

## Public Works and Transportation Committee Electronic Meeting

Anderson Room, City Hall 6911 No. 3 Road Wednesday, November 20, 2024 4:00 p.m.

Pg. # ITEM

**MINUTES** 

PWT-4

Motion to adopt the minutes of the meeting of the Public Works and Transportation Committee held on October 16, 2024.

NEXT COMMITTEE MEETING DATE

December 18, 2024, (tentative date) at 4:00 p.m. in the Anderson Room.

AGENDA ADDITIONS AND DELETIONS

ENGINEERING AND PUBLIC WORKS DIVISION

1. APPLICATION TO 2024/25 BC ACTIVE TRANSPORTATION INFRASTRUCTURE GRANT PROGRAM

(File Ref. No. 10-6500-01) (REDMS No. 7835948)

**PWT-10** 

See Page PWT-10 for full report

Designated Speaker: Sonali Hingorani

#### STAFF RECOMMENDATION

- (1) That the submission for cost-sharing to the 2024/25 BC Active Transportation Infrastructure Grant Program as described in the staff report titled "Application to 2024/25 BC Active Transportation Infrastructure Grant Program" dated October 21, 2024, from the Director, Transportation be endorsed;
- (2) That, should the above application be successful, the Chief Administrative Officer and the General Manager, Engineering and Public Works, be authorized on behalf of the City to execute the funding agreement; and
- (3) That, should the grant application be successful, the grant amount will be included in the Consolidated 5 Year Financial Plan (2025-2029) accordingly.

#### 2. PROPOSED 2025 PAVING PROGRAM

(File Ref. No. 10-6000-01) (REDMS No. 7791760)

#### **PWT-15**

#### See Page PWT-15 for full report

Designated Speaker: Eric Sparolin

#### STAFF RECOMMENDATION

That the staff report titled, "Proposed 2025 Paving Program," dated October 23, 2024, from the Director, Engineering be received for information.

3. UPDATE ON 2024/2025 SNOW AND ICE RESPONSE PREPARATIONS

(File Ref. No. 10-6000-00) (REDMS No. 7772103)

#### **PWT-23**

#### See Page PWT-23 for full report

Designated Speaker: Brandon Olson

#### STAFF RECOMMENDATION

That the staff report titled "Update on 2024/2025 Snow and Ice Response Preparations," dated October 23, 2024 from the Director of Public Works Operations, be received for information.

Pg. # ITEM

4.	PUBLIC ELEC	TRIC VEHICLI	E CHARGING NETV	WORK - DIRECT
	CURRENT	<b>FAST</b>	<b>CHARGING</b>	<b>EXPANSION</b>

(File Ref. No. 10-6125-01) (REDMS No. 7738808)

**PWT-30** 

#### See Page PWT-30 for full report

Designated Speaker: Arzan Balsara, Dinos Ramos and Owen Sinclair

#### STAFF RECOMMENDATION

- (1) That the report titled "Public Electric Vehicle Charging Network Direct Current Fast Charging Expansion", from the Director, Climate & Environment and Director, Public Works Operations, dated October 24, 2024 be endorsed; and;
- (2) That a capital submission for the Electric Vehicle DC Fast Charging Station Installations be submitted for Council's consideration as part of the 2025 budget process.

5		IACED:	'C DED	MDT
J.	IVIAIN	<b>AGER</b>	SKEF	נמט

**ADJOURNMENT** 

#### **Minutes**



### **Public Works and Transportation Committee**

Date: Wednesday, October 16, 2024

Place: Anderson Room

Richmond City Hall

Present: Councillor Carol Day, Chair

Councillor Michael Wolfe

Councillor Chak Au

Councillor Kash Heed (by teleconference)

Councillor Alexa Loo

Also Present: Councillor Andy Hobbs

Councillor Bill McNulty

Call to Order: The Chair called the meeting to order at 4:42 p.m.

#### **MINUTES**

It was moved and seconded

That the minutes of the meeting of the Public Works and Transportation Committee held on September 11, 2024, be adopted as circulated.

**CARRIED** 

#### ENGINEERING AND PUBLIC WORKS DIVISION

#### 1. GREEN AMBASSADORS PROGRAM UPDATE

(File Ref. No. 10-6370-01) (REDMS No. 7742682)

Staff provided a brief summary of the report, noting the (i) ongoing success of the Green Ambassador Program, which has been in place since 2010, (ii) strong partnership between the City, Richmond students and the Richmond School District fostering youth involvement in waste reduction efforts, and (iii) exploration of new opportunities to improve and expand the program.

Discussion ensued with respect to (i) Green Ambassadors providing best practices for sorting recycling and garbage correctly at waste stations, and (ii) the Youth Climate Corps BC initiative which is a climate action campaign and program that builds on youth leadership to foster climate resilience and a livable, low-carbon future while paying young people a living wage.

As a result of the discussion the following **referral motion** was introduced:

It was moved and seconded

That staff explore a working agreement with Youth Climate Corps British Columbia (YCCBC) and report back.

CARRIED

It was moved and seconded

That the staff report titled "Green Ambassadors Program Update" dated September 12, 2024 from the Director, Public Works Operations, be received for information.

**CARRIED** 

## 2. PROPOSED AMENDMENTS TO TRAFFIC BYLAW 5870 FOR SPEED LIMIT REDUCTION IN STEVESTON

(File Ref. No. 10-6450-15-01) (REDMS No. 7748450)

In response to queries from Committee, staff advised that (i) 4<sup>th</sup> and 7<sup>th</sup> Avenue are both included in the 30 km/h speed reduction, and (ii) the speed reduction applies to all vehicles including buses.

Alex Sagert, Richmond resident, expressed support for the proposed amendments to the traffic bylaw reducing the speed limit from 50 km/h to 30 km/h on local roads in Steveston. He also inquired whether there was consideration given to placing stops signs at 6<sup>th</sup> Avenue. In response to the query from the delegation, staff advised that staff will assess the 6<sup>th</sup> Avenue area for further intersection improvements.

The following correspondence was distributed on table (Schedule 1). Staff advised that the correspondence has been forwarded to the Parks department for follow up.

It was moved and seconded

(1) That Option 2 to reduce the posted speed limit on local roads in Steveston from 50 km/h to 30 km/h as described in the staff report titled "Proposed Amendments to Traffic Bylaw 5870 for Speed Limit Reduction in Steveston, dated September 17, 2024 from the Director, Transportation be endorsed; and

(2) That Traffic Bylaw No. 5870, Amendment Bylaw No. 10607, to revise the posted speed limit be introduced and given first, second and third reading.

**CARRIED** 

3. ARTERIAL ROADWAY IMPROVEMENT PROGRAM (2021), TOP 20 COLLISION PRONE INTERSECTIONS - IMPLEMENTATION OF MEDIUM/LONG-TERM IMPROVEMENTS (2021), AND TOP 20 COLLISION PRONE INTERSECTIONS - IMPLEMENTATION OF MEDIUM/LONG-TERM IMPROVEMENTS (2022) - PROJECT UPDATE

(File Ref. No. 10-6500-01) (REDMS No. 7808550)

In response to queries from Committee, staff advised that (i) project delays and cost increases can be attributed to design complexities, (ii) design work on the projects is approximately 10 percent of the total construction value, and (iii) staff conducted a comprehensive assessment in 2019 from data supplied by ICBC on all collisions within the city, from that, a list was created of the top 20 most collision prone intersections that are priorities for improvements.

