

**New Profiles Recommended for Funding**  
 (\$ millions)

Page	Profile Number	Profile Name	Amount
<b>New Profiles Requesting Pre-Approval of 2023-2026 Funding</b>			
2	22-40-9029	Pleasantview Neighbourhood Reconstruction	\$47.4
5	22-40-9028	Killarney Neighbourhood Reconstruction	\$39.0
<b>New Profiles Requesting Pre-Approval of 2023-2026 Funding</b>			<b>\$86.4</b>
<b>New Profiles Requesting Funding from Existing Approved Profiles</b>			
8	22-22-9701	Gateway Blvd Renewal (University Avenue to 82 Avenue)	\$6.9
11	22-12-9008	Mill Creek Pool Rehabilitation	\$6.6
14	22-34-9400	Capilano Bridge Trail (Southwest) Repair	\$6.1
17	22-10-9312	Commonwealth Recreation Centre Solar Photovoltaic Project	\$2.5
<b>New Profiles Requesting Funding from Existing Approved Profiles</b>			<b>\$22.1</b>
<b>Grand Total</b>			<b>\$108.5</b>

**CAPITAL PROFILE REPORT**

PROFILE NAME:	<b>PLEASANTVIEW NEIGHBOURHOOD RECONSTRUCTION</b>	<b>RECOMMENDED</b>
PROFILE NUMBER:	<b>22-40-9029</b>	<b>PROFILE STAGE: Council Review</b>
DEPARTMENT:	<b>Integrated Infrastructure Services</b>	<b>PROFILE TYPE: Standalone</b>
LEAD BRANCH:	<b>Building Great Neighbourhoods</b>	LEAD MANAGER: <b>Craig Walbaum</b>
PROGRAM NAME:		PARTNER MANAGER: <b>Gord Cebryk</b>
PARTNER:	<b>Parks &amp; Roads Services</b>	ESTIMATED START: <b>June, 2022</b>
BUDGET CYCLE:	<b>2019-2022</b>	ESTIMATED COMPLETION: <b>December, 2024</b>

<b>Service Category:</b>	<b>Neighbourhood Renewal</b>	<b>Major Initiative:</b>	<b>Great Neighbourhoods</b>
<b>GROWTH</b>	<b>RENEWAL</b>	<b>PREVIOUSLY APPROVED:</b>	<b>-</b>
	<b>100</b>	<b>BUDGET REQUEST:</b>	<b>47,418</b>
		<b>TOTAL PROFILE BUDGET:</b>	<b>47,418</b>

**PROFILE DESCRIPTION**

Neighbourhood Renewal provides for the renewal of roadway base, paving, curbs, gutters, and sidewalks in existing local and collector roadways and related work for signals and streetlighting rehab/upgrades, mature tree management, and minor geometric and active modes connections/facilities improvements.

Partnering with other City programs or initiatives which bring value to the neighbourhood's overall livability have also been identified to leverage opportunities and efficiencies found with Neighbourhood Renewal. This could include improvements to park and open spaces, commercial areas public realm enhancements, and community traffic management and other social or economic uplift initiatives.

**PROFILE BACKGROUND**

The Neighbourhood Renewal Program (NRP) outlines a cost-effective, long-term strategic approach to address renewal and rebuilding of roads, sidewalks, and signals and streetlights needs in existing neighbourhoods.

**PROFILE JUSTIFICATION**

Neighbourhood infrastructure should be maintained in accordance to its asset life cycle as outlined in the City's Neighbourhood Investment Model. Utilization of a balanced approach of various capital improvement techniques (reconstruction, overlay, micro surfacing) to maximize asset value and asset life.

**STRATEGIC ALIGNMENT**

This profile aligns with the strategic objective of making transformational impacts in our community by making a discrete and measurable impact on Council's four strategic goals: healthy city, urban places, regional prosperity and climate resilience; by creating a community to connect people to what matters to them.

**ALTERNATIVES CONSIDERED**

**Do Nothing/Unfunded:** No renewal work occurs allowing further deterioration that increases maintenance costs and the risk of asset failure. Significant operating funding will be expended and will provide a poor level of service. If the asset fails, there will be severe/complete loss of service and will require costly emergency repairs to reinstate service.

**Band Aid/Triage:** Simple renewal is completed, even if more extensive renewal is required, until funding is available. Overall cost/benefit analysis demonstrates that this option will be a higher cost and provide a lower overall level of service compared to a timely administered program.

**Reconstruction First/Worse Only:** The City's Investment Model and cost benefit analysis showed that effectively combining reconstruction, rehabilitation, and preventative maintenance, the program allows more improvements within 25 years, whereas a reconstruction-only program would take many more years to complete at a higher cost.

**COST BENEFITS**

Reconstruction is required to achieve committed service levels.

**Tangible benefits:** renewing/maximizing service life of aging infrastructure in neighbourhoods and achieving long-term cost savings through reinvestment strategies to increase service levels.

**Intangible benefits:** enhancing the attractiveness of neighbourhoods, offering more active modes options and improved lighting to enhance livability, health, and safety for residents.

**KEY RISKS & MITIGATING STRATEGY**

## Utility Coordination:

The major utilities in neighbourhoods (drainage, water, gas) may be challenged to coordinate their infrastructure work due to lack of resources, condition information, depth of utility lines or funding to meet the timelines of the neighbourhood renewal program. If no coordination is completed, the risk of utilities damaging newly renewed infrastructure increases.

## Mitigation:

Discussions with utility representatives in 2 - 5 years before construction providing time for utilities to secure any necessary condition and renewal data, identify opportunities, resolve issues, and complete the utility work before neighbourhood renewal work is completed.

**RESOURCES**

Internal forces and external contractors (via tender process) will be used to complete delivery. Long term construction contracts for Neighbourhood Reconstruction projects will be coordinated with utility stakeholders and other City initiatives to optimize cost savings and investments.

