiere & Fermor and Leila & McPhillips.
- Traffic on the Slaw Rebchuk Bridge has increased by ~5,000 vehicles per day (+25%).

HISTORY/DISCUSSION

1.0 Background

The 2011 Transportation Master Plan (TMP) identified the Arlington Bridge Replacement as a medium-term priority (by 2021). However the draft TMP 2050 identifies the Arlington Bridge as a short-term priority.

The Arlington Street Bridge over the CPKC Yards is a 37-span, 611.8m long, steel girder and steel truss bridge built in 1910 that is in a very poor condition.

A 2016 CPR Yards Crossing Study resulted in Council concurring on July 13, 2016, to proceed with a preliminary design to replace the Arlington Bridge.

On June 20, 2019, Council concurred in a recommendation to approve an Arlington Bridge replacement on a westerly alignment and that the project be prioritized amongst other major unfunded capital projects. The Class 3 estimate was $318.7 million assuming the project commenced in 2020. However, the project was not prioritized and funded.

As deterioration on the existing bridge was accelerating, the 2023 Capital Budget included funding to undertake a feasibility and preliminary design study to determine if the service life of the existing bridge could be extended an additional 25 years.

In November 2023, the Arlington Street Bridge was closed indefinitely and deemed beyond the point of repair, but still requires continual maintenance to mitigate risks to CPKC operation until the bridge can be removed.

Replacing the Arlington Bridge in kind with one lane in each direction and two multi-use paths (one on each side) would help re-accommodate current traffic volumes, greatly improve driving conditions, and accommodate vehicles previously unable to traverse the bridge due to its previous weight restrictions.

2.0 Study Findings and Recommended Design

The feasibility and preliminary structure replacement study was completed by Tetra Tech Inc. ("Tetra Tech"). The Tetra Tech Preliminary Design Report – Executive Summary is attached as Appendix A with representative plan drawings in Appendix B.

The objective of *The Arlington Street Bridge Over the CPR Yards Rehabilitation Feasibility and Preliminary Design* was to develop a technically compliant and cost-effective rehabilitation strategy for the Arlington Street Bridge to extend the service life and utility of the structure by a minimum of 25 years.

The project was broken down into three phases. Phase 1 included data collection and analyzing the condition. Phase 2 included developing various options for rehabilitation. Phase 3 included Preliminary Design of the recommended rehabilitation concept.

Upon completion of Phase 1, the Arlington Street Bridge was closed in November 2023 indefinitely and deemed beyond the point of repair.

Phase 2 then investigated replacement concepts reusing existing substructure units. Phase 3 concluded this assignment with a Preliminary Design of a replacement bridge including associated utility, road, rail and landscaping works.

2.1 Key Design Considerations

The Arlington Street Bridge Over the CPR Yards Rehabilitation Feasibility and Preliminary Design Study considered a number of key design considerations, as summarized in Table 1 below.

Issue	**Design Considerations**
Lack of safe infrastructure	An initial feasibility study was completed to determine whether, if at all, parts of, or the complete bridge structure could be rehabilitated. Upon completion, it was found that not only did the structure have to be closed as it reached the end of its service life, but it also required emergency repair work on several of its components to provide adequate strength to remain intact and provide adequate safety in the CPKC yard below it.
Lack of vehicular traffic capacity and transit infrastructure	Before reaching the end of its service life, the load capacity of the existing bridge was minimal, allowing only passenger vehicles, and small trucks, up to a total weight 9 tonnes. The preliminary design of the new structure allows all legal weight vehicles' traffic, which includes transit busses, emergency vehicles, and trucks.
Need for infrastructure upgrade to today's standards	The existing structure carried two lanes of traffic with minimum width, no shoulders on either side, and the approach ramps on either end at slopes far exceeding today's standards. The proposed design for the new structure will include shoulders on both sides, as well as approach ramps with slopes at around 5%, meeting the current universal design accessibility standards. In order to achieve these slopes, the intersection of Arlington Street and Logan Avenue will be slightly raised, and one of the railway lines in the yard below the structure will be removed.

	The proposed design also includes two options for the Arlington Street and Dufferin Avenue intersection; the recommended option being the disconnection of the intersection to avoid raising its elevation, in order to optimize costs, which include additional property acquisition; a secondary option keeping Dufferin Avenue connected was also developed as a costlier alternative.
Lack of adequate active transportation	The proposed design includes dedicated multiuse paths on each side of the structure. The paths would provide a connection to surrounding neighbourhoods, and the larger active transportation network. Off the bridge on either side, the roadway alignment design allows for future expansion of the paths.