#### It was moved and seconded

- (1) That Option 1 be approved as presented in the report "Arterial Roadway Improvement Program (2021), Top 20 Collision Prone Intersections Implementation of Medium/Long-term Improvements (2021), and Top 20 Collision Prone Intersections Implementation of Medium/Long-term Improvements (2022) Project Update" dated September 18, 2024, from the Director, Engineering and Director, Transportation; and
- (2) That the budget increase of \$3,750,000 funded by Roads Development Cost Charges (DCC) and Capital Reserve (Revolving Fund) be included in the Consolidated 5 Year Financial Plan (2025-2029).

**CARRIED** 

# 4. UBCM COMMUNITY EMERGENCY PREPAREDNESS FUND: 2024/25 DISASTER RISK REDUCTION – CLIMATE ADAPTATION GRANT APPLICATIONS

(File Ref. No. 10-6000-01) (REDMS No. 7776952)

It was moved and seconded

- (1) That the application(s) to the Community Emergency Preparedness Fund, Disaster Risk Reduction Climate Adaptation funding stream, as outlined in the staff report titled "UBCM Community Emergency Preparedness Fund: 2024/25 Disaster Risk Reduction Climate Adaptation Grant Applications" dated September 13, 2024 from the Director, Engineering, be endorsed;
- (2) That should the grant application(s) be successful, the Chief Administrative Officer and the General Manager, Engineering and Public Works, be authorized to execute funding agreements with UBCM on behalf of the City for the Drainage Pump Station Condition Assessment, Flood Protection and Rain Gauge Monitoring Stations, and Blundell Road Canal Improvement projects; and
- (3) That should the grant application(s) be successful, capital projects of \$150,000 for the Drainage Pump Station Condition Assessment, \$150,000 for Flood Protection and Rain Gauge Monitoring Stations, and \$5,000,000 for Blundell Road Canal Improvement be approved with 100% funding from the external grant, as outlined in the staff report titled "UBCM Community Emergency Preparedness Fund: 2024/25 Disaster Risk Reduction Climate Adaptation Grant Applications" dated September 13, 2024 from the Director, Engineering, and be included in the Consolidated 5 Year Financial Plan (2025-2029) accordingly.

**CARRIED** 

#### 5. MANAGER'S REPORT

#### (i) Steveston Interchange Project

Staff updated Committee on the Steveston Interchange Project and spoke to a key milestone for the project which is switching traffic from the existing overpass on to the newly constructed overpass. This work will continue until November 7, 2024 and the switch over of traffic to the new interchange is anticipated at the end of November. This will facilitate the demolition of the old overpass so that works for the future five lanes can commence.

#### (ii) Introduction of New Staff and Ready for Rain Campaign

Staff introduced Ryan Windsor to Committee as the new Manager of Flood Protection. He provided Committee with an update on the "Ready for Rain Campaign" which began this week and is an annual campaign to create public awareness to help ensure residents are ready for the seasonal weather. He also advised that sandbags are available to the public at the Works Yard.

#### **ADJOURNMENT**

It was moved and seconded *That the meeting adjourn (5:12 p.m.).* 

**CARRIED** 

Certified a true and correct copy of the Minutes of the meeting of the Public Works and Transportation Committee of the Council of the City of Richmond held on Wednesday, October 16, 2024.

Councillor Carol Day	Raman Grewal
Chair	Legislative Services Associate

### Biason, Evangel

From:

CityClerk

Sent: October 15, 2024 10:53 AM
To: MayorandCouncillors

**Subject:** FW: Support Steveston speed limit reduction

Categories: - TO: MAYOR & EACH COUNCILLOR / FROM: CITY CLERK'S OFFICE

From: Spenser Rocky <s.b.rocky@gmail.com>

Sent: October 15, 2024 9:38 AM

To: CityClerk < CityClerk@richmond.ca >; mayoreea@richmond.ca

Subject: Support Steveston speed limit reduction

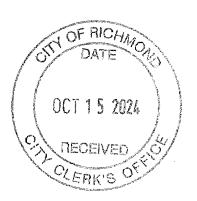
**City of Richmond Security Warning:** This email was sent from an external source outside the City. Please do not click or open attachments unless you recognize the source of this email and the content is safe.

I can't be at the meeting tomorrow but as a Steveston resident with four kids I support the reduction in Steveston's speed limits!

We also need lighting along the Steveston Park path. It's so dark even my wife won't walk there at night. (We don't allow the kids to either).

Thank you, Spenser Rocky 11888 Dunford Rd

Spenser Rocky c: 604-379-6742



Schedule 1 to the Minutes of the Public Works and Transportation Committee meeting of Richmond City Council held on Wednesday,

October 16, 2024.



### **Report to Committee**

To: Public Works and Transportation Committee

Director, Transportation

**Date:** October 21, 2024

From: Llovd

Lloyd Bie, P.Eng. File:

e: 10-6500-01/2023-Vol

01

Re:

Application to 2024/25 BC Active Transportation Infrastructure Grant Program

#### Staff Recommendations

1. That the submission for cost-sharing to the 2024/25 BC Active Transportation Infrastructure Grant Program as described in the staff report titled "Application to 2024/25 BC Active Transportation Infrastructure Grant Program" dated October 21, 2024, from the Director, Transportation be endorsed;

- 2. That, should the above application be successful, the Chief Administrative Officer and the General Manager, Engineering and Public Works, be authorized on behalf of the City to execute the funding agreement; and
- 3. That, should the grant application be successful, the grant amount will be included in the Consolidated 5 Year Financial Plan (2025-2029) accordingly.

Lloyd Bie, P.Eng. Director, Transportation (604-276-4131)

Att. 1

REPORT CONCURRENCE					
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER			
Finance Engineering	전 전	Woeland Zwaag			
SENIOR STAFF REPORT REVIEW	INITIALS:	APPROVED BY CAO			
	Sep	- Que			

#### Staff Report

#### Origin

The Province of BC's Active Transportation Infrastructure Grant Program (the Program) is a cost-share program between the Province and local governments to support the construction of new facilities to make it easier and safer for people to walk, ride or roll using active transportation modes. This report presents the proposed submission from the City for consideration of cost-share funding under the Program for the 2024/25 funding cycle. Council endorsement is a requirement of the submission.

This report supports Council's Strategic Plan 2022-2026 Strategy #4 Responsible Financial Management and Governance:

Responsible financial management and efficient use of public resources to meet the needs of the community.

4.1 Ensure effective financial planning to support a sustainable future for the City.

This report supports Council's Strategic Plan 2022-2026 Strategy #2 Strategic and Well-Planned Growth:

Strategic and sustainable growth that supports long-term community needs and a well-planned and prosperous City.

2.4 Enhance Richmond's robust transportation network by balancing commercial, public, private and active transportation needs.

#### **Analysis**

#### BC Active Transportation Infrastructure Grant Program

The call for 2024/25 applications to the BC Active Transportation Infrastructure Grant Program commenced on September 3, 2024, with a deadline of October 31, 2024. Staff prepared the application and submitted to the Province by the deadline.

The City is eligible for up to 50% cost-share funding up to a maximum of \$500,000. The application that staff are proposing for the Province's annual 2024/25 funding cycle meets the Province's eligibility requirements of:

- City portion of funding secured
- Design completed or in progress
- Can be constructed within the required timeline of March 2027

The proposed project for cost-sharing consideration is described below.

Westminster Highway Cycling Facility (No. 2 Road to Lynas Lane)

The Council approved Cycling Network Plan identifies a new cycling facility on this section of roadway as a short-term priority (2022-2026). The cycling facility along Westminster Highway will provide connectivity between the bike lanes on No. 2 Road (north of Westminster Highway) and the neighbourhood bike route on Lynas Lane (Attachment 1).