**CONCLUSIONS AND RECOMMENDATIONS**

With neighbourhood local and collector roads being an integral part of the City's transportation network that provides access to residents, businesses and industries, an effective neighbourhood renewal strategy is needed to ensure the City meets its goals for sustainable and accessible infrastructure. Reconstruction is required to achieve committed service levels to effectively manage aging local/collector roads, improve accessibility/efficient movement for people, and increase service level and customer satisfaction.

**CAPITAL PROFILE REPORT**PROFILE NAME: **Pleasantview Neighbourhood Reconstruction****RECOMMENDED**PROFILE NUMBER: **22-40-9029**PROFILE TYPE: **Standalone**BRANCH: **Building Great Neighbourhoods****CAPITAL BUDGET AND FUNDING SOURCES (000's)**

APPROVED BUDGET		Prior Years	2022	2023	2024	2025	2026	2027	2028	2029	2030	Beyond 2030	Total
	Approved Budget	Original Budget Approved	-	-	-	-	-	-	-	-	-	-	-
	Current Approved Budget	-	-	-	-	-	-	-	-	-	-	-	-

BUDGET REQUEST	Budget Request	-	23,709	21,779	1,931	-	-	-	-	-	-	-	47,418
	Revised Funding Sources (if approved)												
	Local Improvements Prop. Share	-	3,296	3,296	-	-	-	-	-	-	-	-	6,591
	Neighborhood Renewal Reserve	-	19,307	17,377	1,931	-	-	-	-	-	-	-	38,615
	Partnership Funding	-	1,106	1,106	-	-	-	-	-	-	-	-	2,212
	Requested Funding Source	-	23,709	21,779	1,931	-	-	-	-	-	-	-	47,418

REVISED BUDGET (IF APPROVED)	Revised Budget (if Approved)	-	23,709	21,779	1,931	-	-	-	-	-	-	-	47,418
	Requested Funding Source												
	Local Improvements Prop. Share	-	3,296	3,296	-	-	-	-	-	-	-	-	6,591
	Neighborhood Renewal Reserve	-	19,307	17,377	1,931	-	-	-	-	-	-	-	38,615
	Partnership Funding	-	1,106	1,106	-	-	-	-	-	-	-	-	2,212
	Requested Funding Source	-	23,709	21,779	1,931	-	-	-	-	-	-	-	47,418

**CAPITAL BUDGET BY ACTIVITY TYPE (000's)**

REVISED BUDGET (IF APPROVED)	Activity Type	Prior Years	2022	2023	2024	2025	2026	2027	2028	2029	2030	Beyond 2030	Total
	Construction	-	18,967	17,423	1,545	-	-	-	-	-	-	-	-
Contingency	-	1,541	1,416	126	-	-	-	-	-	-	-	-	3,082
Design	-	1,897	1,742	154	-	-	-	-	-	-	-	-	3,793
Follow Up Warranty	-	474	436	39	-	-	-	-	-	-	-	-	948
Other Costs	-	830	762	68	-	-	-	-	-	-	-	-	1,660
	Total	-	23,709	21,779	1,931	-	-	-	-	-	-	-	47,418

**OPERATING IMPACT OF CAPITAL**

Type of Impact:

Branch:													
	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE	
Total Operating Impact	-	-	-	-	-	-	-	-	-	-	-	-	-

**CAPITAL PROFILE REPORT**

PROFILE NAME:	<b>KILLARNEY NEIGHBOURHOOD RECONSTRUCTION</b>	<b>RECOMMENDED</b>
PROFILE NUMBER:	<b>22-40-9028</b>	<b>PROFILE STAGE: Council Review</b>
DEPARTMENT:	<b>Integrated Infrastructure Services</b>	<b>PROFILE TYPE: Standalone</b>
LEAD BRANCH:	<b>Building Great Neighbourhoods</b>	LEAD MANAGER: <b>Craig Walbaum</b>
PROGRAM NAME:		PARTNER MANAGER: <b>Gord Cebryk</b>
PARTNER:	<b>Parks &amp; Roads Services</b>	ESTIMATED START: <b>June, 2022</b>
BUDGET CYCLE:	<b>2019-2022</b>	ESTIMATED COMPLETION: <b>December, 2024</b>

<b>Service Category:</b>	<b>Neighbourhood Renewal</b>	<b>Major Initiative:</b>	<b>Great Neighbourhoods</b>
<b>GROWTH</b>	<b>RENEWAL</b>	<b>PREVIOUSLY APPROVED:</b>	<b>-</b>
	<b>100</b>	<b>BUDGET REQUEST:</b>	<b>38,932</b>
		<b>TOTAL PROFILE BUDGET:</b>	<b>38,932</b>

**PROFILE DESCRIPTION**

Neighbourhood Renewal provides for the renewal of roadway base, paving, curbs, gutters, and sidewalks in existing local and collector roadways and related work for signals and streetlighting rehab/upgrades, mature tree management, and minor geometric and active modes connections/facilities improvements.

Partnering with other City programs or initiatives which bring value to the neighbourhood's overall livability have also been identified to leverage opportunities and efficiencies found with Neighbourhood Renewal. This could include improvements to park and open spaces, commercial areas public realm enhancements, and community traffic management and other social or economic uplift initiatives.

**PROFILE BACKGROUND**

The Neighbourhood Renewal Program (NRP) outlines a cost-effective, long-term strategic approach to address renewal and rebuilding of roads, sidewalks, and signals and streetlights needs in existing neighbourhoods.

**PROFILE JUSTIFICATION**

Neighbourhood infrastructure should be maintained in accordance to its asset life cycle as outlined in the City's Neighbourhood Investment Model. Utilization of a balanced approach of various capital improvement techniques (reconstruction, overlay, micro surfacing) to maximize asset value and asset life.

**STRATEGIC ALIGNMENT**

This profile aligns with the strategic objective of making transformational impacts in our community by making a discrete and measurable impact on Council's four strategic goals: healthy city, urban places, regional prosperity and climate resilience; by creating a community to connect people to what matters to them.

**ALTERNATIVES CONSIDERED**

**Do Nothing/Unfunded:** No renewal work occurs allowing further deterioration that increases maintenance costs and the risk of asset failure. Significant operating funding will be expended and will provide a poor level of service. If the asset fails, there will be severe/complete loss of service and will require costly emergency repairs to reinstate service.