Need to meet rail clearances and minimize rail impacts	The Arlington Street Bridge alignment crosses numerous CPKC tracks at the widest point in their Yard. In addition, the existing structure does not meet the vertical clearance requirement for several tracks, and therefore, the underside of the replacement superstructure will need to be raised. In collaboration with CPKC, in order to achieve appropriate clearances as well as bridge substructure units, it was agreed in the design considerations to relocate several tracks and completely remove one existing track would be acceptable.
Need for efficient construction sequencing	A design charrette was undertaken that included CPKC and local contractors, to develop solutions in order to minimize impacts to CPKC during construction and to the construction schedule. The preliminary design was optimized to utilize decommissioning of the main trusses by explosion. The preliminary design includes new foundations to assist in minimizing superstructure depth which helps achieve accessible bridge grades, vertical railway clearance. In addition, the bridge girders can be launched from one end to minimize impacts on CPKC operations.
Need for cost optimization to ensure construction feasibility	A consideration to achieve an economically viable, engineering sound, and constructible solution produced a design of the new structure to still carry one lane in each direction, and optimize the Dufferin Street intersection with a closure at Arlington Street.
Need to minimize property acquisitions and impacts	The proposed design minimizes the number of permanent takings required. A secondary design option (Dufferin remains open) would require additional takings, and is therefore not the recommended option for the north end of the project limits.
Need for road renewal	The existing roads pavement structure north and south of the bridge is in poor condition and requires reconstruction.

2.2 Property Acquisition Summary

The recommended base option of disconnecting Dufferin Avenue will require 17 property acquisitions. There are five properties that require partial takes and 12 more that require full property takes. One of the partial properties' takes is CPKC property, 901 Logan Avenue, which cannot be obtained through expropriation.

If the Dufferin Avenue and Arlington Street intersection is raised in order to remain open, 13 additional properties, for a potential total of 30 properties, will be required.

Acquisitions through purchase or expropriation typically must be completed within two years of project approval and it is possible that settlements could take several years to complete.

2.3 Decommissioning of the Existing Structure

There are some challenges in the existing conditions that have put some limitations on the decommissioning of the bridge. Spans over CPKC tracks which handle over 500 railcars per day, 24 hours per day, year-round, limit access for getting construction materials in and out of site. The Consultant has taken into consideration suggestions and preferences provided by CPKC and various contractors to produce a decommissioning plan with the least amount of disruption to regular CPKC activities in the yard.

The locations of the approach spans on the South end and on the North end, are not above active railway tracks, and girder spans located from north of the last camelback truss to Jarvis Avenue are easily accessible. The decommissioning of those spans will not have any impacts on CPKC's yard activities. The proposed plan is that these spans will be removed in place with conventional demolition techniques.

The locations of the spans over the CPKC yard (smaller pratt and larger camelback trusses) have numerous train tracks below them that are very active and will therefore require some interruptions to CPKC activities. The preferred method for the decommissioning of these spans is to drop them down in place by explosion. This method was chosen after it was determined through analysis that the lifting and moving the trusses would not work, showing that many members of the trusses would be overstressed and would require heavy strengthening. The current condition and capacity of the bridge is not conducive to the required strengthening, and was determined to also be very intrusive and costly, as compared to the use of explosions. The drop down by explosion method was discussed with demolition contractors and the preliminarily accepted by the City of Winnipeg and CPKC.

2.4 Estimated Project Cost

Based on a 6-year timeline (2025 – 2030) for engineering design, bridge demolition, and reconstruction, the Class 3 estimate is $166.3 million plus an additional $27.0 million in construction period interest assuming the project is solely funded by the City using debt. Should alternate and external funding sources become available, the debt financing charges would be proportionally reduced. For clarity, the Class 3 estimate of $166.3 million includes $16.9 million to demolish the existing bridge.

If the project is not approved for 2025 funding and commencement, the Class 3 estimate would require updating to account for construction inflation; this is currently projected to be three percent annually.

The current cost estimate reflects 2024 construction market conditions and assumes immediate project commencement with an expected project completion in six years. The estimate assumes a traditional design-bid-build procurement method. If project approval is deferred, construction inflation will result in an increase in the estimated cost, which is currently projected to be 3 percent annually.

The project costs can be approximately apportioned into two major project elements:

- 9.4 - Existing Bridge Decommissioning
- 90.6 - Bridge Replacement, Roadway Improvement and associated works.

2.5 Project Delivery Methods

The Class 3 estimate is based on the traditional design, bid, build project delivery method and cost estimates may need to be revised should there be a change to the project delivery method.