A cycling facility on Westminster Highway is included in the scope of work for the No. 2 Road and Westminster Highway intersection project. This intersection is one of the two intersections approved by Council in the 2021 Top 20 Collision Prone Intersection – Implementation of Medium/Long-term Improvements Program. The cycling related improvements of this project include:

- Re-purposing the westbound merge lane on Westminster Highway between No. 2 Road and Lynas Lane using concrete barriers to create a new protected bi-directional cycling facility.
- Removal of the channelized southbound right-turn at Westminster Highway and No. 2
  Road to slow right-turning traffic and enhance safety for cyclists and pedestrians. A
  dedicated southbound right-turn lane on No. 2 Road will replace the channelized rightturn.

Figure 1 below provides a concept of the Westminster Highway Cycling facility submitted to the Application for the 2024/25 BC Active Transportation Infrastructure Grant Program.



Figure 1: Westminster Highway Cycling Facility Conceptual Rendering

The project is currently in the detailed design stage and construction is anticipated to commence in Q2 2025.

#### **Proposed Funding**

The estimated cost for the No. 2 Road and Westminster Highway intersection is \$2.3 million, which is approved as part of the 2021 Top 20 Collision Prone Intersection – Implementation of Medium/Long-term Improvements Program.

The City has already secured up to \$650,000 in grant funding from TransLink for this intersection with the remaining \$1,650,000 to be funded by the City. Should the City's application be successful at achieving the maximum provincial contribution amount of \$500,000, the City's share of funding will be reduced from \$1,650,000 to \$1,150,000 for the Westminster Hwy & No. 2 Road intersection.

Table 1 below summarizes the estimated cost-share breakdown should the City's grant application to the Province be successful.

Table 1: Funding for Application to 2024/2025 BC Active Transportation Infrastructure Grant Program

Project	Est. Total Intersection Cost	Secured TransLink Funding	City Portion	Potential BC Active Transportation Funding Grant
No. 2 Road and Westminster Highway Intersection: No. 2 Road to Lynas Lane (cycling facility)	\$2,300,000	\$650,000	\$1,650,000	\$500,000

#### **Financial Impact**

Should the application be successful, the City's funding will be reduced from \$1,650,000 to \$1,150,000 and be included in the Consolidated 5 Year Financial Plan (2025-2029). Any excess funding would be returned to the original funding sources and be available for use in future capital projects.

#### Conclusion

The cycling facility improvement project proposed for submission to the 2024/25 BC Active Transportation Infrastructure Grant Program supports numerous goals of the City to improve community mobility, reduce greenhouse gas emissions and increase physical activity. The approved cycling improvements as part of the Westminster Hwy and No. 2 Road intersection project advances the City's goals by expanding the active transportation network and rethinking the road right-of-way. The potential receipt of external funding will enable the City to reduce its share of the project from \$1,650,000 to \$1,150,000.

Sonali Hingorani, P.Eng.

Manager, Transportation Planning and New Mobility

(604-276-4049)

SH:sh

Att. 1: Cycling Network Plan Context Map

### Cycling Network Plan (CNP) Context Map





## **Report to Committee**

To:

Public Works and Transportation Committee

Date:

October 23, 2024

From:

Milton Chan, P.Eng Director, Engineering File:

10-6000-01/2024-Vol

01

Re:

**Proposed 2025 Paving Program** 

#### **Staff Recommendation**

That the staff report titled, "Proposed 2025 Paving Program," dated October 23, 2024, from the Director, Engineering be received for information.

Milton Chan, P.Eng Director, Engineering (604-276-4377)

Att. 3

REPORT CONCURRENCE					
ROUTED TO: CONCURRENCE		CONCURRENCE OF GENERAL MANAGER			
Roads & Construction	Ø		Doeland Zwaaz		
SENIOR STAFF REPORT REVIEW		INITIALS:	APPROVED BY CAO		
		Sh	Gun-		

#### **Staff Report**

#### Origin

This report supports Council's Strategic Plan 2022-2026 Focus Area #2 Strategic and Sustainable Community Growth:

Strategic and sustainable growth that supports long-term community needs and a well-planned and prosperous city.

- 2.3 Ensure that both built and natural infrastructure supports sustainable development throughout the city.
- 2.4 Enhance Richmond's robust transportation network by balancing commercial, public, private and active transportation needs.

The annual Paving Program is required to maintain the City's road network at current operating levels, as well as reduce the need for costly repairs. Staff have developed a prioritized list of locations to be included in the 2025 Paving Program.

#### **Analysis**

The scope of work includes the milling and paving of roads and asphalt surfaces in priority order, as identified by the City's Pavement Management System and staff. This also includes ancillary work such as curb and gutter repairs. The Pavement Management System takes into account items such as the age, structure and current condition of the road. Updated data is gathered to ensure that the Pavement Management System model results are accurate. The data is being gathered on an assortment of road types including arterial roads, the TransLink Major Road Network (MRN), recently resurfaced segments, and sections with substantial surface cracking. TransLink provides funding for the MRN projects, based on the length of lane-kilometers of MRN roadway within the City, and adjusted annually per TransLink's inflationary estimates. Non-MRN projects are funded by the City.

Attachment 1 provides a list of the primary paving sites to be included in the 2025 Paving Program. As with past years, some of the identified paving locations may not be able to be completed due to conflicts with development projects, which are unknown at this time. Any deferred primary paving locations would be replaced with the secondary paving locations, as listed in Attachment 2. Maps showing primary and secondary paving locations for Richmond West and Richmond East are included in Attachment 3. The paving schedule for these paving locations has flexibility which will allow coordination with the construction of capital and development projects to ensure minimized impact to the travelling public. For example, repaving No. 2 Road between Steveston Highway and Williams Road will occur following the completion of the watermain replacement, new multi-use pathway and development projects currently underway in this area.

In most years, some paving work is required to address unforeseen road condition issues that arise during the year, such as settling utility trenches.

These are added to the Paving Program throughout the course of the year. Since the specific locations are not known at this time they are not shown on the attached location maps.

Escalation of paving costs has exceeded annual budget increases due to the increase in global oil and gas prices, supply chain issues and inflation. Recent years have also seen accelerated road deterioration, which results in increased costs due to the additional rehabilitation and gravel base repair work required to repair and repave the roadway. This deterioration is a result of high traffic volumes and harsh winter conditions and is compounded by deferral of repair works. As a result of these increased costs, some project locations, including on the City's Major Road Network (MRN) have been deferred to future years.

The Ageing Utility and Road Infrastructure Planning – 2022 Update report, presented to Public Works and Transportation Committee on July 20, 2022, identified the required annual funding levels for roads and road assets. To manage funding gaps it was noted that staff will bring forward paving program funding recommendations that will include on-going capital funding, combined with one-time allocation of surpluses to meet the five year capital needs of the roadway paving program. Aligned with this, staff are preparing additional capital submission for consideration through the 2025 Capital Budget process that would allow for completion of all the priority locations identified in this report.

The procurement of this year's Paving Program is scheduled to commence in November 2024. Historically, early procurement of this program has resulted in increased competitiveness, and lower costs to the City. By soliciting this work early, staff are taking measures to ensure that paving contract procurements receive competitive pricing and provide good value to the City. This includes monitoring the market to ensure ideal timing to conduct procurement, and the potential of including a variable cost, commodity price indexing structure in the paving contracts. If market conditions indicate that favourable pricing would be received by issuing to the market early, the procurement process will note that the contract award is subject to approval of the 2025 Capital Budget by Council.

