Agenda – Executive Policy Committee – October 20, 2021

REPORTS

Item No. 17 Application to Natural Infrastructure Fund (Infrastructure Canada) Large Project Stream – Trees on Broadway

WINNIPEG PUBLIC SERVICE RECOMMENDATION:

1. That Council approve a *Trees on Broadway Project* application to the Large Project Stream of the Natural Infrastructure Fund (NIF).

2. That the Public Service be directed to submit an application to the Large Project Stream of the Natural Infrastructure Fund for the *Trees on Broadway Project*.

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

ADMINISTRATIVE REPORT

Title: Application to Natural Infrastructure Fund (Infrastructure Canada) Large Project Stream – Trees on Broadway

Critical Path: Executive Policy Committee – Council

AUTHORIZATION

Author	Department Head	CFO	CAO
L. Nichols D. Domke	J. Berezowsky	C. Kloepfer	M. Jack

EXECUTIVE SUMMARY

Infrastructure Canada's Natural Infrastructure Fund (NIF) is a grants and contributions program that supports natural and hybrid infrastructure. The objective of the NIF is to increase the uptake/use of natural infrastructure that delivers multiple community services and benefits across the country, and build community awareness of the value and opportunities offered by natural infrastructure. The City of Winnipeg has been invited to participate in the NIF Large Project Stream. The report is recommending that the Public Service be directed to submit an application for the *Trees on Broadway Project* to be considered under this funding opportunity. The deadline for the City of Winnipeg to make an application to the NIF is October 30, 2021.

Over time, the trees on Broadway have succumbed to the surrounding environmental stresses and disease. This has necessitated replacement plantings in conditions that neither reflect industry best practice, nor result in healthy long-term tree growth to provide the benefits of canopy to mitigate the urban heat island effect in this area of Downtown. New technologies in sustainable underground infrastructure for trees in hardscapes now provide for improved growing environments while accommodating the many other demands for the same space.

The most cost-effective time to install these systems is during sidewalk or road renewal projects. The adopted 2021 Capital Budget identifies Broadway from Osborne Street to Main Street for street renewal under the New Building Canada Fund (NBCF), Accelerated Regional Street Renewal Program. Rehabilitation of Broadway is scheduled for 2023. Insufficient funds are available to fully support a Trees on Broadway project component. A successful application to NIF would provide the opportunity to purchase and install the modular suspended pavement systems necessary for healthy and long-term tree growth, while at the same time improve stormwater management along this corridor.

Incorporation of the Trees on Broadway into the street renewal project will extend the street renewal timeframe from one to two years into 2024 due to the additional work required. The timeline for the Provincial contribution agreement for the NBCF would need to be extended subject to the Province's consent. Currently the Provincial Agreement requires construction to be complete by October 30, 2023.

A resolution of Council indicating support is required in order to apply for funding under grants or contributions programs. The total cost of the project is currently under development, and is

anticipated to be in the order of magnitude of $3 to $6 million, excluding associated road renewal costs. If the application for funding under the NIF Large Project Stream is successful, the Public Service will report back to Council with amending project costs, subject to Council approval.

If the Trees on Broadway project funding application is not approved by Infrastructure Canada or if alternative funding is not identified, the project will not proceed.

The Public Service has not identified any other projects at this time that could be completed under the terms of the NIF application guidelines.

RECOMMENDATIONS

1. That Council approve a *Trees on Broadway Project* application to the Large Project Stream of the Natural Infrastructure Fund (NIF).

2. That the Public Service be directed to submit an application to the Large Project Stream of the Natural Infrastructure Fund for the *Trees on Broadway Project.*

3. 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

Infrastructure Canada has put in place the Natural Infrastructure Fund grants and contributions program to support natural and hybrid infrastructure. The City of Winnipeg is among the select cities invited to participate in the NIF Large Project Stream.

In order to apply for funding under grants or contributions programs, a resolution of Council is required indicating support for the proposed project.