While alternate project delivery methods could be considered, Design-Build project delivery methods including Public Private Partnerships (P3) are not viable for this project due to lack of opportunity for design innovation or risk transfer in dealing with constructing a bridge over the CPKC Yards.

The CPKC Yard is of paramount operational importance to CPKC as all east-west railway traffic crosses through the yard. In addition, trains are assembled with in the Yard. There are 58 existing railway tracks that cross under the Arlington Bridge. Track closures and relocations must be minimized to reduce impact on CPKC operations.

As a result, there is minimal opportunity to innovate on a bridge design as we are threading a needle on where bridge piers can be placed in relation to the railway track; including access in the CPKC Yards to construct them.

The recommended preliminary design is already contingent on CPKC accepting modifications to their railway operations including abandoning one railway track in the CPKC Yard that requires railway improvements at a location outside of the CPKC Yard as well as realignment/relocation of a few other railway tracks. Consultation with CPKC is still ongoing but has been generally positive in accommodating these changes.

Further in discussions with CPKC, the will only deal with the Road Authority (City) on design considerations and risk items related to railway operations. That is, CPKC will not work with multiple proponents during a procurement phase which would be required for any type of Design-Build or P3 procurement options.

3.0 Comparison to 2019 Preliminary Design

A brief explanation is provided as to the differences between the 2024 preliminary design (PD) and the 2019 design which results in a more economical Class 3 budget requirement:

- The 2019 PD include a three-lane bridge plus two protected unidirectional bike lanes and two sidewalks. The 2024 PD is a two-lane bridge plus two multiuse paths for shared pedestrian/cyclist use. Thus the 2024 PD is much narrower. Table 1 below shows the exact comparison of the 2019 and the 2024 bridge cross-sectional widths:

Table 1

	2019 Preliminary Design	**2024 Preliminary Design**
Overall Width	26.275m	14.5m
Number of Lanes	2 NB + 1 SB: Total = 3	1 NB + 1SB: Total = 2
Sidewalks Width	2m (1 in each direction)	n/a
Bicycle Paths	2.5m (1 in each direction)	n/a
Multi-Use Paths	n/a	2.5m (1 in each direction)
Shoulder Widths	1.5m per direction	0.35m in each direction

- The 2019 PD included a grade separation of Dufferin which required the bridge to be much longer. Table 2 below shows the exact comparison of the 2019 and the 2024 bridge lengths:

Table 2

	2019 Preliminary Design	**2024 Preliminary Design**
Overall Length	783.3m	593.8m
Number Spans	9	13
Abutment to Abutment Length	556.3m	370.8m
Approach Spans Length	130m (South) + 97m (North) Total = 227m	n/a
Embankment Length	n/a	154m (South) + 69m (North) Total = 223m

- The 2019 PD on the westerly alignment resulted in a curved bridge that was more complex to construct and required significantly more property acquisition. The benefit was that the existing bridge could remain in service while the new bridge was constructed. However, with the permanent closure of the existing bridge that is no longer a consideration.
- The 2019 PD included roadworks between McDermot Avenue and Selkirk Avenue where the 2024 PD shortens the roadworks between Alexander Avenue and Stella Avenue. Table 3 below shows the exact comparison of the 2019 and 2024 overall project footprint lengths:

Table

	2019 Preliminary Design	**2024 Preliminary Design**
Overall project length	2,270m (McDermot Avenue to Selkirk Avenue)	950m (Alexander Avenue to Stella Avenue)

4.0 Compliance with the City's Debt Strategy

This project is currently estimated to require $193.3 million in debt funding.

The remaining debt room for the Council approved Debt Strategy, inclusive of Administrative reports under consideration by Council approximates $149.0 million.

This project will have to seek alternative funding sources.

FINANCIAL IMPACT

Financial Impact Statement

Date:

in millions

Project Name:

First Year of Program **2025**

Arlington Street Bridge Over the CPR Yards Rehabilitation Feasibility and Preliminary Design Study

	2025	2026	2027	2028	2029
Capital					
Capital Expenditures Required	$ 193.349	$ -	$ -	$ -	$ -
Less: Existing Budgeted Costs	-	-	-	-	-
Additional Capital Budget Required	$ 193.349	$ -	$ -	$ -	$ -
Funding Sources:					
Debt - Internal	$ -	$ -	$ -	$ -	$ -
Debt - External	193.349	-	-	-	-
Grants (Enter Description Here)	-	-	-	-	-
Reserves, Equity, Surplus	-	-	-	-	-
Other - Enter Description Here	-	-	-	-	-
Total Funding	$ 193.349	$ -	$ -	$ -	$ -
Total Additional Capital Budget Required	$ 193.349				
Total Additional Debt Required	$ 193.349				
Current Expenditures/Revenues					
Direct Costs	$ -	$ -	$ -	$ -	$ -
Less: Incremental Revenue/Recovery	$ 0.198	$ 0.468	$ 0.779	$ 0.847	$ 0.846
Net Cost/(Benefit)	$ (0.198)	$ (0.468)	$ (0.779)	$ (0.847)	$ (0.846)
Less: Existing Budget Amounts	-	-	-	-	-
Net Budget Adjustment Required	$ (0.198)	$ (0.468)	$ (0.779)	$ (0.847)	$ (0.846)