**Band Aid/Triage:** Simple renewal is completed, even if more extensive renewal is required, until funding is available. Overall cost/benefit analysis demonstrates that this option will be a higher cost and provide a lower overall level of service compared to a timely administered program.

**Reconstruction First/Worse Only:** The City's Investment Model and cost benefit analysis showed that effectively combining reconstruction, rehabilitation, and preventative maintenance, the program allows more improvements within 25 years, whereas a reconstruction-only program would take many more years to complete at a higher cost.

**COST BENEFITS**

Reconstruction is required to achieve committed service levels.

**Tangible benefits:** renewing/maximizing service life of aging infrastructure in neighbourhoods and achieving long-term cost savings through reinvestment strategies to increase service levels.

**Intangible benefits:** enhancing the attractiveness of neighbourhoods, offering more active modes options and improved lighting to enhance livability, health, and safety for residents.

**KEY RISKS & MITIGATING STRATEGY**

## Utility Coordination:

The major utilities in neighbourhoods (drainage, water, gas) may be challenged to coordinate their infrastructure work due to lack of resources, condition information, depth of utility lines or funding to meet the timelines of the neighbourhood renewal program. If no coordination is completed, the risk of utilities damaging newly renewed infrastructure increases.

## Mitigation:

Discussions with utility representatives in 2 - 5 years before construction providing time for utilities to secure any necessary condition and renewal data, identify opportunities, resolve issues, and complete the utility work before neighbourhood renewal work is completed.

**RESOURCES**

Internal forces and external contractors (via tender process) will be used to complete delivery. Long term construction contracts for Neighbourhood Reconstruction projects will be coordinated with utility stakeholders and other City initiatives to optimize cost savings and investments.

**CONCLUSIONS AND RECOMMENDATIONS**

With neighbourhood local and collector roads being an integral part of the City's transportation network that provides access to residents, businesses and industries, an effective neighbourhood renewal strategy is needed to ensure the City meets its goals for sustainable and accessible infrastructure. Reconstruction is required to achieve committed service levels to effectively manage aging local/collector roads, improve accessibility/efficient movement for people, and increase service level and customer satisfaction.

**CAPITAL PROFILE REPORT**PROFILE NAME: **Killarney Neighbourhood Reconstruction****RECOMMENDED**PROFILE NUMBER: **22-40-9028**PROFILE TYPE: **Standalone**BRANCH: **Building Great Neighbourhoods****CAPITAL BUDGET AND FUNDING SOURCES (000's)**

APPROVED BUDGET		Prior Years	2022	2023	2024	2025	2026	2027	2028	2029	2030	Beyond 2030	Total
	Approved Budget	Original Budget Approved	-	-	-	-	-	-	-	-	-	-	-
	Current Approved Budget	-	-	-	-	-	-	-	-	-	-	-	-

BUDGET REQUEST	Budget Request	-	21,802	15,497	1,633	-	-	-	-	-	-	-	38,932
	Revised Funding Sources (if approved)												
	Local Improvements Prop. Share	-	3,657	2,438	-	-	-	-	-	-	-	-	6,095
	Neighborhood Renewal Reserve	-	18,145	13,059	1,633	-	-	-	-	-	-	-	32,837
	Requested Funding Source	-	21,802	15,497	1,633	-	-	-	-	-	-	-	38,932

REVISED BUDGET (IF APPROVED)	Revised Budget (if Approved)	-	21,802	15,497	1,633	-	-	-	-	-	-	-	38,932
	Requested Funding Source												
	Local Improvements Prop. Share	-	3,657	2,438	-	-	-	-	-	-	-	-	6,095
	Neighborhood Renewal Reserve	-	18,145	13,059	1,633	-	-	-	-	-	-	-	32,837
	Requested Funding Source	-	21,802	15,497	1,633	-	-	-	-	-	-	-	38,932

**CAPITAL BUDGET BY ACTIVITY TYPE (000's)**

REVISED BUDGET (IF APPROVED)	Activity Type	Prior Years	2022	2023	2024	2025	2026	2027	2028	2029	2030	Beyond 2030	Total
	Construction	-	17,290	12,398	1,306	-	-	-	-	-	-	-	-
Contingency	-	1,405	1,007	106	-	-	-	-	-	-	-	-	2,518
Design	-	1,918	1,240	131	-	-	-	-	-	-	-	-	3,288
Follow Up Warranty	-	432	310	33	-	-	-	-	-	-	-	-	775
Other Costs	-	756	542	57	-	-	-	-	-	-	-	-	1,356
	Total	-	21,802	15,497	1,633	-	-	-	-	-	-	-	38,932

**OPERATING IMPACT OF CAPITAL**

Type of Impact:

Branch:																
	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE
Total Operating Impact	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**CAPITAL PROFILE REPORT**

PROFILE NAME:	<b>GATEWAY BLVD RENEWAL (UNIVERSITY AVENUE TO 82 AVENUE)</b>	<b>RECOMMENDED</b>
PROFILE NUMBER:	<b>22-22-9701</b>	<b>PROFILE STAGE: Council Review</b>
DEPARTMENT:	<b>Integrated Infrastructure Services</b>	<b>PROFILE TYPE: Standalone</b>
LEAD BRANCH:	<b>Infrastructure Delivery</b>	LEAD MANAGER: <b>Jason Meliefste</b>
PROGRAM NAME:		PARTNER MANAGER: <b>Gord Cebryk</b>
PARTNER:	<b>Parks &amp; Roads Services</b>	ESTIMATED START: <b>June, 2022</b>
BUDGET CYCLE:	<b>2019-2022</b>	ESTIMATED COMPLETION: <b>December, 2023</b>

**Service Category: Roads****Major Initiative:**

<b>GROWTH</b>	<b>RENEWAL</b>	<b>PREVIOUSLY APPROVED:</b>	<b>-</b>
	<b>100</b>	<b>BUDGET REQUEST:</b>	<b>6,901</b>
		<b>TOTAL PROFILE BUDGET:</b>	<b>6,901</b>

**PROFILE DESCRIPTION**

University Avenue to 80 Avenue:

Asphalt surface renewal; replacement of east lane road structure and curb/gutter; replace 79-80 avenue west side walkway, relocating streetlight to back of walk; streetlight upgrades; and, localized walkway replacement.