The Public Service has identified a natural infrastructure project in the Public Works department that would qualify for this funding. The intention is to submit an application subsequent to obtaining support from Council and prior to the application deadline of October 30, 2021.

IMPLICATIONS OF THE RECOMMENDATIONS

There is no financial impact to the 2021 Public Works capital or operating budgets.

Future financial impacts related to cost sharing commitments under the NIF program will be determined pending the outcome of the funding application and refinement of project cost estimates, subject to Council approval.

HISTORY/DISCUSSION

As part of the 2021 budget, the Government of Canada announced a $200 million Natural Infrastructure Fund. Over the next three years, the program will support projects that use natural or hybrid approaches to protect the natural environment, support healthy and resilient

communities, contribute to economic growth, and improve access to nature for Canadians. Under this new program, up to $120 million will be invested in large natural infrastructure projects. Select major cities were invited to apply for funding of up to $20 million as a part of the Fund's Large Project Stream, including the City of Winnipeg. Projects funded under this stream are expected to deliver multiple community services and co-benefits, such as climate change resilience, access to nature, jobs and economic growth, environmental quality, protection of biodiversity, and carbon sequestration.

On August 10, 2021, Infrastructure Canada invited the City of Winnipeg to make an application under the Natural Infrastructure Fund. Once notified, the Public Service was required to review the program requirements and identify potential projects that would meet the program requirements.

Eligibility Criteria

To be eligible, the project must:

- Have total eligible costs over $3M
- Must be connected to or intended to implement an existing natural infrastructure strategy or plan
- Reflect at least one of the following categories:
    - Planting and restoring greenspace
    - Construction or restoration of naturalized water retention or detention systems
    - Naturalized water diversion and infiltration
    - Natural infrastructure or hybrid infrastructure projects supporting biodiversity and connectivity

The following projects are *ineligible* for funding under the program:

- Pure grey infrastructure projects, including roads, parking lots, buildings and facilities
- Natural infrastructure or hybrid infrastructure projects where the primary purpose is not for public use or benefit
- Natural infrastructure or hybrid infrastructure projects where the primary purpose is for commercial activity in the agricultural or natural resource sector
- Brownfield redevelopment or soil remediation that is not part of a broader eligible natural infrastructure project
- Stand-alone active transportation projects which are not an element within a broader eligible natural infrastructure or hybrid infrastructure project
- Wildfire fuel mitigation, brush clearing or removal
- Projects where land acquisition is the sole project component.

Conditions of the grant include, but are not limited to, the following:

- The NIF will provide funding based on total eligible project expenditures and subject to maximum contribution limit of 60% for municipal governments
- The total federal government funding from all Government of Canada sources will not exceed 100% of total eligible expenditures
- Costs must be incurred between May 1, 2021, and March 31, 2024 to be considered eligible
- Eligible project costs can be reimbursed to the recipient if a contribution agreement is signed by Infrastructure Canada and the recipient, and once all application conditions have been met

- Under a contribution agreement, costs must first be incurred by the recipient, and if deemed eligible, will then be reimbursed at the prescribed percentage of the federal contribution
- All recipients that are approved for NIF funding will be responsible for submitting reports to Infrastructure Canada that will be outlined in the contribution agreement

Project Overview

Growing trees in urban environments is challenging due to poor soil conditions, lack of space for root and canopy growth, insufficient moisture availability or excess moisture due to poor drainage, winter road maintenance regimens, development and construction, and pollution. Long term exposure to these stressors often predispose trees to insect and disease disorders. Urban centers are concentrated urban heat islands due to the high proportion of impermeable surface area and are at high risk of increasing climate change impacts such as increased energy costs, air pollution, and heat-related illness and mortality. Establishing tree canopy with new technologies in sustainable infrastructure for tree planting provides opportunities to mitigate these impacts. The greatest challenge in incorporating tree canopy in urban centers, such as Winnipeg's Downtown, is lack of volume of quality soil for root growth and systems for soil moisture management.