Additional Comments: The estimated costs of this project is $193.3 million comprised of construction costs of $166.3 million (Class 3 estimate) plus construction period interest of $27.0 million. These costs are subject to change mainly due to construction schedule, market rates and project delivery method. Construction period interest assumes 100% City debt financing and would be reduced should alternative funding sources become available. Annual debt and financing operating expense charges associated with the repayment of the principal and interest are based on the assumed 100% City issued debt and approximate $16 million per year, are not reflected above as these operating expenses would not commence until 2030, which is beyond the end date of the statement above. Recovery represents estimated departmental and corporate admin overheads.

Jason Ruby, 2024-09-05

Jason Ruby, CPA, CA
Manager of Finance and Administration

CONSULTATION

This Report has been prepared in consultation with:

- Planning Property and Development Department (as to property acquisition issues)

OURWINNIPEG POLICY ALIGNMENT

This report aligns with OurWinnipeg 2045 and Complete Communities Direction Strategy 2.0 (CCDS 2.0) in the following ways:

- OurWinnipeg 2045
    - *Policy 2.6 Integrated Regional Planning.* The Arlington Street Bridge Over the CPR Yards Rehabilitation Feasibility and Preliminary Design study is based on a collaborative and integrated solution to sustainable transportation system connectivity and efficiency on a regional scale.
    - *Policy 2.9 Reduce Road Congestion*. The Arlington Street Bridge Over the CPR Yards Rehabilitation Feasibility and Preliminary Design will enhance Active Transportation and Transit infrastructure, providing viable alternatives to the automobile, helping reduce current and future road congestion.
    - *City Building Objective 2 – Integrate resilient land use, transportation and infrastructure planning, and investments.* The Arlington Street Bridge Over the CPR Yards Rehabilitation Feasibility and Preliminary Design study supports sustainable transportation options and municipal infrastructure capacity for the movement of people and goods.
- CCDS 2.0 - Urban Structure Supports, *G2 Strategic Infrastructure and Resources – Major Roadways Goal 6 – limit potential impact on neighbourhoods from major roadways while allowing major roadways to function efficiently for their intended use*. The proposed design minimizes the impact on neighborhoods to the extent possible while improving the ability for the Arlington bridge to function for its intended use.

The 2011 Transportation Master Plan (TMP) identified Arlington Bridge as a medium-term priority (by 2021).

Council's Strategic Priorities Action Plan (2023-2026) includes the following action item within Key Theme #4 – *A Green and Growing City with Sustainable Renewal of Infrastructure*:

- 4.10 Initiate replacement of the Arlington Bridge

WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

This project aligns with the following policies from Winnipeg Climate Action Plan:

- *Policy #3.1, Increase Use and Efficiency of Public Transit Systems.* The potential for New Transit routes over the Arlington street bridge and new stops would enhance connections for riders.

- *Policy #3.4, Increase Active Transportation Rates*. New active transportation paths across the Arlington street bridge will fill gaps in the pedestrian and cycling network, and support sustainable transportation options.
- *Policy #3.5, Reduce Traffic Congestion*. Re-opening of the route across the new bridge will re-add two through lanes, synchronizing traffic signals, and efficient intersection design will reduce congestion and stop-and-go traffic.

WINNIPEG POVERTY REDUCTION STRATEGY ALIGNMENT

This project aligns with the following policies from Winnipeg Poverty Reduction Strategy:

- *Goal 5 – Transportation System Equity is Enhanced*. People living in poverty often travel daily to various locations to access services that help meet their basic needs. The proposed design features significant improvements for low cost alternative modes of travel, including walking, biking and Transit.

SUBMITTED BY

Department: Public Works
Division: Engineering
Prepared by: Damir Muhurdarevic, P.Eng.
Date: September 6, 2024
File No: 23-G-03

Attachments:

Appendix A – Tetra Tech Executive Summary

Appendix B – Drawings

Appendix C – Draft Capital Project Detail Sheet – Arlington Bridge