80 - 82 Avenue:

Road Reconstruction; addition of east side walkway; upgrades to furnishing zones (trees, festive lights and Low Impact Development); replace street lights, transformers and pedestals; signal upgrades at 80 Avenue; new pedestrian flasher at 81 Avenue; and, extending the Whyte Ave 'heritage feel' between 80 - 82 Avenue.

Construction is planned to start Summer of 2022 and anticipated completion in Fall of 2023.

**PROFILE BACKGROUND**

Gateway Boulevard is a corridor that falls under the Goods Movement Arterial Renewal Program (ARP) which addresses deteriorating arterial road conditions and provide preventative renewal measures to ensure and maintain the safety of all road users. This program includes renewal of roadway base, curbs, gutters, and sidewalks, as well as upgrading rural arterial truck routes.

Arterial renewal locations are planned in conjunction with other roadway growth components (such as widening, intersection improvements) and Transit growth components (such as bus lanes, signal priorities, LRT), where possible. The ARP program also coordinates and includes related work for street lighting and traffic signal rehabilitation/upgrades, mature tree management, and minor geometric and active modes connections/facilities improvements (for sidewalks, bike, multi-use paths). Coordination strategies intend to optimize cost savings and city invest.

**PROFILE JUSTIFICATION**

Arterial Road infrastructure, such as Gateway Boulevard, should be maintained in accordance with its asset lifecycle as outlined in the City's Arterial Investment Model. Utilization of a balanced approach to various capital improvement techniques (i.e. reconstruction, overlay, crack sealing) to maximize asset value and asset life. Sufficient funding will allow for Gateway Boulevard to receive capital improvements during optimal renewal intervals. This will help create a stable/predictable funding to meet renewal needs of (aging) current and future major roads (because of the population and demographic trends) and mitigate traffic disruption and maintenance (such as potholes).

Population growth and other demographic factors result in higher usage of arterial roads and deteriorating rates that will negatively impact the efficient movement of goods and people (transit, bike, pedestrian), public satisfaction (potholes, disruption) and traffic safety.

**STRATEGIC ALIGNMENT**

Aligns with the strategic objective of making transformational impacts in our community by making a discrete and measurable impact on Council's four strategic goals: healthy city, urban places, regional prosperity and climate resilience; by creating a community to connect people to what matters to them.

**ALTERNATIVES CONSIDERED**

The alternative to advancing this project to construction by approving Checkpoint 1 to 5, is to "do nothing". This would allow further deterioration of Gateway Blvd, which translates to higher maintenance and future renewal costs and poor level of service (i.e. potholes, traffic disruptions, safety) and customer satisfaction. Doing nothing on Gateway Boulevard would allow further deterioration that increases maintenance costs and increases the risk of asset failure. Significant operating dollars will be expended to provide temporary repairs (such as potholes to maintain traffic safety and access to the roadway) that will provide a poor level of service. If asset failure occurs, there will be a severe or complete loss of service (such as limited or no roadway access) and will require costly emergency repairs or renewal for the asset to reinstate service.



# CAPITAL PROFILE REPORT

## **COST BENEFITS**

Arterial networks, such as the Gateway Boulevard corridor, must be maintained and proactively renewed before its condition requires more costly major reconstruction. If adequate renewal investment is not met this will result in a lower level of service, and costly maintenance and reconstruction investments.

## **KEY RISKS & MITIGATING STRATEGY**

Key risks include unforeseen conditions arising during construction, including damages discovered in utility and drainage infrastructure. All risks will be monitored throughout the life of the project during construction. The Risk Register will continue to be updated and reviewed on a regular basis by the project team and Administration. The project team will work together to mitigate the risks in a timely manner as they arise.

## **RESOURCES**

Internal resources will include a project manager and support staff. A Design Consultant has been retained and upon approval of the construction budget will provide engineering construction and post construction services. A Contractor will be hired to complete the construction of the project.

## **CONCLUSIONS AND RECOMMENDATIONS**

IIS recommends funding approval for Checkpoint 1 to 5, to permit funding for construction and post construction services for this project, in order to meet the planned project timelines.

# CAPITAL PROFILE REPORT

PROFILE NAME: Gateway Blvd Renewal (University Avenue to 82 Avenue)

**RECOMMENDED**

PROFILE NUMBER: 22-22-9701

PROFILE TYPE: Standalone

BRANCH: Infrastructure Delivery

## CAPITAL BUDGET AND FUNDING SOURCES (000's)

APPROVED BUDGET	Prior Years	2022	2023	2024	2025	2026	2027	2028	2029	2030	Beyond 2030	Total
	Approved Budget											
Original Budget Approved	-	-	-	-	-	-	-	-	-	-	-	-
Current Approved Budget	-	-	-	-	-	-	-	-	-	-	-	-

BUDGET REQUEST	Budget Request	-	3,134	3,767	-	-	-	-	-	-	-	6,901
	Revised Funding Sources (if approved)											
	Federal Grant	-	735	-	-	-	-	-	-	-	-	735
	Munc Sustain. Initiative - MSI	-	1,831	3,234	-	-	-	-	-	-	-	5,065
	Pay-As-You-Go	-	568	532	-	-	-	-	-	-	-	1,101
Requested Funding Source	-	3,134	3,767	-	-	-	-	-	-	-	-	6,901

REVISED BUDGET (IF APPROVED)	Revised Budget (if Approved)	-	3,134	3,767	-	-	-	-	-	-	-	6,901
	Requested Funding Source											
	Federal Grant	-	735	-	-	-	-	-	-	-	-	735
	Munc Sustain. Initiative - MSI	-	1,831	3,234	-	-	-	-	-	-	-	5,065
	Pay-As-You-Go	-	568	532	-	-	-	-	-	-	-	1,101
Requested Funding Source	-	3,134	3,767	-	-	-	-	-	-	-	-	6,901