Broadway Avenue is an iconic tree-lined corridor in downtown Winnipeg. It is a high-density commercial and residential thoroughfare spanning ten city blocks flanked on the east by the Union Station, the Forks National Historic Site, and Upper Fort Garry Provincial Park, and on the west by the Manitoba Legislature. The sidewalks and median of Broadway were planted with American elm (*U. americana*) at the beginning of the 1900s. Due to the area's age, historic significance and prominent location, the elms along Broadway hold special significance for Winnipeg residents and visitors.

Over time, the trees on Broadway have succumbed to the surrounding environmental stresses and disease requiring replacement plantings in conditions that neither reflect industry best practice, nor result in healthy long-term tree growth to provide the benefits of canopy to mitigate the urban heat island effect in this area of downtown. Tree replacements are planted in existing small 4' x 4' tree wells in sidewalks due to competing requirements for space along these pedestrian corridors. The planting sites are surrounded by concrete, and contain poor quality soil and inadequate soil volume where roots do not have the conditions required to provide the tree with a long healthy life.

New technologies in sustainable underground infrastructure for trees in hardscapes, such as modular suspended pavement systems, now provide for better growing environments and still allow room for the many other demands for the same space. This technology provides added benefits for stormwater management. One such system, Silva Cells, was installed on a block on Broadway in 2007, and two other installations have taken place in road reconstruction projects since that time. Tree establishment and growth has been successful in each of these installations. The most cost-effective time to install these systems is during sidewalk or road renewal projects. The adopted 2021 Capital Budget identifies Broadway from Osborne Street to Main Street for street renewal under the New Building Canada Fund (NBCF), Accelerated Regional Street Renewal Program. Rehabilitation of Broadway is scheduled for 2023. Insufficient funds are available to fully support a Trees on Broadway project component. A successful application to NIF would provide the additional financial resources required to purchase and install the modular suspended pavement systems necessary for healthy and long-term tree growth, while at the same time improve stormwater management along this corridor.

The City is currently developing a vision and strategy for the trees on Broadway in which the use of these new technologies are deemed essential in sustaining this natural infrastructure in this iconic corridor of downtown Winnipeg for the long-term.

The total cost of the project is currently under development, and is anticipated to be in the order of magnitude of $3 to $6 million, excluding associated road renewal costs. If the application for funding under the NIF Large Project Stream is successful, the Public Service will report back to Council with amending project costs, subject to Council approval.

The Public Service has not identified any other projects at this time that could be completed under the terms of the funding agreement.

FINANCIAL IMPACT

Financial Impact Statement **Date:** October 13, 2021

Project Name:

Application to Natural Infrastructure Fund (Infrastructure Canada) Large Project Stream – Trees on Broadway

COMMENTS:

There is no financial impact associated with the approval of this report. Approval of this report only authorizes the Public Service to submit a funding application to the Natural Infrastructure Fund. If the funding application is ultimately successful, the Public Service would require further approvals from Council to authorize a capital project and enter into the funding agreement.

"signed by J. Ruby, CPA, CA"
J. Ruby CPA,CA
Manager of Finance & Administration

CONSULTATION

This Report has been prepared in consultation with:

Assets and Project Management Department

OURWINNIPEG POLICY ALIGNMENT

09 Continue to Respect and Value our Natural and Built Environment (A Sustainable Winnipeg)

- *Direction 9:* Protect and enhance the urban forest

WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

Strategic Opportunity #7: Community Climate Resiliency-
Strategize and implement opportunities to improve Winnipeg's resilience and adaptability to the effects of a changing climate.

SUBMITTED BY

Department: Public Works
Division: Director's Office
Prepared by: M. Barwinsky, City Forester
L. Nichols, Manager, Asset Management Office
Date: October 13, 2021