The 2025 Paving Program also reflects the City's environmental initiatives by allowing the use of up to 40% reclaimed asphalt. In alignment with the City's sustainability goals, the pavement evaluation criteria will consider sustainable methodologies, practices and materials that would assist in reducing green house gas emissions.

#### **Financial Impact**

Proposed funding for the 2025 Paving Program has been submitted as part of the 2025 Capital Budget as follows:

Table 1. Proposed 2025 Paving Program Budgets

Proposed Funding	<b>Amount (\$)</b>
2025 Annual Asphalt Re-Paving Program – MRN	\$ 1,771,825
2025 Annual Asphalt Re-Paving Program – Non-MRN	\$ 4,136,685
Total Proposed Funding	\$ 5,908,510

Procurement will commence in November 2024 but award of the 2025 Paving Program will occur only after the 2025 Capital Budget is approved by Council.

#### Conclusion

Staff have prepared a list of priority locations for the 2025 Paving Program and the procurement documents are being prepared. Contract award and commencement of paving will occur once the 2025 Capital Budget is approved by Council.

Kevin Roberts, P. Eng. Senior Project Manager, Engineering Design &

Construction (604-204-8512)

HA

Wasim Memon Supervisor – Inspections (604-247-4189)

Att. 1: Proposed 2025 Paving Program - Primary Locations

2: Proposed 2025 Paving Program – Secondary Locations

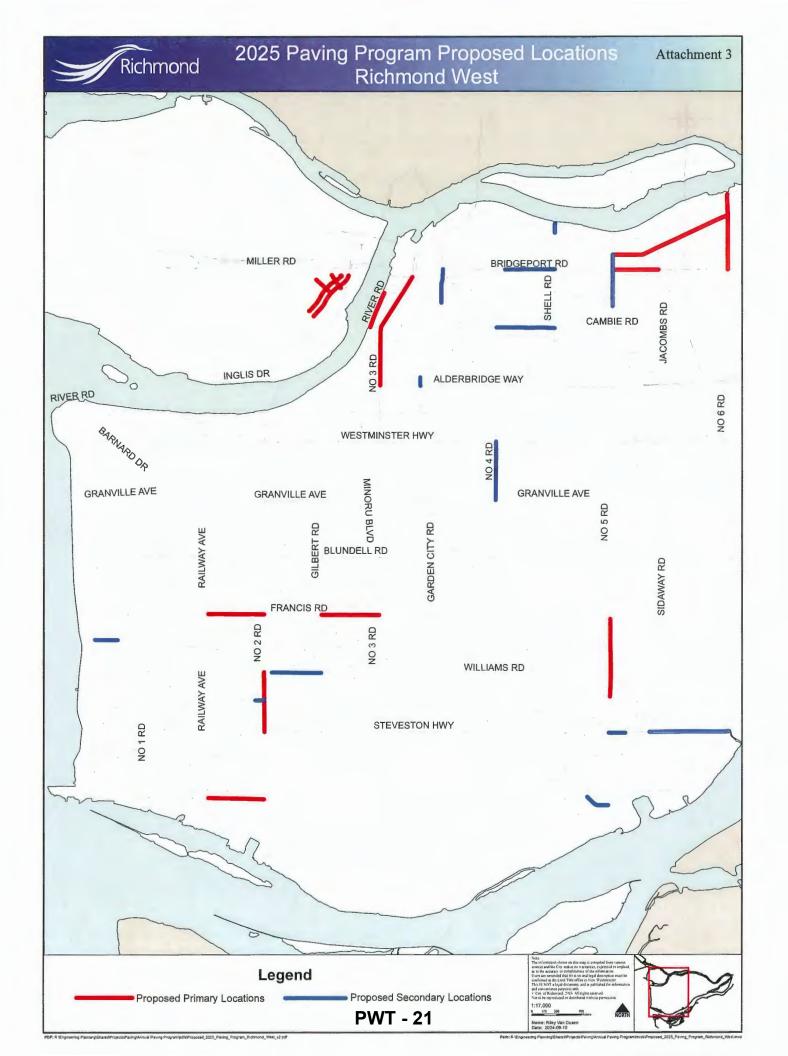
3: 2025 Paving Program Proposed Locations – Richmond West and Richmond East

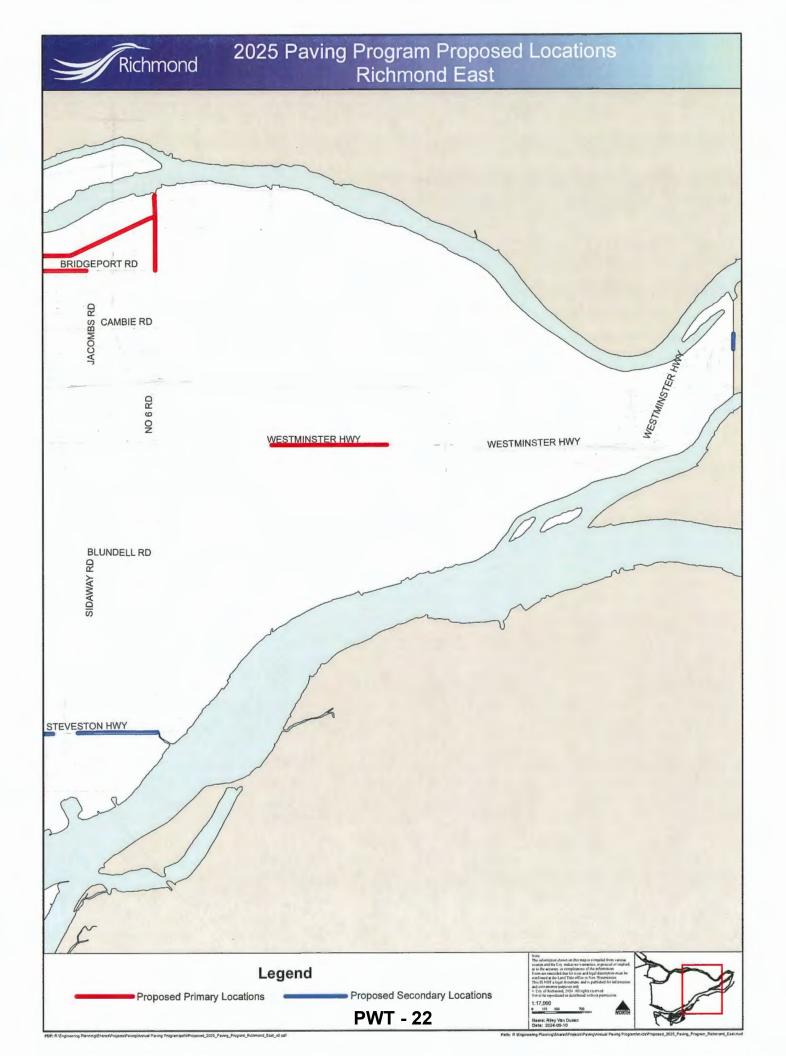
## PROPOSED 2025 PAVING PROGRAM – PRIMARY LOCATIONS

Location	Road Type
No. 2 Road (Steveston Highway to Williams Road)	MRN
No. 3 Road (Alderbridge Way to Cambie Road)	MRN
No. 3 Road (Cambie Road to Capstan Way)	MRN
No. 3 Road (Capstan Way to Sea Island Way)	MRN
Bridgeport Road (No. 5 Road to Sweden Way)	MRN
No. 5 Road (Seacliff Road to Kingsbridge Drive)	Non-MRN
No. 6 Road (Bridgeport Road to River Road)	Non-MRN
Moncton Street (Railway Avenue to No. 2 Road)	Non-MRN
Francis Road (Gilbert Road to No. 3 Road)	Non-MRN
Francis Road (Railway Avenue to No. 2 Road)	Non-MRN
River Road (Cambie Road to Capstan Way)	Non-MRN
Westminster Highway (No. 7 Road to No. 8 Road)	Non-MRN
Vulcan Way (No. 5 Road to No. 6 Road)	Non-MRN
Boeing Avenue (Catalina Crescent to Wellington Crescent)	Non-MRN
Catalina Crescent (Wellington Crescent to Airport Road)	Non-MRN
Douglas Crescent (Wellington Crescent to North end of road)	Non-MRN
Hudson Avenue (Wellington Crescent to Airport Road)	Non-MRN