## CAPITAL BUDGET BY ACTIVITY TYPE (000's)

REVISED BUDGET (IF APPROVED)	Activity Type	Prior Years	2022	2023	2024	2025	2026	2027	2028	2029	2030	Beyond 2030	Total
	Construction	-	2,474	3,056	-	-	-	-	-	-	-	-	-
Design	-	554	584	-	-	-	-	-	-	-	-	-	1,138
Other Costs	-	106	127	-	-	-	-	-	-	-	-	-	233
Total	-	3,134	3,767	-	-	-	-	-	-	-	-	-	6,901

## OPERATING IMPACT OF CAPITAL

Type of Impact:

Branch:																
	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE
Total Operating Impact	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**CAPITAL PROFILE REPORT**

PROFILE NAME: **MILL CREEK POOL REHABILITATION**  
 PROFILE NUMBER: **22-12-9008**  
 DEPARTMENT: **Integrated Infrastructure Services**  
 LEAD BRANCH: **Infrastructure Delivery**  
 PROGRAM NAME:  
 PARTNER: **Community Recreation and Culture**  
 BUDGET CYCLE: **2019-2022**

**RECOMMENDED**

PROFILE STAGE:	<b>Council Review</b>
PROFILE TYPE:	<b>Standalone</b>
LEAD MANAGER:	<b>Jason Meliefste</b>
PARTNER MANAGER:	<b>Roger Jevne</b>
ESTIMATED START:	<b>June, 2022</b>
ESTIMATED COMPLETION:	<b>December, 2024</b>

**Service Category:** Recreation & Culture**Major Initiative:**

<b>GROWTH</b>	<b>RENEWAL</b>
<b>14</b>	<b>86</b>

<b>PREVIOUSLY APPROVED:</b>	<b>-</b>
<b>BUDGET REQUEST:</b>	<b>6,576</b>
<b>TOTAL PROFILE BUDGET:</b>	<b>6,576</b>

**PROFILE DESCRIPTION**

This profile supports the Mill Creek Pool Rehabilitation design and construction. The rehabilitation includes replacement or upgrades to mechanical, electrical, and aquatic components which have received D (poor) or F (critical) ratings. This includes the pool basin, skimming and filtration system, sanitary lines, water heaters, unit heaters, electrical switches, bonding, and exterior light replacements. Growth scope includes the security fence replacement and upgrades to the pool disinfection system, funded through Community Recreation and Culture safety and security composite, and Community Recreation and Culture Swimming Pool OH&S Improvements composite respectively.

**PROFILE BACKGROUND**

This facility was identified as a priority for renewal as part of the Facility: Service Delivery - Renewal composite (CM 12-0000 and CM-75-0100), which funded the planning and design up to checkpoint 3. There is also a design completed for a second project at this facility, to upgrade the pool disinfection system from chlorine gas to chlorine generation. With the addition of this scope, the project now requires the creation of its own standalone profile due to the value of the combined project being over the \$5 million dollar threshold for renewal.

**PROFILE JUSTIFICATION**

As facilities age, there is a need to rehabilitate or replace various components to maximize the life of the facility, to provide a safe environment for staff and the general public and to meet the current service needs of citizens.

Since most facilities will still be in use for the next 20 to 30 years, the primary methods for meeting those goals will be through efficient operation, maintenance, repair, renew, and energy retrofitting of existing facilities. The objective is to maximize benefits, manage risk and provide satisfactory levels of service to the community in a sustainable manner.

**STRATEGIC ALIGNMENT**

This profile aligns with the strategic objective of making transformational impacts in our community by making discrete and measurable impacts on Council's four strategic goals: healthy city, urban shift, regional economic prosperity, and energy and climate. This project focuses on the healthy city strategic goal.

**ALTERNATIVES CONSIDERED**

The alternate to a deliberate rehabilitation program is to carry out replacements of components as they fail using operating funds. This is considered to be the highest cost alternative to facility maintenance by industry.

**COST BENEFITS**

Tangible Benefits: Improved reliability, enhanced energy efficiency, improved water quality and level of service.  
 Intangible Benefits: Customer satisfaction and improved public image.

**KEY RISKS & MITIGATING STRATEGY**

As this facility deteriorates, its components and systems age and will fail. Failure of these systems poses various risks on the staff and users of the facility and the lack of rehabilitation activities can lead to unplanned breakdowns resulting in loss of time/income within the operations and/or the closure of the facility impacting citizens.

A risk management plan follows the steps for risk control, risk register, and assumptions/constraints as outlined in the City's Project Management procedures. The plan outlines the processes used for risk identification, quantitative and qualitative risk analysis. A robust risk register has been created and is monitored during regular project team meetings.

**RESOURCES**

This project will be led by Integrated Infrastructure Services following the Project Development and Delivery Model with internal Project Manager leads, and external consultants and construction manager.

# CAPITAL PROFILE REPORT

## CONCLUSIONS AND RECOMMENDATIONS

Mill Creek Pool Rehabilitation includes both renewal and growth elements. The rehabilitation includes replacement or upgrades to major mechanical, electrical, and aquatic components which have received D (poor) or F (critical) ratings, such as the basin, skimming and filtration system, sanitary lines, and some mechanical and electrical components. Growth scope includes the security fence replacement and upgrades to the pool disinfection system.

The recommendation is that Checkpoint 3 Authorization for Capital Expenditure be approved by City Council to complete the renewal project.

# CAPITAL PROFILE REPORT

PROFILE NAME: **Mill Creek Pool Rehabilitation**  
 PROFILE NUMBER: **22-12-9008**  
 BRANCH: **Infrastructure Delivery**

**RECOMMENDED**  
 PROFILE TYPE: **Standalone**

### CAPITAL BUDGET AND FUNDING SOURCES (000's)

APPROVED BUDGET		Prior Years	2022	2023	2024	2025	2026	2027	2028	2029	2030	Beyond 2030	Total
	Approved Budget	Original Budget Approved	-	-	-	-	-	-	-	-	-	-	-
	Current Approved Budget	-	-	-	-	-	-	-	-	-	-	-	-

BUDGET REQUEST	Budget Request	-	2,698	3,578	300	-	-	-	-	-	-	-	6,576
	Revised Funding Sources (if approved)												
	Munc Sustain. Initiative - MSI	-	2,344	3,466	290	-	-	-	-	-	-	-	6,100
	Pay-As-You-Go	-	354	112	10	-	-	-	-	-	-	-	476
	Requested Funding Source	-	2,698	3,578	300	-	-	-	-	-	-	-	6,576

REVISED BUDGET (IF APPROVED)	Revised Budget (if Approved)	-	2,698	3,578	300	-	-	-	-	-	-	-	6,576
	Requested Funding Source												
	Munc Sustain. Initiative - MSI	-	2,344	3,466	290	-	-	-	-	-	-	-	6,100
	Pay-As-You-Go	-	354	112	10	-	-	-	-	-	-	-	476
	Requested Funding Source	-	2,698	3,578	300	-	-	-	-	-	-	-	6,576

### CAPITAL BUDGET BY ACTIVITY TYPE (000's)

REVISED BUDGET (IF APPROVED)	Activity Type	Prior Years	2022	2023	2024	2025	2026	2027	2028	2029	2030	Beyond 2030	Total
	Construction	-	2,030	3,523	290	-	-	-	-	-	-	-	-
Design	-	522	-	-	-	-	-	-	-	-	-	-	522
Other Costs	-	146	55	10	-	-	-	-	-	-	-	-	211
	Total	-	2,698	3,578	300	-	-	-	-	-	-	-	6,576

### OPERATING IMPACT OF CAPITAL

Type of Impact:

Branch:																
	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE
Total Operating Impact	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**CAPITAL PROFILE REPORT**

PROFILE NAME:	<b>CAPILANO BRIDGE TRAIL (SOUTHWEST) REPAIR</b>	<b>RECOMMENDED</b>
PROFILE NUMBER:	<b>22-34-9400</b>	<b>PROFILE STAGE: Council Review</b>
DEPARTMENT:	<b>Integrated Infrastructure Services</b>	<b>PROFILE TYPE: Standalone</b>
LEAD BRANCH:	<b>Building Great Neighbourhoods</b>	LEAD MANAGER: <b>Craig Walbaum</b>
PROGRAM NAME:		PARTNER MANAGER: <b>Gord Cebryk</b>
PARTNER:	<b>Parks &amp; Roads Services</b>	ESTIMATED START: <b>June, 2022</b>
BUDGET CYCLE:	<b>2019-2022</b>	ESTIMATED COMPLETION: <b>December, 2023</b>

<b>Service Category:</b>	<b>Recreation &amp; Culture</b>	<b>Major Initiative:</b>	
<b>GROWTH</b>	<b>RENEWAL</b>	<b>PREVIOUSLY APPROVED:</b>	<b>-</b>
	<b>100</b>	<b>BUDGET REQUEST:</b>	<b>6,110</b>
		<b>TOTAL PROFILE BUDGET:</b>	<b>6,110</b>

**PROFILE DESCRIPTION**

Engineering Services - Geotechnical Engineering Group noted damage to the paved trail in the River Valley Riverside area, approximately 250 metres west of the Capilano Bridge. Based on a preliminary site review, the trail was made permanently closed due to public safety concerns.

The affected landslide area encompasses a zone of the valley slopes extending over a length of approximately 100 metres along the trail. The instability resulted in the failure of three timber retaining walls above the trail and severe cracking of the trail. Several cracks and subsidence/heave were noted along the trail alignment within the landslide area, indicating both local and deep-seated slope instability.

Renewal of the trail is required to put this trail asset in service and to effectively address this aging asset, improve accessibility/efficient movement for people, increase service level as well as citizen satisfaction. This project will involve detailed engineering assessment, design and construction of the trail repair.

**PROFILE BACKGROUND**

This project was identified as a priority for renewal as part of the Open Space: Environmental - Renewal Capital Profile composite (CM 34-0000), which was to fund the project from Checkpoint 1 to 5. As the development of the design progressed, the project estimated reflected the complex nature of this work. Tender bid pricing reflecting the current (2002) market landscape also contribute to the project requiring the creation of its own standalone profile due to the value of the combined project being over the \$5 million dollar threshold for renewal.

**PROFILE JUSTIFICATION**

Edmonton's River Valley is the longest stretch of urban parkland in North America and is recognized as one of the most important tourist attractions for Edmonton. River Valley trails and parks that have failing infrastructure can lead to trail closures, injury of citizens, programming and scheduling challenges. The River Valley and Ravine System is a valued asset that requires upgrades, rehabilitation and repair due to aging infrastructure and trail damage.

The risk of not reconstructing this trail with permanent repair will include an unacceptable level of safety risk for the public and pedestrian use of the infrastructure. The continued closure of this trail would have a major adverse impact on public access to the river valley in this area since the only viable alternative routing for commuters and trail users would involve detours into the neighbourhood on top of bank lands along Rowland Road. Without stabilization repairs, the area will continue to degrade with ongoing slope movements and further damage of the existing trail area. This would lead to additional non-localized design and construction challenges and higher costs should future remedial work be contemplated or required.

**STRATEGIC ALIGNMENT**

This profile aligns with the strategic objective of making transformational impacts in our community by making discrete and measurable impacts on Council's four strategic goals: healthy city, urban shift, regional economic prosperity, and energy and climate. This project focuses on the healthy city strategic goal.

**ALTERNATIVES CONSIDERED**

The alternative of doing nothing or deferring work was deemed unacceptable due to the safety concerns of this deteriorating asset. Furthermore, without stabilization repairs, the area will continue to degrade with ongoing slope movements and further damage of the existing trail area. This would lead to additional non-localized design and construction challenges and higher costs should future remedial work be contemplated or required.

**COST BENEFITS**

Trails in the River Valley must be maintained and renewed before its condition requires more extraneous safety concerns and more costly major reconstruction efforts. If adequate renewal investment is not met this will result in a lower level of service, and costly maintenance and reconstruction investments.