## PROPOSED 2025 PAVING PROGRAM – SECONDARY LOCATIONS

Location	Road Type
Bridgeport Road (St. Edwards Drive to Shell Road)	MRN
Steveston Highway (No. 5 Road to Hwy 99 limits)	MRN
Steveston Highway (Highway 99 limits to No. 6 Road)	MRN
Cambie Road (No. 4 Road to Shell Road)	MRN
No. 4 Road (Granville Avenue to Westminster Highway)	Non-MRN
No. 5 Road (Bridgeport Road to Vulcan Way)	Non-MRN
No. 5 Road (Greenland Drive to Bridgeport Road)	Non-MRN
Shell Road (River Drive to River Road)	Non-MRN
Wallace Road (Kozier Gate to No. 2 Road)	Non-MRN
Williams Road (Parsons Road to Gilbert Road)	Non-MRN
Machrina Way (Horseshoe Way to No. 5 Road)	Non-MRN
Trumond Avenue (Wellmond Road to Gormond Road)	Non-MRN
Garden City Road (Capstan Way to Bridgeport Road)	Non-MRN
Boundary Road (Thompson Gate to Westminster Highway)	Non-MRN
Kwantlen Street (Alderbridge Way to Alexandra Road)	Non-MRN







## **Report to Committee**

To:

Public Works and Transportation Committee

Director, Public Works Operations

Date: November 4, 2024

Jale. November 4, 2

From:

Suzanne Bycraft

File:

10-6000-00/Vol 01

Re:

Update on 2024/2025 Snow and Ice Response Preparations

#### Staff Recommendation

That the staff report titled "Update on 2024/2025 Snow and Ice Response Preparations," dated October 23, 2024 from the Director of Public Works Operations, be received for information.

Suzanne Bycraft

Director, Public Works Operations

(604-233-3338)

Att. 2

REPORT CONCURRENCE					
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER			
Communications Parks Services Community Bylaws Climate & Environment Information Technology	\ \ \ \ \ \ \ \	Doeland Zwaag			
SENIOR STAFF REPORT REVIEW	INITIALS:	APPROVED BY CAO			

#### Staff Report

#### Origin

The coastal environment of the City of Richmond makes its roads particularly vulnerable to frost formation, given the significant and rapid weather variations from Steveston to Hamilton. During the winter season, staff monitor weather conditions and forecasted precipitation across the entire area to effectively respond to snow and ice events, ensuring safe road conditions for the travelling public.

This report outlines the City's standards for winter maintenance operations and response plans for snow and ice events, in accordance with the service level requirements outlined in Council Policy 7013, "Roadways – Ice and Snow Removal" (the policy). The Policy defines the priorities of ice and snow clearing on the City's public roads, highways, overpasses, lanes and bus stops.

This report supports Council's Strategic Plan 2022-2026 Focus Area #3 A Safe and Prepared Community:

Community safety and preparedness through effective planning, strategic partnerships and proactive programs.

3.4 Ensure civic infrastructure, assets and resources are effectively maintained and continue to meet the needs of the community as it grows.

#### **Analysis**

#### **Operational Preparations**

Operational preparations typically commence by mid-September. The snow and ice treatment response plan is reviewed, revised and updated annually, with refresher training provided to equipment operators and drivers for the 43 pieces of equipment noted on Attachment 1. Salt supplies are secured for the upcoming winter season under contract 8382Q — Supply and Delivery of Bulk Road Salt with 3,000 metric tonnes guaranteed. On-site salt storage includes 1,450 metric tonnes at the Works Yard, or an amount sufficient for seven days of around-the-clock response before resupply is required.

The City's preferred preventative anti-icing treatment is salt brine. The application of salt brine is intended to limit and/or delay snow or ice from bonding to pavement surfaces. This method is effective and operative in temperatures as low as -15°C. Salt brine is more cost effective than salt and has lower environmental impacts. The use of salt brine as a pre-treatment extends its effectiveness beyond that of traditional road salt. In support of the City's efforts to reduce the overall usage of salt on roadways, staff increased the capacity for mixing and storing salt brine from 115,000 litres to 145,700 litres in 2023.

New in 2024 is the implementation of GPS technology which enables monitoring of salt/brine usage in order that adjustments can be made to output levels to ensure optimal application with minimal salt dispersion.

#### Operational Response

*Frost Events*: Frost control and event pre-treatment is undertaken on pre-determined frost routes and based on road condition monitoring. Pre-treatment is also applied to walkways of civic facilities.

Snow Events: During snow events, larger snow response equipment such as tandem and single axle dump trucks are dispatched to clear snow on first and second priority routes, while smaller equipment is directed to clear and treat City facility parking lots and address public complaints regarding entrances to subdivision collector roads. In addition to parking lots, teams supporting the response also clear walkways of civic facilities, transit stops and wheel chair let downs.

#### **Monitoring Activities**

Varieties of tools are used to monitor weather conditions to ensure operational readiness and event pre-planning. Weather watches and road temperature sensors support predictive monitoring, coupled with driving assessments for regular road inspections. Collaborative communication with partner agencies such as TransLink/Coast Mountain Bus Company, Richmond RCMP or other City business units also helps support continuous monitoring activities.

Road Temperature Sensors: As shown in Attachment 2, there are 11 road surface temperature sensors located at key locations throughout the City which are monitored 24-hours a day via the Supervisory Control and Data Acquisition (SCADA) system. Critical for effective deployment of anti-icing and de-icing materials, infrared laser sensors provide accurate, real-time road surface temperature information to identify when road conditions are deteriorating, allowing for effective response when conditions become hazardous for driver safety.

Weather Forecasting: Snow and Ice response preparations are further supported by an external weather forecasting agency (Weathernet) to provide localized (Richmond-specific) weather forecasts. In addition to providing daily forecasts, a meteorologist is available 24-hours a day to provide clarification prior to and during snow events.

Event Coordination & Monitoring: During snow and ice events, with implementation of the GPS technology, staff at a centralized control centre remotely observe equipment locations, salt and brine distribution, plow functions and route completion times captured by equipment mounted sensors enabling a more effective response and reporting capabilities used to forecast costs and prepare for future events.

#### **Bylaw Enforcement Update**

To support pedestrian safety, the City's Traffic Bylaw No. 5870 includes provisions for sidewalk clearing by residents and businesses. In late 2023, the bylaw was amended to require owners of undeveloped property to also clear snow from sidewalks adjacent to their property, which was previously a gap. The Bylaw now states: "The owner or occupier of any parcel of real property shall remove all snow and ice from any sidewalk adjacent to such parcel for a distance that coincides with the property line of their real property, not later than 10:00 a.m. of everyday, including Sunday." Additionally, to encourage cooperation, penalties were increased from \$70 to \$125 for non-compliance.