# CAPITAL PROFILE REPORT

## KEY RISKS & MITIGATING STRATEGY

As this asset deteriorates, its components and systems age and will fail. Failure of these systems poses various risks on users of this trail and the lack of rehabilitation activities can lead to closure of the trail system that would impact citizens.

A risk management plan follows the steps for risk control, risk register, and assumptions/constraints as outlined in the City's Project Management procedures. The plan outlines the processes used for risk identification, quantitative and qualitative risk analysis. A robust risk register has been created and is monitored during regular project team meeting

## RESOURCES

This project will be led by Integrated Infrastructure Services following the Project Development and Delivery Model with Project Manager leads, and external consultants and contractors.

## CONCLUSIONS AND RECOMMENDATIONS

IIS recommends funding approval for Checkpoint 1 to 5, to permit funding for construction and post construction services for this project, in order to address this safety concerns and meet the project commitments.

# CAPITAL PROFILE REPORT

PROFILE NAME: **Capilano Bridge Trail (Southwest) Repair**  
 PROFILE NUMBER: **22-34-9400**  
 BRANCH: **Building Great Neighbourhoods**

**RECOMMENDED**  
 PROFILE TYPE: **Standalone**

### CAPITAL BUDGET AND FUNDING SOURCES (000's)

APPROVED BUDGET		Prior Years	2022	2023	2024	2025	2026	2027	2028	2029	2030	Beyond 2030	Total
	Approved Budget	Original Budget Approved	-	-	-	-	-	-	-	-	-	-	-
	Current Approved Budget	-	-	-	-	-	-	-	-	-	-	-	-

BUDGET REQUEST	Budget Request	-	5,810	300	-	-	-	-	-	-	-	-	6,110
	Revised Funding Sources (if approved)												
	Munc Sustain. Initiative - MSI	-	5,304	-	-	-	-	-	-	-	-	-	5,304
	Pay-As-You-Go	-	506	300	-	-	-	-	-	-	-	-	806
	Requested Funding Source	-	5,810	300	-	-	-	-	-	-	-	-	6,110

REVISED BUDGET (IF APPROVED)	Revised Budget (if Approved)	-	5,810	300	-	-	-	-	-	-	-	-	6,110
	Requested Funding Source												
	Munc Sustain. Initiative - MSI	-	5,304	-	-	-	-	-	-	-	-	-	5,304
	Pay-As-You-Go	-	506	300	-	-	-	-	-	-	-	-	806
	Requested Funding Source	-	5,810	300	-	-	-	-	-	-	-	-	6,110

### CAPITAL BUDGET BY ACTIVITY TYPE (000's)

REVISED BUDGET (IF APPROVED)	Activity Type	Prior Years	2022	2023	2024	2025	2026	2027	2028	2029	2030	Beyond 2030	Total
	Construction	-	4,425	-	-	-	-	-	-	-	-	-	-
Contingency	-	906	-	-	-	-	-	-	-	-	-	-	906
Design	-	283	-	-	-	-	-	-	-	-	-	-	283
Follow Up Warranty	-	-	300	-	-	-	-	-	-	-	-	-	300
Other Costs	-	196	-	-	-	-	-	-	-	-	-	-	196
	Total	-	5,810	300	-	-	-	-	-	-	-	-	6,110

### OPERATING IMPACT OF CAPITAL

Type of Impact:

Branch:																
	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE
Total Operating Impact	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**CAPITAL PROFILE REPORT**

PROFILE NAME:	<b>COMMONWEALTH RECREATION CENTRE SOLAR PHOTOVOLTAIC PROJECT</b>	<b>RECOMMENDED</b>
PROFILE NUMBER:	<b>22-10-9312</b>	<b>PROFILE STAGE: Council Review</b>
DEPARTMENT:	<b>Integrated Infrastructure Services</b>	<b>PROFILE TYPE: Standalone</b>
LEAD BRANCH:	<b>Infrastructure Delivery</b>	LEAD MANAGER: <b>Jason Meliefste</b>
PROGRAM NAME:		PARTNER MANAGER: <b>Pascale Ladoucer</b>
PARTNER:	<b>Infrastructure Planning &amp; Design</b>	ESTIMATED START: <b>June, 2022</b>
BUDGET CYCLE:	<b>2019-2022</b>	ESTIMATED COMPLETION: <b>April, 2023</b>

<b>Service Category:</b>	<b>Recreation &amp; Culture</b>	<b>Major Initiative:</b>	
<b>GROWTH</b>	<b>RENEWAL</b>	<b>PREVIOUSLY APPROVED:</b>	<b>-</b>
<b>100</b>		<b>BUDGET REQUEST:</b>	<b>2,545</b>
		<b>TOTAL PROFILE BUDGET:</b>	<b>2,545</b>

**PROFILE DESCRIPTION**

The City's Corporate Greenhouse Gas Management Plan identifies mitigating strategies for reducing greenhouse gas emissions from City operations. The accelerated deployment of on-site microgeneration solar photovoltaics on City buildings and sites is one of the measures identified by the Plan to reduce greenhouse gas emissions by offsetting the energy used by City buildings. By accelerating the installation of solar photovoltaics from 2019 through 2030, the City will reduce corporate GHG emissions by 10,000 to 15,000 tonnes and are anticipated to have positive financial returns over the lifetime of the assets. The revised Community Energy Transition Strategy sets the path forward for the City with a target for the corporation to be emissions neutral by 2040.

This profile will fund on-site microgeneration solar photovoltaics for the Commonwealth Community Recreation Centre.

**PROFILE BACKGROUND**

The acceleration of solar photovoltaic installations on City buildings and sites is one of the tactics recommended as part of the portfolio of options detailed in the City's Corporate GHG Management Plan. The options are supported by best available data and information on capital requirements, life cycle cost benefit analysis, and further informed by extensive input and advice from corporate project planning, design, engineering, and project delivery staff.