#### Public Outreach

Public involvement within the community is vital during the winter season. The City works in collaboration with the public on the following initiatives:

Snow Angel Program: This program connects community volunteers with residents experiencing mobility, health and economic challenges during snowfall events. The program is activated in the event of a significant snowfall (defined as an accumulation of 3+ centimetres of snow) at which time volunteers assist by shovelling snow from sidewalks and/or walkways leading to the main residential access points excluding driveways. During the previous 2023/2024 winter season, Snow Angel program volunteers were activated two times and provided snow removal services to 125 homes across Richmond. Snow Angel Program enrollment information is available on the City's website and registration forms can also be obtained by calling the Public Works Yard Dispatch, City Hall or emailing parksprograms@richmond.ca.

Good Neighbour Program: This neighbour-helping-neighbour campaign simply encourages residents to watch for people in their neighbourhood who may face challenges that could use help removing snow from their sidewalks and driveways and offer them a helping hand.

Additional information regarding these initiatives is available at richmond.ca/winter.

#### Communications Strategy

A comprehensive communication strategy has proven to be valuable in delivering accurate, timely and relevant information to the public before, during and after winter weather events. Communication protocols and key messaging has been developed which reinforce the snow response communications program over a variety of the City's communication and social channels, including:

- Social media (the City's Instagram, X and Facebook accounts: posting the City's own messaging as well as sharing/amplifying information from credible sources, i.e., weather warnings and safety tips)
- Media relations (news releases, media interviews)
- City's website (dedicated web pages, news pages)
- City's Intranet for employees

#### 2024/2025 Weather Forecast

Meteorologists can predict with some accuracy short term ranges (3-5 days) however, forecasting further in the future increases unpredictable variables which can significantly change weather patterns.

During the 2024/2025 period, moderate La Niña conditions are expected to play a role in influencing winter temperatures. This is characterized by cooler, wetter weather, particularly in the fall and winter months. For Richmond, this can be represented in above-average rainfalls and cooler than average temperatures which can lead to snowfall at lower elevations and the potential for a longer winter season. These predictions can be affected by the polar vortex's strength which maintains the alignment of the jet stream. Should the vortex weaken and the jet stream shift

south, when these conditions are present, La Niña is known to bring more frequent and intense winter storms including strong winds and heavy precipitation.

#### Summary - Winter Season 2023/2024

During the 2023/2024 winter season, Richmond experienced 32 frost and ice events and 6 snow events, with a total accumulation of 40.2 centimetres of snow recorded at YVR. Of these accumulations, 36.2 centimetres of snow fell in January 2024. During these events, City staff brined, salted and plowed over 42,614 lane kilometres of first, second and third priority roads.

#### **Financial Impact**

None. Should Richmond experience a more severe winter than expected, requiring additional funding beyond established budgeted amounts, staff will report back to Council accordingly.

#### Conclusion

Based on forecasts predicted for the 2024/2025 snow and ice season, necessary preparations have been made, such as stockpiling salt, and preparing trucks and equipment to respond to the upcoming winter weather as necessary. Community involvement, through initiatives such as the Snow Angels program, is relied upon to help residents clear sidewalks in front of their homes and the City's Traffic Bylaw includes provisions requiring businesses, residents and developers to clear sidewalks to support safer conditions for pedestrians.

Brandon Olson

Manager, Roads and Construction Services

(604-244-1252)

BO:bo

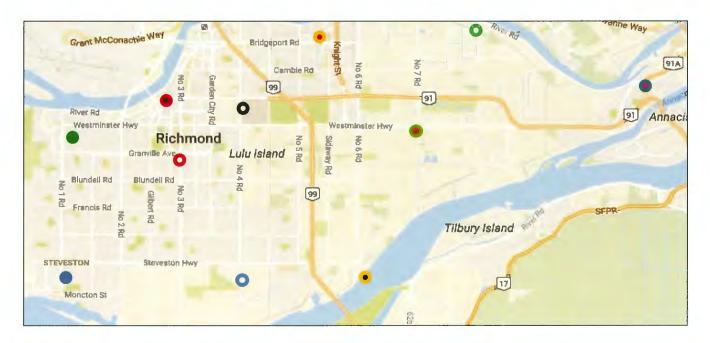
Att. 1: City of Richmond – Snow Response Equipment

Att. 2: City of Richmond – Road Temperature Sensor Locations

## City of Richmond – Snow Response Equipment

Number of Units	Description	
5	Tandem axle dump trucks with front plow attachments and salt spreader inserts	
4	Tandem axle dump trucks with front plow attachments and 12,000 L brine tank inserts	
1	Flusher truck (14,000 L brine capacity) with belly plow	
3	Single-axle dump trucks with salt flinks and belly plow	
5	One-tonne dump truck with plow and 1,875 L brine tank insert	
2	One-tonne dump truck with plow and 1,875 L brine tank insert (designated for city facility parking lots)	
1	One-tonne dump truck with plow and salt insert	
1	One-tonne flat deck truck with 1,875 L brine tank insert	
4	Backhoes	
1	Road grader with belly plow and front bucket	
2	Front-end wheel loader	
3	Bobcat skid steers with plow	
4	John Deere Ride-on mowers with plows	
2	Kabota ATVs with plow	
4	Mobile snow blowers	
1	Wilie Machine with snow brush, snow blower, and 208 L brine tank	
1,450 MT	950MT covered storage + 500MT uncovered storage	

## **City of Richmond – Road Temperature Sensor Locations**



#### **Road Temperature Sensors:**

- Queens North (road temperature, road friction, ambient air temperature, humidity, wind speed/direction and rain gauge)
- No. 1 Rd & Steveston Hwy (road temperature, ambient air temperature, humidity, wind speed/direction and rain gauge)
- No. 1 Rd & Westminster Hwy (road temperature, road friction, ambient air temperature, humidity, wind speed/direction and rain gauge)
- No. 6 Rd & Steveston Hwy (road temperature, road friction, ambient air temperature, humidity, wind speed/direction and rain gauge)
- No. 8 Rd & River Rd (road temperature and road friction)
- No. 4 Rd Armoury (road temperature, rain gauge and road friction)
- No. 3 Rd and Granville Ave (road temperature and road friction)
- Oval (road temperature)
- Bridgeport Rd and Olafsen Rd (road temperature)
- Steveston Hwy and No. 4 Rd (road temperature)
- Westminster Hwy and No. 7 Rd (road temperature)



### **Report to Committee**

To: Public Works and Transportation Committee

October 24, 2024 Date:

From: Chad Paulin File:

Director, Climate & Environment

10-6125-01/2024-Vol

01

Suzanne Bycraft

Director, Public Works Operations

Re:

Public Electric Vehicle Charging Network - Direct Current Fast Charging

**Expansion** 

#### Staff Recommendations

had fal

1. That the report titled "Public Electric Vehicle Charging Network – Direct Current Fast Charging Expansion", from the Director, Climate & Environment and Director, Public Works Operations, dated October 24, 2024 be endorsed; and

2. That a capital submission for the Electric Vehicle DC Fast Charging Station Installations be submitted for Council's consideration as part of the 2025 budget process.