The deployment of solar photovoltaic installations could be coordinated with the planned facility rehabilitation schedule that identifies buildings for rehabilitation based on condition needs assessments as well as new building construction designs. The alignment with building rehabilitation and new building construction schedules will ensure efficient use of time and resources and limit the amount of disruption to service operations and customer impacts.

The Commonwealth Recreation Centre was identified as a potential facility for this program, and work has been done to evaluate the facility's suitability. An assessment has been completed, and the facility identified as a priority for solar panel installation.

**PROFILE JUSTIFICATION**

The rigorous analysis and consultation used in developing the Corporate GHG Management Plan found that the business case actions from a Financial Return on Investment (FROI) standpoint, ranging from strongest to weakest, were building energy retrofits, LED street lights, electric buses, large microgeneration solar photovoltaics, and green electricity purchases. All of the options related to investing in City assets, including microgeneration solar photovoltaic systems, have positive net present value benefits over a 20 year period from a FROI standpoint.

Internal discussion has led to the alignment of funds for potential projects on a per-building basis, this alignment is based on the 2019-2022 new construction schedule and on a study to determine which existing facilities could be potential sites for solar installations. Refinement of this allocation will occur as projects are reviewed on a building by building basis for structural and other feasibility. A total of 20MW of solar PV is planned to be installed between 2019-2030 with a total estimated carbon reduction of 10,000 tonnes CO<sub>2</sub>e.

The project has now completed Checkpoint 3 of the Project Development and Delivery Model. The funding for this project is available within the CM-10-1012 On-Site Microgeneration Solar Photovoltaics. As the funding required to complete this growth project is over \$2 million, a stand-alone profile must be created for the project.

**STRATEGIC ALIGNMENT**

Solar photovoltaics contribute to the Greenhouse Gas Management Plan. Strategic alignment includes: CONNECTEDMONTON Strategic Goal Climate Resilience: Edmonton is a city transitioning to a low-carbon future, has clean air and water and is adapting to a changing climate. This project contributes to City Plan, Greener as We Grow, and the outcome: 2.4 Edmonton is a leader in efficient, sustainable and resilient community design, development and living; 2.4.2. Ensure public buildings and infrastructure are sustainable and resilient; Enable green energy generation and distribution systems.

**ALTERNATIVES CONSIDERED**

This Commonwealth Recreation Centre Solar Photovoltaic Project is part of the larger program for finding suitable facilities for on-site microgeneration through solar photovoltaic systems. Due to the defined scope of the program, alternatives to solar power were not pursued. Alternative facilities were considered, and the Commonwealth was selected to move forward by the program team and project sponsor as the most suitable facility of 9 potential facilities reviewed at the same time.

# CAPITAL PROFILE REPORT

## **COST BENEFITS**

The project will install an 599kWDC solar array, with an estimated generation of 648.5 MWh in its first year of operation. The avoided energy cost will be \$67,444.00 per year with a simple payback of 18 years, and an expected life expectancy of 25 years. It will achieve an annual Greenhouse Gas reduction of 304.1 tonnes Co2e/yr in the first full year of operation.

## **KEY RISKS & MITIGATING STRATEGY**

Supply chain issues and the availability of solar panels and the associated electrical equipment are the largest risks to this project. The schedule and cost estimate have taken into account the level of unpredictability in the market.

A risk management plan is in place, which follows the steps for risk control, risk register, and assumptions/constraints as outlined in the City's Project Management procedures. The plan outlines the processes used for risk identification, quantitative and qualitative risk analysis. A robust risk register has been created and is monitored during regular project team meetings.

## **RESOURCES**

Resources for this project will be internal and external. External resources will be involved to complete the required design and construction. External resources have been procured within the City's required policies and guidelines.

## **CONCLUSIONS AND RECOMMENDATIONS**

The project has completed Checkpoint 3 of the Project Development and Delivery Model. The recommendation is that a stand-alone profile be created for the Commonwealth Community Recreation Centre Solar Photovoltaic project, in accordance with the requirement that stand-alone profiles for growth projects funded from composites be created for projects over the \$2 million threshold.

# CAPITAL PROFILE REPORT

PROFILE NAME: Commonwealth Recreation Centre Solar Photovoltaic Project

**RECOMMENDED**

PROFILE NUMBER: 22-10-9312

PROFILE TYPE: Standalone

BRANCH: Infrastructure Delivery

## CAPITAL BUDGET AND FUNDING SOURCES (000's)

APPROVED BUDGET		Prior Years	2022	2023	2024	2025	2026	2027	2028	2029	2030	Beyond 2030	Total
	Approved Budget	Original Budget Approved	-	-	-	-	-	-	-	-	-	-	-
	Current Approved Budget	-	-	-	-	-	-	-	-	-	-	-	-

BUDGET REQUEST	Budget Request	-	1,040	1,504	1	-	-	-	-	-	-	-	2,545
	Revised Funding Sources (if approved)												
	Tax-Supported Debt	-	1,040	1,504	1	-	-	-	-	-	-	-	2,545
	Requested Funding Source	-	1,040	1,504	1	-	-	-	-	-	-	-	2,545

REVISED BUDGET (IF APPROVED)	Revised Budget (if Approved)	-	1,040	1,504	1	-	-	-	-	-	-	-	2,545
	Requested Funding Source												
	Tax-Supported Debt	-	1,040	1,504	1	-	-	-	-	-	-	-	2,545
	Requested Funding Source	-	1,040	1,504	1	-	-	-	-	-	-	-	2,545

## CAPITAL BUDGET BY ACTIVITY TYPE (000's)

REVISED BUDGET (IF APPROVED)	Activity Type	Prior Years	2022	2023	2024	2025	2026	2027	2028	2029	2030	Beyond 2030	Total
		Construction	-	801	1,481	-	-	-	-	-	-	-	-
	Design	-	238	23	-	-	-	-	-	-	-	-	261
	Follow Up Warranty	-	-	1	1	-	-	-	-	-	-	-	2
	<b>Total</b>	-	1,040	1,504	1	-	-	-	-	-	-	-	2,545

## OPERATING IMPACT OF CAPITAL

Type of Impact:

Branch:																
	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE
<b>Total Operating Impact</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-