Chad Paulin,

Suzanne Bycraft

Director, Climate & Environment

Director, Public Works Operations

(604-247-4672)

(604-233-3338)

#### Att. 2

REPORT CONCURRENCE					
ROUTED TO:	CONCURREN	ICE	CONCURRENCE OF GENERAL MANAGER		
Finance Department Parks Services Recreation & Sport Services Facilities & Project Development Arts, Culture & Heritage Library Fleet	\ \ \ \ \ \ \ \ \		Dolland Zwaay		
SENIOR STAFF REPORT REVIEW	INITIA	ALS:	APPROVED BY CAO		
	Q	)	Gue		

#### Staff Report

#### Origin

This report outlines a proposal to expand the City's public EV charging network by adding more direct current fast charging (DCFC) opportunities in key locations throughout Richmond, in a multi-phased approach.

Phase 1 of this expansion is proposed to include three sites, each featuring 8-10 DCFC charging ports for a total of 24-30 chargers. Each charger will have power output of 150-200 kW; capable of charging an EV up to 80% in less than 40 minutes. The Richmond Curling Club, Minoru Park precinct and South Arm Community Centre have been identified as the three proposed sites for Phase 1. Suitability of these sites is based upon surrounding housing types, population density and proximity to EV charging, ensuring optimal accessibility and utilization.

Staff are seeking Council endorsement of the DCFC expansion strategy as outlined in this report.

This report supports Council's Strategic Plan 2022-2026 Focus Area #2 Strategic and Sustainable Community Growth:

Strategic and sustainable growth that supports long-term community needs and a wellplanned and prosperous city.

2.4 Enhance Richmond's robust transportation network by balancing commercial, public, private and active transportation needs.

This report supports Council's Strategic Plan 2022-2026 Focus Area #5 A Leader in Environmental Sustainability:

Leadership in environmental sustainability through innovative, sustainable and proactive solutions that mitigate climate change and other environmental impacts.

5.1 Continue to demonstrate leadership in proactive climate action and environmental sustainability.

This report supports the implementation of Richmond's Community Energy and Emissions Plan (CEEP) 2050, and Official Community Plan emission reduction policies through:

Strategic Direction 2: Transition to Zero Emission Vehicles

Action Category:

☑ Build out a network of public EV charging stations at civic facilities to accelerate rate of local EV adoption

#### **Analysis**

#### Background

The City's public EV charging network has grown significantly over the past five years, currently comprising 53 Level 2 chargers and four Level 3 (DCFC) chargers for a total of 57 chargers. Of the 57 public chargers, 10 are accessible, Level 2 chargers, and 4 are accessible, Level 3 chargers. The City initially began installing EV chargers in 2013. The network experienced accelerating growth in electricity use for EVs after a 2018 expansion that added 47 chargers to the network. There was a temporary decline in usage from March 2020 to mid-2021 due to the COVID-19 pandemic, which also coincided with the introduction of charging fees. However, by late 2021, usage rebounded as pandemic restrictions eased and the number of EVs in Richmond continued to rise.

Less than a year after the DCFCs were installed, these four fast-charging ports accounted for over half of the total energy dispensed by the City's entire charging network, indicating a strong market preference for DCFCs. When Council first approved the EV charging expansion, installations of DCFCs were limited due to the electrical capacity of existing facilities, leading the City to focus on deploying more Level 2 chargers instead. Currently, more than 60% of the network's energy is dispensed through the DCFC ports. The Level 2 chargers, however, are still actively used and provide an essential service for users with plug-in hybrid vehicles or those parking for longer durations. A map of current City owned EV chargers can be found in Attachment 1.

Level 2 EV chargers typically deliver approximately 6 kW of power, which allows for a full charge in 6 to 12 hours, depending on the vehicle's battery capacity. In contrast, Level 3 DCFCs deliver much higher power levels, typically ranging from 50 kW to 350 kW, enabling EVs to charge up to 80% of their battery in under 40 minutes, making them ideal for quick, on-the-go charging. Staff have noticed a rise in service requests from residents seeking upgraded charging infrastructure, with a particular emphasis on Level 3 DCFCs.

The total power output of the 57 public charging ports is currently 600 kW. For Phase 1, staff are proposing to add an additional 3000 kW (3 MW) by installing 8-10 Level 3 DCFCs at each of the three city-owned facility parking lots (24-30 chargers), bringing the total output to 3.6 MW. This will further support the growing demand for EV charging in the city.

#### Projected Expansion

2023 ICBC data reveals that over 30% of new car sales in Richmond are electric vehicles (EVs), a significant indicator of the city's rapid adoption of zero-emission vehicles (ZEVs). This trend is particularly evident in the City Centre area, where over 40% of EVs in Richmond are registered. This area, characterized by a high density of multi-unit residential buildings (MURBs), often lacks adequate private charging infrastructure, leading residents to rely on public charging options. As the number of EVs in Richmond continues to grow, driven by strong sales and increasing consumer interest, the demand for accessible public charging stations is expected to rise, particularly in densely populated areas like the City Centre.

This growing uptake aligns with both provincial and federal mandates aimed at accelerating EV adoption. The BC Zero Emission Vehicle Act, amended in October 2023, now requires 100% of new vehicle sales to be ZEVs by 2035, with interim targets set for 2026 (26%), and 2030 (90%). Similarly, the federal government's Electric Vehicle Availability Standard mandates a phased transition, requiring 100% of light-duty vehicles sold to be zero-emission by 2035. These regulatory frameworks, coupled with incentives like the federal Incentives for Zero-Emissions Vehicles program, will ensure that EV adoption continues to surge in the City, necessitating a reliable, robust and scalable charging network to meet current and future demand.

A recent report published by Metro Vancouver, titled "Keeping it Current: Guidance for Collaborative Deployment of EV Charging in Metro Vancouver", provides key insights into the future needs for public EV charging infrastructure across the region. The report includes modeling that estimates the number of public EV chargers required in each municipality to meet projected demand by 2035. In a low retrofit scenario for existing MURBs, Richmond is projected to need 208 DCFCs and 3,722 Level 2 chargers. Currently, Richmond has a total of 92 DCFCs, from various providers; however, 72 of these chargers are Tesla-specific. Tesla is slowly opening up their chargers for use by other vehicle brands, requiring vehicles to upgrade software and purchase adaptors in order to access the Tesla chargers.

#### Site Selection Rationale

Sites were selected based on an analysis of surrounding housing types, population density, and proximity to existing chargers, ensuring that the new stations are accessible to a wide range of EV users and user accessibility. This approach maximizes the potential for high utilization, particularly in areas with a significant number of MURBs where home charging options are limited. Additionally, the selected locations are strategically distributed geographically to serve as much of the community as possible, ensuring equitable access to fast charging. The installation of DCFCs at the proposed locations could allow EV users to utilize the facilities while their vehicles are charging. This could provide further support to those using these sites and potentially encourage greater participation in programs and services, including those promoting physical activity and social connectedness.

Feasibility studies have been conducted with an engineering firm at all three sites to ensure viability. While BC Hydro will not confirm electrical capacity until a formal application is submitted, staff have selected sites where high voltage lines are available and close to the proposed locations of the chargers. These projects involve connecting to a dedicated 1.5 MW commercial-level pad-mounted transformer, which is a more complex and a higher-demand installation than a typical residential service upgrade. Should BC Hydro determine that an upgrade is not feasible at any site, one of the potential future sites would be selected for similar review and potential installation.

#### Implementation Overview

The estimated timeline to complete Phase 1 is approximately three years. During this time staff will engage with BC Hydro for a new dedicated electrical service on each of the three sites, while simultaneously engaging with an engineering firm for detailed designs on the electrical system distribution for the EV chargers and associated equipment.

Staff are mindful of the challenges related to parking availability, particularly given the premium on parking spaces in key areas of the City Centre. To address this, the selected stalls for new charging stations have been strategically chosen based on their proximity to existing BC Hydro high voltage electrical lines, ensuring cost-effective installation, and will be located at the farthest distance possible from facility buildings to minimize any inconvenience to patrons. There are currently two accessible EV charging stalls at both the Minoru Park Precinct and South Arm Community Centre. Staff will explore the feasibility of adding an accessible EV charging stall at the Richmond Curling Club. Before proceeding with the installation of the chargers, staff will evaluate parking demand in each of the locations, engage with the community that use these sites and engage with community associations/societies that provide programs and services for the proposed sites. Information will be used to prepare potential measures to better define how we utilize stalls to ensure they are suitable locations for the chargers. Should any of the proposed Phase 1 sites be found to be unsuitable, staff will evaluate other potential sites noted in Attachment 2, and update Council accordingly.

Table 1 shows proposed funding sources on a total estimated cost of \$7 million for phase 1 expansion. The operating surplus resulting from the usage of the EV charging network will be used to repay the borrowed funds. Staff will apply for any available provincial or federal grant funding opportunities. The Low Carbon Fuel Standard (LCFS) credits that the City may receive in the future, including potential grant funding will also be utilized to repay borrowed funds. \(^1\)

Table 1: Phase 1 DC Fast Charger Expansion (three proposed sites)

Funding Source	Amount
Gas Tax Provision	\$500,000
Carbon Tax Provision (Low Carbon Fuel Standard Credits)	\$500,000
Enterprise Fund	\$4,000,000
Internal Borrowing (Equipment Replacement Reserve Fund - Public Works Vehicles)	\$2,000,000
Total	\$7,000,000

Future phases under consideration are the new Steveston Community Centre and Library, Richmond Ice Centre, King George Park, and others. Staff will conduct feasibility studies for any potential site to ensure the projects are viable prior to bringing forward capital submissions in the future. A map of Phase 1 DCFC sites and potential future DCFC sites can be found in Attachment 2.

7738808

<sup>&</sup>lt;sup>1</sup> On April 22, 2024, City Council approved recommendations in the report: Public Electric Vehicle Charging Network – Use of Proceeds from Low Carbon Fuel Standard (LCFS) Credits. Recommendation 2: That revenue from the sale of LCFS carbon credits be put into the City's Carbon Tax Provision account and be reserved for capital and operating costs related to the installation and maintenance of new electric vehicle charging stations.

#### **Financial Impact**

A capital submission for the Electric Vehicle DC Fast Charging Station Installations project for \$7 million with the proposed funding sources shown in Table 1 above, will be submitted for Council's consideration as part of the 2025 budget process. Staff recommend that \$6.0 million of this project will be funded through a combination of the Equipment Replacement Reserve Fund - Public Works Vehicles (\$2.0M) and the Enterprise Fund (\$4.0M). The expected net revenue resulting from the usage of the EV charging network (OBI) will be utilized to repay both funding sources. The estimated OBI before repayment is \$670,000 per year. The current estimated payback period is nine years once the stations are open to the public. The estimated payback period can be shortened up to six years, subject to federal and provincial grant funding availability and the continuation of the provincial Low Carbon Fuel Standard (LCFS) credit program.

#### Conclusion

The City's Public EV charging network serves as a key element in the City's commitment to achieving emission reduction targets for transportation by 2030 and 2050 as outlined in the CEEP 2050. With increasing provincial and federal light duty vehicle sales targets leading to a higher number of EVs on the road, expansion of the City's public charging infrastructure represents foresight to meet this growing community demand and supports reducing community energy emissions overall.

A multi-phased expansion strategy, commencing with the installation of 24-30 Level 3 DCFC chargers at three city-owned parking lots, is proposed.

Arzan Balsara

Senior Climate Action Specialist

(604-247-4615)

Dinos Ramos

Program Manager, Fleet Operations

(604-233-3302)

Att. 1: City of Richmond Public Electric Vehicle Chargers

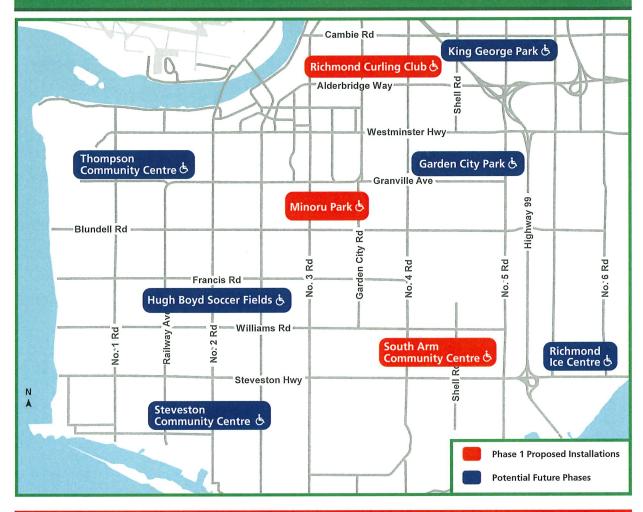
Att. 2: City of Richmond DCFC Expansion Phase 1 and Potential Future Phases

## City of Richmond Public Electric Vehicle Charging Stations



Public EV Charging Location	Address	Type of Station Level 2 (L2)	Level 3 (L3)
Animal Shelter	12071 No. 5 Road	2	
Blundell Park	6468 Blundell Road	2 <b>Ġ</b>	
Britannia Heritage Ship Yard	5180 Westwater Drive	2	
Cambie Community Centre	12800 Cambie Road	2	
Capstan Park	3311 Carscallen Road	2 /	
City Hall	6911 No. 3 Road	2 [+ 2 🖒 ]	[1 🖒 ]
City Public Works Yard	5599 Lynas Lane	2	
Fire Hall 3	9660 Cambie Road	2	
Garden City Park	6620 Garden City Road	2 <b>Ġ</b>	ě
Garry Point Park	12011 Seventh Avenue	1	
Hamilton Community Centre	5140 Smith Drive	2 <b>Ġ</b>	
King George Park	4100 No. 5 Road	2 <b>Ġ</b>	1 🖒
Minoru Park			
Minoru Arenas	7551 Minoru Gate	4 <b>ٿ</b>	
Minoru Centre for Active Living	7191 Granville Avenue	6	
RCMP City Centre Community Police Office	6931 Granville Avenue	2	
Richmond Ice Centre	14140 Triangle Road	2 <b>الج</b>	1 🕏
Richmond Oval	6111 River Road	4	1 🕏
South Arm Community Centre	8880 Williams Road	2 <b>હ</b>	
Steveston Community Centre	4111 Moncton Street	2	
Steveston Tennis Courts	4151 Chatham Street	2 <b>Ġ</b>	
Thompson Community Centre	5151 Granville Avenue	2	
West Richmond Community Centre	9180 No 1 Road	2 الح	
TOTAL AS OF SUMMER 2022		53 + 2 /	4

## City of Richmond DCFC Expansion Phase 1 and Future Sites



Phase 1 DCFC Proposed Installations	Address	Type of Station Level 3 (L3)
Minoru Park	7191 Granville Avenue	8-10
Richmond Curling Club	5540 Hollybridge Way	8-10
South Arm Community Centre	8880 Williams Road	8-10

Potential Future Phases		
Garden City Park	6620 Garden City Road	8-10
Hugh Boyd Soccer Fields	4038 Francis Road	8-10
King George Park	4100 No. 5 Road	8-10
Richmond Ice Centre	14140 Triangle Road	8-10
Steveston Community Centre	4111 Moncton Street	8-10
Thompson Community Centre	5151 Granville Avenue	8-10